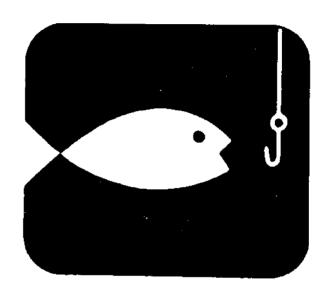
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Limited Entry

A Fishing Industry Information Exchange

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> Proceedings of the Conference Fishing for Answers: An Industry Information Exchange Newport, Oregon USA / March 7-8, 1985

EM 8332 / July 1987



Limited Entry

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Proceedings of the Conference Fishing for Answers: An Industry Information Exchange Newport, Oregon USA / March 7-8, 1985

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Oregon State University Extension Service

The "Fishing for Answers" Conference was partially financed by funds from the Economic Development Administration,
U.S. Department of Commerce, under Title IX, Section 903,
of the Public Works and Economic Development Act of 1965, as amended

(Grant No. 07-09-02791).

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WELCOME AND INTRODUCTIONS

Judith St. Claire, director, Oregon Fishing Industry Project Newport, Oregon

Welcome to Fishing for Answers, the fishing industry information exchange on limited entry.

The Oregon Coastal Zone Management Association's (OCZMA) Oregon fishing Industry Project was funded by an Economic Development Administration strategy grant to help the Oregon fishing industry. The Oregon Fishing Industry Project is co-hosting this industry exchange with the Oragon State University Extension Sea/Grant Program. Bob Jacobson, OSU Extension/Sea Grant agent in Newport will be your conference moderator.

The question of limited entry, or fleet versus resource as it is sometimes called, is one of the areas of interest for OCZMA's Oregon Fishing Industry Project. Our entire project is concerned with stabilizing and revitalizing Oregon coastal communities. Other goals of our project are to inventory the numbers of displaced/dislocated fishing industry workers and develop a plan to find alternative employment for them; to inventory fisheries habitat enhancement efforts and explore funding possibilities for further habitat enhancement projects; and to explore the marketplace for niches into which new products from traditional species can fit—products that potentially could displace foreign imports.

Such an exchange as this is so important, so necessary, and so seldom done--in the fishing industry's case, practically never.

This Fishing for Answers conference is our opportunity to gain first-hand knowledge and information in an objective fashion--a real exchange, a real first.

I'm sure Bob Jacobson will echo my thanks to the following:

First and foremost, thanks to our advisory committee of industry people who helped plan the conference for their ideas, interest, and enthusiasm.

Thanks to Bob Schoning for his unlimited, if you will, experience.

A special thanks to OCZMA's own Georgia York, who helped put the conference together, and to Jay Rasmussen, the director of OCZMA.

Thanks also go to the Fishermen's Wives. Any industry gathering would be incomplete without their contribution of time, expertise, and energy. They have come to our aid in helping with conference registration.

Finally, thank you, the participants, for your interest and willingness to participate.

Have a good conference!

Robert W. Jacobson, OSU Extension marine agent, Moderator Newport, Oregon

I am a part-time OSU Extension marine agent in Newport and a parttime commercial fisherman with 15 years experience in the troll salmon, Dungeness crab, and albacore fisheries locally and the halibut and king crab fisheries in Alaska.

Certainly the topic of limited entry is one that has frequently been discussed by fishery managers and fishermen during the time that I have been associated with the industry. Limited entry is a controversial topic and one that has polarized the thinking of many fishermen. Having talked with many of you, I know there are some strong sentiments for limited entry and some equally strong feelings in opposition. The purpose of this conference is not to promote limited entry as a fishery management tool, but rather to provide you, the industry members, with an opportunity to listen first hand to the comments of an excellent slate of speakers who have been directly involved with limited entry programs in their respective areas.

Regardless of your current feelings on this topic, I hope you will listen, ask a lot of probing questions, and leave this two day session with a better understanding of the relative failures and successes of limited entry as it has been applied elsewhere.

KEYNOTE SPEAKERS

Robert Jacobson, OSU Extension marine agent, Moderator

Why are we talking about limited entry? Our first speaker will address that question. Barry Fisher is a 15-year resident of Newport. dis first five years in this area were spent working as a commercial fishing gear development specialist with the OSU Sea Grant Program. He has been a full-time dragger since 1975 and he currently owns two midwater vessels, the EXCALIBUR and EXCALIBUR II, which are currently engaged in the Marine Resources Company (MRC) joint venture fishery for pollock in Shelikof Strait. In 1978 he was one of the first two skippers to participate in the MRC joint venture for Pacific whiting. He is currently their senior fleet captain and certainly one of their key negotiators with the Soviets. He is a board member of the Fishermen's Marketing Association and currently serves on the North Pacific Fishery Management Council Advisory Panel.

Why are We Talking About Limited Entry? Captain R. Barry Fisher, trawler Newport, Oregon

I would like to correct one thing. Newspapers reported that I would give you an address on why we need limited entry. That is decidedly not the title of my talk and it may not be my sentiments.

A multimillionaire had three sons, a lawyer, a doctor, and a fisherman. He called in the lawyer son and said, "Son, if I gave you a million dollars, what would you do with it?" The lawyer son thought for a minute. "I will put together a legal clinic. I have gone through all the figures and it is very profitable." The old man nodded wisely. He asked the same question of his second son, the doctor. "I would establish a professional medical clinic. I have gone through the figures and such a clinic would be very profitable." The old man was pleased with that and he called in his third son, the fisherman. He said, "Son, if I gave you a million bucks, what would you do with it?" The fisherman son thought and thought and thought, then he said, "Gee dad, I guess I will just have to keep fishing until it's all gone."

That joke has got a somewhat bitter and ironic ring to it these days.

Why are we talking about limited entry? There are several reasons. I started dragging out of Newport in 1975 with a 50-foot boat with a 671 rated at 160-170 horsepower. It was a typical little coastal dragger for sole and a few ground fish. The boat's average daily catch was 9200 pounds. Such a boat today would be lucky if it averaged 3000 to 3500 pounds a day and that would include species that we couldn't sell ten years ago. I recall going out with Craig Cochran on a crabber when I first came out here. I saw him move gear on 10 and 12 crabs to the pot. If any of you crabbers were getting 10 to 12 crabs to the pot today, suddenly every radio on your boat would become inoperative and you would swear your crew to a contract signed in blood that you wouldn't divulge the spot where those crabs were being caught.

I went salmon trolling here in 1970 in a dory. One hundred silvers and a couple chinook would be a day's scratch fishing for the dory. That was scratch fishing. If you take the number of licenses for 1984 and the silvers that were available and divide the silvers by the licenses, you suddenly discover that each boat got for the season less than what we would get for a scratch day back in 1970.

This is one reason we are talking about limited entry: we have a crunch on the resources. Unfortunately, it spreads across several fisheries. A lot of people claim there is too much effort in the fisheries. I don't know. But one reason we are talking about limited entry is simply that the resource has undergone some stress and strain.

The second reason we are talking about limited entry this morning is that the managers are all talking about it. For example, a couple years ago, several of us decided we should convene a conference of managers to talk about the effectiveness of various management tools and techniques. This highly successful conference was held in Anchorage last fall. The managers suddenly discovered by the end of the first day that they were the target audience. This was not going to be another session to beat up on fishermen. Instead, we were really starting to question the effectiveness of various fishery management tools and techniques. Limited entry discussion dominated that conference.

The other thing I want to point out in passing is that most of that audience, according to the registration, consisted of economists, not biologists. I regard those people as outsiders. They are not talking managing fish, they are talking about managing men. They are outsiders in that they haven't spent any time in this industry of ours. By time, I mean time spent on the grounds, spent on the docks, talking to the processors, and so forth. It astounds me how little contact most managers have with the industry they are supposed to manage. (There are exceptions, so if you feel that I have injured you, just count yourself as one of the exceptions. Nevertheless, the charge is true.) The other thing that alarms me about some of these people is that they don't have

any economic stake in this industry. They don't carry mortgages, they don't own boats, they don't have an inventory of gear laying in the gear sned, they don't have to worry about securing a contract for a market.

The third reason I think we should be talking about limited entry is that it is creeping in piecemeal whether we like it or not. Most of us have combination boats, boats that were built for several fisneries. For example, my little boat, the EXCALIBUR, was laid out as a dragger when we built her. We also built her with longlining in mind. She would also make a pretty good seiner. Looking around the room, I recognize many of you who have combination boats and who fish in three or four fisheries. What concerns a lot of us about limited entry is that it is often being accomplished without any regard for this remarkable feature of a West Coast combination boat.

Our boats are mobile. The 60-foot EXCALIBUR is currently fishing in the Bering Sea. This is March. She has been there since the first of February and she is doing very well. We are far flung. The fleet has an almost instant capability to respond to any moneymaking opportunity that exists. Not only is this fleet mobile, but there is still plenty of money around to put into good fishing schemes. Now that sounds paradoxical, but money is available for investment. The investors worry when they keep reading newspaper articles about limited entry.

We worry, too. For example, I would invite anybody to look at the nistory of the Alaska halibut moratorium, where after five, six, seven years we have—what—7000 licenses? Down here we have roughly 280 shrimp permits out with only 30 boats fishing for them last year. The scallop industry, which took off with a bang on this coast a couple years ago, has 130 permits out, but only six boats fishing. One of the best of those boats couldn't get an Oregon permit, so the skipper bought a Washington license and pays a \$75 landing fee every time he wants to land a trip in Oregon. He never lands any trips in Washington. I don't think he has ever gone there.

So what is happening here? Every time the managers start talking limited entry, we have what you could call the Great CYA Game--cover your you-know-what--by rushing out and getting permits and getting grandfathered in. I submit that this is not the way to do things. Nevertheless, it is occurring.

I look at all this and I look at those fisheries that are in economic trouble--resource scarcity, too many boats, inadequate markets, no penetration into new areas, no utilization of new species, and so forth. But all of this can, and is, changing rapidly.

I will give you an example of how fast change can come. In 1978, after fighting a year-and-a-half political battle for the right to go

fishing and to sell to somebody other than the company store, two of us took 980 tons of whiting in four weeks. On a later voyage, I took some 900 tons of whiting. That was the start of the joint venture. That was the start of the type of business organization that, even though it had existed elsewhere in the world, the framers of the Fishery Conservation and Management Act of 1976 had not foreseen—even though there were some 370 joint ventures operating in other parts of the world at that time.

Where are we today? When the figures are released in a few days, you are going to discover that the United States is now the number one fish-catching nation in the Pacific. We are ahead of the Japanese, the Koreans, the Soviets, and any other foreign nation out there. We have come from ground zero in 1978 to a situation in which we—who were labeled by various officials in the National Marine Fisheries Service as being obsolete and improperly equipped, our gear was no good, our boats were no good, and our management tactics were no good, in other words we were a Third World nation as far as a fishing fleet was concerned—we have come in six short years to number one position.

Now the managers said we were bad planners; we didn't know what we were doing. We are now number one. Why have we succeeded? Because of the joint ventures and something new on the horizon, the factory trawlers. There are now 11 American-built factory trawlers at work in the Bering Sea. They have done very well in the past. Their future financial success is going to depend heavily on the development of markets for pollock because the cod stocks in Alaska are dwindling. They are not being overfished. There are natural cycles involved here.

So that brings me to one of the points I want you—and especially the managers—to keep in mind about limited entry. It seems to me that limited entry involves building a three-legged stool. One of those legs may be limited entry, but the other two legs depend on the status of the stocks—how many animals are there out there to catch and how are you going to catch them—and on the status of the markets. Can market potential grow? You have seen what the Japanese have done with surimi. We are in the embarrassing position in Alaska of catching all the fish for the foreigners, seeing that fish carted off to the Orient, being made into a product which is called kamoboko, and sent back into the country. Three thousand tons the first year, 28,000 tons the second year, and some 50,000—odd tons this year will be sold.

So all is not doom and gloom. There are some areas where we can grow. There are some areas where our growth can be retarded—if not cut off forever—if a lot of these things aren't understood. The American fisherman, in my opinion, is the world's best. I don't give a damn how you measure it. In terms of capital intensity per man aboard the boat, in terms of tons of fish produced per man, in terms of return to capital, or return to labor. I don't care how you cut it, we are the world's most

efficient fishermen. One thing that makes me very proud is knowing that those two Newport boats in Shelikof Straits right now are averaging 260 to 270 tons a day. They have totally plugged a 600-foot Korean processor. The Koreans have called another processor in because they were plugging that processor with five to six hours fishing a day. Man for man, we are the world's best. If you doubt that, look at the tuna purse seine fleet. It has the highest state-of-the-art technology in the world and it is a fleet that is going broke because of events that it can't control. The king crabbers in Alaska are another example of really crack men, crack boats.

Furthermore, the American fisherman doesn't need a government to train him and he doesn't need a government to put him in business. He needs two things: a resource and a market. Don't you worry about the technology, we will supply it. We taught ourselves to midwater trawl in 10 days. My Soviet counterparts tell me they were all sent to school—four month training courses to learn to midwater trawl.

The point is that our capacity to produce must be remembered. It must be remembered when discussing limited entry programs. We have to be able to move capital assets and man-efforts back and forth.

What is my stance on limited entry? It is confused. I am philosophically opposed to it because of the track records of its advocates and its practitioners. I won't make any summary judgments on that. The program in the next two days is going to let you make up your own minds as to how successful these various limited entry schemes are.

But I want to leave you with one thought. This is addressed to the fishermen in the audience. No matter how all this stuff comes down, you had better get involved. The days of being a free living hunter are gone. We are still hunters, but I would question how free we still are. We can't afford independence as a stance any more. I think we have to become involved in good associations and we have to take a highly intense and active interest in political action. Think of it this way: if your life style is worth living, it is probably worth fighting for.

Maybe the time has come to form a fisheries-wide association of fishermen and to forget all the wrangles between fisheries. (This is a classic tactic managers have used to divide us, to get us fighting among ourselves over gear conflicts, quotas, prohibited species, or whatever. Their job is then made easier.) We have to unite, we have to get ourselves involved, and we have to become political animals. If you don't want to do it yourself, that means digging into your pocket every once in awhile for a few bucks to make sure that the job gets done by those who do nave the time, the skills, and the interest.

As American fishermen, we have another unique advantage. We can involve ourselves politically. The Canadian fisheries are run by

dictators. Canadian fishermen have almost no input into policy formulation. The same thing is largely true in the European Economic Community. There are so-called "wisemen" (managers, bureaucrats, owners, and so forth) who make the decisions in those fisheries. The fisherman is cut out of the process.

I give the Congress of the United States high marks for trying to ensure that management under the FCMA would not only be done regionally, but that the people affected by it would have a voice in the process. If we sacrifice that voice, we deserve to die.

Limited entry. I don't know where it is going to be implemented next. It is gradually gaining a foothold in many fisheries. One handy exercise that we might undertake is to draw a relief map of the West Coast showing each fishery that is currently operating under some form of limited entry. In a fleet comprised almost entirely of combination boats, rarely has the concept been addressed as to how you limit access in one fishery to a combination boat, and then treat it in regard to other fisheries. You can't have piecemeal introduction of limited entry, or suddenly we all become specialists. I would rather be a generalist. I would much rather have an opportunity to shift my boats from fishery to fishery as market and resource conditions warrant.

I get very frightened by people who glibly talk about limited entry and don't answer these questions about transferability, who don't answer questions about how we prevent what, for example, has happened to the Bristol Bay salmon limited entry, or the False Pass seine fishery where the permits go for anywhere from \$100,000-\$150,000. The permits in the Bristol Bay fishery are worth far more than the value of the average boat. Think that one over. How do we wrestle with this concept of limited entry, how do we put it together, how do we make it work, or how do we reject it?

I think that is really the task of the next couple of days. I think there are good reasons to be talking about it, to be thinking about it when you go home, and one way or another, to start acting on it. If you don't, you are going to be had for breakfast and I will be had witn you.

Robert Jacobson, Moderator

Our second keynote speaker is Dr. James A. Crutchfield, an internationally recognized authority on limited entry and the author of more than 150 publications concerning the economic aspects of development and management of fisheries, water resources, and other natural resource systems. Dr. Crutchfield has been on the University of Washington

faculty for 35 years. He has also served as a consultant and advisor on a wide variety of national and international fisheries-related studies. He has been a partner in Natural Resource Consultants, a Seattle-based fisheries consulting firm, since 1980. He was one of the original members of the Pacific Fishery Management Council and is currently serving as the Council's chairman.

What is Limited Entry?

Dr. James A. Crutchfield, Chairman, Pacific Fishery Management Council Seattle, Washington

I want to express my gratitude to the Oregon Coastal Zone Management people and the Oregon State University Extension/Sea Grant people who put this meeting together. This is a different kind of limited entry program because it offers an opportunity to hear from people who have had operating experience with limited entry programs and from fishermen, like Barry Fisher and others, who are qualified to say what this experience might mean to them.

Let me start by disagreeing with something Barry said. All fishery management people do share some common objectives with fishermen—three things basically. First, in any management program we have to protect the basic productivity of the stocks involved. If that isn't done right, the rest of it doesn't count. Secondly, we would like to do that in a way that makes it possible for fishermen to make as much money as possible in the resource, to fish where and when and how they want with as few restrictions as possible. And thirdly, we want to do it as fairly as we can. No matter how you cut it, management doesn't affect everybody equally, but we do the best we can.

All of you are familiar with the traditional methods of regulation. Quotas, area and time restrictions, gear restrictions, trip limits, frequency limits, and so on have the potential to protect the productivity of the stocks, to keep fishing mortality within acceptable limits. All of them, without exception, have a negative effect on the efficiency of the individual vessel and the fleet as a whole. In every managed fishery in which these traditional methods have been employed, we find fishing vessels and men working below capacity and frequently being forced to use kinds of gear that they know are not the best types of gear or to fish in areas they know are not the best areas to fish.

And I think that is the main reason the interest in limited entry has grown. It is not a panacea, God knows. It will have to be used, if at all, in conjunction with other management methods, as I want to point out a little later. But at least it is a way of protecting stock productivity while providing some opportunity to realize the economic

benefits that the fishery is capable of yielding. The point is, can we manage in ways that will enable fishermen to operate full scale on an efficient basis? And that, I think, is the basic objective. It isn't going to work in every fishery, obviously, but it is worth a hard look and that is simply why we are here.

Basically, limited entry—which is a lousy term, incidentally, but I guess I was among those who used it first so I share part of the blame—is really a question of how you convert a common property resource into property rights for individual fishermen so that the system will fit into a market-oriented economy the way it is supposed to.

I would like to talk briefly about two possible approaches. First, the main one that has been employed everywhere, the license limitation approach. And second, a new approach that has attracted a fair amount of interest, the establishment of individual fisherman quotas. I am not an advocate of limitation on fishing effort. That has been my position in the past. My biases are clear. I would like simply to lay out for you some of the issues that are involved so that we can talk about limited entry more sensibly.

Almost all limited entry programs have to start with a moratorium on the issuance of new licenses after a certain cutoff date. As Barry Fisher pointed out, a moratorium in itself is not a limited entry program. It will never operate that way. In the first place, it is almost impossible to get a moratorium established before the word is out and everybody has licensed everything that will float and you have all kinds of new people to deal with who aren't really actively engaged in the fishery at all. That has got to be dealt with. At best then, it is a first step.

It is also a first step because even a timely moratorium with a tight cutoff date is not an effective way of controlling fishing power. You have all kinds of opportunities for upgrading older, smaller, less efficient vessels. You have all kinds of opportunities for converting from half-time or part-time casuals into full-time professional fishing if the price and the catch make it worthwhile to do so. So under any kind of a moratorium, you can get a lot of increased fishing effort before anything really begins to take hold.

The principle advantage of a moratorium is that it keeps things from getting worse. And a ridiculous halibut situation in Alaska shows just how bad it can be if you drag your feet for five or six years after talking about it before anything gets done. It is not a question of assigning blame. There were a lot of factors involved in that delay. But it makes it almost impossible to unscramble the eggs at this stage of the game. So a simple moratorium at least keeps things from getting out of hand any further than they are.

In any effective limited entry program, a moratorium has to be followed by some way of peeling back the excess capacity. If you have too many boats in relation to the productive capacity of the resource, some acceptable way of reducing that fishing power has to be accomplished. It has been tried in some places by making the moratorium a way of reducing the number of license units as well. In Alaska, for example, an elaborate point system was used to eliminate a fair number of people at the outset. In its salmon program, British Columbia established two classes of licenses. One was selfterminating, the other would continue. Some programs have established minimum landing standards to weed out or reduce inactive licenses and, in some cases, get rid of part-timers and casuals. To give you a typical South American approach, Chile wanted to reduce the number of fishing vessels so officials there said, "Very simple. Tomorrow we will have half that number of licenses and we will auction them off." Try that one on for size.

As you can imagine, these efforts to get the number of units down as part of the moratorium have aroused a tremendous amount of protest, some of it justified, some of it perhaps not. An enormous amount of time has been spent in Alaska trying to fight the hassles that developed as a result of an elaborate point system to get the original number of participants in the program down at the outset. As a result, most of the discussions have centered on a moratorium that simply grandfathers everybody into the fishery who is currently active, who has contracted for a boat, or has any other tenuous claim to participation.

In practical terms, it also means that some kind of fisherman-organized and fisherman-oriented review board has to be created to take care of those cases that don't fit the general rule. For example, there are a lot of people who have spent a lifetime developing the groundfish fishery off Oregon who went to Alaska when the fishing here got too scratchy. They might not qualify under a moratorium of the usual type. Obviously, some method of dealing fairly with this has to be developed. The simple moratorium isn't going to effectively reduce redundant fishing effort, if that is the problem.

And that moves you typically to some kind of buyback program under which an effort is made to reduce the number of licenses through repurchase agreements. And, of course, the repurchase agreement should guarantee that a boat isn't going to show up somewhere else. If it does, you are just creating worse problems for yourself. Unfortunately, the buyback procedure has built-in difficulties. One, if you effectively reduce the number of boats that are fishing, the value of the remaining permits is going to go up. As a result, the buyback fund will run out quickly unless you have some kind of self-financing scheme in which the more valuable existing licenses pay a tax or fee that enables the fund to be self-financing and keeps the price of licenses from rising as rapidly as it will otherwise. As Barry has pointed out, that is a real problem.

Unfortunately, few people have had the political guts to face up to the fact that the buyback program ultimately has to be self-financing in some degree. The general taxpayer simply isn't going to foot the bill for buying out a whole mess of existing boats. And unless enough political courage is shown to create a buyback program with a self-financing basis, it isn't going to work.

The other problem with buyback is familiar to all of you. Obviously a buyback program first tends to pick up the old wrecks—boats and men alike. As a result, you could pick up 50 percent of the existing units and still barely touch the fishing power of the fleet involved. So be it. It just means you have to push a bit further, but at least it makes management a neck of a lot easier. It makes the way clear for the more professional, full-time fishermen, if that is one of your objectives.

Nevertheless, in spite of these difficulties, let me just lay it on the line. Unless some method is found of reducing the amount of excess gear in the water in an overcrowded fishery, then nothing is going to be accomplished by a simple moratorium. You will not improve the economic condition of the fleet and you simply create more problems.

Another issue that Barry alluded to is the question of transferability of permits. Earlier limited entry programs created considerable discussion about whether the permits should be transferable or not. The main objection to transferability was that people who got the initial permits free would enjoy a substantial capital gain when they chose to sell them -- after the permits really became worth something. On the other hand, there are good arguments for making the permits transferable. One is just a simple matter of fairness. Fishermen who have a transferable limited entry permit have the right to give it to their kids, to sell it, to lease it, to do anything with it exactly as they would with any other piece of property. Transferability gives maximum flexibility. It provides a built-in mechanism for the permits to gradually gravitate to fishermen who are harder working, more efficient, and more knowledgeable because they are the ones who can afford to pay for them and make money with them. You can argue wnether that is good or bad, but in general that is the way transferability is going to work.

Perhaps the most important point on transferability is the monopoly issue. The courts are not going to allow a monopoly situation and the transferable permit provides a way for people to get into the fishery, exactly as you get into farming, retailing, meat cutting, or any other business. You buy your way in and, having paid for the permit which you think you can pay for and make a living at, carry on. Nobody invites you into their orchard to harvest apples for free. You rent it or buy it and then you use it efficiently to make money. That is basically the transferability issue.

A couple of problems arise out of that. One is the cost of the license. A tremendous amount of howling has gone on -- the latest about the price of an Alaskan permit. Let me point out that the price of an Alaskan permit is based on what any sensible fisherman looking at the future of that fishery feels he can afford to pay and make some money at. The price doesn't come out of thin air. It is what somebody can pay and still make a decent living at. The price is high because at the present time you can make a good deal of money at it. On the other hand, there is no question that the high initial price is a barrier to new young people coming in. And that can present some social and political problems that are difficult to deal with. If you don't want a high permit price, you can put a tax on fish landings, which is, in effect, a tax on the increased value of the permit, as one way of holding that price down. Moreover, if you talk to any supplier of funds--bankers, backers, anybody else in the fishing industry--it has become easier in reasonably successful limited entry programs to finance the purchase of both the permit and the boat. There is a hell of a lot less of the debtor peonage that we had when we relied on processors and buyers for capital in these fisheries.

The final point with respect to the licenses is the readily available market for them. They are transferred fairly freely and in fairly large numbers. There is an active, well-organized group of people who will buy and sell permits. You can look in any Seattle paper, in The Fishermen's News and other fishing magazines and find permits with or without boats for any area you want to fish. So whether or not transferability is desirable, at least it works as a way of getting people in and out of the fishery efficiently and with very little or no administration by government.

Let me give you some conclusions about limited entry. First, limited entry is not, of itself, a very good way of protecting the biological productivity of the stock. Its effect on the stocks is obviously indirect. In any fishery that is subject to major fluctuations in natural abundance, you must have other controls to deal with the stock productivity problem. Limited entry has worked, if at all, in conjunction with other regulatory techniques. Secondly, you get some other unfortunate side effects. One is this capital investment argument. If you can't increase the number of boats or the tonnage of the boat, you could create a Bristol Bay 32-footer which is 32 feet long and 30 feet wide and try to get a bigger share of an existing catch. If your neighbor does the same thing, you all end up with the wrong kind of boat and the wrong gear combination. It ultimately costs you more to get the same amount of fish. And that is a problem that has to be dealt with. Limited entry also shifts pressure to other fisheries. So if you are going to have limited entry in one or two major fisheries, you better take a careful look at the other fisheries to which gear can be shifted. Otherwise you can create some tough problems.

Contrary to popular belief, limited entry has very little effect in terms of its secondary impact on the local economy. You have the same number of dollars to be taken in. They will be spent in different ways if you have a small number of boats earning better incomes than if you have a larger number of boats with smaller incomes. But the general secondary regional effect is going to be pretty much the same.

The real question is: Do you want fewer fishermen earning better incomes, or do you want more employment in the area and lower incomes as a result? I can't say that either one of them is better than the other. In some fisheries, getting the most people employed on the resource may be a legitimate objective. But that is what open access means. And that is what you have to accept. And again, you have to decide whether you want to put pressure on part-time fishermen, or on fishermen who have multiple fisheries strategies. Most limited entry programs do tend to favor the full-time professional fisherman who specializes in that limited fishery. Limited entry tends to militate against part-time, casual fishing. Whether that is good or bad is a matter that will have to be decided in any given area, but it is a fact of life that we have to consider.

Limited entry is no panacea. But let me put it this way: Are Oregon bottom fishermen happy with a regime of quotas, harvest guidelines, constantly changing trip limits, trip frequency regulations, and boundary lines? If not, they should at least look at the limited entry approach as a partial alternative that may get us to a more sensible regime.

QUESTIONS FOR KEYNOTE SPEAKERS

Terry Johnson, National Fisherman Magazine: You said that some form of buyback or fleet reduction is a necessary follow-up to a moratorium, but isn't that the case only where you have an already distressed fishery? Wouldn't the solution to a lot of these problems be to implement limited entry prior to the point at which it becomes distressed?

Crutchfield: You are quite right, Ferry, and I thought I made that clear. The moratorium followed by buyback or some other way of reducing the fleet is the answer when you already have a seriously overcapitalized fishery that is in trouble. But when did we ever get any kind of management on a fishery before it was in serious trouble?

Terry Johnson: Why can't management be applied before trouble develops?

Crutchfield: I think our friend from Australia [Colin Grant] may have some positive answers. I don't have a good answer. It's hard to get anybody to talk about managing a fishery before it is in trouble. That is the problem.

EXPERIENCES WITH LIMITED ENTRY, PART 1

A CANADIAN PERSPECTIVE

Robert Jacobson, Moderator

We now turn to a series of speakers who will talk about their experiences with limited entry programs. We will look first at our northern neighbor, Canada.

David Reid is an economist with the Canadian Department of Fisheries and Oceans, Pacific Region, based in Vancouver, B.C. David has been with the Department since 1973 and since 1978 has been director of economics for the Statistics Branch. In 1977, he provided the analysis in support of the \$150 million, seven-year British Columbia Salmon Enhancement Program. In 1981, he was Department liaison to the Pearse Commission on Pacific Fisheries Policy. And from 1982 to 1984, he was chairman of the Department's Pearse Commission Response Task Force.

An Overview of British Columbia Limited Entry Programs
David J. Reid, economist, Department of Fisheries and Oceans
Vancouver, British Columbia

As a Canadian, I knew I was an outsider down here. But I didn't realize I would be even more of an outsider because I'm also an economist. I notice that Dr. Crutchfield didn't bill himself as an economist. I think he knew something I didn't know.

I want to give some historical perspective on British Columbia's limited entry programs, then look specifically at the salmon fishery program and, if time permits, the roe herring fishery.

The need to control the expansion of fishing fleets in Canada's Pacific fisheries has been recognized for almost a century. In the 1880's, anxieties about over-exploitation of salmon on the Fraser River were sharpened by apparent depletion of stocks in the Columbia and Sacramento rivers to the south. This led the government, in 1889, to limit the number of licenses for fishing boats on the Fraser to 500. These were basically distributed among canneries and the only way to obtain more licenses was to expand canning capacity. As the fishery became more profitable, canneries predictably expanded their capacity and new canneries were built as well. The vessel limitation scheme broke

down and was abandoned by 1892. By the following year, the number of licenses on the Fraser River had more than doubled—to more than 1000. So by 1892, we learned that limited entry is tricky.

A second experiment was attempted on the Skeena River and by 1907 the Commissioner of Fisheries for British Columbia had become alarmed at the increasing number of boats and feared a repetition of the Fraser River experience. He proposed that no additional canneries be permitted in the north and a limit be placed on the number of boats the existing canneries could operate. Boats were allocated between the canneries by private negotiations among them and inevitable disagreements arose which threatened the arrangements. But once again, it was high profits in fishing that led to the demise of this regulatory system.

As the value of salmon escalated during the First World War, the government gave in to pressure to issue licenses to new canneries and, under further pressure, to provide jobs for people returning from service at the end of the war. In 1917, the government lifted all restrictions on cannery licenses and, therefore, on vessel licenses.

The result of this exercise produced one of our famous commissions, the Evans Commission. The Commission's report revealed a remarkably perceptive understanding of the need for controls. I quote:

"It seems to us clear that all conditions surrounding the industry should as far as possible be stabilized and the excessive use of capital and labor obviated or prevented. The solution of this problem would not seem to be found in encouraging or permitting employment of more capital or more labor than can efficiently perform the work. If the cost of production becomes too great, all hope of advantage to the public as consumers will disappear."

This was around 1920. As is the fate of all our commissions, its recommendations were generally rejected.

The fisheries continued to expand for several decades. In 1958, Dr. Sol Sinclair, an agricultural economist, was appointed to investigate the salmon and halibut fisheries. By this time, the general theory of why common property fisheries inevitably over-expand was better understood. Sinclair proposed a system of restrictive vessel licenses and levies on the catch to dampen incentives to over-invest. These recommendations were vigorously debated and provided the basis for the license limitation program introduced in the salmon fishery 10 years later. Notice it was discussed for 10 years.

Today we have restrictive licenses in 10 Pacific fisheries. There is considerable variation in application of license control from one fishery to another. In part, this has been due to accumulating

experience; in addition, different circumstances in different fisheries have required special treatment. The result is a complex set of regulations, with differences between licensing schemes which are quite fundamental and seem to have no rationale.

Some regulations are common to all licensing forms:

- * All licenses are valid for one year.
- * They are renewable.
- * They must be renewed each year.
- * All vessels are subject to some kind of vessel replacement rules.
- * All licenses have to be transferred to replacement vessels (i.e. no splitting of licenses is permitted.)
- * All limited entry licenses are transferable by one means or another.
- * The Minister has discretionary power to issue new licenses, or to refuse to reissue a license where the owner of the vessel is convicted of a violation of the Fisheries Act.

The rest of this talk will deal with the specific arrangements which apply in the two most important British Columbia fisheries—the salmon and roe herring fisheries.

Salmon licensing arrangements

In 1968, the Minister of Fisheries, Jack Davis, announced the details of a limited entry program for the salmon fishery. The objectives of the scheme were twofold: 1. "...to increase the earning power of British Columbia salmon fishermen"; and 2. "...to permit more effective management of the salmon resource by controlling the entry of fishing vessels into the fishery...."

The plan involved four phases:

- 1. Freezing the number of vessels by licensing only those who could show a significant dependence on the salmon fishery.
- 2. Reducing the fleet by purchasing and retiring excess vessels.
- 3. Improving vessel standards and product quality.
- 4. Improving the fleet structure and relaxing some of the restrictive regulations on the fishing effort of the reduced fleet. (The fourth phase was never pursued.)

The first step was an attempt to freeze the number of licenses. All vessels that had landings of salmon worth \$1,250 in either of the two preceding seasons were declared eligible for a salmon "A" category license. These licenses were applied to the vessel, and the licensed vessel could be replaced. Vessels that had landed less than the qualifying amount were eligible for a temporary salmon "B" license for a reduced fee. These vessels could not be replaced.

The scheme was highly controversial and a number of concessions were made, which in effect undermined it. The requirement for \$1,250 worth of salmon landings was weakened to allow for landings of any fish of that amount. The result was an influx of large vessels—trawlers, crabbers, and longliners—into the salmon seine fleet. These vessels had little or no previous interest in the salmon fishery.

Special licensing arrangements for Indians were also subverted, as Indian licenses were often transferred to non-Indians. In an effort to prevent further declines in Indian participation, the sale of Indian licenses to non-Indians was prohibited in 1979.

In May 1971, a buy-back program was established to eliminate some of the excess fleet. Because of the looseness of the eligibility criteria, such a scheme was probably necessary. However, fleet reduction was restricted to what could be bought out of the industry by the increased license fees levied for the purpose. The scheme was abandoned in 1973 when high salmon prices drove up the value of salmon licenses. By that point, about \$4 million had been spent to retire about 300 vessels (5 percent of the fleet).

Meanwhile it was becoming clear that limiting the number of vessels alone would not effectively control fishing capacity because licensed vessels were replaced by larger vessels, often many times larger. In order to forestall this "capital stuffing," replacement rules were devised to restrict replacement vessels to the same length and tonnage as the vessel being retired. Later the freedom to combine licenses from smaller vessels on to a larger vessel ("pyramiding") was prohibited. However, again the stable door was locked long after the horse had bolted. Weak vessel replacement criteria had allowed a devastating increase in the capacity of the licensed fleet.

Thus, while the number of vessels in the licensed fleet has declined some 30 percent since 1969, from more than 6,100 licenses to under 4,500 licenses, the capital invested in fishing is now several times greater than when limited entry was instituted. Because of technological advances, the fleet's catching capacity has increased even more.

Thus, the plan failed in one of its main purposes, which was to control and reduce excessive fishing capacity. As a result, the resource itself has been jeopardized by overfishing by a fleet which has grown out of control.

Are fishermen better or worse off? Certainly, the group of fishermen grandfathered into the fishery, and who were given for a nominal fee a valuable and limited fishing right, have benefitted. For fishermen buying into the industry, the prospects of a reasonable return

to capital investment and labor are probably as dim now as they were before license limitation. And the prospects of a return to the public--who are, after all, the owners of the resource--are also as dim as before.

The industry has probably become even more cyclical if the experience of the last 15 years is anything to go by. Fishing assets worth close to \$600 million in 1980 were reduced in value to less than half of that three years later. In addition, these devalued assets carried in excess of \$300 million worth of debt. Although things have improved somewhat in 1985, it seems that the advent of a system of transferable licenses has made an inherently unstable industry even more unstable.

I was also asked to comment on the effects of limited licensing on small coastal communities. In British Columbia, at least, the reduction in the fishing fleet has been borne mainly by the larger centers of Vancouver, southern Vancouver Island, and Prince Rupert. The small coastal communities have largely succeeded in maintaining a vital fishing economy.

In summary, the British Columbia salmon license limitation program initiated the first difficult steps in bringing the fleet under control. The plan has been overtaken by events, however, and required change has come too slowly. As a result, the limited entry plan has not been developed sufficiently to achieve its basic goals.

Roe herring licensing arrangements

The roe herring industry began in 1972 after herring stocks had recovered somewhat from their collapse in the 1960's and the Japanese market for roe became accessible to Canadian producers. The new fishery developed remarkably quickly, and in 1974 the government attempted to control further expansion by limiting the fishery to the number of licenses in that year. To further discourage participation, unprecedented annual fees were set (\$2,000 for a seine license, \$200 for a gillnet license). The Department's stated goal was to issue 150 seine and 450 gillnet licenses. When the dust cleared, 270 seine licenses and 1,400 gillnet licenses had been issued.

So once again, limited entry failed to curtail the size of the fleet to the required capacity. What went wrong?

The roe herring license, in contrast to the salmon license, was issued to persons rather than vessels. The licensee must designate the vessel to be used, but this can change from year to year. The Department

did require a certain degree of ownership by the licensee in his or her designated vessel. All licenses are technically non-transferable. Licenses can be renewed whether they are used or not.

A most obvious flaw in this scheme, just as in the case of salmon, was the generous eligibility criteria. Also, Indian licenses continued to be issued without limit until 1977. Moreover, in 1974, when restriction was implemented, the original license holders from pre-restriction days were allowed to obtain a second license, and naturally nearly all did so. Further, only those licenses issued to first-time roe herring fishermen in 1974 were required to be operated by the licensee; those issued to previous participants were not. Because of the difficulty of operating two sets of regulations, the licensee-operator criterion was abandoned in 1979.

By making the license non-transferable and requiring that it be exercised by the licensee, the Department expected to see the total number of licenses drop over time as fishermen/women retired. However, it found that non-transferability was basically unenforceable. It was difficult, for example, to deny the transfer of the license to the next of kin. And as the fishing privilege became more valuable, legal ways (leases and trusts) were found to circumvent the non-transferability rule. Today there are almost the same number of licenses as there were originally. Almost half of them are operated by someone other than the person whose name appears on the license. The Department has very little idea who the de facto license holders are!

Also, because the license is issued to persons who can change their designated vessel from year to year, there is little to restrain the growth of fishing power through replacement vessels. The fishing power of the seine fleet in particular has increased dramatically as a result. Since these vessels are also involved in the salmon fishery, the use of larger vessels in the roe herring fishery (where hold capacity is an important factor) also stimulated the introduction of new, larger vessels into the salmon fishery as well.

As a result, success in regulating the catch has not been good. Harvesting targets have been exceeded in many cases; in other cases, fisheries will not be opened because of the feared impact of a waiting, voracious fleet, which if loosed would decimate the stocks.

To make the fleet more manageable, additional restrictions have been required. In 1980, net length for the gillnet fleet was halved. In 1981, a system of area licensing allowed a licensee to fish only one of three designated areas. Most participants agree that this has helped make the fishery more manageable, enabled improvements in stock utilization, and lowered the fleet's operating costs. But it has done nothing to resolve the problem of overall excess fleet capacity.

Where are we now?

The public hearings of the Pearse Commission on Pacific Fisheries Policy, which reported in 1982, revealed that present licensing arrangements and trends are unsatisfactory to everyone in the industry. They are a threat to resource conservation. And they are a frustration to fishermen/women and other Canadians who watch the wealth in these exceptionally valuable resources being squandered in wasteful and destructive fishing effort.

Although the kinds of policy changes required to reverse the adverse trends are difficult, controversial, and costly, a consensus on the types of changes that are required has emerged in the past two years:

- * increased escapements to rebuild depleted salmon stocks;
- * changes in the form of licenses to bring more order to the licensing system, to provide better security for fishermen/women, and to provide for better control over fleet development;
- * fleet reduction programs for the salmon and roe herring fisheries;
- * a policy of allocating the catch among competing gear sectors to ensure that the burdens of conservation and the benefits of fleet reduction and stock rebuilding will be equitably snared;
- * royalties to fund fleet and resource development projects, and to discourage excessive investment:
- * an end to perverse subsidies;
- * new and tighter restrictions on vessel replacement.

These policy changes are currently being widely debated by fishermen/women. The Minister's Advisory Council of industry representatives has presented its ideas in a package which would take the industry a significant step forward. One thing is clear—far reaching changes will have to be made to current licensing arrangements if our fisheries are to realize their full potential contribution to the economic and social welfare of Canadians.

Robert Jacobson, Moderator

With 36 years in the British Columbia fishing industry, our next speaker comes to us well-versed to discuss British Columbia limited entry programs from an industry point-of-view. For the past eight years, he has been president of the United Fishermen and Allied Workers Union (UFAWU), a 7500-member, Vancouver-based industrial organization representing seine, gillnet, and troll fishermen, trawlers, longliners, herring seiners and gillnetters, and other gear types. Processing plant

workers and fish transport vessel crews also belong to this organization. He is currently co-chairman of the Advisory Council to Fisheries Minister John Frazier, a group that deals with a broad range of fleet and fisheries development issues. Jack Nichol.

A Canadian Fishermen's Union Perspective on Limited Entry Jack Nichol, president, United Fishermen and Allied Workers' Union Vancouver, British Columbia

In Canada, fisheries resources are deemed a "common property resource;" that is, they are owned by all Canadians and are to be used for economic, social, and recreational purposes. Thus, all Canadians must have access to the fisheries resources, but there is no constitutional prohibition to privatization of resources (which is really another issue).

With "open entry," the problem of too many boats chasing too few fish was compounded by each new entrant who bought or built a boat to try his luck at the fishing game. The fishing industry in British Columbia, particularly the salmon fishery, was characterized as being overcapitalized and having far too great a catching capability. Conditions for fishermen were generally depressed and extraordinary pressure was being applied to fragile salmon stocks.

For many years the United Fishermen and Allied Workers' Union pressed for a system of "license imitation" to restore the economic viability of the salmon fishery. The concept is as old as the salmon industry itself on the Pacific Coast. The great debate centered on how it should be done.

In essence, the UFAWU said:

- The license must be issued to the fisherman and not the vessel.
- The fishing privilege should not be transferable.
- New entrants should be admitted from a waiting list by a point system.
- Points would be awarded, say, to a son of a fisherman and by other criteria.
- Selections of new entrants would be made by a committee representing a broad cross-section of the community.
- Part-time fishermen would be excluded if they could not show that 30 percent of their income was derived from fishing in the first year, 40 percent in the second year, and 50 percent in each of the next three years.
- There would be a five-year moratorium on the issuance of new licenses.

In the early 1960's, successive Ministries of Fisheries began to make noises about limited entry. In 1967, the Honorable Jack Davis, a West Coast member of the Liberal Party government, introduced a limited entry plan, inevitably now called the "Davis Plan."

Effective September 6, 1968, Davis imposed a moratorium on the issuance of new salmon licenses. Vessels qualified for a salmon "A" license if they fished for salmon in 1967 or 1968 and could demonstrate landings in either year of 10,000 pounds of pink or chum salmon, or the equivalent in other species. Salmon landings were required at least in every other year to maintain the "A" license. "A" licenses were fully transferable and an "A" licensed vessel could be retired and replaced with another "A" licensed vessel.

The moratorium, combined with the "A" provision, reduced the fleet by a much heralded 2,000 vessels and relegated others to a "B" category that prohibited replacement and transfer and imposed a ten-year life. The abolished licenses were non-producing, mainly recreational vessels that used commercial licenses for convenience.

In defense of his plan, Davis claimed that by his scheme fishermen would become members of a "select club." A license would be the fisherman's passport out of the industry, an asset he could sell. As an economist, Davis said he was concerned about the inverse ratio of 2-3 dollars of investment for each dollar of return and vowed to reduce capitalization of the fleet to manageable proportions. He failed to explain how he would reduce capitalization by compelling new entrants to pay potentially exorbitant prices for the fishing privilege.

In theory, any Canadian could enter the fishery by simply purchasing an existing license, but when values reached \$6,500 per ton, a select club had, indeed, been created.

Davis embarked on a buy-back program to reduce the fleet further. After two buy-backs, a moratorium was proclaimed since fishermen were now reluctant to offer their vessels for sale. The next and last buy-backs happened in 1981.

The industry experienced a dramatic turn around in the 1970's. Good salmon catches, coupled with improved prices as well as the advent of the multi-million dollar roe herring fishery, created the illusion that the Davis plan was working. Some critical errors were then committed.

Some vessel owners protested they were barred entry into the club and, yielding to the pressure, Davis awarded "A" licenses to about 150 large non-salmon vessels. In time, vessel owners exercised their privilege of retiring the "A" license and striking another license on a new vessel. More than 100 seine boats entered the fishery through this door.

Pyramiding of tonnage was permitted, if not encouraged. Small vessels could be purchased and their aggregate tonnage produced on large vessels. More than 100 seine boats were introduced into the industry by this means, but it is difficult to trace a corresponding decline in small vessel tonnage. The suspicion is widespread that a good deal of derelict tonnage was resurrected from the beach by fishing companies and others.

So where does that leave us?

The salmon fleet is now comprised of about 4,600-4,700 vessels, compared with 6,100 in 1969. About 550 of these are seine boats, whereas the seine fleet numbered about 300 vessels in 1969. The balance of the fleet is made up of

gillnet 1,065 troll 1,493 combination troll & gillnet 1,266

4,235 licenses

In addition, we have about 250 seiners licensed for roe herring and approximately 1,300 gillnet licenses. This enormous capacity will soon be turned loose to harvest a projected catch of 18,000 metric tons of roe herring.

The capitalization of the salmon fleet is now pegged at a half billion dollars. If a modest salary was provided for out of gross earnings, the net cash return on this total investment (before depreciation) would be one percent.

While interest rates have since moderated, interest on debt in 1982 represented almost 25 percent of a fisherman's total costs.

Salmon licenses are valued on a per ton basis and their value has declined drastically from the peak of two or three years ago. Vessel prices, too, are severely depressed. With the foreclosures by the banks and the potential for foreclosures—the write-down of loans and resale of vessels below their rated value—the fleet is being quickly recapitalized or re-evaluated.

Fishing weeks for the net fleets are in the nature of 24 hours in most areas. Some bumper runs of salmon have provided the exception. Fishing seasons in many areas can be counted by the few days when fishing is allowed.

The "select club" has lost a good deal of its lustre.

Dr. Peter Pearse of the University of British Columbia was commissioned to undertake a study of the fishing industry. His drastic proposals

for fleet rationalization were universally opposed by the industry. A report of a Fleet Rationalization Committee met a similar, if not such a hostile fate.

Now the Minister's Advisory Council is studying the question of fleet rationalization and with a new buy-back scheme being touted, vessel values are strengthening and there is evidence of speculation in vessels and/or licenses.

Let me conclude. If I could make one final observation of a trade union, it would be this. There is something perverse in creating value in the right to harvest a common property resource.

Most fishermen in British Columbia believe that the value that has been created in the salmon fishing privilege—depressed as it now is—is their right and a firmly established benefit accruing from their fishing license. Those who were grandfathered in at inception have, of course, realized a capital gain. Entrants since the licensing plan's inception have had to purchase their fishing privilege and in many cases at much more per ton than it is now worth. Few would agree to change the system now—not because they like it, but because they're stuck with it.

Fishing privileges, or salmon licenses, are now capitalized at about \$150 million.

