

January - December 1984

Annual Report of Program Accomplishments



New York Sea Grant
Extension Program
Fernow Hall
Cornell University
Ithaca, New York 14853
607-256-2162

1984 ANNUAL REPORT OF ACCOMPLISHMENTS AND ACTIVITIES

LOAN COPY ONLY

INTRODUCTION

New York's coastline is comprised of approximately 600 miles along Lakes Erie and Ontario and the St. Lawrence River and 1800 miles along the Atlantic Ocean and tidal Hudson. With more than 14 million residents in counties contiguous to those coasts, educational opportunities abound.

The anecdotes included in this report were selected from more than 650 discrete activities and accomplishments. These were synopsized from monthly narrative reports of the 20 professional staff in the New York Sea Grant Extension Program. These professional staff plus support staff and at least 200 volunteers from along the coasts comprise the people power of the program. Through their efforts, more than 80,000 direct audience contacts were made with literally millions of other persons receiving information through mass media.

It should be made clear that no attempt was made to fully describe all 1984 program efforts. Rather, we have attempted to portray sample educational program approaches and the nature of our impact. A complete description of our major program methods and priorities is included in our Situation Statement and Program Plan. A complete bibliography of current educational materials also is available. These documents plus sources of additional details on our program activities are available through: New York Sea Grant Extension Program, Cornell University, 12 Fernow Hall, Ithaca, New York 14853 (607)256-2162.

This report was developed by Bruce DeYoung, Program Coordinator with substantial assistance from Sea Grant Specialists: John Scotti, Robert Buerger, Charles O'Neill, Jr., Jay Tanski, Kenneth Gall, H. David Greene, Christopher Smith, Glenna Ryan, Stephen Lopez, Stephen Brown. Editorial leadership for this report was provided by Judy Cohen, with assistance from Eileen Brennan, Sue Milowski and Marion Hovencamp, Sea Grant Administrative Assistants.

TABLE OF CONTENTS

| | Page |
|--|-------|
| Introduction | 1 |
| Program Overview | 2 |
| Location Map | 3 |
| Educational Program Anecdotes: | |
| "Public Involvement In Coastal Issues" | 4 |
| "Lake Ontario Leadership Development" | 5 |
| "Expanding University Involvement in Coastal Issues" | 6 |
| "Enhancing Coastal Tourism And Recreation" | 7 |
| "Seafood Marketing Education" | 8 |
| "Coastal Youth Education" | 9 |
| "Eroded Hopes - Eroded Dreams" | 10 |
| "Organizing To Save Shinnecock Inlet" | 11 |
| "Tuna Handling Tips" | 12 |
| Synopsis Of Activities/Accomplishments By Subject Area | 13-37 |

PROGRAM OVERVIEW

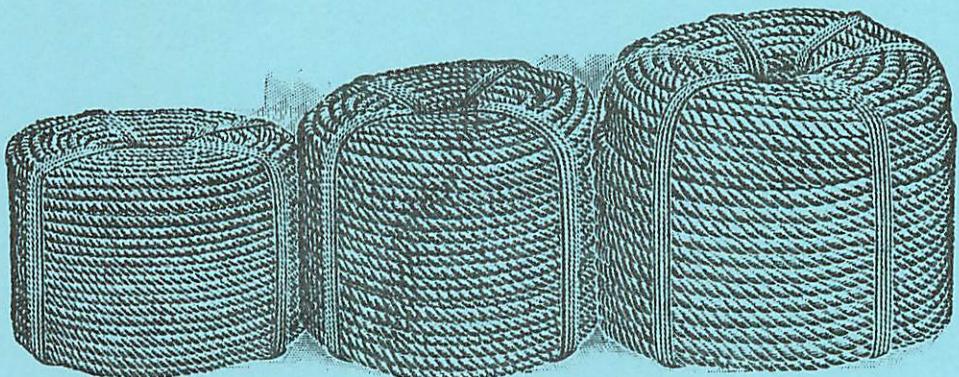
The National Sea Grant mission to enhance appropriate use of marine and Great Lakes coastal resources is carried out in New York State by the New York Sea Grant Institute. The advisory service effort called for in Sea Grant's enabling legislation is conducted in New York State through Cooperative Extension employees of Cornell University.

The role of the Sea Grant Extension Program in New York is to carry out educational efforts that will help coastal residents, users and decision makers resolve current and projected problems, while developing and conserving coastal resources. To carry out this role the Extension Program:

- Transfers knowledge to persons who can use it to solve coastal problems.
- Stimulates appropriate persons to apply this knowledge to solving problems.
- Stimulates researchers to generate knowledge needed to solve coastal problems.

These roles are carried out by:

- Identifying problem-solving educational programs and activities with: commercial fishermen, marine recreation industries, seafood processors and handlers, consumers of marine foods, marine mining industries, coastal property owners, marine recreationists, urban minority youth, and others.
- Maintaining and further developing working relationships with other agencies and groups so resources are used efficiently and programs are implemented effectively.
- Assisting in developing the directions of future Sea Grant research efforts so they are in accord with needs of the coastal users and the welfare of society.



Sea Grant Extension Program Office Locations, Personnel and Major Program Emphases

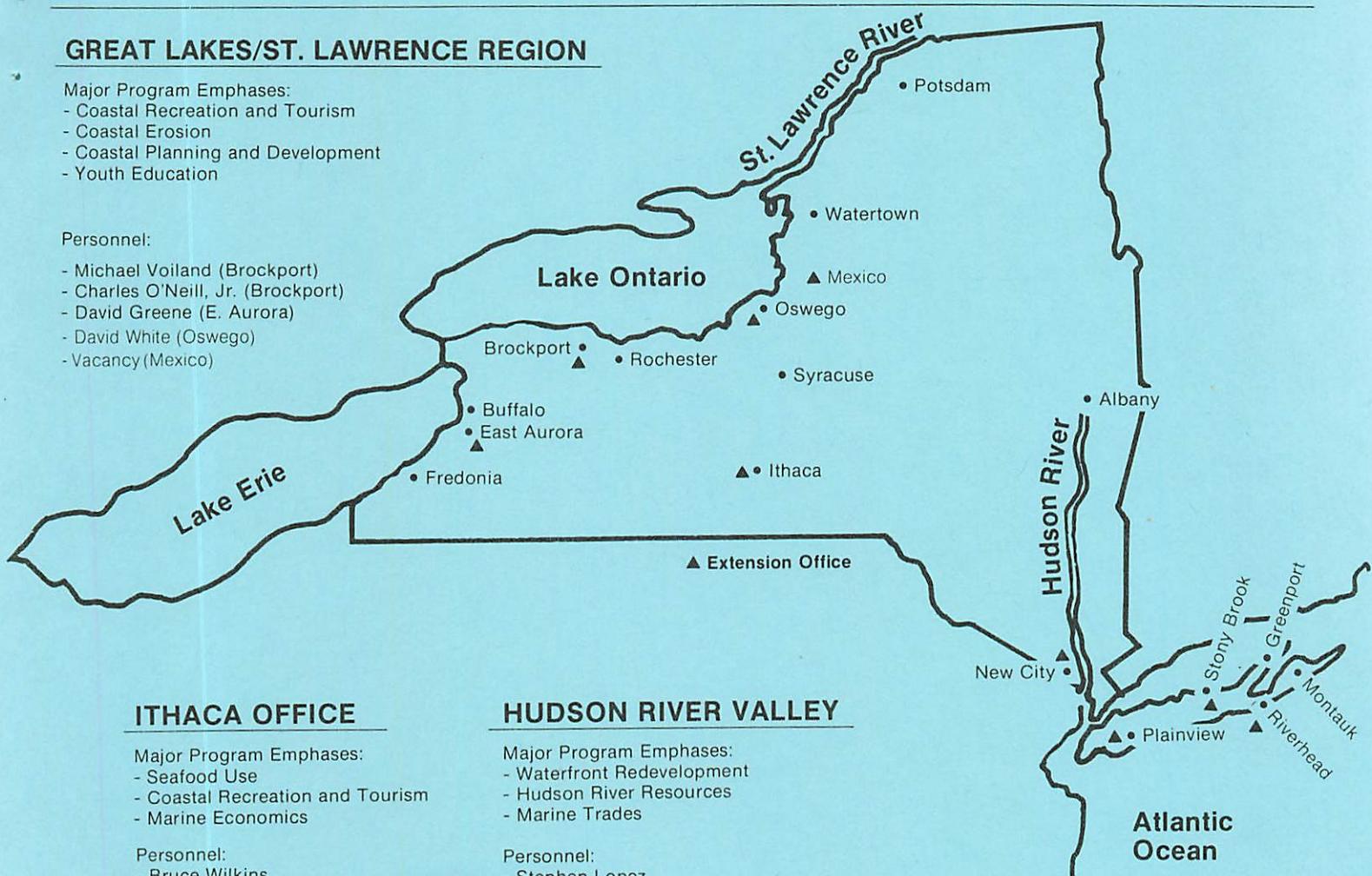
GREAT LAKES/ST. LAWRENCE REGION

Major Program Emphases:

- Coastal Recreation and Tourism
- Coastal Erosion
- Coastal Planning and Development
- Youth Education

Personnel:

- Michael Voiland (Brockport)
- Charles O'Neill, Jr. (Brockport)
- David Greene (E. Aurora)
- David White (Oswego)
- Vacancy (Mexico)



ITHACA OFFICE

Major Program Emphases:

- Seafood Use
- Coastal Recreation and Tourism
- Marine Economics

Personnel:

- Bruce Wilkins
- Michael Duttweiler
- Glenna Ryan

HUDSON RIVER VALLEY

Major Program Emphases:

- Waterfront Redevelopment
- Hudson River Resources
- Marine Trades

Personnel:

- Stephen Lopez

LONG ISLAND

Major Program Emphases:

- Commercial Fishing
- Seafood Marketing
- Seafood Technology
- Coastal Erosion
- Coastal Recreation and Tourism

Personnel:

- Bruce DeYoung (Riverhead)
- John Scotti (Riverhead)
- Chris Smith (Riverhead)
- Jay Tanski (Stony Brook)
- Robert Buerger (Stony Brook)
- Ken Gall (Plainview)

PUBLIC INVOLVEMENT IN COASTAL ISSUES

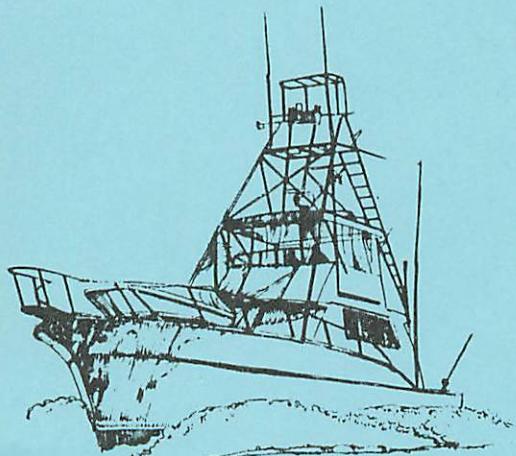
Sea Grant forms a vital link between coastal resource users and decision makers responsible for managing them. Tidal inlets are one of the most important natural and economical resources on Long Island's south shore. Inlets provide access to the open ocean for thousands of commercial and recreational boats annually generating millions of dollars of revenue. Due to the dynamics of the shoreline, these inlets are naturally unstable. Shifting and shoaling of these channels pose serious navigation problems for a diversity of user groups.

