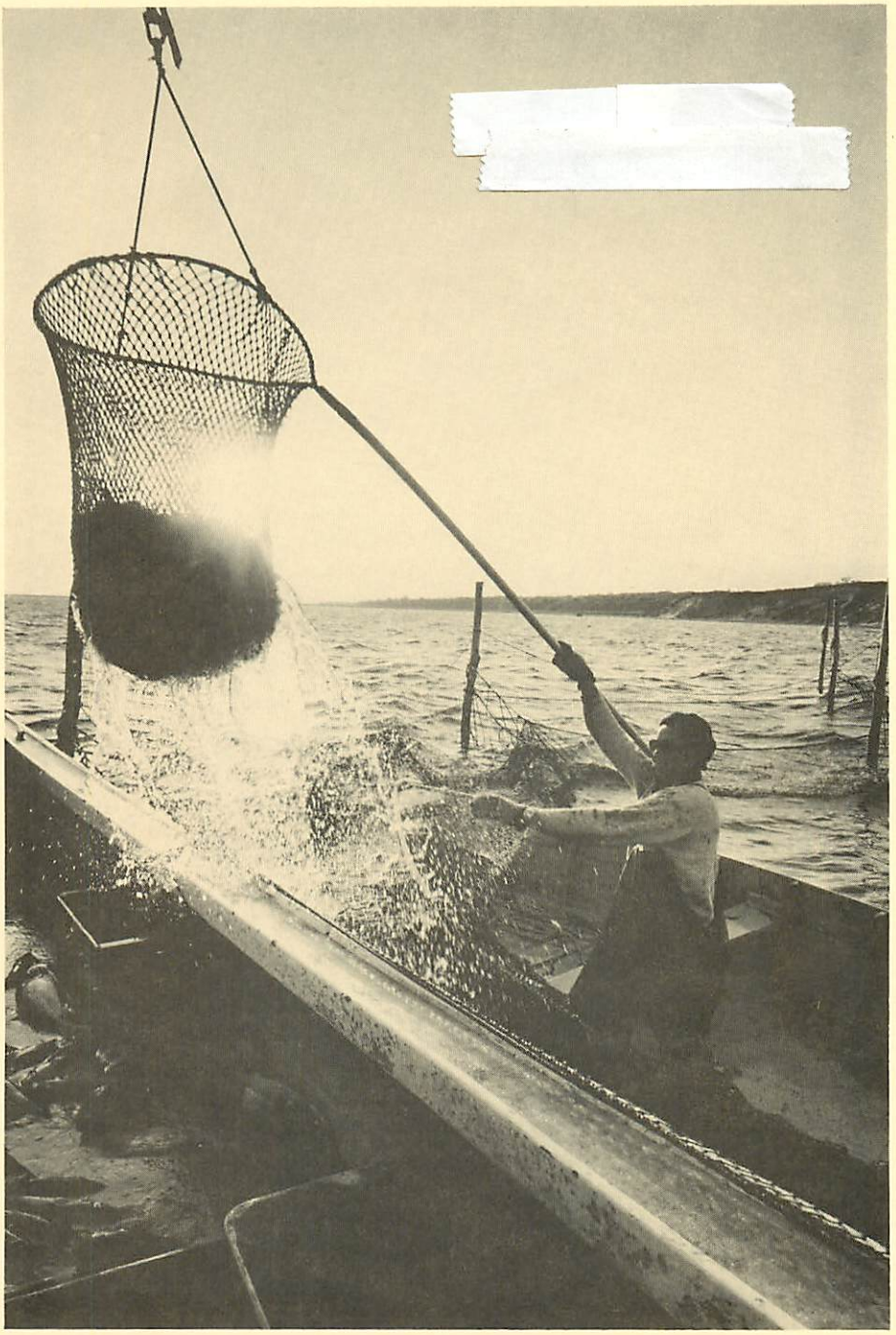
January-December 1985

Annual Report of Program Accomplishments



New York Sea Grant
Extension Program
Fernow Hall
Cornell University
Ithaca, New York 14853
607-255-2832

NEW YORK
SEA GRANT EXTENSION PROGRAM
1985 ANNUAL REPORT

INTRODUCTION

More than 14 million people live within 20 miles of New York's 500 mile Great Lakes, and 2,300 mile marine and tidal Hudson River coastline. The role of the New York Sea Grant Extension Program is to help such coastal residents, coastal users and decision makers seize upon opportunities, and address problems in the development and conservation of our coastal resources.

This report portrays examples of educational impacts of this Extension program selected from hundreds of activities and accomplishments of the Cooperative Extension professional staff during the last year. Over 30 professionals plus support staff and several hundred volunteers along the coasts compose the people power of the program. Through their united efforts, more than 70,000 individuals were aided directly while millions of others received information through mass media efforts.

This report was developed with the assistance of staff, particularly a committee of Dr. Robert Buerger, Dr. Chad Dawson, Charles O'Neill, Dr. Michael Voiland and Dr. Bruce Wilkins. Examples of impacts in six areas of major emphasis, some additional traditional efforts, and a few instances of work in emerging areas are presented. The report concludes with highlights of organizational growth and changes.

A map on page 3 indicates the location of Sea Grant Extension staff offices, and suggests topics emphasized in each region.

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BACKGROUND

The National Sea Grant College Program's mission is to stimulate appropriate use of marine and Great Lakes coastal resources. The New York Sea Grant Institute, a partnership of the State University of New York and Cornell University, is one of 21 Sea Grant Colleges the U.S. Department of Commerce helps fund to carry out this mission. The Extension Service or Advisory Service effort required of a Sea Grant College is conducted in New York as one of Cornell Cooperative Extension's five areas of emphasis.

The role of New York's Sea Grant Extension Program noted earlier is to aid coastal residents, users and decision makers seize opportunities and resolve current and anticipated coastal problems. To carry out this role the Extension Program:

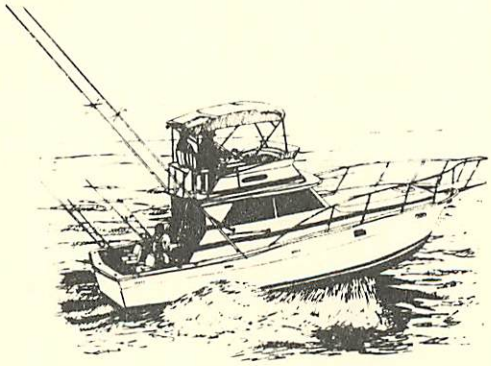
- Transfers knowledge to persons who can use it to solve coastal problems.
- Stimulates appropriate persons to apply this knowledge to solving problems.
- Stimulates researchers to generate knowledge needed to solve coastal problems.