If, in the beginning, the fishing privilege had been ruled "non-transferable," then non-transferability would be equally well-entrenched and accepted now as the norm. One great concern with transferability is that ownership of the fishing privilege will pass into the hands of absentee landlords and fishermen will become nothing more than sharecroppers.

Over-capacity in a salmon fishery threatens the resource itself. Over-capitalization puts enormous pressure on the resource and impoverishes those who must fish within the limits of the salmon resource.

In the opinion of my organization, the health of the resource, the economic welfare of the people who support the resource, and their capital should be the issues considered in any limited entry scheme—in that order of priority.

QUESTIONS FOR CANADIAN PERSPECTIVE SPEAKERS

Question from Pete Granger, West Coast Fisheries Development Foundation: How do the processors view the Canadian experience with limited entry?

Jack Nichol: Generally the processors have favored the idea of limited entry, they favored the idea of transferability, and they favored the idea of the vessels being rated by tonnage. Now they are concerned that there is over-capitalization. (It has been the practice in British Columbia for processing companies to help finance fishermen.) A couple of years ago when interest rates went to 24 percent in Canada, it became more of a burden on the companies and a lot of them went under as a result of the debts they had and the interest payments they were making. So they've decided to get out of fleet financing altogether. They support the idea of a buy-back. They support the idea of fishermen paying for it, too.

Carl Finley, Newport fisherman: Are you still basically pushing the concept of non-transferability and licensing fishermen?

Jack Nichol: We would still prefer it, but it is impractical.

Finley: Right. If that system had been implemented, wouldn't it simply have resulted in the money chasing the available fishermen instead of the scarce licenses? Thus the windfall profits would accrue to them rather than the license holder.

Jack Nichol: Well, if that were so, then fine. But we thought that the fisherman should be the thing of value rather than the boat. Better that the individual should have some value to the industry. But again, I think trying to reverse the situation now is too far down the road.

Harold Lokken, Director, Pacific Fisheries Foundation: Jack, you mentioned pyramiding and said that it increased the fleet. If you have three licenses that are combined with one, wouldn't that reduce the fleet because you have three boats leaving and only one remaining.

Jack Nichol: If that were the case, that would be correct. But what we were doing was building seine boats that were costing \$1.25 million and there was no way the fishery could support that kind of capitalization. The boats that we were buying out of the industry were the smaller gillnetters or trollers. One of the things I had in my notes was that it is hard to detect a corresponding reduction in small boat tonnage. During the Pearse hearings, our secretary-treasurer went down to the Department of Fisheries and tried to trace back some licenses and couldn't do it. We suspected a lot of tonnage was derelict--laying on the beach, whatever--that the companies assigned some tonnage to. And

they came up with licenses. So an awful lot of skeletons found their way into the fishery. There just doesn't seem to have been the corresponding reduction in the small boat tonnage. David mentions that the fleet is smaller now. When Davis brought in his grandfathering provisions, you had to have a certain level of production in order to qualify for a license. Two thousand licenses went out of the industry, but they were generally recreational vessels that weren't a factor in the commercial fishery at all.

James Crutchfield: Would you be in favor of having people who wanted to purchase a home or a farm line up, or draw lots, or have some board decide who is to get the privilege of buying?

Jack Nichol: No, I wouldn't. I don't think there is any question that purchasing a farm bestows property rights, but there is no property right, as you said, in a common property resource like fishing. And it is a question of somebody having the privilege to go out and fish commercially for what is a resource that is owned by all the people. You can't put ownership on fish that are roaming free in the oceans.

Spike Jones, Kodiak fisherman: From a management point of view isn't it easier to manage the system you have now or was it easier to manage the system before?

David Reid: I am much too young to remember. What would have happened since 1968 if we had kept the open access system? Certainly the number of vessels would have escalated significantly.

Jack Nichol: My feeling is we are probably in much the same situation with as we would have been without limited entry in terms of management. It hasn't improved things at all.

EXPERIENCES WITH LIMITED ENTRY, PART 2

ALASKAN SALMON

Robert Jacobson, Moderator

Introductory remarks from Bob .

Our next speaker, John Williams, received a master's degree from the Institute of Marine Resources at the University of California-Davis. He was a member of the University of Alaska Sea Grant Marine Advisory Program until 1977, when he went to work as a policy analyst for the Alaska Legislature. In 1979, he was appointed to the Alaska Commercial Fisheries Entry Commission. He now has his own fishery consulting business, G & W Fishing Industry Services in Juneau.

Limited entry in Alaska's commercial fisheries
John D. Williams, fishery consultant, Garner and Williams
Juneau, Alaska

I have been asked to provide an overview of the entry limitation system enacted for commercial fisheries in Alaska. In this overview, I am to specifically cover the when, how, and why issues of the initial drive to implement the management legislation; the goals and objectives of the program and a subjective analysis of the degree to which these goals have been met; the key provisions of the program, including the point system utilized for the initial issuance of permits; the numbers and types of fisheries and fishermen affected; and, finally, what might have been done differently (and presumably) better. First, some background. Until the relatively recent oil era in Alaska, commercial fishing was the largest single industry in the State of Alaska. Total dollar volume, employment levels, communities reliant on that industry base, and probably a number of other measures would all substantiate the importance of commercial fishing. More recently, the boom in tourism and the pressure of population growth have elevated both sport and subsistence fishing issues to the same level of political importance as the once-almighty commercial fishing industry.

Commercial fishing issues probably played the predominant role in the Statehood Act. In 1959, Alaska took control of its natural resource management and immediately outlawed by constitutional action the use of fish traps in state waters. The condition of salmon stocks at that point was a downward sloping trend line of reduced harvests from the bumper years of the 1930's.

Both before and after statehood, various attempts were made by both statute and regulation to implement forms of limited entry in specific commercial fisheries in the state. Each in turn failed the test of legal scrutiny and was eventually overturned. Finally, in 1972, the Alaska constitution was amended to specifically allow for the use of entry limitation to manage common property fisheries. This constitutional provision would not have saved any prior attempt at limited entry, but the language of the amendment benefited from the lessons learned in the previous attempts.

Prior to adoption of the 1972 amendment, Article VIII, Sec. 15 of the Alaska Constitution provided:

No exclusive right or special privilege of fishery shall be created or authorized in the natural water of the State.

The 1972 amendment added (without affecting the sentence above) the following:

This section does not restrict the power of the State to limit entry into any fishery for purposes of resource conservation, to prevent economic distress among fishermen and those dependent upon them for a livelihood and to promote the efficient development of aquaculture in the State.

Former Governor Bill Egan, a popular leader of the statehood movement, made the issue of limited entry a major plank of his 1972 gubernatorial campaign. A study group had been formed, and in February 1973, it presented its findings, including a draft bill which was simultaneously introduced in the Legislature. Although the major focus had been the salmon fisheries, the legislation addressed all commercial fisheries. The legislation came on the heels of a 70 percent voter approval for the constitutional amendment. The bill contained many of the essential elements of the present Alaskan program, but key provisions were added by the Legislature.

To complement the constitutional amendment which had preceded the introduction of the legislation by a scant six months, the bill recited certain purposes and findings. They are a part of the law signed by Governor Egan in April 1973 and are:

It is the purpose of this chapter to promote the conservation and the sustained yield management of Alaska's fishery resource and the economic health and stability of commercial fishing in Alaska by regulating and controlling entry into the commercial fisheries in the public interest and without unjust discrimination.

The Legislature finds that commercial fishing for fishing resources has reached levels of participation, on both a statewide and an area basis, that have impaired or threaten to impair the economic welfare of the fisheries of the state, the overall efficiency of the harvest, and the sustained yield management of the fishery resource.

The Governor's proposal involved a complex system, creating an administrative body to implement the legislation (The Alaska Commercial Fisheries Entry Commission) and charging it to determine those fisheries which from time to time require entry limitation and to develop a ranking system which considers specific categories under the umbrella categories of "past participation" and "economic dependence" to be used to determine who would qualify for a permit.

The motivation for this particular approach was clear and consistent with Alaska's view of itself as the victim of outside exploitation, and further embodied a variation of the typical grandfathering system. While the majority of participants in the Alaskan fishing industry were residents of the state, almost all of the processing sector of the industry and many of the fleet's "highliners" were non-residents. Further, the importance of the emerging cash economies in the numerous native coastal communities was recognized by the law. The Governor's bill, as amended and passed by the Legislature, contained elements both in the initial issuance of the permits and in the means of legal use and control of the permits which favored the Alaskan fisherman and provided him/her with a means to break the perceived control over fishermen which the cannery owners were believed to enjoy.

The Legislature accepted the basic concepts of the Governor's bill with one major change related to the number of permits to be initially issued by the Entry Commission. The Governor's bill would have required the Commission to establish permit issuance levels considerably below the level of recent effort in the salmon fisheries targeted for limitation. Rather than freezing out numerous fishermen who would have received no compensation for their removal, the Legislature directed that the initial number of permits issued in each fishery was to approximate recent levels of effort. Once that was accomplished, the Commission was empowered to implement a tax at the ex-vessel level, the proceeds of which were to be utilized to "buy out" excess gear units at fair market value.

While this scheme did much to provide for compensation for those removed from limited fisheries, it certainly did not prevent numerous instances in which (a) recent fishermen with little historical experience, or (b) long-standing fishermen who did not for various reasons participate in their traditional fisheries immediately prior to limitation were eliminated without compensation. Permits issued under the statutes were transferable to provide a means of access by those excluded on initial issuance.

To prevent these newly-created use privileges from being controlled by the "outside" canneries, the Act provided that a permit could only be issued to a natural person (one only) and that the name holder must be present whenever the gear authorized by the permit was fished. The Act specifically amended contract law by prohibiting an individual from being contractually bound to sell a permit for a time-certain after he/she may have signed a contract of sale. Finally, the Act prohibited the permits from being controlled by interests other than named holders by preventing the permits from being utilized as collateral instruments (except by the State of Alaska under the provisions of a fisherman's loan program and a related loan program available through an Alaskan cooperative) or from being subject to any order of any court for any reason. As of this time, I am unaware of any governmental body (except for the above-mentioned state loan program) involuntarily severing a fisherman from his/her permit, including attempts by the Internal Revenue Service to sell permits for back taxes.

How were these permits issued? The Alaska Limited Entry Act and all the research leading up to its passage focused on the historical salmon fisheries dating back to the 19th century. Virtually no consideration was given to the recent emergence of the numerous crab, shrimp, herring roe, and other fisheries. In 1973, an insignificant portion of the bottomfish stocks in waters surrounding Alaska was harvested by domestic fishermen. Hence, the industrial organization of the salmon fisheries shaped the legislation.

The legacy of federal management was not all bad. Fortunately for entry limitation reasons, federal management had established requirements and landing tickets. These items had been incorporated into state statutes and regulations. The organization of historical data based upon archived records proved the essential source of information which allowed for the grandfathering of fishing rights.

Nineteen salmon fisheries were initially targeted for limitation. In Alaska, a "fishery" is defined by three considerations—targeted species, geographic area of operation, and gear-type utilized. Based upon these criteria, 26 salmon fisheries exist in the state. All gear types (except hand troll in Southeast Alaska) utilized to harvest salmon from Southeast Alaska through Bristol Bay were covered by the initial regulations promulgated by the newly embodied Entry Commission. Following statutory guidance contained in the Limited Entry Act, the regulations specified a complex ranking scheme intended to recognize by equal weightings the elements of economic dependence upon a particular fishery and the historical participation of each gear operator in each fishery. A "point" system was developed to measure a fisherman's qualification under these two general principles.

The point schemes relied to a great extent upon historical information contained in archived vessel licenses, commercial fisherman licenses, gear licenses, and fish tickets or landing records. However, some point categories required the applicants for permits to produce additional evidence, especially where such comparisons as the amount of money earned from non-fishing sources to the gross earnings from a specific fishery were to be utilized to determine economic dependence as measured by percentage of income from the specific fishery. In other examples, applicants in many instances were required to provide proof of residency in a particular community in order to qualify for points under an economic dependence criteria which attempted to measure "availablility of alternative occupations" based upon the population density of one's domicile. Other records were required for points available for vessel or gear ownership, past participation as a crewman, and the like.

Applicants were granted two separate opportunities to present evidence at oral presentations before representatives of the Entry Commission as well as significant amounts of time to mail in evidence in support of point claims. Most often, Commission staff and publications could be relied upon to disclose the types of information applicants should present in support of point claims. For lucky applicants, sufficient points could be verified from archived state records to authorize the issuance of permits simply by the applicant's verification of the accuracy of computer records. Because it was expected there would be more eligible applicants than permits to issue, a deadline was established for application for a permit.

The process of awarding and denying point claims and the legality of the methods utilized to measure these various indices of participation and economic reliance were all subject to judicial review. Hundreds of challenges have been made to both the regulations which established the point systems and the administrative decisions of the Entry Commission. Many of these challenges have resulted in major portions of the original point systems being declared unconstitutional on their face (including place of domicile as an indicator of "availability of alternative occupations") or by their implementation (such as the award of income dependence points to the partner of a gear license holder, something which the Commission determined to be unavailable under the point system and the Alaska Supreme Court required under the same point system).

Successful court challenges of both the point systems and other factors of the system have resulted in the initial issuance levels being exceeded in 11 of the first 19 fisheries limited. In five more of the first 19, maximum numbers were exceeded under a provision of the Limited Entry Act which directed the Commission to issue a permit to any applicant who would suffer "significant economic hardship" if excluded from the fishery. Provisions for "significant economic hardship" had been implemented by establishing a point threshold. All who exceeded that threshold were issued permits irrespective of the number of permits to be issued under the regulations.

Who could apply for a permit? Fortunately, federal licensing schemes had distinguished between individuals who were licensed to work on a commercial fishing vessel and individuals who were authorized to operate gear. Until regulatory considerations in the mid-70's caused otherwise, it was quite uncommon to find more than one gear licensee aboard a given commercial fishing vessel.

Any individual who had been properly licensed as a gear operator and who had recorded commercial landings of fish under that gear license was eligible to apply for an entry permit in that fishery. Crewmen who had never been licensed as gear operators were not eligible to apply. The Limited Entry Act specified that all gear license holders who had participated at any time from 1960 through 1972 (the last fishing season prior to implementation of the Limited Entry Act) were eligible to apply for entry permits in the first 19 fisheries put under limited entry.

Each individual applicant was to be ranked under the complex point system. Should additional permits remain after issuance to all who would suffer "significant economic hardship," they were to be issued to those individuals with the highest verified point totals.

One of the first significant court losses of the infant program resulted in a new class of eligible applicants which had originally been excluded by the Act. While the Act specified that only those who had fished prior to the passage of the Act would be allowed to apply, the Alaska Supreme Court declared that all those who had fished prior to the promulgation of regulations to implement the statute would be allowed to apply. Since the regulations did not become effective until late in 1974, all those individuals who had been first time gear license holders in 1973 or 1974 were authorized to apply. The opportunity to apply for many of these people resulted in the issuance of entry permits.

The Limited Entry Study Group had compiled historical data as part of its mission to develop the legislative proposal. (In its report released in February 1973, tables were presented demonstrating the numbers of gear licenses issued in each fishery and rates of turnover. These tables are available in "A Limited Entry Program for Alaska's Fisheries," Governor's Study Group on Limited Entry.) To date, 7,933 permits have been issued to 11,150 applicants in the initial 19 salmon fisheries brought under limitation. Fourteen more fisheries have since been brought under the program, and 4,705 entry permits have been issued in those 14 fisheries.

Have the goals been met? Were the objectives of the program achieved? As many answers exist as the number of interpreters. From my perspective, I would say that for the most part the goals and objectives as stated have been met, albeit at a cost in human and financial resources which far exceeded any estimation made at the time the legislation was adopted.

The complex ranking scheme greatly accentuated the importance of fishing success in the likelihood of receiving a permit by the application process. As a result, more than 80 percent of the initially issued permits were issued to Alaskan residents. Of those, Alaskan Natives fared very well. Alaska's resident native population received 44 percent of the permits initially issued, while comprising only 18 percent of the resident population. The effect of free transferability of permits has not caused a noticeable change in the distribution of ownership patterns, except in one category. The number of permits held by Alaskan Natives in the originally limited fisheries has declined by nearly 19 percent. The group most impacted by this net loss are residents of the Bristol Bay region.

From the perspective of economic efficiency, it matters little who gets permits initially. At the initial issuance stage, sound arguments can be made for any quick and easy means to distribute permits. Not only will the public sector costs resulting from such a hypothetical system be substantially reduced, the actual costs incurred by the public will be reduced in two ways: 1) in time and money spent seeking the award of the permit (attorney fees, record searching, travel expenses, etc.); and 2) in eliminating the uncertainty as rapidly as possible. Ten years after the first applications were received, numerous individuals who submitted applications do not yet know if they will receive an entry permit.

In the case of salmon fisheries, it can be legitimately argued that no better system of entry limitation could be achieved than the licensing scheme utilized by Alaska. In other fisheries, especially those where harvestable surpluses can be determined in advance and in which the surplus can be subject to exploitation over a period of time, more economically sound systems should be seriously considered. The licensing scheme does little to eliminate overcapitalization extant in commercial fisheries. However, it does provide for a reasonable environment in which to undertake stock rehabilitation and enhancement efforts, and more than likely introduces a consideration which accentuates the treatment of a given fishery with more professionalism and economic reality. In the Alaskan experience, limited entry has clearly created the opportunity for greater than normal return rates and allowed for substantial reinvestment in the limited fisheries to occur.

Due to the timing of circumstances, the implementation of the second stage of the limitation process—the buyback of excess permits—has never been attempted in any fishery. The statutory provisions provided in the Limited Entry Act would appear to suffer from major problems and should be subjected to close scrutiny before implementing regulations are proposed. It is very likely that amendments to the Act would be necessary before an efficient buyback program could be achieved.

Robert W. Jacobson, Moderator

Our next speaker has been a commercial salmon and herring fisherman in Southeast Alaska for the past 15 years. He is the owner of a 58-foot limit seiner, the SIERRA MADRE, and resides in Ketchikan. He is executive director of the Southeastern Alaska Seine Boat Owners and Operators Association. He also is a member of the board of directors of the United Fishermen of Alaska and the Alaska State Board of Forestry. And he was a member of the Alaska delegation to the U.S./Canada Salmon Treaty talks. Here with an industry perspective on the Alaska salmon limited entry program, Bruce Wallace.

Alaska's Limited Entry Program for Salmon

Bruce H. Wallace, executive director, Southeastern Alaska Seine Boat Owners and Operators Association, Ketchikan, Alaska

I will state initially that I support the concept of limited entry. I have been a fisherman for 15 years, with at least six years of that as a crewman. I bought my permit to get in. I bought my permit almost six months before the election so that, as it turned out, I could fish in the 1976 season. Having said that, however, I would warn that there are a number of problems in limited entry. It is not a solution, but rather a step in a process. My Association [the Southeastern Alaska Seine Boat Owners and Operators Association] may be the first—as well as the first gear type—in Alaska to attempt buyback. We are doing so in part because of the U.S./Canada treaty and in part because it is quite clear after approximately 10 years that, with the number of permits available, we are not going to be able to sustain an economic return to the largest portion of the fleet.

It is fairly clear in our review that there is nothing that can be done about the bottom 25 percent of most of the fleets. Jack Nichol's point is well taken that somewhere between 20-40 percent of the fleet will catch the largest majority of the fish. Those guys are going to do fine under almost any circumstance if they have the opportunity to fish. What we are trying to do is deal with the problem of that middle 50 percent.

Because of a number of allocation questions in Southeast, the Limited Entry Commission has been much faster in compiling and distributing economic information on the Southeast Alaska salmon fisheries. We get a fairly extensive report at each Board of Fisheries finfish meeting detailing the economic impact of the seine fishery on the other net fisheries and on the troll fishery in Southeast Alaska. It is fairly clear that while Chignik seine permits may cost \$300,000.

Southeast seine permits can be purchased for something less than \$40,000. The Chignik vessel, because it fishes in a lagoon or very close to a lagoon, is relatively shallow drafted and probably costs on the order of \$150,000. The Southeast seine vessel—my vessel, for instance—is a 58-foot deep-drafted vessel that runs anywhere from \$250,000 to \$1,300,000. We have stuffed as much into a 58-foot limit as you possibly can put in. The 58-foot limit on Southeast seine is not unlike the 32-foot Bristol Bay limit. The point is that we are overcapitalized to a degree. From a fisherman's perspective, some of the reasons behind it should be understood.

In Southeast, we have five species of salmon, three gear types, and bi-modal and tri-modal entry patterns. Most fishery managers view it as the most complex salmon fishery on the West Coast, maybe the most complex salmon fishery in the world. The salmon come in during a relatively short period of time and the Department has to be right in its stock size predictions. An inaccurate estimate may result in a loss to the industry of 1.5 to 5 million fish in a given week. Now I know what that means catchwise to you fishermen, but I have to tell you that we can't sustain that sort of mismanagement either.

The Department feels relatively comfortable with the current fleet size. What it means to us, though, is that we are going to fish somewhere between 25 and 27 days a year when in the 1960's we were fishing 45 and 50 days a year. For our troll fishery it means fishing 38 days a year instead of 160 days. Now that doesn't necessarily mean we are going to catch an awful lot fewer fish, it just means we are going to have to do it in a hell of a lot shorter period of time.

It is in that light that I would like to speak about limited entry. I agree with the speakers who have come before that it is not the complete answer. I don't think that there is such a thing as a complete answer. But for Southeast and for salmon, it was an integral part of the answer. We will, obviously, over time modify it. The problem with modification is that it has statewide implications, and sometimes what is good for Southeast is not necessarily good for Bristol Bay or False Pass. Since the law is the law of the land as far as the state of Alaska is concerned, site specific solutions, if implemented, while resolving a problem in one area, may only create problems in others.

That has probably to some degree helped and it has to some degree hurt. It has helped because sometimes you want to do something on the spur of the moment when you should move more deliberately. I would agree with the comment expressed earlier about limited entry, "Take your time and do it right." I would also point out that if some form of limited entry is not soon enacted for the halibut fishery, there may not be a hell of a lot that you can do with it in the future. As a matter of fact, that may be the case right now. There's a balance there that has to be met and I don't quite know what the balance is.

Looking at recent history, I suspect that the balance is different in each one of these cases. I make that point because the limited entry concept is very broad in definition and scope. You cannot take the Alaska format or the Australian format and expect them to meet your needs without some changes. In that regard, I have a message for every fisherman in this room. You better stay with the process (of working out a limited entry system), whether they ram it down your throat or whether you develop your own program. It is a process. It means 15 or 20 years minimum to plan, implement, and develop an acceptable program. It is going to take that long for you to come to some kind of rationalization you can live with that is also acceptable to the general public and to fishery managers. If you were to implement limited entry tomorrow on the Oregon coast for salmon, it would be 15 years before you would have anything that would generally be workable.

Regarding buyback, the plan we are developing for the Southeast seine fleet would involve no more than \$3.5 to \$5 million initial funding. We can achieve our fleet reduction goals with that. John Williams is currently under contract to our association to study our proposed buyback program. In addition, a number of my members have spent a great deal of time at this. Reducing the fleet size would allow the Department to relax its regulations and provide those of us remaining with more fishing time, thereby providing what we feel would be a very positive cost benefit to us. At current fleet size, each season is a gut wrencher. When they "pull the trigger" to open a season at 6:00 a.m., we must make very hasty but calculated decisions on where to fish, how long it will take us to get there, where the fish will be located once we arrive—and we must be finished by 9:00 p.m. that evening. That is just about the way the seine fishery operates in Southeast.

We have become efficient--very efficient. We were forced to become more efficient because our fishing time was reduced. In 1976, the first year of limited entry, we fished 14 days. You have to understand that, at that point in time, a day in the Alaska seine fishery was only 12 hours. A standard day now, because we won a battle, is 15 hours With limited entry, you are simply going to find ways to get around some of the restrictions. The pressure to survive will generate new avenues of approach using either new technology or new administrative approaches. I think some of the things Jack Nichol pointed out about Canada are comparable to the circumstances in Alaska. However, I believe Alaska's salmon limited entry program was considerably more thought out--perhaps because we had the ability to look at what had gone on previously. You have that same opportunity but have more case histories to study. You can look at Alaska and other limited enyry programs and see where the mistakes were made and identify other options. When planning your limited entry program, allow a short enough period of time that you don't get into major speculation, but a long enough period of time so that your base decisions are closer to your end result. Perhaps then you won't

have to talk in terms of 15 years. You may be able to talk in terms of five to eight years, but it is a process.

For our buyback proposal, we looked at what it would take to insure that the majority of the fleet in a given year would be able to sustain themselves to an order of about 60-70 percent of their annual gross stock without adversely affecting any of the other salmon fisheries. That is a pretty loose target.

Limited entry has given a certain stability to a very complex fishery in Southeast. The interesting byproduct is that, since implementation of limited entry, the fleet has developed into a group of real highline fishermen. Interestingly enough, a lot of those highliners have decided that there was no salvation in Southeast and have moved out to False Pass, into Prince William Sound, into other fisheries. As it turns out, we are probably in the 60-40 range. In other words, 40 percent catch about 60 percent of the fish. This is a situation that would, I think, have happened to some degree whether limited entry was there or not. That is why limited entry in most cases is only a partial solution: it only will modify to a degree what is going to happen.

New gear technology-purse seines, increased hydraulic power, those sorts of things-was being developed anyway. It was applied a little bit faster in Southeast because there weren't a lot of fish around. It has also had an impact on determining the logical number of seine boats available to fish. It is a capitalization question.

As far as buyback goes, we have set some details in place and left a lot unsaid. At this moment we are talking about a two percent of gross stock assessment on Southeast seines to help finance the buyback program. We are also talking about increasing our initial licensing fee to either \$1,000 or \$2,000 so we can build a larger buyback fund more quickly.

These kinds of things are what fishermen can do. If left to the government or to the economists, we might be faced with a buyback assessment that we can't afford. Our state language on buybacks now requires a seven percent assessment. It is fairly clear that fisheries in jeopardy and needing buyback can't afford to contribute seven percent of their gross stock. This is an absurdity that needs to be corrected.

If fishermen participate in planning and instituting limited entry, they should decide whether or not it is something that will have a potentially positive effect for their fishery. If so, they should stay with it. They will derive the ultimate benefit.

However, fishing pressure is growing as fleets become combination boats—as Barry Fisher said. For example, my partner's boat will be able

to transfer from halibut, which is a potential 35,000 pounds a day operation, to a purse seine fishery in eight hours. I can change to a pot fishery in about 4-1/2 hours. I say this only because I think it's inevitable that many more boats will move into a combination of fisheries. I would argue that we are getting gear-poor trying to chase the fish around. If I have to fish seven fisheries and each one employs a different gear type, there is a point at which I spend more time sitting on the beach than I do on my boat. I would argue, therefore, that diversity is the nature of survival for fishermen. But if you have to fish seven different fisheries with different gear, you are probably never going to economically catch up with yourself. And limited entry can act as a control that would give you three fisheries, maybe four. At that point, I think you may begin to realize a certain economic return.

Fishermen must learn to recognize all the tools that are available to them. One thing we are learning is that enhancement is a tool that goes along with this sort of "presence of management." All gear types in Southeast Alaska pay three percent to two regional aquaculture associations. Fishermen are required, therefore, to put something back into the fishery. You will not continue to get a free lunch. At least in salmon, there is a perception that we are taking something from the public domain and putting it to private benefit. It is fairly clear that if you want buyback—and I think buyback is ultimately one part of limited entry—you are going to have to pay for it.

I know that each one of you is saying "I'm paying already." We do the same thing in Southeast. It is not something unique to any geographic area. But if you use these tools properly, I think they will end up benefitting you.

You should first decide on what tools to use. Look at limited entry in that light. Listen to what is being said here today, make that judgment based on your needs and whatever form would be most applicable, then go forward with it. To reject limited entry without that detailed look is probably going to be counterproductive in the long term.

QUESTIONS FOR ALASKAN SALMON SPEAKERS

Question (questioner unidentified): Has the state of Alaska established a loan fund to buy permits?

John Williams: There is a loan program in place that allows a permit to be used as collateral for the purpose of borrowing money.

Bruce Wallace: There are two things I would like to say about the Alaska loan program. While it is an economic program, it also is a very social solution in that it has some fairly strong residency requirements. It was set up to keep the residents home, to maintain the local economies, to bring people back to Alaska, or to attract them to Alaska for the first time. What you are saying is that the limited entry permit requirement has introduced an extraneous expense to the cost of fishing. I guess the reply is that the managers can manage better under a limited entry plan--or at least they say they can. Certainly in Southeast I would make the point that when we started this, we had an escapement index of 2.6 million pink salmon and we caught about 7.5 million. Last year we had a 9.2 million escapement index and we caught 36.5 million pink salmon. The Department is the first to tell you that Mother Nature played the greatest role in that. The fact that good management also occurred obviously added to it. I don't know how you cut the pie there, but there are different ways of looking at the question. It is valid; how valid is the question I don't have an answer for.

John Williams: I don't have the answer either, except to say that if you are going to accept the principles of the free market economy as a guiding principle of our society, you are going to allow individuals within that society to assume the risks, the benefits, and the losses. There is no guarantee anywhere. The degree with which the Alaska loan program deviates from that notion is that it does subsidize those loans. Money is loaned at below market rates. The value of that subsidy is a mistake, I believe. But in terms of total impact on total permit valuation in the state, it is a small component of the overall valuation of permits, which is legitimately set in a free market.

Craig Berger, Newport fisherman: I think there is another component to what Barry Fisher was saying in his talk this morning. That is the availability of permits and the assumption that the price of permits is related to the free market. In fact, what everybody found out when credit dried up is that the price of something is related to the availability of credit at least as much as to any intrinsic value. If there are no buyers who can produce money, it has damn little value. If people produce less money, it is worth less. So perhaps by producing easy credit, the state of Alaska is creating an indebtedness that wouldn't otherwise be there.

Comment from audience (speaker unidentifiable): The assumption has been made that the value of permits is related intrinsically to the permit's ability to produce profit. I think everybody discovered that when the Feds pushed interest rates up to 20 percent, banks found that they didn't want to make such loans. So the price of things is also related to the ease of getting money. When you can't get money, the price of things goes down. I think what Barry Fisher was pointing out is that easy money raises the price of those permits and if you had a failure in the resource you would have a lot of people strung out, which is where the industry is now.

Bruce Wallace: I am not sure but that the price of a permit has almost nothing to do with anything. Quite frankly, people come into the fishery because of some of the wildest, harebrained ideas I have ever heard. There are people from Oregon who come up to Southeast Alaska to fish for two reasons: they can't fish in Oregon because of reduced stock availability and because there is a perception that you can make a million dollars in the fishery in Alaska. I am talking about people who have 10-15 years in the fishery. It is even worse for people coming because of the lure of Alaska. The 147 million salmon harvest is some kind of a cornucopian horn. There are almost as many reasons for people buying permits as there are permits sold—at least in my fishery.

I agree with Jack Vichol that it would probably be a good idea if you spent five or six years in a fishery before you were allowed to buy a permit. But that is an inhibiting factor on free transferability. There are people who have generated these prices because they are willing to pay them, but have very little understanding of what the real cost is. They don't totally understand until sometime about the middle of the third or fourth opening when the reality hits home that there are another 200 to 400 men and women out there who are fairly skilled and who don't think he has any right to even one fish. And they are going to make sure they exert that point in the extreme. It is a competitive fishery.

There is a real problem with what lies behind the price of a permit. I think credit is part of it. Easy credit obviously drives the price up a bit. But the fact is that the State of Alaska wanted the residents to have an advantage. The purpose was to keep the residents and the local community involved in the local fisheries, so there was a social trade off there. I am not saying you are wrong, only that there were other things at work besides the equity question.

John Williams: Based on my knowledge of economic theory, I think the subsidy present in our loan program should be capitalized and become part of the permit price. Consequently, the availability of that loan money should drive permit prices up. I can also tell you from my experience with the Commission, and now working as a consultant in the industry, that price setters are not residents of Alaska. Alaska residents are the

only people eligible for the loan program. Price setters in every salmon fishery that I have dealt in are non-residents. They pay the highest prices and, as far as I know, there is no bank in the world that will give them credit on a permit.

Melvin Olson, Bristol Bay Fisherman: I have been fishing Bristol Bay since sailboat days. I got one of those free permits you talk about. I want to stay in fishing. Fishing in Bristol Bay today continues because of the limited entry permit system. If we didn't have the limited entry permit system in Bristol Bay, there'd be no fishing. I fished a converted sailboat for 25 years. In 1979, I borrowed money at 12 percent to buy a \$100,000 gillnetter. It made fishing viable for a person my age. I think you people should take a look at what we have in Alaska. Barry is a free enterprise man. Sure, he wants to go wherever he wants, but those days are over. You can't have 250,000 to a million people fishing Bristol Bay and still maintain a viable fishery.

Ted Painter, Kodiak, Alaska: I purchased a salmon permit three years ago for \$80,000, it is now worth \$40,000. But that is not my point. My question is, what did it cost to operate the limited entry program when it was originally instituted, what is the cost today, and what will be the cost 10 or 20 years down the road? I am referring to the Limited Entry Commission.

John Williams: This is from memory. The original budget of the Commission in 1973 was around \$600,000. There was a lot of inflation between 1973 and 1983. But when I left the Commission, the budget was about \$2.3 million.

Bruce Wallace: I am responding to this because I am testifying in Juneau as soon as I get back about certain budget line items that will inflate that number. One of the things that has happened is that the Commission has taken on added roles. It now does things it did not initially do. I am not sure what the cost relationship is between the \$600,000 and the \$2.3 million, but I know that my association is going to ask for a \$38,000 line item budget increase for limited entry to take care of its role within the buyback program in Southeast. Part of the Commission's budget growth, therefore, is what fishermen and industry have asked for. Another part can undoubtedly be attributed to the kind of unbridled administrative growth that happens with such organizations.

Spike Jones, Kodiak, Alaska: What percentage of Southeast permits are owned by Alaska residents versus outsiders? Are permits moving to outside ownership there, as they have in other parts of Alaska such as Bristol Bay?

Bruce Wallace: In 1976, the ownership of Southeast seine permits was about 49 percent non-resident, 51 percent resident. Today it is about 52

percent non-resident and 48 percent resident, so there has been a small shift. Some of it has occurred because of allocation and restructuring, and some because there has been a move from a company-oriented fleet to more private ownership. In addition, some fishermen who were originally residents of Alaska found that the only way they could maintain their economic stability was to keep their boat and living costs down and they have moved out. These are reasons that really don't have anything to do with limited entry. I will say that there has been a fair amount of argument among our fleet about what limited entry has done to the relationship of the individual fisherman to the company owned fleet. I think there is general agreement that limited entry has allowed any fisherman to go out into the real banking world and put his life on the line to give himself an advantage in relation to the company fleet.

John Williams: I would like to say that a lot of the expense associated with the limited entry program is directly attributable to the Commission's capability of manipulating data. The Commission runs a fairly massive data base containing historical sequence data. It is essential for discussions like this where everybody has ideas or estimates about what is going on. The Commission publishes annual reports on all this. If you want to know what is happening to permit distribution because of transfers, there is a yearly report that comes out. There is a report on Alaska's subsidized fishing loan program and the impacts that it has on permit distribution and value. There are other reports on employment and gross earnings, Alaska Natives, and changes in the distribution of permit ownership. I noticed in the bibliography in our packets for this conference that a lot of this new information is now in your local library.

Spike Jones: What is the impact on intra-state permit transfers?

Robert Jacobson: You are talking about permits moving out of the rural areas to the metropolitan areas, is that right?

Spike Jones: That's correct.

John Williams: Every permit transfer has a required survey that must be completed. Consequently, the knowledge base should be perfect from the government entities and those conditions are tracked very carefully from a policy perspective. On a statewide basis, there has been very little change in distribution of permits among local residents, non-residents, and non-local residents, with the exception of the Alaska Natives—especially Alaska Natives in the Bristol Bay area. I don't think I mentioned it in my talk, but 80 percent of the original permits were issued to Alaskan residents. Just about 80 percent are still owned by Alaska residents. Forty-four percent of the permits initially issued were issued to Alaska Natives. There has been an 18 percent decrease in the number of Alaska Natives who are holding permits, and most of that is

attributable to the Bristol Bay region. That number excludes the Arctic-Yukon-Kuskokwim fisheries, which are 99 percent native fisheries. If you include the AYK fisheries, the numbers are not so startling, but it is pretty startling that an economic opportunity for the villages within Bristol Bay is eroding fairly quickly. That is something Alaska needs to start thinking about.

Questioner unidentified: This is for Mr. Wallace. Suppose there was a clause in limited entry that also required limited exit. Do you think limited entry would still be as interesting?

Bruce Wallace: No.

Alan Rolfe, Newport, Oregon, dragger: Right now we are overcapitalized and the resource is suffering as a consequence. Once you start talking about this, then it follows that subsidies to the fishing industry are harmful. Yet when we talk about limited entry, we never discuss it in tandem with the subsidies that the fishing industry enjoys. It seems to me there is a certain hypocricy there. The first thing we have to discuss is how we justify the capital construction fund that encourages us to keep investing in our boats and in our industry when it is a stupid investment. We would be better off buying an apartment, or a lot in Florida. Those are certainly as good investments as reinvesting in the fishing industry. But the economics of the situation that we work under keeps encouraging us to reinvest in the industry, to overcapitalize more. Anytime you talk about that alternative, you also have to talk about rational aids to the fishing industry. Certainly if limited entry is the rational aid to the fishing industry, the subsidies are not rational.

Bruce Wallace: I am not sure if that was a question. In terms of limited entry and what you are saying, one of the drawbacks is that when you buy a permit you feel constrained to stay in the fishery when from a purely economic point of view you should probably get out. It is part of the investment, it forces people to look at it in a different light. If it was just packing in your gear and leaving, you could sell out and go. Owning a permit might be the difference between staying and going. It shouldn't work that way. You'd think it would be part of the package and that a permit would almost enhance the circumstance. But I am not sure I see a very direct linkage between vessel subsidy, or capital construction, and limited entry.

John Williams: I can espouse the classical view on those things. Those subsidy programs—the capital construction plan and the fishery obligation guarantee program, which are coming under a lot of fire, and subsidized loan programs in general—will accelerate natural tendencies that you will see in a common property fishery. I can agree with everyone from Kodiak who has said government policy is the problem with fisheries to the extent that, yes, government policies are a problem with the rate at which you see overcapitalization occur.

EXPERIENCES WITH LIMITED ENTRY, PART 2

THE AUSTRALIAN EXPERIENCE

Robert Jacobson, Moderator

The next speaker, Colin Grant, has been in the United States for the past 12 months on a U.S./Australian experience exchange that is coordinated in this country by the National Marine Fisheries Service. He has had 20-plus years of limited entry experience in Australia. He has worked as a research scientist and has been a university professor in the same country. He has done extensive work and travel in China, the South Pacific, and the Caribbean. He is currently director of Fisheries Resource Management for the Australian Department of Primary Industry.

What Have We Learned in Australia? Colin Grant, director, Resource Management Section, Fisheries Division Department of Primary Industry Canberra, Australia

I was talking the other day to an economist from the eastern United States. Basically what he said was that limited entry as a philosophy and a theory was developed in North America. And he is perfectly correct. Economists from Canada and the U.S.A. developed the theory of limited entry some 25 or more years ago. In Australia we saw what we believed were some of the benefits of this. We picked up the ball and ran with it. He said America—and Canada to a certain extent—has been fumbling the ball ever since.

The point is that we have developed the theory in practice and refined it. And as he said, if you now want to see how limited entry can work, you go to Australia or New Zealand. Not to say that everything works, because it doesn't, but when we found mistakes, we tried to change the game plan and put it into a more rational perspective.

Let me tell you how we go about it and where we see the benefits. First, I think there is nothing intrinsically good, bad, or indifferent about how you want to manage a fishery. If you want to manage a fishery for social benefit, or economic gain, or recreational purposes, then decide on it and do it. But if you want to manage a fishery for economic benefit to the people in the fishery, with some consideration for social benefit, then do that, too. That is exactly what we have decided in Australia.

Our basic legislation—that is, the Fisheries Act—has two objectives. They are 1) conservation of the resource, and 2) optimum utilization of the resource. We have further decided that optimum utilization will be defined in terms of economic efficiency.

Australia has been employing limited entry for 22 years. We have done it sequentially. To the best of my knowledge, there is no other way of doing it. You can see that in the United States. You have had a fisheries act for seven years and you are still putting fishery management plans into place. It would be nice to do it all on day one, but it is not possible for obvious reasons, manpower being one of them. So we have developed limited entry plans over 20 years. Twenty years ago we put the western rock lobster fishery under limited entry and it is still under limited entry. In the last year we put two or three other fisheries under limited entry.

Right now, every single one of Australia's major fisheries is under limited entry, and if you take the full spectrum of minor and major fisheries, something of the order of 80-90 percent of Australia's fisheries are under limited entry. The interesting point is that I have grown up with limited entry and so has an entire generation of Australian fishermen. And those Australian fishermen are seeking limited entry.

I want to make one point clear. We are a federated country, very much like the United States and Canada and when I say "we" in the context of Australia, the partnership in management is government, both state and federal, and the industry. And the "we" I talk about is that partnership.

We discovered one thing: we will never push limited entry down anybody's throat. It has to come in the partnership context through and from the fishermen. That is the first thing.

The second thing we have learned is that you have to be very clear in your definition of limited entry. What is limited entry? This morning, Jim Crutchfield explained what limited entry is, and I have to agree with everything he said. Which was what it can be theoretically. We have interpreted it that way in Australia and made that theory work. Essentially limited entry can be anything you want it to be. We have 12 or 13 major fisheries in Australia, depending on your definition of a fishery, and every single one has a different limited entry scheme tailor-made for the circumstances of the people in that fishery, for that resource, and for the economics of that fishery. You have to take that into account. You don't take a fixed formula and say this is limited entry. This is going to be applied here, here, and here. It won't work.

So, basically, limited entry has to be clearly understood. I think there is a lot of confusion in this country as to what limited entry could be. People have said limited entry is socialism. I can tell

you that limited entry is not socialistic in any sense of the word. It is the highest form of capitalism, if capitalism is defined as it is in the textbooks as the ownership of the means of production. Then limited entry means that the custodianship of the resource is vested in the people who are fishing it. Once that resource is theirs, as it were, they will tend to look after it. They will look after it very, very well. It also has some spinoff benefits. For example, if you have paid to get into limited entry, you have an investment in that fishery, so you are going to have a certain involvement in enforcement as well because you want to be certain that the person who didn't pay to get into the fishery doesn't take your resource from under your nose.

How do we get into limited entry in Australia? I guess this is the crux of the difference between how we have done it and the difficulty you are having in getting into it, if indeed you want to get into it. In Australia we have a constitution very similar to Britain and Canada. We have a written constitution granting all the protections that you find in the U.S. constitution. But we have one slight difference. The minister is vested with the responsibility to manage fisheries. True, he does it through this consultative process, but he is vested with the responsibility, which means he can make certain decisions.

He may--and does--choose on occasion to make the following decision, and it is made at a point in time without warning. Essentially the minister sends out a press release as of today's date that says: "The Ministry for Primary Industry announced today that anybody entering XY fishery as of today's date will not necessarily get guaranteed access to that fishery in the future should that fishery go under limited entry."

In other words, it is a warning of a moratorium. We have learned one thing, you move rapidly, very rapidly. On one occasion, we took seven years and people did get into the fishery even with the warning. They challenged the government in court later and the government lost, so we have learned to move very quickly. What we do is develop criteria for entry. And they are usually almost exclusively three-fold. They are the following:

- 1. Operating history in that fishery over a given period of time, say 12 or 18 months. If you are there and have been fishing, you are in.
- 2. If you are about to lay the keel of a boat and about to negotiate a loan, or you just talked about buying a boat and you can prove it and that boat was intended to be used in the fishery for which the announcement has just been made, then you are in.
- 3. And let's assume for the last 18 months you have been on holiday from that fishery, either fishing another fishery or just on holiday, and you were intending to come back but for the announcement of the minister. Then you are in, too.

Essentially everybody who should be in has a right to be in, even those who had an intent to be in. But you don't give six months, one year or five years warning to the issue because you'll obviate your very intention, which is to limit entry.

Let me say of our fisheries in Australia that we have done everything wrong in some cases and everything right in others. We have fisheries in Australia that we put under limited entry when we had a badly overcapitalized situation. We have fisheries that we put under limited entry when the capacity was about right. And we have limited entry fisheries with no boats in them and the development of that fishery is going to be controlled.

I have heard a lot this morning about the capital value to get into a fishery, what the entitlements were relative to the boat and so forth. The boat is the tool, entitlement is the commodity, just as a hammer is used to build a house. The hammer is the tool for \$2.00, the house is the valuable commodity. Without that entitlement to go fishing in a limited entry fishery, you have nothing. Basically, the entitlements consist of two main things: 1) an access right to go fishing; that is, a permit to fish, which is our main access type right; and 2) an individual fisherman or an individual vessel quota; that is, a given proportion of the catch is yours. The individual quota is fairly recent in Australia, and we are still learning how to handle it.

Both permits and quotas are freely tradeable and always have been. There is no limitation on what you do with them in the main. If you want to lease, you lease. If you want to lend, you lend. If you want to sell, you sell. You can own more than one entitlement to fish and you can own as much of the quota as you can possibly buy. We have not yet had a problem with monopolization.

We have the world's longest-established limited entry fishery on Western Rock lobsters—a very viable and valuable resource. There are 830 entitlements, or permits, and there always have been. Except for possibly one or two, they are individual owner-operated. They have been going for 20 years and I doubt if any one of them hasn't been traded at least once, yet we still have individual owner-operators. In the United States there is a fear that limited entry leads to monopolization. There is nothing essentially different in the United States than in Australia in terms of economy and the freedom to buy. Limited entry hasn't necessarily led to monopolization.

Our philosophy is economic efficiency, so to some degree the tendency towards monopoly wouldn't cause us any difficulty but that is a decision we have made. You can make it whichever way you want.

Australia has one major fishery, a shrimp fishery. I will talk a little bit around that fishery, but in a generic sense. One thing

limited entry never precluded was overcapitalization. All it did was confine it within a smaller group of people. The second thing limited entry never did was stop a highliner from being a highliner—ever. It's only an entitlement to go fishing. If you are a good fisherman, you will do better than the bad fisherman.

What we have found in our Australian fisheries—given the structure of limited entry as an entitlement to go fishing—is that essentially capital still chases the fish and you still get overcapitalization. We are trying to manage our fisheries to widen the cost—benefit gap to the maximum. That is what economic efficiency is about. And in so doing we are trying to keep the amount of capital flowing into a fishery to the minimum. But we are not trying to make technological efficiency a minimal ingredient in the mix. There is one way of doing this. If you have, say, 300 entitlements in a fishery and each of them is capital stuffing—that is, increasing their capacity to fish—then basically you can achieve some degree of reduction of that capacity by only one method. That is to buy out complete units of fishing capacity, which in this case are the entitlements to operate a boat.

One Australian fishery that went under limited entry 10 years ago has increased its catching capacity by an estimated 30 percent in that time. It is now becoming only marginally profitable. In fact, we have this typical syndrome of 20 percent of the fishermen catching 80 percent of the fish and 80 percent of the fishermen not doing so well. We have decided to buy back (we being the industry/government) about 30 percent of the capacity in a fleet of only 300 vessels. In other words, we are going to buy out 100 entitlements to fish. We plan to do it over six years.

One thing that has been decided based on discussions with the industry is that the government is not going to pay for it. The government is not the beneficiary of the reduction in capacity. The people left in the fishery are the beneficiaries, so we have had to develop a system whereby a levy is extracted from the industry to pay for buyback. The point is that the licenses are freely transferable entitlements. Some money is going to be absorbed from the industry and put into a buyback authority. The buyback authority will comprise industry and government and it will buy back the freely transferable entitlements on the free market. But once the buyback authority buys it, it is gone, finished forever, and you have reduced the fleet. The people left in get the benefit of reduced competition.

