

ANNUAL REPORT ON ACCOMPLISHMENTS AND ACTIVITIES
OF SEA GRANT EXTENSION PROGRAM IN NEW YORK

January - December 1977

INTRODUCTION

This report summarizes activities and accomplishments in the major program areas of coastal zone management, coastal protection, recreational access, tourism, consumer fish utilization, commercial fishing, seafood processing and youth education. It is not a complete commendum, but it includes selected activities and accomplishments to indicate the nature of program directions during 1977. Detailed background information and situational analysis for the major program areas are not included. The 1977 Situation Statement and Program Plan provides this information. In this annual report, each of the eight program areas plus communications and program leadership is briefly described and selected events listed.

COASTAL MANAGEMENT

Awareness of coastal resource problems and understanding of the need for coastal zone management are important. Assistance can be offered in the process of developing the State's coastal management plan, especially in public participation efforts. Technical knowledge and management alternatives should be made available to all with emphasis on local planners.

A. Example Anecdotes

1. Cayuga County planners have jurisdiction over only ten miles of Lake Ontario shoreline, while the bulk of their county lies inland. Yet that ten miles is as diverse as almost any other on the shore, including major wetlands, a nuclear power plant site, a large bay with extensive residential and recreational development, a state park, the highest clay bluffs on Lake Ontario and more.

Discussions with three of the planners, including the county planner, revealed that none had visited the shore other than at the park. Sea Grant arranged a day-long tour and discussion of coastal issues. When the tour was complete, one participant said, "Wow! this is a whole different world up here." The others indicated that they had no understanding of their shoreline diversity before the trip. While too soon to fully evaluate, it seems likely that the participating planners will be better able to make informed decisions about their coast.

2. Many coastal residents along Lake Ontario have suffered serious property losses from wave induced erosion. The Corps of Engineers, in attempting to assess the full extent of shoreline damage along the Great Lakes, was surveying property owners. Members of a landowner's association on Lake Ontario felt threatened by the detailed questions included in the survey and decided to boycott it. The regional Sea Grant Specialist met with the group and explained the potential benefits of the survey in documenting need for better lake level control. The group subsequently participated in the survey.
3. Policy decisions affecting use of the coasts have a direct impact on marine workers. Yet marine worker unions had not recognized participation in the coastal management program as a means for influencing their future. Sea Grant met with union leaders to explain CZM and the associated public participation opportunities. Subsequently, union leaders made substantial commentary on the subplan for their region.

B. Accomplishments and Activities

1. Planners and Officials

- 14 Lake Erie Coastal Planners attended a workshop on Lake Erie coastal processes during which Sea Grant research was reviewed. Several commented that the information was directly applicable and asked for more details.
- The official ad hoc CZM committee for Niagara County asked Sea Grant to serve as a non-voting, resource member.
- Cayuga County planners were given a tour of their Lake Ontario coastline.
- The Nassau County Health Department and Nassau County Environmental Management Council were aided in evaluating the site of a proposed inlet relocation project.
- Seventeen members of the Nassau/Suffolk Marine Resources Council attended a tour of proposed sites for dock facilities in the Shinnecock Bay area. Local groups such as this will have major influence in the development of New York's fishing industry.
- The New York State Department of Agriculture and Markets was assisted in identifying farm lands in the coastal zone of Lake Ontario.

2. Public Awareness

- 75 persons attended the Great Lakes Tomorrow program on the Extended Navigation Season proposal; Sea Grant assisted in publicity and logistics for the program. Extended navigation could influence many coastal residents, particularly those in the St. Lawrence Valley.
- 60 people (some shoreline owners) attended a presentation by staff at the Monroe County League of Women Voters meeting on the County's coastal zone management plan.
- 65 persons (most of whom were government related) participated in a Seaway Transportation Conference which reviewed the many influences of this major transportation system. The conference was sponsored by the Sea Grant initiated St. Lawrence Valley Conference Council.
- League of Women Voters groups in three areas were assisted in carrying out their public participation contract with the New York Coastal Management Program.
- Two 208 tributary study tours were coordinated (one of Lemon Creek in Staten Island, the other of Coney Island Creek in Brooklyn). 31 persons learned about existing problems and the 208 effort to preserve the creeks.
- More than 40 representatives of agencies, elected officials, civic organizations and fishermen's associations attended a "Public Forum on Sand Mining in New York Harbor."