Those functions are carried out by:

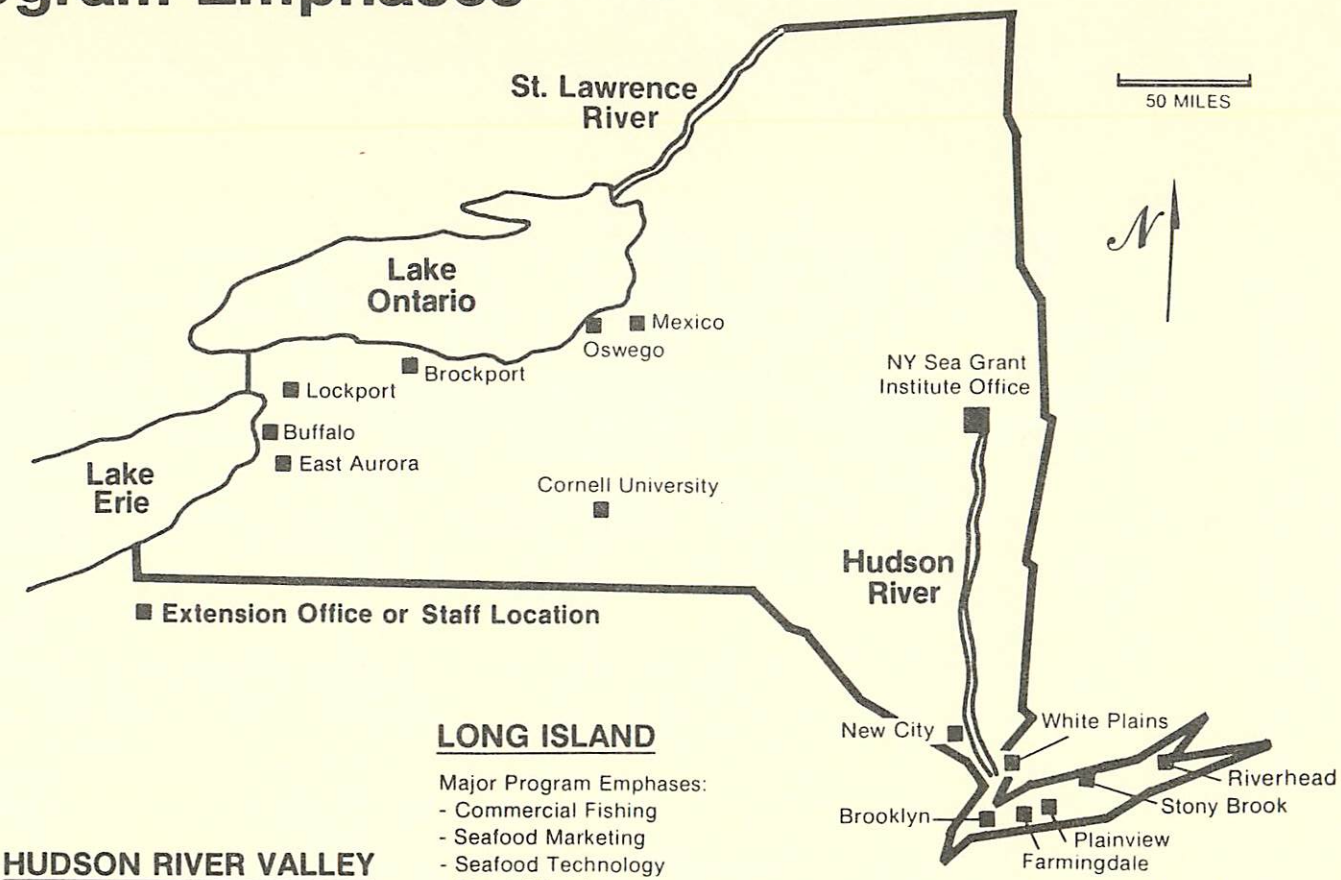
- Conducting problem-solving educational programs and activities with commercial fishermen, marine recreation industries, seafood processors and handlers, consumers of marine foods, coastal property owners, marine recreationists, youth and community leaders.

- Maintaining and further developing working relationships with appropriate agencies and groups to ensure resources are used efficiently and effectively.

- Assisting in the development of Sea Grant research in accordance with the needs of coastal users and the welfare of society.



Location of Staff with Significant Sea Grant Extension Program Commitments, and Major Program Emphases (1985)



GREAT LAKES REGION

Major Program Emphases:
- Coastal Recreation and Tourism
- Coastal Erosion
- Coastal Planning and Development
- Youth Education

Personnel:
- David Greene (E. Aurora)
- Kevin Brown (Buffalo)
- Richard Robinson (Lockport)
- Joseph Urso (Lockport)
- Charles O'Neill (Brockport)
- Michael Voiland (Brockport)
- Stephen Brandt (Oswego)
- David White (Oswego)
- Chad Dawson (Mexico)
- Norman Valley (Mexico)

CORNELL UNIVERSITY

Major Program Emphases:
- Seafood Use
- Coastal Recreation and Tourism
- Marine Economics

Personnel:
- Carole Bisogni (Nutrition)
- Tommy Brown (Natural Resources)
- Jon Conrad (Agricultural Economics)
- Michael Duttweiler (Extension Admin.)
- Glenna Ryan (Nutrition)
- Bruce Wilkins (Natural Resources)

HUDSON RIVER VALLEY

Major Program Emphases:
- Waterfront Redevelopment
- Hudson River Resources
- Marine Trades
- Youth Education

Personnel:
- George Babey (White Plains)
- Stephen Lopez (New City)

LONG ISLAND

Major Program Emphases:
- Commercial Fishing
- Seafood Marketing
- Seafood Technology
- Coastal Erosion
- Coastal Recreation and Tourism
- Youth Education

Personnel:
- Bruce DeYoung (Riverhead)
- Robert Kent (Riverhead)
- John Scotti (Riverhead)
- Chris Smith (Riverhead)
- Robert Buerger (Stony Brook)
- Robert Malouf (Stony Brook)
- Jay Tanski (Stony Brook)
- Ken Gall (Plainview)
- Maria Sant'Angelo (Plainview)
- Tom Aulenbach (Farmingdale)
- William Fink (Brooklyn)

NEW FOODS, NEW DOLLARS, NEW JOBS - COMMERCIAL FISHING

Over 3,000 New York commercial fishermen landed 38 million dollars worth of fish for consumers in New York, other states and other countries last year. The value of these foods multiply as they move through the marketing chain to the consumers. Sea Grant helped enhance the production, harvesting, and marketing of fish and shellfish, and aided consumers make better informed decisions on their use.