We have also done our sums and we know that as we buy out this 80 percent of the least efficient people, the price of the entitlement will rise. We are having to do this at a time when the price of the entitlement has dropped. (I heard somebody talking about what pushes up

the price of an entitlement. Sure, cheap loan money does, but the biggest part of it is the viability of the fishery. How much money can that entitlement allow you to make? If it allows you to make more, it is going to cost you more to get in, but if it doesn't have much earning potential, it costs you less to get in.)

We know that the entitlement in this particular fishery is now trading for about \$70,000. In the past it has cost up to \$250,000. Who lends you the money to get into that fishery? We have had boat building subsidies and fuel subsidies, but they are off now. We have discovered our error. The people who lend you money to get into a fishery are the commercial lending agencies, and they will do it at the normal market price for the normal reasons that everybody will lend you money, it is a good risk. It is a good risk if it is a viable, well-managed, and profitable fishery.

Now, I have made limited entry sound somewhat simple. It isn't. It is complex and takes a lot of roundtable discussion. It takes an enormous amount of cooperation on the part of industry and government, and it takes time. It has taken us 20 years and we are still developing the system. It isn't a panacea. It is an ongoing developmental process.

As I said before, each scheme is devised to fit the needs of the particular fishery. For example, we have one fishery in Australia where we put individual quotas into place. We have had to calculate how to give equitable quotas to various people and we have done that on the basis of their operating history and past landings. What could be fairer than that? After that, it is yours to do freely what you will with it. What is better than that?

Because of the way we have set up our limited entry in all these fisheries, we have a lot less regulation than I see in the United States. We don't have individual fishing days, trip limits—I can't think of others but they are complex. We have an entitlement to go fishing and they go fishing. I hasten to add, however, that our resources are slightly different. You can't essentially overfish a pandalid shrimp fishery. Consequently, we have a limited number of vessels and they go fishing. And when the fish run out, they stop fishing. It's true the fish are running out in a shorter period of time these days because of the capacity of the fleet. But essentially you can't overfish that resource because it is annual property and you fish it to economic extinction every year. That is a slight difference, but that is how we have managed one of our fisheries.

It is probably better for me to stop and field any questions that may have developed out of my discussion.

QUESTIONS FOR COLIN GRANT

Alan Guimond, New England Fishery Management Council: Two questions. What are you achieving by reducing the fleet through buyback, and how do you achieve it if people don't want to get out of it?

Colin Grant: Let me say that we are at the beginning of this buyback scheme, so your question is the \$64,000 question. What is the answer? We have to wait and see. Our sums tell us that we will achieve our objective. We have discussed it with industry. Some people are not making money and they want out. I can't answer your question, but bring me back in a few years and I will. Essentially what we are trying to achieve is some reduction. Even if we buy out the least effective people, we will be buying them out at the least price. And the benefits will be less, but they will accrue to the industry. You get essentially what you pay for. The answer to the question, what happens if somebody doesn't want to sell? Every man has his price. If the buyback authority can't afford to pay it, it may just keep asking the fisherman to name his price. Who knows? The guy just may drop his price. There is no coercion in this system. None whatsoever. In fact, other than setting up the schemes, the government stands back. It doesn't even want to know on the register that it has been done.

Jeff Feldner, Newport Troller, Crabber, Longliner: What's the mechanism to get the money from the fleet into a buyback authority? In other words, does the higher producing percentage of the fleet have to pay a higher percentage? Do you share? Do you tax? How do you do it?

Colin Grant: Essentially we have unitized the capacity of the individual vessels in the fleet by a formula to calculate an amalgam of its size and its engine horsepower and that comes together into a package which we have called underdeck tons (UDT's). It is a quantification or unitization principle. You end up with a vessel here of so many units and a vessel here with so many units. We have also done a regression analysis to show that larger vessels with bigger horsepower engines are more effective catching machines. We get a good regression with a very good confidence limit around it. The point is bigger vessels with bigger engines catch more shrimp than smaller vessels with smaller engines. On that basis, we have developed this unitization scheme and we charge a levy based on the number of units you have. It is a fixed dollar value per unit, so the more units you have the more dollars you pay. The less units you have the less dollars you pay. There are a couple of little quirks in the system and I don't know whether I should go into them because they may be just more confusing. But essentially that is the mechanism. The money goes into a pot and we buy back on the basis of the same units. The unit is an indicator of the effectiveness of that boat. Effort is a different thing from the capacity or the ability of a vessel to catch fish, which is determined by how much time it is on the grounds, how good the skipper is, luck, and a few other things.

Janet Seavers, Fisherman's Wife, Newport, OR: Does entitlement include both the permit and the vessel?

Colin Grant: No. First, to go fishing in Australia's federal waters. you need a \$20 license. That is it. To get into a limited entry fishery, you have to have a rubber stamp--called an endorsement--on your license that says you are licensed and endorsed to fish in that fishery. You get an endorsement either by being in the right place at the right time--just like the land grabber going west in America--or you may purchase it from somebody. He gets his endorsement erased and it is put onto your license. You can have several of these endorsements on one fishing license. I think that is something Barry Fisher was concerned about this morning. How do you get the opportunity to transfer from one fishery to another? We have combination boats with entitlements to fish in two adjacent fisheries under limited entry. They are free to move from one to the other. Some boats are only entitled to fish in one fishery. They could buy the entitlement to the other. But we are talking about a fishing entitlement on a piece of paper. That is one commodity, the boat is another. The government issues the entitlement to fish. The purchase between two individuals can involve the entitlement to fish, which can be applied to the buyer's boat under a boat replacement scheme, or it can involve the entitlement to fish plus the boat from somebody else. The buyback authority is only going to buy the entitlement, which leads to a question you didn't ask. What happens to the boat that wasn't purchased? Since all our fisheries are limited, essentially they all have boat replacement policy. So that boat goes somewhere. It may stay within that fishery because a vessel sinks and needs to be replaced, or it may slot out into some other fishery to replace an old wooden boat that is now being retired. That is one of the issues that we certainly have to take into account.

Paul Smith, Yaquina Boat Works, Toledo, Oregon: I think you made a little mistake in discussing when the United States started this limited entry business. It started at the inception of our country and was called the free enterprise system. The free enterprise system limits everyone through profit or loss. There are rewards and punishments. It does guarantee equality of opportunity and freedom to the individual. It allows opportunity, not success, and from my visits to other countries, I really can't see a better limited entry system than we have.

Colin Grant: I think you are wrong. What we have in Australia isn't anything but free enterprise. Free enterprise is the freedom to go and do something. Freedom to own a condominium on the beach, freedom to go to a university, freedom to do a whole lot of things. They're all there. Every one of you has them, every person in Australia has them. But freedom to go fishing for free is no more or no less free enterprise than freedom to go fishing and to pay to get into it. The point being that if you want to buy a house, you pay for it and you end up owning a

commodity. The more value you put into it, usually the more valuable commodity you get. Somebody said to me the other day, limited entry is a preclusion on free market access to fish. And I said you are wrong. Limited entry is a limitation on free access, but not free market access. That is, you pay to get in and you are in. You pay to own waterfront property in a real estate game and you are in. It's a limited access situation. There is only so much waterfront property. You want it, you pay for it. You get a better deal and you get a more valuable piece of commodity than otherwise. It doesn't preclude your opportunities. It never did. It just costs something.

Paul Smith: I can't buy that. We have got to make the distinction between limiting people and limiting property. In our country, without the freedoms guaranteed to the individual we would have no rights. What you are talking about is central planning. Our concern in this country is that government cannot do things very well. It is just the nature of the government. In fact, the greatest danger to us as free citizens is a strong central government. I can't imagine actually wanting central planning.

Colin Grant: I don't think we are that far apart. We are not involved in central planning. We have said there is a resource that is going to have a limitation on the number of people who can have access to it, but whoever wants access can have it by purchasing it. There are taxi medallions in this country. You can only get into medical school based on a quota. A form of limited entry pervades many activities in this country. But it is free market access depending on certain criteria. To get into medical school, you have to have the qualifications and some money. To get a taxi license, you have to have some money. To get a liquor concession, you have to have some money. It is everywhere. But you are saying it should be different in fisheries and I can't understand that.

EXPERIENCES WITH LIMITED ENTRY, PART 3

EAST COAST SURF CLAMS

Robert Jacobson, Moderator

Here to discuss the limited entry program currently in effect on surf clams in the Mid-Atlantic Council region is Kathryn Marvin, one of the owners of the American Original Corporation in Seaford, Delaware. Her company has been involved in seafood processing and fishing since 1894. Kathryn is a 1983 graduate of the Massachusetts Institute of Technology and is currently manager of the corporation's vessel repair facility at Shadpoint, Maryland. The American Original Corporation is a vertically-integrated company in the surf clam and ocean quahog fisheries and owns 21 clam vessels ranging from 90 to 155 feet in length.

Limited Entry in the East Coast Surf Clam Industry Kathryn Marvin, co-owner, The American Original Corporation Seaford, Delaware

I suppose the first question to answer is why are we talking about surf clams. The answer is that the surf clam industry is the first American experiment with limited entry on the federal level. The Surf Clam-Ocean Quahog Plan of 1977 was the first plan under the auspices of the FCMA to include a limited entry provision. Technically, what we have is a moratorium. As Dr. Crutchfield has explained, a moratorium is not quite the same thing as a full-fledged limited entry program. In 1977, the moratorium on the surf clam industry was written with a one year self-destruct clause. That is, it was originally conceived as a temporary measure. However, it was included in every subsequent amendment to the plan and it was indefinitely continued in 1981.

I would like to begin by talking about what surf clams are and how we catch them and then go into the history of the industry prior to 1977 to show why we felt that the plan had to be written at all. Then I would like to describe our experience with limited entry and, finally, attempt to evaluate the effects of limited entry on the surf clam industry as we see it from the inside.

First of all, what is a surf clam? Spisula solidissima has a dozen different names due to its geographical distribution. You may have heard of a bar clam, a skinner clam, a beach clam, a sea clam, or a hen clam. It is all the same thing. Spisula solidissima, or the surf clam,

is found in commercial sizes of 5 1/4 inches long and up. We prefer 6 to 7 inches long, but there aren't any of those left. It is found in depths to 150 feet, but we usually work in depths of 80 to 120 feet. The clams reproduce by spawning and live more than 15 years. They reach sexual maturity during the second year and continue to be fertile throughout their lives. Their most productive time is at about 4 3/4" long, which is between the fourth and fifth year. That is when they spawn twice in a year instead of once. Growth rates vary according to density, depth, and food sources. Density has a particularly strong effect. We are having a problem right now in that we have some very dense beds off New Jersey and off Virginia which aren't growing because they are too thick. That is what surf clams are.

We catch surf clams using a hydraulic dredge. The hydraulic dredge is about 4 1/2 tons of steel ranging from 48 inches wide in Massachusetts to 120 inches wide elsewhere. There is a knife carrier which we drag six inches below the bottom of the ocean in order to dig the surf clams out of the sand. We use jets of water to pump the water from the surface of the ocean down into the ocean floor in order to dig up the soil so we can drag the dredge through it. So you see it is quite different from many of the fisheries that you have been discussing.

The history of the surf clam industry prior to the promulgation of the plan is very short. We started catching surf clams for human consumption during World War II. Before that it was a bait fishery for New England groundfish—and that only started in 1870. As a bait fishery, landings never exceeded 2 million pounds per year. The 1940's saw the invention of the hydraulic dredge as well as the introduction of surf clams as food for people. Landings increased, therefore, from the 1940's on. When we started catching clams to feed people instead of for bait, we started fishing them in the coastal waters of New York. Because they were more available than the hard clams and cheaper to get, they became a staple for things like New England Manhattan Clam Chowder in which chopped up clams are used.

In the 1950's, the industry began to take off when we found massive beds off New Jersey. From that time the number of vessels increased and we moved further and further south as we looked for new resources after depleting the resource that we were fishing on previously. In 1960, there were 50 vessels and landings were approaching 40 million pounds per year. In 1970, there were 100 vessels fishing for surf clams and landings were about 70 million pounds. Meanwhile the fishing area was moving from New Jersey down to Delaware and to Maryland as the frontier of the resource moved further south. The high water mark for the surf clam industry came in 1974 when we landed 96 million pounds, most of them taken off Virginia and North Carolina. Since 1974, we haven't found any beds south of North Carolina, so we seem to have reached the geographical limits of the resource. The catch has declined

since then. In 1975, it was 87 million pounds, and in 1976 it dropped to 50 million pounds. The number of vessels kept rising and there were over 120 in 1976.

As a result, a plan was implemented in 1977 at the urging of industry. We could see that we were headed for disaster if we didn't do something. That is how we got to the situation where we had a management plan at all. The moratorium is an essential component of the plan, but it is not the only one. The moratorium criteria were: a vessel must have fished during the year prior to the promulgation of the plan, or during November 1977. That is, it must have landed surf clams during the course of a directed fishery for surf clams, or it must have been re-rigged or under construction on the date the plan was published. Under construction means the keel had been laid. The only other provision for getting a permit—the permit is attached to the vessel—was if a vessel was replacing another vessel of substantially similar harvesting capacity which had involuntarily left the fishery.

Other provisions of the surf clam plan included an annual quota, which for the first several years was set at 30 million pounds. That is less than one-third of our previous high of 96 million pounds in one year. Time and day limits were also set. A vessel was assigned particular days and the amount of hours during the day when it could fish. We began with three days, 24 hours per day. The days were pre-selected, so you got, say, Monday, Tuesday, and Wednesday. If it blew on Monday, you didn't get Thursday. The bushel price rose substantially as a result of the decreased catch, but it didn't rise as much as the catch decreased. As a result, we had to pump more and more capital into the vessel.

The idea was to have the moratorium reduce the number of vessels through attrition. There was a use it or lose it provision included in the moratorium. It was a very mild provision: you had to land surf clams once during the year in order to renew your permit. There has been vessel attrition since the plan was promulgated.

The number of vessels actually fishing most of the time is down to less than 100 today from 120 before the plan went into effect in 1976. The number of vessels with permits has also dropped from 157 in 1978 to about 140 today. We do have some dormant permits where the vessel only fishes once a year in order to maintain its permit.

The annual quota has increased. In 1982 and 1983, the annual quota was almost 40 million pounds. Remember, the original annual quota had been set at 30 million pounds. In 1984, the quota was over 43 million pounds and the quota that has been set for 1985 is 45 million pounds. The annual quota is increasing as the successful set from a spawn in 1976 off New Jersey and in 1977-78 off Virginia has approached

harvestable size. However, our ability to catch clams has gone up even faster than the amount of clams available to be caught. As a result we are under more severe fishing restrictions today than we were during 1978.

Closed areas were an original provision. Today we have one large closed area off Ocean City and two huge closed areas off New Jersey and Virginia. A size limit was introduced in 1981. It was 5 1/2 inches when it was introduced and it has been reduced to 5 1/4 inches as a result of what has been described as an enforcement emergency.

We are down to one day of fishing per week. We are now allowed a make-up day, but only on the day after your regularly scheduled day. We have been reduced to six hours of fishing a day, so what I am saying is that you can fish six hours a week. I have heard a lot of talk about restrictions that sound a lot worse than this, but in our case the boats that fish for surf clams don't fish for anything else, except possibly ocean quahogs. So if you're fishing on a surf clam vessel and you get six hours a week to fish, you are tied up the rest of the time. You make your money that week during those six hours.

We also have closures. In 1984 we were closed down for three two-week periods—in other words a month and a half. That has been our experience with all the aspects of the plan, not just limited entry.

I am going to try to evaluate the effect of limited entry as distinct from the effects of the other parts of the plan.

First, how did limited entry contribute to the recovery of the resource? That is very difficult to evaluate because of the success of the spawn which took place the first year of the plan off Virginia and the year before the plan was promulgated off New Jersey. So the question we are trying to answer is "What would have happened to that very successful spawn if we hadn't had limited entry, quotas, time limits, and everything else that we had restricting us?" That is very difficult to assess.

The second problem is overcapitalization. When we put the moratorium into effect, there were 157 vessels in the fleet. There is a frequently repeated notion that one surf clam vessel could catch the entire annual quota. I am not sure I believe that, but I think two probably could. We are down to about 140 permitted vessels and about 100 that actually work, so you see the problem. When I say two probably could catch the entire quota, they would have to be the right two boats, the biggest ones with the best captains, but there is still a serious problem here.

In addition to the overcapitalization represented by the number of vessels, there is a problem stemming from pumping more and more capital

into individual vessels. In 1977, the fleet consisted mostly of old wooden boats with limited horsepower and one small dredge. Today most of the vessels in the fleet are steel vessels with two dredges and they are, on the whole, much more efficient than the 1977 fleet. This occurred because it was the old wooden boats, the inefficient ones, that dropped out.

We have also had a result that has prevented diversifying into other fisheries. I have been listening to people talk about boats which leave one fishery and go into another. What we have been forced to do as we try to catch a share of the quota before we get closed down is to make a boat that is very efficient at surf clamming. As a result we have designed something so specific that it cannot be used for any other purpose. Odd as it may sound, the surf clam vessels are so technologically specific to surf clams that the vast majority cannot even fish for ocean quahogs. Somebody made a comment earlier about limited exit. We have something that is a little bit like limited exit in the surf clam industry.

The moratorium itself has proved more flexible than it seemed to be when it was originally written. Obviously, if you want to buy into the surf clam industry you merely need to find a vessel that has a permit and is for sale, or offer the right price so that it will be for sale. In addition, the hardship clause has been interpreted more liberally than it seemed when it was first written. So vessels have been replaced by newer vessels whose substantially similar harvesting capacity hasn't meant they were equally inefficient. The fleet has become more efficient in this way.

The surf clam fishery is not like most of the fisheries that you have been describing today in that it is not a mixed fishery at all. Almost nothing else comes up in the dredge besides surf clams. When the plan was written, it was combined with an ocean quahog plan because ocean quahog meat can be substituted for surf clam meat in the marketplace to a certain extent, and because ocean quahogs can be caught with fairly similar gear, despite the comment I made earlier. However, ocean quahogs and surf clams aren't found in the same places so we don't have the mixed trawl problems that you have been describing here.

In conclusion, the role limited entry has played in the surf clam plan is hidden under the effects of other management measures. Given the situation we confronted in the 1970's, limited entry was one of many measures that we felt were desperately needed. This was a case where the industry got together and asked that something be done to solve a serious problem.

Once you set an annual quota you have in theory solved the biological problem. The rest of it is to minimize economic dislocation.

It is fairly clear to me that limited entry assisted in minimizing economic dislocation. In the 1980's, we have a situation where the resource appears to have recovered. From a management point of view, we are trying to spread out a very abundant resource over the next ten years. We still have legislation for a shortage and we are still acting as if we have a shortage even though we have very thick beds, sometimes so thick that it seems to retard their growth.

This is not meant to be a blanket endorsement of limited entry. Implementation of limited entry has significant and far reaching consequences. The use of limited entry must, in our opinion, be in response to definite needs and with the concise purpose of fulfilling clear and unbiased goals. And most important, the participation of involved members of the industry and other competent experts is a must during the development and life of any management plan that includes limited entry as well as any management plan that doesn't include limited entry.

Robert Jacobson, Moderator

Here to discuss the surf clam industry on the Atlantic Coast is Alan Guimond, founder and president of Stonington Seafood Products, a large, diversified seafood processing operation located in Point Judith, Rhode Island. The company produces squid and butterfish for export to Spain and processes a variety of East Coast groundfish for fresh and frozen domestic distribution. The company has been involved in joint ventures with Spain for three years and as a result Stonington is the largest processor and exporter of squid on the East Coast. Al was executive secretary of the Atlantic Offshore Lobster Association from 1967 through 1981, a member of the Marine Fisheries Advisory Committee to the Secretary of Commerce from 1977 through 1981, and a member of the New England Fishery Management Council from 1980 to the present. He is currently chairman of that council.

A New Englander's Perspective on the Surf Clam Management Program Alan Guimond, president, Stonington Seafoods Point Judith, Rhode Island

In this paper, I propose to investigate a number of aspects of the surf clam management program, in part, from my perspective as an individual member of the New England Fishery Management Council and also as a close observer of the developing southern New England surf clam fishery. The views expressed in this paper, however, are my own and are not intended to represent any formal Council policies or views. The

subjects that I will discuss include: (1) the failures and inappropriateness of the limited entry program and the futility of pursuing this limited entry approach any further; (2) the regulatory nightmare of the plan; and (3) the obvious lack of industry support for the program as indicated by the number of expensive violations of key Fishery Management Plan (FMP) measures.

Let's first simply take a look at why the moratorium was introduced and whether or not it was successful in achieving its intended goals. The Surf Clam FMP was implemented in November 1977, and it established a restrictive and conservative annual quota of about 10 percent of the standing stock to "husband" the resource on the questionable premise (more on this later) that this would improve the chances for long-term population stability at maximum levels. moratorium on permits to enter the surf clam fishery was implemented to "promote economic efficiency" and to "minimize short-term dislocations" [Objective 2] while managers anxiously awaited the fortuitous natural events which would lead to a rebuilding [Objective 1] of the resource, which was in a state of decline in 1977. Other reasons given for the moratorium include to prevent further overcapitalization and further overfishing (i.e., to avert a failure of the stocks and resulting idle capital, unemployment, and social disruption) and to preserve the economic status quo.

The moratorium had the exact opposite effect of the stated goal of "promoting economic efficiency." In 1976 it was well known, as data in the original plan indicates, that the existing 34 vessels in Class 3 could catch the 1.8 million bushel quota in just 25 days at their maximum catch rate of 2,100 bushels a day. By the end of 1977 and with the moratorium in place, the number of powerful Class 3 vessels had increased to 59, a one-year increase of 74 percent. With this increase it would take less than 15 days of fishing annually to catch the quota, and this is only if the big vessels were in the fishery. With the current quota of 2.65 million bushels, it is clear that less than 10 of the Class 3 vessels could easily catch the annual quota. The moratorium also never even had a chance to achieve the goal to "minimize short-term economic dislocation" since the mere discussion of the possibility of a moratorium attracted more people, as shown in Table 1, to a fishery which could not sustain them. Thus, the moratorium did change the status quo.

There should also be no doubt that the moratorium dramatically worsened the existing overcapitalization situation. The facts are that, prior to federal government intervention, participation in the surf clam fishery had historically (at least since 1965) been relatively stable. For the six-year period 1971 to 1976, the number of vessels in the fishery averaged 99, which was also the number of active vessels in 1975. In 1976, with the beginning of Mid-Atlantic discussions on the possibility of a moratorium, the number of vessels increased to 122; and

by the time all applications were considered for the so-called "hardship" provisions and for individuals claiming keels were laid, the fleet increased to 157 active vessels, a whopping 59 percent increase over the 1975 participation level. Further, the moratorium's effect on the overcapitalization problem is even more demonstrable if we take into account the resource situation during 1976 and 1977. Not only were the stock levels declining, but the loss of 130 million pounds of clams off the coast of New Jersey (25 percent of the total population) due to anoxic water conditions would normally have been cause for some vessels to search out other immediate fishing alternatives. Instead of vessels leaving the fishery because of the lack of resource, it is obvious that a lot of new individuals accepted the Council's promise that the moratorium would protect "present investment in the fishery...against further capitalization." The Council's further stated intention to move in the next year to "an alternate limited entry system, such as a stock certificate program" was just plain irresistible when coupled with the goal of increasing the annual quota to 2.9 million bushels.

There are many dimensions to the question of whether there is economic efficiency in a fishery. There is not time to fully explore them in this paper, but I would like to point out some interesting numbers with respect to idle capital in the surf clam fishery. The FMP provided for the annual quota to be divided into quarterly quotas (to protect smaller vessels) and established a four-day fishing week during which the hours of fishing could be further restricted. Table 1 shows the number of hours fishing has been allowed each year since the plan went into effect compared with the total calendar hours and the total hours permitted by the plan before further time restrictions were imposed.

Table 1

<u>Year</u>	Fishing Hours Allowed Under Plan	Maximum Possible Hours Within Fishing Week	Percent Vessel Use	Maximum Calendar Hours	Percent Vessel Use
1977	288	576	50%	1,008	28%
L978	1,752	4,992	35%	8,736	20%
1979	1,440	4,992	29%	8,736	16%
1980	1,728	4,992	35%	8,736	20%
L981	972	4,992	19%	8,736	11%
L 98 2	1,248	4,992	25%	8,736	14%
L983	1,248	4,992	25%	8,736	14%
.984	618	4,992	12%	8,736	7%

The data for 1984 indicates that surf clam vessels were not allowed to fish for surf clams during 88 percent of the already restrictive fishing week; or, to put this in more realistic terms, surf clam vessels had to tie up to the dock for 93 percent of the calendar year or switch to another fishery. Clearly, this management-induced idle time amounts to a tremendous waste of capital. In a technical study Strand, Kirkley, and McConnell conclude the following concerning waste in the surf clam fishery:

"Thus, ... there were "wasted expenses on excess capacity gear, i.e., dredges. This, in combination with the apparent excess vessels in the fishery since 1978, leads us to conclude that the moratorium has likely not been a deterrent to the "wastes" associated with excess capacity. "(Strand, Kirkley, McConnell, 129). [emphasis added]

The suggestions in the FMP that the moratorium could contribute to a lessening of the overfishing problem or contribute to averting a stock collapse are not remotely plausible given the level of participants at the time of the moratorium. For a moratorium alone to realistically contribute to conservation goals, it must be enacted when the number of vessels is below or near the minimum number necessary to harvest the

likely annual resource yields. It is well established that most limited entry programs are not likely to achieve conservation goals without additional measures, such as quotas and gear restrictions.

In the case of surf clams specifically, neither the moratorium nor other restrictions have provided for the achievement of a principal FMP objective to promote economic efficiency. Seven years after the initiation of the moratorium and now with 148 permitted vessels (at least 138 more than is needed to harvest the annual quota), the Council is no closer to solving the overcapitalization problem, which has gotten worse due to improvements in individual vessel fishing power. And again this worsening of the overcapitalization problem was caused, in part, by Mid-Atlantic Council and Committee discussions of further gear restrictions. This notion is supported by the following published comments on a technical examination of the surf clam limited entry program:

"... a significant upgrading of the capacity of the fleet occurred in 1979, in part probably in response to discussions of a freeze on dredge size and number [of dredges] and in part in response to a desire to maximize harvest per unit of time in response to the management regime....Based on the 1979 race to upgrade dredges, it is highly unlikely that the industry and council would seriously consider restrictions on gear in future versions of the plan." (Keifer and Freese, 139).

It appears that there is a fair amount of agreement in the Mid-Atlantic Council that the next step, to eventually allow some reduction in the gross overcapitalization situation, is to establish an individual vessel stock certificate program to replace the moratorium. However, despite intense discussions over the last five or six years, the industry and Council have been unable to agree on a method to make the initial distribution of the resource. There has been a tremendous amount of quality analysis by Council staff, industry, and NMFS of various options based on historical vessel performance, either individually or by vessel class, and on other kinds of criteria which could serve as a basis for the distribution of the resource. But the bottom line, given the basic approach and philosophy of the Surf Clam FMP, will always be that there are not enough clams to go around; and some will feel cheated and will decide to hold out until either their historical performance improves or until the distribution formula is changed to a more favorable one. On the other side, the handful of large, vertically-integrated processing firms, always armed with a pocketful of lawyers, are able and will continue to effectively kill consideration of any proposal which does not gorge their appetite, at the expense of the independent operators, for cheap product caught by their own boats.

Since it is clear, from my perspective, that agreement on the initial distribution and further components of a stock certificate program is not likely to be reached, then the objective of promoting efficiency cannot be realized without some kind of draconian and big brother type of action. It is not realistic to think that the U.S. government will or should either buy up over 100 surf clam vessels or arbitrarily take away an equal number of vessels' ability to try and make a living off the surf clam resource.

To fully appreciate this regulatory horror show, try to picture a small independent vessel owner, someone on the Mid-Atlantic Council's mailing list, who receives Notices to Permit Holders from NMFS, occasionally reads conflicting accounts of potential developments in local newspapers and/or industry trade letters, and, finally, as someone who has recently been forced by his crew to stop bringing volumes of the Federal Register into the wheelhouse because of the obvious fire and sinking hazard. In my view it is an absolute miracle if this guy is able to keep up with the constant regulatory tinkering. I know that I cannot do it, and we Council members are routinely kept informed of only the major changes.

It is only with the utmost concentration that I do the following. I will not attempt to include all the regulatory changes and notifications which go along with the closed area provisions to protect concentrations of small clams. Also, keep in mind that the basic plan requires a fisherman to keep a detailed logbook, and he must select an authorized fishing period during the fishing week which he is restricted to, except that there is also an authorized weather make-up day. I have already briefly touched on some of the regulatory restrictions, such as the frequently-changing, extreme fishing time restrictions. As best as can be determined, the Mid-Atlantic surf clam fishery has been completely closed on five occasions for a total of nine weeks and has operated on either six hours every other week or 6 to 12 hours a week for a total of 62 weeks. In all, there have been 31 scattered changes to the authorized fishing times in the Mid-Atlantic since the beginning of the plan. In New England the fishing time was restricted for the first time to 12 hours per week during the spring of 1983, and the fishery was closed entirely from July 1 to December 31 of that same year. On June 10, 1984, the fishery was again reduced to 12 hours per week until emergency implementation of Amendment #4.

The basic plan is currently being implemented by Amendment #3 to the original FMP. There are four additional existing amendments all of which do, or propose to do, different things to the management program, and each is at a different level or stage within the Council process or federal rulemaking process.

Amendment #4 was implemented on an emergency basis in July 1984, which was also the beginning of the Secretarial review process on the formal amendment. This amendment established a new management program specifically for the southern New England fishery, raised the annual allowable quota to 200,000 bushels and established a 5-1/2 inch minimum clam size. This amendment was extended to the maximum time allowed under the law, and then it expired (because it was not formally approved by NMFS) in late December 1984, reverting management in the New England area back to Amendment #3 (i.e., no minimum clam size, a 100,000 bushel quota. and old restrictions when 50 percent of the quota is taken). In August 1984, NMFS took an emergency action (not to be confused with emergency implementation of an amendment) to allow the newly discovered virgin fishery on Georges Bank to proceed. This emergency action was terminated on October 7, and fishing on Georges Bank was prohibited for the rest of the year. The expiration of Amendment #4 and the so-called 'Georges Bank Emergency Action' means that until some other action is implemented only 100,000 bushels can be taken from both resource areas instead of the already conservative yield of 500,000 bushels called for by the FMP's 10 percent exploitation strategy. On October 17, NMFS issued another temporary emergency rule reducing the minimum size of clams to 5-1/4 inches and also changing the complicated rules of how cages of clams are to be inspected to determine compliance. On January 16, 1985, this emergency rule was extended for another 90 days and a clarification was made that the lower minimum size did not apply in the New England resource area. On December 26, a proposed rule was issued to implement Amendment #5. This amendment will: (1) allow adjustments in the minimum size limits; (2) formally revise the method of inspecting clams for compliance with the minimum size; (3) implement a new requirement that all surf clam cages be tagged; and (4) establish the presumption that surf clams landed on an authorized fishing day were caught in the FCZ. The January 16 emergency rule extension was to allow Amendment #5 to continue its journey through the Secretarial review process.

On January 31, 1985, a notice in the Federal Register announced public hearings on Amendment #6. This amendment would divide the New England area into the Nantucket area (west of 69 degrees) and the Georges Bank area, establish a separate management regime for Georges Bank, revise the effort limitations in the Mid-Atlantic area by adding provisions that vessels may land clams only once during an authorized fishing period and that the Regional Director may not authorize fishing periods less than the allowed hours when the allowed hours are 12 hours or less, and establish procedures whereby vessel owners or operators must notify NMFS in advance of the area they intend to fish for surf clams. Presumably this amendment will somehow also carry forward the detailed management regime which was specified in the now-expired emergency implementation of Amendment #4. It is not yet known whether NMFS will grant Emergency Action to implement Amendment #6 so that there will not be an extended closure or other interuptions in the New England fishery in 1985.

Finally there is Amendment #7, which three or four years ago was actually going to be Amendment #4 and then #5 until all these little emergencies kept pushing it back. Amendment #7 is the long-awaited amendment where the Mid-Atlantic Council will decide on either a stock certificate program or some other direction to move from the moratorium which NMFS keeps threatening to remove if the Council continues to fail to act. This amendment is also supposed to deal with the New England Council's recommendation for long-term management of surf clams in the New England resource areas.

I believe that the above litary of regulatory activity is essentially correct in identifying the major events during the past year, but I would not be surprised if I have left out a few.

One way of measuring whether or not a management program is cost efficient is to examine the degree to which the major provisions are supported by the affected industry as indicated by the regulatory compliance level. Management measures which are deemed essential for the program's success obviously must be complied with in order for the plan's objectives to be achieved. If a plan's objectives are being achieved and there is a relatively high rate of non-compliance with principal measures, then the relationship between the measures and objectives (i.e., cause and effect relationship) should be questioned and the need for the measures re-examined. This is a fundamental test that all objectives must undergo. It is not possible to realistically apply this test to the principal biological objective of the Surf Clam FMP given the time frame involved.

We have already established in this paper that the moratorium has not achieved the objective to reduce the overcapitalization problem and also that, for practical purposes, the moratorium is irrelevant to any biological objectives in the surf clam fishery. The principal biological objective of the plan is "to allow eventual harvest approaching the 50 million pound level." The current annual quota (FCZ) is approximately 45 million pounds, and the total annual harvest has exceeded this level since 1981. The strong 1976 and 1977 year classes (already in existence before the plan's implementation) alone could support the restrictive 50 million pound quota for the next ten years. Obviously, the strength of either of these year classes cannot be attributed to any measures within the current FMP. The explicit strategy for achieving the long-term biological objective is to 'husband' or 'shepherd' strong year classes over the ten-year planning period despite the fact that there is no stock recruitment relationship for surf clams and that there are indications that strong year classes may be more likely when the standing stock is relatively low (the latest example being the rapid recovery of the offshore New Jersey population in 1977).

An assessment of the success or failure of the objective will require a review of the status of the stocks at the end of the ten-year planning period, or more appropriately at the end of several planning periods to allow for possible fortuitous circumstances, recognizing that a very low biological yield (10 percent of standing stock) is expected. At the time of the review, any benefits will have to be weighed against the cost of the program which will, in addition to the many standard administrative and enforcement costs and costs to individual operations, have to include the management-induced, artificially high price (due to relative product scarcity) of clams and clam products to consumers over the planning period.

In any case, Table 2 provides information on the number of violations/citations and dollar amount of assessed penalties concerning the major measures of the plan. I leave it up to the individual reader to decide whether this level of non-compliance constitutes support for the management measures. I would only point out, however, that it is generally accepted that the level of enforcement on the East Coast is grossly inadequate to create any significant level of deterrence. As a result, only a very small proportion of violations is actually detected, and the perception on the part of many operators that the chances of getting caught are slim is probably realistic.

Table 2: Number of Surf Clam Violations/Citations and Fines Assessed

	Number of Active Vessels	Violations/Citations			Total	Total
Year		Undersize Clams	Time/ Day	Closed Area	Violation Citations	Penalties Assessed
1984	NA	49	9	6	64	\$ 755 , 000
1983	113	51	22	9	82	300,000
1982	114	41	12	20	73	89,000
1981	122	<u>19</u>	<u>14</u>	<u>21</u>	_54	44,000
Total	•	160	57	56	273	\$1,188,000

SOURCE: Unpublished NOAA/NMFS Data (Personal Communications: Neila Cremeans)

Conclusion

The Surf Clam FMP is a classic example of incredible regulatory overkill, and I submit that the Mid-Atlantic Council would be better off to abandon the current direction, which is both futile and anti-free market, and return to basic biological management of the resource. From a biological point of view, and here I refer you to the formal long-term surf clam biological position of the New England Council for details, a minimum size and possibly a mechanism to protect concentrations of small clams (both of which are in the current plan) are all that is necessary to provide for the conservation of the resource. There are no guarantees or any conclusive evidence which suggests that the so-called restrictive quota 'husbanding' of the resource will in the long run provide the industry and the nation with any more clams or other benefits. Many people in New England, including participants in the fishery, feel that the Mid-Atlantic Council is dangerously and inappropriately meddling in a major way with the economics of an industry, and it really has no control over the only legitimate justification for its involvement. There is little managers can do to determine the future status of surf clam populations; and what can be done can be quickly and decidedly undone by nature: witness the anoxic decimation of the offshore New Jersey population in 1976.

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QUESTIONS FOR SURF CLAMS SPEAKERS

Questioner unidentified: What does the Mid-Atlantic Council think of your (Al Guimond's) opinion of the surf clam limited entry program?

Alan Guimond: Bob Martin is my counterpart on the Mid-Atlantic Council. He doesn't agree with me entirely. The Council knows there are problems and it is trying to address them. One of the problems has been: "Should they go into a stock certificate program or individual vessel quota?" That has been discussed for the last five years and I still do not see that question being resolved. I think the Mid-Atlantic people are trying to solve the problem, but there just isn't a simple solution at this time. I don't know what they are going to come out with, but I know Bob doesn't agree with my philosophy of how to approach the problem. That is why I say it's a personal opinion and obviously it would never carry over into the Council's discussion.

Questioner unidentified: Are problems that you have had with surf clam limited entry the result of handling by the Council? Has it been a Council weakness in that regard?

Alan Guimond: I think it has been a combination of all three elements in the plan process. The industry itself dictated -- and not in a heavy handed way--the types of things they thought in the 1976-77 period and the Council responded appropriately and set out some objectives that were noble and correct. The problem was in how they were implemented. The implementation did not allow for the one major consideration: if you were going to control entry, then you had to do it literally without warning. Instead, we had a discussion for 12 months that allowed the fleet of the big boats to almost double. If that had not happened, I don't think you would see me or others complaining that the objectives of the plan have not been met. The problem the New England Council has had is related to dividing it into two areas. The Mid-Atlantic Council is the management authority for surf clams throughout the region and has focused essentially on three stocks: Mid-Atlantic, Nantucket, and now Georgia. Mid-Atlantic vessels with licenses can fish in the Mid-Atlantic area and in the New England area. Vessels in New England could get licenses to fish in New England; five could get licenses to go to the Mid-Atlantic. but nobody else could. So Mid-Atlantic vessels could go back and forth, depending upon quotas, availability and closures, but New England vessels couldn't go south except for a few of them.

James Crutchfield: Much of your discussion seems to be a criticism of the FMP and not necessarily of the role played by limited entry, which you and Kathryn Marvin agree you can't evaluate anyway. Both of you seem to be concerned with the fact that there is a hell of a lot more capacity than that resource can possibly absorb. If I understand you correctly, Al, your answer is, "Let her rip. There is nothing you can do about it anyway."

Alan Guimond: I really believe that for the following reason. The economics of it are that anyone who only can operate six hours a week has a hell of a good chance of making money when no one else can operate any longer. I would like to see the guys who want to work seven days a week, 24 hours a day, go at it. The guys who can't compete are going to fall by the wayside. I don't think that is a disadvantage. If I have a \$1 million vessel and I can't cut the mustard, then I am going to lose it. You may pick up that vessel for \$500,000 and I don't think that is a bad idea. That is how people make money in normal business. I think the overcapitalization problem takes care of itself because inefficiency will reduce capital involvement.

Questioner unidentified: Could the increase in vessels in the surf clam industry be associated with tax advantages to private investors?

Alan Guimond: There is less passive investment in the surf clam industry than probably in most other industries. Kathryn may have a better idea of that, but most of the boats I am aware of are either individually owned or they are company-owned. I don't think the tax situation has come into play in the surf clam fishery as much as it has in other areas.

Kathryn Marvin: I agree with Al. Most of the vessels that were in the permit rush in the '70s are actively fishing. Most of the dormant permits, as I mentioned before, are not the big steel boats but the little wooden ones. Some of the dormant permits are held by boats that fish for ocean quahogs and they only make one surf trip a year in order to maintain the surf portion of their permit.

Questioner unidentified: If you turn vessels loose on a species like the surf clam and it dwindles out, then do you have a new species to replace the lost one in the market? Or if you have a management regime that spreads the harvest out over a number of years, the least that will happen is that the entire catch for a given year will come in a very short period of time. What does that do to your markets?

Kathryn Marvin: You are right, that makes things very interesting.

Alan Guimond: By the way, I am not a surf clam processor but Kathryn is. In my opinion, one of the guiding factors in how the regime has been set up has been to keep stability in the market, stability in the processor's ability to handle the product. I suggest that if you turn fishermen loose and the processing segment cannot handle the glut, then those that are going fishing aren't going to go out. There are some self-regulatory aspects. If you can't sell it you are not going to catch it. So if you plug things up, you have to unplug them one or two ways. It's that way with any resource. The only exceptions are probably halibut and salmon because I consider them to be real pulse type situations. When Bristol Bay hits, it's boom—two or three weeks—you get a lot of fish and you have limited capacity. With surf clams, the

market has more influence, and I don't have a problem with that. I just feel that people should be able to go out and fish for the things that they think they can make money at. And we should stop trying to get into making people economically viable because we don't do it for any other industry.

Kathryn Marvin: I wasn't quite finished. We have experienced the phenomenon of overcapitalization in the processing end because we must have the capacity to shuck a month's worth of surf clams in two weeks so that when we are closed down for the next two weeks we have enough to sell.

Craig Berger, Newport drag fisherman: Al, you stated that we don't try to make any other industry economically viable. What is the Japanese car import quota?

Alan Guimond: It is a voluntary quota. We are talking about the import of automobiles from Japan. It is a voluntary quota by the Japanese.

Craig Berger: Okay. I am sure there are hundreds of examples that are not voluntary quotas. I think you got carried away a little bit. They do it for all sorts of things. Continental Illinois got bailed out, for instance. We had a great influx of people into the brown rock fishery on this coast and I think half the boats and almost all the plants went down the tube. You said, let's just go do it, it will work out fine. Well, I think our experience here is that that's not necessarily so.

Alan Guimond: You won't get an argument from me that there is not a hardship to be caused by it. I think if you use examples like Continental Illinois and even Chrysler and Boeing, you notice that these "entities" receiving all this assistance are large corporations. What I am saying is that, individually, if you are good, you ought to be rewarded in some way. I focused on surf clams, but it applies to ground fish because we have tried a moratorium by virtue of quota that did not do anything for anyone. Everyone got hurt, nobody had the opportunity. It is like going out with a 54-foot gillnet vessel for salmon and being told you can only catch 1000 pounds and some guy goes out with a little hook and line and he also can catch 1000 pounds. There is something wrong when you don't take individual circumstance into consideration. The problem with limited entry on a management plan is it goes right across the board. It is not individualized like a Continental Illinois problem, which involves one particular entity that can change and adjust. So I just don't like government involved in my business. a fisherman, I think I should have the right to be a success or failure just like any other business without interference by anyone in the process. That is a philosophical problem that you and I probably won't agree on, but it doesn't mean that there are not problems with unleashing things. I know what unleashing means. We saw it on our coast. We have

a 200-mile limit because the foreign vessels were unleashed on Georges Bank in the 1960s and 1970s. But I think the question is: are you keeping people in something that maybe they have no business being involved in?

Fred Yeck, Newport Attorney and Trawler Owner: I would like to make a comment based on what you stated, Al. I think your statement that you don't like government being involved in your business, that you like the free enterprise system of survival of the fittest--I think those are very dramatic statements. They are very popular statements, but I think they are also very unrealistic. I would like you to consider the fact that we do have something called a Magnuson Act that speaks to things like optimum yield, that the Council shall manage the fisheries based on optimum yield, which is something like what the fisheries will sustain on a continuous basis year after year, that in developing that optimum yield the Council shall consider the social and economic effects of those decisions. The fact that we don't want government interference, and the fact that we should have survival of the fittest, is behind us. just isn't the way it is. Congress has enacted that law and that is the way our fisheries are regulated on the West Coast. There is no way we can benefit by being the best here either. The brown rock limit is 60,000 pounds every two weeks. You get to go out one day and catch 60,000 pounds, then you sit at the dock for 13 days. You can be the best brown rock fisherman in the whole world and it doesn't do any good. You can't catch more than 60,000 pounds every two weeks.

Alan Guimond: I hear what you are saying and don't misunderstand me. am not opposed to limited entry. I just don't think that in itself it is the answer. If you don't couple it with other things, such as gear and quotas and areas, the mere fact of restricting new vessels into a fishery doesn't do anything. My biggest concern on surf clams is that essentially we have a limitation on new entrants, but nothing has been done to eliminate the effort. That is the management problem I have. The social and economic problem is that if 130 vessels are catching 50 million pounds, that equates to a certain economic amount. Conversely. if you had 100 vessels catching the same amount, it would imply more efficiency and it may even result in more economics of scale through the whole process of marketing and selling. So limited entry by itself is not acceptable to me and the alternative of limited entry with no add-ons is just free market. However, if you want to take a look at biological enhancement or maintenance of a certain stock level and couple it with other things, fine. But do not assume that stopping the number of vessels at today's level is going to reverse the decline of a resource because it is the number of vessels in that fishery that collectively have caused the situation that we find ourselves in. So I say limited entry is a tool, but don't use it by itself.

Fred Yeck: I agree with that. My point is that statements like "survival of the fittest" and "manage only for the biology" are dramatic and popular, but they are not realistic under the law.

Alan Guimond: I agree that they may not be realistic, but keep a careful eye on Congress. Congress has gone through a reauthorization and there are a lot of questions as to the proper place for "limited entry or expanding of the limited entry portion" under the Magnuson Act. There are a lot of conversations about changing it and adding more information that would allow the councils to do other things. There are some people who feel there should be no mention of limited entry in the Act. So I suggest that whatever your persuasion on limited entry, or even if you are indifferent, watch what happens in the next several months because the law may be changed.

James Crutchfield: One final comment. Every speaker who has spoken today has stressed the fact that limited entry does not purport to be the sole management tool. The literature is full of exactly the same view. Limited entry is one of a complex of tools that can be useful. I still am puzzled by your statement that you are perfectly willing to turn loose a large number of vessels that can catch the total allowed amount in a very short time and be content with the fact that doing so might have a very significant effect on the resource and it takes time to recover and time is money.

Alan Guimond: Jim, I agree with you. But, remember, I am talking surf clam now, because that was the topic. Only 10 percent of the outstanding stock is being harvested. We don't even have an assessment as to what is happening since the 1976 and 1977 spawnings. We don't have an inkling as to what level of spawning has taken place. It is obvious to me that some spawning has taken place. And if you look historically, as Kathryn has pointed out, in the early 1970s the high landing of 90 million was reached. Look at the number of vessels that reached it and look at the industry that was processing it. They were able to handle it and there were no restrictions. So the unleashing of twice as many vessels, in my way of thinking, is going to be no more than the situation that they had in the early 1970s where the poundage was landed by fewer vessels. I just don't think you go out and catch for a long period of time that which you cannot sell. And if the processors can't handle it, then they are not going to be able to buy it. I think what you will see is a big glut to start and then there will be some leveling out.

EXPERIENCES WITH LIMITED ENTRY, PART 3

ALASKAN HALIBUT

Robert Jacobson, Moderator

Our next speaker, Jim Branson, was born and raised in Oregon and spent three years fishing commercially off Oregon, Washington, and northern California. He spent 27 years in enforcement divisions of both the U.S. Fish and Wildlife Service and the National Marine Fisheries Service in all parts of Alaska, including Southeastern, the Arctic, the Aleutians, and the Bering Sea. He is currently executive director of the North Pacific Fishery Management Council, a position he has held since the Council's inception in July 1976. He will give us an historical overview of the North Pacific halibut fishery and a review of past and present limitation plans for that fishery.

Review of the North Pacific Halibut Limited Entry Experience Jim Branson, executive director, North Pacific Fishery Management Council Anchorage, Alaska

To understand what the Council has been trying to do, we have to talk about the history of management in the halibut fishery and the history of the fishery itself. I am not going to get very deeply into those subjects because I think most of you are probably quite familiar with them.