This year the Captree Boatmens Association (CBA) requested Sea Grant's assistance on problems being encountered at Fire Island Inlet. One of the most heavily used inlets on Long Island, it suffers from shoaling of its navigational channel. At the request of the CBA, Sea Grant organized several meetings of representatives from affected charter and party boat operations, commercial and recreational fishermen and pleasure boaters.

As a result of these meetings, marine leaders formed the "Coalition for the Stabilization of Fire Island Inlet" to unify and direct efforts to remedy the problem. Sea Grant assisted this group of 100 organizations and businesses by providing technical information on physical processes affecting the inlet, methodologies for determining the problem's economic impact and the public decision-making process. The Coalition used this information to document economic losses.

Working in conjunction with an area congressman, Sea Grant arranged a "Coalition" meeting with appropriate local, state and federal officials to present their findings and discuss alternative solutions. Within a month of the meeting the Army Corps of Engineers resurveyed the inlet to initiate plans for interim dredging to rectify the problem before the next boating season. A citizen's advisory committee was also formed to involve inlet users in the planning and design phases of a long term dredging program for the inlet.

By opening up lines of communication, Sea Grant helps coastal resource users to become more involved in the public decision-making process while giving agency managers a better understanding of their needs.



LAKE ONTARIO LEADERSHIP DEVELOPMENT

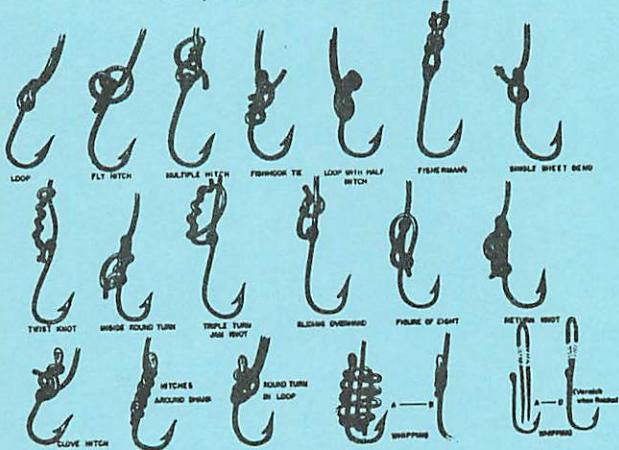
During 1982-83, a major educational effort was undertaken to develop a sportfishing exhibition directed at the growing Lake Ontario fishery. The exhibition was the result of increased demand by anglers for information on the Lake Ontario salmonid fishery. This new fishery (less than ten years old) had gained nationwide attention for the numerous trophy trout and salmon it was producing. Consequently, anglers from throughout the northeast were traveling to Lake Ontario to participate in the new fishery.

As a result of the growing attention to the Lake Ontario salmonid fishery, numerous new products and techniques were being developed for Lake Ontario angling. The Lake Ontario Sportfishing Exhibition was designed as an educational forum where new ideas and technology could be presented. From the outset Sea Grant viewed its role as a one-year commitment to demonstrate that such an event could be successfully undertaken. It was believed that after the first year another organization would be identified to take the program over and continue it into the future. The first annual Lake Ontario Sportfishing Exhibition (1983) proved a huge success.

As a non-profit organization the Oswego Maritime Foundation fosters maritime recreation, research and education. In 1983 the foundation was approached as a possible heir to the sportfishing exhibition due to their organizational objectives. Initially, the foundation executive board was hesitant to take on the job of organizing the sportfishing exhibition due to the magnitude of undertaking such a project. But the foundation agreed to organize the 1984 exhibition on a trial basis when the Sea Grant specialist who directed the previous exhibition agreed to assist in an advisory role.

As a result, the 1984 Forum attracted over 5,000 visitors and generated in excess of \$1,500 for future foundation activities. At the conclusion of the 1984 exhibition, the Oswego Maritime Foundation executive committee voted to continue their lead role in sponsoring the Lake Ontario Sportfishing Exhibition and make it their major annual educational program.

TIES for EYE and TAD HOOKS



EXPANDING UNIVERSITY INVOLVEMENT IN COASTAL RESOURCES

Anecdotal evidence reported over the past year supports the observation that low income families in New York State consume fish containing toxic chemicals in amounts exceeding the State Health Department's Advisories. Consumption guidelines are published each year in the New York State Fishing, Small Game Hunting and Trapping Regulations Guide. The Guide is available free wherever fishing licenses are sold.

Many low income audiences don't have access to the information because they may not read the Guide nor purchase a license. In addition, licenses are not required for fishing in the tidal zone of the Hudson River, that is below Poughkeepsie. Unfortunately, several fishery advisories pertain to this region's residents.

The Expanded Food and Nutrition Education Program (EFNEP) of Cornell Cooperative Extension involves low income families in a two year food and nutrition course, reaching populations not usually served by traditional communication channels. A series of three booklets on aspects of the Health Advisories were prepared by Sea Grant specifically for this statewide audience. The booklets were written for three low income audiences: the pregnant and/or nursing mother, the family member who catches and cleans fish, and the family member who cooks fish. The latest Health Advisories were listed in each booklet.

Over 600 copies of each of the booklets were distributed in New York State through EFNEP in 1984. Camera ready copy of the portions of the booklet containing more recent advisories were also made available to 57 counties in New York State. In addition, 6 agents and 27 aides representing 7 counties in Western New York were trained in methods to reduce contaminants in fish. They have access to about 700 low income families.

As a result of this effort, two graduate students in the Division of Nutritional Sciences at Cornell University have undertaken related thesis topics. They will be quantifying the number of EFNEP families in representative counties who prepare fish at home, the types of fish they eat, how often and how much they eat, how the fish are prepared and who in the family eats them. The result will be a clearer profile of the families at risk. In addition, the students will investigate the general awareness of Health Advisories by this audience and assess the economic impact of putting the advisories into effect.

By exposing university faculty and staff to coastal resource problems, Sea Grant can multiply its impact on these. In this case, Sea Grant involved dozens of professionals who could voluntarily deliver education needed by the audience to maintain longer termed health.

EXPANDING UNIVERSITY INVOLVEMENT IN COASTAL RESOURCES

Anecdotal evidence reported over the past year supports the observation that low income families in New York State consume fish containing toxic chemicals in amounts exceeding the State Health Department's Advisories. Consumption guidelines are published each year in the New York State Fishing, Small Game Hunting and Trapping Regulations Guide. The Guide is available free wherever fishing licenses are sold.

Many low income audiences don't have access to the information because they may not read the Guide nor purchase a license. In addition, licenses are not required for fishing in the tidal zone of the Hudson River, that is below Poughkeepsie. Unfortunately, several fishery advisories pertain to this region's residents.

The Expanded Food and Nutrition Education Program (EFNEP) of Cornell Cooperative Extension involves low income families in a two year food and nutrition course, reaching populations not usually served by traditional communication channels. A series of three booklets on aspects of the Health Advisories were prepared by Sea Grant specifically for this statewide audience. The booklets were written for three low income audiences: the pregnant and/or nursing mother, the family member who catches and cleans fish, and the family member who cooks fish. The latest Health Advisories were listed in each booklet.

Over 600 copies of each of the booklets were distributed in New York State through EFNEP in 1984. Camera ready copy of the portions of the booklet containing more recent advisories were also made available to 57 counties in New York State. In addition, 6 agents and 27 aides representing 7 counties in Western New York were trained in methods to reduce contaminants in fish. They have access to about 700 low income families.

As a result of this effort, two graduate students in the Division of Nutritional Sciences at Cornell University have undertaken related thesis topics. They will be quantifying the number of EFNEP families in representative counties who prepare fish at home, the types of fish they eat, how often and how much they eat, how the fish are prepared and who in the family eats them. The result will be a clearer profile of the families at risk. In addition, the students will investigate the general awareness of Health Advisories by this audience and assess the economic impact of putting the advisories into effect.

By exposing university faculty and staff to coastal resource problems, Sea Grant can multiply its impact on these. In this case, Sea Grant involved dozens of professionals who could voluntarily deliver education needed by the audience to maintain longer termed health.

ENHANCING COASTAL TOURISM AND RECREATION

Developing Local Lifesaving Capability

In Rockland County, a river patrol covering the thirty-three mile Hudson River waterfront was abandoned for lack of funding. The county's legislature and Sheriff hoped to one day bring back the service.

In 1983, the County Sheriff's office contacted Sea Grant for assistance. Through Sea Grant efforts a source of funds to purchase a \$24,000 boat were identified, as well as free berthing space at a local marina. Because there were no funds to hire additional law enforcement personnel, volunteer officers were reassigned to the new river patrol.

In its first year of operation, the patrol has saved one life and assisted numerous boaters and marina owners. According to Rockland County Cooperative Extension Board Member, Felix Matusky, "the one life saved - not only in the value of the life itself - has saved the county money. It costs more to mount a full scale search with divers for one body than the entire first year start-up cost of the river patrol program. Though it is unpleasant to think of a monetary value to a life, it is necessary to make this point to convince county legislators of the value of the river patrol program."

This river patrol program is planned to be continued with joint funding from the State and Rockland County. Although Sea Grant is not directly involved in saving lives, it can create this capability through problem solving education.

Bed and Breakfast Businesses Blossom

The Bed and Breakfast (B&B) lodging concept is catching on in Northern New York State. This concept consists of owners of private houses renting excess bedroom space for lodging to visitors for short periods of time. A breakfast is typically provided to seasonal tourists, who are often anglers in search of sportfishing. The seasonality of freshwater fishing often precludes the construction of new motel lodging. So the B&B provide extra income to the local economy while accommodating visitors' lodging needs.

After Sea Grant conducted two inservice training programs for Cooperative Extension staff, six county based extension programs were conducted on "Opening a Bed and Breakfast Business in Your Home". Over 250 people attended these workshops and learned various aspects about a Bed and Breakfast business. Topics included the rules and regulations that affect the business, how to operate a B&B and some personal considerations one needs to evaluate before opening a B&B.

Since almost one-third of those attending workshop sessions are evaluating the feasibility of opening a B&B, a second generation of programs are being planned for those who feel that a B&B is for them. Soon B&B's will crop up with a yield of more tourist dollars for the economy and a new lodging option for the visitor.

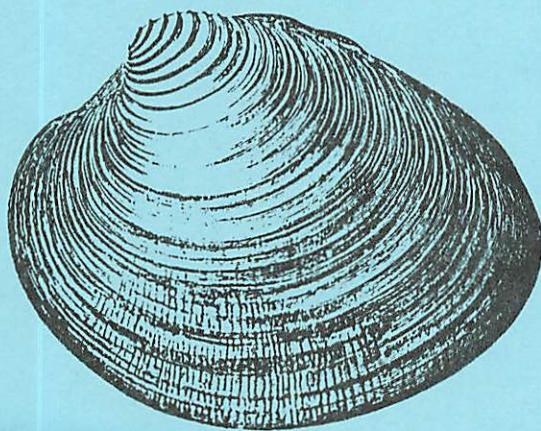
SEAFOOD MARKETING EDUCATION

Effective marketing strategies and sensible business practices are critical to the success of small seafood markets in the highly competitive New York marketplace. With over 700 independent seafood retail businesses and supermarkets in the New York Metropolitan area, some are interested in learning new ways to enhance their image and services.