- Coastal contractors, with assistance from staff, provided commentary on proposed tidal wetlands regulations that had major implications for their work.
- Sea Grant assisted in arranging and participated in a 30-minute Rochester T.V. show on CZM, which was viewed by an estimated 20,000 viewers.

3. General

- A mini-grant study on the effectiveness of the Braddock Bay dredging project was developed to provide needed information for concerned residents and agency professionals.
- Wilson Town Board and 15 other concerned citizens learned about the Wilson 12 Mile Creek mini-grant study. Board members voted unanimously to provide \$1,500 in matching funds for the grants to examine sources and movement of sediment at the creek mouth which hindered boat access.
- 40 Pine Grove Beach cottage owners met with representatives of the Corps of Engineers and Sea Grant to discuss the present stage of planning for the Port Ontario Harbor and access alternatives to the breakwall. Representatives of both the Corps and landowners felt that much was learned by both parties.
- Dick Irwin, an advisory committee member, was appointed to the Coastal Zone Subcommittee of the Lake Erie Regulation Study Board. This is important since "citizen" representatives are very rare on such boards. His appointment is related to Sea Grant's role in getting Mr. Irwin appointed to the statewide citizen participation committee of the New York Coastal Management effort.
- A quarterly aquatics plant newsletter "Cattales" was developed jointly with an agronomist to be distributed to Sea Grant and Cooperative Extension offices throughout the State.
- Waterfront groups were assisted in exploring the possibility of declaring Long Island a disaster area after severe damages during the winter of 1976-77.

COASTAL PROTECTION

Educational programs should provide decision makers with information to solve coastal protection problems in a manner which is economically efficient, environmentally acceptable and physically effective. Efforts are directed towards individual property owners, contractors, coastal planners and other officials.

A. Example Anecdotes

1. The Town of Islip (Long Island) recognized that planned shoreline protection was requisite to conserving their oceanfront and considered developing a shoreline protection plan. Sea Grant was asked to provide assistance. A survey of existing bulkheads and property ownership was identified as a first step. Sea Grant helped design an inventory and train surveyors. The inventory indicated that 50% of the shoreline was bulkhead while the remainder was almost all publicly owned. With minor expenditure, the town had discovered that an elaborate, formal plan was unnecessary.
2. A Lake Erie shoreline owner had lost a significant portion of his bluff property to "erosion" such that his house was threatened. He requested a visit by Sea Grant to help evaluate options for shoreline protection. Site inspection indicated that the primary difficulty was not wave erosion but rather insufficient drainage in the bluff itself. Sea Grant researchers documented that this condition was common in this area. Thus, the landowner avoided expenditure on extensive shoreline protection, which likely would have been ineffective.

B. Accomplishments and Activities

1. Property Owners

- More than 200 Great Lakes landowners were informed how to claim casualty losses from shoreline erosion on their income tax.
- 50 Great Lakes landowners attended an erosion control workshop which featured researchers from the Michigan Sea Grant Program.
- Citizen concern stimulated a mini-grant to study the most effective location for a Floating Tire Breakwater in Barcelona Harbor. When installed, it will be the second FTB on the Great Lakes.
- A marina operator in the Lake Champlain region was assisted in planning for the installation of an FTB to protect some docks.

- The Leeton Drive Homeowner's Association (Long Island) was aided in their efforts to have the Goldsmith jetty partially removed at no cost to the county; an engineer will visit the site and give a cost estimate on the removal and sale of the rock. They also were assisted in gaining free from the manufacturer a 200-foot long by 4-foot diameter tube of filter cloth to be used as a sill. Either action could have represented a sizeable expense for the Association.
- The Leeton Drive Property Owners Association also asked Sea Grant to attend a site visit inspection of a proposed shoreline stabilization project. Representatives of the Corps of Engineers, NMFS, and Fish and Wildlife had had reservations, but after the visit had different perspectives on the application.
- 40 members of the Niagara-Orleans Shoreline Protection Association attended a presentation on low cost methods of shoreline erosion control.
- Over 200 Great Lake shoreline owners requested and were sent information on proper erosion control methods.