Halibut is one of the oldest managed fisheries in the North Pacific. Management started with a convention between the United States and Canada in 1923 when both the Canadian and U.S. industry realized that the resource was having problems. It began with a small closed season in the winter during spawning time. After several reiterations of that convention, it has picked up all the other trappings that management has always had. There have been overall catch limits, gear restrictions, season closures, area closures, size limits on the animal you can take, and of course, licensing. In addition, the U.S. industry itself, starting in 1933 with the Halibut Marketing Board, devised a number of methods of regulating itself to slow down the take so that it hit the market over a longer period of time, more of it went into the fresh

market, and price stability was maintained. They were joined by the Canadians in that effort in 1934. It actually worked quite well until the war came along. Then the government said, "Go out and catch the fish, but we don't want you out there too long."

They had such things as split fleet departures in which they divided the fleet into two segments. Half would sail one week and the other half would sail the next week in order to stagger the landings. They had trip catch limits, based on the amount of fish that could be brought back for each man on board. Generally it ranged from 2500 to 4000 pounds per man per trip. They had in-season lay-ups, 6-14 days in port between each delivery, and scheduled delivery dates within the fleet itself.

After the war, they instituted these provisions again. All of this worked pretty well up through the 1950s and into the 1960s, but it ended in 1977 when the fleet began to expand with the entrance of many new boats. Too many of them ignored the rules and the whole thing fell apart. Regulation then went back to the Halibut Commission and the implementing regulations of the two governments.

Prior to 1977, the seasons generally exceeded four months. In the early years, they were seven or eight months or longer. Catches were fairly stable at around 40 million pounds through the 1930s and 1940s and into the 1950s, with highs of 50-58 million pounds. I am talking now about the Alaskan catch, not the overall halibut catch, which includes British Columbia, Oregon, and Washington. Landings fell rapidly from the late 1960s to 16-20 million pounds in 1974 through 1976 and hit a low of 15 million pounds in 1980. They increased after that for reasons which are still unexplained. The harvest in 1984 was 36 million pounds and the 1985 quota has been set at 45 million pounds with fish again in the Bering Sea really starting to build quite well with a quota of 3.5 million pounds. For a while the Bering Sea catches were almost incremental in 20's of thousands.

While the catch has increased and the stocks have been rebuilding since the late 1970s, the length of the season has been decreasing. In 1974, it was 121 days. In 1977, it was 73 days off Southeastern and 47 days in Area 3, where the bulk of the fish are caught in the central gulf of Alaska. In 1984, there were three days in Area 2C and five in Area 3. The catches were increasing during this time.

Why has the change occurred? It was a combination of things. We can argue about exactly why it happened and everybody will have a different reason for it, but there are some fairly obvious ones. For one thing, the price of halibut increased rather markedly in the late 1970s. It was \$1.31 per pound in 1977, higher than it had ever been before. The number of fish increased, the availability increased, other fisheries,

including crab, were stressed. Fishermen moved into halibut as something to pick up on. It is an easy fishery to get into. Outfitting doesn't cost an awful lot and it is something that can be done with almost any boat. As Barry Fisher pointed out earlier, the Excalibur would make a good longliner although it was designed as a trawler.

The number of boats increased significantly between 1974 and Some of that jump might have occurred because the Council started talking about a moratorium and limited entry as far back as 1977, but the total increase from that time has been about 69 percent, or from 2,000 boats in 1977 to 3,510 in 1984. Some of the increases have been interesting in point of vessel size. You would expect a jump because of the threat of limited entry. You would assume there would be quite a few small boats that could set some gear, deliver a few fish, and, therefore, stand a chance of grandfathering into the system. The statistics do show a slight bump in the small boats in 1979, but generally speaking, that hasn't been the case over the entire period . There actually has been a decrease in the number of participants using boats of five net tons or smaller, from 1,746 to 1,624 boats between 1974 and 1984. Boats of over 19 net tons increased 585 percent from 127 to 725, and those are the real producers. They always have been and always will be. The Halibut Commission formerly required licenses only of documented vessels of five net tons or larger. In 1974, the U.S. fleet had 327 licensed boats. now has 1,886--and that is where your catching power is coming from.

Council participation in the halibut fishery started with the Council's third meeting in January 1977. They asked the State Department to renegotiate the Halibut Convention with Canada to make it conform with the Magnuson Fishery Conservation and Management Act. Because they felt the renegotiations with Canada might be difficult, they started working on a fishery management plan for halibut that would include just the U.S. portions of the stock and the fishery off Alaska. They finished the plan in 1978, sending it to the Secretary of Commerce for review and implementation with the requirement that implementation would only occur if we failed to renegotiate the convention with Canada. That draft management plan set a cut-off date for qualifying for limited entry in the halibut fishery at December 1, 1977. That was the first time the Council had surfaced this particular concept for halibut.

In March 1979, the Council organized a work group to look at limited entry in the Southeastern Alaska offshore troll salmon fishery. They were trying to handle the few boats there that did not have State of Alaska limited entry permits. As it turned out, there were only two such boats and the group came up with a fairly simple solution. Shortly after, the work group responded to a letter from the Petersburg Fishing Vessel Owners Association asking for limited entry in the halibut fishery. Other requests to the Council followed, including one from the Fishing Vessel Owners Association, the major group representing the Puget Sound fleet.

In October 1979, the Council again confirmed the December 1, 1977, cut-off date for qualifying for limited entry. And in 1982 they started on a moratorium, again at the request of their Advisory Panel and the Conference Board of the International Pacific Halibut Commission, which includes representatives from most of the halibut fishing areas in Alaska, Oregon, and Washington. They adopted a moratorium unanimously. (I think it was the last time they have ever voted on this issue together.) They set January 1, 1978, as the new cut-off date, reaffirmed that cut-off date in July 1982, and contracted for a study of the shared quota system on the basis that they knew enough about the Alaskan and Canadian limited entry systems so that an extensive study of those weren't required.

They were interested in hearing more about the possibilities of a share quota system. That is, assigning a percentage of what can be harvested to individuals. They finished the moratorium through public hearings and all the other things you have to go through in this process. In early 1983, they sent the moratorium-implementing material to Washington D.C., warned the license holders and all the people they could find who might be interested in the halibut fishery that no new licenses were likely to be issued for 1983, and waited for the moratorium to go into effect.

The Department of Commerce rejected the moratorium the day before the season opened in June. Why it failed, again, is open to speculation. The Office of Management and Budget was certainly instrumental in it. The letter we received from John Byrne, then the administrator of NOAA, reflected the OMB position. They said they would be perfectly happy for the Council to implement a limited entry system, but they were afraid that once the moratorium was set it would become permanent. Considering the surf clam experience, they have some basis for that idea as they have been unable to get off the moratorium initially established. OMB failed to see that it is very difficult to get a limited entry system into effect unless you start with a moratorium. I think that still is true.

But they said they would support a limited entry system in the fishery, any fishery, that would allow people access to the fishery and would open it to market forces. That is very broadly paraphrased, but that was it. They didn't consider the moratorium as doing that. Probably the real reason it failed was the intense lobbying against it by a lot of different people. That is going to be true of anything we try to do in this area. I know of no other subject—with the possible exception of religion during the Middle Ages—that raises as much passion or gets people as firmly fixed in opinions as limited entry and moratoriums leading up to it. There isn't any way under our system of government that anybody is going to shove a limited entry system down anybody's throat. Unless it is supported by a very broad consensus of the industry, it just isn't going to go. So you have to want limited entry before it is going to happen, believe me.

After the moratorium defeat, the Council sent its work group back to look at its objectives to see what could be done to alleviate the problem in the halibut fishery which most people will agree exists. In September 1984, we reviewed a number of options that are available for management—not just limited entry, but for all the things we have been using like shorter seasons and further restrictions on gear. However, we simply couldn't come to any conclusion. What it amounts to is that one of the things in the arsenal of management measures that has to be used is some form of limited access, but the industry simply isn't ready for it and the Council isn't going to push it. The Council did tell the subcommittee to put together all the available material for managing halibut and put on a series of industry workshops to see if some kind of consensus on what should be done can be developed. Maybe nothing should be done, if that is a consensus. That may very well be what happens. At any rate we are not going to force it.

Those workshops are probably going to be scheduled in October and November 1985. They will include Seattle as well as most of the coastal communities in Alaska, but we don't have a definite itinerary yet.

A number of interesting things have come out of this. fisherman must look at this from several aspects. How much does it cost to gear up, what is the net return, and what is it in relation to gross? In 1977, when the season was 47 days long, boats between 5 and 19 net tons grossed \$13,000 in Area 3 during the halibut season. Boats over 60 net tons grossed \$100,300 that year. Those figures held up for the next couple of years when the season got progressively shorter. But in 1980 we had a short season combined with a drop in the halibut price from \$2.13 per pound in 1979 to 99 cents. That year the gross for the 5-19 tonners dropped to \$5,000, for the over 60 ton boats to \$46,000. Since then it has maintained pretty much that level, although in 1983 it bounced back up again. With a seven day season in 1983, the gross in Area 3A for the 5-19 tonners was almost \$3,000, for the over 60's it was \$81,500. It dropped again in 1984, but primarily because prices came down. The price was 75 cents per pound. The gross was \$4,000 for the smaller boats and \$41,000 for the boats over 60 tons. You have to look at all these things before you make up your mind on whether you want to use limited entry.

Robert Jacobson, Moderator

Our next speaker is the manager of the Fishing Vessel Owners' Association, a Seattle-based organization representing North Pacific longline fishermen who fish for halibut and black cod. His association has consistently lobbied for the implementation for a limited entry program for the halibut fishery. He also manages the Alaska Marketing

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Association, serves as chairman of the North Pacific Fishery Management Council Advisory Committee, is a member of the Marine Fisheries Advisory Committee to the Secretary of Commerce, and is a commissioner on the Pacific Marine Fisheries Commission. Bob Alverson.

The Alaskan Halibut Experience Robert D. Alverson, manager, Fishing Vessel Owners' Association Seattle, Washington

For the last three decades, attempts have been made to justify limited entry on the basis of preventing overcapitalization. I would like to address three issues confronting our industry today. They do not necessarily speak directly to overcapitalization, but they are parameters our industry must deal within. I would like to address these three and how they relate to the halibut industry and how you are looking at them off Newport today. The three are 1) the conservation of the resource, 2) product quality and responsibility to the consumer, and 3) health and welfare of the crews.

In regard to conservation of the resource, I mean the initial mechanisms used for reducing the aggregate rate of harvest of the fleet. You have a beginning and closing date, then you have closed areas, limitations on size of vessels and use of gear, limits on shapes of hooks, trip limits, trip limits per man, trip limits per time, and trip limits per vessel. All of these have been used by the International Pacific Halibut Commission and the Pacific Fishery Management Council in dealing with the resources they respectively have to manage. Conservation needs of the halibut resource have been met largely by sticking to strict quotas—and those quotas will be snuck up on this year with a series of 48—hour openings in the Southeast Alaska area and in the Central Gulf area, 3A and 3B.

Management of the ground fish complex off Washington, Oregon, and California is also being attempted on the basis of severe quotas, and those quotas will theoretically be reached with severe vessel trip limits. The fleets that have precipitated these trip limits and short openings have increased substantially since 1976, when the 200-mile legislation was passed. In 1976, the halibut fleet was approximately 2,600 vessels. Of those, about 1,000 were in the troll salmon fishery in Southeast Alaska. They were not using longline gear to target specifically on the resource. They were landing a couple hundred to five hundred pounds per vessel along with their chinook trolling operations. In 1984, there was somewhere between 4,000 and 6,000 vessels. The number is obscure at this time, but it looked like a golf course out on the ocean with all the flag poles waving.

That increase doesn't necessarily mean a doubling of the fleet. With the sophistication in gear and electronics and with many of those vessels not just targetting on chinook salmon but actually buying longline gear and specifically targetting on halibut, it has probably meant more of a three- to four-fold increase in fishing power. It has resulted in very short openings for the fleet.

The fleet in the groundfish industry off Washington, Oregon, and California has also increased dramatically since 1976. In 1976, it had just a little over 200 vessels participating in what was a 12-month fishery with few regulations. In 1983, the data I received from the Pacific Fishery Management Council indicated there were 437 vessels participating in the groundfish resource off here. Many of those are new vessels with mid-water gear, off-bottom gear, as well as bottom-gear. The vessels have greater fishing power. And all of the vessels, even the older ones, have upgraded their electronics so everybody's fishing power has increased. This increase in fishing power and number of vessels has to be compensated for by the managers. They have been compensated for in terms of strict poundage limits per vessel.

Because of these increases, the Pacific Fishery Management Council and the International Pacific Halibut Commission have gone through a series of gyrations on quotas, vessel limits, and very short openings. Those fishermen who do not want limited access have no alternative to management. By itself it will not stand. As Dr. Crutchfield has indicated, you must intermix other regulations with limited access to make it work. But if you want to eliminate it as an option, then as a fisherman you have to accept that these are your alternatives. When this conference is over, no new regulations will have been made. You will be relegated to the same regulations that you have had. When things get tough, when trip limits get cut back even further, there isn't much more that the fishery manager can offer you. He is in a box, he is backed up against the wall, and so is the fleet.

Let me jump now to product quality and consumer responsibility. Three years ago, we and the Canadians landed 70 percent of the quota in a two week period. I think that was a late June opening. That meant that the vast majority of it got frozen. Processors were buying product essentially for the November, December, and January market. They were inventorying seven to eight months in advance of when they were going to sell those fish. The fishermen essentially lost the leverage they had to negotiate a price because they had large quantities of fish to get rid of in a hurry. And the processor lost his leverage to negotiate a price with the large food chains and the big brokers because they knew he was sitting on 30 million pounds of fish and they knew the longer he waited, the more dehydration takes place, the lower the quality, and the higher the monthly freezing and financing costs. So they play the supply and demand game and the processor has no leverage to negotiate a decent price in the halibut game.

To alleviate this situation, the Halibut Commission, along with the industry and the processors, agreed in 1985 to a series of 48-hour openings in the Central Gulf where the majority of the quota comes in. These were coordinated with our Canadian counterparts so there will be a series of 48-hour openings every 30 days with a series of Canadian openings in between. The idea behind this is to maintain a fresh fish supply to the markets and not overburden ourselves with a great amount of frozen product in the marketplace when the next season rolls around, or it is January or February and you are sitting with 10-20 million pounds of frozen product that you have to dump before the next season starts. This is the situation we have put ourselves in in the last three years. The fisherman is fishing for volume in fish and not price.

In terms of what has happened off the Washington, Oregon, and California coasts on groundfish, you have a rockfish fishery that essentially depends on a fresh fish market. If you allow the existing fleet to punch that resource and bring it in all at once and it has to be frozen, it is not competitive and the fishermen aren't going to get a good price for it. A frozen fillet that is landed on the coast here has to compete in an international market. It will not compete well with foreign labor costs, so you are relegated to selling it into a fresh fish market. In order to maintain the market integrity and consumer responsibility we have with that resource, the Pacific Fishery Management Council has little option but to set a series of small trip limits per vessel that have reduced the efficiency of the larger vessels. In fact, many of the larger vessels have left the rockfish fishery off the coast here. Nevertheless, in order to supply a twelve-month market with this fish, this is the answer.

Someone could reply to both the issues I've raised by contending that the existing mechanisms have satisfied the conservation needs of the resource and they have satisfied the product quality issues within 75 to 80 percent. That is sufficient. But there is another cost, and that is the cost to the harvester, the fisherman. How is this affecting his efficiency? We have answered the manager's efficiency issues with all these mechanisms and we have answered the marketing issues with all these mechanisms, but how about the efficiency of the fisherman himself, or the boat owner, or the crew? They are, in my opinion, not being met with the standard management mechanisms that the Council, the Halibut Commission, and North Pacific Council can offer us. The only way you are going to change that is if the industry itself designs its own limited entry program and takes it to these groups. There are some limited entry programs that my association and I have an anathema towards, but there are others that are good and complement the industry.

Now let me talk about the health and welfare of crews. This is something that is very seldom talked about. It's a macho industry, you know. I don't recall ever seeing anything in a management plan that

takes crew health and welfare into consideration, but anybody who owns a vessel in the Pacific Northwest and Alaska area knows that at least 12 major marine underwriters in the last 16 months have withdrawn from marine underwriting in the Pacific Northwest. Three of them have gone broke. Liability insurance for draggers off the coast here and in Alaska has increased at least 60 percent in the last two to three years. All insurance rates have increased anywhere from 40 to 400 percent in the last two and a half years, depending upon the fishery.

A significant amount of those costs in liability and hull insurance can be related to the management regulations in effect. For instance, the halibut industry agreed to 48-hour openings. Now if you are out there with a crew and the weather kicks up, what are you going to do? Or let's say it doesn't kick up, are you going to take six hours and rest your crew? No, you are going to take a "No-Doz" or snort something, and as a result, a tremendous amount of injuries occur.

Our association has run a liability insurance pool since the 1930s. Basically it has been for the longline fleet out of Seattle and our personal injuries have increased 100 percent in the last three years. My association directors and I contend that it is directly related to the shortening and intensity of the halibut fishing seasons.

Now what do we have off the coast here? The fisherman has a mortgage on his boat that is probably what he could sell his boat for, he has house payments and a family to feed, and he is put on severe trip limits. Now if you institute trip limits based on time, which I think we have evolved to, the only way you can increase your gross revenue is to fish longer. So instead of starting in late March or April, you start in late January or February. We all know there are boats out there that should not be operating in those time periods.

Let me summarize these three issues: 1) the conservation issues; 2) the responsibility to the consumer and the market; and 3) the health and welfare and personal property issues. If the fleet is satisfied with what it has, then it should live with it. But if you aren't satisfied, you have to come up with other options for the Pacific Fishery Management Council to consider. What the Council can give you now—and what I am afraid of—is smaller trip limits and, in the halibut game, shorter fishing openings.

That concludes my remarks. Remember: no regulations will be imposed at this meeting, but when you go back to your boat and find yourself subject either to 48-hour openings on the halibut fishery or to severe trip limits and you have a vessel that can do three times that amount, that is what you have locked yourself into. That is what we have locked our managers into. It is up to industry to come forward with new schemes. And even though a moratorium or a straight vessel limitation

program does not solve all your problems immediately, it is a foundation to build upon. It at least provides hope for the future. We have to bring the fleet back into being an advocate for the resource rather than going to the management council and saying, "Hey, the easiest way out of this is just increase the quota." Deficit harvesting doesn't work, just as deficit spending doesn't work in the nation's capital.

Robert Jacobson, Moderator

Our next speaker, Kevin O'Leary, has been one of the leaders among Kodiak area halibut fishermen who have lobbied against effort limitations in the North Pacific halibut fishery. He is the current owner of a 58-foot vessel, the SUN RUNNER, one of those combination vessels that fish king crab, tanner crab, and halibut, and tender salmon during the summer, and he is currently rigging for black cod. He is a member of the United Fishermen's Marketing Association of Kodiak and is currently chairman of the Alaska Coastal Communities Alliance, a group which he helped form, among other things, to lobby against further limited entry in Alaska's commercial fisheries.

A Halibut Longliner's View of Limited Entry Kevin O'Leary, halibut longliner Kodiak, Alaska

I have some very strong feelings about these issues—as many of us in Kodiak do. Kodiak has been considered one of the staunchest advocates of open access fisheries. We are the fly in the ointment of most of the halibut fishery limitation plans, so I would like to give you a little background about our community.

Kodiak is one of the leading ports nationally. We ranked fourth nationally from 1980 to 1983 in dollar value of fish produced. In 1981, we were the largest dollar value producer of fish products in the United States. In halibut landings, we have been the leading port in Alaska at least since 1980 and our share of the Alaska landings has increased dramatically in the last couple of years. As a result of this and of the investment all of us in Kodiak have in the fisheries industry, we have taken a keen interest in fisheries management in general and particularly in the halibut limited entry issue.

An important thing to remember about the Kodiak fisheries is that we are an entry level community for fishermen. I will use myself as an example. I was born and raised on the East Coast of the United States and had absolutely no knowledge of fishing and no background in fishing

at all. I graduated from college and didn't have a specific idea of what I wanted to do. I went to Alaska ten years ago to visit friends. While there I found an opportunity and an interest that has provided a livelihood for me. In fact, I have developed to the point where I am a classic American success story: I am a little more than \$500,000 in debt and scrambling like hell to make payments.

Anyway, there are fellows like me and there are fellows like many of you down here, second and third generation fishermen who, because of fluctuations in fishery abundance down here, occasionally come to Alaska to fish. I know a number of you in this room who have left Oregon, Washington, and California and have made permanent homes in Alaska. Here's the point I want to make: one of the reasons for the overwhelming disdain for limited access in Kodiak is that we all appreciate the opportunity we have had to make a life for ourselves up there. We want to see that opportunity perpetuated in such a way that our children can participate in the fisheries in the future. We see limited access as a management tool that will put such a great dollar value on permits and add to the capitalization of the fishery that fewer people will be able to participate from a ground floor level.

We also have some practical business reasons to explain our dislike of limited access fisheries. The most important is that the majority of the people who fish out of Kodiak are diversified fishermen. The overwhelming majority of us have participated in multiple species fisheries and we all have had experience in multiple gear types. For example, I have fished shrimp, crab, halibut, herring, and salmon. I participate in all those fisheries with my vessel in order to make a living. Each one is an important part of how I derive my income and meet my financial obligations. One of the problems we have with limited access is that if we piecemeal limited access into these different fisheries, we are going to force people who don't qualify for one fishery to go into another fishery that they may not want to participate in or may not make any money in.

I think there are two reasons why we fish in these different fisheries. One is that we choose to fish in different fisheries at different times of the year because of fluctuations in resource supplies. This year I decided to fish black cod instead of tendering herring as I have normally done because I see a potential financial reward. If I had to buy a limited entry permit to fish black cod, I might not be able to do that. In fact, I am in debt to the point now that if I had to buy a permit for every single fishery I wanted to participate in I couldn't do it. I can't afford to buy a permit for every fishery that I need to participate in—much less want to participate in. What I want to participate in is what will sustain my operation and will make myself and my family a decent living. The other reason we participate in different fisheries is because of market

fluctuations. A guy might decide to fish salmon in the summer instead of halibut if he thinks he can earn more income from it. But if he had to have that permit for every single fishery, his level of capitalization is going to be such that he isn't going to be able to do it. You are not going to be able to afford permits for all those different fisheries. The permits we are looking at are going to be very expensive.

I recently read a paper by Dr. Wilson called "Economical Management of Multi-Species Fisheries." He pointed out that we are looking at a fairly constant biomass in the ocean of all different types of species. Fluctuations occur within the individual populations of that biomass. We want to keep open access to a diversity of fisheries in Kodiak so we can protect ourselves from a decline in abundance of particular species. If a species goes into a decline, we need to switch to alternative species to be able to make our living. For example, the crab fishery and the ground fish fishery. The ground fish fishery impacts crab population. I know that the director of the IPHC contends there is no substantial scientific proof that halibut eat crab, but I have seen quite a few tanner crab in the bellies of halibut. Now I am not advocating slaughtering all the halibut in the ocean. But the fact is that I need to participate in that halibut fishery right now because the biomass in the ground fisheries around Kodiak is at an almost all-time high.

I need that ability to move from a depleted fishery right now, which is the crab fishery, into that more abundant fishery. We need the flexibility in management in order to do this. We need to adjust to these biological circumstances. We also need to be able to adjust our operations to these circumstances in order to make our living.

I view limited entry as an economic and not a biological management tool. I think that is what has been stated already by most of the people here. It can alleviate some adverse biological impact. It is one tool that can be used, but there are other tools available. And there are other tools available that don't cause the kind of economic and social dislocation that the implementation of limited entry will have on the people who are participating in the fisheries right now.

I would like to use salmon as an example. And unlike Bruce Wallace's experience in Southeast, I contend that the salmon fishery in Kodiak has prospered, at least from a biological point of view, in spite of limited entry, not because of limited entry. Today we have a greater level of capitalization in the Kodiak salmon fishery than we have ever had before. We have a level of participation, which is different than capitalization, at least equal to the biggest year of participation that we have ever had in the fishery, and there are some very fundamental reasons why this is so. Once a fellow goes out and buys the permit, he has to compete within the fishery with other fishermen for the product.

In order to justify buying that permit and fishing it, he turns around and buys a more efficient boat so that he can meet his obligations in buying that permit. Once he has that investment in the permit, he has to fish it year in and year out.

Prior to limited entry, there were fishermen in Kodiak who didn't bother fishing their boats in the summertime if it wasn't going to be a good year. They just never bothered putting their boats back in the water and going fishing. Now that we have limited entry in the Kodiak salmon fishery, we have boats out there that have state-of-the-art equipment and they're fighting tooth and nail with each other for the resource. The level of capitalization has increased dramatically as a result. The debt burden those fishermen are carrying has increased just as dramatically as a result. So limited entry hasn't reduced participation in the Kodiak salmon fishery and it hasn't reduced capitalization either. If anything, it has increased capitalization and it has increased the average yearly participation in the fishery.

From a biological point of view, the salmon resource in Kodiak is healthy today for several reasons. The most important reason is that we have had favorable environmental conditions for production of salmon for the last ten years. Limited entry had nothing to do with the good weather. This morning a gentleman said that limited entry saved his fishery in Bristol Bay. I would disagree with that. What saved the fishery in Bristol Bay was stopping the foreigners from intercepting our fish within our own waters. That is what made the big difference in the fishery in Bristol Bay, not the limits on participation. The fact of the matter is that Bristol Bay has an awful lot of people participating in the fishery today. I don't know what it is relative to the last year before limited entry, but I suspect that the level of participation in Bristol Bay today is as great or greater on a year in and year out basis than it was prior to limited entry.

The final point about the health of the Alaska salmon fishery today is that we have had a dramatic increase in the quality and quantity of scientific information available to the management people. The key to healthy fisheries is sound scientific management, and that scientific management and those sound policies can be achieved without a limited entry program. In fact, the most important thing we can do to conserve our resources is to develop sound management from a scientific point of view.

The government today has limited resources. There is no limited entry system that is going to operate without a substantial bureaucracy and substantial costs. I have heard some limited entry schemes proposed that would generate revenue to be earmarked for scientific research and administering the limited entry program. But the North Pacific Council's

legal counsel pointed out that all monies have to go into the National Treasury and it takes a specific act of Congress to get that money directed back to the fisheries. So how realistic is it to expect they will get the monies from a license limitation scheme back into the fisheries? What might happen is that money that would have gone to good biological research and management will go instead to administer limited entry programs.

The basic question is can traditional management meet the needs of the fishery? I believe a majority of us in Kodiak think it can and it can do so at much less social cost and much less dislocation for the people who are involved in the fisheries today. We have seen what the IPHC has done with management of the halibut fishery in the last 15 years just from the biological perspective. We are looking at a rebuilding of stocks in the halibut fishery that is very substantial today. We are looking at a very healthy fishery in spite of the fact that, when the subject of limited entry first came up at the North Pacific Council, it was being sold under the guise of being necessary to protect the resource. Well, we don't have a depleted halibut fishery. We have a very healthy fishery. Even with the greater level of participation in the halibut fishery the last couple of years, the IPHC generally has been able to stay within its guidelines by instituting shorter openings. And with the spacing of the openings, we have also been able to meet the criteria of providing fresh halibut to the market. I would also point out that while fishermen are now moving into this fishery, it doesn't necessarily mean they will be there forever. Multispecies fishermen, fishermen who have diverse operations, move in and out of fisheries as they need to and as the economics dictate their situation. We have a high level of participation in the halibut fishery today because people can make money halibut fishing.

The quality problems we had in Kodiak this past year were really a result of that first seven day opening when fantastic quantities of product came to town all at once. With the shorter, more evenly spaced openings, we have ensured that processors will be able to handle the product when it hits town. The shorter openings also mean it's less likely that the fish will remain uncleaned for an excessive amount of time.

I would make one point about working straight through these 48-hour openings. No bones about it, my crew is going to be awake for 48 hours. That is the way I was brought up in fishing. I fished for Ted Painter on the back deck of a crab boat and was awake a heck of a lot longer than 48 hours and lived through the experience. While I can't say that I enjoyed it all the time, I was very satisfied with the living I made. That is something a fisherman chooses to do. It is something that is part of the way business is conducted in this fishery. I frankly don't need somebody telling me how to run my operation. I am satisfied,

the people who work for me are satisfied with the way I run my operation, and I don't think it is the purview of the federal government to be concerned with that aspect of the fisheries.

Finally, a fellow in the audience this morning said that limited entry, as an economic management tool, is a reaction to the general overcapitalization of the fisheries. I don't want to be a hypocrite and tell you we don't have an overcapitalization problem in the fisheries today. We do. Bob Alverson is right when he says it's terrible to consider that we are looking at maybe seven or eight days total in the halibut fishery. I just fished a three-week tanner crab fishery. Overcapitalization is a problem in the fisheries. What we ought to ask is how these boats got into the fisheries and how we can reduce the level of new vessels in the fishery.

I wish one of the economists here could tell me what percentage of the vessels that entered the Pacific Northwest fisheries in the last five years were built with capital construction fund money or with loan guarantees from NOAA. I would suggest, particularly in the crab fishery, that the large vessels built in the last five years have been financed with capital construction fund money and with the aid of some guaranteed NOAA loans. It seems strange to me that one branch of the federal government is helping to crank out new vessels while another branch is saying fisherman are the problem and some of them should be eliminated. I think the government ought to review its policy with regard to the capital construction fund and NOAA loans. I don't think David Stockman would be adverse to the elimination of that NOAA loan program. While it wouldn't provide a quick solution, it certainly would help bring down the level of capitalization over the long term. We have time to do it. We still have some developing fisheries in Alaska, fisheries that people from Oregon can come and participate in, fisheries that Alaskans who were displaced presently from the crab fisheries can move into and still make a living.

I am not a beneficiary of government loans, which I suppose explains why I am against government subsidies. It is difficult for me to compete at the prime rate plus two with some guy who is getting a subsidized loan. But as long as I have these other fisheries to move into, as long as there is some future development, I can survive. But we are rapidly coming to the point where we are Americanizing all those fisheries and I would think that the fisherman today who wants to succeed badly enough will succeed if he continues to move into developing fisheries. But having the federal government help put more boats into the fisheries at a time when another part of the federal government is telling us to limit the number of fishermen because we are overcapitalized doesn't make any sense to me. The thing we need to do—short of limited entry—is to look at some of these subsidy programs and see if we can make some changes that will help to bring capitalization in line with the resource over the next five to ten years.

QUESTIONS FOR ALASKAN HALIBUT SPEAKERS

Alan Guimond: In reference to the years when the halibut catch went down and the price went down, that doesn't make sense to me on a normal supply and demand curve. How do you explain that?

Robert Alverson: Going into 1972, the industry was coming off a 30 to 40 year period when 50-70 million pounds of halibut were harvested annually. We had a very consistent supply and established markets. Between 1972 and 1974, the Halibut Commission dropped the quota to U.S. and Canadian fishermen from the 60-70 million pound level down to 21 million. The price shot up to \$2.32 per pound and as high as \$2.60 in Seattle for vessels that brought the product down there to sell. I believe it was 1980 that it collapsed. Essentially the 21 million pound quota supplied the restaurant trade. With restaurants taking the entire supply, halibut disappeared from the supermarket chains. So the price went below what it should have been just to buy ourselves back into the market. Subsequently, we had a dramatic increase in volume, which has helped keep the prices down also. So it has been a combination of factors through about a 10-year period.

Jim Branson: Just for numbers, it went down to 99 cents on an average in 1980 from \$2.13 the year before.

Al Guimond: What was the quantity?

Jim Branson: It was 17.5 million pounds in 1979 down to 14.2 million in 1980, when the price dropped also.

Ted Painter, Kodiak halibut fisherman and crabber: Since 1963, we've derived 95 percent of our income from crab, but for the last two years there hasn't been a season on king crab in Kodiak. In addition, our seasons on tanner crab have dropped dramatically. So we switched to halibut last year and derived 50 percent of our income from that fishery. If halibut limited entry had been instituted in 1984, it would have eliminated approximately 70 percent of the Alaska residents now engaged in that fishery. Ironically, 70 percent of the Alaskan halibut, five years down the road, would be caught by non-residents. I ask you, how could I, as a commercial fisherman, possibly want limited entry?

Robert Alverson: In regards to whether non-Alaskans got involved in the halibut fishery, you ought to look around where you are sitting. You are in Newport. Halibut is a U.S. resource, not an Alaskan resource. We are all U.S. citizens, not Alaskan citizens, when it comes to a national resource beyond three miles. The rationale for limited entry was not an inside or outside issue. It was supported by people in Homer, people in Petersburg, and people in Southeast, as well as people in Seattle. And

it was supported by a 9 to 2 vote by the Council and you can't have a 9 to 2 Council vote unless you have a majority of the Alaskan residents on that council voting for it.

Ted Painter: The only thing I have to say to that is that originally what was being proposed was to go back five years and make a cutoff date. But in the last five years, a good share of Alaska residents have jumped into the halibut fishery to make up for declines in their traditional fisheries. It would indeed have been ironic if limited entry had excluded us from a fishery that is currently helping us pay the bills.

Carl Finley, salmon troller, Newport: Earlier this morning I was talking to someone who told me the first black cod area closure in Alaska will take place around the end of this month [March 1985]. Now this looks like a pattern. I think, Bob, your people have found a home in black cod after being pushed out of halibut by everybody else. Can you comment on the situation?

Robert Alverson: I think Kevin may have as much comment on this question since he has a mortgage on a vessel and will be participating in the fishery. But our fleet sees the same scenario developing in black cod as we had in halibut. There are going to be some very good prices—just like we had the \$2.15 price for halibut. It is going to attract everybody and his brother and I see a series of very short, intense seasons two or three years down the road. Now if that is the box the fishermen want to fish in, I can support that. The majority of our organization is very fearful of that situation occurring again and is trying to work within the system to do something about it. But I don't know if the system can respond quickly enough to alleviate the problem.

Kevin O'Leary: I can see the same kind of situation developing, no doubt about it. However, competition is the nature of the game I am in. If I don't want to compete, I will get out. I don't think we need to guarantee anybody a certain amount of money or a certain amount of fishing time. If the people in Bob's organization don't like the nature of the fishery today, nobody is preventing them from putting their boats up for sale and getting out. Myself, I will live with it. I also think other events will ameliorate the situation. I think you will see a comeback in some of the crab resources. You will see people moving back into those fisheries and out of some of the others. This isn't a static thing. We go through cyclic periods with different resources and it just so happens that this particular resource is the one getting all the attention today. We could see a decline in the level of participation with halibut and black cod in the future and those people who choose to stay in them will be able to go back to their longer fisheries. But at the present time, it's a question of what is equitable for all the people who put their livelihood on the line in terms of capital investment. I think it is much more inequitable to arbitrarily say that this guy is in

and that guy is out. Basically the way these things are going to be decided will come down to who has the ear of the politician with the power to enforce these things. Let me give you a little example of what I mean. Ted Painter made the point that if the halibut moratorium had gone through a few years ago, 70 percent of the Alaskans who are presently participating in the halibut fishery wouldn't be able to participate today. I don't know the exact numbers, but that is probably close. I live in a town where the halibut resource and the ground fish resource affect all the other fisheries. And to some degree that resource has had an effect on the decline of the crab stock. So I feel I have as much right to participate in all those other fisheries in the Kodiak area. Bob's group has been almost exclusively halibut fishermen. They have derived 90 percent of their income from the halibut fishery for quite a number of years. Given their historical participation in the halibut fishery in Alaska, they have every right in the world to take part now. But is their longtime historical participation in that particular fishery any more important than the time I have spent developing a diversified operation in Kodiak? Who is going to make the decision? Who is going to say whether Kevin O'Leary goes or one of Bob Alverson's boats stays? Those choices are extremely difficult and given the present level of overcapitalization in the fisheries, I think we need to look at some ways to discourage future capital investments. It is a long term solution. At the same time, we should let those people who are willing and able to compete today, compete and let the future take care of itself.

OPEN FORUM

Unidentified questioner: This is for Bob Alverson. I have had a halibut permit for three or four seasons now. Last year I had planned to fish halibut not because I wanted to, but because I wanted the option to fish halibut down the line, so the proposed moratorium has forced me into a fishery. I'd like your comments on that.

Robert Alverson: A lot of people went into the halibut fishery on speculation when there was talk about limited entry—as I indicated some 6,500 licenses. Many of our guys feel that's okay. They're willing to wait the guys out and get the numbers back down to a workable level. I think in halibut we may have gone past the point of no return because the system didn't work fast enough. A lot of people came into it under speculation and began taking part of the resource thereby reducing the take for those fishermen already in the fishery. Under any system, those people are probably going to be included in limited entry programs. So I think maybe we have gone too far in halibut and it's time now to let some of the market forces push some people out, just play the hard game that a number of other people want to play.

Unidentified questioner: My point is that you are of necessity going to have people like me getting into the fishery because we want the option, not because we want to fish it. We just want the option.

Alan Rolfe, Newport, Oregon, dragger: Several speakers talked about letting market forces prevail. I think the halibut experience shows the fallacy of that. Twenty years ago, if I understand it, something like 40 million pounds of halibut were delivered at a price somewhere between 30-36 cents per pound. Last year we had approximately 40-50 million pounds delivered and the price was 75 cents a pound. Now if you correct for real dollar values, last year's price was actually less money than it was 20 years ago. Yet you have on the order of 10 times as many people in the fishery. Now you would think that if the price is falling over a 20-year period and the cost of operation is going up and real dollar value down, your effort will be reduced. But obviously we see it is not reduced. There are evidently other factors in the business that account for the 10-fold increase in participation. Given the experience in the halibut industry and perhaps our West Coast trawl industry, it is my view that we need some sort of limited entry scheme. Now frankly I have a lot of problems with the schemes that have been in place, but it seems to me that looking at the experience of the halibut industry we need to give limited entry some consideration.

Kevin O'Leary: I think those market forces don't seem to be working because of the level of capitalization generally in the fisheries. We haven't built any level of capitalization in the halibut fishery. The

capital that has gone into the halibut fishery wasn't specifically for halibut boats. We haven't built any new halibut boats or had a great influx of halibut-specific boats in the last few years. What we have seen is an overall high level of capitalization in the fisheries in general and the capitalization in halibut has involved boats that didn't have anywhere else to go. They were more or less forced in because of the situation of the fisheries. So the reason you are seeing boats going into a fishery when, in fact, the level of profit seems to be declining in real dollar value, is because those boats at this time don't have anywhere else to go and they have got to do something.

Alan Rolfe: I just want to respond quickly. The drag and halibut fisheries could be called sponge fisheries. When other fisheries become negatively impacted, those fishermen enter these two fisheries. But if market forces aren't prevailing and making corrections in these industries, then there needs to be some other mechanism. Let me make one other point. Several speakers have equated commercial fishing with other businesses. But the fisherman is not a farmer. He doesn't own a piece of land. And he doesn't own a store. All he has is, let's say, certain proprietory information that may give a particular advantage in the fisheries. But even that is compromised to some extent by Extension agents who essentially want to spread the technology as wide as possible. So the fisherman really doesn't have anything he really owns unless you give him a commodity, which is his permit.

Scott Harrington, Extension agent, University of Washington Sea Grant: In answer to the previous gentleman's statement, your store or business is your boat and the thing that makes your boat different from any other business on the block is that you are the entrepreneur. If you have four burger shops on the same block, one of them is going to survive, the other three are going to fail. The same is true with boats. If all the fisheries are healthy, none of us has to look to catching other kinds of fish. But when some fisheries become impacted, people start looking to where they can make a dollar.

Spike Jones, longliner, Kodiak, Alaska: The fisheries in Australia seem to be a little different than the ones I am familiar with here in that they are not cyclic. How do you think that affects the success of limited entry in Australia?

<u>Colin Grant</u>: Every fishery in the world is cyclic. What I was saying this morning with respect to the shrimp fishery is that regardless of what the cyclic abundance is, you take the lot. The point is that all fisheries are cyclic to one extent or another. The cyclic nature is ironed out to a certain extent by the management, but the availability of the resource does cycle up and down.

Spike Jones: I hear talk about limited entry stopping overcapitalization. In your presentation this morning, you said that limited entry hasn't stopped overcapitalization in your country.

Colin Grant: That's right, it hasn't stopped overcapitalization. What it has done is confined it to a smaller group of people. And, in a sense, that has controlled the amount of capital in absolute terms going into a fishery. In other words, 3,000 people can put a lot more capital into a fishery than 300. But it doesn't stop overcapitalization per se.

<u>Spike Jones</u>: Is it true that most of your limited entry systems were imposed before the fisheries became overcapitalized, except for one or two?

Colin Grant: I would say that all of them were at a stage of overcapitalization except one or two. There is no need to impose limited entry generally until the overcapitalized situation has developed. How do you judge when you have an overcapitalized situation? That is a question I can't answer, but everybody knows when a fishery is overcapitalized. It is not an easy point to judge.

<u>Spike Jones:</u> I see what you are saying. Have you had to exclude fishermen from many of your fisheries through the limited entry programs?

<u>Colin Grant</u>: Only on the basis of the three criteria we usually develop as the entry criteria. And they are fairly liberal criteria. If people can't meet those, and those criteria are developed by industry, then people are out. If they are then out, they have a second bite of cherry by going before an appeals tribunal. After that, it is absolute that they are out. Then, of course, if they want to they can buy in from somebody who did get in under the basis of those criteria.

Spike Jones: In the United States, we have 5,000 to 6,000 halibut fishermen. The economists I have talked to at council meetings say that a workable number would be more like 500. Politically I don't see how it is possible to implement limited entry in our country and yet we hear a lot of argument in favor of it. I think we are barking up the wrong tree. I think we are going to have to look elsewhere, at least in these situations.

Colin Grant: Okay, I don't know enough about your fisheries to comment, but let me say this. I think you are automatically assuming that limited entry will limit some of the 4,500 excess over the 500 number that you think viable. I see no reason why, for example, you can't limit in all the excess capacity that is there now. Let everybody who is in now stay in. And then structure some scheme such as buyback to remove some of it. I think some people have the idea that limited entry automatically means you are going to chop half the people out. That is not the way we

have done it in Australia. I mean, we should have stopped it before twice as many people got in, but we didn't.

Spike Jones: Do you think we are going to have any success going about limited entry one fishery at a time? I see a lot of problems with that.

Colin Grant: We have done it both ways. In March 1984, the State of Western Australia put in a limited entry plan across the board. No more entering into any fishery in the State of Western Australia. Done, finished, all stop. We have done it in the federal government sequentially. We have ended up with what we call sink fisheries. That is, all the capacity that can't go into one fishery flips over to the next one. It becomes limited entry and the excess keeps flipping over until you get to the last one. And we have got one fishery where we have some problems. I don't think you are going to be able to do it in any other way but sequentially. When you have got one good one, one successful one, people outside will see the benefits and they will start to seek it for their own fishery. But I think you should probably just try it once and one thing will lead to another.

Barry Fisher: Alan (Rolfe), one thing you said disturbed me greatly, the idea that Extension agents have given away proprietary information. I have worked inside and outside of the system. I was an innovator inside the system. I can recall when I introduced the Atlantic western trawl to this coast because a fishermen asked if there was a better combination net. And that fisherman did very well; in fact, he creamed the rest of the fleet. A deputation of 20 fishermen showed up at ODF&W and at OSU demanding the net be outlawed and that I be fired. How do you respond to a fisherman's request? The Extension agents are innovators, they are catalysts. They come out with information on equipment, on safety, on refrigeration, on law, on finance. They organize workshops like this. am very familiar with the Extension Service here and in Alaska. Those are the two government programs next to the Library of Congress I don't want to see cut because of the benefits they pay. I really think you should reconsider that remark. I am not aware of any proprietary information being given away.

Alan Rolph: There was a time when the Gulf Coast shrimp fishery was dominated by the Cajuns of south Louisiana. There was a form of limited entry in that the knowledge they had of the shrimping grounds was clannishly protected and the effort was pretty well matched with the resource. Then at someone's request, Texas mapped all the cut-off oil platforms, heads, and drillings—in other words, they created a hang chart. The chart, which contained information that had been jealously guarded, was distributed throughout the Gulf fishing industry and was a major factor in the overcapitalization that occurred in the following six to eight years. That's what I was talking about when I referred to giving out proprietary information.

Fred Yeck, dragger, Newport, Oregon: I don't agree with the analogy made by the Washington Extension agent who compared managing a store to skippering a fishing boat. The difference between managing a store and a boat is that the boat manager is seeking to harvest a natural resource that someone else is telling him how, when, and where to catch. I think there is a very distinct difference. We have to recognize that we do have choices as an industry or as government in managing the industry. For instance, with groundfish we have a program where boats get to go out once every two weeks for 60,000 pounds. In August or September they will be going out once every two weeks for 10,000 pounds. I am not necessarily in favor of the proposal that puts groundfish on limited entry, but I think something needs to be done which is different than we are doing. Also, I think we have to deal with an issue, we have to deal with it realistically and based on actual facts. The statement we are hearing over and over again today is that limited entry is strictly an economic tool for management. I think that limited entry also can be used as a biological tool. As most of us know, there is a tremendous bycatch problem in the groundfish fishery. The fact that you can only bring in 10,000 pounds is fine, but if you are fishing sole you are releasing 20 to 30 percent dead which go to the bottom. So if there are 100 boats fishing, you have way more biological kill than you do if there are only 50 boats. My concern about limited entry is that most boats that survive in the West Coast fishing industry have done so as a result of their ability to move between fisheries. Something that might be considered would be a coast wide moratorium which would stretch from Mexico to Alaska and would allow boats to go freely within fisheries in this area. This would take into account the diversification requirements that have been noted, and on a long term basis it probably would return most fisheries to a reasonably healthy status. This would mean that you could participate in whatever fishery you wanted, but it would restrict the entrance of new boats or boats from outside the geographical area.

Bob Schoning, senior policy advisor, National Marine Fisheries Service: (To Colin Grant) In the 22 years that you have had limited entry in Australia, roughly how many vessels have you taken out of any of the fisheries? I recognize you froze the ones that were already there, but I am interested in knowing how many you have actually taken out. A second question: of the nine or ten fisheries under limited entry, how many of them have overcapitalization as you described it and of what magnitude is that overcapitalization?

Colin Grant: In reply to your first question, we have only just implemented a buyback scheme in Australia. It is a very new technique. Is it working? We will have to wait and see, but it is in place. The problem of overcapitalization within the fishery has become a horrendous problem only recently. Australia only produces about 150,000 tons of fish. Biological and chemical reasons associated with the productivity of the seas around Australia account for that. We are therefore a very

small fishing nation. But 150,000 tons translates into half a billion dollars of production, all of which is basically exported, a lot of it to the United States. There are only 9,000 fishing vessels and 18,000 fishermen in Australia. So the scale of things is much smaller than the problems and the size of the industry that you have here. Nonetheless, so is the population of Australia. So the relativities of the problems, the size of the country to the size of the fishery, I would say, are in reasonable proportion to the scale of the situation you have here. For example, you catch 3-1/2 million tons of fish product in the United States; we catch 1/25th of that. So the answer to the question is not so easy to give in black and white figures. But if we have one dollar of overcapitalization, it is probably equal to \$15 of yours because there is about 15 times the population in America and your fisheries are about 25 times the size. But certainly we have had horrendous overcapitalization situations. Let me give you one example. We instituted limited entry in our east coast prawn fishery last year. There are 2,000 vessels in that fishery. For the last 12 months, 1200 of them have been tied up. They are still tied up, but they are now in limited entry. We estimate that the fishery is probably viable for about 500. So we have four times the number of vessels there than we really think is viable. Now that we have limited entry, we are going to try to bring that fishery back to some degree of viability. I want to make a point here. I have heard a number of people say that limited entry is there to make people rich. It is not there to make individual people rich in our context; it is to make the return to capital the greatest possible value to the nation of Australia, which is the owner of the resource. The people who are fishing it are the custodians of that resource. The custodianship is bestowed upon them by their entrepreneurial involvement in the very first place.

Alan Guimond: (To Colin Grant) I am trying to figure out how you get to an overcapitalized position if you put in limited entry at the right time. Did you put in limited entry and buyback at the same time?

Colin Grant: Oh no, it is easy to get overcapitalization in limited entry. Ten years ago 300 vessels, under the criteria that we developed, got into the fishery. They were 60-meter wooden vessels. Now they build steel vessels and they put echo sounders and kort nozzles on them. And this is money putting extra capacity, extra ability to fish, into the fishery on the very same 300 boats.