HARVESTING

New Partners- Less Hazard

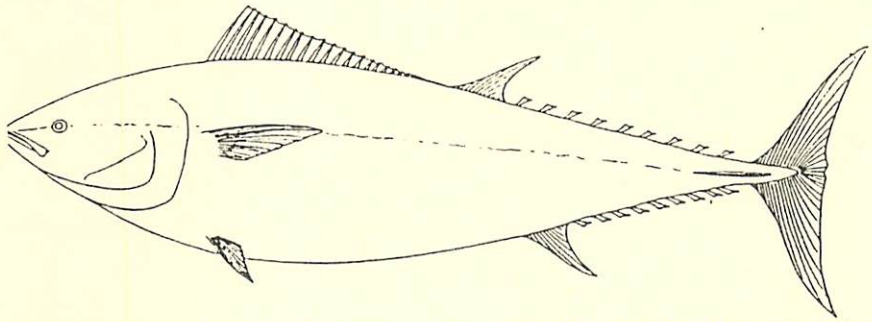
Deep in the bays of the boroughs of New York City lie significant quantities of hard clams that are potentially hazardous to public health if illegally harvested. For many years, the New York State Department of Environmental Conservation has made these stocks of clams available for transfer to certified waters for cleansing and subsequent market. In the past, few have taken advantage of this program as it was difficult to draw together the necessary components. In New York, baymen and private bottom landowners have not traditionally seen eye to eye on most issues. The unique position of Sea Grant Extension staff within the seafood community facilitated productive discussion in a potentialy raucous meeting of the landowners and baymen to explore the possibility of a joint effort to remove these clams from areas where their great concentration made them a seductive, though hazardous to consumers, target.

The result of this meeting--a cooperative arrangement--which saw a group of seven baymen designated to harvest the clams, sell them to a private bottom landowner who planted them on his underwater land for cleansing. Many benefits accrued. One of the most important was that two traditionally combative groups came togther in a successful effort that reduced a public health hazard. Also, some of their traditional suspicions and distrust were overcome, which hopefully will result in more cooperation in the future. Both groups also learned how to obtain needed permits in a timely fashion.

Economically, the benefits of cooperation to the two groups were impressive. Over a four-month period, the baymen harvested over 500 bushels of clams per week. This translates to a newly added fishery value exceeding $170,000. The private landowner was able to market these clams at a higher price, which resulted in additional value to New Yorkers of $200,000 or more dollars.

Fresh Sashimi and Sushi

Hundreds of thousands of dollars were being lost and thousands of tons of fish wasted through mishandling of tuna caught offshore. Japanese buyers would pay high prices for properly handled tuna for foreign and domestic eaters of sashimi (raw fish) and sushi. At $4.00-5.00 per pound dockside a single 800 pound bluefin tuna can be worth nearly $4,000 or--if mishandled--worthless. Few New York fishermen know proper tuna handling techniques.



Working with buyers, Sea Grant Extension specialists developed a bulletin, and held meetings which aided hundreds of fishermen better understand this market. Over 100 fishermen said the bulletin alone helped them market more than 30,000 pounds of fish, yielding more than one-quarter of a million dollars of regional economic activity. Tuna sales have subsequently soared, reaching nearly $2,000,000 in 1985 from less than $300,000 in 1982.

Cooperation Pays

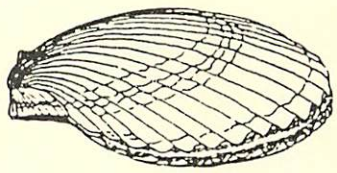
It's good to have markets for fresh tuna but New York's commercial fishery can be overdependent upon fresh fish marketing. Area fishermen seeking to expand market opportunities worked with Sea Grant Extension to establish the Shinnecock Fishermen's Cooperative. This first cooperative of finfishermen in New York now operates a facility at Shinnecock Inlet and expects to pack and market 5,000,000 pounds of fish by the end of this first year. Twenty-five vessels, and over 100 persons are involved. Much of their catch will be sold to processing and export markets, and involve underutilized species such as squid, butterfish, and whiting.

Surf Clam Boom

A Long Island Sound surf clam fishery has boomed in the past two years. Harvest yields have soared from a mere 253 bushels in 1983 to over 300,000 bushels in 1985. This now represents over two million dollars in new seafood value and associated jobs for New York State and is one of the most rapid increases to have ever occurred in the industry in New York. Sea Grant Extension has helped this budding industry in a variety of areas. A surf clam hydraulic dredge technology developed in Massachusetts was introduced to fishermen at major meetings along with information on harvesting and marketing of the newly located beds. Specialists have worked closely with the New York State Department of Environmental Conservation in insuring opportunity and appropriate oversight for this newly developed food source.

MARICULTURE

Enhancing Decimated Bay Scallops



The industry dependent on bay scallop harvest was severely threatened as a result of a 1985 algal bloom affecting Long Island bays. A coalition of Eastern Long Island Baymen's Associations was formed, with assistance from Sea Grant, to develop a plan to restore the Peconic Bay Scallop resource. The restoration program designed by the baymen associations was specifically directed at re-establishing the bay scallop brood stock in 1986 and 1987. Meetings with the participating groups and potential funding sources resulted in a combined allocation of $130,000 from the New York State Urban Development Corporation and Suffolk County. The funds were earmarked for extensive scallop seed planting and predator control programs.

Once the funding was in place, it became necessary to develop a more detailed plan for implementing the resource enhancement program and to finalize contract agreements. Inter-agency meetings provided needed technical information and coordinated community resources.

The project will start with the acquisition of one and one-half million bay scallop seeds of 20mm size that will be planted in the summer of 1986. In conjunction with this planting, a predator control program will be initiated and continued through 1987 coinciding with the growth of the scallops and subsequent spawning.

This effort hopefully marks a new beginning in a forged partnership between baymen and public agencies to help restore and respond to pressing shellfish resource problems in New York.

Long Island Green Seal Hard Clam Transplant Program

The Long Island Green Seal Hard Clam Transplant Program which was funded by New York State Ag & Markets began in August of 1985 and the transplant program which was conducted through October resulted in over 4500 bushels of hard clams being transplanted in six participating towns' waters.

Sea Grant Extension served as facilitator in the development of the Green Seal Program and the resultant funding of the Hard Clam Transplant Program. Ultimately, an organization was established that could respond to the problems identified by the participating baymen's associations representatives. Specifically the information and outline for the transplant programs proposal that was submitted and ultimately funded was developed using information on other successful transplant programs. Further, the Sea Grant Extension program, advisors to the group, aided them develop reports needed by the funding agency.

How Does It Smell?

Over 500,000 metric tons of fish and shellfish are marketed in greater New York annually. Local seafoods as well as fresh and frozen seafoods from all regions of the country and world move through distribution channels that operate both in New York and New Jersey. Because of the diversity of products and their wide variety of quality levels, seafood quality programs have become an important issue to all seeking safe and economical food for consumers. Quality is likely to assume even greater importance in the future as markets become increasingly competitive and the retail and consumer populations become more discriminating.

