

New York Sea Grant Recognizes Valuable Leadership

Notes on an Innovative Teacher

by David Greene, Sea Grant Specialist in East Aurora

One of the most important things in Carla Borelli's life as a teacher is to give her senior biology class a better understanding of the world around them, and a large part of that, she feels is the world of water.

As the Sea Grant Specialist in upstate New York working with teachers and their students, I can always count on fielding questions. But when a call comes from Carla Borelli, I can be certain that I will have to dig a little deeper, and that is good.

Like the time she was searching for information about Cattaraugus Creek, a stream local to her Lake Shore school district. She had already sought out the typical sources and more. We were able to locate together the innovative, sometimes hidden sources of information, providing

answers to the students' questions about nearby Lake Erie and hopefully giving them a newfound appreciation. That, too, is important to Ms. Borelli.



Ms. Borelli's students, examining marine life and talking with a commercial fisherman during visit to Cape Cod.

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continued on page 6

Sister Francis G. Kress: Caretaker of the Greenpoint Waterfront

by Stephen Lopez,
Sea Grant Specialist in New York City

Sister Francis Gerard Kress, a member of the Sisters of Saint Joseph, Brentwood, N.Y., community cares about the natural resources where she lives and works.

Her daily charge as a member of the 124-year-old Brooklyn religious order, which predates the French Revolution, is to care for the sick and unwanted — she works for the Kingsborough Psychiatric Center — but in her spare time, she is concerned about the shoreline and waters surrounding the three sides of the Greenpoint Brooklyn community where she lives.

"From the universality of tenderness, Sisters of St. Joseph draw their own characteristics of adaptability," says Sister Kress. And it is this concern for adaptability that has brought Sister Kress to the presidency of the Greenpoint Civic Council and the chairmanship of the Environmental Protection Committee of Brooklyn Community Board 1. She also is the secretary of the Citizens Advisory Committee for the New Town Creek Water Pollution Control Plant and a member of the Sea Grant Waterfront Redevelopment Advisory Committee.

Organizing local people and getting them interested is one of the most difficult problems she faces. "So many people are apathetic because it's always been this way," she says in reference to the lack of physical change in the community.

continued on page 6

Increasing Access

Steady Progress in Public Boat Launching Access to Lake Ontario Being Made

by Michael P. Voiland, Sea Grant Specialist in Brockport

State and local governments have made slow but sure progress toward increasing boat access to Lake Ontario waters.

Due to the development of the lake's salmon and trout sportfishery and to greater appreciation by boat owners of Ontario's cleaner and clearer waters, demands for inexpensive-to-use, convenient and well-built launching facilities have increased in recent years.

Over the last five years, Sea Grant research has indicated an alarming shortfall in the number of boat ramps available to boaters. A study in 1979, for example, estimated that an additional capability to launch at least 32 craft simultaneously would be needed along the lake's south shore by 1985, based solely on projected numbers of salmonid fishermen. While private marinas will probably provide some improvement in boat access, it appears the public sector is being called upon to pro-

vide the bulk of the additional basic launching facilities needed.

Since last reporting on Lake Ontario's boat access situation (see *Coastlines* March-April 1977), state, county and local agencies have taken steps to enhance the access picture. A variety of funding approaches has been utilized and resulted in various degrees of planning or development. Here's a run down of these project developments:

Niagara County: 1979 saw the opening of two major launching sites in "Rainbow County". The Niagara Frontier Parks and Recreation Commission (OPR) completed its launch area at Tuscarora State Park in the Town of Wilson. This facility allows for three boats to launch at a time. Also, the Town of Newfane opened its six-bay launching area within Olcott Harbor. The town used federal Heritage Conservation and Recrea-



tion Service (HCRS) funds to defray half the cost of this project.

Orleans County: On July 12, the Genesee State Parks and Recreation Commission (OPR) broke ground for its new boat launch at Oak Orchard Marine Park at Pt. Breeze. Monies were made available by state legislative action, through the supplemental budget appropriation process. This site will allow for three launchings at a time and comes at a cost of \$147,000.