Alan Guimond: That's because you don't have restrictions on the vessels.

Colin Grant: We had some restrictions, just like you have 58-foot seiners that are 30 feet broad. We had a limit on the length of the vessel. But they started to build fat vessels. They started to put kort nozzles on; they started to be able pull bigger nets. They put radar and echo sounders on. That is excess fishing capacity, it's overfishing capacity, which is overcapitalization.

Alan Guimond: The actual overcapitalization now results in 200 vessels doing what 300 used to do, but it is 200 different kind of vessels.

Colin Grant: Essentially, yes.

John Williams: I suppose if you have to divide people on one side of the fence or the other, I'm an advocate of limited entry. But I can understand a lot of the confusion as to why limited entry doesn't sound good to those of you who are opposed to it. Limited entry, as Colin said, does not stop overcapitalization. Limited entry can create overcapitalization--probably more quickly than an unlimited fishery in a lot of circumstances. In the case of the Alaska salmon fisheries, as soon as you put a limit on the number of participants and you have market conditions that turned around and created profits in conjunction with the federal government policies, you try to hide those profits -- i.e., put them back into steel and fiberglass. You created an opportunity which very quickly accelerated the catching power and the effort in the fleet. The difference between an open access and a limited fishery is that at least you have the opportunity to do something about it in the limited entry one. Any cure to that kind of situation is going to require some kind of sacrifice. To ask a fisherman to sacrifice today for something better down the line is very difficult if a new entrant at some point down the line can take advantage of the sacrifices that these people make today. I don't think there is any cure in a licensing scheme for the overcapitalization problem. There is in the individual fisherman's quota, but not in the licensing scheme. But just because it doesn't prevent overcapitalization, it doesn't defeat it as a management tool.

Robert Alverson: In reply to the comment that limited entry may not fit in with our capitalistic system, I'd like to point out that the capitalistic system does not work all that well for the boat owner in an open fishery. For example, this sheet of propaganda I found in my speaker's packet says, "Although it is impossible to get figures from the 1ending institutions involved, several sources have estimated that 20-30 percent of the fleet has either defaulted on loans or faces repossession." This is referring to the West Coast ground fishery. if you have a Joe Easley or a Barry Fisher or a Fred Yeck out there--that is, successful, competent skippers who out compete this guy on the horizon so he goes broke and gets repossessed. Do they sit back and say, "Oh good, we have only 431 more to go." No, it doesn't work that way. In an open fishery, the marshal takes possession of the boat and he sells it to, let's say, Jim Branson. So the same number of boats are still in the system. And the managers of the Pacific Council add up the boats and say, "God, we still have over 400 boats and your trip limits are going to So the guy who is most efficient out there could be contributing to a fleet of vessels coming in that sell for one-third of their original costs.

Joe Easley: First, Bob, let me tell you that those boats that go up for auction are no bargain. I looked at a bunch of them this winter and decided not to buy any of them. There was so much work to be done on them that I would have had more money in them than if I had bought a decent boat from a private fisherman. Just because you get in cheap doesn't mean it's any good or that you are going to make money with it.

There are a couple things I would like to point out. overcapitalization is a somewhat subjective term. That is, as Colin pointed out, it's hard to determine when a fishery is overcapitalized. We could all get from point A to point B in Ford Escorts, but a lot of us drive something else, Cadillacs or Ford Broncos or whatever. And that is a personal choice, even if we have a lot more capital tied up than we need for transportation. We could probably make the argument from a national standpoint that we would be better off if we all rode buses and didn't own cars. Second, I am disturbed by the use of the term "efficiency" when it's used in reference to the ability to catch product. The only efficiency that I am interested in is whether that unit turns a profit. If it turns a profit, it is efficient. If it doesn't, it's not. Now I have a question for any of the speakers. Salmon is perhaps one fishery that would be an appropriate candidate for limited entry in the Pacific Northwest. But there is a large recreational component in that fishery. We have talked about limiting entry for commercial entities, but not for recreational fishing. How do you control that political animal that has a lot more muscle than commercial fishermen? If you are going to control just one part of the fishery and let the other go, I think you are kidding yourself. I would like some opinions on that.

Bruce Wallace: Well, Joe, I tend to agree with you. Let me tell you what Southeast Alaska is doing. We have a developing charter boat industry. About two weeks ago we had a discussion with the charter boat people in Sitka. They want some controls. I think the days of rampant entry by sportfishing businesses are at an end. They see that they could go ahead and push for a larger percentage, but at some point they would spend more than they could buy. So in that regard we have taken some steps already to come to terms with the charter industry in Southeast. We are dealing with the sports industry as a whole, too. As I said earlier, we tax ourselves 3 percent and use the money to develop enhancement facilities. We have already targeted as high as 27 percent of our coho at one facility, which meant a seven-fold increase in the sports availability in one area for a 3-1/2 week period. We made sure the sportfishing people understood that. So we are already building buffers. I think the difference is we learned a lesson that Washington, Oregon, and California taught. I am not sure that you can do it all over Alaska. I am not sure you need to do it all over Alaska, but we are already starting to work out that kind of component.

James Crutchfield: Joe Easley's point is well taken, but I would remind you as a fellow Council member that the Oregon and Washington charter boat operators and trollers developed their sliding scale allocation arrangement pretty much on their own. Both of them seem reasonably happy with it. In effect, the division between the two fleets is pretty well accomplished. Now how each group divides up its share of the catch becomes a matter that, to some extent, is independent of this sports versus commercial thing. The second point I would like to make is this. Something worries me a little. In a lot of the discussion, particularly with respect to halibut, it seems to me that we are in danger of confusing management of the fishery with screwing your competitor. If we let that kind of conflict interfere with good management of the resource over time, then everybody's going to lose. It is awfully easy to use conservation as an excuse for management measures that favor your state over another state, or Lower 48 over Alaska or something of this sort. And it is a real danger. Let's look at limited entry not from a standpoint of whether it helps one state or another but from the standpoint of the resource first. You can worry about the allocation later.

BANQUET KEYNOTE SPEAKER

Robert Schoning, senior policy advisor, National Marine Fisheries Service Corvallis, Oregon

Today you heard Jim Branson refer to him as a man who invented halibut. Harold Lokken has represented the United States in international negotiations in most of the major fishing nations of the world. Many of our bilateral agreements were better because he was there, because he spoke up, and because he was listened to. He has had a significant impact on halibut management for the past 50 years and has been involved in the North Pacific Fishery Management Council activities since its formation in 1976. Harold only recently completed eight years on the North Pacific Fishery Management Council and is the only member who never missed a single council meeting in that time. Harold's first exposure to the fishing business was when he filled in for his brother at the Fishing Vessel Owners' Association in Seattle in 1924. That is the Seattle based longline fleet. He served them extremely well for 52 years and all of that without a written contract, just a handshake and an understanding. A handshake and an understanding are trademarks of Harold that have stood him well all over the world. Harold is probably the most respected elder statesman in the U.S. fishing industry. He has earned that because of his experience, knowledge, patience, understanding, integrity, flexibility, responsiveness, and realistic caring attitude. am confident no one here has such a wealth of experience to call upon in talking about the past as a basis for projecting the future of the U.S. fishing industry.

The Past Is Prologue Harold E. Lokken, director, Pacific Fisheries Foundation Seattle, Washington

When I was first invited by Barry Fisher to speak at the dinner, I was told that I should give my views on limited entry-particularly with reference to the restricted meaning of the term as it is now being debated in fishing circles. Then I was told by Bob Schoning that it would be more appropriate if I were to talk not only about limited entry but about what has occurred in past years and to predict what was likely to take place in future years. This covers a lot of ground. I am not sure that these two gentlemen realize what they were getting into. In my experience, it is risky to ask an oldtimer to reminisce about the past. You never know when he is going to stop. Moreover, you are never sure

what mischief will result. Usually a speaker is under a certain degree of restraint, based on his need to protect himself and his ideas from criticism that might lead to disfavor in any public activity in which he might later seek to engage. I am under no such restraint. I am not a candidate for any office, committee, group, or other board in which public popularity is an essential ingredient. I tell myself from time to time that the only constituents I have are the fish themselves. I have no fear of complaint from them as they are quite tolerant of all the views expressed on all matters affecting them, both unfavorable as well as favorable. How effective I am on their behalf is another matter. Nevertheless I welcome this opportunity to be candid. Candor, I think, is an ingredient in short supply in the fishing industry.

When I was asked to assign a title to my remarks, I chose "The Past is Prologue" because it fits what I am going to say. I borrowed the title from the Archives Building in Washington, D.C. The title may also be found on a recent 20 cent stamp which is now in relative disuse as of February 17. The theme is also appropriate, according to George Santayana, an American poet and philosopher, who said that "those who cannot remember the past are condemned to repeat it." If you don't believe this, you might like the advice offered by Aeschylus, a Greek dramatist, who in 458 B.C,—and I was not there at the time—said "The future you shall know when it has come. Before then, forget it." I suspect that the truths lie somewhere among these views.

It is no doubt certain that people will react to events the same in the future as they have in the past, but the events themselves will be different. It is not hard to talk about the past, but predicting the future is hazardous to one's credibility. I was once asked by the editor of Pacific Fisherman to write an article for the magazine's annual issue giving my views on what was likely to happen in the halibut industry during the following year. As this was my first attempt at predicting, I gave my all. Unfortunately, what happened bore little resemblance to what I had predicted. After that, my predictions were guarded by the use of expressions such as "if conditions remain the same," "providing the general economy remains strong," and such other escape mechanisms. You may hear some of those this evening.

In the fishing industry, there is no future for anyone who dares to forecast coming events except those of extremely short term. I have no fear in this regard as my future is behind me rather than ahead. If one is right in his predictions initially, he will be considered a genius of some sort and will be expected always to be accurate in the future. If he is wrong, his intelligence will be questioned. In either case, he is sure to wind up in the latter situation given the vagaries of fishing and the extreme number of variables that effect the industry. Furthermore, a prediction in itself can set in motion developments which would prevent fulfillment of the prediction due to the mobility of the

many segments that make up the fishing industry, and that includes outside factors as well.

Another instruction I received from those who asked me to speak tonight was "to tell it like it is." I interpret this to mean that they want me to stick my neck out. There was no mention, however, of protection in the event I stuck my neck out too far. I am mindful of recent events in this area, namely the General Westmoreland-CBS litigation and that involving the former Defense Minister of Israel and Time Magazine. In circumstances like these, the use of the Fifth Amendment is inappropriate. One possibility is that of seeking asylum in the state of Oregon. It has an added attraction in that it might improve my chances of being a winner in the Washington State lottery.

From my vantage point over the years, there has never been a dull moment in fisheries. Where else could one have rubbed elbows with characters with colorful nicknames like "Lobscos Charlie," "Blood Poison Bill," "Cast Iron," "Squeaky Anderson," "Snailum Kid," "Long and Narrow," "Duke of Poulsbo," "Ling Cod John," and others not usually mentioned in mixed company. There is something going on at all times. The status quo was counted in hours and days rather than by longer time intervals. Forces are constantly at work to alter the status quo. The open access nature of most of our fisheries makes for constant change. There is continuous debate as to the benefit to the industry and nation of open access to our fisheries. I see no end to this debate, no matter what happens. Debate is an essential ingredient in life in the fishing industry. Without it, fishing would be dull.

During the past 60 years, developments in the North Pacific fishing industry have been monumental. The millenium has not yet arrived, but it is being worked on. On the international side, developments include the halibut treaty with Canada, the sockeye and pink salmon treaty with Canada, the international North Pacific Fisheries treaty with Canada and Japan, many bilateral agreements with a host of countries, and the pending general salmon treaty with Canada. On the national side, we have seen the advent of the Pacific Marine Fisheries Commission, the extension of U.S. fisheries from 12 to 200 miles, and many domestic acts, national in scope but materially affecting fisheries. We've also had developments in the states themselves, including limited entry, vessel size restrictions, area limitations and so on—all of it too detailed and too complex for further comment at this time. And last but not least, the Boldt decision.

Each of the fishery management organizations serves a purpose, but collectively they represent a maze. There are good arguments for retaining the existing structures and also valid reasons for changing them. Most were set up to satisfy three objectives. First, to provide for conservation of natural resources. Second, to allocate harvesting

among users of the resource. Third, and probably the most important, to bring management as close as possible to those being managed by including the participation of many of the users in the management process. This leads to a certain measure of inefficiency, but this is the price one must pay for user support. It is the better of two evils. The problem here involves the need to appoint users with broad viewpoints to management groups rather than individuals only who satisfy the needs of those responsible for making the appointments in the political process. I see no improvement in this process in the future in our form of government and I am certainly not advocating any change in the latter. This is another case of being the lesser of two evils.

Let me comment from the standpoint of past and prologue on the developments that I have outlined so far, taking these developments I have just mentioned in chronological order.

First, of course, is the halibut treaty. It came into existence because the fishermen of both Canada and the United States saw the need to conserve the resource and make the harvesting of halibut more humane and more profitable. Before the advent of the treaty, fishermen could take halibut 12 months out of the year. They saw the folly of operating in the wintertime because fish could be taken more safely with less effort in the spring, summer, and fall. The objective was also to protect the resource during the winter when fishing would interfere with spawning.

Originally it was thought that time closures would suffice to protect the resource from depletion, but this concept was found to be faulty when it became apparent that with an increase in effort, more halibut could be taken in nine months than were taken before in 12. This led in the early 1930's to the imposition of quotas—a concept that has continued to this day.

No discussion of the halibut industry and resource would be complete without paying tribute to the halibut fishermen of the 1920's through the 1960's for their resourcefulness and their high degree of social awareness, particularly their "do-it-yourself" philosophy. When costs were deemed to be too high, they established their own outfitting stores, marine yards, and insurance cooperatives. Their greatest accomplishment, however, involved the creation of an informal group of boat owners and fishermen from Alaska, British Columbia, and Washington State. Included were representatives of large boats, small boats, ports with large fleets, ports with small fleets, and employees as well as employers. It functioned without the direct support of either the government of Canada or the United States, although both, through the Halibut Commission, gave their blessing to the effort.

The effort began in the depths of the Depression in the early 1930's when the price of halibut reached the rock bottom price of 4 cents a pound for a medium fish and 2 cents a pound for large and small. It was obvious to everyone at the time that something drastic had to be done. The first measure adopted was the lay-up of seven days after each trip in order to spread the season out. This was followed by longer lay-ups and limits on the amount of fish which could be marketed by each vessel in the fleet. During one period, the entire fleet was divided into two groups. One group began fishing on the opening day of the season and the other one seven days later. The order was reversed in the following year in order to treat all vessels equally. Anti-trust was not a problem at the time, although officials of the government must have winced at the name Halibut Production Control Board, which was used in Seattle at the institution of the effort.

In 1937, further regimentation was tried with a system in Seattle which spread the departure of vessels to the grounds by assigning a departure date for each vessel. The idea, however, was abandoned after one season as it involved what was regarded at that time as too much control over individual effort.

What was remarkable in the relationships among the diverse elements making up the Canadian and American fleet was a system of voting devised for meetings of the group. This included meetings of the Commission's conference board as well because both had the same general makeup. Some ports and organizations sent one or two representatives each while others sent as many as 25. It was obvious that a system had to be worked out other than the one person, one vote concept. The formula devised involved an evaluation of votes. If an issue were agreed upon unanimously there was no need to evaluate votes. On the other hand, if there was a split vote it became necessary to check whether or not the vote actually carried. This was usually done by the chairman and secretary. It involved consideration of the number of vessels and fishermen behind each vote or group of votes, the nationality involved -- whether Canadian or American -- and so on. You couldn't have the American section outvote the Canadian and vice versa. There had to be a proper mix of votes.

A system of voluntary regulation continued for more than 30 years. I repeat, it lasted on a voluntary basis for that length of time until the character of the fleet changed with the influx of many additional boats, primarily smaller vessels from other fisheries. With necessary support eroding, the system was abandoned.

Looking back at the halibut fishery, one can only give management mixed marks for success. Catches have been fluctuating. This is normally understandable. But when catches rise as they have during the last several years, and with the fish now being taken consisting largely

of those that were on the grounds during the preceding period of declining catches, one cannot help but be impressed by the ability of the resource to defy analysis and, secondly, by the inability of science to measure with any degree of accuracy what is happening to fish stocks in the ocean. Furthermore, when the resource that can be harvested with greater return to all over a six to nine month period is taken instead in a matter of a week or more, something is wrong with management.

I point my finger at no one in particular. We are all at fault, myself included. The shortness of the halibut season has forced the diversion of halibut and other boats into the black cod fishery. It is easy to predict that the black cod season will suffer the same fate as the halibut season. The future of halibut, despite its present availability—and black cod as well—is not bright. That may seem to be a rather strong statement, but based on my experience over the years, in good times and bad times, I can see trouble ahead.

When times get tough in the halibut fishery, fishermen move to black cod, then they move into shrimp, then to salmon, then to crab, and so on. I just wonder when we are going to run out of fisheries to which fishermen can go. It seems to me that as far as the future goes, if things are tough in fishery 1 and 2 and 3 and 4 and 5, they are eventually going to be tough in all of them. There will then be no place for fishermen to go. And I don't believe you are going to find fisheries in such condition that you can jump from one to another and then come back because it is much better. Unless we do something about it, they are going to deteriorate to the point where everybody is going to have the same problem. You simply are not going to be able to shift from one fishery to another.

The increased availability of halibut has brought a flow of new participants into the industry. These are part-timers whose interests are primarily based upon species other than halibut. This has dire consequences for unified halibut management. When the trend of halibut availability turns down, as it inevitably will, the agitation for separating the American sector from that of Canada will become intense. The existence of the present Halibut Commission will be threatened to such an extent that it may not be able to survive. When unified management of halibut over the range of this resource ends, the existence of the resource itself will be in grave jeopardy.

I have dealt with the halibut fishery at length for two reasons. It is the one with which I am thoroughly familiar, but of more importance it is a fishery with a long history of regulation. It has had its ups and downs, but it serves admirably as a case history of management for other fisheries—both as to what should and should not be done.

The second fisheries treaty negotiated with Canada was that covering sockeye salmon. It became effective in 1930, but was revived in 1957 at the insistence of the Canadians to cover pink salmon as well as sockeye. The treaty has been remarkably successful, but now will be replaced by somewhat similar arrangements as a part of the new U.S.-Canada agreement on general salmon problems. This assumes, of course, that the new agreement will be ratified by both Canada and the United States, something I think is fairly well assured at the present time. I will have more to say about this matter when I comment more fully on the future of the new agreement with Canada.

The third fishery treaty with Canada, but including Japan as well, is the International North Pacific Fishery Treaty, an international commission with the three countries as members. It is generally referred to as INPFC. The treaty and the commission were effective in bringing some measure of protection to the resources of the North Pacific. It began by covering salmon, halibut, and herring, but herring was later dropped when the resource was deemed to no longer comply with the criteria established by the treaty. The commission was instrumental in bringing together the scientists of the three countries and providing a forum for the resolution of problems before they became unmanageable. The need for the organization diminished with the passage of the FCMA.

The future of INPFC depends on two factors. The first involves the length of time it takes for domestic vessels and processors to replace their foreign counterparts in the bottom fisheries of the Gulf of Alaska and Bering Sea. Barry Fisher can tell us all about that. The second is the extent to which the United States will allow some foreign fishing inside our 200 mile zone in return for some measure of control of foreign fishing for American and Canadian salmon outside of 200 miles.

As time goes by, the INFPC will become of lesser importance as a part of U.S. fishery policy. Its mission, however, could be changed by enlarging its membership to include other fishing countries in the Pacific and by changing its function to correspond to that of the International Commission for the Exploration of Seas in the North Atlantic, otherwise referred to as ICES. A similar organization in the Pacific would no doubt be referred to as PICES. In any event, it seems probable that INPFC will continue in some form in the future as organizations like that are difficult to terminate.

The organization does serve a purpose by providing an automatic forum for the discussion of future problems. In the absence of an organization like INPFC, convening a meeting of the three countries would be difficult, particularly if any one of the countries were an unwilling participant in any of the issues that might be brought up at the meeting.

As for the many bilateral agreements with foreign countries. I see the need for them diminishing as the fishermen of the United States take over fishing now done by foreigners. This will occur as inflation will in time raise the incomes of our fishermen at a rate greater than the cost of production, enabling them to operate profitably where in the past they were unable to do so. The development will take place with considerable argument among domestic users for the right to participate in fisheries which cannot accommodate everyone. The road ahead will be rough. You will see a subtle form of limited entry, but it will not be called that. An agreement on the proposed U.S.-Canada salmon treaty was reached despite gloomy predictions that it could not be done. There was a difference this time. The two countries put muscle into the negotiations by the appointment of high level representatives in the persons of Mitchell Sharp for Canada, and Edward Derwinsky for the United States. The inference was always present that if the two delegations could not reach agreement, the two government representatives would. The political climate in both countries was also favorable. However, the euphoria resulting from the agreement should be tempered by the realization that the problems largely still remain. Only the form of discussion will be changed and formalized. Enhancement of the stocks involved in the agreement is still a question mark--both from the standpoint of funding and from the feasibility of success on the scale contemplated.

A perennial problem still remains. That is funding and mounting the research to provide substance to the discussions of the commission and its panels. A special problem is the protection of the chinook salmon resource which originates generally in southern streams, but is largely harvested in the north. The availability of this species to capture during feeding periods as well as in migratory stages makes the chinook a special case. Extremely tough and controversial management will be necessary if this grand animal is to be preserved for future generations. The proposed new commission offers hope for the future rational management of salmon common to the two countries. It is one bright spot in the future of Pacific fisheries.

Within the United States, the first attempt at interstate management of the Pacific was the establishment of the Pacific Marine Fisheries Commission in 1947. It was designed originally to prevent the federal government from taking jurisdiction over areas coveted by the member states of the commission. PMFC operates quietly and serves a function of providing a forum for discussion of problems among the member states and problems between the states and the federal government. It is likely to continue performing its present functions for the forseeable future, although the Pacific and North Pacific councils have lightened its load considerably.

High on the rank of importance in fishery developments of the past has been the extension of fisheries jurisdiction by the United States, first to 12 and then to 200 miles, accompanied by the establishment of the Magnuson Fishery Conservation and Management Act. These three developments could not have occurred when they did without the leadership of former Senator Warren Magnuson. In my view, he was a giant in formulating United States fishery policy.

In extending jurisdiction first to 12 miles, Maggie faced the solid opposition of the tuna industry. Through legislative muscle and know how, Senator Magnuson was able to get the extension passed through Congress and then secured for the President's approval. The extension was based on a rather confusing decision some years earlier by the International Law Commission. The decision stated that any nation had the right to extend its jurisdiction to 12 miles, but that other nations also have the right not to recognize any extension beyond the customary three miles. The extension became law in 1966.

Then followed a period of relative calm for 10 years. During this period, foreign fishing increased on both coasts and led to increased agitation for a further extension of U.S. fisheries jurisdiction similar to extensions proclaimed by South American countries. The agitation was particularly strong in the New England area. Mr. Guimond knows well what I am talking about in that area in that regard. The agitation for extension received a monumental boost when Senator Magnuson indicated he was amenable to pushing legislation through Congress if the industry would show support for the extension. While the fishing industry was not unanimous in its support for 200 miles, there was sufficient approval, particularly when the Sport Fishing Institute endorsed the idea. We all urged the senator to proceed with the legislation. This was done in May 1973. Three years later, extension became a reality.

Legislation that was passed with fisheries extension represented a compromise of the different views around the country of how the 200-mile zone should be managed. Some wanted the jurisdiction to be vested in the states, some favored the federal bureaucracy in Washington, while others supported local autonomy in the various regions of the country. Unfortunately, what came out of the compromise divided jurisdiction to such an extent that it was difficult to know who exercised it. Added to this dilemma was the interminable number of required hearings and reviews of proposed management measures, a process that involved extensive periods of time.

In assessing responsibility for this cumbersome system, I look both east and west. People in Washington appropriately refer to it as the central bureaucracy. That is a term they use themselves, and it reflects the apparent unwillingness to share authority with either the regional directors of National Marine Fisheries Service or the regional councils. On the other hand, the council members themselves are often unwilling to make the tough decisions necessary to rationally manage the resources in their jurisdictions. This passes the buck to Washington instead of leaving it in the region where it should be. Moreover, minorities in the councils lobby the central bureaucracy to overturn majority actions of their councils. I can't be too optimistic about the future of the councils as full managers unless there is considerable improvement both in Washington and the regions.

The two should work in harmony. There is a place for both. The councils should not have complete autonomy. This would be disastrous for proper management because council membership is so transitory. It would be devastating to minorities with minimal political clout. On the other hand, Washington should use the expertise in the councils and intervene only when council proposals are contrary to the national interest or are unfairly discriminatory to any part of the council's constituency. Washington should make its views known to the councils through its regional directors during the early stages of council deliberations on matters which would lead to proposals of fishery restrictions of any kind. The councils should be given in-season authority in certain fisheries to manage on a day-to-day basis--after having the limits of that authority agreed upon both in the region and in Washington. Washington should decide on broad policy. The regions should then be free to implement that policy and any dispute on the policy should be settled prior to its implementation. I would expect this to take place eventually as it makes sense.

No discussion of past years would be complete without reference to a number of minor developments. For example, we should watch the continuing Law of the Sea negotiations. While the effects of these negotiations so far have not been great, there is no guarantee that we will continue to be unaffected. It is something we ought to continue to monitor. Of greater importance to our fishermen are irritants such as the Marine Mammal Act, the Paperwork Reduction Act, the Administrative Procedures Act, the National Environmental Policy Act, and a number of others. All of these were designed to cover what was perceived as a national need, but as usual they automatically cover the fishing industry as well. This is a mixed blessing. If the progress of a proposal you like is impeded by these irritants, you curse them. On the other hand. if you oppose a proposal, you trot out all the acts as a means of killing the proposal which you oppose for other reasons. I see little change in the effects these acts will have on fishing. There are strong advocates supporting them with much greater political muscle than can be mustered by the fishing industry. We should assume some of the blame for their existence through our use of them whenever it suits our purpose. Most were designed to simplify procedures but actually have had the opposite effect. Getting rid of them is going to be extremely difficult.

On the domestic scene there has been no development more controversial or far-reaching in its effect on fishing than the Boldt decision. So much has been said about it on all sides that I see no point in elaborating further at this time, except to say that I believe many of the wounds that exist today will be healed as all elements of the controversy necessarily adjust to the conditions imposed by the decision.

Before I exhaust your patience I would like to comment briefly on limited entry, particularly the form that seeks to eliminate a percentage of boats and fishermen from their previous right to fish and fish at will. In assessing limited entry generally, I have come to the conclusion that limited entry, where it is not already in place, is a concept whose time has come and gone as far as U.S. fisheries are concerned.

There was a time when limited entry was a viable concept. But with the expansion of our fishing effort over the past ten years, and particularly with the large increase in the number of individuals participating in fisheries today, I see no way to secure approval of limited entry by the political process in today's climate. One must reach this conclusion if one determines the number of current fishermen who would have to be eliminated from fishing today in order to achieve the objectives of limited entry. And I am talking about the restricted definition of the term.

Take halibut fishing, for example. This year, the catch in one main area is estimated to require six days. How can you eliminate enough boats and fishermen to stretch the season to at least six months? Similar problems exist in other fisheries as well. Some believe that the point system followed by Alaska in its salmon fishery is the way to go. This would mean the elimination of all late comers in fisheries. This in turn raises a political problem as the late comers generally outnumber the old timers. Those who are not now fishing but think they might generally are opposed to any bar to their participation. Therefore, political approval is next to impossible.

Another limited entry concept, that of allocating parts of the overall quota to individuals based upon past performance, has two faults. First, it reserves the resource to the old timers and invites obvious opposition by the more numerous late comers, or prospective comers. Second, it gives to private individuals something that belongs to the citizens of the United States collectively. The latter is a concept that I find difficult to accept. It could lead to dividing our 200-mile zone into small segments and restricting the right to harvest in each segment to the registered owner or owners. Others would be excluded. That is a real danger.

Another limited entry approach, sometimes referred to as the guild system, would convey the right to fish for a stated percentage of an allowable quota to certain fishermen who bid the highest sum for the privilege. The percentage allowable would be in small increments with a limit on the number of increments any one person could hold in order to avoid creating a monopoly. The successful holder of a percentage of a quota could then take his allowable increments at any time during an overall season. This concept also has many faults. It would eliminate full-time professional fishermen and replace them with less skilled part-time individuals. No particular skill would be needed if one could take his time in catching his allotment, nor would it matter what catching methods were used as long as the fisherman did not exceed his limit. The cost of fish would be raised to the consumers when those seeking entry bid up the price beyond what a knowledgeable fisherman could or would pay based upon his past experience with the economics of fishing. It also would mean that the price of fish would rise each season when the newcomers outbid those already in possession of increments of the quota. It would always go up; it would rarely ever Spreading the taking of fish randomly over a long season at come down. the whim of the harvester would prove to be an enforcement nightmare.

While on the subject of limited entry, I think it appropriate for me to comment on the attempt in the halibut fishery to obtain a moratorium on new entries to the industry in 1983. The effort failed for several reasons. One-third of the halibut fishermen, mostly operators of small boats, were opposed to the proposal. Fishermen in other fisheries were also opposed as they feared the precedent that would be set. The possibility that they might be barred in some way created another political problem in Washington. The proposed system required considerable federal supervision, which went against the present Administration's drive to get the government off the backs of industry.

What's more, the proposal offered no solution to the basic problem involved, that of reducing effort in the fleet to rational proportions. There was also an unresolved issue between the Council and the central bureaucracy as to whether or not there should be an appeals procedure available to fishermen who did not qualify for licenses. The Council was also divided, with a minority lobbying against the majority proposal. These factors combined to make it easy for the Secretary of Commerce to reject the Council's proposal. In the future I do not see a successful resumption of this effort unless recommendations treat the entire problem and not just a part of it. The philosophy of the Administration in Washington would also have to change to allow for acceptance.

On the subject of fisheries, I hold strong views. The fish in the United States zone belong to the citizens of the United States. They are not the property of fishermen until they are legally taken. The United States government has an obligation to its citizens to manage the

country's marine resources for the benefit of all. If it requires more supervision nationally than is the case now, the government has the obligation to provide this supervision and the funding necessary for it. This does not relieve the users from paying a fair share of the cost. The supervision can certainly be done through the council system, assuming the people in Washington and the regions can reach a much higher level of cooperation than is the case now.

In a somewhat murky part of my crystal ball, I see the application of what is termed in INPFC circles as the principle or concept of abstention. It has been applied primarily to foreigners, but I can see it being applied domestically as our North Pacific fisheries develop further. That is from the standpoint of domestic participation. As used now, it means when a fishery is fully exploited, is under continual scientific scrutiny, and harvests are limited, new methods of harvest will not be permitted unless it can be clearly shown that the new methods would lower cost to the consumer, promote better conservation, and serve national interests better than the old method. It would be up to fisheries management to determine under strict criteria whether or not a new type of fishing method was superior to the old. Entry could be permitted on a trial basis pending evaluation of its potential.

With the U.S. fleet consisting of so many styles and sizes, I can see the possibility in the future of reserving inshore areas for small vessels and offshore areas for large vessels with separate quotas for each. That is in appropriate fisheries, of course. There is a need to protect small coastal communities from pulse fishing by larger more mobile fleets. I don't mean that small coastal communities should be allocated all the resources in adjacent areas, but I do mean that their needs should be given consideration when plans are being made for the future. There needs to be give and take in this field. It makes political sense.

Paramount in our thinking about fishery management should first be the welfare of the resources. I think that was referred to this morning by one or two speakers. In this regard, it is acceptable, on a very temporary basis and under special circumstances, to give precedence first to the needs of the users, even at the temporary expense of the resource. However, anything beyond a temporary period would be disastrous to the resource and eventually to the users. I am well aware of the constant economic needs of fishermen. But I am also aware that many of tomorrow's problems can be averted by restraint today. It is much easier to prevent a problem from occurring than it is to solve a problem once it has arisen.

It seems to me that an ideal fisheries management policy needs two basic elements. The first is a realistic determination in a particular fishery of the length of time for harvesting that would yield the

greatest return to the nation in terms of quantity of food. Once the ideal fishing period is determined, all those interested in participating in the fishery would register in advance. The supervising authority would then allocate fishing time to those having registered. Fishing time for an individual participant might be short, depending on the number of those who registered. This would tend to even out once the system had been in operation for a trial period of sufficient length.

The idea has merit from the standpoint of marketing. The public would be assured of better quality seafood over a longer period of time than at present. And buyers and processors could stabilize their handling and marketing of fishery products. It would end the boom and bust that characterizes many of the fisheries today.

What are chances of such a system today? I would say nil. Most would oppose it because it represents a revolutionary change from the freedom that fishermen now enjoy in entering and leaving most fisheries at will. As for the distant future, the chances are somewhat better. True, it represents an imposition of more bureaucracy. Conditions, however, will change. You, as fishermen and processors, will change. When conditions become intolerable, there could be support for such a radical idea.

In summing up, I would say that the crystal ball is murky as far as the North Pacific is concerned. It is an area which in some respects is expanding. The domestic industry is slowly replacing the foreign industry; however, the transitional period is going to be a difficult one. Tough and controversial problems are arising, particularly in the fleet of vessels that are delivering to foreign processors. What happens when fully domestic units of both fishermen and processors expand their efforts to the point where it is necessary to cut down on the so-called joint ventures? What countries and what fishermen do you eliminate? What criteria do you use? This is a toughy. The solution to the problem is going to be an interesting development in a subtle form of limited entry.

Now let me close by saying that I have appreciated the opportunity to stand on my soap box and air my views. I leave with you an expression of hope that my subject, "The Past is Prologue," is not a literal indication that the future of fisheries management is going to be a carbon copy of what has occurred in the past. I certainly hope we can do better. And in case my fearless forecasting turns out to be wrong, don't call me. I'll call you.

EXPERIENCES WITH LIMITED ENTRY, PART 4

DUNGENESS CRAB AND GEODUCK CLAM

Robert Jacobson, Moderator

We are going to turn our attention a little closer to home for today's program. Our first speaker is Ron Westley, assistant director of the Shellfish Program for the Washington Department of Fisheries. Ron has been a department employee for the past 34 years. During this period he has had extensive experience in the development of management strategies for shrimp, clams, and crab, including the development of a crab management plan for the Pacific Fishery Management Council and Washington State legislature to control access in the Puget Sound crab and geoduck clam fisheries. He is currently responsible for resource management and enhancement of 36 invertebrate species in the State of Washington.

Limited Entry in the Washington Dungeness Crab and Geoduck Clam Fisheries"

Ronald E. Westley, assistant director, Shellfish Program Washington Department of Fisheries Olympia, Washington

I am going to talk about the geoduck and Puget Sound Dungeness crab fisheries. We have instituted a form of limited entry on both of these small fisheries. They are quite different from the subjects that were discussed yesterday. Perhaps I can give you some insight how controlled access can be used in specific situations. I can also bring you a perspective that hasn't been talked about on the problems you encounter in limited access. These are problems closely interrelated with the existing management tools that agencies love to base much of their work on.

First, the geoduck fishery. The geoduck is a large clam. It weighs about 2-1/2 pounds and lives to be about 100 years old. The average age of the commercially harvested clam is about 40 years. After we discovered a large resource of geoducks in the Sound, we started setting up a commercial harvest. This was our first experience with a brand new resource. Based on the problems that Washington was experiencing with salmon at that time, we thought we should consider limited entry. In setting up the overall management scheme, we wanted to achieve optimum yield and to avoid the problems caused by having too many people in the fishery.

The basic system we use is facilitated both by a specific law authorizing controlled access in the geoduck fishery and an existing law dealing with the natural resources on public property that are to be sold. Our divers surveyed the stocks and delineated specific tracts with geoducks on them. The harvest rights for these tracts were sold at public auction to the highest bidder. It seemed like a good system and, basically, we have finally made it work. But there were a lot of problems with it.

One mistake we made was in having people bid by the pound for the right to harvest a specific tract. The bids kept getting higher, but the revenue stayed the same. Another mistake we made was setting a quota on each tract. Theoretically, when the quota was met, the harvest stopped on that tract. Well, the quotas were never met. Here's why that happened. In the process of developing the fishery, a high value market developed in Japan. Geoducks quickly became a very valuable fishery. Our limited entry scheme put tremendous pressure on people to not report their catch accurately, both for financial reasons and because of the quota. Of course, the under-reporting meant our sustained yield system was shot down pretty quickly.

We did another thing wrong. Puget Sound is a fairly large estuary with about 3,000 miles of shoreline. We scattered the tracts around the Sound. This created horrendous enforcement problems. So to correct the problem we started selling the geoducks by the tract and not by the pound. We surveyed, then put the tract up for bid, and gave companies the opportunity to look at it themselves. They bid on what was on the ground, not on so many pounds of geoducks. They bid for the harvest right on that tract. Then we concentrated the tracts together. It is a fairly small fishery, around 5 million pounds per year. We hired two enforcement officers specifically for this fishery.

We still don't have a perfect situation; we still have some problems with under reporting. But the revenue back to the state has gone from about \$250,000 per year under our original system of bidding for pounds to about \$800,000 per year at present.

From what I understand about limited entry, this is close to a perfect system. It is based on a defined property right that can be sold. There is a very high return to the general public for the use of the resource. Moreover, Puget Sound gets heavy recreational use and there are a lot of shoreline conflicts. This limited entry scheme has produced a fairly orderly fishery. The general public objected to the fishery plan at first, but as we have operated and modified it, it has worked out quite well.

The second fishery I want to discuss is the Puget Sound crab fishery. The numbers in Table 1 show the year and the number of

licenses. This is a small fishery with landings of 1-2 million pounds per year. In the early 1970's, we had just over 100 boats. Because of some economic problems, we had a large influx of people into the fishery and the fleet jumped to more than 400 vessels, a four-fold increase.

TABLE 1

Number of Licenses in Puget Sound Limited Entry Dungeness Crab Fishery

Year	Number of Licenses	Year	Number of Licenses
1972	129	1981	345
1975	212	1982	341
1978	262	1983	327
1979	427	1984	302
1980	455	1985	291

Again, Puget Sound gets a lot of recreational use and, as a result, we had sharp conflicts occurring between sport and commercial fishermen with this increase in gear. With over a four-fold increase in pots, we were also having a major problem with lost pots and, therefore, wastage of crab. The Crab Fishermen's Association asked us to join them in seeking some form of limited entry. We were concerned about the biological issues and about protecting what we felt was a rational use of the resource. If there were some prohibition on harvest, there would be a lot of crab wasted. It's a nice little fishery and creates employment for a number of fishermen. So we joined the industry people in asking the legislature for a limited entry program. Our objectives were to reduce wastage, to reduce the sport-commercial conflicts, and, if possible, to increase benefits to the remaining fishermen.

We imposed two major requirements for limited entry. Whatever scheme we devised had to be fairly simple and inexpensive. We sought a moratorium on licenses with a provision for non-transferability. We enacted a retroactive landing requirement based on 1979. That is, they had to have landed crabs between 1976-1979 to be eligible for the moratorium. It was a simple way of avoiding the problem created by people jumping into the fishery when they hear rumors of a moratorium. Unfortunately for me, I was the one who got to answer telephone calls from people who were cut out by the retroactive requirement.

We established a target of 200 vessels and we have a fairly minimal maintenance requirement. They have to land so much to retain their license. That is a double-edged sword and you have to be careful because you don't want to force people to fish in years when they don't want to. So we have a very minimal requirement. They have to make a landing every other year to stay in the fishery.

We reduce the number of vessels strictly by attrition. There is no buyback. There were no state funds available to go into any kind of buyback. Now we have one major problem with our limited entry scheme. To make this work, we have a 100 pot limit. Enforcing a pot limit in a fishery like this is extremely difficult and that is the source of our problem. Without good enforcement of the pot limit, we don't have a moratorium. We have just shifted fishing efforts to fewer vessels, true enough, but we have the same amount of overall effort. We are keeping some control of it. We have taken extra steps and are bringing it back under control, but it is far from perfect.

To summarize from our experiences, limited entry seems an appropriate aspect of management. When you are setting up a new fishery, you don't have to worry about displacing people. And in an area such as Puget Sound where you have sharp conflicts between recreational and commercial people, limited entry can be a very major help. In an established fishery, such as the Puget Sound Dungeness crab fishery, limited entry will work only if the industry wants it and supports it. The only circumstance I can see where an agency should seek limited entry without industry support is if there is a major biological problem. Basically, if industry doesn't want limited entry, you will not come up with a workable system. And if you have to go through the legislature for enactment, it will not be enacted without industry support.

Control of effort or access can significantly reduce sport-commercial conflicts. Where we are blessed with a comprehensive shoreline management act, we have to pay attention to reducing the conflicts with shoreline residents. In both instances, controlled access has been a major help.

Limited entry does not reduce the cost of management or enforcement. As a matter of fact, we had a significant increase in costs for the geoduck fishery. Of course, the increase is far less than the increased revenue.

But here's my main point. Limited entry really tests the blind trust agencies have in the effectiveness of some conventional management tools, and specifically, I am talking about quotas and catch reporting. If you put economic incentives in your limited entry scheme, you better be prepared to beef up your management.

It is possible to make limited entry work without extreme administrative costs such as buyback. I believe our limited entry schemes have provided increased benefit to the public and to the fishermen who remain. Let me emphasize that there has not been a great deal of displacement in the Puget Sound Dungeness crab fishery. Most of the people who have been excluded are yacht owners and others who just wanted to get into it part-time. We are not forcing people out in any big hurry, but instead letting attrition take care of it.

You have to be very careful about getting into limited entry. You must be sure you know why you want it and where you are going. You should not be afraid to use it, but you have to use it carefully.

QUESTIONS FOR RONALD WESTLEY

Jim McClain, Winchester Bay: With non-transferable licenses and attrition, do you plan on changing the law when you get down to a certain number of boats?

Ronald Westley: Yes. We set a target of 200 vessels and the law now has a provision for new people coming in once we get to 200. I think the law now provides for a lottery. I suspect that was not a well thought out mechanism and it may be changed when we get down to the 200.

Ernie Summers, Washington Crabbers Association, Westport, Washington: There are some provisions in there for transfer of licenses. One is from father to son. Another is a death in the family. So licenses can be transferred, they just can't be transferred without those provisions. Again, we are talking about a small area in Puget Sound. I think the same area in the ocean would be altogether different. We are talking about an area that is probably 10 miles long, 3 miles wide, with about 400 boats. While we went along with the limited entry scheme in the Sound, I don't think we would go along with the same one in the ocean.

Ronald Westley: Thank you, Ernie, I am glad you pointed that out. There are two provisions for transferring. The point Ernie is making about 400 boats in a very confined area in Puget Sound, where we have probably a maximum of 150 boats in the ocean fishery, is that we have two entirely different situations. We felt that the concentration of gear in this confined area in the Sound was causing a biological problem, and there is no question that we were getting into a sport/commercial conflict and a conflict over the Shoreline Management Act.

Robert Jacobson, Moderator: What I am hearing you say is that perhaps after some initial problems you now consider your geoduck limited entry program fairly successful. But because of some unfortunate problems the Puget Sound Dungeness crab pot limitation may not be quite as successful. Is that a fair analysis.

Ronald Westley: Yes, I feel the geoduck program is as successful as it can be. There are problems with it, but we are accomplishing the objectives we had in mind. The Puget Sound crab program is also successful. However, it takes more than blind trust to make the key regulation—the 100 pot limit—work and each year we are having to put more and more effort into that. We are keeping it under control, but last year we had 15 officers inspecting and surveying gear during the days prior to the opening of the season and about three times the normal

effort on the grounds after the season opened in order to keep control of this 100 pot limit. We still are not doing it with 100 percent effectiveness, but I think we are keeping it under control and there is less gear than there was.

Terry Johnson, National Fisherman Magazine: I have heard that ring nets are not limited under that program. Is that the case? Have ring nets posed a problem as far as managing the fishery?

Ron Westley: They are not under the limitation and that was an oversight. It is not a major problem yet, but it is becoming one as more people find out rings nets are not excluded. We will probably have to do something about it.

Jack Robinson, Biologist, ODFW, Newport: I think the prohibition on the number of ring nets is less of a problem because people have to tend them and it takes time to do that. Plus there is only so much of that gear that you can tend. Since a pot just sits there, you could put 500 out.

Ron Westley: Of course, we have the 100 pot limit, but we have people fishing 50 ring nets. They leave them and pick them up each day, but they do leave them and come back. It is becoming a problem for us.

Bob Schoning, National Marine Fisheries Service: How long is the crab season in Puget Sound?

Ron Westley: It opens October 1 and closes April 15. The geoduck is year round. We have very few regulations on the geoduck industry.

Bruce Bolding: Have you ever considered a lottery system on the geoduck fishery instead of allowing a couple large companies to out bid everyone else in the auctions?

Ron Westley: The law we operate under is fairly specific and it would not allow a lottery. We are directed to sell, in essence, to the highest bidder. So, no, we haven't considered a lottery.

Bruce Bolding: Do you have any sort of recruitment program for the geoducks?

Ron Westley: Yes, that is one of the benefits from the revenue that is being returned. The state has seen fit to plow about half the revenue back into enhancing the fishery. We feel that in about five years we will be producing sufficient seed to double the commercial yield of the fishery to go from about 5 million to about 10 million pounds through a hatchery program. We are cranking them out by the millions now.

EXPERIENCES WITH LIMITED ENTRY, PART 4

CALIFORNIA HERRING, ABALONE, AND TROLL SALMON

Robert Jacobson, Moderator

We turn our attention now to California. Our next speaker, Melvyn Odemar, is a senior marine biologist with the California Department of Fish and Game in Sacramento. He currently serves as coordinator of the California State-Federal Fisheries Management Program. His responsibilities include liaison with the Pacific Fishery Management Council, serving as the California designee on the PFMC, and acting as the Pacific Marine Fisheries Commission coordinator for the State of California. A few of his past responsibilities with the department include program leader of the Tri-State Dungeness Crab project; project leader for lobster, abalone, sea otter, dungeness crab and pink shrimp investigations; and senior marine biologist in charge of diving programs.

Limited Entry in California's Herring, Abalone, and Troll Salmon Fisheries

Melvyn D. Odemar, senior marine biologist, Department of Fish and Game Sacramento, California

Yesterday's discussion was most interesting. We couldn't have held anything like it a few years ago because the general hostility toward limited entry was so strong. I doubt you could have found enough people to say anything good about it to fill a closet.

I first became involved with limited entry during that particular climate in California. The emotions within my agency at that time were so negative about limited entry that you couldn't approach the corner office with the idea without getting tossed out on your ear. Interestingly enough, we have now reached the point where we do have limited entry in California. In fact, we have seven programs in California. I will go over each of those briefly and then get into more detail about the abalone and herring fisheries.

The seven programs fit into three types of approaches. The first is the moratorium, which you have heard discussed here. The second is what we refer to as a full-fledged type of limited entry program that allows for new entry into the fishery. The third we call qualified

entry. The first two programs are designed specifically to limit effort in the fishery, while the third is more to ensure that fishermen are knowledgeable and/or experienced in a particular fishery before they are allowed to operate in it.

As you know, a moratorium puts a stop on all new entry. In California, it is usually the first step we take before setting up a limited entry program that would then allow for new entry into the fishery. In all cases, however, a moratorium must eventually be followed by a system that does allow new entry into the fishery. Two fisheries are operating under an effort moratorium system: the set-net gillnet fishery and the salmon permit program. The salmon moratorium will be replaced later this year by a full-fledged limited entry system which Pat Lawlor will discuss further. In both cases, entry is either based on past participation in the fishery or on a person having made a substantial investment with the intent of entering the fishery prior to the enactment of the moratorium. In both cases, there are no minimum landing requirements to retain the permits.

Now what I will refer to as limited entry is an effort limitation program that allows for issuance of new permits or licenses under specified conditions. California limited entry programs cover abalone, herring, and two drift gillnet fisheries. To retain these permits, a person must make minimum landings the previous year, such as in the abalone and drift gillnet fisheries, or at least have shown some evidence of being active in the fishery, which is the case for herring.