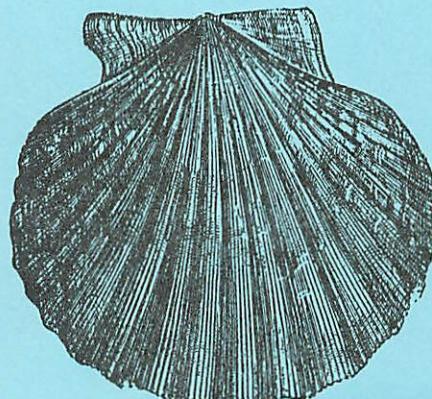
With Sea Grant assistance, a group of retailers formed a Seafood Retail Merchants Committee of the Long Island Fisherman's Association. This group strengthened communication between the commercial harvesting and retail sectors of the regional seafood industry. The Committee also provided an organized group of retailers interested in improving seafood marketing practices and product quality.

To promote their products and stimulate sales of less traditional species, the Retail Merchants Committee requested Sea Grant assistance in organizing in-store demonstrations and consumer education initiatives. Sea Grant developed and coordinated a program to train volunteers to conduct seafood demonstrations in retail stores. Sea Grant assisted in securing funds to continue this effort under sponsorship of the Mid-Atlantic Fisheries Development Foundation. Twelve demonstrations were conducted in seafood markets on Long Island. Retail sales of the product presented at each demonstration immediately increased by up to 50% at those stores.

This marketing program provides a unique opportunity for retail markets to enhance their merchandizing efforts while educating their consumers. Because more retail business requests for this service are expected, a self-sustaining network of volunteer demonstrators is being developed by the Retail Merchants Committee, with Sea Grant assistance.



Quahog



Scallop

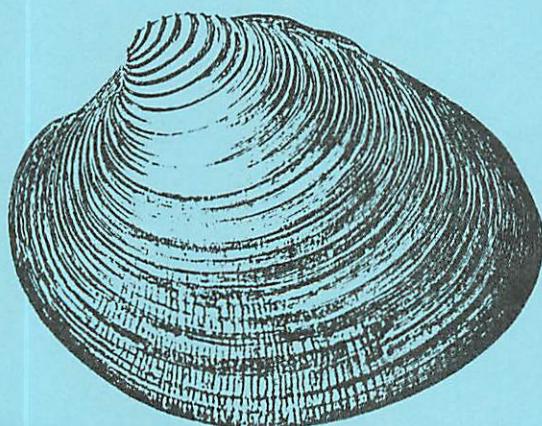
SEAFOOD MARKETING EDUCATION

Effective marketing strategies and sensible business practices are critical to the success of small seafood markets in the highly competitive New York marketplace. With over 700 independent seafood retail businesses and supermarkets in the New York Metropolitan area, some are interested in learning new ways to enhance their image and services.

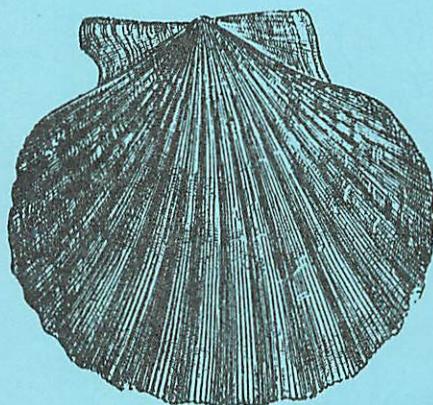
With Sea Grant assistance, a group of retailers formed a Seafood Retail Merchants Committee of the Long Island Fisherman's Association. This group strengthened communication between the commercial harvesting and retail sectors of the regional seafood industry. The Committee also provided an organized group of retailers interested in improving seafood marketing practices and product quality.

To promote their products and stimulate sales of less traditional species, the Retail Merchants Committee requested Sea Grant assistance in organizing in-store demonstrations and consumer education initiatives. Sea Grant developed and coordinated a program to train volunteers to conduct seafood demonstrations in retail stores. Sea Grant assisted in securing funds to continue this effort under sponsorship of the Mid-Atlantic Fisheries Development Foundation. Twelve demonstrations were conducted in seafood markets on Long Island. Retail sales of the product presented at each demonstration immediately increased by up to 50% at those stores.

This marketing program provides a unique opportunity for retail markets to enhance their merchandizing efforts while educating their consumers. Because more retail business requests for this service are expected, a self-sustaining network of volunteer demonstrators is being developed by the Retail Merchants Committee, with Sea Grant assistance.



Quahog



Scallop

COASTAL YOUTH EDUCATION

Sportfishing Clubs

Like many other youth groups, 4-H has a problem holding the interest of older teens, especially males. Sea Grant recognized the universal appeal of fishing and the wealth of volunteer adults potentially available through sporting clubs. Collaboration of Sea Grant with the Natural Resources 4-H program specialists and agents throughout the state has created a new project area with seemingly unlimited potential.

Bob Kent, 4-H agent from Suffolk County, gave a name to the idea; Sportfishing Clubs. Sea Grant gave a big push by organizing an In-Depth Week Course at Cornell to design the project and assess needs. A small grant to Suffolk County made possible by the Coastal Issues program of Sea Grant Extension gave birth to two highly popular sportfishing camps.

Across the state the idea took hold. On Lake Erie a \$300 donation by a civic club launched its own version of a sportfishing club. On Lake Ontario, ice fishing was the hook to catch new members.

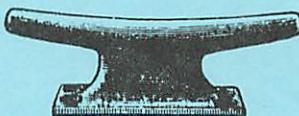
New youth and adults are being drawn into 4-H to take advantage of what Sea Grant and Cornell can offer. The benefit will be a better informed fishing population of the future.

Courtesy is Contagious Program Spreads

This year the "Courtesy is Contagious" 4-H Hospitality Training material was developed and distributed to county extension personnel, school districts, business colleges, universities, and chambers of commerce.

As part of this effort, a slide presentation entitled "Courtesy is Contagious in 4-H" was developed and presented at the Statewide 4-H Conference and at a Western New York 4-H Agents meeting. The slide presentation portrayed the value and importance of demonstrating good hospitality skills. Written resources accompany the slide set as part of a hospitality training packet.

Now tourism business entrepreneurs, extension professionals and University educators throughout the state are recognizing the value of extension tourism/hospitality educational programming. For, this training package is enabling many people to conduct hospitality training programs in their respective regions.



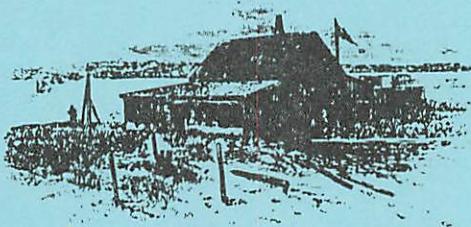
ERODED HOPES - ERODED DREAMS

Life on the coast can be far more trying than life inland. This truism was driven home quite forcefully for hundreds of Lake Ontario shoreline landowners this year when a Memorial Day nor'easter hit the coast on top of the year's high water peak. Some areas along Lake Ontario's western shore evidenced erosion losses of up to 15 to 20 feet of recession in only 24 hours! While no homes or cottages were lost, scores of them are now dangerously close to the water and could be severely affected in future storms. Numerous old or poorly constructed erosion control structures were also damaged or destroyed by this storm.

In response to the high level of landowner interest generated by this storm, two major information meetings (one in cooperation with Congressman John LaFalce) were sponsored by Sea Grant and attended by over 180 coastal landowners. Almost 100 field site visits were held, some in conjunction with the U.S. Army Corps of Engineers and/or N.Y.S. Department of Environmental Conservation. Many of these visits covered two or more properties. In some cases, there were viable low cost erosion control options which landowners could employ. In most situations, however, highly erodible shoreline soils and very short distances from water to house require some type of structural control measure. At a cost ranging from \$100 to \$250 or more per foot of shore to be protected, this is not a decision most people make easily or happily.

Follow-up discussions with landowners indicate that the majority decide to do nothing. Often they try to enjoy their property as long as it lasts, sell to some unsuspecting greenhorn, or put in some type of cheap, homemade (and, unfortunately, often ineffective) erosion control structure. A smaller number of folks (about ten percent) choose to build a scientifically designed structure based upon information received from Sea Grant. In these cases, the long term benefits of property value preservation and home protection far outweigh the investment in the structure. The Sea Grant information also often results in a less expensive, but just as effective, project being chosen.

This was the case, for example, with one landowner near Chimney Bluffs State Park, who changed his plans from a 200 foot long timber bulkhead (estimated at \$30,000) to another type of protection for about \$15,000. Informal feedback has shown that similar savings (from 10 to 50%) commonly occur after Sea Grant site visits and property owner use of our printed information.



ORGANIZING TO SAVE SHINNECOCK INLET

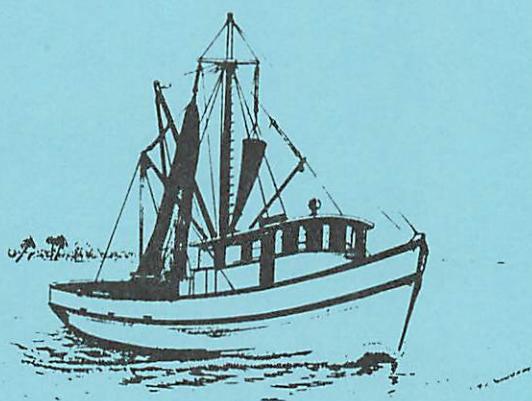
The Shinnecock Inlet commercial fishing center represents the largest, single fishing port in New York in terms of pounds landed. In 1984, over ten million pounds of seafood product were landed by commercial fishermen working out of Shinnecock. While it is a growing fishing port and community, the Shinnecock area is not without problems.

In 1984, a severe winter storm resulted in heavy shoaling at the Shinnecock Inlet mouth and extensive beach erosion adjacent to it. Commercial fishermen and their families were very concerned about the inlet's hazardous conditions and adverse economic effect resulting from lost fishing time. They sought Sea Grant's help to find a remedy to this hazardous situation.

The first action suggested by Sea Grant Specialists was that of establishing an organization to focus public attention on the situation. This resulted in the formation of the Shinnecock Fisherman's Wives Association composed of twenty-five area fisherman's wives. This association was able to engage the Army Corps of Engineers, local, state and federal officials in dialog.

After several meetings, it became clear that for improvements to occur the extent of economic loss had to be documented. To this end, Sea Grant developed a survey and collected information on the economic loss to both the commercial fisherman and marine trades community. This information was presented at a public hearing and subsequently used securing county and federal financial support for remedial dredging.

As a result of the above activities, the inlet was dredged in the summer of 1984, with plans for additional dredging in the spring of 1985. To further stabilize this important inlet, the Shinnecock Fisherman's Wives are either conducting or coordinating establishment of snow fencing, evergreens and dune rebuilding. By assisting these coastal residents to organize and gain access to key elected officials, Sea Grant helped the marine industry to help itself.