2. Planners and Officials

- Along with a representative of the regional Soil Conservation Service, Sea Grant examined 26 parcels of coastal property and spoke with 7 owners having erosion problems.
- Nassau County Cooperative Extension referred 32 shoreline homeowners from Bayville to Sea Grant for assistance in solving an erosion problem. This represents the increasing recognition of Sea Grant as a program resource within Extension.
- East Hampton Village officials were made aware of possible alternatives to exercise control over shore protection structures.
- 52 persons (local, village, town and county officials involved in the permit issuing process) attended the Shoreline Stabilization: Planning Considerations workshop and learned what each other required during permit processing.
- Sea Grant stimulated regional Soil Conservation Service representatives to establish coastal vegetative demonstration sites along Lake Erie. Among the first of this kind located along the Great Lakes, plant materials will be monitored and evaluated for use by coastal property owners.

RECREATIONAL ACCESS

Major programs in recreational access involve: harbor of refuge development on the Great Lakes, management information for private recreational enterprises, diminishing conflicts between recreationists and landowners (largely in the Great Lakes region), assistance to coastal planners and efforts to increase awareness of recreational opportunity.

A. Example Anecdotes

1. The Lake Ontario salmonid fishery places exceptional recreation pressures on tributary waters during spawning runs. Waterport Dam, on Lake Ontario's south shore, is an example of highly concentrated pressure. Fish and fishermen concentrate below the dam (which the fish can't pass). The property below the dam is owned by a power company which passively allowed fishing. However, increased problems of litter and property damage threatened access to the site. Sea Grant arranged meetings between the power company, law enforcement agencies, resource managers and sportsmen to identify options for lessening impacts. As a result, signs were produced and posted urging sportsmen to be considerate. Afterward, sportsmen's groups initiated their own coordinated clean-up efforts and removed 40 large trash bags of debris and litter. The area remained open to fishing.
2. Access to New York City's waterfront is blocked effectively at numerous streets that dead end adjacent to the water. Working with a Community Planning Board, Sea Grant helped a Brooklyn community develop a street end park in a formerly abandoned lot by providing design and planting expertise. Direct access to the water, thus, was created for this neighborhood.

B. Activities and Accomplishments

1. Public Awareness

- Orleans County Federation of Sportsmen was advised of the latest information on access and liability resulting from recent legal interpretations.
- 3,000 copies of "Make Your Own Fish Trophy" have been distributed in an attempt to stimulate trophy only fishing for species with contaminant problems.
- WDOE-Dunkirk, a coastal radio station, broadcasted summer marine boating forecasts hourly, researching and disseminating information on beach conditions as appropriate for local areas. This is a direct result of the coastal recreation opportunity radio spots that Sea Grant produced for the Lake Erie region during three summers.

- A weekly news column on recreational opportunities was carried in three papers with a combined circulation of 20,000 along the Lake Erie coast raising awareness of the Lake as a recreation resource.
- 155 persons (from Erie and Chautauqua Counties) participated in a meeting dealing with Lake Erie salmonid recreational fishing. It was sponsored by the Chautauqua County Izaak Walton League, Dunkirk Continuing Education and Sea Grant. Increased stocking of salmonids during 1976 because of contaminant problems in Lake Ontario made this a timely session.
- 70 persons attended the "Great Lakes Sport Fisheries--Understanding Our Problems" conference in Rochester. The current status of contaminant problems was discussed to provide background for understanding future contaminant rulings.
- Four communities on Lake Ontario including Irondequoit Bay and Wilson Harbor were aided in their exploration of how to develop a safe harbor. Harbors of refuge on Lake Ontario are few in number.