Eligibility for these new permits, when they become available, is based on past experience or participation in the fisheries. Selection among equally qualified applicants is then done by lottery. In all cases, the permit is issued to an individual rather than to a boat and is non-transferable.

The third type of effort limitation program is called qualified entry. State law requires that the owner or operator of any vessel using gillnets or trammel nets possess a valid permit to do so. This is in addition to any other permit required by law. Although there is no limitation on the number of permits that can be issued, these qualifications effectively serve to limit entry into the fisheries. Qualifications are based on past participation and/or by passing a proficiency exam that is administered by the California Department of Fish and Game.

Over the years, the Department has held to two principles in its effort limitation programs. First, such programs primarily must be resource conservation measures, or mechanisms to resolve user conflicts, rather than a means to conserve capital and labor. Our reasoning is that our primary responsibilities are to conserve the resource and resolve

user conflicts, whereas the industry itself must take the lead in developing management programs specificially intended to increase economic efficiency.

The second principle we observe is that the permit or license shall be issued to the individual rather than to vessels and be non-transferable. An exception to this is a salmon permit system that Pat Lawlor will go into. That particular program was developed by the industry, not by the Department, although we were very much involved in it. Our reason for issuing licenses to individuals is to avoid the problems experienced by other management agencies—and we heard plenty of that from the Canadians yesterday—when the value of the vessel permits becomes excessive and there is a considerable windfall gain because of the newly created property right.

Now I will go into a little more detail on two of the programs. The first program developed by the Department was for abalone in 1977. Limited entry was only one aspect of a comprehensive program that we recommended to the Fish and Game Commission with the goal of restoring abalone stocks and increasing the yields. After an extensive study, the Department concluded that one cause of the decline in abalone stocks was mortality of sub-legal-sized abalones that were picked and replaced. This was largely due to the excessive number of divers in the fishery, many of whom were inexperienced. From 1973 to 1975, 30 percent of the divers were new to the fishery and about 50 percent had less than two years experience in the fishery. The Department, with industry support, recommended limiting entry in order to remove inexperienced divers from the fishery and to reduce overall effort to reasonable levels. done in part to reduce the pick and replacement mortality. The Fish and Game Commission adopted a limited entry program by establishing a limited number of non-transferable diving permits to allow for new entry into the fishery when the number of permitees falls below a set number. Crew members are also required to purchase permits, but there is no limitation on the number of crew permits issued. Diver permits were set at \$200 each, whereas crew permits were \$100 each.

When this system was initiated in 1977, effort was limited to those who had participated in 1975, and we had no limit on the number of permits that were issued that first year. Presently the number of diver permits issued each year is limited to 175. Renewal of the permit requires landings of 5,000 pounds or 20 landings—each landing is defined as a minimum of two dozen abalone. Permittees may obtain a waiver of the minimum landing requirements under certain circumstances. The abalone fishery is very demanding and there are times when injury or illness prevent a diver from participating in a particular year. New entry into the fishery is allowed when the number of permittees drops below 175 because of permit revocation or through attrition. Permits may be revoked because of failure to meet minimum landing requirements or

because of fishing violations. New applicants must have at least three years experience as an abalone diver or crew member, or they must pass the proficiency test. When more applicants than permits are available, a public drawing is held.

Is this system working and are the objectives of the program being realized? From the viewpoint of the person who was directly involved in the original research and the drafting of the recommendations, I must say, yes, it has been successful. It may not be perfect, but we have come a long way toward stopping the decline in commercial landings and restoring the fishery. The number of diver permits issued dropped from 397 in 1976 to 272 in 1977 and has leveled off at just under 175. Abalone landings have also leveled off. Although landings are considerably less than what they once were, the decline has been halted and we are in a better position to gradually restore the stocks and provide for a more stable, healthy fishery.

The original Department recommendation to the Commission included a reduction of the minimum size limit of abalone to make better use of abalone growth characteristics. Our research showed that the minimum size limit we had set on abalone -- and these size limits were set maybe 20-30 years ago--in some cases was the maximum size that the average abalone in a normal situation would ever reach. To make better use of the resource, we recommended reducing the size limit. However, this could not be done when unlimited numbers of divers were working the resource, and it could not be done until the numbers were substantially reduced. Originally we recommended that the number of divers be held at about 70. In 1984, the California Legislature enacted a law that allowed us to reduce the commercial sizes of three abalone species contingent on a reduction in the number of divers to 100 or less. Currently, the Fish and Game Commission is considering dropping the maximum number of divers to 100 through attrition. Once the number of divers reaches that level, the size limits of red, green, and pink abalone will be reduced. These measures should increase landings while providing for a more stable industry. Such an approach would not be possible without limited entry.

The events leading to the development of the herring roe fishery were quite different. When the California herring roe fishery began in 1973, there were no regulations. However, before the year was out emergency legislation was passed giving the Department of Fish and Game responsibility for setting catch quotas. At that time, a total of 17 boats took 1,000 tons at a maximum price of \$100 per ton. Things started to heat up. In 1974, legislation was introduced that would have prohibited the commercial take of herring except for bait. This came about because of a perception by some that the commercial fishery would deplete the resource, which in turn would impact fish such as salmon and striped bass. But, in fact, the resource was not threatened. It was only perceived to be. The Department negotiated with the bill's author

and rather than banning the entire fishery, the fishery was placed under the authority of the California Fish and Game Commission and a permit system and a modest annual quota were established.

As herring prices increased, the numbers of fishermen wishing to enter the fishery also increased. More controls had to be established and quotas by gear type and area were established. It then became apparent that new management measures were needed, and in 1977 limited entry was introduced. It didn't stop there. The following year an odd-even platoon system was set up for gillnet vessels. Odd-numbered permits fished odd-numbered weeks and even-numbered permits fished even-numbered weeks. In addition, a small number of purse seine and lampara vessels were licensed to participate in the fishery. And a third experimental platoon was added in 1980. These vessels were permitted to fish only during December, prior to the opening of the traditional fishery. Currently, there are 385 gillnet permits in the San Francisco Bay area.

The increasing complexity of regulations was not because of resource problems. In fact, spawning biomass estimates indicated that the herring populations were increasing. Management measures were designed more to alleviate social problems than to provide protection to the resource. In 1980, prices reached an astounding level of \$4,000 a ton and highliners reportedly earned more than \$120,000 in a little more than two weeks. Naturally there was intense pressure to allow more fishermen and larger quotas. Without strict controls over entry into the fishery and the amount of gear, there would have been complete chaos. Further complicating the situation was the fact that the fishery occurs primarily in a small, highly developed area in San Francisco Bay. Fishing boats compete with each other, with commuter ferries, and with yachts for the same limited space. If the non-fishing public had its way, there would be no competition for space—there simply would be no fishery.

A nine member advisory committee has been formed to advise the director on annual regulations. The Commission establishes a maximum limit of permits to be issued by gear and area. The permits are issued to the owner/operator or lessee of a fishing vessel. The vessel to be used must be specified and the permits are non-transferable, except that permittees may designate another fishing boat under certain circumstances. When the program was initiated, all persons who participated in 1976 were automatically grandfathered into the fishery. An additional 155 new permits were allowed into the fishery. To qualify for renewal, a permittee must have a valid permit from the previous year and must have actively fished or demonstrated an intent to fish the previous year. A permit renewal cannot be waived and no minimum landing is required.

New permits are issued whenever the number of permits allowed exceeds the number issued. Applicants must be licensed commercial fishermen and be the owner, operator, or lessee of a currently licensed fishing vessel. There is no proficiency testing except what might be required under the general gillnet-trammel net permit. The method of selection is by public drawing, with points given for past experience.

The herring limited entry program is extremely complicated and adjustments are made to the system each year to meet the needs of the resource and the users. The system is working in that the resource is being maintained at high levels and we have been able to maintain a valuable fishery that was threatened by complete closure in 1974.

The two programs I have just described to you were programs that were proposed by the Department and designed with a lot of help from the industry. Another program, the salmon limited entry program, is somewhat different in that the proposal came out of industry. So you will see a different approach in that particular system.

I would like to make some comments about what we have in California in relation to some of the statements I heard yesterday. For instance, it was stated that a moratorium must inevitably be followed by a buy-back system. This has not been the case in California and we hope it will not be the case. We have had no buy-back programs and are not contemplating any.

It was also assumed that limited entry is never administered until there is excessive effort already in the fishery. That is not always the case. In our drift gillnet fisheries, limited entry was set up at the very beginning when there was no effort. And as Ron Westley mentioned, when they opened up a brand new geoduck fishery in Washington they established a limited entry scheme.

Another statement was that limited entry is usually a very poor conservation tool. Maybe it is in general, but there are times it is a very effective conservation tool. We felt so with abalone where the excessive effort was having quite a deleterious effect on the stocks. Even though the fishermen were good about observing the minimum size limits, in the normal course of their fishing they would pick an abalone that was too small and try to replace it. A good portion of those abalone would die. I think the same could be said with salmon. Even if the skippers are observing the minimum size limits exactly, they are going to be sifting through a lot of fish. The more boats you have, the more fish they are sifting through and tossing back. So there is a conservation measure involved.

Another statement made yesterday in relation to Canada and Australia was that the principal goal of limited entry was to manage

labor and capital. We have not attempted to do that in California. We feel that industry is best able to establish those systems and the agency does not get into it. Another issue is transferability. I suppose that is the most contentious of all. We have held that the vessel permits not be transferable, but there is transferability with the salmon permit system in that the permit can be sold.

Another statement that we certainly agree with—and I think Colin Grant made this point—is that each system must be custom made for the particular situation and there must be a heavy involvement by the industry. There is no single system that is going to work for all fisheries. Ron Westley made that point also.

Another point I feel very strongly about is that the system must be run by the state. After listening to the experiences the Mid-Atlantic Council had with surf clams and the experience of Alaska in trying to set up a limited entry system, I feel that the states, at least on the Pacific Coast, are much better able to administer a limited entry system than is the federal government or the councils.

Of all the people I heard yesterday, the one person that I seem to agree with the most is Jack Nichols from Canada. He made some points as if he wrote our script. He made a very strong case on licensing individuals; that has been our position. And we agree with him on the issue of non-transferability. He also made the point that new entry should be chosen by a panel. That is a system that we set up with salmon. Nichols also made the point that new fishermen should show a dependence on the fishery before being allowed into it. We do that by giving points for past participation, which tends to favor those fishermen who are more involved in the fishery.

Nichols also made the point that the cost of the license should go to the state to benefit all and not the individual. I know that is a very tricky issue because a lot of people see these licenses as a property right that they helped create and the value should go back to them. But we feel there is a property right that should go back to the state on this and that any windfall gains to be gathered should in some way go to the benefit of all. We are not contemplating any system that would give the money back to the state in selling these permits, but overall we would agree that any windfall gains should not go to the individual.

Robert Jacobson, Moderator

Our next speaker is Pat Lawlor, a commercial fisherman for the past eight years in northern California. He is past-president,

vice-president, and treasurer of the Fort Bragg Salmon Troller's Marketing Association and currently serves on its Board of Directors. He is a past director of the Pacific Coast Federation of Fishermen's Associations and is currently a member of both the PCFFA Limited Entry Committee and the State of California Limited Entry Salmon Board.

California's Troll Salmon Limited Entry Program Patrick W. Lawlor, Commercial Troll Salmon Fisherman Fort Bragg, California

California now has what the fishing industry refers to as a limited entry program for troll salmon. Whether or not it is actually a limited entry system is open to question. The California Department of Fish and Game refers to it as a moratorium. However, it allows for transferability of permits under certain circumstances and there are provisions for allowing new individuals into the system. There is also a provision for expanding the number of permits outstanding. So whether or not we have a full-blown limited entry system or moratorium is therefore open to question.

Let me correct one point. Mel Odemar indicated that our salmon vessel permits can be sold. This is and isn't true. You can buy a salmon vessel permit, but you have to buy the boat, too. So the permit by itself is not salable.

Following is a brief historical sketch on how we got where we are. During my eight years of active involvement with the salmon fishery, limited entry has always been a bone of contention. The pros and cons of limited entry came up at every meeting of fishermen. This situation has changed in California. Currently, limited entry is rarely discussed at a fishing meeting. The fishing industry is satisfied with what it has on the whole. There are some dissenters, but very few. On the basis of my experience in meeting with people from other ports and meeting with the Pacific Federation of Fishermen and our local organizations, I conclude that we like the system we now have.

The California Legislature enacted a moratorium for the troll salmon industry in 1979. It established a personal license and anyone who had any involvement in the fishery between 1974 and 1979 was eligible. Any person who could show evidence of landing, assisting in landing, or even having the desire to land a fish was licensed. It was pretty liberal. The moratorium was written for a specific term of two years in order to allow the fishing industry, the California Department of Fish and Game, and the legislature to come up with a program they felt they could live with for a longer period of time.

This two-year period was later extended another year, but the initial impact was a high number of individual licenses—8,442 to be exact. This figure represents the potential number of boats in the fishery in 1980. (We had a potential of 8,442 boats because every individual that had an individual permit had the right to put that on a boat and go fishing.) This compared to only 3,854 boats actually making deliveries, so we felt we were pushing the maximum number of boats at that time.

The moratorium concluded at the end of the 1982 season. With the beginning of the 1983 season, we had a new limited entry law in place that moved the permit from the individual to the vessel. This permit was non-transferable and was issued for the life of the vessel. There are now provisions for replacement vessels and transferring the permit to other vessels, but these are minor. The actual number of transfers that have occurred over the period of this law has been minimal.

To qualify for a vessel permit in 1983 essentially you had to have fished during the years of the moratorium, so any individual permit that actively produced fish during 1980, 1981, and 1982 was issued a vessel permit in 1983. In 1983, we issued 4,617 vessel permits. This was more than the number of boats actually participating in the fishery because we included vessels that were under construction or contracted for construction. We had provisions for hardship cases—individuals who were unable physically, mentally, or for some other reason to fish—but the actual number who qualified under these conditions was not large. Another qualification, added later, granted permits to people who could prove 20 years participation in the fishery.

What is the net result of what we have done since 1980 in the California troll salmon fishery? In 1982, we had 5,964 individual permits. In 1983, we had 4,617. In 1984, we dropped to 4,177 actual vessel permits. The number of permits since 1982 has been reduced by 1,787, which computes to a 30 percent reduction in potential. Using the high figure of 8,400 licenses issued in 1980, it approaches a 50 percent reduction. We anticipate that the number of vessels licensed in 1985 will be somewhat lower than in 1984—probably less than 4,000 permits. Of these permits, we can't see more than 3,000 vessel permits that could possibly fish because we have a lot of hulls on the beach and a lot under construction that were never finished. These boats will never go in the water, but they do have permits.

The current law, as I said, is still widely supported by the industry. It has provided us with a definite degree of stability. The current law sunsets in 1985 and legislation is now being pursued to extend that for another two years in order to give us time to come up with a replacement piece of legislation.

We have had some problems with the current law. The transferability issue was one of our major issues. We left some loopholes in transferability that we intend to plug. We keep very close track of the fleet profile—what size boats we have participating in the fleet. We don't want this to change. We don't want all our permits to reach the maximum potential of a salmon boat. We want our permits to stay within our existing profile because doing so will allow us to accommodate the maximum number of people for the maximum benefit to the coastal communities and still produce the maximum amount of fresh product. We hope to have this in place in 1986.

The program we have was developed by the industry. It took more than two years of meetings at each individual port and with each individual fishing organization. We had a lot of statewide meetings and workshops. We involved the maximum number of people. Anybody we could involve, we did. And every time our committee held a meeting and came up with a tentative draft of what we thought would be a good system, we went back to our ports and asked our fishermen if they would support it, or how they wanted it changed. Eventually we came to a unanimous idea of what we wanted. When it was presented to the legislature, it passed without any problem.

This happened because of the industry involvement and because one of the members of our committee was a representative of the Department of Fish and Game. They cooperated with us fully. We couldn't have done it without their help.

We looked at the pitfalls of limited entry by obtaining all the information we could from Canada, Washington, Oregon, and everywhere else that had a limited entry system. We wanted to avoid a drastic increase in the value of a vessel license. We didn't want a \$30,000 salmon permit like they have in Bristol Bay so we adopted a provision that will increase the number of permits if the value of the individual boat substantially increases because it is a salmon boat. So the value would be diluted. This increase can't take place without the proper triggering effect over a specific period of time.

We also wanted to prevent upgrading. We didn't want all the 26-foot boats to suddenly become 36- to 38-foot boats (that is, ideal size trollers), so we strictly maintain our fleet profile. Whenever we have an application for a replacement vessel, the applicant is required to physically appear before the Fishery Review Board, or send in whatever documents he feels will support his case. It is the responsibility of the Fishery Review Board to determine that the vessel to which the permit will transfer will not increase the fishing effort. The Board has been extremely strict. We have had some irate fishermen who could not replace their 26-foot boat with a new 32-foot fiberglass boat because we don't allow that degree of upgrading.

We don't anticipate having a buyback program. Actually, we have had a substantial buy-back in the fishing fleet—it's called repossessions. The other thing that makes our system acceptable to the fishing fleet is the Review Board, which is composed of people from the fishing fleet. The Review Board has seven members, four permanent and three alternates. The fifth permanent member, who acts as chairman, is a representative of the Department of Fish and Game. The chairman has no vote except in a tie of the permanent members.

So we have a system that was requested by the industry, designed by the industry, and, with the help of the Department, is administered by the industry.

Questions FOR CALIFORNIA FISHERIES SPEAKERS

Ernie Summers, Westport, Washington: The non-transferrable license bothers me. It would be tough if a guy dies and leaves his wife with a boat that she can't transfer or sell. What happens when a guy wants to retire and get rid of his boat? He might have \$300,000 in his boat, so he's got to be able to do something with that boat. There's got to be some provision for selling your boat. It's all right in the small fisheries where a guy is just filling in, but in the permanent fisheries you have to be able to get something out of your boat when you decide to retire. I don't know what your thoughts are on that.

Mel Odemar: I agree with you on that, Ernie. By the way, I understand that there is legislation that will be introduced this year in California that will allow for transferability to a son or daughter. What we did not want to do is set up a system that had, at the very beginning, a freely transferable license. Wherever that has been done we've seen nothing but problems. Now on to what you described as a fill-in fishery. Some of the fisheries we have under limited entry are rather small and the investment isn't that great. The abalone fishery is not one in which the license is passed on from father to son or daughter or whatever. There are only a few people who go into the abalone fishery because it's very demanding. On the other hand, most of the people involved in the herring fishery are also involved in other fisheries.

With salmon, the fishermen feel, as you do, that they need some property right. When they die, what does their wife do with the troller? The vessel permit stays with the vessel and it therefore retains the value pointed out. That is one example of transferability. It would be very difficult to make licenses non-transferable in dragging or crabbing, for example, because we're talking about a lot of money in the boats. The license holder has to be able to transfer the right.

Stan Schones: I'd like to ask you a question about your swordfish permit. Do you know how many permits are distributed by the Department of Fish and Game?

Mel Odemar: I'm sorry, but I don't have that number.

Unidentified member of audience: About 400.

Stan Schones: I know that a number of those permits are inactive; that is, the fishermen owning the permits are not actively fishing. Instead they lease their permits for 10-25 percent of the gross to another boat that doesn't have a permit. It's absurd to let someone who has a permit but who is not actively fishing benefit from an income like that. You've got guys who are capable of fishing and need to get into the fishery, and they're not allowed to because you've got a number of deadheads with permits who don't want to fish.

Mel Odemar: Well, that particular program, as you know, is rather recent. There are still bugs in it. These particular issues are going to be addressed. I wasn't aware of the situation that you just mentioned. I don't work that closely with that fishery but I'm sure that particular permit system is going to be changed to take care of some of those problems.

Stan Schones: How can you place a limited entry system on a fishery when the whole U.S. catch is only about 4 percent of the world catch? That particular fish is highly migratory and is only in the waters on the East Coast or the West Coast for about three or four months out of the year. How can you justify that?

Mel Odemar: It wasn't for conservation for the obvious reasons you just pointed out. We catch just three or four percent of the total world catch. The limited entry system was for social reasons and was related to the shark billfish fishery. It's a very emotional issue. Until recently, the only legal fishing we had was by harpoon. The big debate then was whether or not to use spotter aircraft. There was a lot of opposition to the use of aircraft, so that was done away with. People started experimenting with drift gill nets, originally targeting on thresher sharks, but we had an incidental take of billfish. Then we had quite a bit of pressure to open the swordfish fishery. We simply could not open that fishery with no controls. The fish are too valuable and there was too much opposition by the general public to having any commercial fishery for it. It's very similar to herring. So the only way we could have that fishery was to have tight controls over the number of people going into it. That's the reason it started out with limited entry. It's just to keep the numbers down. It wasn't to conserve the resource--except in the case of the thresher shark. We are overfishing thresher shark.

Stan Schones: How does a state with a limited entry program on salmon or whatever forbid fishermen from upgrading their boats? For instance, someone who's using a 26-foot boat to fish salmon isn't allowed to do buy a larger boat. To me, that's just downright communism or socialism.

Mel Odemar: Here's the man who helped design the system.

Pat Lawlor: If an industry is going to have limited entry, it has to give up something. We had a lot of discussion before we went into a limited entry system about whether or not we wanted limited entry. Once it was determined by consensus that we wanted a limited entry system, it became obvious that we had to give up something. One of the things we had to give up if we were going to have limited entry was the unrestricted right to upgrade. It's just one of the things you just have to give up if you're going to have limited entry.

Stan Schones: I was involved in the tuna industry for about 15 years. I got out of it about five years ago, not because I wasn't making money, but because I just didn't like the hassles—the Mexico situation, the unions, and things like that. Since I got out, that industry has steadily declined because of the Mexican licensing requirements. You've got about a dozen boats down there with good fishermen who are being forced out of this fishery through no fault of their own, either because of reduced tuna prices or restrictions in Mexico. These folks are trying to get into the shark/swordfish industry, but the limited entry program doesn't make provisions for people who face hardships through no fault of their own. How do you react to situations like this?

Mel Odemar: First, if you did not have limited entry in that particular fishery, you would not have that fishery. Gillnets are a very hot issue. I think California is the only state of the three West Coast states that has gillnet fisheries on the open ocean. There is a general perception by the public that they're a destructive form of fishing. If we were to open it up, given the season, the length of net, and so forth, it would be absolute chaos out there. The California Legislature would shut it down immediately. It's the same as we had with herring. If we had not stepped in with the controls we had, there would be no fishery in the San Francisco Bay for herring. Without limited entry, I'm convinced there would be no drift gillnet fishery in Southern California. Those people who are in it are making a very tidy living, as you know, but without limited entry, we wouldn't have it.

Stan Schones: Again, how do you make the provisions for these displaced fishermen? It's only a handful of boats.

Mel Odemar: There is a provision for new people. There isn't room for everyone who wants to get in, but we do have a system set up that allows for new entry into the fishery. It's on a point system as permits become available. Now the maximum number allowed can be adjusted by the legislature or the Fish and Game Commission. Permits are made available either because those owning them have not made landings or have had their permit revoked because of violations. It's a very small number of permits that become available, to be sure, but there is a provision for new entry. The law requires it. There will never be enough permits for new entry to satisfy all the people who want to get into the fishery.

Lee Wilson, Crescent City, California: I do want to clarify one thing about upgrading. Anyone can enter the California salmon troll fishery simply by buying a boat with a permit, and there are lots of them for sale right now. If you want to upgrade all you have to do is get both a permit and a boat.

 $\overline{\text{Pat Lawlor}}$: Thanks, Lee. I knew you were going to catch me on that. When I was speaking of upgrading, I was talking primarily about bringing

a new boat into the fishery that was not already in the fishery. One of the key provisions of the system says that you are not perpetually doomed to fish a certain size boat if you don't want to. With a maintained fleet profile of various size classes of boats, nothing prevents you from purchasing any other boat that you want, larger or smaller. If you are a small boat fisherman and set your eye on a 42-footer, there is always a boat for sale. You have the assurance of knowing that you've got the permit because it goes with the boat, so the prohibition on upgrading is limited to the new boat that is not already in the fishery.

Jeff Feldner, Troller/Crabber, Newport, Oregon: I've got a comment on the transferability issue. Even though you can buy a larger boat, it seems like you're building in vessel obsolescence. Ten to fifteen years down the line you're going to have a fleet of old boats.

Pat Lawlor: Currently we allow for replacement of older vessels with newer vessels as long as they are within the same size parameters. To a limited extent, this is upgrading the fleet. We don't see this as a real problem because the bulk of the fishing fleet, as you are well aware, does not have the capital, given the current status of the fishery, to replace all the older boats with newer boats. If the fishery became lucrative enough that the majority of the people with old boats suddenly felt they could replace them with new boats, the increased effort could probably be supported. Currently, that is just not a problem. As a person who fishes a 1923 vintage boat, I can tell you it has more years left in it than I do.

Spike Jones, Crabber, Longliner, Kodiak, Alaska: I didn't understand what you meant when you said you wouldn't have a fishery if you didn't have limited entry. Don't you have other options like quotas and net sizes available to you?

Mel Odemar: We have all those. We use them all. It's probably the most heavily regulated fishery that we have. What I meant was that in 1974, the second year of the season, the California Legislature was already looking at a bill that would ban the commercial take of herring in San Francisco Bay. The only way we were able to prevent that was through limited entry. I don't know if you are familiar with that part of the world, but it's probably the most urbanized fishing grounds anywhere. You are right in front of Sausalito with all the beautiful people in hot tubs and the commuter ferries. You can't imagine a bigger zoo. Without strict limitations on the number of people getting into the fishery, you simply wouldn't have it. There's a lot of people making a tidy sum of money off that fishery. The resource is in good shape. The only way we can maintain that is through a limited entry system. We have maximum participation by the fishermen themselves. A nine member panel advises the Department. The Fish and Game Commission has at least two meetings a year to set regulations and they end up with something like eight or ten

pages of regulations. It's a real mess to try to figure out, but at least it's working and it's something into which the fishermen have a lot of input—and they have a fishery. Without it, everyone would be sitting on the beach.

Joe Rock: I can't accept your [abalone] limited entry program when you tell me that you currently plan to remove 100 fishermen and you want to take out another 100 fishermen in the future. Have you ever addressed the sea otter problem? It seems to me that what you're saying is that you're going to take the fishermen out until the sea otters are capable of taking care of the fishery by themselves.

Mel Odemar: I headed up that program when it first began. I know as well as anyone the impact that the sea otter has on the resource. I have dived on just about every mile of the coast, so I know what you're saying. In short, the sea otter and abalone industry cannot exist side by side. We do have a section of the coast that has a viable commercial abalone fishery: the Channel Islands in Southern California and parts of the mainland. Central California at one time had the world's greatest abalone beds. I'm convinced that those will never produce abalone again in any quantity to support a commercial or a sport fishery. That's the home of the sea otter. But in Southern California we do have a chance to maintain a fishery. We have been able to level off the decline of landings. If you look at the history of the fishery, there was a steady downward slide in the fishery, but it has leveled off. We are now able to look at management measures that we know will provide for better utilization of the resource. I was involved in the research. We tagged thousands of abalone out there. We determined that in some areas of the coast, the average maximum size the average abalone would ever reach in that population was in some cases smaller than the minimum legal size that we set by law. That meant we would have had to change our size limits in order to fish those stocks. You can't do that if you have an unlimited number of divers out there. We also found there was a substantial mortality of abalone among those that were just short of legal size. This was because of the inexperience of the divers. Every year 30 percent of the divers entering the fishery had never done it before. We won't take credit for the idea of limited entry in abalone. It was the fishermen themselves who said they had to have control over the people getting into the fishery. We can't have every high school kid who likes to go diving start harvesting this resource. I think that limited entry has been very successful, but sea otters are another problem.

Gary Frederick: What happens to the people who are displaced by limited entry? I grew up in California. I graduated from high school there. I went into the military service from there. But when I came back from the service I wasn't eligible for a permit because I hadn't participated. I spent five years fishing in Alaska. When Alaska went limited entry, I

didn't qualify for a permit because I didn't have enough points. You say there is a provision for new people to acquire permits, but the individuals who try to go through this legislative process encounter a stone wall. Can you name one person who didn't get an original permit who was able to acquire one in the gillnet swordfish fishery or the San Francisco Bay herring fishery? These people who are displaced have a tough time getting started.

Mel Odemar: There's no doubt that is a problem. When you talk about people being displaced by limited entry, we have never come in and set a number that would force people already in the fishery to get out. We do this through attrition. That's been the case with all of these programs. As far as those people who were out when the door was closed and how do you get back in—that is a problem. We try to make it as equitable as we can. We try to set up provisions that will allow a maximum opportunity for new people to get into the fishery. Those fisheries that are the most valuable are naturally always going to be the hardest to get into. There is going to be a longer waiting line. There is no waiting line at all to get into salmon. But the alternatives to limited entry in many cases are no fisheries at all.

Gary Frederick: I have seen several instances where a state has imposed limited entry and the resources were devastated anyway. I don't think that limited entry necessarily is going to guarantee a fishery's existence in the future. There are other circumstances—natural or economical—that are going to affect it.

Mel Odemar: I'll certainly agree with you on that. I mean, limited entry, as was pointed out many times, is only a tool. It has to be done with other measures. And even with limited entry, it's no guarantee that you're going to have a viable industry. In California, we have restricted our limited entry programs to those that we felt would otherwise result in no fisheries at all. In salmon, we said all along that we weren't going to put our head up against that particular brick wall. We wanted to control the salmon fishery through seasons and whatnot. We said if the fishermen felt they needed some other measure to assure their viability, they would have to come up with it. They did with limited entry. I hope it works for them. There are other methods we can use. I think Bob Alverson made a very good point yesterday when he said that if fishermen want to be put in the particular boxes they find themselves in, that's their choice.

Gary Frederick: If many of us in the business today had been frozen into one fishery when we started, we'd have never got to where we are now. The problem with limited entry is that you quite often encounter a stone wall when you try to get a permit by working through the system.

FISHING INDUSTRY PERSPECTIVES

NET FISHERMEN

Robert Jacobson, Moderator

We felt that it was important to provide an opportunity for fishermen and other industry people to formally comment on their philosophies regarding limited entry. In selecting people to participate in the next section of our program, we attempted to get those who, although not coming from totally opposite ends of the limited entry spectrum, may have different philosophies on the use or need of limited entry as a fishery management tool.

The first speaker this morning in the net or trawl fishery is Ralph Brown. Ralph was born and raised in Brookings and grew up in a fishing family. For the last ten years, he has owned and operated commercial fishing vessels. He is currently the owner-operator of a 75-foot trawler and fishes out of Brookings. He has been on the Board of Directors of the Fishermen's Marketing Association for five years and is currently vice-president. He has been on the Oregon Otter Trawl Commission for the past few years and is currently chairman.

Fishing Industry Perspectives: Net Fishermen, Part 1 Ralph Brown, Trawler Brookings, Oregon

As Bob Jacobson said, I'm vice president of the Fishermen's Marketing Association. We have submitted a proposal on limited entry for groundfish only to the legislatures of Oregon, California, and Washington. We did not include shrimp. A couple of years ago we polled our members by mail on several issues, including limited entry. Of the questionaires we got back, 75 percent were in favor of some form of limited entry. We didn't do anything about it at that time. We knew it was a controversial issue and we didn't want to touch it. Last year, we learned that the Southwest Region of the National Marine Fisheries Service was going to submit a proposal to the Management Council to set up a study group on limited entry and other management alternatives.

We felt there was a good chance that the study group would come up with specific proposals on limited entry. We also felt that if we were

going to have a limited entry program, it would be a lot better to have the fishermen control it. So we made a deal that if industry submitted its own limited entry proposal at the November Council meeting, the National Marine Fisheries Service would hold off on submitting its proposal. At our next Board of Directors meeting, we drew up a proposal. Fishermen from San Francisco to Astoria attended that meeting. We had one joint venture fisherman, some beach fishermen, some deep water draggers, and midwater fishermen. A short time later, we submitted that proposal to our membership.

Our members voted and, again, about 75 percent voted to submit that proposal. In November we submitted it to the management council. We felt it was well received by the Council. The Council convened a study group that was part of the original proposal. The study group totalled 11 people, including drag fishermen from Washington, Oregon, and California and a couple of management people from the Council. The group ironed out a couple of things and submitted it to the three state legislatures.

That's pretty well where things stand right now. The legislatures are waiting to assess the amount of industry support. The indications we have are that whatever the industry wants, it can get. Let me add one point: our proposal stipulated that all three states had to adopt the same type of program. So if any one of the states doesn't adopt our proposed program, the Fishermen's Marketing Association will go on record as opposing limited entry.

The feelings of the industry on the proposal seem to be mixed. As I said earlier, about 75 percent of the FMA members voted in favor of submitting this proposal. However, since then many of them seem to have changed their minds and no longer support it. Joe Easley sent a questionnaire to the trawlers in Oregon and the returns are running about two to one against limited entry. Next week the Otter Trawl Commission of Oregon will be meeting and one topic on the agenda will be to set policy on this proposal.

At this time, I think it's likely that we will come out against limited entry. This is going to put me in an interesting spot. As a member of the Fishermen's Marketing Association board, I'm charged with supporting this proposal. And as Chairman of the Otter Trawl Commission, I'm going to have to oppose it. I'm not sure how to work that out.

Personally, I have mixed emotions on limited entry. On one hand, this industry isn't in very good shape. On the other hand, the number of boats is declining and perhaps will continue to decline until we get healthy again. I would like to see something done to put the industry back in shape, but I'd hate to have a program that gives us the kind of mess they described in Canada yesterday. I think those two statements

probably summarize the industry's views on limited entry right now. We know we have to do something to put this industry back in shape. But we are really afraid that whatever we do, the final solution is going to be worse than the problem we have right now.

Robert Jacobson, Moderator

Richard Young is a Crescent City, California, dragger. He is currently part owner-operator with his father of a deepwater dover sole vessel which they also use for midwater trawling. Richard has been fishing for the last 15 years. He is past president of the Fishermen's Marketing Association and is currently chairman of the three-state limited entry study group. He has a bachelor's degree in economics from Humboldt State and a Ph.D. from the University of California at Santa Barbara.

Fishing Industry Perspectives: Net Fishermen, Part 2 Richard Young, Trawler Crescent City, California

In thinking about what I'd like to say today, I realized I couldn't do much better than to steal from our keynote speakers yesterday. First, Barry Fisher eloquently addressed the topic of "Why are we talking about limited entry?" He noted the possibility of externally imposed systems and the fear that someone is going to tell us we have a limited entry system over which we have no control.

Limited entry is a large topic of discussion within the industry itself. That might seem curious because fishermen have plenty of other things to talk about besides limited entry. However, if we look at the coastal trawl fleet today, I think most reasonable people would agree that it is in trouble. It is in a lot more trouble today than it was 10 or 15 years ago.

That doesn't apply to all segments of the trawl fleet. Certain elements are fairly well off. The joint-venture boats, for example, are doing quite well. The vessels that are paid for do quite well, by and large. However, if you have a mortgage and if you're selling fish in the traditional trawl fish market, you probably agree that the industry is experiencing a great deal of difficulty today. It's easy to see some of the symptoms of this difficulty. The Production Credit Associations, the banks, or other lenders are tying up boats left and right. Many boats that haven't been repossessed are having difficulty meeting their financial obligations. All this is certainly a symptom of the kind of trouble that the trawl fleet is in.

I believe the statistics over the last few years would show an increase in the number of vessels lost at sea. Perhaps some of them are sold to the insurance company, but I think this only represents a small percentage. It is certainly true that many people haven't had the financial resources to do the proper maintenance—to have the wood replaced when it gets old, to have the welds checked on that steel boat when it's hauled out, or even to haul the boat out as frequently as it should be. We've also seen an increase in the number of unnecessarily lost lives. By unnecessarily lost, I mean that lives are lost that could have been saved if the vessel had the proper safety equipment, if the vessel was better taken care of, or if the operator of the vessel hädn't had to push his boat and crew beyond the limits of fatigue in extreme weather conditions to meet his financial obligations.

We see numerous symptoms of this trouble. Some of them are confined to a certain few segments of the industry. However, when one segment of theindustry gets in trouble, it spills over to affect all segments of the industry. For example, when we lose more boats -- for whatever reason-the insurance rate goes up for all the remaining boats. I don't think there is anyone buying insurance on a trawler who hasn't experienced an increase in his insurance rates over the last few years. This increase is related directly to the increase in the loss rate the insurance companies have experienced. When the Production Credit Association repossesses a boat, the first thing that happens--because PCA is a cooperative--is that the interest rate goes up on the remaining It's not in business to lose money. It expects to recover whatever loss it has incurred by raising the interest rate on the remaining loans. Because we have out competed that guy down the dock, and he's gone broke, we'll have to pay more in interest over the life of our loan.

When boats get repossessed and sold, it causes a great deal of damage to the capital structure of the industry. Several speakers have touched on this. When a fishermen gets to a certain age, he wants to sell his boat and retire. He is counting on having some value in the boat, some value that has built up over 20 or 30 years of participation in the fishery. When you get a boat that is repossessed and sold for half to one-quarter of its original value, it certainly makes it difficult for the successful fisherman to sell the boat that he has paid for. That is, when you get a \$1 million boat that suddenly becomes a \$250,000 boat, the guy with the \$300,000 boat that has been paid for finds himself with a \$100,000 boat. His retirement is gone and in many cases that is the only retirement that members of the fishing industry can afford. Consequently, even the vessel that has been paid off suffers when you see the kinds of problems that we have in the trawl industry today.

We talked about donut stores yesterday. Well, we're in a situation where we have four donut stores on one block. Two of them eventually go broke, but the fourth one has to pay premium interest on his mortgage in order to cover the losses caused by the two who went broke. He finds that he can't get insurance because the third one burned

down. Suddenly he's in the unique position of having a market value for his donut store that is less than what he owes on his mortgage. Now if that isn't trouble, I'm not sure what is. I don't want to exaggerate too much. I think that the coastal trawl fishery is not about to disappear, but this kind of description is accurate in substance if not in specifics.

What do we do when we find ourselves in this type of situation? First, I think we ask how it happened. It is popular to blame the government and its various subsidy programs--the Fishing Vessel Obligation Guarantee Program, the Capital Construction Fund, and so on. While I agree that it doesn't make any sense to subsidize or encourage entry into an overcapititalized fishery, to simply blame the government sounds to me like the story Edwin Moses told after he encountered the lady police officer on the corner in Los Angeles. The government wasn't actively purchasing those boats, fishermen were. The situation also was a result of several good years in the trawl fishery and a couple of record years in the shrimp fishery (the shrimpers have now spun off into the trawl fishery). It was partially the result of the Magnuson Fishery Conservation and Management Act, which encouraged people to think in terms of the United States harvesting all that groundfish. We saw the widow rock and the midwater trawl fishery take off at about the same time. We saw a big discrepancy in the value of boats between the Gulf Coast and the West Coast which made it profitable to buy a boat on the Gulf Coast and bring it around to the West Coast. We saw general inflation for a long period of time that meant you could make a severe mistake and only have to wait two years for the price of everything to go up enough to bail you out.

All of those things, along with the easy money, or the availability of credit, contributed to the increase in the trawl fleet over the past few years. We saw the fleet more than double in two or three years. Now, in hindsight--and we all, of course, have 20/20 hindsight--it may be obvious that a doubling in size couldn't have been sustained. Even with the decline that has occurred over the past few years, we still find ourselves in the interesting position of having more catching capacity than we have either markets to sell to or stocks of fish to exploit. Most of us find ourselves spending at least part of the year fishing on plant-imposed limits because the processors simply can't sell the amount of available fish. We also find ourselves fishing on management-imposed limits because the fleet is so large that we are capable of catching more than the amount of fish that can safely be removed from the stock. The problem we are facing today is at least a partial answer to the question Barry Fisher posed yesterday: "Why are we talking about limited entry?"

If the problem is too many boats and too rapid an expansion in the fleet, then one way to make sure it doesn't get any worse would be to limit the number of boats coming into the fishery in the future. That might sound simple-minded, but at least we can stop that kind of rapid expansion from happening again a few years down the line.

The second keynote speaker yesterday [James A. Crutchfield] addressed the problem of defining limited entry. Yesterday morning, I thought I knew what it meant. By yesterday evening I was sure I didn't know. Some things did become clear yesterday. For example, limited entry means something different to every person in this room. It has become quite obvious that we all have a different notion of what limited entry is all about. I think it is also true that limited entry is different for different fisheries. It has to be. What is right for Kodiak, Alaska, is not what is right for Southeast Alaska. What didn't work in British Columbia may have worked very well in Australia. Limited entry schemes have to be designed and developed for each specific fishery.

Another thing that became clear is that limited entry is not necessarily no entry. We hear a lot of talk about not wanting to be shut out of a fishery; that is, I don't want to limit entry to the trawl fishery because then I couldn't get in. That is not necessarily true. You might have to buy a license. But if the license is freely transferable, then there is certainly no difficulty in buying a license and getting into a trawl fishery. In fact, today I'm sure a license would be very cheap. High license prices are the result of a profitable, healthy industry—if the licenses are freely traded.

A high price should not be a barrier to getting into the industry because you're paying something for a valuable asset. It is not socialism or anti-American. In many states, liquor control regulations permit a specified number of liquor licenses per county. I've yet to find a bar owner who thinks he is a victim of creeping socialism. Purchasing a liquor license is simply another cost of doing business which has to be taken into account when he decides whether or not to open a bar.

Third, limited entry is not necessarily a guarantee of profit. Even with a limited entry scheme, a healthy fleet might still have 20 percent of the people going broke or getting out, 60 percent of the people doing okay, and 20 percent of the people getting rich. The problem we have today is that 20 percent of the people are doing okay and the other 80 percent range from bad to worse.

And finally, I'd like to point out that limited entry is a tool for addressing the economic health of the industry. We already have plenty of tools for addressing the biological health of the fish stock. We have time and area closures, trip limits, and so on. The stocks are well taken care of. The industry, on the other hand, is not so well cared for. The economics of fishing vessel operations today are precarious at best and to me they show no immediate signs of improvement. So the question we need to ask ourselves, I believe, is where we want this fishing industry to go in the next five or 10 years. Where do we want to be 10 years down the pike? Once we can decide where we want to be, we have to find a way to move towards that objective.

We can all see where the current way of doing things has brought us. My guess is that the majority of the members of the trawl fishery

don't like the situation they find themselves in today. They may not know what to do about it, but they don't like it. They'd like to see the industry put on a healthier footing. The question I would like to leave you with is: If we don't limit entry, what other solutions are there?

QUESTIONS FOR NET FISHERMAN SPEAKERS

Ken Martinson, trawl fisherman: What would happen if we took the joint venture boats out of the trawl fishery?

Richard Young: I think if you took any fishing boats out of the trawl fishery today, the ones left would be healthier.

Ken Martinson: What I'm asking is: Aren't the joint venture boats the ones that are taking most of the fish right now?

Richard Young: Well, what they are catching is whiting, primarily, and it doesn't go on the domestic market. It's not impacting my coastal trawl fishery at all, at least not directly. It certainly isn't one of the stocks that is fished by most coastal vessels.

Bob Jacobson, Moderator: Let me clarify your question. Since a lot of the joint-venture boats do catch rockfish in the winter, what percentage of the overall rockfish catch comes from the joint-venture boats, excluding whiting?

Jack Robinson, Oregon Department of Fish and Wildlife (responding to the last question): I'm going to have to take a lot of this right off of the top of my head. Coastwide, joint-venture boats don't catch a whole lot of the Sebastes or perch. They are a minority of the catch for those vessels. The Sebastes is really important to a lot of boats, particularly the smaller boats that don't joint-venture. The joint-venture boats do, however, take a very substantial portion of the widow fishery; at one point, practically all of it, but no longer. I've heard estimates from Washington that pelagic trawl gear takes about 50 percent of them up there. And, of course, quite a bit of pelagic trawl gear is operated by joint-venture as well as conventional boats. ODFW looked at this winter's [1985] catch in Newport. We had perhaps a dozen joint-venture boats fishing here. The catch was about 60 percent widow in the first two months. I don't know what the catch might be in California or other ports, but it's not very much of the Sebastes or perch here.

Ralph Brown (comment on excluding joint venture boats): I just don't see how you can legally exclude a group of American fishermen who are already in the fishery. You might do it by taking them out of the licensing system or something like that, but I don't think you could let them joint venture fish and prohibit them from fishing in the winter.

Richard Young: Let me add something. It probably is a bad precedent to discriminate among boats on the basis of where they sell their fish. The

same principle could then be applied to some other market for fish. Because a boat happens to be on a joint venture doesn't seem to me to be a reason to single it out.

Bill Berg, scallop fisherman: I just heard Ralph Brown say something about not excluding American fishermen from the fishery. I have a scallop boat and the way the Fishermen's Marketing Association proposal reads, I would be excluded from the fishery and I am an American fisherman. How can you explain that?

Ralph Brown: I probably stuck my foot in my mouth again. You are right. You would be excluded. One of the reasons for that is that the Fishermen's Marketing Association only includes groundfish trawlers in its membership. We didn't feel we had the right to ask for a limited entry program for shrimpers, scallop fishermen, salmon fishermen, or anybody else. The only thing we deal with is groundfish. When you are talking about limited entry, you are talking about limiting entry. If you're not in the fishery, you are right, you would be excluded.

Bill Berg: Then you are retracting the statement you made before about the joint-venture fishing?

Ralph Brown: I didn't say that it wouldn't be challenged in court.

Wally Welch: I have a vessel that has scallop dredges; it's tanked, double-rigged, and stern-ramped. It's a midwater boat, too. I'm fishing hake right now. Because I made that investment, I feel I should be able to do the things the boat is designed for and that I bought it for. I have been fishing for quite a few years and I'd like to have the opportunity to do the things my boat can do. I am an American. I'm out there competing with foreigners and I would like to have the same rights they do. I'd like to be able to fish my boat in the way that makes money for the boat and the crew. One more comment about limited entry. I had the third double-rigged shrimp boat on the West Coast. I went to Alaska for a couple years and when I returned to Oregon, I didn't have a permit in my own state. I'm an Oregonian. Guys from Mississippi, Florida, and Washington had permits. I held property here for years and had a family here, yet somehow I'm not an Oregonian anymore.

Ralph Brown: If you read this proposal, you'll see that there is a provision for people who have been in the ground fish fishery and have gone to Alaska. It provides for people like you.

Alan Guimond, chairman, New England Fishery Management Council: Ralph, we were talking about the tri-state effort and how everything was going forward. Now the results of the Oregon survey are going the opposite way. If that takes place and there is no agreement, what are you going to do?

Ralph Brown: In that case, the Fishermen's Marketing Association will come out against limited entry. Unless it can be the same in all three states and include reciprocal agreements between all three states, we would not support limited entry.

Alan Guimond: If Oregon is going against it right now, do you have any perception of what is happening in California or Washington?

Ralph Brown: I really don't know. I'm not entirely sure Oregon is going against it. There are still replies coming back from Joe Easley's survey. I'm sure there are people in California complaining about our limited entry proposal. I don't know who they are. Are they people who foresee the likelihood that the swordfish fishery in Southern California is going to collapse and they want to come into the trawl fleet eventually? I don't know. It has been pointed out to us that legislative leaders are very much aware that more people are excluded from the limited entry program than are included. They recognize that most of the comment is going to be against a limited entry program. The big problem they're having--and we're having--is identifying just who is and who isn't part of the industry. In Oregon, for example, the Trawl Commission includes anybody who pulls something on the bottom that catches a fish, scallops, or shrimp. And I would suspect that if there were any clam dredgers around here, we'd probably include them. The Fishermen's Marketing Association only includes people who catch groundfish with legal gear as defined by the Groundfish Management Plan, which excludes hook-and-line fishermen. Many complaints were from hook-and-line fishermen. It has been a real problem identifying who the industry is in this fishery.

Alan Guimond: If you don't get complete agreement and there is no limited entry, what are you going to do to solve the problem that is causing the concerns to have limited entry? I'm curious what your next move would be.