Recognizing the interdependence of the seafood industry in New York and New Jersey and the need for seafood quality education initiatives, Sea Grant Extension specialists organized a meeting of New York and New Jersey seafood specialists to identify opportunities to address this issue. As a result, the Bi-State Seafood Quality Committee was formed, coordinating seafood quality education efforts in the two states. Specialists from the two states' Department's of Agriculture, Sea Grant programs and the Port Authority of New York and New Jersey now meet regularly to develop and evaluate quality assurance programs.

The Committee has sponsored development of a fresh seafood quality identification guide, 1000 copies were distributed to restaurants and retail establishments in the region. Educational exhibits were also developed for food service trade expositions that reached over 1000 regional businesses.

The need for seafood quality education programs became evident from the experiences gained by these initiatives and was typified by the frequent comment: "This can't be real fish - it doesn't smell" expressed by many food service professionals at those exhibits. Really fresh quality fish may have little odor!

Saving Food for Others

The Long Island Food Bank, an organization that distributes food to the needy, requested assistance and information on bluefish handling. They had arranged for the donation of bluefish caught at a local fishing tournament held in Freeport, but the Food Bank's staff was inexperienced in handling fish. Sea Grant Extension provided information on handling and storing bluefish and suggestions for contacting Freeport businesses that might donate containers and ice. As a result of this effort the Food Bank was able to distribute 1,000 pounds of bluefish worth over $1,500, to charitable organizations.

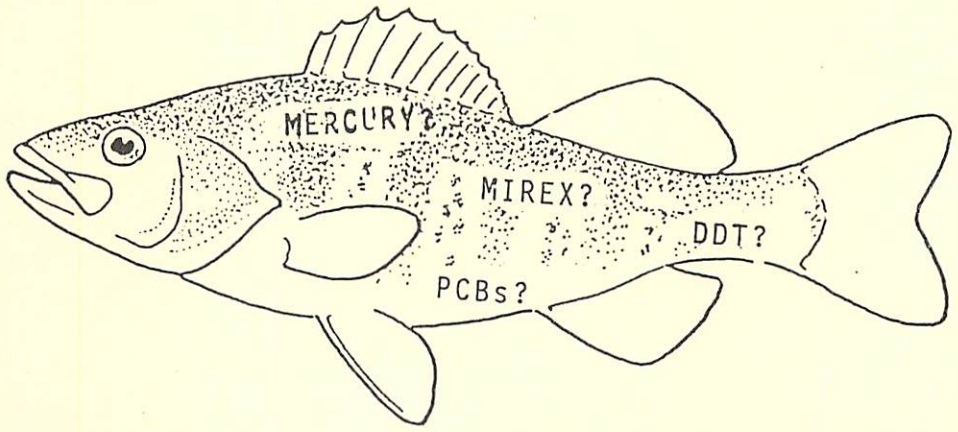
CONSUMER USE OF SEAFOODS

What's Safe About Eating Fish?

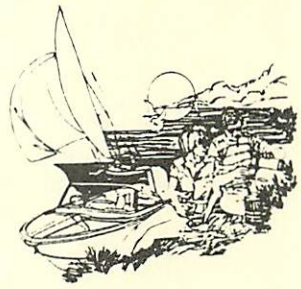
Consumer interest in seafoods has increased significantly as a result of a heightened awareness of new information on seafood's role in diet and health. Recent research has suggested that including seafood in the diet on a regular basis may reduce an individual's risk of coronary heart disease, and seafood is an important food item in most weight reduction programs. However, at the same time that these positive nutritional attributes have been widely acclaimed, the public's attention has also been focused on potential health risks associated with seafoods. Outbreaks of foodborn illness attributed to raw shellfish consumption and findings that striped bass and certain Great Lake fish may contain elevated levels of chemical contaminants are examples of health issues that have received considerable attention. As a result, consumers are confused by this apparently contradictory information and are actively seeking reliable information to help them evaluate these issues.

Sea Grant Extension specialists have provided leadership in coordinating an educational program that responds to that need. Specialists and Cornell Cooperative Extension home economists have gathered resources, identified educational opportunities and designed programs responding to these issues. Training food and nutrition professionals, a directed effort to provide objective information to the media, and distribution of updated information at annual consumer events are among the approaches used. The result? Seventy food and nutrition professionals participated in workshops designed to provide a basic understanding of seafood safety issues that will enable them to objectively evaluate new information as it emerges; eighty-five volunteers who participated in programs designed to encourage knowledge sharing with other individuals received current information on seafood nutrition and safety; over 5000 copies of four new factsheets relating to seafood nutrition; utilization and safety were distributed directly to consumers; and media contacts have resulted in articles on raw fish preparation, chemical contaminants, seafood nutrition, selection and preparation reaching at least 5 million consumers in the New York metropolitan area.

Sea Grant's program strategy of teaching professionals, volunteers and writers who serve as information multipliers has successfully utilized a consumer education network to address the changing educational needs of New York consumers.



COASTAL TOURISM AND SMALL BUSINESSES



Sportfishing, boating--most forms of coastal recreation--are experiencing rapid growth rates. Businesses capitalizing on this growth are generally small, whether they are one of New York's 800 charter boat operations, or one of the hundreds of marinas, bed and breakfast operations or other related firms. Sea Grant has aided such entrepreneurs explore and adapt to the rapidly changing coastal scene, helping to ensure maximum recreational enjoyment and maximum economic returns accrue from opportunities afforded by wise management of coastal resources.

Better Business Management

Tourism development has provided both opportunities and problems for coastal communities and businesses. The growth in recreation and tourism activities along eastern Lake Ontario and Northern New York has been particularly significant. The economic impacts, especially those related to the sportfishery and boating, are large and can be important job generators in coastal communities.

Educational programs on management topics for sportfishery-related businesses, coastal restaurant firms, and bed and breakfast businesses reached over 500, owners and managers or those considering starting a business, in that region. Within months, three of the restaurant operations altered their business management approach, six lodging firms expanded or started a new business, and four other entrepreneurs opened tourism-related businesses, with more confidence, following the workshops.

Increased participation in boating activities in the Great Lakes and Marine District requires and facilitates a healthy marina industry. A special marina session at the Sea Grant aided Marine Industries Day on Long Island helped 40 marine industry representatives learn more about the coastal permit process and legislation affecting their businesses. As a result of that meeting, four marinas subsequently developed marina expansion plans and successfully obtained coastal development permits.

B&B's, A Growth Area

In coastal New York opportunities for B&B's Bed and Breakfast operations (providing overnight accommodations and a morning meal in a private home) have increased dramatically over the last five years. The personal expression of the host makes each bed and breakfast operation unique, permitting visitors to become acquainted with a new area and different people while providing additional local tourism attractions.