Wayne County: In March of this year, the county opened its new Sodus Point launch site in time for the peak salmon and trout fishing season. A notable aspect about this two-bay ramp is that it was wholly designed, built and funded by the county using its own county planners, construction crews and fiscal resources. Sea Grant specialists assisted in the design of the ramp. Consequently, at a cost of about \$6,000 for materials, Wayne County has improved the boat launching in and about the Sodus Bay area.



Oswego County: The City of Oswego has received HCRS monies to share the cost of improving and expanding its Oswego Harbor boat launching area. This facility is heavily used by anglers and boaters and is the weigh-in site for the numerous fishing derbies held each year along the Oswego County shoreline.

While these "success stories" mean better lake access, some projects are still slow in developing. For example, the City of Rochester and County of Monroe, despite their completion of design studies and budget authorization, have been unable to proceed with the construction of a much-needed \$150,000 boat launch area in Rochester Harbor due to a legal dispute with current port land lease-holders. Also, use of some launch areas continues to be difficult if not impossible because of the absence of navigable channels or the need for costly wave protection structures. Examples here include existing situations found at Hamlin Beach, Braddocks Bay and Mexico Point, all state-run facilities.

A Lakewide Effort

Beginning in 1979, a lakewide "grass-roots" approach to obtaining enhanced boating and fishing access to Lake Ontario has been coordinated by the state's Fish and Wildlife Management Act Board. Board member Wil Kennedy has led the effort to have lakeshore counties recommend and coordinate projects that they believe need state agency attention. "Our goal is to have the counties suggest sites where state action may be appropriate, usually on state-owned lands," notes Kennedy. "Once in hand, the Board takes the local requests or ideas to Albany, where we attempt to get funding commitments from the State Division of Budget and the responsible agencies.

"Last year, three sites — Fort Niagara, Pt. Breeze and Stony Point— were allocated funds in the executive budget for boat ramp improvements," he explains. "This year we hope for further dollar commitments from the state. If we fail, the situation could be pretty sorry, when tourists and fishermen arrive in 1985 to enjoy Ontario's fabulous fishing."

For further information on the boating access situation, boat ramp design and costs or the Fish and Wildlife Management Act Board's effort, contact Mike Voiland at Brockport.

Illustrations: Top left: A view of the Town of Newfane's new public marina and boat launch facility at Olcott Harbor in Niagara County; Lower left: Interested on-lookers check out site plans for the state's new public ramp at Pt. Breeze in Orleans County; Center: Wayne County's new public boat launch at Sodus Point Beach Park. The ramp is open to boaters during fishing season prior to and after mid-summer, but is closed during peak summer months to accommodate beach users; Lower right: Public officials including State Senator John Daly, Congressman John La Falce and State Assemblyman Steve Hawley participate in ground breaking ceremonies for the state's new public boat launch at Pt. Breeze in Orleans County.



A Giraffe is a Horse of a Different Color *by Donald F. Squires, Director in Albany*

Editor's note: Sea Grant researchers (and directors) often get into all kinds of strange subjects in their work — like New York City's sewers. In conducting research for his upcoming book on New York, our Director Don Squires wrote up this item which we couldn't resist sharing with our readers. It's about research and folklore," as Don says in his introduction.

Giraffes, alligators, and marine science? Well, it's about research and folklore and the frustrations of what you almost know, but can't quite grasp.

In the winter of '79 (1979 that is) our Research Assistant, John Dana, was getting background for an article called "Historical Perspectives of the New York Bight" (it will have another name by the time it's published.) In the course of his readings, he found a one line reference in Robert Boyle's book, "The Hudson River: A Natural and Unnatural History," about things dredged up from the bottom of New York Harbor that included a mail truck, a piano, and a giraffe.

The business about the giraffe was particularly interesting to John Dana because he had had a successful excursion with an alligator. You all heard the stories about the baby alligators (actually cayman, not alligators) people buy them when they

visit Florida. Then, of course, the alligators grow up; junior gets tired of it; and Mom surely doesn't want it around the house. So, baby alligator goes into the toilet, that wonderful device for getting rid of all manner of things, and away into the sewers.

Some of us are old enough to have been exposed to those wonderful old movies where the villain escaped into the sewers of Paris. Those sewers were always vaporous, but remarkably sterile. The sewers of New York City aren't — they are full of those baby alligators people are always flushing down the toilets.