Ralph Brown: We would hope that if people don't like our solution, they can come up with their own. They have obviously indicated to us that either they have another solution or they like things the way they are.

Alan Rolfe, dragger, Newport, Oregon: My question is for Ralph Brown. A lot of hook-and-line fishermen seem to be concerned that they are included under the Fishermen's Marketing Association proposal and its provision requiring 100,000 pounds per year production. That seems to be the cause of the opposition coming from these people since they are included in the Groundfish Management Act. Perhaps that needs to be clarified. The hook-and-line ground fish fishery, particularly the black cod fishery, certainly is a component in the production capacity that we are concerned with. That needs to be addressed in tandem with the groundfish trawl program. Rich Young pointed out that the market and the resource can't sustain the effort we are now capable of.

Ralph Brown: Hook-and-line fishermen and pot fishermen are not included in our proposal. On the rest of it, I agree 100 percent with you. When we began developing the proposal, we took a very hardline approach. Then we began to back off for a variety of reasons: we can't do this because we are afraid that Fred Anderson, who has been here for 30 years, would be cut off, and somebody else says we can't do this because of something else. Again, we don't include hook-and-line fishermen or pot fishermen. We really don't want to regulate their business.

Richard Young: One other thing. We recognized that any time you're going to regulate one user group of the stock, you should also address regulating the other users of that stock. Black cod is a good example. If you regulate trawl users of the stock but you don't regulate pot fishermen or hook-and-line fishermen, you leave it wide open for growth on the other side. So that was recognized and there is a movement to contact any hook-and-line associations and pot fishermen's associations and find out what they want. The Fishermen's Marketing Association does not want to impose any kind of limited entry on somebody else. If the others want it, fine. It's up to them to propose it and go forward with it rather than have someone else come in and say this is what you have to have.

Ralph Brown: I'd like to say one other thing. As we recently saw, shrimping went bad so everyone went groundfish fishing. If we limit entry into the trawl fleet, we may well see an increase in the number of pot fishermen and longliners. So I agree that all parts of the groundfish industry need to be looked at. I know that the people who are involved in the proposal would be more than happy to sit with the rest of industry. Let me go a little further on this. Right now this proposal amounts to a moratorium. It doesn't amount to any kind of rollback. The way that the various legislatures work, particularly in Oregon, is to meet once every two years for six months. We didn't have any choice, if we were going to get it in, without giving a two-year warning on it. We had to go ahead on it quickly. So what it amounts to at this moment is a moratorium. It sunsets in two years. During that two years, we would like to finalize a workable limited entry system for groundfish.

Barry Fisher: One thing that happens in any discussion like this is confusing terms and techniques. For example, take Ken Martinson's question. You are talking allocation now. You are not talking limited entry. That should be remembered. The proposal is to eliminate the boats that brought the fishery in here in the first place, to reward innovation by killing them through allocation. It is not a limited entry device that you are talking about. That's allocation. That should be addressed as an allocation issue. Allocation also entered into the comments on the last few questions. The thing that I would plead is to be very clear on what we are talking about. This is a conference where we are trying to exchange information on limited entry. If you want to

get into allocation games, then I suggest that you use a whole separate session and a separate theme. I didn't put my ass on the line in 1978 to be told in 1985 that I am no longer an Oregon trawler.

James Crutchfield: I just wanted to issue a word of warning about polling too early in the game. As I understand it, FMA has gotten together a very well-qualified group of industry people to study what limited entry options there are in the trawl fisheries. Consider some of these complications that are now being mentioned about the related user groups working on the same stocks. If I was a dragger and received a questionaire asking, "Do you want limited entry or not?" with no specifications of what it is all about or how carefully it has been done, I would say, "Hell, no:" I think that the time to poll people is after the study group has reported, after you have time to present it, perhaps at workshops up and down the coast, to get reactions to the study. Then I think you would have a better idea of whether you wanted to vote yes or no. At the present time there is a real danger of killing the study group's enthusiasm before you ever have gotten a grasp on what the issues are.

Joe Easley, administrator, Oregon Otter Trawl Commission: I just want to explain the questionnaire that everyone is talking about. We sent out three things: the complete Fishermen's Marketing Association proposal as modified by the study group the complete legislation as proposed to the Oregon Legislature and three questions: Do you favor limited entry? Do you favor FMA's proposal? Do you favor the legislation? Yes or No. That was it. It is for the commissioners' information. They will have to make the final decision next Friday. We do have a means of keying what the vessels owners who respond to the survey are fishing for. That is done on a regular basis, and we will have that all broken down for the commissioners Friday meeting.

FISHING INDUSTRY PERSPECTIVES

POT FISHERMEN, PART 1

Robert Jacobson, Moderator

Our first speaker is Rick Ekelund, a resident of North Bend, Oregon, who fishes out of Charleston. Rick has a 42-foot combination boat and fishes for salmon, albacore, and crab. Rick has fished since 1969. He is a 1970 graduate of Oregon State University in forest engineering. He is a member and past chairman of the Oregon Dungeness Crab Commodities Commission. In the biographical information he gave me, he indicated he is a fisherman for nothing more than the freedom and the wealth.

Fishing Industry Perspectives: Pot Fishermen, Part 1 Rick Ekelund, crabber North Bend, Oregon

As far as my claim that I fish for the freedom and the wealth, I'm sure most of you know how much wealth is involved in the fisheries lately.

My subject today is an industry perspective on pot fishing and the possible applications of limited entry or some other management scheme. Before we get into the discussion of limited entry, we ought to look at the Dungeness crab fishery to see if it is even a candidate for limited entry. We have to draw some lines to determine what we would consider the criteria for limited entry. Some of the criteria we have talked about at this conference include over-capitalization, problems of stock abundance, and socio-economic problems. The question is, do we have any of these problems in the Dungeness crab fishery.

Do we have a biological problem with our resource? Is it shrinking daily, annually, or semi-annually? We do have some effective regulations. Basically, we have a pretty selective fishery. In fact, I noticed the other day that some of my pots were very selective: a lot of water and a couple of rocks. We have a 6.25-inch minimum size limit on Dungeness crab that is more rigorously enforced than the surf clam limits that we discussed yesterday, as any crab fisherman here can attest. In 1982, the Oregon Department of Fish and Wildlife enacted a regulation stipulating that we must put a biodegradable lid latch release on our lid

latch. I picked up a cut-off yesterday that didn't have any crabs. It is demoralizing not to have 12 to 14 jumbo crabs in your cut-offs anymore, but the regulation is working. We have 4.25-inch escape rings in the pot, and anything under about six inches tweedles through there and the real fine stuff goes through the mesh. So the fishing system that we have is relatively easy on that portion of the resource that we aren't using.

According to the Fish and Game people, the 6.25-inch crabs have the opportunity to mate at least a couple times. They have had ample opportunity to procreate and keep our resource in pretty decent shape.

The question remains: do we have a biological problem? Let's look at the production records since 1950. Production has varied from 3 million pounds a year to 10-14 million pounds a year and a high of 18 million pounds in 1980 when we had a giant increase. The 10-14 million pound highs and the 3-5 million pound lows have been typical now for about 30 years. It would appear that despite the increase in fishing effort the crab population is still maintaining its general up and down cycle over a 7 to 9 year period, so I doubt that we can complain about the size and abundance of our basic resource.

What about over-capitalization? I am not convinced that the government has any particular responsibility to keep us from over-capitalizing, but it should be important to each of us as processors and fishermen. In the 1950-1951 season we had 83 crab boats. We had a high of 310 boats in 1972-1973, but by 1975 there were only about 200. In about 25 years, the fleet doubled in size. Then from 1975 to the biggie in 1980 we jumped from about 200 to 519 boats and some of those rascals were big.

The number of pots, went from 13,000 to about 50,000 between 1950-1975. It more than tripled in size. From 1975 to 1980, our pots rose from about 50,000 to over 100,000. The interesting thing is that for 25 years, 1950-1975, the fleet doubled in size and the pots tripled in number. During that whole period, the average number of pounds per pot stayed between 300-350 pounds in a good year and between 150-200 pounds per pot in low abundance years. In 1980, the best production year since records have been kept, when 18 million pounds was landed, we had a per pot average of 169 pounds. So from a per pot perspective, the record year wasn't as good as the averages between 1950-1975. And the average number of pounds per pot during poor years dropped to 42 and 68. This indicates that there is over-capitalization, at least in respect to crab pots. So maybe we need limited entry, or perhaps pot limits.

Now for socio-economic concerns. I'm only going to touch on one problem that has developed roughly since 1976. Prior to that time, each port had a relatively stable area, or zone, off its coast that the locals

fished. There was some movement by larger boats from port to port following reports of hot bites. But because of the number of boats and the length of the season, everyone figured to get his share if he fished his own waters—areas he knew how to fish. The large, mobile fleet didn't develop until after 1976-1977. Then boats began coming in from other areas—from Alaska, California, and Washington and North Bend boats went to Crescent City. It was no longer just a dozen boats going up and down the coast. It became a giant fleet. In 1979-1980, Newport to Coos Bay was the big production area. In 1982, Crescent City got hit. In 1984, Astoria was it. This year it was Crescent City again. This movement of a large fleet hurts the fishermen who rely on their traditional local area. It means the peak crabbing in the hot areas is pretty well finished by mid-December. So the mobile fleet has disrupted what had previously been a stabilized local economy.

A related problem involves the huge amount of production early in the crab season followed by a sharp drop. The Dungeness Crab Commission was formed in 1976 or 1977 at the request of the fishermen themselves; they finance it and, through due process, make the decisions that are issued through the Commission. Because there was a limited amount of crab and the fishermen wanted to increase the revenue from it, the Commission decided to market Dungeness crab as a gourmet product, as the best crab in the world. So the Commission went to the white tablecloth restaurants and to the cocktail bars and away from the beer and pretzels market. It has been a reasonably successful promotional effort. Even though the current price of crabs is attributed to the decline in number of crabs, the Commission's effort has had a definite effect. We have had shortages of crab before and it was still selling for 10-25 cents per pound, so the effort has helped and I think we have a responsibility to this effort and to the customers.

In considering any particular management plan, we should give some credence to their desires. Do they want 90 percent of the crab delivered the first six weeks and then have to buy frozen crab until the Alaska crab come on line, or would they rather have a more reasonable supply curve? By reducing the number of boats or reducing the number of pots, we can even out the curve. There will still be a jump at the beginning of the season, but we can even out the influx to the market. These are things we may have to look at. What does the end customer—the restaurant—want?

Processors, historically, like to get this crab business out of the way. They want to get done with cooking the crab and go on to groundfish and salmon. Their ideas may have changed in the last two to five years, too. They may want to have some crab during the summer to put onto the market, but I think it is something which we really should address. The fishermen have gotten into this marketing business, so to speak, and whenever we consider changing the existing rules, I think we should look at it.

In summary, we probably do meet the qualifications for limited entry or zone management. Reducing the number of pots is one possibility. We have already lengthened and shortened the season several times, and that dramatically affects the flow of crab. That is a very useful tool. I think that the Oregon Department of Fish and Wildlife was slow in handling the soft crab problem the last three years and hurt our marketing effort. We really hated to sell those soft crabs, but we did it anyway. Finally, we got together and went to the commissioners and said that the processors, the fishermen, and the buyers are complaining, so let's close the season, and we won't let it go past August 15 for the next five years. That should discourage any soft-shell crab fishing.

Robert Jacobson, Moderator

Our second speaker on the Dungeness crab, or pot, section is Herbert Goblirsch. Herb is a resident of Newport and has been fishing for 14 years. He has a 50-foot combination boat, the EZC, and fishes for crab, salmon, and halibut.

Fishing Industry Perspectives: Pot Fishermen, Part 2 Herbert Goblirsch, crab fisherman Newport, Oregon

First of all, I've got a joke for you. A family needed a brain transplant for one of its members, so they went to the Brain Bank and talked to the guy who sells brains. "What brains are available?" the family asked. The guy said, "We have a brain from a scientist for \$10,000, a brain from an economist for \$20,000, and a brain from a fisherman for \$125,000." Why was the fisherman's brain so expensive, the family asked. "Simple," replied the salesman, "It hasn't been used."

Maybe that's the problem. Too often fishermen let the roof fall in on a fishery before they realize that something is wrong. There is a potential problem in the crab fishery. I have seen the fishery over the years turning from a four or five month fishery to a four or five week fishery to a four or five day fishery. I question whether that is in the crab industry's best interest. Should we catch our crabs in a matter of a month or so, or spread it out over four or five months like it used to be? The short time span puts a lot of pressure on the processors, and they, in turn, put pressure on us, especially over the price they want to pay for crab.

If this meeting had been held in Crescent City in early December, we would have had a pretty vocal outpouring. Everybody was wondering

where all the crab pots came from. There were an estimated 60,000 pots in the port of Crescent City in the first week in December. That is hard to imagine because Oregon has a total of 80,000 pots. What I am seeing, then, is a more mobile fleet, as Rick Ekelund said. The fleet is becoming more mobile and it can jump on a hot spot of crabs and move on in a couple weeks. It's turning a fishery that used to be a port-by-port fishery, where you could make a living with a small boat solely from crabs and a little bit of salmon and tuna, into a one-to-two month fishery where you catch the cream and move on to the next fishery. It's become a fill-in fishery where very few are making a full time living crab fishing.

This is becoming dangerous. Already you see 40-foot wood boats being equipped with generators so they can run lights and fish around the clock like the big boats do. You fish weather you never would have fished before. I've lost some good friends in the last five or six years because of the way things are developing.

What do we want in this fishery? First, we don't fish for ourselves. We fish for consumers. Nobody asks them what they want, but look at the fishery from their point of view. We are getting heavy production for a short period of time. The crab goes in the freezer and consumers eat frozen crabs the rest of the year. I question whether that is good marketing. I'm not sure that the consumer wants this present situation. Consumer prices might be better if production was maintained over a longer period.

Let's talk about limited effort. Perhaps a pot limit, no night fishing, or zone fishing would do what we want without having to go to a full limited entry system. There was a lot of talk in Crescent City this year about limiting effort and a lot of sentiment in favor of it. A 300 or 400 pot limit was suggested. Others felt that prohibiting night fishing would take care of a lot of problems, but it would cut down efficiency.

Limiting effort would also eliminate the increasing problem we have with lost pots causing gear damage to other fishermen. If you have 1,000 pots, you can't tend them as well as someone with, say, 300 pots. That's comfortably what you could run in a day's time during December and January, if they're set right. With 1,000 pots, you scatter them all over the ocean and you tend to lose more. After the crab season, the draggers and trollers work some of the same areas and their gear gets entangled with the crab pots. That can be expensive in terms of lost gear. Sport boats have also encountered the same problem.

I didn't hear any talk this winter about individual quotas, as some of the speakers mentioned yesterday. More people were in favor of a pot limit and area zoning than anything else. Making the mobile fleet a little less mobile would help slow things down.

I think we already have the available means to harvest the resource. The question is whether we want to harvest it over a short period of time or a long period of time. What is going to happen when the cycle turns around and we get some crabs? This year, just on the speculation that we were on the upswing, guys were pulling pots out of the blackberry bushes in Eureka and Crescent City just to get them into production. It turned out that there wasn't any production. What is going to happen when we do get some production?

I would recommend we prohibit anyone not in the fishery now from entering it. It would be doing them a favor down the road. I certainly wouldn't want my son or daughter to be in the crab or any other fishery around here right now. I would recommend some other stable means of making a living over a long period of time. We are in a situation where maybe 20 percent are making a good living, but it is the other 80 percent of the full time fishermen who aren't. We're just hanging on from one season to the next, waiting for things to get better and we haven't seen that happen in four or five years.

Whatever we bring upon ourselves in this business, we have to keep flexibility within the fisheries. A full time fisherman needs that. He needs to be able to move from one fishery to the next. In the past, if salmon season wasn't good, you could deal yourself in on tuna or crab. In the last four or five years none of the fisheries have been good. We haven't been able to deal ourselves in on anything except for those fishermen who went to Alaska. They are doing pretty well. Around here it is starvation city.

I don't know whether we need limited entry or not, but I'm on the fence leaning towards the side that says we do. I don't think we should wait until it goes too far. We should be thinking about it now, but we don't want to give everybody advance warning as happened in the Alaska halibut fishery. In that fishery it is too late for them to implement anything that would help resolve the problem.

Enforcement of gear, time, or effort restrictions may pose a problem. Prohibiting fishing at night seems like a simple one to enforce because a helicopter could fly the coast and spot those vessels fishing by the lights being used to fish. Enforcing a pot limit would be more difficult. None of the crab fishermen I talked with had an answer on how to enforce it. A 100 pot limit may be easier to enforce than a 300-400 pot limit.

There isn't a need for buyback in the pot fisheries. I don't think buybacks work anyway. If you buy back boats, you have to buy the top 20 percent, not the bottom 80 percent. There isn't any biological need for limited effort or limited entry in the crab fishery right now. There might not ever be. Under the current regulations in the crab

fishery, we can't overfish the resource. We catch harvestable crabs leaving undersize males and females to breed. The need for limited entry, or effort, is solely for economic benefits.

We are already cutting the pie in too many pieces. What is going to happen a few years down the road when even more people are fishing? Let's get a bigger piece of pie for everybody. I have my motives, too. I would like to make a better living at this. Why not take care of things and alleviate the problem before it becomes worse?

QUESTIONS FOR POT FISHERMEN SPEAKERS

Ernie Summers, crabber, Westport, Washington: We've talked about pot limits and other limits time and time again in Washington. Everybody seems to want a pot limit equal to the amount of pots that they own. If it's a limit on boat size, they want it equal to the size of their boat. Limited entry isn't going to stop mobility in the fleet unless you restrict boats to certain fishing zones. But going from one fishing area to another is the same as going from one fisheries to another. They are both things you have to do to stay in business. That's the way it is today. A pot limit is not an easy solution. I think you would have lots of resistance to establishing restricted fishing zones. To be in the crab business today you have to be mobile. I think you both did a good job discussing conservation. I don't think we have a real problem there unless you are fishing in a softshell time. I have a middle-size boat. I am not one of the big boats coming down there, but I gotta speak for them just the same. You can't just put them out of business with a pot limit or zones. I don't think that is the solution; I don't know what the solution is. We do have some problems. I just want to bring some of this out.

Herbert Goblirsch: We do have a problem and it's not insurmountable now. What are we going to do about it? That's what we are here to discuss.

Ernie Summers: The situation could reverse itself. If you get a poor season down in California and we get a good one in Washington, we will probably have the 60,000 pots in our area. We probably won't like it any better than you do. We have these boats in the industry today and limited entry isn't going to get them out. And I believe we would hurt the entire crab industry by establishing restricted fishing zones.

Herbert Goblirsch: What if we put in a restriction that said you can only fish Oregon or California or Washington this year and next year you have to pick another area?

Ernie Summers: It may come to that in the long run. I'm not sure you can do it because outside of three miles you're in federal waters. It would have to be handled state by state because each state has its individual problems.

Herbert Goblirsch: I don't know what the average number of pots per boat is at Crescent City, but it's probably close to 300, and here it might be closer to 600. So the guys here wouldn't go for a 300 pot limit, but down there they would. In fact, one of the big highliners at a meeting in Crescent City said he was in favor of a 400 pot limit.

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Ernie Summers: The capability big boats have over you is that they can fish around the clock and they can fish tougher weather. But they also have a lot more expense to do it. That's the difference. You can catch a lot less crab and still put more money in your pocket than they can. The only reason the big boats are down there is because the crab fishing in Alaska is bad. If it picked up in Alaska, I'm sure they wouldn't even come down here.

Rick Ekelund: I'd like to comment on the statements that the states should at least have their own individual plans. I think it is important to realize that at this particular time the states are in relative agreement. We had quite a fluster a couple years ago when we were talking about having a year round season in Oregon. The other two states couldn't get together on it and there was a flurry of activity. Right now we have a homogenous plan that is working and if we upset the apple cart too far, the feds are still there. The Dungeness crab planning is still in the back of their minds. If we don't manage this resource and keep our bickering down, they are going to do it for us and we will end up with a situation like the surf clam fishery on the East Coast. I can live with almost any kind of rules and regulations, except when they change from month to month.

Mike Becker, Newport: One thing I hear at this conference is a heavy emphasis on the limited entry or limited effort approach. The one thing we are forgetting is that the largest single contributing factor to the fisheries that we are working with, no matter what fishery it is, is economics. You are looking at the crab fishery as a small boat versus big boat problem. I think there is room for both. The point being discussed here is a situation that would be very effective for the small boats, but would eliminate mobility and efficiency in the big rigs. Your comments are very unfair. I know Herb Goblirsch very well, so let me put him on the spot. Basically, Herb, you fish for salmon in California. You fish for Dungeness in Crescent City and some here in Newport. You were talking to me a couple days ago about possibly halibut fishing in Alaska. You have mobility to support your fishing business and yet you are saying, damn it, stay out of my fishery. Basically, the thing on the Oregon Coast that has held the fishery together is the flexibility to get into various fisheries. What I am saying is that you can't remove that kind of flexibility from the crabbing industry. It is not fair to the other people in it.

Rick Ekelund: I don't think we should be picking on big boats. If it sounded like I was picking on big boats, I wasn't. The mobile fleet is not just big boats. They just happen to be more visible than the little boats when they come into port. I don't think we should be stepping on that particular part of the flame. The efficiency you are talking about is only in total production and not necessarily the economics of the operation.

Joe Rock: I think you missed a couple points. One of them is the pot limit. Traditionally, Newport has been an area that requires a lot of gear. You don't fish Newport effectively with 300 pots because it is a soak fishery. We don't have a situation like Crescent City where you get 25 to 30 pounds in 12 hours. Good fishing here would be, say, 18 crabs in a 24-hour period, so you have to have a lot of gear. I guess you could label me as one of the big boat crabbers. I have no problems with the small boat crabber. If he wants to fish that is fine with me as long as his product is saleable and doesn't hurt our markets. But there is one important thing to remember: The lines you draw may look good today, but tomorrow they might be the fence that stops you.

Ron Westley, Washington Department of Fisheries: I can't imagine even trying to enforce a pot limit on the ocean. It would be a real problem.

Carl Finley, Newport fisherman: The only way you could enforce a pot limit is probably peer pressure.

Jim Branson, North Pacific Fishery Management Council: We had some experience with pot limits and area registration in the very recent past with the tanner crab fishery in Alaska. The state had a 200 pot limit for tanner crab in the Kodiak area and wanted to change it to 150 pots. The Council regulations have got to match the state's or things are not going to work, so we went through a long process with the intention of keeping effort at about the same level. We concluded that it didn't make any difference whether you moved it from 200 pots to 150 pots. The way the fishery was going, the limit would have to have been about 60 pots and that doesn't suit anybody. The enforcement problem is another one. I think you are dead right that peer pressure is going to be most of it. The State of Alaska has tried all sorts of schemes to register pots and then control them at sea. It is very difficult. We had the same situation with area registration. The Sand Point District wanted to have exclusive registration so that if you registered there you couldn't fish anywhere else and vice versa. It's obvious that when the fishing is going to be good in a specific area, everybody is going to go there whether that is the only area they can fish or not. You are just as liable to lock in a lot of effort in a situation like that as you are to lock out some of the effort. Neither one would be very effective as management measures.

Colin Grant, Australian Department of Primary Industry: The State of West Australia manages the West Australia rock lobster fishery, which is Australia's second largest fishery. It's probably worth about \$100 million and has 800 vessels in the fleet. There is a limitation on the number of vessels and a limitation on pots with a formula that allows you to have so many pots per vessel up to a maximum of 200. This has come about through quite a few years of history. In fact, this is Australia's longest limited entry fishery. The entitlement to fish has accrued a

value; the entitlement to operate pots has accrued a value. Pots are tradeable and so are entitlements to fish. The transfer of a pot between two people trades at about \$1,500. Essentially, the enforcement of that situation after many years has come down to one thing, peer pressure. If you pay \$1,500 per pot, you are going to make damn certain the other guy putting in illegal pots.

FISHING INDUSTRY PERSPECTIVES

TROLL FISHERMEN

Robert Jacobson, Moderator

Scott Boley is a resident of Gold Beach, Oregon, and a full-time salmon fisherman. He and his wife and family fish together aboard the vessel FRANCIS. He is past president of the Oregon Fishermen's Association. Scott graduated from Oregon State University with a degree in general engineering and a master's in ocean engineering. He spent most of his time recently coordinating efforts to change the PFMC through Fishermen's Solidarity, a coalition of commercial and sports fishermen for three Northwest states.

Fishing Industry Perspectives: Troll Fishermen, Part 1 Scott Boley, troller Gold Beach, Oregon

It is appropriate to have the troll industry represented at the tail end of the program. That is about where the status of our fishery is. I have heard a lot of discussion about limited entry programs, but one thing I found very useful is to clearly define your objective—where you want to go—before you start.

Limited entry means something different to every person in this room. But if you can decide where you want to be, what kind of picture you want to look at, then you are likely to get more agreement than if you use one term to describe a hundred different ideas.

I was interested in how many fishermen were traditionally supported by our salmon resource on the coast. My interest is from a small town point of view. I am interested in the stability of the coastal economy. Salmon has been very important culturally and economically on the coast. It would be instructive to know how many speculators bought licenses in the hopes that they would have value in the future, or how many people used to harvest how many fish as full-time fishermen or part-time fishermen or multi-species fishermen or whatever. Chris Carter from the Oregon Department of Fish and Wildlife sent me some information. I have only fished since 1976 so almost all of it pre-dates my experiences. In fact, some of it is from before I was born.

In 1943, there were 73 licensed trollers. I don't know if that is an accurate reflection of how many people delivered troll salmon in the state. There were about 1,000 vessels that made deliveries of some sort of fish. That number--73 troll licenses--held pretty steady until the early 1950's when it went up to 100-200 boats that were licensed to troll for salmon. By 1958, it had gone up to 900 boats that were licensed for troll salmon. Prior to this, in the 1940s there were 900 to 1,100 gillnetters. So in those days there were maybe 1,000 to 2,000 boats making a portion or all of their living from the salmon resource.

In 1963-65, a wondrous thing happened. It involved a food for smolts that worked and a successful hatchery program evolved which may have been augmented by favorable environmental conditions over a 10-year period. Anyway, it produced a lot of coho. We went from average catches of around 200,000 king salmon to 400,000 and about 300,000 coho salmon to 1.3 million. Licenses started taking off about 1967. In 1965, there were 1,700 boat licenses. This total included maybe 100 crabbers and some trawlers, and salmon fishermen, albacore fishermen, and probably a few longliners. In the next few years the number of licenses doubled in response to an increased availability of fish. A big jump occurred in 1980 and just before, when we started talking about moratoriums.

I think you can comfortably say that the salmon resource had been supporting 1,000 to 2,000 boats for a long period of time. As the gillnetters were regulated out of business and to a certain extent the runs changed, some of those operations either moved or were replaced by ocean operations so you had an increased ocean use. But that seemed to be a number that had some meaning to me.

If you want to look at an overall long term picture, we could sustain the 200,000 fish harvest of king salmon in Oregon. The sustainable harvest of coho is going to be more a matter of policy than numbers of fish available. I was looking for some sort of magic number and trying to compare that with how many licenses we had available to see if we had a huge number of people now involved in the troll fishery—say double or triple—over what had historically been involved, and it didn't appear to me that we did have.

We have had about a 50 percent increase in involvement since earlier periods. We have 3,200 permits available at the present time and maybe that number could be doubled. But I don't think we were in a situation like the halibut fishery in Alaska such that we had already increased our fishing potential out of all possibilities of control.

I spoke about defining objectives. I guess my objective is that the salmon resource should be one of the economic factors contributing to the coastal economy. And it should be distributed up and down the coast, which is what the troll fishery does. Salmon are historically produced by only a few river systems. If you harvest them when they return to those river systems, you geographically limit the economic benefits from that resource. I think it is desirable—as it has been in the past and would be in the future—to spread that out somewhat.

In the future we ought to look at the 1,000 to 2,000 boats that fish part-time or full time and help stabilize the economy of their communities. If there is a resource crisis, perhaps those people should be supplemented with enhancement work and when times are good they won't need that extra employment.

I don't have any magic solutions to propose for limited entry or changing our present moratorium structure. I don't see any point in talking about solutions unless the policy decisions being made point to a future. We don't have a future at the present time given the policy in Oregon. As a result of present policy, the salmon resource is being taken away from the coast and transferred to inland fisheries and to the Columbia River system. Unless those policies are changed, there really isn't any reason to look at further limited entry schemes in salmon.

If those policies were changed, I think there would be some sort of increased limitation, a reduction by perhaps one-third in the number of available licenses.

The California group made a key point about the transferability of permits. After a lot of discussion, the California troll industry tied those permits to the vessel. I think that is very important. I think that preserves an entry level fishery, which salmon has been traditionally for a lot of fishermen. If you tie a permit to a 26-foot boat and make sure it stays at 26 feet and about the same capabilities, that boat is not going to increase in value beyond what its capable of actually producing in income. You may have some inflated value because people have all sorts of perceptions or misconceptions about the desirability of fishing. Some will want to jump into the business for the glory or the competition or the romance, but that is a social thing. I don't think we want to dabble in that beyond allowing it to occur. That is one of the things that makes life in our country interesting.

Another point I heard emphasized here is that successful management schemes in other countries as well as in the United States have been a partnership arrangement between industry, government, and other areas of the country that are interested in the resource. It is not someone dictating what is going to occur. You have to get the people who are affected involved in a meaningful way. It's not enough to just hold hearings for them.

I don't think limited entry is a management tool for conservation purposes—at least not in salmon. Some limited entry schemes might help

on the market structure. In the world market situation for troll salmon, we do need time on the water and a long season so we can produce fresh market fish. That is how we make our money. If the coho quotas are filled in a day or 12 days and the product is frozen, I think we run into the same sort of constraints that the Dungeness fishery has.

We are reducing the total value and, thus, the benefits to both the fishery and society in general because we have allowed those products to be taken too rapidly.

Robert Jacobson, Moderator

Our next speaker on the troll salmon fishery is Jeff Feldner. Jeff is a Newport resident and has been in the fishing industry for the last 13 years. He has a 45-foot combination boat and fishes halibut, salmon, albacore, and crab. He is a former member of the board of directors of the All-Coast Fishermen's Marketing Association. He is on the Advisory Committee to the OCZMA Fishing Industry Project and is a member of the Oregon Salmon Commission. Jeff has a bachelor's degree in chemical engineering and at one time was a chemical engineer for 3M Company.

Fishing Industry Perspective: Troll Fishermen, Part 2 Jeff Feldner, troll fisherman Newport, Oregon

In California, Oregon, and Washington, we already have a rudimentary form of limited entry with license limitation schemes. I think you could argue that they are effective. Some of them may be more effective than others. But what I am going to talk about is the need for further limitation in the salmon troll industry. Obviously, any further limitation in the troll fleet is going to be difficult and I don't know if it should be approached state by state or on a regional level. I'll dodge that issue and address my remarks on a state level.

Quite a few of the limited entry schemes that we have seen here might be applied to the troll fishery, or perhaps we could pick pieces from each of them. What I want to do is apply certain criteria to different parts of them as they might fit salmon. I asked four questions about any scheme. One, is it necessary? Two, will it work? Three, is it fair? Four, is it going to benefit me? We don't have to talk about the last one very much. I could pretty easily devise one that will benefit me.

I agree with Scott that limited entry as a management tool in general is not really necessary for the salmon fleet. We don't lack management regimes for the salmon resource right now. And from the testimony we have heard, most limited entry schemes aren't really designed for resource management.

I have a couple comments on limited entry as a management tool. We are already seeing one effect of the license limitations among the three states. There is a slow attrition of non-resident licenses. There is a greater likelihood that you are going to let go of a license in another state when you are having a bad year and you are going to have to dig up \$300 here and \$300 there. This kind of interstate mobility can be designed into a limited entry scheme. In some cases, such as Alaska, it might be desireable. If I am sitting in Alaska and looking at the great hoards potentially coming up to a fishery that's relatively healthy, I am going to want to keep them out. But down here, limiting access among the three states in a troll fishery is absolutely short-sighted. The name of the game in trolling is mobility. Mobility is the reason you have a troll fleet.

You can't avoid having a shift of effort. It's like trying to poke a ball of mercury around with a pencil. No matter where you poke it, it squirms. That's the nature of fishing. Try to limit us in one area and we are going to scramble over to another one. We are good at it.

There might be some cases where fishermen in the three states think it would be better to keep trollers from the other states out. This year, for instance, the California fishery looks better than Oregon and Washington, but that can change in the future. If Washington had put in an exclusive limited entry program six years ago, then Oregon and California would have retaliated and the Washington trollers would be completely belly-up today.

My other comment is on limited entry in general. I thought Fred Yeck's statement yesterday about the possibility of limited entry as a management tool in that it reduces incidental catch was an excellent one. Reducing the incidental catch would be one of the side benefits of a limited entry scheme.

Most of the limited entry discussion has focused on limiting harvest efficiency, limiting effort. I came in here skeptical and I probably still am, but after listening to the comments and talking to people, especially Colin Grant, I actually think we could devise a limited entry system that would work in the salmon industry.

Let's start by asking if it is necessary? It probably isn't. If you let things go the way they are, people are going to drop out. Maybe that's the way it should be. But if we let that happen, it not only is

awfully severe on the people who drop out, it also kills those of us who stay because the dropouts sell their boats at a nickel on the dollar and our boat value goes down. It locks the rest of us in and completely destroys our equity. So you might not be able to say that limited entry is necessary, but I think you can certainly say it would be desirable if we can concoct a good scheme.

Will limited entry work? Trouble. The troll fleet is really over capitalized. Unlike Alaska where increased catching capability is possible, the catching capacity in the troll fleet down here is probably maxed out right now. I can't imagine the situation will change so rapidly in the next few years that the presently licensed boats couldn't handle it.

The old ratio of 20 percent of the fleet catching 30 percent of the fish is probably accentuated in poor years, but it will take more than a license limitation to deal with that problem. You have to cut out a lot of that fleet. Cutting a few guys off the bottom just isn't going to do it. The California limited entry scheme has taken some licenses out and we have lost some licenses from the Oregon list, but they don't really represent any fish catching capability. They don't really help yet. As the British Columbia people said, that approach of just limiting licenses is slow. It is going to take 10-15 years before you are going to see any effect. The attrition probably isn't fast enough to do any good.

You can go farther than California has in restricting transferability. If you make it more difficult for people to survive in the industry by reducing their ability to move around, move up, get in, that will speed up attrition. The other thing you can look at—and a mechanism I had absolutely rejected before this meeting—is buyback. I'm talking about a buyback that the fleet pays for.

Any buyback scheme that would have an effect on the Oregon troll fleet alone would involve a large initial expense. You will need a lot of money to buy people out. Even though the first boats likely to be bought out are largely non-productive that doesn't mean they are going to be cheap. A lot of them are owned by people who have another income. They don't need to sell so it is going to take a higher price to get them out than pure consideration of the state of the industry would indicate. No matter how you finance buying these people out, there is going to be a lag between the time you start buying them out and the time the economic returns start to benefit the people who remain.

Somebody has to pay for it in the meantime. Maybe the state could do it through long term loans, a tax, or poundage fees and we would pay the state back later. There are possibilities. Any of these things are going to haul around a lot of administrative baggage. Any attempt to buy

units of capacity out of the fleet is going to be expensive and it is going to lead to even more short term overcapitalization. The fleet is going to be even more in debt; it is going to have to have even more credit. You could probably project how long it would take before the increase per unit of return to the industry would more than pay it back.

Transferability. Most transferability provisions in the limited entry programs I have seen lead to greater production. If you allow transferability, you get people to upgrade. You can design it different ways to maximize or minimize the amount of transferability, but some trends are inevitable. If you restrict transferability, it gets harder and harder and more expensive to enter the fleet. It gets more difficult to move up in capacity or to trade boats. It's hard to be flexible, or to move in and out of fisheries, and it probably tends to favor older fishermen—which I think is fine.

On the other side, you have young fishermen trying to get in, and that brings us to the fairness point. Anytime you talk about eliminating 30 to 50 percent of an existing fleet, somebody is going to hurt. And somebody has to decide who is going to get hurt. I don't want to be the one who tells the chicken farmer, the school teacher, or the guy who is just starting that he can't do it. Maybe we have to do it, but it's a damn tough moral decision that has to be made.

Any limited entry scheme that we come up with can't restrict new blood. The troll fishery in the lower 48 traditionally is the seed fishery for the whole damn industry. Right here in the audience I can see guys who all started out as trollers and have gone on to other fisheries. That situation hasn't really changed. I started trolling with \$1,000. I bought a little 26-foot Columbia River gillnetter. You take that small investment and add to it until you get to the position you want to be in.

A limited entry scheme that restricts upward mobility doesn't seem to make much sense. How can I go chugging out every morning in my three knot boat, watch all these beautiful trollers cruise past, and not want to have one of my own? Wanting to better yourself is basic to what fishing is about.

Furthermore, I don't think it is better to create an industry that requires wealth to get into. It may be true that you must have wealth to buy a house or to buy goods, but just the same, there are limited entry schemes we have talked about here that put an incredible initial financial burden on anyone who wants to enter a fishery. I think that is undesirable. It doesn't encourage better fishermen to get into the fleet. It encourages people with more money to get into the fleet.

What about inheritance? Does a kid whose dad was a good fisherman deserve to get the pie? I don't know. Does he have any more right than a guy who comes from Arkansas? Limited entry programs have tendencies to create these types of arbitrary things. If I had had more obstacles, I wouldn't fish the boat that I fish now. A highliner could plow right through those obstacles and buy up shares in a bigger permit every two years, but that is not the way it works. You claw your way, or you get up there at your own pace. These things have to be allowed.

The other thing I want to talk about is the idea of efficiency itself as a goal. Most of us generally believe that efficiency is good. And it is. It's better to be efficient, to make a profit, than to be bankrupt. But somewhere along the line you have to balance the bottom line profit against the number of people in the fishery and all the auxiliary industries. A fishery might not make any profit. Everybody might break even. But if the fishery employs the maximum number of people, it probably benefits the society the most. And of course, if you take efficiency to the extreme you are going to end up with a fish wheel or with a private salmon ranch.

Let me toss out one more idea. Let's say we design a limited entry scheme with a buyback to be paid eventually by the fleet. The initial money comes from the state, who continues to pay until such time as the increased per unit production of the fleet comes up enough to pay for it. If the increased per unit production doesn't rise quickly enough to satisfy the state, we could take the difference from the budget of the Department of Fish and Wildlife. (Laughter from audience.)

QUESTIONS FOR TROLL FISHERMAN SPEAKERS

Terry Johnson, National Fisherman Magazine: If I understood correctly. both speakers were saying that because of current circumstances in the Oregon fishery there is really no compelling need to proceed with a fully conceived limited entry program. I suggest that some day these circumstances are going to change and you will have more fish here. Then I think you'll find a lot of these people you thought had dropped out are going to come crawling out of the woodwork and you will have quite a big fleet working on these fish when they do show up. Also, having open access to trolling provides one cushion for combination boats. good deal for the combination boats, but it also supports your own competition to have large crabbers and draggers able to jump into the troll fishery when you have a good salmon run. I'm not saying that's necessarily a bad thing, but I think it is something to keep in mind if you depend primarily on trolling. It would seem to me that if you are going to live through the bad years, if you are going to hang on during these times of very poor production, you would want to capitalize on the good years when they come. I might also mention that Alaskans are getting into the Washington/Oregon troll fisheries because they know there are early seasons down here which we don't have in Alaska. They also know that one of these years we are going to have bad returns in Alaska and they want to know where they can get in on some good fishing when it comes up. Those are the points I wanted to make. Here's a question. I heard of a proposal a few years ago--I think it might have been authored by Paul Thomas of the Washington trollers--that proposed a share quota system for trolling. Have either of you studied that proposal or given it any thought?

Scott Boley: I studied the proposal. It wasn't well received by the industry primarily because there is a lot of resistance to change among all the fishermen and it's a pretty big departure from normal ideas. As far as the ease of obtaining a license in Oregon, I know it is still possible to buy an existing vessel and license and to change it to another vessel, but there is not much motive at the present time for that. I agree that if things did turn around, those of us who survived would like to have some sort of lid. I was interested in seeing what that lid might be--one that would still keep some sort of fleet profile. By far the most viable proposal I've heard here that actually applies to West Coast fisheries was made yesterday by Fred Yeck when he suggested putting a cap on the fleet size here and not restricting interfishery mobility. That might at least prevent the situation from getting any worse and it would be fairly easy to do. That permit would have to be tied to vessels. If someone wanted to get into an entry level fishery, he could, or if he wanted to go king crabbing in Alaska he would have to buy a vessel that was capable of doing that and already had a permit.

Ernie Summers, Westport, Washington: I shouldn't get into this, but you mentioned buyback. I watched the Washington buyback. Half of those boats are now down here in Oregon where you can buy them back again. Half of them are in our crab industry or drag fishery. Maybe you can buy them back in time to sell to California, and they can buy them back again.

Jerry Lavelle: I see a clear difference in attitude toward what limited entry is. You people seem to believe it is a tool to solve immediate problems, the buyback, etc. The presentation we heard from California assumed that what has happened has happened. The economy will take care of the chicken farmer, the school teacher, and the peripheral part of the fleet. I thought they were saying we should stay away from this in the future. I would hope that this would be the better idea. What was the quote we heard earlier? "Those who fail to recognize history are doomed to repeat it."

Jeff Feldner: I think one of the problems I see with just limiting licenses, like the California scheme, is that we are not going to benefit because the fishermen who have dropped out through attrition are generally the non-producers. The big boats that are still holding permits are going to come back into the fishery and I don't see any way you can get them out. For this reason, I'm not sure a buyback program is viable. I am really anxious to see what happens in Australia and Alaska.

Jerry Lavelle: In California you are talking roughly 50 percent attrition already in permits. I would suggest that the value of the boats is probably approaching what it should be. The fact that people bought boats in the inflated situation is their problem. I don't know why we should have to worry about indemnifying them.

Jeff Feldner: I hear what you are saying. I don't see a buyback scheme that really looks like it is going to work, but you also have problems trying to do it with attrition on licenses alone. Let's say you reduced the ultimate potential for catching fish by 30 percent in a real good year, but in real terms you haven't yet reduced your catching capability very much. I am just sure you haven't. I really don't like to restrict transferability. I fish four fisheries. I have to fish at least five to make a living. And I have to be able to move back and forth.

Jerry Lavelle: What Pat Lawlor told me was that when they decided to have limited entry, they included everyone who had any inclination to fish. They didn't try to set up an exclusive club. They organized everyone into a manageable group and said, now let's all get together and think about tomorrow.

Carl Finley: I've got a couple comments here. One is that although many fishermen look upon limited entry as a bunch of bunk, virtually everybody in management and the biological community accepts the idea of it and is

convinced that there is a problem with fleet overcapitalization. Managers and biologists think salmon enhancement is a great idea, but invariably they say there's hardly any use in pursuing it as long as the fleet can continue to expand. Nobody really gets any benefit because the greater production of salmon just gets sopped up by increased fleet expansion. There is a political reason for limited entry. If you are going to promote further enhancement to try to improve the situation, you are going to have to do something to control the size of the fleet. I would like to bring up one phrase that everyone has talked around in this meeting and that is "latent potential." Latent potential refers to a small license that has the capability of being put on a large boat. Managers are afraid of latent potential. The interesting thing about California's program, although it may have its imperfections, is that it is probably the only one of the few American programs that really controls latent potential. Probably the big mistake in Alaska with limited entry, at least as far as the troll fishery is concerned, is that the people who remained had unlimited possibilities for growth in the fleet. So now in tonnage and the size of the boats, the fleet is twice as big as it was when limited entry was implemented. The first and essential step is to try to get a control on latent potential, whether it is through the California system or somehow through assigned tonnage to boats.

Earl Soule, Troller, Newport, Oregon: I've trolled and gillnetted under limited entry. In Washington and Oregon it really hasn't worked. We haven't gained any substantial stocks or any fishing time from it. If anything, we have been cut. Maybe it works fine in Alaska, but it hasn't worked down here worth a damn. If you are going to go for limited entry in the rest of the fisheries, you better have some fishermen on the board who know what the hell's going on. Otherwise you are all going to be out of business.

Scott Boley: It's a mistake to think that limited entry is going to be a cure all for anything, particularly communication between managers and the industry, but I don't think that limited entry could be blamed for that lack of communication either. I don't see any real correlation between having a limited entry program and not having success.

Jeff Feldner: I live in constant fear of limited entry programs designed by bureaucrats.

Bruce Wallace, Southeastern Alaska Seine Boat Owners and Operators Association: I know there are a lot of guys in this audience who fish in Alaska. Before you start referring to Alaska and the circumstances around limited entry up there, I think you should spend some time looking closely at the data that is available. And that's what John Williams was showing you—that data is available. You people are making wrong assumptions from incorrect data and you are basing what you want to do on

those assumptions. I said yesterday, and I say again, you have the ability to look at Alaska, to see where we have failed and where we are succeeding and possibly to look at the adaptability of those successes and failures to what you want to do. I think you have a bad misunderstanding of limited entry. It is not preclusion. It doesn't reduce the ability to catch fish, although it may change the share basis of that fishery. I say one more time, look very closely at what has happened other places. Do not make random statements that get you into a position you can't get out of. You have the ability here to do the things that you need to do. I listened to the California presentation. Some of it surprised me, so I asked them some questions. Based on our brief discussion, it seems that their circumstance fits their situation. It would not work in Alaska, but it may very well work in California. It is still called limited entry, but it does an awful lot of things differently. I am not saying that it's a solution for you. It may not even do what you want it to, but it may be what you have to do. So you have to make that decision, too. I think any fisherman here would much rather be unbridled than saddled with regulations. The fact of the matter is that those days are fast coming to an end on the whole Pacific Coast and you are going to have to make some decisions. And it is better that you make the decisions by understanding what they mean, or at least having a good chance of understanding what they mean, than to have them made by administrative fiat later. Those people will make those decisions if we wait until the very last minute. Jim Branson has said that fishermen aren't going to have limited entry unless they want it, but at some point they will have something stuck down their throat because the pressure will mount. The fact that there are some Alaska trollers working down here early tells you something about the ability of the fleets to move around. Next year there will not be a troll season in Alaska until July 1, except for a small 10-day opening in limited areas in Southeast. That is going to be the situation in the Alaska troll fishery for the next few years. If those guys have the ability to fish down here, I guarantee you they will come down. It's not because they want to jump into your backyard, but because they are going to be forced That is the essence of limited entry. Now, I am not telling you that preclusion is a good idea because I don't like it particularly. But having said that, I still support the concept of limited entry because it is a better alternative than having somebody at some later date--well past the time that a decision should have been made--making it because that's the only thing left for them to do. And I guarantee you I've seen it happen--and it will continue to happen in each fishery by gear and by species.

Limited entry doesn't give you anything. It is no blessing, believe me, but if it's done right, it prevents something being done to you against your will that may possibly be to your long term detriment. Limited entry doesn't make any fish for you. There are a lot of other things you have to do to make fish. But having made the fish, it gives you a chance to utilize them.

I have one last comment and I know it is a problem. There was a 70-year old guy who had been trolling in Southeast Alaska for 62 years. Because of a weird set of circumstances from 1968 through 1972, he did not qualify for a troll permit. Now you can talk about all the guys who have gone away and didn't come back, but that may be the worst case I ever heard. It was so bad that 25 trollers in the Ketchikan area went together and bought a troll permit for the guy because there was no way administratively that he could get into it. It was just one of those things that falls through the cracks. No matter what kind of program you put together, you are going to have those cracks. Some of the things Colin Grant has spoken about indicate that there is a way. I think with California basically there may be a way. But there is still going to be some fall through there. You must remember, though, that you can go away, you can fish multiple fisheries, and the opportunity to come back into the fishery will still be there if you are willing to carry the permit with you. And those people who are still in the fishery while you are gone are going to benefit from your absence. So there are two sides to look at in that question. The problem is getting from the side we are on now to the other side down the line. Obviously, I'm giving you a pro-limited entry stance. I don't particularly like limited entry, but I think it is a viable tool if it's done right. A lot of its merits are going by the boards because of misperceptions.