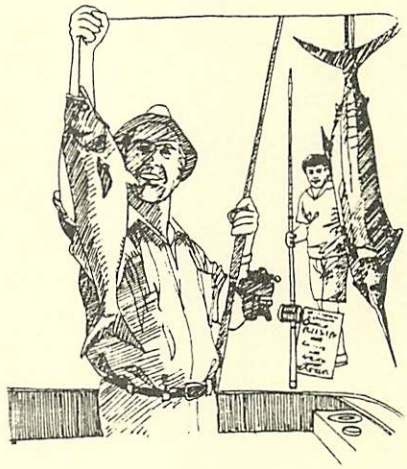
Cooperative Extension and Sea Grant Extension have aided appropriate growth of bed and breakfast businesses through informational meetings, leaflets and video tapes. In 1985 a Seaway Trail Bed and Breakfast Association was started and 15 operators in a 10 county area from Chautauqua to St. Lawrence county became charter members, and 30 more operators expressed interest in joining. The association offers the means to combine marketing efforts such as a Bed 'n Breakfast brochure for the Seaway Trail counties. The networking of these businesses also provides opportunity for them to collectively address their insurance, zoning and building code requirements.

Marketing Marine Firms

A two-day meeting of 30 leading Northeast marine recreation businessmen and 10 Sea Grant faculty and extension staff has already produced change. The group identified priority research and outreach needs of these small businesses in four areas: human resources, marketing, operations, and finance. Results of just one subsequent research project "Relationship Marketing" (how to make the most effective use of the primary publicity mode impacting small businesses, i.e., -- word of mouth) has been sought by Sea Grant staff in a dozen states and preliminary findings have been published in trade journals.

FISHING FOR ANGLERS

Nearly two million persons fish in New York's marine and Great Lakes waters. Dramatically expanded salmon and trout stocking (5 million a year) and harvest have brought new dollars and job opportunities. Such growth is also accompanied by problems such as access, competition for shoreline and waste disposal. A more mature marine sportfishery is also seeing new opportunities for revitalization and enhancement. Sea Grant seeks to aid each.



Sportsfishery: An Economic Generator

Sea Grant research documented an estimated $10.9 million in angler expenditures during 1984 along the greater Salmon River corridor. Presentations to 20 county legislators and officials contributed to that county initiating a new county tourism committee to address the needs of the small businesses supporting this industry including requests for educational programs on the resolution of issues/problems generated by the sportfishery, and continued support for the development of a safe harbor of refuge.

Thermal Structure Information Pays Off

Since 1982, Sea Grant researchers have been documenting how Lake Ontario's springtime thermal features influence salmon and trout movements, and Sea Grant Extension has carried out educational activities aimed at improving angler harvest through enhancing the anglers' understanding those processes.

By 1985, the fruit of this three-year labor could readily be seen and appreciated. Primarily on the basis of personal presentations, demonstration offshore fishing trolls, and print media coverage, a previously non-existent offshore fishery had become a reality during the months of May and June. Hundreds of sportfishing vessels now regularly roamed offshore, locating specific surface thermal clues and improving their take of steelhead, salmon and lake trout. Over 90% of charter skippers polled indicated that they had used and adopted the new thermal information and felt that it had directly improved their offshore catch. The State spends millions stocking these fish and only when they are caught, does the investment pay off.

Leadership Development within the Marine Recreational Industry

On Long Island, sportfishing-related businessmen such as charter and marina operators are increasingly recognizing the need for more active promotion of New York state's marine recreational opportunities, services and attractions. In 1985, leaders from 4 charter and party boat associations and 2 marina organizations, working with Sea Grant, met with the New York State Department of Commerce's Tourism Division staff to discuss needs, opportunities and options for positive promotions. As one result of this meeting the private interests formulated a saltwater sportfishing awareness campaign addressing the state's marine area.

Sportfishing Technology Conference

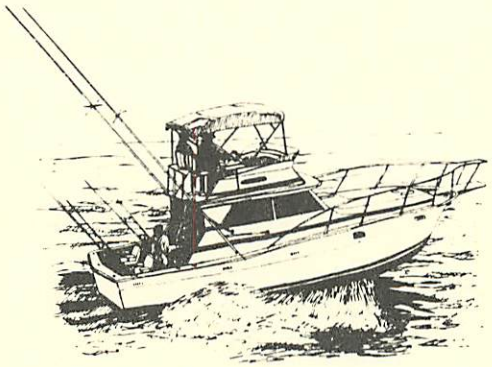
New York sport anglers value new updates on issues that affect the marine environment and on sportfishing technology. Sea Grant Extension initiated and now coordinates, with numerous sportfishing groups, the New York Sportfishing Technology Conference which provides sportfishing organizational leaders with up-to-date information and research. Over 200 invited leaders attended the day-long workshops and technology fair, and in turn transferred the information to over 40,000 club members. One sportfishing group leader noted the New York Sportfishing Technology Conference is the major educational activity on New York's marine coast.

Educational Vessel Completes Its Cruise

In 1983, Sea Grant Extension launched its "Educational Vessel Ontario" (EVO) on the waters of that Lake. Its goal was to bring sportfishing information "down to the dock," using the vessel as both a vehicle and an attraction to facilitate sportfishing educational activities. The vessel, a 25-foot fishing craft, all its equipment and operational funds (valued at over $50,000) were donated and supported by over 250 private and public organizations within New York State and around the country.

In 1985 at the end of its third educational season, the EVO had been visited by over 20,000 anglers and boaters. Its youth educational effort permitted some 300 4-H'ers from six counties to go aboard and be exposed to the basics of navigation and Great Lakes fishing technology. Over 1,500 anglers had attended formal presentations on equipment uses, fisheries history and a variety of other topics given by vessel staff. And its media trips and demonstrations has resulted in enhanced TV and national print media coverage of the lake estimated to have reached well over 10 million viewers and readers. Practical exercises conducted by the vessel crew resulted in handouts that enhanced sonar interpretation by anglers and boaters, the marketing of a sub-surface water temperature system by a private entrepreneur, and a finer understanding of a unique underwater environment occurring on one of the lake's few major shoals.

This fall because its educational goals had been met, the E/V Ontario Project was concluded. Many of its educational activities have been picked up by a growing number of private and public groups, thus in spirit, the "EV" lives on.

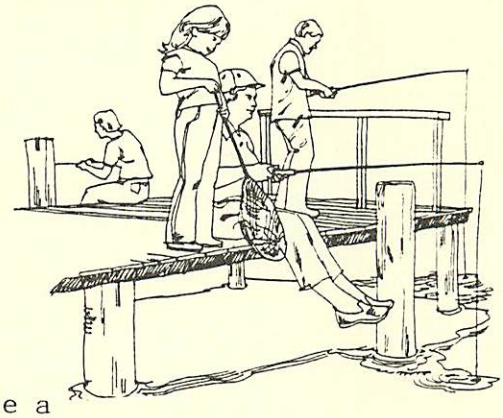


YOUTH EDUCATION

Sea Grant makes substantial contributions to the economic development of this country but our most important treasures, such as America's youth, cannot be valued in dollars. Today's children will eventually assume responsibility for managing our coastal resources, and New York Sea Grant has a strong commitment to helping them understand and make appropriate use of those resources.