Well, because part of "Historical Perspectives" dealt with the building of the sewer system in New York City, and because that subject is a little soggy, it seemed like a good idea to find out if anyone had ever found an alligator in the sewers of New York — or any city for that matter, just to lighten things up a bit.

Would you believe it? The New York Times of February 10, 1935, reports that Salvatore Condulucci, age 16, and friends were shoveling snow into an open manhole on East 123rd Street when they saw an alligator. With some clothesline cadged from the Lehigh Stove and Repair Shop, young Salvatore lassoed the beast and with the aid of companions hauled him to the street. The alligator perished from a combination of cold and blows from a snow shovel, but was authenticated at a length

of 7½ to 8 feet and a weight of 125 pounds. Theory, proposed by New York's finest, was that a passing steamship had tossed the alligator overboard and that he had, seeking warmth, swum up the sewer. But, of course, we know how he got there.

Further research, however, is clearly required. The 1930s saw a veritable plague of alligators in New York City: "Stalk Alligators in Bronx River Lair" (New York Times, June 30, 1932); "Hunt Jersey Alligators" (New York Times, September 12, 1932); "Alligator Swimming from Brooklyn Shore is Captured by Mystified Barge Captain" (New York Times, June 1, 1937) "Alligator in Subway, Brooklyn" (New York Times, June 7, 1937). Could there be a relationship between alligator outpourings and times of economic stress? What is the meaning of such phenomena to climatology?

Well, the giraffe is a horse of another color. Research proceeds, telephone calls have been made, newspapers consulted, books reread. Everything has been tried. John Dana still hasn't found out how that giraffe got into the harbor. He found an old timer at the Army Corps of Engineers who remembers the giraffe. John knows about the boatload of animals being unloaded for various zoos and the giraffe that fell overboard and broke its neck. But he can't find out about the giraffe at the bottom of the harbor. Can anybody help?

Resource Materials 1980

An Annotated Bibliography
of Publications and Audio-
Visual Materials Available from
New York Sea Grant.

For sake of clarity, this listing of resource materials is organized into two categories: extension and research. The price and source of information is given for each entry. For 16 mm films, audience levels are indicated by the following codes: **p** - primary (preschool, K-2); **i** - intermediate (grades 3-5); **j** - junior high (grades 6-9); **s** - senior high (grades 10-12); and **a** - college and adult. Ordering information including mailing addresses is given at the end of the annotated listings.

Extension Materials

This category covers a wide range of publications, reports, slide/tape and film programs on coastal issues from a variety of sources. Of general educational value, they are intended for use by Sea Grant's varied audiences including educators, the commercial fishing industry, those interested in sportsfishing, consumers, marine business, coastal engineers and property owners, public officials, libraries and the media. With the exception of films and slide programs, many are free or carry a nominal charge ranging from a few cents to a couple dollars.

General Information

Coastlines. S. Willson, editor. 8 pp., free subscription for New York State residents and \$2.00 for out-of-state subscribers for a two-year period. (Order from Sea Grant in Ithaca.)

A bi-monthly newsletter aimed at commercial and sport fishermen, marina operators, coastal contractors, planning boards, environmental management councils, educators, recreationists, and seafood processors. Focuses on articles and information of use in solving coastal-related problems.

Discover Sea Grant. 1979, 46 slides, cassette tape and script, \$26.50 or free rental. (Order from Sea Grant in Ithaca.) Explains the Sea Grant Extension Program, its relationship to Cooperative Extension, Cornell University and the State University of New York. Identifies Sea Grant specialists, their function and location in New York.

Discover Sea Grant in New York. 1979, illustrated, fold-out pamphlet, 1 pp., free. (Order from Sea Grant in any regional location.)

This illustrated pamphlet explains how individuals, groups, industry and local governments can receive help from Sea Grant. Explains Sea Grant's role in coastal protection, commercial fishing, coastal access, recreation and tourism, use of fish by consumers and youth education. Lists regional office addresses.

New York Faces the Sea. 1972, 13 min., color, jsa, \$130.00 or \$9.00 rental. (Order from the A-V Resource Center.)