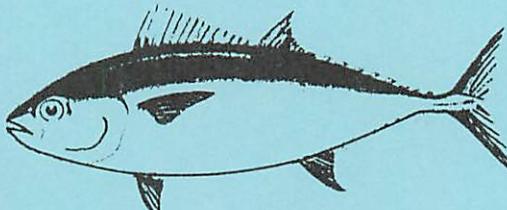
TUNA HANDLING TIPS

Late in 1983, it became apparent that human illness and needless waste of resources were occurring as a result of fishermen mishandling of large tuna caught offshore of Long Island, New York. The problem had several dimensions. For instance, the involved vessels were small, high-speed vessels without expensive blast freezing equipment. Since the predominant season of harvest was the summer, high air temperatures were conducive to meat spoilage. This meat spoilage not only made the product unmarketable but also potentially toxic. This resulted in the waste of fish sometimes worth as much as \$2,000 to \$3,000 each.

To address this, Sea Grant Extension Staff initiated educational efforts to improve handling of tuna fish by fishermen. This effort included production of a "How-To" booklet detailing methods to handle these fish to ensure a fresh, healthful food commodity. Workshops were presented dockside, at club and association meetings using the booklet to illustrate these techniques in detail.

The educational booklet developed by Sea Grant was distributed to 700 fishermen during 1984. A subsequent evaluation assessed the usefulness of the booklet and effectiveness of this handling method. Twenty-five percent of the individuals receiving the booklet returned their evaluation cards. These individuals indicated that a total of 32,783 pounds of tuna were successfully marketed as a result of using this handling method. This translates to between \$136,000 and \$619,000 in regional economic activity as a result of this educational effort.

Future goals in this topical area include production of a videotape visually detailing these handling methods. This tape will be used to further educate fishermen on how to handle tuna offshore to ensure a healthful food item and a marketable commodity. Additionally, research investigation and field trials on alternative preservation techniques are being planned for 1985.



Bluefin

COASTAL EROSION

--A Sea Grant specialist wrote an article on identifying erosion processes and possible control techniques published in the March issue of Nassau and Suffolk Living (circ. 13,000). This is the initial installment of a series of articles on erosion and erosion control that will appear. Another Sea Grant specialist wrote an article on vegetation for the May issue.

--A Sea Grant specialist performed 2 site visits and provided 6 homeowners with information on erosion control; provided a County Legislator with materials on impacts of marinas; provided a marine supplier with information on a new galvanizing technique.

--After a follow-up request from the vegetation workshop in October, Sea Grant specialists and SCS personnel met with an NPS representative at the Gateway National Recreation Area in Queens to examine options for protecting the badly eroding Plum Beach area. Although they have been trying vegetation in conjunction with tire groins and breakwaters, the area was not ideal for vegetative treatment. Information was provided to them on different dune building techniques, aided in evaluating potential effects of nearby dredging project, and offered alternatives to increase the efficiency of the existing structure.

--A Sea Grant specialist met with a CRD specialist in Suffolk County and a representative from SCS to develop a directory listing agencies and institutions involved in erosion and erosion control and their responsibilities for homeowners and local government officials. The revised version of the erosion control directory was well received by members of the coastal vegetation steering committee. The agencies involved ordered a total of 1200 for distribution to their clientele.

--15 Lloyd's Neck shorefront property owners received a short evening seminar on erosion processes acting on their bluffs and some of the alternatives available for erosion control. This area has all the problems--toe erosion, ground water, surface runoff. After this presentation and discussion, the owners decided to tackle the toe erosion first and narrowed the options to a bulkhead or revetment.

--The first AMI boat show went well, and at the request of one of the coordinators a Sea Grant Specialist provided information on evaluating this year's event and will be working with them to find ways to strengthen the next show. The president of the AMI also introduced the specialist to Congressman Carney saying Sea Grant has been a big help to their association and industry.

--3 Long Island marinas received small business energy audits. While the Suffolk energy specialist has been doing these audits for other small businesses, these were the first done for any marine industries. It is hoped that the results of these audits on the marinas can be used as the basis for programming on reducing costs at marinas.

--Working both sides of the fence, information on north shore erosion processes and sediment transport were provided to U.S. Coast Guard for a proposed bulkheading project at Eaton's Neck and the CMP who is opposed to the project.

--40 residents of Oak Beach received a presentation on the processes causing erosion on their property at Fire Island Inlet. Unlike most barrier island inhabitants their problems are the result of tidal current scouring rather than waves. The talk was well received with the high level of interest reflected in a 30 minute question and

answer period. One attendee commented that it was the first time anyone explained the situation in terms they could understand and another requested the specialist act as an interpreter when they discussed potential dredging projects with the COE.

--As the result of a meeting arranged between Art Lieberman and members of the CVSC on Art's upcoming bulletin on coastal plantings CVSC members will have the chance to review the manuscript and provide input on the content. He not only received technical information and photos but was also very pleased with the feedback on the more practical aspects involving cost, format, number, etc. and will use the suggestions in developing the bulletin.

--Sea Grant provided 7 homeowners with information on erosion control structures including representatives of 3 homeowners associations with memberships totaling over 400 people.

--9 homeowners and 1 landscape contractor received information on erosion and erosion control. Ten members of a north shore homeowners' group received a shoreline tour and informal seminar on erosion processes and control methods in their area. Alternatives for structural and non-structural techniques were discussed and information on maintenance of structures and physical processes were distributed. The group is going to re-evaluate its present practices and if warranted (it will be) make the necessary changes.

--Sea Grant arranged a tour with members of an Ulster County environmental group and a legislative aide to determine the extent of the erosion problem along the Hudson River and tributaries in that area. Although it provided some info on possible erosion control techniques, it quickly became apparent flooding rather than erosion was probably a more significant problem for the community to be considering.

--Eighteen participants representing Suffolk County Soil & Water Conservation, DEC, SCS, US Fish & Wildlife Service, NPS & Suffolk & Nassau County Extension received training on evaluating coastal erosion sites for vegetative treatment at a Sea Grant workshop.

Indoor sessions and site visits led by Sea Grant and SCS illustrated what vegetation and structures can and can't do. At a subsequent Coastal Vegetation Steering Committee meeting, DEC and USFWS indicated they will use this info gained at the workshop in evaluating permits and formulating alternative erosion control measures. The DEC is also going to incorporate the methods and principles discussed into training programs for new employees.

--The 5-8' storm surges and gusts of up to 85 MPH associated with the March 28th storm on Long Island resulted in both Nassau & Suffolk Counties being declared disaster areas with over \$70 million in damages. Although most of the damages were from flooding, Sea Grant received over 40 calls for information on erosion and erosion control from individuals, community groups and local governments. After numerous site visits, a Sea Grant Specialist was able to put together a package of basic info that assisted homeowners in answering the most common questions. Already, at least 3 individuals have made decisions regarding erosion control based on Sea Grant info (1 decided to replace \$25,000 bulkhead, 2 others are going with vegetation). More calls are expected when summer people come out and see what the storm did to their properties.

--At the request of the State Park Commission a specialist coordinated a meeting for 3 park officials and a SUNY researcher to study options for relieving coloform problems at Zach's Bay swimming area. The objective of this meeting was to determine what information was needed to determine the best alternative. As a result, a small-scale, low-cost study of the circulation and bathymetry will be done by SUNY in June. This information will be used to evaluate other more environmentally and economically sound alternatives. It was very gratifying to have the park officials come back to Sea Grant for help, even after we had shown them their first stab at the problem was impractical.

--Based on information and materials received at the Sea Grant vegetation site selection workshop held in February, the DEC has computerized the vegetative potential index on their main computer in Albany. While it will not be fully operational for 6-12 months, this effort indicates that the DEC and other agencies value and use the ideas and information presented at these educational events.

--During a site visit a potential coastal homeowner found the average recession rate was 1-2' per year in the area where he was planning on purchasing a \$80,000 house that was only 12' away from the edge of the bluff. He definitely used this Sea Grant information when he decided not to purchase the north shore house. Another homeowner has decided to modify plans for his proposed \$250,000 home based on the identification of a severe groundwater during another site visit. He has already acted by planting beachgrass in several smaller exposed areas and is contemplating a drainage system.

Finally, a third homeowner has incorporated Sea Grant information regarding protection from toe scour into the design of a low-cost (\$50-\$150 per yard) gabion structure he is installing on his property.

--A Westhampton property owner who contacted the Sea Grant office with questions regarding vegetation and dune building was able to save \$1500 by deciding against planting a newly created dune on her property. Not only was the planting suggested by the contractor unnecessary but he also proposed to do it at a time when survival would be minimal.

--A yacht club's questions were answered regarding certification of a boat crane. The information allowed them to avoid an unnecessary inspection of the equipment. The club was a repeat customer that had used materials previously provided to design and build two floating docks.

--Representatives from a Lido Beach condo group and a beach maintenance contractor received a site visit and information on dune building for a \$7,000 dune rehabilitation project they are undertaking. After the meeting they used the information to revise the plans to include a walkway over the dunes, move the proposed duneline away from the buildings, make one continuous dune rather than several smaller ones, and plant beach grass rather than shrubs.

--As a result of erosion control programming, one homeowner's association is initiating the use of beachgrass and fencing for erosion control while another 100 member association has already installed a diversion berm and added a fence and walkway on a bluff after a Sea Grant visit. The latter is now looking at vegetation for the bluff face. Additionally, a homeowner has decided to incorporate filter cloth in his new bulkhead.

--A Sea Grant specialist worked with an Agriculture Program Leader in Nassau County to co-produce a slide/tape program on the topic of biotechnical erosion control. The product planned is a 15 minute piece suitable for introducing local government officials, homeowners and others to the subject with optional personal presentation, written material, site visit or other backup.

--The "Coastal Processes of the Lower Hudson River" conference was attended by 35+, including private consultants, marine contractors, elected & appointed officials, yacht club members & marina owners. A quick review of evaluations, in addition to verbal comments indicate that the conference was well received and that attendees do generally plan to use what they learned. Projects included an environmental impact statement for a new US Navy facility on Staten Island, a multimillion \$ mixed use waterfront development plan, a local park erosion control project, a yacht club bulkhead reconstruction project and a marina aquatic plant management problem.

--NYS Dept. of State staff were provided material on coastal vegetation advisories for the marine district coastline. The material, as reported in City Shores, July/August '81, will be used with various audiences to educate them on "non-structural" shore erosion control techniques.

--The Irondequoit Bay Technical Planning Committee has developed an erosion management plan. They have included plans for detailed soil survey which was suggested by a Cornell faculty member introduced to the committee through a summer 1984 erosion tour/training school arranged by Sea Grant.

--A videotape documenting a two year field test of vegetative protection of bluffs on Lake Ontario now is available.

--Seven Sea Grant programs in other states have requested our newly released "Stabilizing Coastal Bluffs with Vegetation" videotape.

--A seven month followup survey of real estate appraisers who attended our erosion workshop indicated that half of those attending had used information provided in making appraisals and only one person (out of about 20) indicated the information was not useful.

--The first of two Cornell Cooperative Extension Information Bulletins on erosion was drafted and sent out for review.

--A property owner with a major erosion problem likely will install drainage and use slope grading and stabilization to retard bluff retreat.