Master Anglers/Teachers

Sportfishing provides a leisure activity readily available to most coastal residents. For youth, fishing skills learned early on can be continued throughout life. Sportfishing also provides a focal point for gaining an understanding and appreciation of the coastal environment specifically, and of natural resources as a whole. Traditionally youth learn about fish and their environment from parents or friends. However, for many who want to learn about sportfishing but do not know others who fish, the process can be difficult, frustrating and may not even be available. Most such instruction is also likely to be weak in scientific accuracy. Sea Grant Extension and Suffolk County Cooperative Extension 4-H sought a way around those problems.



Closer scrutiny revealed the problem was not lack of information--many experts in the different areas of sportfishing could be identified--the problem was lack of knowlegeable teachers. The task then was to develop a network of well trained volunteer sportfishing educators. The volunteers would be trained by the extension team and then use their new, and old, knowledge to work with youth in a number of formal and informal educational settings.

When the Master Angler program was advertised, 85 individuals applied. The 31 selected to participate became a highly cohesive group over the 13-week two-hour sessions. Their enthusiasm is demonstrated by 29 successfully completing the "Master Angler" course. In their evaluation of the program, comments such as "I hope this is the start of something big for everyone who enjoys the environment" and "One of the best things to come to this Island" indicated the participants' positive feeling for the program.

As a result of this program, 29 highly knowledgeable volunteers are now teaching sportfishing education to Scouts, camping groups, 4-H Clubs, and school children in settings as diverse as classrooms and beaches. The future of the program has already taken shape with master anglers programs scheduled for 1986 on both the marine and Great Lake coasts. By the end of 1986, over 100 volunteer Master Anglers are expected to be educating youth in New York coastal areas about New York fish and fishing.

Fish through Ice?

Cornell Cooperative Extension 4-H agents working in natural resources sought an effective wintertime activity. Ice fishing, an enjoyable and productive form of winter activity, holds potential for introducing many new youth to Extension 4-H. Staff at Cornell and East Aurora developed a publication, "Let's Go Ice Fishing" to meet this need.

To get the publication and project "into the system", a workshop attended by 40 4-H agents and volunteers from 16 counties across New York trained these potential trainers. The agents and volunteers in turn trained several hundred youth in a new wintertime activity--ice fishing.

Marine Science Camps

Another approach to helping youth learn of fish and fishing are two 4-H camps designed to teach basic marine and coastal science. The Long Island camp, planned by Cooperative Extension 4-H Agents and Sea Grant Extension Specialists attracted 50 youth participants.

This camp has been so successful that 4-H and Sea Grant staff along the Great Lakes developed a related weekend on coastal science. Another 50 leaders, agents, and 4-H youth learned of the Lakes, their life and contributions. Trips contributed by local charter boat captains were the hit of this camp.

"Give a man a fish, and you feed him for a day.
Teach a man to fish, and you feed him for a lifetime."

-- Chinese Proverb

COASTAL EROSION AND MANAGEMENT

Our marine and Great Lakes' waters play important roles in enhancing the quality of life and the economy of our state and nation, they can also be highly destructive of properties. Sea Grant in New York helps industries, communities and landowners minimize damaging impacts of our coastal waters, while seeking to make maximum use of those same resources.

Communities and the Corps

Due to their complexity, many marine resource issues require more than a "quick fix" solution. Sea Grant helps resource users develop leadership and organizational skills for solving problems and at times provides the technical information necessary for informed decision making.

In 1984 Sea Grant assisted sportfishing, commercial fishing and recreation boating businesses and organizations in forming the Coalition for the Stabilization of Fire Island Inlet. This group was very successful in increasing public awareness of hazardous shoaling problems at Fire Island Inlet, the busiest inlet on Long Island. In 1985, as a result of the Coalition's efforts, the U.S. Army Corps of Engineers worked with members of the Coalition and local and state government officials to develop a comprehensive plan to improve inlet safety. This plan called for an interim dredging project to improve the existing channel while options for a more permanent solution were being studied.

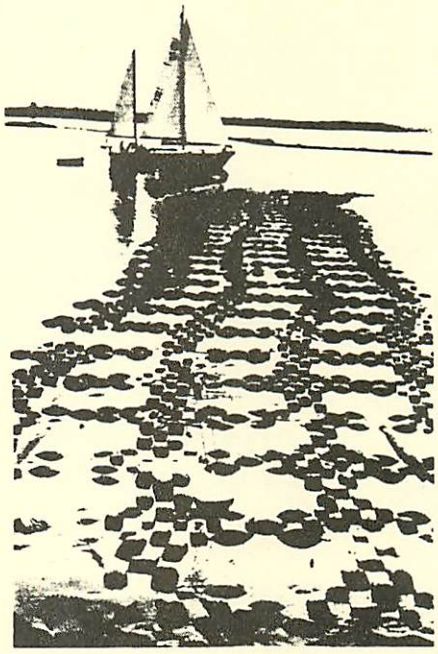
However, developing and implementing a project are two different things when so many user groups may be impacted. Fearing possible adverse impacts on Great South Bay salinity, local officials, unfamiliar with the specifics of the plan, objected to the interim dredging. Sea Grant educational efforts focused on providing unbiased technical information on the project and its effects (and non-effects) to clamming industry leaders and the Long Island Shellfish Advisory Board. Consequently, the objections were withdrawn and the $1.5 million interim dredging project was completed in 1985. Realizing the salinity question would be a more important part of any long-term solution, Sea Grant brought researchers from SUNY's Marine Sciences Research Center together with Corps officials to explore this potential problem. The U.S. Army Corps of Engineers subsequently committed $75,000 for a modeling study of the inlet.

An inlet users advisory group suggested by Sea Grant has also been actively working with the Corps to identify viable options for permanent improvements to the inlet. As a result, the options have been narrowed down and efforts are being concentrated on the development of a $27 million channel realignment project.

The Coalition's leadership skills, nurtured by Sea Grant Extension, have helped them become an active participant in public decision making. The Coalition has remained together and is now actively involved in other projects to enhance fisheries in New York waters.

An FTB Doesn't Make Waves

Boats in the Sodus Bay Yacht Club marina were plagued with wave damage when strong south and southeast winds blew--a too common experience. Conventional breakwaters were unfeasible for the club. In 1982, after meeting with Sea Grant Extension Specialists and studying Sea Grant's bulletin "Floating Tire Breakwaters" (FTB's) the club built their own FTB. Doing the work themselves, they constructed a main section 77 feet by 14 feet with a 28 feet by 14 feet dogleg extension. Does it work? In the summer of '85, during a 2 hour southeasterly 30 knot blow, nearby marinas had very choppy wave action resulting in numerous crossed masts; the yacht club marina had gently rocking boats, no crossed masts, and no strained landlines. The best news: the FTB has paid for itself in only 3 years and the club plans to extend the structure to protect new docking areas.