2. General

- 20 persons from a homeowner's association on Long Pond (Monroe County) received a suggestion on how to modify their boat ramp to meet low level lake conditions.
- Sea Grant aided a Genesee River marina operator with information on minimizing ice damage which has been severe during the recent harsh winters.
- In response to an expressed need by diving enthusiasts, a list of SCUBA diving facilities and hyperbaric chambers in the marine district was compiled.
- Sportfishermen were aided in gaining extended night fishing time for brown trout off the Hamlin State Park groins.
- Recreational facilities are being improved at the Point Breeze Harbor of Refuge, partly attributable to educational activities of Sea Grant.
- Specialists were trained about state agencies and their programs relating to recreation.
- A mini-grant on water surface zoning was used by Monroe County in planning for future use of Irondequoit Bay.

TOURISM

Communities in several coastal areas of the state could benefit from increased understanding of tourism and, subsequently, could foster the types of tourist development that increase economic and social benefits to the coastal area without compromising resources.

Activities and Accomplishments

1. Private Entrepreneurs

- The St. Lawrence County Chamber of Commerce was assisted in developing promotional materials for recreation. This represents formal recognition of the role of tourism promotion to their success.
- A 13-session business management course was conducted for coastal hotel/motel and restaurant operators. They learned about marketing, hospitality and other phases of management.
- 20 tribal members of the St. Regis Indian Reservation participated in a session on small business management. Lack of capital was identified as a major hinderance to their tourism development.
- Programs on tourism and hospitality were conducted for two Chambers of Commerce in the eastern Lake Ontario region.
- Staff assisted in the formation of the 17 member Western Bait and Tackle Dealers Association, individuals previously lacked a unified voice.
- A "Keys to Selling Success" seminar was conducted for St. Lawrence Valley entrepreneurs.

2. General

- "The Oswego Coastal Trail", a self-guided driving tour along part of Lake Ontario's shore was developed and distributed to Chambers of Commerce and planning groups in Oswego County. It will serve both as a tourist activity and an educational tool in coastal resource management.
- A 1000 Island/St. Lawrence Seaway tourist survey is being conducted in Massena, Ogdensburg, Alexandria Bay, Wellsley Island, Clayton and Sacketts Harbor. Supplemental data will come from Watertown and Cape Vincent. The survey will help local communities analyze their tourism potential.

- Cooperative Extension employees involved in CRD have asked Sea Grant to develop information sources in tourism in addition to providing an in-service program for January 1978 to deal with Extension's role in tourism, indicating increased potential for joint educational programs in the future.
- The Niagara County Tourist Advisory Board is issuing a monthly Business Management Newsletter which contains the "A Step Ahead" series developed, in part, by Sea Grant. Multiple use of educational materials such as this is necessary to reach the diverse tourist industry.

CONSUMER FISH UTILIZATION

New dietary recommendations emphasize the use of fish as a protein source. However, many consumers are simply unaware of how to use fish and new fish products. Also, some fish are known to be contaminated with toxic substances resulting in a need for informed fish consumers.

A. Example Anecdote

Use of less known species such as carp, sucker and sheepshead and new fish products such as minced fish is "foreign" to most consumers. One effective way for reaching large numbers of potential fish consumers is working through extension home economists, in effect, "teaching the teachers". Twenty-eight home economists attended fish preparation workshops in two locations and were updated on preparation of lesser used species and new products. It is estimated that up to 1,000 consumers were contacted by them subsequently. This is a traditional "specialist" role of training other extension professionals to build in a "multiplier effect."

B. Activities and Accomplishments

1. Training Educators

- 10 EFNEP aides from Suffolk County and two home economists learned about seafood preparation at a workshop which emphasized under-utilized and economical species of fish and shellfish.
- 60 home economics agents, participating in a campus-based in-service on food chemicals, learned about PCBs and other contaminants in fish.

2. General

- An estimated 100,000 Buffalo viewers/listeners heard a 7-minute T.V. spot, 2 half-hour radio talk shows, and one half-hour live phone-in radio show on underutilized fish preparation, basic fish recipes and the toxic chemical situation.
- A fish contaminant notebook and associated pamphlet were developed for field staff reference and public distribution. The pamphlet, "Fish Contaminants: Minimizing your Intake," outlined steps that individuals can take to decrease ingestion of contaminants. The pamphlet was used by Sea Grant in Michigan, Wisconsin and Minnesota and was acknowledged by a major cancer research institute in Buffalo. Over 5,000 copies were distributed.