Sea Grant in New York is a state and federal program designed to help residents solve coastal problems. When information is lacking, the New York Sea Grant Institute provides funds to university faculty for research on coastal issues. This information is made available to people through the Sea Grant Extension Program. Publications, reports, slides and films are just one way of getting the results of research to the people who need them.

Introduces the Sea Grant program, a federally-sponsored program in New York State, which assists in the development and utilization of the coastal areas of Long Island, the Great Lakes, and the St. Lawrence Seaway. Considers problems of commercial fishing, recreational uses of inland and coastal waters, power plant development, shipping, and manipulation of wetlands. Cornell Univ.

Our Environment: Everybody's Business. 1972, 15 min., color, jsa, \$140.00 or \$9.00 rental. (Order from the A-V Resource Center.)

Shows some of the positive actions which each of us — private citizen, community leader, legislator — can do to improve our environment. Cornell Univ.

Sea Grant Today. B.T. Hall, editor, et al. 20 pp. plus, no charge. (Order from Sea Grant in Virginia.)

A bimonthly publication of articles, information and publication listings of Sea Grant programs nationally.

Commercial Fishing

Marine Fisheries of Maine. 1979, 6 color filmstrips, 6 cassettes and 1 teacher's guide, \$48.00. (Order from Sea Grant in Maine.)

Although Maine's commercial fishermen provide the subject for this filmstrip, the work, equipment and lifestyles of Maine's fishermen are similar to New York's. Shows fishermen engaged in lobstering, gill netting, clamming, scalloping, seining, and trawling.

New York Commercial Fisheries Update. J. Scotti, editor. 4 pp., free. (Order from Sea Grant in Riverhead.)

Important and timely information intended for New York's commercial fishing industry is published bi-monthly.

A Retailer's Guide to Seafood Promotional Material. M. Haby. 1979, 11 pp., free. (Order from Sea Grant in Riverhead.)

For large or small seafood retailers, this guide describes promotional materials (applicable to Mid-Atlantic fishery products) which may be received free or for a minimal fee by writing to a wide variety of organizations including the New York Department of Agriculture and Markets, the National Marine Fisheries Service and others.

Consumer Use of Fish

Preparing Those "Forgotten Fish" for Your Dinner Table.

M. P. Voiland. 1978, 4 pp., illustrated, 15¢. (Order Fact Sheet 400.00 from the Distribution Center.)

Fish like carp, sucker, freshwater drum (sheepshead), pickerel and even the northern pike are often discarded by anglers. This fact sheet, with its concise instructions and illustrations of dressing, filleting and scoring, and recipes for freshwater fish, explains how anglers can prepare "forgotten fish". The information can be used by teachers and other outdoor educators.

Preparing Those Forgotten Fish. 1978, 40 color slides and script, \$15.00 or free rental. (Order from Sea Grant in Ithaca.) The consumer is introduced to specialized yet simple techniques for preparing carp, sucker, freshwater drum, pickerel and northern pike for the dinner table. Techniques described include scoring, flaking and grinding. Designed to complement the Sea Grant fact sheet, "Preparing Those Forgotten Fish" as a teaching aide in fish preparation and cookery educational programs.

Seafood Handling and Preparation. 1977, 34 color slides and script, \$14.00 or free rental. (Order from Sea Grant in Ithaca.) Basic step-by-step instructions on how to clean, scale, fillet, steak and field-dress fish.

Seafood Sourcebook. New England Marine Advisory Service. 1978, 44 pp., \$1.00. (Order from the New England Marine Advisory Service.)

By using this well indexed, annotated bibliography, you can send away for dozens of publications, films or slide tape programs on topics ranging from buying quality seafood to canning, freezing, smoking and barbecuing fish at home. The sourcebook lists 153 flyers, pamphlets (94 are free), film and slide tape programs available from 33 organizations.

Smoking Seafood at Home. N. DeGeorges and E. R. Matthews. 1980, 47 slides, script and cassette tape. \$25.00 or free rental. (Order from Sea Grant in Ithaca.)

Specifically produced for youth and/or adult audiences. Shows how a 4-H club built a seafood smoker from a 55-gallon drum. Procedures for brining and smoking fish are described.

The Switched-On Kitchen. 1975, 30 min., color, sa, \$14.00 rental. (Order from the A-V Resource Center.)