-- Due to high lake levels and spring storms, on Lake Ontario, numerous telephone and mail requests for erosion control information were responded to and almost 100 in-the-field site visits were conducted.

-- A team of specialists and faculty preparing for fall educational programs on Lake Ontario erosion were provided a tour of erosion processes along Lake Ontario.

--31 regional staff of the Department of Environmental Conservation were provided an overview of biotechnic erosion management at the request of the Regional Permit Administrator.

--A series of radio spots on erosion was aired by Cornell's Consumer Information Network. Such releases typically are aired by more than 40 stations throughout the Northeast.

--16 staff members from the N.Y. Dept. of Environmental Conservation, Soil Conservation Service, county planning departments and environmental management councils participated in a 2-day erosion management school and tour. Immediate results included increased referrals from DEC offices, and SCS commitment to experiment with beach grass plantings, and initial explorations of forming a permanent team to deal with erosion problems.

--A slide/tape program entitled "Impacts of Coastal Erosion on Real Property Value" was prepared and will be distributed as a Great Lakes Network product.

--A Cornell landscape architecture class was provided a tour of Lake Ontario erosion sites.

--Based upon information provided in 2 site visits, a property owner has decided to install a 200+ foot gabion bulkhead above the winter ice mark.

--A Sea Grant specialist is serving on the Irondequoit Bay Technical Planning Committee to help develop an approach to protecting the Bay's highly erodible slopes.

COASTAL RECREATION & TOURISM

--From information gained from Coastlines the South Carolina Sea Grant Marine Extension Program contacted a Sea Grant specialist for further information on establishment of the Hudson Valley Marine Trades Association. Information provided on questionnaires will be used to stimulate greater participation of South Carolina marinas in a statewide marine trade association there.

--A developer for neglected coastal property in Nyack was assisted with development options, funding sources, permit requirements and physical layout considerations. A \$1.75 million redevelopment project is planned for the site.

--The Town Supervisor of the Town of Esopus acknowledged Sea Grant's assistance with funding sources for planning the town's shoreline which lies south of Kingston. A NYS Department of State waterfront revitalization grant has been requested to overhaul zoning. Currently there is strong subdivision pressure for large tracts in ownership of religious groups and some properties have already been broken up.

--Two locations were identified besides the plans for the Cold Spring Derby, to hold fish derbies in the Lower Hudson Region. Sea Grant anticipates involvement in the Kingston Shad Derby (Ulster County) and the Mamaroneck Fish Rodeo (Westchester County). These two established events will gain sportfishery educational components with the assistance of Sea Grant Extension, County Extension 4-H and Home Economics staff, and excited volunteers from the region.

--The 2-day 1984 NY Sportfishing Forum took place and was a great success. The first day was Marine Industry Day, and over 90 attendees included leaders of 1 marina association and 2 fishing station associations and operators and employees of charter and party boats. One association has already sent a telegram to their state senators concerning proposed legislation that they learned about at the meeting. The second day was Sportfishing Techniques & Technology Day, attended by over 400 fisherman, and 25 commercial and educational exhibitors.

--With the assistance and input of a Sea Grant specialist, festivals and fish derbies in Putnam, Ulster, Dutchess & Orange Counties scheduled for this spring & summer will include displays and demos on seafood utilization and fish contaminants.

--The Empire State Marine Trade Association will coordinate delivery of educational materials on a marine trades speakers bureau to appropriate program officers in the 7-member umbrella organization. Materials were developed by Sea Grant staff.

--Sea Grant participated in a research panel for a conference on Jamaica Bay sponsored by the National Park Service in NYC, which was attended by approximately 200 indicating a high local interest in that natural resource in the heart of the Big Apple.

--The Putnam County 4-H Fair featured a fishing and casting contest illustrating that in due time some program training will actually be put to use. This program drew from experiences with the Cold Spring fish derby.

--A Sea Grant specialist attended a meeting of boatmen association representatives to discuss recent rulings by the NYS Dept. of Taxation regarding sales tax status of party and charter boats and the equipment supplies purchased by this industry. The present position of the Sales Tax Dept. is that all the above related activities and that of fares associated with utilizing charter and party boats are subject to sales tax. Boatmen feel that this new position on sales tax will have a tremendous negative affect on their business operations. Information was provided relative to the NYS sales tax position on party and charter boats as well as other states and how they handle this circumstance.

--A developer and his architect were assisted in reviewing preliminary plans for a marina he will be building on Long Island. It is a big-time operation, complete with sea-plane cove. Given the magnitude of the project it was surprising to learn how little they knew about coastal construction and marine facilities. They were very receptive to information provided on everything from boating statistics to slip layout to parking requirements to submetering. After the 2 1/2 hour meeting, they decided they would use this information to go back and revise their initial plans.

--Sea Grant met with a local sportfishing club leader to discuss methods of preserving fish quality. As a result, Sea Grant will be experimenting with different material that can be used to construct fish cooling bags. Ideally, these bags would be designed to be low cost and could be constructed by sport anglers.

--A 2-part article penned on liveabards was run by Boat & Motor Dealer in the Sept. issue bringing this emerging issue to the forefront of national issues (BMD circulation 25,000)

--Sea Grant spent a day with a Piermont planner touring potential sites for proposed village boat launching and marina facilities. The tour enabled the planner to eliminate several of the sites for various reasons (wetlands, parking limitations, etc.) and start concentrating of collecting needed information on the more favorable sites.

--A marine supplier requested and received information on ice control for use in a newsletter to 400 contractors and marina operators.

--2 days were spent touring Long Island's marine tourism industry with Jim Kahn from SUNY/Binghamton. He will be submitting a proposal to Sea Grant for funding to conduct research into the economic impact of the marine recreation industry in New York.

--A Sea Grant specialist gave a presentation on marina landscape design at the 11th National Docks & Marinas conference in Madison, WI.

--A presentation on waterfront revitalization was made at the annual Environmental Management Council & Conservation Commission conference in Albany. The presentation contrasted a NYC case study with a case study of a small Hudson River community.

--A Sea Grant specialist's presentation on oil analysis at the Sportfishing Forum drew numerous requests for more information; 15 of those requesting information said they were definitely going to start an oil analysis program, and one boat dealer indicated he would make it part of his package service deal.

--The Town of Ossining recently received a \$30,000 Urban Community Grant for improvements. The Town asked Sea Grant to review waterfront improvement plans for the Town park, and as a result of recommendations made, a strong case will be made to the Town Board to allocate at least a portion of the funds to shoreline erosion control.

--A Sea Grant specialist met with the Commodore and members of the Yonkers Yacht Club who had high praise for this specialist's efforts to help them understand the dredge permit process. They have recently obtained both Army Corps & NYS DEC permits. This was especially helpful as it came in a meeting that also included the Mayor of Yonkers and a State Senator, who have promised support for resolving an additional local erosion dilemma with Sea Grant participation.

--Following positive responses at the 1984 NY Sportfishing Forum to the UNH/Maine Sea Grant video on Cold Water Survival, these tapes will now be made widely available to the general public.

Arrangements are being made with the Cooperative Library System of Suffolk & Nassau Counties to allow interested groups to borrow these video programs through any of 108 local public libraries. Great interest has been shown by sportfishing organizations on Long Island, and hopefully this opportunity can be extended to library systems in other parts of the state.

--Six municipalities in the lower Hudson Valley and along Long Island Sound received waterfront revitalization grants ranging in value from \$10,000 to \$30,000. Four of these communities received information on this grant source through Sea Grant educational programs.

--A 10-page seasonal fishing guide to the Lower Hudson River was completed with co-author Tom Lake, Director of the Hudson River Fisherman's Association. The guide includes illustrations of many popular recreational species on the river. Locations and fishing techniques are stressed throughout the guide. This educational booklet should bolster the regional conception and utilization of the tremendous fisheries available in the Lower Hudson.

--As a result of initiatives with Manhattan Community Board 8 in NYC improvements have been made to the East River promenade. The promenade was recently featured in a New York Times roundup of waterfront parks to visit in NYC.

--The Village of Piermont received a \$1,000 grant from the Heritage Task Force for improvements to two local waterfront parks. Assistance was provided to the communities by Sea Grant in identifying this funding source and in specifying appropriate improvements.

--With the information provided to a marina developer, several alternatives were incorporated in his revised plans. Among other things, they were able to increase slip capacity by almost 20%. Subsequently, Sea Grant met with the developer, architect engineer, and contractor at the site to discuss the \$1.5 million waterside facilities (land facilities not included) in more detail. As a result, they are now having a proposal put together for slip metering and looking at the wave climate to determine if modifications to the entrance channel are needed.

--Through the information and guidance Sea Grant provided to a marina owner on permits, work on the \$125,000 modifications they had planned had finally started. Through Sea Grant's involvement the owner was extremely grateful and was able to meet DEC requirements. Follow-up information was also provided on wood treatment specs and material on filter cloth for the new bulkhead.

--Poor enforcement of boat speed limits in Esopus Creek (a tributary of the Hudson River) is causing damage to floating docks and historic boats at the Hudson River Maritime Center. Appropriate enforcement officials from the County Sheriff's river patrol office were identified for resolution of the problem. High wakes from passing freighters and tugs were reported to the NY Harbor Masters Association (by local fishermen) with immediate and positive results: commercial pilots slowed down!

--150 members of anglers organizations learned about spring and summer temperature structures in Lake Ontario and implications for fishing. Three attendees requested documentation of this information for use in their adult education programs.

--At their request, the Niagara County Fishery Development Plan was critiqued. This strong and innovative document drew heavily on Sea Grant research and extension materials.

--A charter association was assisted in clarifying Coast Guard requirements for flotation device lights on Lake Ontario charter vessels.

--Attendees of a Lake Erie downrigging seminar were provided an overview of fish contaminants and the Lake's forage base.

--Tentative financial backing for production of a demonstration St. Lawrence Valley coastal heritage brochure was gained from two tourism-related organizations.

--An individual pursuing opening Bed and Breakfast and boat sales and service businesses was provided specific information on the Lake Ontario market.

--St. Lawrence and Wayne County Extension both are using the "Let's Go Ice Fishing" program as a winter project.

--A group of fisheries related interests in Chautauqua County (Lake Erie shore) brought together by Sea Grant has decided to form a county fishery advisory board. Formal bylaws and constitution were drawn relying on information and models from other counties also provided by Sea Grant.

--The Army Corps of Engineers has developed specific plans to improve the Barcelona Harbor on Lake Erie. The final plan included modifications Sea Grant had assisted the local harbor commission to identify and subsequently verified through hydraulic modeling.

--The Lake Ontario Charter Boat Association held its first major educational conference. The 110 attending captains found it to be well structured and very useful. Sea Grant had assisted this group in forming, partly to develop new professional development opportunities for charter operators. The conference indicates that this educational objective is being met.

--Plans for a fishermen's lodge and charter boat operation were reviewed with the person undertaking the development.

--25 persons interested in sportfishing were introduced to the National Weather Service's volunteer weather reporting system (MAREPS) in hopes of improving local weather information.

--A New York tackle manufacturer was provided information on Upper Great Lakes fisheries to enhance his market region.

--50 persons attended an "advanced" workshop on Bed and Breakfast operations.

--45 persons affiliated with the Seaway Trail, Inc. were provided an overview of tourism trail development.