COMMERCIAL FISHING

Retention or expansion of New York's commercial fishing industry will be dependent upon several factors including:

1. effective management decisions on the part of individual businesses,
2. development of marketing distribution programs which result in increased returns to the vessel and some degree of control to the fishermen,
3. availability of appropriate facilities for handling and processing of landed fish,
4. appropriate legislation permitting effective management of fishery resources, and
5. legislation which promotes efficiency in the commercial fishing industry.

The educational task requires involvement of federal, state and local bodies. Policy makers need adequate information to identify and respond to industry needs. Fishermen must be helped to recognize their own problems and seek appropriate solutions.

A. Example Anecdotes

1. The severe winter of 1976-77 resulted in an apparently substantial and unusually large winter kill of natural clam populations in Great South Bay. A "mini-grant" research project was initiated by a Sea Grant specialist to assess the winter kill. Detailed analysis of data from the project and review of limited existing Sea Grant research data indicated the dieoffs had been neither as extensive nor as widespread as was thought. The results had a stabilizing effect on the shellfish market and precluded a request for "disaster" assistance.
2. The fishing industry often receives little recognition as a major component of New York's economy. Fishermen in the Town of Easthampton felt that lack of recognition was preventing them from getting due consideration in Town decisions. Unfortunately, no local economic data was available to support their position. Sea Grant helped the fishermen in designing and conducting a survey to document economic impacts of fishing. Results indicated nearly two million dollars worth of fish were landed in that one township in 1975, a much higher figure than was expected.

B. Activities and Accomplishments

1. Fishermen

- Clammers on Long Island were made aware of the surf clam industry being made "conditional" before this action was taken and subsequently were able to comment on the action.
- About 1,000 copies of the first issue of "South Bay Journal" were distributed by the Great South Bay Baymen's Association. This newsletter was initiated with the help of Sea Grant and provides a useful communication medium for these very independent businessmen.
- Eighteen charter boat operators and three dragger captains and crew gained information about the availability of loan capital for new boats, groundfish regulations, license requirements, medical benefits and Coast Guard "rules of the road". A similar meeting was conducted emphasizing groundfish regulations and opportunities for fisheries development.
- The NMFS Financial Programs Northeast Leader was brought to Long Island and appointments made with 7 commercial fishermen and 16 charter boatmen to discuss loans for vessel construction. Five vessel projects were qualified and ready for processing; these totaled \$1.2 million.
- Two fishermen associations were aided in their formation: The Captree Boatmen Association (39 members) and the West End (Freeport area) fishermen (55 members).
- 85 recreational and commercial fishermen heard the Chief of Law Enforcement Branch, NMFS (from Gloucester, MA) speak on groundfish rules. The meeting was organized by Sea Grant in response to a request from the Montauk Boatmen's Association.
- Boatmen in Montauk, Captree Boat Basin, Sheepshead Bay, Port Jefferson and Greenport were advised of a proposed expansion of the NMFS vessel obligation guarantee loan program to include documented charter and open boats. In Captree and Sheepshead Bay, meetings involved about 60 new contacts.
- An exporter and 20 potential squid fishermen were brought together so they could understand market requirements and opportunities.
- Commercial fishermen were helped in preparing "negative bids" to preclude development of certain offshore oil and gas tracts. Sea Grant assistance was recognized by Governor Carey in his letter transmitting such bids to the Bureau of Land Management.
- Three new charter fishing businesses, which were stimulated by limited salmon fishery development on Lake Ontario, were advised as to liability insurance considerations, licensing, and small business management materials available.

2. Planners and Officials

- Sea Grant assisted the Brookhaven Town Shellfish Commission in understanding limited entry and preparing statements for a public hearing on aquaculture.
- National Marine Fisheries Service and Sea Grant conducted a presentation on NMFS Financial Aid Programs for the Long Island Trust. Nine bank officials representing 34 branches attended. Support by the banking industry is necessary to fully develop the New York fishery.