Graham Kerr, television's "Gallop Gourmet", offers viewers a potpourri of ideas on handling and cooking fish of all kinds. He compares the costs of frozen and fresh fish, gives advice for selecting and buying fish, and points out its nutritional value. Kerr demonstrates crimping, broiling, poaching, baking, and frying. Supplement with recipes, summarizing the information presented, 25/\$1.75. Cornell Univ.

The Switched On Kitchen. 1975, U-Matic Videocassette, 30 min., color, (Order from the A-V Resource Center.)

See same title above.

Why Eat Fish. 1977, 18 color slides and script outline, \$6.00 or free rental. (Order from Sea Grant in Ithaca.)

Designed for use by home economists, nutritionists and other educators as a basic introductory teaching aide in fish preparation and cookery.

Coastal Planning and Development

Cattails. M. Duttweiler, editor. 2-6 pp. (Order from Sea Grant in Ithaca.)

A periodical newsletter issued two to four times yearly. The primary audiences are Cooperative Extension employees and persons directly involved with community efforts to manage aquatic plant problems. Current research findings, references, rules and regulations and plant management activities in New York State are featured. **Cattails** is written by Michael W. Duttweiler of Sea Grant and Dr. John Peverly of the Cornell Agronomy Department.

City Shores. S. Lopez, editor. 4 pp., free. (Order from Sea Grant in New York City.)

A bi-monthly news memorandum focusing on coastal redevelopment pertaining to New York City. Intended mainly for community leaders, government officials and educators.

Changing New York City's Waterfront. S. Lopez. 1979, 12 pp., 60¢. (Order from Sea Grant in New York City.) Describes the mechanism for change and the many agencies involved in decision-making on a waterfront development

project in New York City. Intended for community leaders, public interest groups and government officials in waterfront redevelopment programs. Lists numerous agency addresses for more specific follow-up.

Hurricane Agnes in Words and Pictures. 1975, 50 color slides, script and cassette, a, \$23.75. (Order Slide Set 198 from the A-V Resource Center.)

Emphasizes development beyond the standard approach to flood damage by interpreting the effects of the 1972 disaster. Recommends three approaches to flood damage potential: change of flow, balance of burden, and reduction of amount of damage. Presents six action steps for discussion and a framework for future action.

New York City's Waterfront Legacy. 1977, 26½ min., color, sa, \$265.00 or \$16.00 rental. (Order from the A-V Resource Center.)

The New York City waterfront is as varied in character and personality as the multi-national residents of its five boroughs. The film follows along the city's 578 miles of shoreline of decaying docks, magnificent beaches and marinas, riverfront expressways, and new housing. It points to the conflicting demands on the waterfront from industry, commerce, shipping, housing, recreational facilities. Indicates how residents and planners can work toward solutions to the demands for shoreline frontage. Cornell Univ.

So You Want to Build an Artificial Fishing Reef?

M. P. Voiland. 1980, 3 pp., single copy free, additional copies 10¢ each. (Order from Sea Grant in Brockport.)

Provides information including purpose, types, examples, characteristics, costs and references on building an artificial reef to enhance recreational fishing.

Coastal Protection

Are Floating Tire Breakwaters for You? B. DeYoung. 1979, 33 slides and cassette, 7:45 min., \$21.50 or free rental. (Order from Sea Grant in Ithaca.)

The purpose of this slide/tape program is to help coastal businesses and communities understand how floating tire breakwaters can be used effectively to protect marinas and other facilities from wave damage. Provides practical information on planning a breakwater, the limitations of breakwaters, obtaining permits, and how to get more information. Designed for use at various public meetings, the tape is professionally recorded and includes background music and sound effects.

Casualty Loss Tax Information for Coastal Property Owners.

B. and K. DeYoung. 1979, 4 pp, 15¢. (Order Fact Sheet 101.00 from the Distribution Center.)

Storms, floods, hurricanes and other casualties can sometimes cause extensive damage for which insurance is inadequate. This fact sheet explains how to fill out the proper tax form for casualty losses. Topics covered are deductible and non-deductible losses, timing, documenting losses and special circumstances such as disasters declared by Presidential action. Names and addresses of resource organizations in New York are given.