--As part of continuing assistance to the Barcelona Harbor Commission, 80 Town of Westfield residents and officials were provided an overview of sportfishery economic impacts. The Town Board later voted to commit \$60,000 towards improving harbor deficiencies.

--600 attendees of a Lake Erie sportfishing show were provided information on coastal recreation.

--40 members of the Jamestown Audobon Society were provided an overview of Lake Erie fisheries.

--A marina owner was assisted in documenting the need for improved radio/telephone coverage for Lake Ontario in a proposal to the telephone company.

--The 1000 Islands Bridge Authority was provided information on setting up tourism information systems based on C.B.'s and low-wattage broadcasting.

--A collective group of St. Lawrence County museum representatives was provided counsel on developing a promotional brochure and evaluating its impact.

--Information/assistance on applications of the 4-H "Courtesy is Contagious" hospitality program was provided to several New York counties and to contacts in Michigan, Minnesota, and Vermont.

--"Courtesy is Contagious" is being field-tested in seven vocational classrooms in St. Lawrence County.

--Funding of a modest study to describe lower Niagara River walleye stocks was arranged between an anglers' association and a Sea Grant researcher.

--22,000 copies of the 1984 Lake Ontario Sportfishing Annual were distributed. The Annual generated more than \$8,000 for this year's "EV-Ontario" project.

--280 Lake Ontario charter captains received the newsletter Charterlines.

--Articles on Lake Ontario fisheries appeared in Outdoor Life, Field and Stream, and Great Lakes Fisherman as a result of "EV-Ontario" activities.

--Representatives from the six Lake Ontario county fishery advisory boards were provided an overview of fishery management trends and associated issues.

--Two bait and tackle dealers were provided marketing assistance.

--Provide updates on Lake Ontario access needs for a State Senator and representatives of Office of Parks and Recreation in preparation for Congressional hearings on Port Ontario.

--200 spotters were lined up to participate in the National Weather Service's MAREPS program to improve marine weather.

--48 persons attended an interstate conference on community based tourism development sponsored by the Great Lakes Sea Grant Network.

--80 members of the Eastern Lake Ontario Salmon and Trout Anglers Association were provided information on fishing thermal structure in Lake Ontario.

--Market potential information for the Lake Ontario area was provided to two Lake Michigan charter captains, a radar/sonar manufacturer, and an individual interested in establishing a fish processing operation for angler-caught fish.

--Two inservice training programs on Bed and Breakfast were held for 27 persons from 11 North Country counties.

--Assisted a local art gallery with money management and a local chamber of commerce in defining a tourism monitoring system.

--A subsurface temperature gauge manufacturer was assisted in diagnosing a faulty component in his units.

-- 60 persons participated in a clinic on Loran which featured five equipment manufacturers.

--A Bed 'n' Breakfast Inservice Training Program was conducted for St. Lawrence County Cooperative Extension agents.

--Bed 'n' Breakfast operators in the Finger Lakes have initiated cooperative advertising as was suggested at a Sea Grant-sponsored Bed 'n' Breakfast meeting.

--Seaway Trail, Inc. has initiated educational activities as a part of their regular meetings as was suggested by Sea Grant.

--300 copies of the "Courtesy is Contagious" 4-H Hospitality Training Package have been distributed statewide.

--Three 4-H Clubs participating in the Courtesy is Contagious Program have completed community service projects.

--A sportfishing-related business operator was provided financial planning information.

--A tackle manufacturer representative was provided updated information about growth in sportfishing businesses in Eastern Lake Ontario.

--Along Lake Ontario, Sea Grant assisted eight counties in the formation and maintenance of Fishery Advisory Boards to their legislatures. Fishing interests in Chautauqua County on Lake Erie expressed interest if forming a similar board. Sea Grant provided organizational assistance to potential sponsors and documented activities of boards in other counties. Only six months after discussions began in earnest, the full legislature passed an enabling resolution by a unanimous vote.

--The N.Y.S. Assembly Tourism Committee is using Sea Grant generated materials on tourism trail development to establish statewide criteria for designating tourism trails.

--A 4-H club that had participated in the "Courtesy is Contagious" program has developed a portable information booth which will be used by the village of Potsdam.

--35 public and private sector employees in the Massena area participated in a hospitality training session. Several employers attending recommended annual workshops.

--A Canton Agricultural and Technical College will be using Sea Grant hospitality materials on a regular basis in his retail training class.

--The "EV/Ontario" paid visit to the Buffalo waterfront attracting in coverage by two area T-V stations.

--Representative of "Field and Stream" and Nashville cable channel's "Fish America" were provided first hand Lake Ontario chinook fishing experience on the "EV/Ontario". The "EV" also led a 26 vessel offshore trolling demonstration to assess techniques for summer steelhead fishing. An article on the "EV" appeared in "Fishing Tackle Trade News".

--A Buffalo-based electronics firm was assisted in defining a potential new sub-surface temperature detector for use with downriggers. The inventor of a new fish hooking system was assisted with market analysis.

--The Seaway Trail was dedicated as a National Recreation Trail, the first multiple use trail in the United States. Sea Grant staff have assisted many communities along the trail and serve on the Trail's board of directors.

--The St. Lawrence Valley Council was provided an historical review of their program offerings as an aid to future planning. Sea Grant assisted in formation of this important international group and has continued a role as technical advisor for more than nine years.

--4-Hers who had completed the "Courtesy is Contagious" hospitality training program conducted a training program for 65 senior citizens. The same 4-H club constructed a tourism information booth for their community.

--120 persons attended an "EV-Ontario" workshop on downriggers cosponsored with the Oswego Maritime Foundation. 136 youth and 40 4-H leaders from 5 counties participated in "EV-Ontario" cruise activities. 60 history and fishing buffs learned of Lake Ontario's influence on Wayne County development resulting in a deluge of oral history anecdotes received by the county historian. On the basis of his experience on the "EV-Ontario" during the 1983 cruise, our first year deckhand has been retained as a marine electronics specialist by a diving/salvage firm.

--A NOAA-NOS hydrographic field crew supervisor was advised on Lake Ontario thermal phenomena, which apparently skewed their sonar readings.

--Representatives of 5 charter boat associations were informed of downstate interest in sales tax exemptions for charter operations.

--The Town of Ripley on Lake Erie was assisted in reviewing plans for development of a swimming beach.

--Six North Country county extension associations that had participated in Sea Grant originated inservice training programs on Bed & Breakfast businesses are planning public workshops on B&B this fall.

--4-H youth from two St. Lawrence County clubs that had participated in "Courtesy is Contagious" hospitality training developed booths for the county fair that dealt with tourism.

--30 key leaders and individuals interested in potential sportfishery development in the Buffalo area participated in a one-day workshop. One immediate result is that the regional transportation board is reviewing its waterfront development proposals to assure that sportfishing is given adequate consideration.

- Three marina operators were assisted with technical aspects of dock expansion and relationships with local government.
- Consultants retained by the City of Rochester to assist in waterfront redevelopment plans were provided marina marketing and inventory studies.
- 80 members of the Rochester Trout and Salmon Anglers Assoc. were provided an overview of the limitations of Lake Ontario's forage base.
- Educational vessel "Ontario" activities included a joint cruise with a U.S. Fish and Wildlife Service vessel to improve interpretation of recording depth sounder output for anglers. 130 persons attended a "Salmon Preview" which described the expected fall salmon run. 50 persons attended a workshop on the importance of Lake Ontario to Orleans County resulting in 4 followup stories in local newspapers. Writers from "Outdoor Life", "Great Lakes Fisherman", and twelve Buffalo area weekly papers were introduced to Lake Ontario fisheries.
- Sea Grant has been requested by Seaway Trail, Inc. to explore potential relationships between agriculture and tourism. Assistance is being sought from county agricultural agents and agriculture interests along the trail.
- Information provided to Seaway Trail, Inc. on signing and interpretation options was used by N.Y. Dept. of Transportation in selecting their signage approaches for the Trail.
- New York's Division of Tourism is organizing an Adirondack motorcoach tour that will use Bed & Breakfasts as lodging. This notion was suggested by a Sea Grant specialist who had seen a similar approach in Canada.
- Cornell's Rural Schools Program newsletter featured the 4-H hospitality package "Courtesy is Contagious" resulting in several inquiries for program materials.
- The Niagara Frontier Transportation Authority was assisted in reviewing proposed sites for marinas and launch sites. Several reviewers used information presented at a Sea Grant sponsored sportfisheries conference in their review comments.
- The Monroe County Parks Dept. was provided with model rules and regulations for boat ramps.
- A potential campground/marina developer was provided market information and coastal construction information.
- A meeting was organized between four Lake Ontario charterboat operators associations and a representative of the Atlantic Professional Boatmans' Association. Sales tax issues, state licensing, and possible need for a federating organization were discussed.
- Final activities of the 1984 "EV-Ontario" season included a marine electronics workshop cosponsored with the Oswego Maritime Foundation and attended by 50 persons, a two day cruise with a Field and Stream editor, a Rochester PBS-TV filming session on the salmon fishery, and documentation of a major open-lake plant bed at Wautoma Shoal. In addition, a final report on the joint sonar trawl conducted with the U.S. Fish and Wildlife Service provides new suggestions to help in graph interpretation for anglers.

--Consultants retained by a developer considering a major marina/condominium development in Wayne County were provided information on erosion, dredging, and channel protection.

--A fact sheet on lodging taxes in New York was prepared in response to several inquiries from around the state.

--A fact sheet on considerations in developing a recreation enterprise was prepared.

--25 county planners, legislators and other officials from around the state attended a seminar on tourism as part of the annual meeting of the NYS Association of Counties.

--45 parents, volunteer leaders, and 4-Hers viewed a slide program on "Courtesy is Contagious". Program materials were distributed to a district tourism agent in Michigan, an North Carolina college, and several school districts in the Mid-Hudson Valley. The materials are being used in a noncredit waiter/waitress course at Mater Dei college.

--25 members of the Great Lakes Sportfishing Council were provided an overview of thermal structure fishing in Lake Ontario.

--20 members of the Seaway Trail Inc. were provided a summary of economic impacts of sportfishing in New York's Great Lakes.

--Representatives of SUNY's western New York Small Business Development Center were provided information on Lake Ontario's fishing and boating markets for use by potential developers of a marina/campground. A potential developer of a restaurant/marina on the Genesee River was provided information on permits, bulkhead design, and docks. A consulting firm working for developers of a marina/condo project were advised on dock-spacing requirements.

--A presentation on community approaches to lake access development was made to 60 attendees of a Lake Ontario Access meeting sponsored by the New York Departments of Environmental Conservation, Commerce, and State.

--A Bed and Breakfast seminar in Franklin County attracted 60 participants.

--A local art gallery which is receiving financial management counseling from Sea Grant received a grant from the New York Council on the Arts.

--Niagara County 4-H is offering a three-part hospitality series based on the "Courtesy is Contagious" series.

--A report entitled "Sportfisheries for Buffalo" based on a recent Sea Grant workshop now is available.

--Designs for fish cleaning stations were provided to groups in Monroe and Niagara Counties.

--Sponsors of a major new fishing tournament are earmarking a portion of net proceeds to support Lake Ontario fisheries research and education projects.