3. General

- Helped stimulate three public meetings to determine the best plan for opening a formerly closed clamming area.
- A mechanism has been outlined to market low value species of fish in New York City to low income families; four trap fishermen, a fish packing business and EFNEP will be involved.
- At the request of the Long Island Farm Bureau and Long Island Fishermen's Association, a two-day tour of the Long Island commercial fishing industry was given for Yehia Hashad, son of the former Egyptian Minister of Agriculture.

SEAFOOD PROCESSING

Effective research and educational programs should inform processors in the Long Island-New York City area and upstate of up-to-date and innovative seafood processing methods, technology and equipment. Alternatives to present marketing systems should be investigated and export of processed items should be considered. Information on improved overseas and domestic transportation and seafood handling should be provided to processors. Until the Fulton Fish Market is receptive to change, efforts should be directed toward assisting others in the New York City area and on Long Island. Related activities involve aquaculture and new product development.

A. Example Anecdotes

1. Several years of Sea Grant research in New York and Michigan demonstrated the desirable qualities of white sucker for minced fish products. A food processor expressed interest in purchasing large volumes of minced sucker for use in a new line of institutional foods. Supply of fish became the obvious question. Sea Grant brought together fifteen Great Lakes fishermen and processors from four states to discuss the possibilities for large supplies of suckers. The potential buyers learned that the price of minced mullet may be double what they expected and have since reconsidered their new line. While this outcome was discouraging for the participants, the communication generated between processors and fishermen is basic to any future marketing of sucker from the Great Lakes. Upon leaving, one fisherman said, "Thanks. One of these times we'll make a deal and off we go!"
2. Maintaining fresh fish quality is a basic problem in seafood processing. Hypobaric transport has been used successfully to move other perishable products. A major firm was approached by Sea Grant to discuss the possibilities of applying hypobarics to fish transport. Subsequently, engineers from the company developed a proposal for modified atmospheric storage and hypobaric treatment of seafood. The prospects for new seafood transport technology appear bright.

B. Accomplishments and Activities

1. Processors

- Two members of the Long Island Duck Farmers Cooperative and a staff member of the New York State Department of Agriculture and Markets were brought into contact with Modern Maid Food Products, Inc. They may develop a cooperative effort to use and market minced fish. The Eastern Regional Manager assured Long Island Duck and others that they would receive technical assistance from Modern Maid if and when processors go to a breeding line item with minced fish.

- 25 processors and packers attended a demonstration on Long Island to see a fish deboner in operation.
- A seafood processor on Long Island was supplied with information on waste treatment equipment. Waste disposal is a major problem for many processors.

2. General

- Discussed with Grumman Allied a proposal for modified atmospheric storage and hypobaric treatment of seafood. This proposal is a result of a prior meeting with Grumman.
- The Stonington Lobster Cooperative (Maine) was visited at the request of the Maine Sea Grant Program and information provided on the feasibility of setting up a seafood processing plant.
- The Shinnecock Indians submitted a proposal to the federal government for a seafood processing plant and requested information from Sea Grant about processing minced fish and reviewing the proposal.
- Approximately 160 persons attended a Mariculture Symposium held at Southampton College.
- Ways of reducing heating costs were suggested to two owners of shellfish hatcheries.
- South Bronx Equity Project members met to discuss a project to raise salmon in a closed system in basements of refurbished buildings.
- Aided a pilot joint project between the Shinnecock Indians and Long Island Oyster Company to raise 100,000 seed oysters.

YOUTH EDUCATION

Water related jobs are key to the New York State economy. Also, the continued protection of our valuable water resources requires an aware populace, especially youth. Youth education programs involve both career option identification and general appreciation of the coasts.