Controlling Bluff Groundwater Along the Great Lakes.

B. DeYoung and L. Brown. 1979, 4 pp., 15¢. (Order Fact Sheet 101.00 from the Distribution Center.)

Explains the causes and effects of excessive groundwater in coastal bluffs typical of the Great Lakes regions, including illustrations and diagrams on different types of drainage systems both above and below ground. Artificial conduits are explained so the average property owner can decide whether to seek consultation or not. Improved vegetation is also mentioned. Names and addresses of helpful organizations in New York are given.

Enhancing Wave Protection with Floating Tire Breakwaters.

B. DeYoung. 1978, 28 pp., \$1.50. (Order Information Bulletin 139 from the Distribution Center.)

Floating tire breakwaters (FTBs) can help reduce damage to harbors and marinas caused by heavy winds and high waves. The purpose of this bulletin is to explain FTB technology, its advantages and disadvantages, in addition to information on planning, building, and obtaining permits for FTBs. Intended mainly for business and community groups which face the need to improve coastal protection.

Guidelines for Selecting a Marine Contractor. B. E. Doyle.

1980, 4 pp., 15¢. (Order Fact Sheet 103.00 from the Distribution Center.)

Explains what marine construction is and what a marine contractor does. Provides information on what to consider when hiring a marine contractor, including ideas for judging experience, capability and performance.

Hold This Land. 1979, 23 min., color, sa, \$12.00 rental. (Order from the A-V Resource Center.)

Shows irrigation-related soil erosion and resulting sedimentation water pollution problems. Details case studies where new and innovative technologies are effective in controlling soil erosion/sedimentation problems due to irrigation. Results of various control measures and management practices are vividly portrayed. Presented so that anyone can understand problems and solutions. Narrated by Robert Redford. U.S. EPA.

Oil Spills: A Coastal Resident's Handbook. J. T. Omohundro.

1979, 16 pp., illustrated, \$1.00. (Order Information Bulletin 164 from the Distribution Center.)

Gives a thorough account of what happens following an oil spill. Topics included are federal and state responsibility, laws and liabilities, alert systems, observer's corps and contingency plans. The section "How to Protect Yourself and Your Property" explains protective measures such as sand bagging, skirting and flooring of boats, docks and shoreline. For emergencies, the name, address, and telephone number of appropriate organizations in New York are given.

Oil Spills: A Public Official's Handbook. J. T. Omohundro.

1979, 16 pp., \$1.00. (Order Information Bulletin 166 from the Distribution Center.)

Although national and regional oil spill response teams carry out decisions following an oil spill, community leaders have an important role in the cleanup process. This handbook provides information of use to elected representatives; fire rescue, police, civil defense, Red Cross and Chamber of Commerce organizations; resident associations, sport clubs and other local groups involved in cleaning up after a spill. The emphasis is on understanding how and why the public responds the way it does and what problems are encountered. Suggestions on how to work with coastal residents, the press, the cleanup crew and emergency teams which come from outside the community are included.

Our Ever Changing Shoreline. 1972, 15 min., color, sa, \$150.00 or \$9.00 rental. (Order from the A-V Resource Center.)

Focuses on the problems of erosion and deposition on New York's Atlantic and Great Lakes shorelines. Explains how misunderstandings of the natural coastal cycle of destruction and rebuilding have led to pain in the past. Commonly used protective devices and other approaches to erosion problems are discussed. Sea Grant specialists are seen with citizens, communities and agencies to determine more effective solutions. Cornell Univ.

Promises to Keep. 1980, 12 min., color slide-tape program, free rental. (Order from Sea Grant in Ithaca.)

Explains the development, purpose, content and implementation of the Great Lakes Water Quality Agreement between the United States and Canada. Uses graphics, photos, narration

and music to tell the agreement story. Produced by the Great Lakes International Joint Commission.

Raindrops and Soil Erosion. 1947, 21 min., color, sa, \$10.00 rental. (Order from the A-V Resource Center.)

Shows the action of individual raindrops on uncovered soil and emphasizes the need for soil and water conservation methods. USDA.

Shoreline Protection Permits: For Long Island North to the Tappan Zee Bridge. E. R. Matthews. 1978, 4 pp., 15¢. (Order Fact Sheet 100.00 from the Distribution Center.)