Steps to Scouting

The managers of a Girl Scout camp on a steep bluff overlooking Peconic Bay sought technical advice on construcing steps to their beach. Using Sea Grant educational materials they decided to install toe protection in front of the stairs to protect them against wave attack and extend their expected life. Design specifications based on Sea Grant suggestions (use of filter cloth, pressure treated lumber, etc.) were written into the contract. The camp was able to select a design incorporating improved specifications that saved them $9,000 from their original plans.

Water for Industry

Industries using Lake Ontario as their main source of process water need to know and adapt to the reasons the lake's water quality varies from day-to-day, season-to-season, and year-to-year. A change in source water quality can result in a company being unable to use that water in today's high technology processing.

A 2-day workshop on "Impacts of Lake Ontario Source Water Quality on Industrial Processes and Municipal Uses", was cosponsored by Sea Grant, Eastman Kodak (which treats 11+ billion gallons of Lake Ontario water annually in their own treatment plant), Rochester Institute of Technology, Monroe County Water Authority, and the Rochester-Monroe County Industrial Management Council. Other agencies and corporations involved included: New York, Ontario, United States and Canadian governmental agencies as well as Eastman Kodak, Molson Brewing Company, Bausch & Lomb, Calgon Carlson, E. I. duPont deNemours, and Xerox. Ninety industry representatives, water suppliers, researchers, and government representatives from the two countries attended the workshop.

While numerous conferences on pollution touch upon source water quality and industrial and commercial users, this was the first New York workshop designed specifically to give this audience information on the resource, and to solicit their concerns and needs related to the Lake. Physical phenomena impacting nearshore water intake quality; supply water treatment standards, technologies and trends; supply water quality needs of users; and future options to improve source water quality were among the topics discussed.

A management-level ad hoc steering committee established by participating industries will focus on development of a relevant, accessible, analytical data base on source water quality; the development of improved technologies for water treatment; the development of better in-house specifications for source water; as well as improved communications between government and the private sector to increase understanding of Lake Ontario as an industrial water supply source.

Part of a Triad

A Sea Grant College has responsibilities in research and resident teaching as well as extension. Work with researchers and with students should mark a Sea Grant College's Extension effort. Examples in New York for 1985 are:

Researchers

Fifteen professors, technicians, and students attending a seminar developed by a specialist on inlet problems along Long Island's south shores so that they might more adequately design research responses.

Ontario Ministry of Environment representatives were provided an overview of salmonid movement research and sportfishing experiences to help assess relevance to Canadian waters and programs.

A computer information system researcher requesting materials on Puget Sound was provided a list of 122 references (thanks to SGNET, Sea Grant's electronic mail network) the same day! He used this information in developing a computerized coastal information system.

At meetings arranged between a researcher studying the economic impact of marine sportfishing in New York, and cooperating charter/party boat associations data on cost and income was collected from boat operators.

Information on the effects of trimming and cooking procedures on PCB levels in saltwater fish was lacking. Available information was based on studies done on freshwater fish, and it had not been shown that these procedures work on marine species. A grant permitted researchers to study the effects of trimming and cooking on PCB levels of striped bass.

Students

A specialist aids Suffolk Community College explore a potential curriculum in tourism and travel development.

Forty students in a RIT sport recreation and tourism class were provided an overview of coastal development.

A design project is undertaken by a university class on "Thermal Properties of Textiles" to speed up the cooling of hook-and-line caught fish yielding better flesh quality.

Landscape Architecture grad students, a visiting professor from India and a professor were given a one-day tour of Lake Ontario shoreline erosion sites. The second year for this tour for that class.

A high school class is assisted in setting up a retail seafood market, yielding "hands-on" training for those students.

A Sea Grant professor develops a course outline in concert with 40 marina operators, to ensure there are well-trained students who can be effective employees for those New York businesses.

Working with Groups

Seventeen million New Yorkers are too many for any educational group to impact directly. Effective use of "multipliers", those who in turn can teach others is a long-term strategy of Sea Grant Extension. In some cases this means assisting new groups organize, in other cases we work with existing groups. For example in 1985:

Six charter boat operators associations on Lake Ontario were assisted in forming an umbrella council--the New York State Charter Sportsfishing Council

A bulletin on coastal plants developed by a specialist was published by the American Society of Landscape Architectures, the national society influencing a key group who plan shoreline vegetation.

Volunteers from the "Concerned Shinnecock Fishermen Wives" group was assisted in planning and planting 69,000 square feet with panicgrass, stabilizing frequently over-washed dunes near a commercial fishing dock.

The National Park Service was provided information on the status of research related to measuring the economic impact of sportfishing. The National Park Service is now contemplating such a study for the Jamaica Bay area.

The editor of the Shinnecock Tuna and Marlin Club was provided information related to using NOAA weather radio, and boating safety for inclusion in this year's club journal.

Four leader training classes were held that reached 56 volunteer leaders who will go back and teach their respective groups. The class, "A Little Fish Goes A Long Way" focused on the use of extenders, and a pound of finfish, to feed a family of 4-6. Volunteer leaders were excited about sharing the new information learned, and they were also surprised to find that one could make dishes such as tacos and cole slaw with flaked fish.

The enrollment of children in Suffolk County 4-H school programs increased during the last year. "Food from the Sea," one of the newest offerings, was booked solid -- 2,657 students in 33 schools heard a one-hour program on the life and times of Long Island's fish and the men who catch them.

Twenty-two agriculture teachers were provided an introduction to fisheries management as part of the New York Ag Teachers Association Conference.

Regional and National Efforts

We seek to further our effectiveness by using and providing resources to regional and national groups. This is facilitated by New York's position as the swing state between three Sea Grant regional groups--the Great Lakes, Northeast and Mid-Atlantic. Thus:

Staff gave presentations at meetings of baymen in Massachusetts, of fishermen in Maryland, at Trade Shows in Boston and Chicago, at sessions in Michigan sponsored by the Great Lakes Fishery Commission and chaired a regional workshop for leaders of Charter Boat Associations.

A staff member spent a year assisting the National Sea Grant Office in Washington, DC developing training and evaluation procedures for Sea Grant programs in 31 states and territories.

Sea Grant assisted industry and the Department of Environmental Conservation members in organizing a project to evaluate the feasibility of transplanting shellfish from polluted waters, placing them in mesh bags and putting them on bottom in certified waters. New York Sea Grant was able to utilize the resources of the Connecticut Marine Advisory Program to obtain critical information concerning the bag relays Connecticut has been conducting for some 7 years. Connecticut health officials were also contacted and information conveyed to the New York State Department of Environmental Conservation.

Samples of black sea bass from the New York Bight were needed in a South Carolina Sea Grant research project. A local fish company provided the fish and a South Carolina trucker, returning from a trip to Fulton Market, delivered them.