Accomplishments and Activities

- The New York City Board of Education funded a program to transport teaching tools from school to school accompanied by a teacher and an assistant. Sea Grant selected and developed teaching materials for the project, named "the Marine Mobile" and provided oversight. Programs were conducted in four selected school districts with high success, reaching 24 teachers and 700 students.
- The New York State Commission of Parks and Recreation in New York City contracts for a number of bus trips with private concerns. These are intended to further recreation and cultural advances of children in the City, particularly children from low income families. 4-H was offered 200 of these trips to incorporate in their programs. A segment of those trips was designed to help the youngsters become more familiar with, and better understand, the marine environment. 100 adults Sea Grant trained provided leadership for children on these trips. More than 3,400 youth were reached in this activity, and a stop at Gateway East National Recreation Area was highlighted in a NEW YORK TIMES story on this program.
- Four, one-half hour television shows dealing with marine education were produced by NBC for their educational network. Part of a ten-part series on 4-H activities, they were broadcast in New York, Chicago, Los Angeles, and Washington, D.C. It is estimated more than one million people were exposed to Sea Grant and marine education through these programs, and the National 4-H Foundation is duplicating the video-tapes for even broader use.
- Approximately 100 administrators and teachers from all levels gained a better understanding of the importance of marine education at a downstate Marine Education Policy Statement workshop, while 115 persons became aware of coastal/water resources among upstate school systems at a second Marine Education Workshop. These programs were supported by a grant from Delaware Sea Grant.
- Approximately 30 elementary and secondary teachers were assisted in developing their own marine education programs.
- Over 20 volunteers and rangers of Gateway National Recreation Area were trained in fish preparation and fish printing.
- 75 youth at the Museum of Natural History learned of unusual foods from the sea.

COMMUNICATIONS

Communication techniques are basic to all extension activities. Field staff receive assistance from the media specialist in designing and packaging information for lay audiences. The following are products of both staff and the media specialist.

Accomplishments and Activities

- Staff regularly use mass media to support their ongoing programs. Examples are a weekly newspaper column on coastal issues carried in three papers with a circulation of 30,000; a weekly radio show; two regional newsletters; use of radio talk shows and numerous news releases supplied or news stories stimulated.
- Staff were stimulated and trained to take more and better photographs, improve methods in direct mail contact and plan media efforts.
- NEMAS communicators met for two days at Cornell for a radio workshop; Eight radio public service announcements were produced.
- "New York City's Waterfront Legacy", a film on the New York City waterfront, was completed (aided by a \$5,000 industry contribution). This will be used by local agencies and staff in New York City.
- "Coastlines", a bimonthly newsletter, was distributed to 4,300 persons interested in New York's Great Lakes and marine coasts.
- The following publications were produced:
 - "The Oswego Trail (A Self-Guided Driving Tour)"
 - "Make Your Own Fish Trophy"
 - "Views on Sea Grant Advisory Service Work"
 - "Insight #8: Tax Information on Casualty Losses for Coastal Property Owners"
 - "Insight #9: Free Medical Care for Commercial Fishermen"
 - "Shoreline Erosion Control" (Conference Proceedings)
 - "Marine Trades Flyer #8: Legal and Liability Considerations for Renting a Boat"
 - "New York Sea Grant and You"
 - "Fish Contaminants; Minimizing Your Intake"

PROGRAM LEADERSHIP

The New York Sea Grant Extension Program field staff is one of the largest in the country (20+ full time employees) representing many disciplines related to coastal resources. As their proficiency and relationships with audiences has developed, needs for subject matter and educational process support have increased. Effective program leadership is required to provide this support and overall program guidance.

A major change in leadership structure was the implementation of the Assistant Program Leader position. Responsibilities include recruitment and training, budget management and Great Lakes Program management. This position is in Cooperative Extension Administration at Cornell and further formalizes the relationship between Sea Grant and Extension.

Selected Leadership Activities

- Twenty special projects jointly funded with Sea Grant were initiated by County Cooperative Extension Associations.
- Staff developed eight statewide situation statements and long term goals.
- An Intern Program was established and four persons hired.
- A new brochure for prospective interns was produced.
- Staff were recruited to fill four vacated positions; three new specialist positions were filled.
- Promotions were obtained for nine staff.
- Offices within the New York City Planning Department were established but relocated to existing Cooperative Extension Offices in New York City.
- A four-state Great Lakes Sea Grant Network for advisory service efforts was initiated.
- A faculty position was established in shellfish biology with extension responsibilities.
- An extension associate position was established in seafood technology.