Coastal businesses and property owners need to understand the government permit process before building erosion control structures on their shore or even before grading or cleaning their beach. This fact sheet describes those circumstances under which permits are obtained. The various erosion control measures considered are: maintenance and repair, replacement, changes in design and placement, new construction and non-structural activities like beach cleaning. Charts showing the state and federal process are included along with appropriate addresses.

So Little Time. 1969, 30 min., color, jsa, \$12.00 rental. (Order from the A-V Resource Center.)

An environmental film in which waterfowl and other wildlife sharing marsh and field are dramatically pictured. Noted naturalist Roger Tory Peterson discusses with a young boy the mysteries of bird migration and explores problems and possible solutions for the future. Conservation and management principles are stressed to preserve breeding grounds, prevent destruction, and increase the number of prime waterfowl habitats. U.S. Fish and Wildlife Service.

Troubled Waters: The New York Bight. D. Edgar. 1980, 4 pp., 15¢. (Order Fact Sheet 300.10 from the Distribution Center.)

The Bight — the 15,000 square miles of water bound by Long Island, New Jersey, and the continental shelf about 80-120 miles offshore — serves some 20 million people as a source of recreation, transportation, commercial fishing and a depository for raw sewage, dredge spoils, acid and toxic chemicals and construction debris. In this four-page fact sheet, the sources of contamination and their natural build-up in marine plants, fish and people through the food chain are described. The "fish kill of '76" which caused an estimated \$7.9 million loss to New York's fishing industry is explained. Alternatives to pollution are briefly outlined.

What's Happening to Our Lakeshores. 28 min., color, sa, \$12.00 rental. (Order from the A-V Resource Center.)

Takes a critical look at lakeshore development and the need for orderly planning. Tells what to look for when buying lakefront property. Consideration should be given to soil drainage, proper placement of septic systems, and preservation of trees and natural areas when building. Presents examples of good and bad lakeshore development. Univ. of Wisconsin.

Recreation and Tourism

Cold Water Drowning. 1980, 16 mm. SOF 6 min., color, free rental only. (Order from Sea Grant in Ithaca.)

Featuring Dr. Martin J. Nemiroff, the University of Michigan physician who carried out research on cold water drownings under Sea Grant sponsorship, this 6-minute TV clip discusses several recent cases of survival and outlines what action should be taken.

Expanding Tourism with CBs. J. L. Kinnear. 1978, 4 pp., 15¢. (Order Fact Sheet 201.00 from the Distribution Center.)

Tourist services which include CB base stations offer help, information and directions to tourists with CBs. This fact sheet answers questions a community should consider before setting up a tourist information CB station — for example,

"Who should sponsor the service?" "What federal laws affect it?" It also provides information on how to set up the station and a list of some CB terms.

Hospitality Training Program Package. V. Dee, 1980. 8 booklets, each 6-8 pp., \$1.35. (Order from Sea Grant in Potsdam.)

Intended for use by information centers, marina, service station, restaurant, retailing, hotel/motel personnel and public employees, this series of eight booklets is the basis of a new training program on improving hospitality and tourism in a given coastal area.

Lake Erie's Recreational Climate Year-round. J. L. Kinnear and R. DeAngelis. 1980 reprint, 20 pp., free. (Order from Sea Grant in Ithaca, East Aurora and Fredonia.)

Whether your favorite activity is swimming, sightseeing or jogging in summer, or snowshoeing, snowmobiling or watching ice valcanoes in winter, the authors name places where it can be done along Lake Erie! Skiers will appreciate the information on the area's snow conditions; and fishermen the hints on where to catch trout, smelt, and perch. Weather conditions, including guides on wind, temperature, and rainfall are given. The area's facilities, services, and parks are easy to find in the booklet's map. Cold-water survival rules and other references are provided.

Promoting Tourism with Information Plazas. J. L. Kinnear. 1978, 3 pp., illustrated, 15¢. (Order Fact Sheet 200.00 from the Distribution Center.)

A tourist information plaza is a place where tourists find a map and a billboard of signs which show the location of recreational facilities, tourist accommodations, restaurants and service stations. This fact sheet points out the advantages and disadvantages of plazas in answer to questions a community might ask. Various types of plazas are illustrated.