An Illinois firm received information to insure their design of a 400 foot pier met certain requirements of the Hudson River.

Sixty Advisory Leaders from around the country participated in a 4-hour workshop on evaluation led by New York staff. Professors from Cornell, Universities of Maryland, and Minnesota were involved.

Getting the Word Out

Successful and efficient extension programs will use a variety of communication media. In addition to two bulletins, three fact sheeets and four technical papers, staff produced weekly newspaper columns, weekly radio shows, monthly TV broadcasts, and issues of four different newsletters appeared quarterly.

The myriad meetings, tours and workshops held--some with large attendance, some with small--included:

The Town of Hempstead Seafood Festival and the Long Island Harvest Festival. Attendance at the Hempstead Festival was 50,000+, only 2,000 attended the Long Island Harvest Festival due to Hurricane Gloria's visit.

Thirty local government officials new to their roles learned more about problems and opportunities associated with the use of coastal resources. The State University Marine Sciences Resesarch Center, and State Department of Environmental Conservation assisted at a Sea Grant and Suffolk County Cooperative Extension sponsored seminar intended to increase the new official's awareness of some of the problems they will be facing, as well as where they can get help.

One 4-H fishing trip on North Channel Bridge involved 24 children plus 5 leaders. That was but one marine activity in New York City. Another 130 City youth were involved in similar field experiences.

A presentation to six science supervisors at the State Science Supervisors Conference in Elmira led to a lively session with many questions as those key persons use coastal sciences in program development in their schools.

3000 persons attended the Eastern Lake Ontario Sportfishing Exhibition. Sea Grant organized the associated educational events including 13 presentations and 13 films. Between $150,000-$200,000 in direct sales occurred during the event.

A workshop on "Seafood Nutrition" for 15 dietitians completing a Cardiovascular Counseling course provided an update on fish oil research and cholesterol.

Representatives of six Lake Ontario landowner associations participated in on-site review of their shorelines. They were assisted in determining causes of their shoreline erosion and deciding on means to mitigate that loss.

A series of tours and discussions on joint foreign and domestic fishery ventures was developed with state agency representatives. One such tour, arranged through the Eastern Long Island Trawlers, permitted Secretary of State Gail Shaffer to board, at sea, a Japanese processing vessel and meet with its crew and to generally become familiar with joint ventures.

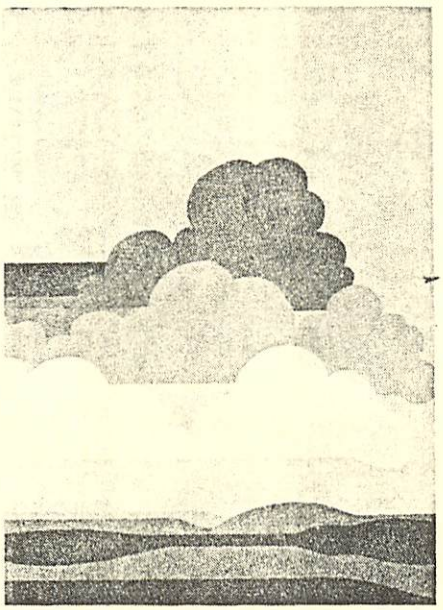
ON THE HORIZON

New initiatives arise because of foresight, or sometimes they hit you in the face! Three 1985 initiatives that are expected to expand in 1986 and the years ahead:

Aquaculture Development is increasingly a topic for which state agencies and private citizens seek assistance from Sea Grant. Growth in marine aquaculture (mariculture) is spawning renewed exploration of aquaculture upstate. Sea Grant assistance in the formation of a Statewide Aquaculture Association and their first statewide meeting, suggests an area of emerging importance.

Highwater Levels will occur in 1986 on Lake Ontario. Evident late in 1985, the levels could approach or exceed record highs recorded over the past century. Sea Grant has alerted coastal residents, governments, and media to this threat. Higher than normal levels exist in the Upper Great Lakes. It takes three years for that water to move through and out Lake Ontario, thus high water concerns are likely to be with us for several years.

Electronic mail, data base systems and computer aided instruction made modest advances in 1985. One personal computer program developed as part of a research project, aids commercial fishing captains decide on propeller retrofitting of their vessel. Over 40 captains used the system with extension assistance, resulting in numerous propeller conversions. One captain reported his $20,000 cost for retrofitting was repaid in four months by increased efficiency. Such electronically aided instruction will assume greater prominence in 1986 and the years ahead.



Organizational Growth and Change

Sea Grant is a partnership of the State University of New York and Cornell University, the United States Department of Commerce, County and State government--all working together with hundreds of private individuals and groups to conduct valued educational programs. Such partnerships require nurturing, and as any organization Sea Grant Extension must change to be in accord with current and future, rather than past, realities.

Partners

Federal support for Sea Grant has grown little in the past five years but other members of the partnership are assuming a growing role. For example:

Suffolk County Cooperative Extension Association used a portion of $90,000 of county funds to establish a Sea Grant unit. Two Sea Grant specialists joined the county staff, it represents the first county Sea Grant Extension unit in the nation.

Four county Cooperative Extension Associations along eastern Lake Ontario joined in a designated "Tourism/Small Business Development" team to aid in the economic development of this dynamically changing coastal region.

Cooperative Extension Associations in Niagara and Nassau County expanded commitment by their staff to Sea Grant Extension programming.

People

People grow professionally and in so doing often move. Several specialists, long-term contributors to the New York Sea Grant Extension Program, ended direct Sea Grant programming this past year. Included were two individuals who switched to the private sector, Glenna Ryan and Steve Lopez, and two others who remained with Cooperative Extension, but in different roles: Steve Brown joining Vermont's Cooperative Extension Service, while Dr. Michael Duttweiler assumed an Extension Representative position within Cornell Cooperative Extension Administration.

Mr. Brown's departure marked the closing of the Potsdam Sea Grant office after a decade-long service to the people of the St. Lawrence Valley by he and others.

Extension achievements, as those of other educational groups, are principally dependent upon our staff. This year the outstanding accomplishments of several New York Sea Grant Extension Program staff were recognized. These included:

Dr. Robert Buerger, recipient of the New York State Park and Recreation Association's 1985 Lehman Award for Outstanding Research.

Bruce DeYoung, recipient of the 4-H Agents Association of New York Award of Merit.

David Greene, a co-recipient of the Cooperative Extension honorary society (Epsilon Sigma Phi) award for development of an outstanding program, on ice-fishing (see page 13).

Dr. Michael Voiland, recipient of the 1985 Great Lakes Sea Grant Network Award for his program involving greater use of Lake Ontario thermal structures by sports anglers (see page 10).

They, and the others working with Sea Grant, hope this review of some of our 1985 efforts have been valuable to you.

THIS IS NOT THE END--

IT'S JUST THE TIP OF THE ICEBERG...