--A Sea Grant initiated meeting among the five Lake Ontario charter operator associations resulted in a commitment to explore an inter-association council.

COMMERCIAL FISHERIES

--A Sea Grant specialist met with 4 baymen to review various marine culture techniques that they might incorporate in their efforts. One of these individuals subsequently received a permit from the Corps of Engineers for establishment of a mussel culture effort off Huntington in Long Island Sound.

--Plans have been finalized for incorporating a Long Island shellfish industry education program into the SCOPE course offerings for 1985. Following preparing a proposal, a site visit to their offices found an enthusiastic reception for this idea. Plans are presently to use 2 pilot examples this year in the shellfish industry educational programming as examples of how other school districts can benefit by participating in this program. Hauppauge High School District has enrolled in its pilot program.

--The 5th Long Island Fisherman's Forum was attended by about 1,000 individuals. These people, representing diverse interest and background, had an opportunity to participate in or view learning experiences which would benefit their interest. As in past years, the Forum provided an opportunity to open up new areas of interest or problems for commercial fishermen on Long Island and re-establish ongoing dialogues. For example, a special meeting of lobstermen was held at the conclusion of the Lobstermen's Workshop.

--20 individuals contributed \$800 towards a Sea Grant organized 2-day course on net mending and construction. Participants, comprised almost entirely of commercial fishermen from across Long Island, were provided hands-on opportunity to repair nets according to several traditional techniques of sewing and mending. A follow-up meeting has been requested to be held in Montauk.

--A Sea Grant Specialist met with 25 members of the Riverhead Baymen's Association to update them on progress of the mariculture project this spring. A mid-May date was set to construct the rafts that will be used to float hard clams in East Creek as well as two days to plant oyster shell used for remote setting purposes. The shellfish mariculture project was successfully completed with over 99% survival in all three rafts yielding just under 18,000 clams for planting on open bay bottom. This project was a classic example of town government, baymen and youth cooperating toward a common goal.

--A Sea Grant Specialist met with a representative of Long Island Oyster Farms to go over techniques of remote setting of oysters, which he believes holds some potential for this company. By utilizing remote setting techniques companies such as this one could plan for continuous supplies of seed and not depend on the whims of mother nature in Connecticut.

--A Sea Grant Specialist met with a representative of the Long Island Farm Bureau to discuss their plans for upcoming mariculture work and to determine their willingness to participate as an organizer of a statewide culture association. In Long Island shellfish farmers are interested in joining with the trout farms upstate to form a single association. An initial organizational meeting was held in Albany in conjunction with the NYS Department of Ag & Markets and the New York Farm Bureau. Industry received the idea with enthusiasm. A follow-up meeting date was identified for formation of bylaws and organizational kick-off planning.

--The Shellfish Mariculture Fact Sheet has been completed and is in the process of being printed. This fact sheet will provide a useful information piece to answer requests by those just beginning to learn about mariculture and the details one must know to get into the business.

--Two Sea Grant specialists accompanied a commercial fish trap operator out of Greenport to his fish traps one morning to perform a fish handling demonstration and experiment. They collected and processed bluefish and several weakfish that will subsequently be analyzed by the Gloucester, MA National Marine Fisheries Service Lab. It is hoped that several educational pieces of information will be produced from this that will help both commercial and sportfishing industry representatives better handle their catch to obtain higher profit and quality.

--A Sea Grant specialist and 2 owners of Coastal Ponds in New York visited the Fishers Island Ocean Pond Inc. mariculture facility. While there, the Pond's owner and operator gave an extensive tour of their facilities and helped to educate these two people on ways in which they might use their ponds here on Long Island. Following this tour, one individual established pilot-scale mariculture efforts in his pond.

--ESPN Cable TV business magazine requested an interview and taping session on Long Island's fishing industry that would overview the development of New York's commercial fishing industry and highlight the new technological and marketing developments.

--Sea Grant provided Ag & Markets Commissioner Gerace a 1-day tour to familiarize him and his staff with the shellfish industry on Long Island that included both public baymen harvesting and private mariculture methods. This information, according to Mr. Gerace, would be utilized in developing his department's plan for aiding the entire shellfish industry of Long Island.

--A day was spent on the F/V Patriot making follow-up measurements on vessel thrust and horsepower following installation of the Kort nozzle. The Columbian Propeller Co. of Freeport, NY contributed \$1,500 to pay for the instrumentation and technician to make the follow-up measurements. These measurements were completed by Teledyne Engineering Services and an educational bulletin outlining Kort Nozzles and results of this demonstration has been produced.

--Sea Grant responded to a request by Bill Titus of Nassau County Extension to present information on the biology of Long Island Sound to the Oyster Bay Power Squadron. An assembled group of 50 learned about the mechanisms influencing distribution and abundance of biological organisms in Long Island Sound.

--A cooperative effort of commercial fishermen and seafood packers on Long Island was directed at providing relief from the recent NYS Sales Tax Department decision that determined the box used to package and transfer fish to market was, in fact, a sales taxable item. Establishment of a billing procedure at Sea Grant's suggestion will eliminate the technicality that caused the fish box to be taxable. A new procedure has now been established that will become effective December 1, 1984. At that time all seafood packers on Long Island who prescribe to this method will gain sales tax exemption on fish boxes.

--The success of the Eastern Long Island Trawler's Corp., a group of 25 commercial dragger operators operating out of Montauk, Long Island, has spurred the interest and commitment of a similar 20 odd commercial draggermen out of Shinnecock to form their own group to establish direct marketing of certain seafoods. Several meetings were conducted with interested Shinnecock fishermen over the last 2 months, and the result has been the formation of the Shinnecock Fishermen's Cooperative, Inc., a group of 27 commercial fishermen that will direct market products on a contract basis between themselves and overseas as well as domestic buyers. This second such effort on Long Island has clearly established a new order of business as far as the commercial dragger operators are concerned. In effect, fishermen are attempting to establish their own marketing power and eliminate some of the unnecessary middleman costs and also establish direct marketing options that will provide higher prices and market access.

--4-H Nassau County based staff are interested in the Clam Club concept and will be visiting the rafts this summer to learn more about the project opportunity. Activities in the Riverhead Baymens' Association have increased as a result of this program. One such activity has been the setting of approximately 200,000 oyster seed onto shell which was planted by the baymen in Peconic Bay.

--Preliminary approval from the NYS Job Development Authority for consideration of commercial fishing vessels for JDA funding was received. The first application has been completed and submitted to the local JDA coordinating agency for further processing. Should the application be approved, the commercial fisherman applicant in this instance will receive up to 40% financing on the acquisition of an approximately \$400,000 new commercial fishing vessel at an interest rate of 9 3/4% for a 15-year term.

--The propeller software developed by Webb Institute as a result of Sea Grant Institute funding has begun to have impact in New York's commercial fisheries. Three dragger fishermen learned how engine horsepower, gear reduction and propeller diameter and pitch combined to provide characteristic towing power for pulling trawls. This learning experience was made particularly effective because the individuals involved could use their own vessels as a case study.

--At the request of the NYS Department of Ag & Markets seafood industry members will attend a conference in Syracuse and will develop recommendations for the Governor on ways of promoting and marketing the New York produced seafood products. This activity is another indication of the continuing and growing interest on the part of NYS and its commercial fishing industry.

--A workshop for Mid-Atlantic & New England Sea Grant Advisory personnel has been held which enabled these individuals to learn how to use the software to benefit their industries. A videotape has also been produced which in 13 minutes summarizes propeller engineering details as well as the construction techniques used to build propellers. In 1985 the entire package will be available to all Sea Grant programs including research reports, floppy disk computer program, software and Extension publications.

--At the request of the Governor's Striped Bass Task Force Committee Sea Grant worked with the commercial fishing representatives on the Task Force and developed a survey which was distributed to 25 commercial fishermen; the data from which will be used to profile the typical economic impact to a commercial fisherman. Sampling was developed to include harvesters using the various types of fishing gear and also to be representative of the varying reliance on striped bass.

--"Attention Commercial Fishermen: The Bank of New York is now accepting capital construction fund accounts. For more information call." The preceding words were part of a newspaper commercial run by the Bank of New York. The full advertisement goes on to tell fishermen in the areas of Southampton, East Hampton and Greenport that their bank is now able to provide them with capital construction fund applications and assistance in completing those applications. Thus, providing them with a valuable service that will allow them to take advantage of a very important program for commercial fishermen. This undertaking by the bank resulted from 2 Sea Grant workshops that were conducted for their employees, familiarizing them with capital construction funds, their use and review of application procedures and information. An executive from the bank advises that several fishermen have made inquiries about the capital construction fund service and, in fact, 2 applications are now being completed.

CONSUMER USE OF SEAFOOD

--An in-service Seafood Utilization Workshop for the Lower Hudson Region (6 Counties) was attended by 22 Cooperative Extension staff. As a result of this workshop there was increased awareness of the complicated fish contaminates issue along the Lower Hudson; various nutritional classes are anticipated to be held; also anticipated to be held are Fishing Derbies along their waterfront areas.

--The Green Seal Committee, through the offices of Senator Owen Johnson, were asked to present a press conference and product offering for legislators in Albany. A press release was prepared with a group for this occasion and a Sea Grant Specialist also participated in the presentation of the serving of clams on the half shell and Long Island produced wine along with 9 members of the Green Seal Committee. This effort was well received and should prove helpful in educating upstate legislators of the sincerity and conscientiousness of the majority of Long Island baymen.

--Sea Grant coordinated educational exhibits and demos at two Long Island festivals. The Town of Hempstead Seafood Festival attracted over 40,000 Nassau consumers this year. Seafood nutrition, proper handling, and "How To" demos were featured in a cooperative exhibit with the Home Ec & 4-H programs in Nassau. The Long Island Harvest Festival attracted over 10,000 consumers to this educational event that focused on local seafood and agricultural products. 15 public and private firms or organizations participated in the seafood products exhibition. Seafood retail demonstrators volunteered their services for Sea Grant exhibit activities that included samples of seafoods harvested on Long Island, a display of local and unusual fish species and written consumer informational materials. In addition, the Bank of New York has underscored their growing interest in New York's commercial fishing industry by sponsoring the full cost of the Seafood Tent with a contribution of \$800.

--Paul Houghton of the Seafood Retail Merchants Committee and a Sea Grant specialist attended a New Jersey Seafood Retail conference at Rutgers, and provided an update of their retail efforts in New York including the in-store demo program that is being developed. Processors & retailers presented their perspectives on seafood quality issues.

--A Sea Grant specialist at the request of 2 retail demonstrators presented a program on seafoods to a continuing education group called the Cooking Exchange at Brookhaven National Lab. Forty people participated in the program which covered Long Island seafood products and included a lively question & answer session. It was encouraging to have our demonstrators take a leadership role in organizing this program; and, several potential demonstrators from this group were identified. Demos were also requested and conducted by these volunteers at 2 retail stores and a Miller Place/Mt. Sinai Chamber of Commerce event in October.

--Sea Grant coordinated a seafood products workshop at the request of the National Association of Extension Home Economists in NYC. Financial support for the workshop was provided by the Mid-Atlantic Fisheries Development Foundation. The workshop included a tour of Fulton Market followed by presentations on seafood products, edibility and nutritional characteristics, consumer perceptions and resources for planning and conducting seafood educational programs. Economists from 21 states attended, and over 50% of those who participated indicated that they planned to include seafood in their foods and nutrition programs in the future.