There are 300 troll permits not being fished in Alaska right now. One of the major concerns is that if the U.S.-Canada treaty is a working vehicle to bring chinook back to the Southeast fishery and we enhance our own chinook to the point that we get back to a harvest in excess of 400,000, the share base for all those guys who went through the hard times up there is not going to increase one iota because those permits are going to come back in. You may not like exclusion, but think about paying some dues and what it means to go through those kinds of circumstances. Buyback is part of limited entry at some point. For my fleet, buyback is something that we are going to have to look at, and we are going to have to look at it fairly hard because we can't, while our numbers are big, make a lot of money. These parts and parcels of limited entry are independent of each other, but they're all interconnected. Barry Fisher went into a discussion about allocation. I understand the allocation question. If you were in Southeast, you would know how well I understand allocation. The fact of the matter is that allocation is part of it, too. You can't separate these things out entirely. You have to understand that they all become part of it. All I can say is don't dismiss limited entry until you've got a good in-depth, fisherman-oriented working group to look at it and judge all the different values. Limited entry isn't just what you said it is, it is a lot more.

FISHING INDUSTRY PERSPECITVES

SUPPORT BUSINESS OPERATORS

Robert Jacobson, Moderator

We have four speakers here who represent a broad diversity of backgrounds including banking, seafood processing, boat building and repair, and gear sales. I have asked each of them to give approximately a five minute presentation on how they view limited entry. The first is Don Barth. Don has been in banking for more than 30 years. He is currently president of the Yaquina Bay Bank in Newport, a town in which he and his wife have lived for the last nine years. He is also a six-year member and past chairman of the Oregon Fish and Wildlife Commission. He is the only person on the Commission from the coast, a geographical area that prior to his appointment had not been represented for at least 15 years.

Fishing Industry Perspectives: Support Business Operators, Part 1 Don Barth, President, Yaquina Bay Bank Newport, Oregon

For those of us who are philosophically opposed to limited entry, I guess one reason or excuse for our opposition is as good as another. Certainly a few come to mind such as unAmerican, unfair, unnecessary, but I would like to talk about what is going on in other industries that have recently been deregulated. The key word here is "deregulated."

The airline industry, natural gas, and banking have gone through a lot of trauma in the course of being deregulated, but the results are rather remarkable. Airline fares have probably never been lower. Gas prices have stabilized and there are no localized shortages. Interest rates to consumers on their savings are probably higher than they have ever been relative to our present low rate of inflation. All this demonstrates again the power of the free enterprise system.

But these deregulated industries are a long way from being free in the traditional American definition of free enterprise. Airlines can't fly unsafe planes; they can't take off and land without filing flight plans; and they can't hire unqualified pilots. Banks have to get approval to go into business in the first place; they have to get their officers and directors approved; and they must tell their depositors about early withdrawal penalties, how the interest is calculated, and when it is paid. Bank advertising must meet certain standards. The insurance industry is making sure we don't sell insurance and the securities industry is making sure we stay out of their business, yet Merrill Lynch and Sears and Allstate are becoming banks. Banks in our deregulated environment can't even change their banking hours without approval.

It's fair to say that every industry in our free enterprise system is regulated to one degree or another to protect the public. And to be honest, I feel better getting on an airplane knowing that the pilot has had to meet at least some minimal standards to prove that he can fly that thing. And I suppose you all feel somewhat better knowing that your bank deposits are insured. The problem seems to be that the regulators and the legislators don't always know where to draw line on the public welfare and safety.

All of this is to illustrate that every industry has some regulations that will protect the safety and the resources of the public. We can all debate the rights or wrongs of that and where that line should be drawn, but we can't deny that that's the environment we are in. And it is likely to be for a long time to come. So what does all that mean to the fishing industry?

Regulatory control over all natural resources in this country is total. Probably the least controlled, at least until recent years, has been the ocean fisheries. I have heard a lot of fishermen say that if the regulators would get out of the way, everything would be okay, but that may not be true. For example, how many of you would like to see a year round crab season with no restrictions on size or sex? A couple of years ago I was part of an effort that convinced the Fish and Wildlife Commission to not impose a minimum shrimp count per pound. We did away with that and within literally weeks, probably days, the whole industry—the processors and fleet alike—asked us to please reinstate the limit because there were some unscrupulous people out there taking these small shrimp and there were unscrupulous people buying them. So we have to admit that there has to be some regulation and some recognition that the environment is important, which leads me to what I want to say about limited entry.

The pie that you folks work on, whatever fishery you are in, is not infinite. The more pie eaters, the smaller those pieces of pie have to be. What does this banker think of limited entry? I think it's too bad we even have to consider it, but we are dealing with a limited resource and therefore only a limited amount of income can come from that limited base. And it all depends on how we slice the pie.

A great number of pie eaters is going to require a great number of small pieces. So, yes, I would like to see some kind of limited entry. I don't like the one that is currently being proposed in our state legislature. I would like to see it applied to all fisheries. Done properly it could create a healthier fishing industry and help bankers do a better job of lending to the industry.

However, before I could support a limited entry program, it would have to be initiated by and supported by the industry. I think it would have to work in a way that allowed a fisherman to fish in more than one fishery and in more than one area. As a banker it would be very difficult to loan to a vessel that was licensed to fish in only one fishery and in only one area. I am sorry I wasn't here yesterday when Fred Yeck made his comments because I think what he said may be very consistent with a thought or two of my own.

There are a couple things that I think you might consider doing. You could prohibit new vessels from being licensed unless they replace a vessel of similar size and capacity. And you could require that the vessel not be licensed or relicensed unless the owner derived some percentage—maybe two—thirds of his income—from fishing in general. In the case of a corporation, you might impose a restriction requiring that corporation to have at least \$5-10,000 of income from fishing. These and similar provision would keep the speculators and opportunistic folks out of the fishery so that the pie could be bigger for those of you who are trying to make a living at it.

I think the time is right to do something. If you don't do something, as the gentleman from Alaska said, you could end up with something that would be a whole lot worse. You could end up much like old George who worked in a logging camp. George's health got pretty poor and finally his buddies brought him into the nearest hospital. The doctor examined George and ordered the nurse to give him some chicken soup and an enema. She came back with the chicken soup, but George refused to eat it. So the nurse left and returned with help and forceably gave old George an enema. His buddies stopped by to see how things were going. George said he really wasn't sure, but he knew one thing: the next time they offered him soup he was going to take it the first time it was offered.

Robert Jacobson, Moderator

Our next speaker, Jack Crider, has been in the processing industry for the last 10 years or so. He owns a couple processing plants, lives in Depoe Bay, and is a graduate of OSU in fisheries. He is currently a member of the statewide Salmon and Trout Enhancement Program Advisory Committee and the Oregon Salmon Commission.

Fishing Industry Perspectives: Support Business Operators, Part 2 Jack Crider, owner, Riverside Fish Company Depoe Bay, Oregon

I have dealt with limited entry from both sides, as a biologist and as a processor. As a biologist I understand the logic of limited entry. As a predator population grows to an imbalance, numbers simply have to be reduced or you get peaks and valleys of predator-prey populations. If you relate this to humans, you get either good times or bad times. The politician has tried to reduce the economic effects that this type of dynamics has produced. And this is where you get into the real regulatory mess.

But the question posed to me was how does limited entry affect me? Basically, it gives me a headache. It costs me time and it costs me money. We receive fish at four stations and we target primarily on small boats, 20- to 25-feet long. During those summers when we have a salmon season, we have over 300 fishermen on file. Each of those fishermen will make at least one landing.

Most fishermen have one permit, some maintain two or three permits. Some are valid, some are not. Usually we check during weekdays, but on weekends when we get the bulk of the landings, we are not able to check the validity of the permits. If the numbers aren't right and the fishermen didn't pay their \$1, we get a ticket for \$100. I'm tired of receiving tickets over the whole ordeal. And if we end up, heaven forbid, getting into the same kind of system for groundfish and crab, I won't have to worry about any of this because I will probably be in jail.

However, I'm not opposed to limited entry, just to some of the regulations which only maintain the numbers and don't reduce them. For instance, since 1980 the Oregon salmon troll fishery has lost approximately 200 permits a year. This is primarily because of the value of the permit, not the regulations. An Oregon salmon permit is worth \$250 to \$1,000. To keep the license valid, a fisherman has to pay a \$75 single delivery fee, or buy a \$170 boat license plus a personal license and a \$1 permit and then must make at least a single delivery.

So let's say you have spent \$100 to \$200 each year to keep the permit valid and you catch one fish. Well, it's just pure and simple, those permits are basically worthless unless you want to continually dump money into them when you are not fishing and there are a lot of people in the industry who are not fishing, just holding those permits. Every salmon season there are approximately 500 deliveries of one fish. At several of my plants, especially the ones that have the retail markets associated with them, a fisherman will purchase a fish in the market, take it home, then come back in a boat that can barely make it to the dock, and deliver my fish back to me. Presto, his permit is valid.

Here's another example. A couple years ago, one of the local fishermen went to Alaska. Two months later his buddy came up to me with a fish and wanted to make his buddy's permit valid. I knew the story, so I sent him to another fish company that probably accepted it without any problem. There is a lot of that type of thing.

Of my 300 fishermen, about 20 percent make 75 percent of the landings. If we are really interested in reducing the size of the fleet, we need to set some type of minimum poundage for landings. This will reduce my headaches and it will also force boats to be maintained and fishable.

The only thing about limited entry that scares me is how the cyclic changes that occur in all fish resources could produce a population so large that the troll fleet could not harvest their quota, and would leave an abundance for the inland fishery. The troll fishery is one of the best ways to selectively harvest fish and produce the highest quality salmon. Why we want to harvest poor quality spawners with non-selective gillnets has always baffled me.

To sum up, limited entry can be a useful tool for everyone involved. But if we let ourselves get over-regulated, we may limit ourselves right out of business.

Robert Jacobson, Moderator

Our next speaker is Jon A. Englund. After graduating from the University of Oregon in 1960, Jon moved back to Astoria and joined his father in the marine supply business, a business that began in 1944. He currently owns marine supply stores in several coastal locations.

Fishing Industry Perspectives: Support Business Operators, Part 3 Jon Englund, owner, Englund Marine Supply Astoria, Oregon

It's quite a pleasure to come to a fish meeting and hear everyone working so hard in the same direction. What I have to say is going to echo the words of Rich Young. I came here with limited entry as I knew it. I don't know what limited entry is right now. It has so many facets and has to be applied in so many different ways that I am a little confused.

I am thankful for the opportunity to express my views as an owner of a business that supports the fishing industry. We are not often asked

to comment on how major issues will affect us. And I think a lot of fishery managers and the people in the industry forget how much is invested in the support industry. Believe me, we are in the same mess that you are in.

As I sat here, I wondered how many of us would be here if this was held in the late 1970's. We overcapitalized ourselves. We heard it from many speakers here. I have in my business. Those in certain fisheries have done the same thing. And I can't blame government for it, I have to blame myself. Now we are going through that difficult time of de-capitalization and it hurts. Some of us have been consumed and more of us probably will be. Some of us will make it through.

I heard it said here several times: who is going to be the one to tell somebody they can't get into a fishery? How do we go about eliminating people without anybody getting hurt? We all have grief and we are all looking out for ourselves in our little sector. But I think we already have that mechanism in place.

I am a great believer in the supply and demand system. We may have reached a crucial point of supply and demand in this industry and rather than face up to it, we are attempting to bring in regulation to help resolve the problem. There is too much catching capacity in relation to the supply of what we are trying to catch, yet we all want to continue the same type of living. I just wonder if that is what we should be wrestling with. Perhaps we are trying to use limited entry to resolve a situation that the natural effects of supply and demand will take care of. It is a painful process. I don't know what the answer is.

Limited entry would affect my business considerably. The inability of a boat to move throughout the industry would have a drastic affect on our inventories. I heard the 20-80 ratio tossed around here today. Twenty percent of the fishermen catch 80 percent of the fish. Well, the other 80 percent that aren't catching as much fish are a very important part of this industry. There is no way the support industries can operate on the 20 percent who do well. It is impossible.

Limited entry has a tendency to squeeze out the small guy. I don't believe in that. If he can economically operate, he has a right to operate. If he is not hurting the biological part of the industry, leave him alone. He is buying things and making it cheaper for that top 20 percent. Take wire rope or trolling gear, for instance. It's the little guy, the guy who doesn't compete on the full level, who allows people like me to buy in the right quantities and to keep the prices in balance. They are an absolute part of this industry.

If we are going to use limited entry to eliminate these people, I think you are looking at a strong effect on your suppliers and the rest of the support industry.

One good point has come out at this meeting. We seem to agree that we have quotas and regulations and that our stocks are somewhat in check and balance. That was nice to hear. So what we are talking about is ourselves. Maybe we better look at ourselves and realize that some of us are going to be forced to get out. That is sad, but at some point supply and demand cannot be put in an artificial situation, and I believe that limited entry would do that.

Robert Jacobson, Moderator

The last speaker on this part of the program is Paul Smith. Paul owns and operates Yaquina Boat Works in Toledo. He has been in the industry for 35 years. His first 25 years were as a fisherman fishing for salmon, albacore, and shrimp. Paul was the first shrimp fisherman to actually fish a double rigger here in Oregon.

Fishing Industry Perspectives: Support Business Operators, Part 4
Paul Smith, owner, Yaquina Boat Works
Toledo, Oregon

Limited entry is a denial of the forces of our free enterprise system to operate. It would affect boat building and repair, equipment suppliers, and all the other support businesses. We would become a no-growth industry and, in one word, stagnate.

Joint ventures were mentioned this morning and I would like to say a few words about them. They have been a blessing for the boat building business. A good deal of my work now is from the joint venture boats and they are the best kind of customers to have because they pay their bills.

When the joint ventures started, we were involved with a number of vessels that were in that business. I don't remember seeing any guarantees that they were going to succeed. These fellows had their necks stuck out a mile. It was during a time when the interest rates were above 20 percent. I really see no advantage in trying to eliminate the joint ventures. The only problem I see with joint ventures is that it is a quasi-limited entry fishery. In other words there is only room for so many boats. If there was room for more boats I am sure that most of the fleet would be in that business.

Let's get down to some pretty basic things in life that I am sure most of us have forgotten. If we are to live together in a free, rational, civilized society, we must recognize the principle of the individual. The purpose of law and our government is the protection of

these rights. Protection is for the individual. Jefferson and many of his contemporaries considered a strong central government to be the greatest threat to our society. It has been proven during the short history of our country that the only system that guarantees and protects our freedoms is the capitalistic system. Our constitution is a limitation on government, not on the individual.

We do not want a society held together by institutionalized gang rule. We do not need a bureaucratic nanny to look after our every need. Nowhere in the world is the gap greater between rich and poor than in a society that does not allow the operation of a free market system. A free market releases energies of people to pursue their objectives. It also prevents anyone from having too much power. Government is not a benefactor. It is a threat to our freedom and will continue to be as long as we consider that the government can do it better.

There is no guarantee that the judgments, knowledge, or integrity of the regulatory bureaucrats is superior. You should consider who you think you could trust to say who gets a permit and who doesn't, and who sits in judgment in the dispute. In a permit system, perhaps women should be first in line, then minorities, the disadvantaged, or possibly veterans. How many licenses should be issued? Should the most productive fisherman be given a license? Maybe we should do away with that 20 percent that produces 30 percent. That way the other 80 percent will share in 80 percent of the product. I think that is the way they do it in Russia.

Limited entry schemes employ the forces of envy, greed, political blindness, and ideological arrogance. Their object is to protect their members from competition in the name of more healthy fisheries.

Our fisheries already have many limited entries which everybody is aware of: quotas, seasons, boat sizes, areas, licenses. Those should be enough to manage the resource, so apparently what we are talking about today is managing people. And it is not a function of government to manage people in a free society. It is in strong centralized governments, such as in China, India, and Russia, that they manage people.

We don't need anyone to tell us about limited entry in Oregon. We have it in our salmon, shrimp, and scallop industries, and who among you can say it has done any good for the resource or the fisherman? Only the bureaucrats. Don Barth mentioned deregulation. What in the world is going on in this country? In the midst of deregulation, we are talking about regulation. The airline, trucking, and railroad industries are being deregulated because they are not for the good of our country. You can buy a roundtrip airplane ticket to New York City for \$250. If they still had their limited entry, it would probably cost you somewhere between \$700 and \$800.

Our free enterprise system does not guarantee success. What it guarantees is opportunity. That is, the opportunity to move from fishery to fishery, or state to state, whatever is needed for the survival of those who are left. I say the need today is not for a limited entry system, but for an elimination of the limited entry systems that we have and a return to the free market system.

Let's just look at the advantages of the free market system. It is in place. We don't have to have a study to see what everybody wants. It treats everybody the same. Everybody is treated fairly. Maybe this is the biggest problem it has, it's self regulating. It works, it excludes no one. It has 200 years of history to prove it. I hear about maximizing the profits of the fisherman. When did that become a function of government? As for overcapitalization, I am afraid we are going to have to look in a mirror and point the finger at who was responsible for overcapitalization. I don't think anybody held a gun to fishermen's heads when they went to purchase more equipment or buy a new boat. When did that get to be a function of government?

The free market is a system that is low cost to operate and it does guarantee opportunity. I am not sure your limited entry guarantees you opportunity.

One of man's better instincts is to better his condition. If law interferes with the pursuit of this, he will first lose respect for the law, then he will evade the law or break the law. Apparently they have a few people like that on the East Coast based on what Alan Guimond said about \$750,000 worth of fines being imposed. And the gentleman from Canada was talking about jail terms. This is what happens when you vary from your free market system.

When someone starts to tell you the advantages of the limited entry system as they see it, don't be timid. Have the courage to stand up and tell them you have not given up yet on the free enterprise system. Maybe all we need is a dose of patriotism and a good kick in the butt and to get back to work.

QUESTIONS FOR SUPPORT BUSINESS OPERATOR SPEAKERS

John Williams, fishery consultant, Juneau: I've got a story I would like to tell about free enterprise. When the settlers came to the East Coast, they settled in places like Boston. In Boston they set aside a commons in the middle of town where everybody could put a milk cow. It was within a few blocks of their homes so they could easily milk their cow and have their gallon of milk for the family. At some point, enough people moved to Boston that the productivity of that commons was impractical. The carrying capacity of that land was exceeded by the number of people who wanted to put their milk cows there. The solution in Boston was to put the milk cows on private property, put milk production in the hands of private ownership, and produce milk for profit. They turned the commons into a place for people to play catch, play on the grass, chase frisbees, and have fun. If you want to treat your oceans that way, turn them over to the sports fishermen and you can have Weyerhaueser raise the salmon.

Craig Berger: You talked about joint venture boats being the best customers because they paid their bills. I thought I might explore that a little. It seems the joint venture fishery is the most profitable fishery on the coast. One might also assume that a profitable fishery--one that is in a healthy condition--is earning people money and they can also pay their bills. I would like to point out some salient features about the joint venture fishery as opposed to the brown rock fishery that developed with many of the same boats. The brown rock fishery had willing buyers and the price for brown rock went from 20 cents to 6 cents. Very few people made money on it and plants went belly up. The joint venture fishery is a limited entry fishery. Not everybody will buy that product. You know how many midwater boats went belly up on this coast. They had the capability of going joint venture and wanted to go joint venture, but couldn't because there weren't any market spots open. If you had that situation in the drag fishery, whether it was processor-introduced or legislature-introduced, you would have a limited entry fishery. That is the only reason the joint venture fishery is profitable. Otherwise they would be out there fishing for 3 cents a pound until nobody could make a penny. That's when you would find out who was willing to fish for \$10,000 gross income a year on a million dollar vessel. Your joint venture fishery is a limited entry fishery and that's the reason they are making money and that's why they are good customers and that's why you like them in your place of business.

Paul Smith: Okay, I made a mistake. I should have said they pay their bills, too, just like the rest of our good customers, such as yourself. Did you want me to address the limited entry thing?

<u>Craig Berger</u>: I'd like your view of the joint venture fishery as being a limited entry fishery. Is that why it's so profitable and hasn't deteriorated like the brown rock fishery or the halibut fishery.

<u>Paul Smith:</u> Harold Lokken said last night that it was a quasi-limited entry fishery in that there is room for only so many boats. That is the limited entry effect on the present joint ventures, true.

FISHING INDUSTRY PERSPECITVES

AGENCY PERSPECTVE

Robert Jacobson, Moderator

Now we want to hear from some speakers who can give us an idea of what the regulatory people in the National Marine Fisheries Service, the Oregon Department of Fish and Wildlife, and the Pacific Fishery Management Council might be thinking along the lines of limited entry. The first speaker is Joe Greenley, the executive director of the Pacific Fishery Management Council since 1982. Joe spent a number of years with the Nevada Department of Fish and Game and was director of that department in 1980-1982. He spent some time in Alaska as the director of the Game Division of the Alaska Department of Fish and Game. He was also director of the Idaho Department of Fish and Game for eight years in the 1970s.

Agency Perspectives on Limited Entry: Part 1 Joseph Greenley, Executive Director, Pacific Fisheries Management Council Portland, Oregon

I'm supposed to tell you the Council's position on limited entry. Fortunately, four Council members and one alternate have attended this meeting. I frankly don't know their individual views on limited entry. There isn't any official true position of the Pacific Fishery Management Council so I want to discuss the actions of the Council in addressing limited entry over the last eight years. I think that will tell you what the position of the Pacific Fishery Management Council is on limited entry.

In reviewing PFMC's position on limited entry, let's first look at the Magnuson Fishery Conservation and Management Act which dictates the options the PFMC has. Let me quote, "It is further declared to be the policy of Congress in this Act to assure that the National Fishery Conservation and Management program...involves, and is responsive to the needs of interested and affected States and citizens; promotes efficiency;...and is workable and effective."

Let's go a little further. Under definitions, the term "optimum" with respect to the yield from a fishery, means the amount of fish which

is prescribed as such on the basis of the maximum sustainable yield from such fishery as modified by any relevant economic, social, or ecological factor."

Let's move into Section 303 which deals with the contents of fishery management plans. Under that you have required provisions and you have discretionary provisions. Under discretionary provisions: "Any fishery management plan which is prepared by [the speaker skips over some sentences here]...to achieve optimum yield, if, in developing such system, the Council and the secretary take into account: A) present participation in the fishery, B) historical fishing practices in, and dependence on, the fishery, C) the economics of the fishery, D) the capability of fishing vessels used in the fishery to engage in other fisheries, E) the cultural and social framework relevant to the fishery, and (F) other relevant considerations."

This tells us that limited access is a tool available to the councils for conservation, management, and/or attaining optimum yield. It wasn't long after passage of the Act and the establishment of the Council that the PFMC declared its intent to limit access in the commercial troll and charter boat ocean salmon fisheries. This was in 1979 and I quote from a couple of news releases and minutes:

"In December 1977, the Council declared its intent to limit access to the commercial troll and charter boat ocean salmon fisheries commencing in 1979. That declaration is included in Section 10.5, Limited Access to the Commercial Fisheries to the Council's 1978 Ocean Salmon Plan...In January 1978, the Council established a Task Force on Moratorium to develop the specifics of a salmon moratorium program for inclusion in the 1979 Comprehensive Salmon Management Plan."

Here's a news release from a couple of months later, March 1978: "The Council heard recommendations from the Moratorium Task Force that the moratorium should be for a two-year period and should be implemented by the states, etc."

We move a little further down the calendar into August 1978: "Studies of limited access as a viable management tool for effort limitations are necessary before such a system is adopted. Until a decision is made regarding limited access, a license moratorium is the only effective means of curtailing a speculative rush on licenses such as occurred in other limited access programs."

The Council went on further to state that they had recognized the coastal states have existing vessel license programs and can most efficiently implement their own moratoria, which can be responsive to the needs of the states. "In view of the above, the Pacific Fishery

Management Council will defer consideration of a Federal moratorium as an amendment to the Salmon Fisheries Plan in order to permit the coastal states to institute license moratoria by state law with the goal that such systems be in effect by the 1980 seasons."

And then the Council encouraged the states to move ahead and also stated "that in the event the coastal states are not able to establish these moratoria, the council will resume development of a federally-implemented coastwide moratorium in 1980." Then there was a quiet period. I was originally on the Council during those first three years and then I left. In 1980-82, it got awfully quiet on limited access.

The next thing I found in the minutes of March 1981 mentioned "Dr. Crutchfield, chairman of the ad hoc committee appointed to develop a format for a workshop on methods of controlling fisheries efforts, suggested the following...." So in 1981 we sponsored a workshop. In May 1981, "the Council discussed state versus federal implementation of a limited entry program on shrimp." Some more discussion. In September 1982, in a report on a limited entry workshop: "Dr. Hubbard stated that Phil Meyer, the contractor who prepared the draft limited entry report which summarized comments by limited entry workshop participants held on September 27 and 28." Another workshop.

In November 1982: "Washington troll limited entry program was suggested and a questionnaire sent out." In this case, the industry requested that a questionnaire be sent out and the Council helped get the questionnaires out. That was followed by an Oregon limited entry survey questionnaire to the Metro Trollers. The Council worked with them to gather that information and then the results were reported.

In January, a presentation of a petition to the Council for a moratorium on entry into the groundfish fishery said: "Mr. Davis addressed the Council on the merits of a moratorium. The Council discussed it and felt the most appropriate approach was on a state level rather than through the Council."

The most recent mention of limited entry was in November 1984 when "Pete Leipzig, general manager of the Fisheries Marketing Association, presented to the Council a plan for implementing a limited entry program for the groundfish trawl industry on the West Coast." The Council helped him in setting up a study group. However, the Council did not necessarily endorse it, but simply helped with some more discussions on limited entry.

So after declaring its intent in 1979 to get involved in limited entry, the Council for some reason backed off. In all probability, the support was lacking and since that time the Council has done no more than

sponsor or work with industry groups in talking about and setting up workshops on limited entry. It is entirely possible that in 1979 and 1980 the support from industry and the states was not there and that is the reason the Council had deferred its limited entry activities.

The Council provided a forum for discussion of limited entry, but has not attempted to initiate any system. I think I can say with a high degree of assurance that the Council does not intend at any time to shove any system down anyone's throat. It must be a partnership approach. There is no indication that an acceptable system has been presented as yet. And from what we have heard here, there may not yet be one.

Frankly, I think the Council would prefer to see the states handle it. The Council is concerned about the regulations they have to implement at this time, or at least recommend for implementation, which are merely regulations reducing the efficiency of the fleets. But so far better alternatives have not come forth. The concern and interest over what industry wants are the reasons representation was here from the Council.

Robert Jacobson, Moderator

Our next speaker, sitting in for Oregon Department of Fish and Wildlife Director, Jack Donaldson, is Jim Martin. Jim has been an ODFW employee since 1969 and is currently Harvest Manager for the Department working out of the Portland headquarters.

Agency Perspectives on Limited Entry, Part 2 Jim Martin, Harvest Manager, Oregon Department of Fish and Wildlife Portland, Oregon

I can't remember when I have learned more in a short period of time and relearned things I knew but had forgotten. It may seem that discussion and understanding of limited entry will immediately bring us to a consensus. That is obviously wrong. I often run into folks in our profession and in the industry who feel that if we only knew what was going on, it would be intuitively obvious to even the casual observer which way to go. I think the discussion in the last two days has clarified that perhaps our strength—the diversity of our fish resources and our people resources—can also be our weakness in terms of arriving at a consensus and moving forward with any kind of coordinated program.

I don't know any bureaucrats in Oregon, including me, who are interested in shoving limited entry or other management programs down

anyone's throat. Colin Grant's discussion of a team approach and a cooperative approach toward management was very appropriate. I can't say that we have always done the best job of doing that. I can say that is our desire.

It appears to me that the decision on limited entry involves trading one set of objectives for another set and trying to optimize the mix. You can have a lot of security and not much flexibility, or you can have a lot of flexibility but not much security. It appears there are some age breakdowns in what we are looking for. Young guys want a lot of flexibility and are not too worried about security. Guys who have been in the industry for quite awhile and have been through the pinches want some security because they've hung in there. And the guys who are ready to get out of the fishery and want to pass their boat and permit to their sons or daughters or for their retirement, they want some flexibility again. Big boats want more flexibility than small boats in some situations.

The last few days have been tremendously educational for me and now I have to explain where we stand on limited entry as an agency.

Basically the Oregon Department of Fish and Wildlife would support a limited entry proposal if three things occurred:

- 1) The proposal must be conceptually sound, must make sense, and must solve more problems than it creates.
- 2) It is not just a quick fix, but in fact is going to lead us toward a sound future as opposed to quick bail out subsidies, excessive concentration of fishing power, monopolistic approaches—in short, things which might get us off the hook on some of the problems now, but aren't going to lead us to a sound future.
- 3) There must be a consensus of support among the industry.

I think Harold Lokken put it very well last night: politically, it is unrealistic to think that anything is going to happen without a consensus of support. Basically, I don't think unanimous support on anything will ever happen in this industry or any other. I know of nothing in America that has unanimous support today. But we do have an opportunity to form a consensus of support.

We are only going to form that consensus of support to the extent that we can bring this diversity of points of view toward a clarification of our objectives. And if we knew more clearly what our objectives are and what success would look like, then we could discuss methods to get there. As long as we are talking about methods, we might begin the discussion by asking who likes trip limits? Well, if we are trout fishing and we are talking about the daily angler trip limit, maybe we like trip limits. If we are fishing brownies, maybe we don't like trip limits. The point is it's only relevant to what we are trying to accomplish and to the alternatives. It is pretty clear there is no gain without some pain and we have to learn how to deal with it. And it is pretty clear the whole discussion of what is fair is crucial, central, and perhaps the most elusive of the difficult concepts.

I have heard a lot of discussion in my career about paralysis by analysis. Bureaucrats and research biologists are commonly accused of that. Well, there is another concept that needs to be brought out here, too, and that is paralysis by argument—by presentation over and over of diverse arguments. And yet there is no process to work through those arguments and come to some consensus about our objectives and initiate some kind of practical approach.

I don't know of a limited entry program or any other program that is perfect and I think it is unrealistic to think that we are going to have one. However, I certainly don't think the present management is perfect either. The question is how can we work together to improve things?

Robert Jacobson, Moderator

The third speaker in this portion of the program, Rolland Schmitten, served in the Washington State Legislature from November 1975 through January 1981. In the 1979-80 session, he served as executive chairman of the Natural Resources Committee. He was the director of the Washington Department of Fisheries for two years from 1981 to 1983. For the next two years, he was chief of policy for all natural resources for the governor of the State of Washington. He is currently Northwest Regional director of the National Marine Fisheries Service and has been since the first of this year.

Agency Perspectives on Limited Entry, Part 3

Rolland Schmitten, Director, Northwest Region, National Marine Fisheries Service

Seattle, Washington

Not long ago it would have been very difficult, or almost impossible, for various sectors of the fishing industry to sit down and rationally discuss limited entry. I have been impressed that no one has

approached this conference with a pre-conceived notion of where it is going and with the honest, open dialogue we have had for the last two days. You have asked me to provide a federal perspective, or at least a National Marine Fisheries Service view on limited entry, and I am prepared to do that. I have set aside my prepared remarks because I think we have amply defined the parameters of limited entry. Instead I would like to briefly give you my personal views on limited entry as well as my involvement and then tie that to my position in a federal role.

As a past Washington State legislator and later chairman of the House Natural Resources Committee and eventually the director of the Department of Fisheries for the State of Washington, a good share of all Washington's limited entry programs came before me for comment or action. We actually called them license moratoriums. I think the phrase seemed to be a little more palatable and not quite as permanent to the industry and the legislature. And the emphasis was on license limitations as a method of limited entry. For this reason almost all of our early efforts were sunsetted or to be reviewed at a certain time.

Limited entry really isn't new in the State of Washington. In fact, the first attempt goes back to 1934 when it was passed by initiative from the people, only to be found unconstitutional by the Supreme Court in 1936. The early plan did not provide for transferability of licenses and that was the primary reason the court struck it down.

If you should choose a course of limited entry, it is very important for you to remember that you must meet the constitutional question of an "equal protected class." In the State of Washington, the Supreme Court applied two tests. One, persons in the same class must be treated alike; those of you who have a license must have equal opportunity. Secondly, reasonable grounds must exist for making a distinction between those within and those outside of a class. And that means those who now have a license and those who would not.

They drew their conclusion from the Fourteenth Amendment, which says, "No state shall make or enforce any law which shall deny any person within its jurisdiction the equal protection of the law." The issues were easy back in 1934. The arguments in favor of limited entry were that there was too much gear competition for a limited resource (they were addressing salmon). The arguments against it said that since the fishing industry was subsidized by taxpayers through hatcheries, entry should not be limited.

A second-successful-attempt at some sort of limited entry in Washington passed in 1974. It was primarily driven by the advent of the Boldt decision and also a Congressional promise of money for displaced fishermen. Thank you, Warren G. Magnuson. His promise was termed the

buyback program. The first license moratoriums were for salmon only, including gillnetters and purse seiners inside Puget Sound. That was followed in 1975 by one for Grays Harbor trollers and Columbia River gillnetters.

The public feeling at the time—and this was about the time that I got in the business—was to prevent a bad situation from getting worse. In 1976, the Legislature, led by then Representative John Martinez, whom I think many of you know, placed a limited entry program on the herring fishery. John was nicknamed the bear for very obvious reasons. As a freshman legislator, I remember to this day what he said when the Washington Department of Fisheries wanted to study the impacts of a limited entry system and wait a year. He said, "We don't need any more God damn studies. We want some action and we are going to put a lid on it." And that he did. I relate this story only because it often takes that kind of support to get a limited entry program eventually passed.

In 1977, I sponsored the charter vessel license moratorium which limited the number of licenses. In 1978, I amended that and sponsored the passenger vessel license limitation, which basically did the same thing but took a different direction. In fact, I think it did something that had never been done: it limited the number of persons per boat based on the size. And it actually put a cap on the growth of that industry.

That same year we also passed the Inner Sound crab license moratorium, on which we heard from Ron Westley this morning. But it should be apparent, at least in Washington, that just about everything but groundfish has some form of limited entry placed upon it. In general, all the Washington limited entry programs preclude new entry and allow for conditional transfer of licenses. They license vessels, not owners or individuals; they require time qualifications during the eligibility period; and most require an annual minimum landing. There also was an appeals board set up to review any sort of extenuating circumstances in license denials. The appeals board was made up of the fishermen from that gear type.

It is important to remember during those early days that a key driver was the buyback program which required the establishment of a limited entry program before qualifying for federal funds. Through buyback, Washington has reduced its licenses in all gears approximately 20-25 percent.

Legally, the state has withstood the test. The herring moratorium was challenged in court and after very lengthy hearings, the court ruled in favor of the state. In every instance, the segment of the industry that we were concerned with supported limited entry, not passively but vigorously. And this is important: not just a portion, but a vast majority wanted action.

The question of limited entry normally occurs when the biological potential of the resource is reached. Further increases in the number of vessels entering the fishery will diminish the catch and may eventually destroy the commercial viability of the resource. Hence the need for regulations and, you know, we have heard them 10 times already, time, area, gear, quotas, but regulations that conserve the fishery and possibly the resource. Or as you are looking at now, the second option, the need to reduce the numbers of fishermen and vessels permitted to fish on a given resource.

Generally I see the cycle as working like this: start off with a healthy resource, a lot of entry, overcapitalization resulting in over-harvest, resulting in over-regulation, equals a spiraling cycle of deteriorating conditions. Now it reminds me of a story that many of you have probably heard, but I think it is fitting. Three people win the Washington lottery and receive \$1 million each. A teacher, a doctor, and a fisherman. And obviously the press asked each one, tell us what you are going to do with your million dollars. The teacher is concerned about security and wants to buy IRA's to prepare herself for later life. Now the doctor is pretty well fixed and he wants to travel alot. So they turn to the fisherman and they say what are you going to do with your \$1 million? He thought for a minute and finally said, "I think I'll just keep fishing until it's all gone." It is sad, but possibly very true in some of our fisheries.

Well, as a new federal representative my views today have not changed. I am not a promoter of limited entry, nor should the federal government be a promoter of limited entry. Limited entry is not a panacea. It is a management technique or tool and it takes a special set of circumstances to work. But limited entry can work and has worked.

Let me repeat, government should not take the lead or impose its judgment on those of you involved in the system. As a past businessman, I'd have the same feelings about government leading or promoting limited entry without industry support as I would have for the saying that goes, "Hi, I'm from the government and I'm here to help you." Government can contribute importantly by assisting those involved in the fisheries to formulate sound objectives to be met, guidelines to follow, and pitfalls to avoid. Further, government can help by reviewing proposals and government can offer alternatives for consideration by the participants. But the final selection must be self imposed.

I truly admire what you are doing, I applaud your attitude, and I stand convinced that there are better ways for conducting or managing our fisheries.

QUESTIONS FOR AGENCY PERSPECTIVE SPEAKERS

Fred Yeck: You indicated that the final alternative politicians would support would be one that industry promotes and supports. The problem is what is the industry? Does that mean if all the fishermen currently fishing halibut want limited entry, then you will support it even though everybody who is excluded, obviously will oppose it? Does that mean if trawlermen support limited entry for trawlermen, but everybody else opposes it because they will be excluded, that you would support it?

Rolland Schmitten: If the segment of the industry I am dealing with—for instance, if it was trollers—that is the one I would listen to. And, yes, if they want to impose it upon themselves, at that point I would want to be involved and could support them.

Fred Yeck: The point is that whoever will be excluded will oppose it.

OPEN FORUM

Craig Berger: Joe Easley made a comment about efficiency. That is a term we really have to watch. I don't want to see that term equated with big. I like Joe's definition: if you are making money, you are efficient.

Jim Branson, North Pacific Fishery Management Council: This is an appropriate time to talk about management and what I have been doing in it for the last 35 years. And efficiency, too. Managers and fish councils and the whole complex of bureauracy for managing these fisheries really have two goals in the fish business. One, they try to control the number of fish you are going to catch. That is the biological end, the conservation end, of it. Second, they try to make sure that everybody gets a fair shake in the business. That's the fair starts, the hold inspections, the bait up periods, the uniform end of the season, the gear restrictions. Those are, by and large, regulations that the industry itself has asked for, and they take up an inordinate amount of time for boards and commissions trying to decide how they are going to be set, and for the enforcement officer when he figures out how it is going to be enforced. The other end of it, trying to control the number of fish that you catch, is usually done by trying to stretch the length of time you fish because it is a lot easier to control the catch the longer you This is where limited entry in some of its forms could be of real benefit because it is going to extend the length of time it takes to harvest that given amount of fish. And that is all we are ever working with, a given amount of fish. That is a tool; it could be a useful one in some fisheries. Frankly, I would like to see it used in quite a few of them because it has some real potential. Without limited entry, and I have never worked in a situation where we did have limited entry, you have got to use the tools that are available. And this is where we get to efficiency because our chief purpose -- and by "our" I mean managers -- in developing these regulations is to make you just as inefficient as we possibly can. That is why you have 32-foot boats in Bristol Bay and 58-foot limited seiners in Southeastern Alaska. That is why you can only fish with two tons of gear in some of the gillnet fisheries. And when we were foresighted enough to see something really efficient coming along we would kill it before it ever got there. For instance, the drum seine. The minute that showed up in Alaska, the managers realized it was going to get away from them so it was outlawed. Unfortunately we didn't catch the power block in time. So when you are talking about extending the season, remember all you are doing is adding another tool to this whole bag of tricks that has to be used to manage the publicly-owned resource.

And putting limited entry on most of the fisheries now is not going to change the other regulatory system very substantially right away. When you start reducing the number of participants in a given fishery, then an awful lot of those regulations are going to come off. Depending on the type of limited entry, a lot of those are going to be relaxed and you are not going to have to put up with four lines in the troll fishery, X number of hooks, all sorts of crazy things, just to make you as inefficient as possible.

Joe Easley, Oregon Trawl Commission: I just want people to realize that limited entry is no panacea, at least not the kinds of limited entries that are legal. You aren't going to remove people from the fishery to start with and you are probably looking at 10 to 20 years down the road before you see any of those other regulations starting to be relaxed. You are going to have all the things that you've got right now as well as limited entry. And you have another set of bureaucracies to fool with. If you think the long term objective is worth it, take a look at it. It is not, however, an instant cure.

Barry Fisher: Let me clarify a remark I made that was sort of snappy the other day. I said that the first year I was out here a fisherman asked me to get him a better net. I got the better net, put it on the boat, and we made it work. The immediate cry was to outlaw the net because it was too efficient. I would like, through this kind of meeting, for fishermen to understand full well that occasionally someone is going to come along who is an innovator. As you talk about limited entry, regulations, or seasons, or anything else, the one thing that we can all consciously agree on, that most of us unconsciously disagree on, is the role of that guy who comes along and says I have a better idea. Jim Branson is quite right when he says you make regulations to maintain inefficiency. But when one man like Mario Puretic can make the difference that he made with that crazy idea of a power block, you have to think about what innovation means. I am one of those guys who hauled seines before the power block--20 men on a seine boat off the East Coast hauling 220 fathom long seines, 30 fathom deep, by hand. I started on the deck of a schooner and a dory; the vessel was propelled by sail. am 56 and in my lifetime we have come to my buying computers to put on my boats. Last year my Excaliber II with four men caught 10 times the volume of fish that the highline dory longliner caught in Boston in the year we established records for the dory longline. That vessel had 37 men. We caught 10 times the fish with four men. We obviously need a strong examination of the effects of onrushing technology. The one thing I would beg most of you, because most of us hate change, is that we absolutely cannot and shall not shut off innovation. If and when we kill the spirit of innovation in the fishery, we surely will have killed the last of the hunters. You don't kill innovation and you don't kill ideas. Almost 2,000 years ago we strung a man up who was 33 years old because he was different. I would submit that if that man came back today it wouldn't take us 33 years to catch up to him. Don't kill the innovators.

Al Guimond, New England Fishery Management Council: I want to remind everyone that Congress is looking at the Magnuson Act for reauthorization. They are looking at all segments of it, but specifically in the area of limited entry. Whatever your viewpoint is, remember that something is going to be done about this on a national level in the next couple of months and whatever your views are you should express them to your congressional representatives.

SUMMARY

Robert Jacobson, Moderator

Bob Schoning played a big role in this meeting. Bob is past director of the Oregon Fish Commission, past director of the National Marine Fisheries Service, and is now a senior policy advisor with NMFS based in Corvallis.

Robert W. Schoning, Senior Policy Advisor, Northwest and Alaska Fisheries Center, National Marine Fisheries Service Corvallis, Oregon

The theme was fishing for answers. We had many questions and lots of answers. There was much pertinent information. People who have been in the trenches shared their views. There was an excellent cross-sectional representation of experience and knowledge. The program committee deserves a commendation for the outstanding selection of speakers. The speakers earned our thanks for commenting in such a candid, forthright, understandable, interesting, and informative manner.

We learned about limited entry from as far away as Australia, as close as Washington and California, with Alaska, Canada, and the East Coast of the United States thrown in for good measure. We covered finfish, shellfish, crustacea, lines, pots, and nets, and heard from fishermen, processors, managers, support industry operators and fishery agency leaders. There are successes and failures, winners and losers, supporters and opponents.

I will cover some highlights as I noted them; inadvertently, some will be missed. We heard why limited entry is worthy of discussion and evaluation at this time. There are some serious problems in several fisheries relating to resource abundance, overcapitalization of the fleet, or economics. Fishermen, processors, suppliers, managers, and coastal businessmen are having difficulties. Various approaches to limited entry have been tried elsewhere. There is increasing interest in knowing more about it at the fishermen's level.

We were told what limited entry is and ways it can be and should not be used. There were several points on which there seemed to me to be general agreement. I will summarize them. Nothing is perfect and limited entry is no exception. It does not in itself preclude or eliminate overcapitalization. It is not a panacea, but a tool that can be used in some circumstances with other tools. It can vary greatly in its use and value. It is not really to protect stocks in most cases, as that is usually done in other ways. Fishermen's needs, more than resource needs, are addressed by it. In most cases, limited entry is designed primarily to make the fishery more profitable and orderly for those in it and to provide for optimum economic benefit from the resource.

There is not total satisfaction with any limited entry program anywhere. It is not simple and no one with experience says it is. There is far too much catching capacity in many existing fisheries. Various ways to improve the situations should be examined in the interests of the resource, the fisherman, the processor, the consumer, and the manager.

Limited entry has been proposed or tried under many circumstances for a variety of reasons. Some of the objectives were:

To limit or prohibit new vessels from entering a specific fishery.

To reduce the number of vessels already involved.

To improve the quality and marketability of the product.

To reduce administration by government.

To improve net profit to fishermen.

To simplify regulations and permit a more orderly fishery.

To permit some fishing which might otherwise not occur.

To optimize economic benefit to the state.

Some results in one or more fisheries were:

Upgraded the catching capacity of vessels, individuals, or the fleet.

Increased the numbers of vessels in specific fisheries; restricted entrance or participation in others.

Increased administration for fishermen and government.

Made regulations more complicated; simplified them in others.

Caused fishing under more difficult, trying, or hazardous conditions.

Reduced profits; also, increased profits.

Complicated enforcement.

Reduced wastage.

Permitted some fishing where it might not otherwise have occurred for non-biological reasons.

Created significant value for some fishing permits.

Stabilized effort in specific selected fisheries.

Provided for more orderly and resource-efficient harvest and utilization.

Maximized economic profit to the state.

Benefited fishermen with permits.

It has been said, "If it ain't broke, don't fix it." Assess the advantages and disadvantages of the present management regime for any specific fishery and determine how long you can be content with the status quo until trying to change it in a rational way. If you are content, leave it. If not, evaluate limited entry and other approaches for potential improvement. Don't change unless you have something that really looks to be better and there is a good chance it will work. Don't initiate limited entry just for limited entry's sake.

Let me review some things that have happened. Examples of fisheries were given in which entire seasons were 10 minutes, a few hours, one day, 10 days, or in which two boats are capable of catching the entire annual quota, but 176 are now licensed. In still another, only very few of the permittees fished in an extremely brief season in a restricted area to minimize chaos. Costs and profits were shared by all permittees. Permittees in some fisheries stayed ashore and leased their permits to others for specific seasons. These situations are far more complicated than merely unrealistically short fishing periods during which surprisingly large catches are made by unnecessarily excessive effort.

benefits probably will take many years, indeed, if they ever accrue. Some approaches to limited entry were tried and later prohibited by the courts. They should be remembered in future efforts. Have tight qualifications and requirements initially and loosen them as appropriate as the program develops rather than starting with few limitations and having to become more restrictive to correct for problems that develop. Carefully evaluate the merits of vessel or fishermen permits, the pros and cons of permit transferability, and associated specifics. Provide for self-supporting buyback programs for possible use and consider funding them through the potential benefactors, the fishermen.

A moratorium is a reasonable start toward limited entry. If limited entry is tried, it must have industry support, and preferably it should originate with industry. Essentially all programs that have had some success originated with industry, and industry has maintained a significant role in the administration and policy decisions. The National Marine Fisheries Service, the Pacific Fishery Management Council, and the Oregon Department of Fish and Wildlife expressed a desire to work with industry, whichever way it wishes to move with limited entry, but the impetus and direction must come from the industry.

In planning the conference, we did not try to get a consensus for or against any aspect of limited entry at this meeting and we did not get one. I don't know how many, if any, had their positions on limited entry changed as a result of this program. Some probably will never change from being for or against it, but maybe that is not as important as being well-informed about the subject and having a sounder basis for your beliefs, whatever they are.

I am impressed that during the past two days we discussed an extremely sensitive issue in a rational, controlled manner and became better informed in the process. I compliment all of you for your efforts and Bob Jacobson for his leadership in bringing this about.

I understand there were 184 registrants. Speaker selection and presentation, attendance, audience interest and participation, and program organization, coordination, and monitoring are factors in a successful conference. I think this has been a successful conference. I am convinced all of us are better informed that when we came here yesterday morning.

Much food for thought was offered. Take it home and chew on it. We wanted to whet your appetite with factual information from experienced practitioners. That has been done. Now tell us what you would like as a next step, if any.

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