--An information piece has been finalized covering basic fish handling techniques and bleeding procedures that can maximize their quality. It is hoped that the information will be used by both commercial and sport fishermen.

--Extension Nutrition Staff from Dutchess, Ulster & Orange Counties all held seafood preparation demonstrations and educated people on Hudson River fish contaminants at three Shad Festivals held in their counties. Other Nutrition staff in other counties, such as Putnam, have followed this lead. They also held seafood exhibits at their county's fish derby at Cold Spring -- not bad results from one seafood workshop.

--Regional broadcasts of Sea Grant generated information in Western New York now number no less than 20 each month. In addition, seafood shorts are broadcast through In-Store Broadcasting to more than 700 stores in five states and have been rated "very valuable" by the broadcast organization.

--The City of New York Department of Health's Bureau of Nutrition, the Brooklyn Medical Group, and the Maryland Department of Economic and Community Development were provided information on nutritive qualities of seafood and a staff member of Gateway National Recreation Area was provided information on fish contaminants.

--84 agents and program aides from 40 counties in New York State participated in a fish preparation workshop.

--46 food purchasers, teachers, hospital and school administrators attending a food service management summer school at Cornell were provided a workshop on seafood quality, nutrition and identification.

SEAFOOD TECHNOLOGY

--Sea Grant assisted Waldbaums Supermarkets in upgrading their seafood departments. A meeting was held with corporate management on Long Island, and they will be preparing a needs analysis which will be followed by a tour of their present operations with the appropriate personnel. It is hoped that an initial program for management personnel will take place and an ongoing training program could be developed to meet their needs.

--The new Seafood Retailers Session at this year's Long Island Fisherman's Forum was attended by 30 participants. The 2 regional Fisheries Development Foundations presented their programs, along with information on merchandizing, skinning machines, seafood packaging and free energy audit services available in Nassau & Suffolk Counties. The session ended with open discussion of a retailers organization, and several new members joined at that time.

--A meeting was held at the request of Phil Bradway of NY Ag & Markets in Albany and Don Squires with representatives from New York & New Jersey to discuss possible bi-state seafood quality and voluntary inspection initiatives. Attended by 16 representatives from Ag & Markets of NY & NJ, NY/NJ Port Authority, NY Sea Grant and NMFS Gloucester Lab, a committee representing the interested organizations was formed to investigate other quality initiatives and to initiate discussions on programs that could be relevant to NY & NJ.

--30 participants attended the Seafood Processing session at the Long Island Fisherman's Forum which focused on quality maintenance at the processing level. Several individuals indicated they may pursue some of the technologies introduced in the session.

--A Sea Grant specialist coordinated a New York Seafood Industry booth at Seafood '84 in Boston. The booth was a group effort with NY Ag & Markets, Sea Grant, the Fulton Market Information Council, the Green Seal Clam program & Mid-Atlantic Fisheries Development Foundation. New York's Seafood Industry & major ports were featured along with the educational and marketing programs of each group.

--A Sea Grant specialist and Joe Regenstein met with representatives from Marshal Smoked Fish Company in Brooklyn. After an extensive tour of their plant operations, technical discussions on a number of problems and potential opportunities were held. Arrangements are being made to have some of the product shipped to Joe's lab in Ithaca, and after an initial evaluation of their raw material it is hoped that suitable products or market opportunities can be identified to utilize this material.

--Volunteers from both the Nassau and Suffolk County Cooperative Extension Home Ec programs participated in a workshop designed to train them in conducting in-store seafood demonstrations. This training was provided in cooperation with the seafood Retail Merchants Committee who received a grant from the Mid-Atlantic Fisheries Development Foundation to organize local seafood promotions and demonstrations. The volunteers trained at this session will provide consumer information and samples of selected species to customers in participating independent retail stores.

--New York Sea Grant was invited to participate in the NMFS Year of the Ocean celebration held in conjunction with St. Peters Fiesta in Gloucester, MA. An exhibit depicting seafood availability on Long Island, Sea Grant programs and publications in New York and Cornell University's seafood science efforts was developed.

--A summer Seafood Program Assistant has developed a number of radio scripts that were taped and has researched and developed a number of consumer seafood exhibits and participated in Sea Grant & Home Ec educational programs.

--Frozen Long Island Bay Scallops were provided to the NMFS-Pascagoula, Mississippi Lab. They needed reference material for an electrophoretic procedure to distinguish between various types of scallop meats.

--Discussions were held with Winter Harbor Fisheries in Greenport on shelf life and quality control alternatives for surf clam processing. Initial discussions resulted in the development of a plan for the NMFS-Gloucester Lab to conduct a 10-day shelf life study on their surf clam product to identify sensory and microbiological changes that occur during refrigerated storage. After further internal discussions among the folks at Winter Harbor, it was decided they preferred to work with a private lab to obtain some initial data, and that an in-depth study with the NMFS was premature. The experience was gratifying because of the Gloucester Lab's cooperative attitude and willingness to conduct this mini-study.

--Sea Grant assisted in a follow-up visit to LuMar Lobster in the Five Towns with the energy auditor from Nassau Extension. A number of low cost energy saving modifications that can be made to this type of lobster holding facility that could also be applied to other similar businesses were identified. Sea Grant will be investigating various filtering systems at the manager's request to help him evaluate the best system for his operation.

--New York hosted the bi-annual Mid-Atlantic Fisheries Development Marketing Meeting in New York City. The Cooperative Extension Home Economics programs in Nassau, Suffolk and Ulster Counties will receive \$750 each for consumer seafood education activities in 1984. Paul Houghton representing the Seafood Retail Merchants Committee of the Long Island Fisherman's Association presented a project for coordinating in-store demonstrations as a direct consumer education effort. His group will receive \$1000 direct financial support from the Foundation. A Sea Grant Specialist will receive \$1000 to support the seafood workshop at the National Extension Home Economics Convention in September which he is coordinating.

--75 faculty and special students participated in a Sea Grant coordinated seminar at the Culinary Institute of America which provided an overview of the seafood industry in the northeast, discussions on substitution, edibility profiles and seafood quality and buying practices. The seminar concluded with an in-depth overview of 50 different seafood products. This workshop was requested by the CIA's director of continuing education to enhance the seafood expertise of their chef instructors. The CIA recently changed their curriculum to include a required course in Fish Cookery and has designated an entire kitchen to seafood as a result of their recognition of the importance of seafood to restaurant and food service businesses.

YOUTH EDUCATION

- 24 students learned how to build lobster pots and had shellfishing experiences during the marine camp 4-H program in Montauk.
- Sea Grant helped in the production of a Nassau County 4-H Scuba Diving Program. The grand finale involved a lecture with a slide show on shipwrecks of Long Island followed by the group making two dives which exposed them to Long Island Sound diving techniques as well as biological organisms that they would see around the Island. It is felt that Nassau County 4-H will continue this program in the future.
- Twelve Nassau County 4-Hers participated in an evening class and subsequent fishing excursion at Captree State Park. The program was organized to try and generate interest in sportfishing among Nassau 4-H programs.
- Sea Grant support to five counties through the Youth Involvement in Coastal Issues Small Grant program amounting to \$4,000 has generated \$23,633 in matching commitments. More importantly, creative new programming ideas have been generated.
- The International Joint Commission's Education Group was assisted in developing a network for disseminating educational materials on both sides of the border.
- Ten 4-H program leaders toured an erosion management site on Lake Erie.
- A pilot 4-H wetlands inventory project was funded through the Youth Involvement in Coastal Issues Small Grant Program.
- 30 elementary students were provided an overview of acid rain.
- An article on marine education will appear in the New York Outdoor Communicator.
- For several years, upstate school districts were encouraged to include Marine Awards in their science fairs. The Rochester area schools have followed through with two projects for "outstanding Jr. and Sr. High marine related topics" submitted to Regional Science Fair.
- Erie County 4-H agents, program assistants, and youth were provided a Lake Erie coastal tour.
- Sessions on fish identification and fishing research were provided for 300 youth from 5 coastal counties.
- A teacher serving on one of Sea Grant's program advisory committees presented information on K-6 marine education to the State Science Teacher's Association at the request of the State Education Office.
- A youth sportfisheries club is forming in East Aurora with assistance from the local Boys and Girls Club and Kiwanis.
- 5 students who had participated in Sea Grant assisted activities of one marine science club are pursuing training for careers in marine fields.
- Monroe County 4-H has initiated a natural resources committee and will include coastal topics.
- 60 youth and volunteer leaders took part in a week-long Marine Natural Resources Tour. This was a collaborative effort of Sea Grant, Cornell's Natural Resources Department and several county extension associations.

--Three county fairs were provided display materials dealing with Great Lakes resources or marine related topics.

--With sponsorship of a local Kiwanis Club, a network of local agencies and sportsmen was established in East Aurora to provide fishing outings for groups such as ARC, 4-H, Boy and Girl Scouts, and church groups. A first outing involved 16 handicapped youth from a group home and was assisted by the Boys Club.

--26 attendees of the North American Environmental Education Conference were provided an overview of our Youth Involvement in Coastal Issues small grant program.

COASTAL RESOURCES

- The St. Lawrence Valley Council, established under Sea Grant direction nearly 10 years ago to encourage international collaboration on Valley issues, will incorporate in the U.S. and Canada.
- The sixth section of the Coastal Zone Management Handbook for extension staff was completed.
- Information on controlling gull damage was provided to a Detroit waste management firm.
- 125 attendees of a forum on the implications of the opening of Irondequoit Bay to Lake Ontario were provided an overview of historical development of the area, environmental implications and possible conflicting uses.
- A Rochester engineering consulting firm was provided an overview of coastal management in New York in preparation for their work on a major residential project.
- Save Oswego County was provided information on placing wood duck nests.
- The St. Lawrence Valley Council was provided a guidebook for conducting educational programs. This important forum for international interests was initiated with Sea Grant help and continues to actively explore issues of concern to Valley residents.
- A Sea Grant specialist is serving as ex-officio member of the Rochester Waterfront Revitalization Planning Committee at the request of the City's Planning and Economic Development unit.
- The Buffalo Sierra Club was assisted in conducting a Lake Erie resources conference.
- A meeting was arranged between Eastman Kodak's water quality staff and area academic aquatic scientists to promote better understanding of Lake Ontario resources.
- A town planning board in Oswego County was provided information on the State's Coastal Management and Waterfront Revitalization Programs.
- Three new chapters of the Coastal Erosion Handbook for extension staff were completed.
- A presentation on the importance of coastal planning and an overview of erosion was provided at the annual meeting of Conservation Commissions and Environmental Management Councils as part of a day-long workshop on coastal management.
- The Dunkirk Observer, a St. Catherines paper, the Buffalo News, and a series of weeklies were contacted and indicated interest in Lake Erie related articles.
- 10 releases on water-related issues were aired on WBEN radio in Buffalo.
- 50 people attending Environmental Education Day at the Buffalo Zoo received a presentation on Lake Erie fisheries.
- A review of potential water surface zoning applications for addressing Irondequoit Bay problems was provided for the Rochester Committee for Scientific Information.