Recreational Access and Owner Liability. T. L. Brown. 1979, 4 pp., 15¢. (Order Fact Sheet 203.00 from the Distribution Center.)

Frequently landowners ask: What are my property rights and how do I exercise them? What is my liability to recreationists and how can I protect myself against liability suits? How does posting signs affect my liability? This fact sheet attempts to answer these questions by explaining New York's laws on trespassing, liability and safeguards to landowners — particularly those along Lakes Ontario and Erie, the Finger Lakes and other inland lakes, rivers and streams, and the tidal waters of Long Island. Natural hazards, injuries and insurance are also discussed.

Scuba Information for New York and Great Lakes Divers. E. R. Matthews. 1978, 4 pp., 15¢. (Order Fact Sheet 202.00 from the Distribution Center.)

For divers in New York and other Great Lakes states. Provides information on scuba instruction, emergency care and diving publications. Describes the symptoms and treatment of air embolism and decompression sickness, two of the primary causes of accidental death in scuba divers. Lists scuba organizations, national agencies which offer diagnostic consultation and referral for treatment, the location of hyperbaric chambers and doctors specializing in scuba-related illnesses.

So You Want to Build an Artificial Fishing Reef? See *Coastal Planning and Development* listing.

Sportfishing

Angling for New York's Great Lakes Underutilized Fish. R. Buerger. 1980, 4 pp., free. (Order Fact Sheet 204.00 from the Distribution Center.)

This illustrated publication describes fishing techniques for certain Great Lakes fish that are presently under little angling

pressure. Describes equipment, fishing techniques and location for: carp, crappie, sunfish, white bass, white perch, freshwater drum and sucker.

Aquatic Ecologist. 1973, 30 min., color, jsa, \$14.00 rental. (Order from the A-V Resource Center.)

Describes how fishery biologists and aquatic ecologists apply scientific knowledge to restore the fish life of the Finger Lakes, the Great Lakes, and rivers and estuaries of the Northeast. Explains investigations of environmental degradation, management studies, and research. Subjects covered are: fish tagging and spawning, lamprey problems, and nuclear effects on aquatic environments. Narrated by Rod Sterling. SUNY College of Environmental Science and Forestry.

The Economic and Social Impact of a Developing Salmonid Sportfishery: The Case of the 1978 Rochester-Lake Ontario Trout and Salmon Derby. M. P. Voiland. 1979, 3 pp., single copy free, additional copies 10¢ each. (Order from Sea Grant in Brockport.)

Originally published by the Ontario Research Council on Leisure in their monograph, **Recreation Impacts: The Great Lakes Ecosystem**, August 1979. Examines the results of a random sample survey of registrants at the 1978 Rochester-Lake Ontario Trout and Salmon Derby. Discusses significant social and economic consequences of that derby.

Fish Contaminants Fact Sheet Series:

A Perspective on Fish Contaminants. M. Duttweiler. 1978, 3 pp., 15¢. (Order Fact Sheet 10.00 from the Distribution Center.)

The first in a series of fact sheets on contamination of fish in New York's Great Lakes. Defines what contaminants are, when they were first identified in New York and what their impacts are on human health, society and the economy.

Sources of Fish Contaminants. M. Duttweiler. 1978, 4 pp., 15¢. (Order Fact Sheet 11.00 from the Distribution Center.)

Second in a series on fish contaminants. Identifies the types of contaminants commonly found in fish, their interaction and accumulative build-up in the flesh of fish. The origin of these pollutants and corrective measures are also discussed. The author recommends prevention as the best possible method of avoiding contaminant problems in the future.

Fish Contaminants and Human Health. M. Duttweiler. 1978, 4 pp., 15¢. (Order Fact Sheet 12.00 from the Distribution Center.)

Third in the series, the basic risk to human health is considered. Procedures used to establish health guidelines and management alternatives are described.

Fish Contaminants: Minimizing Your Intake. M. Duttweiler. 1980, 55 color slides, script and cassette tape, \$25.00 or free rental. (Order from Sea Grant in Ithaca.)

This 10-minute slide-tape program reviews trimming and cooking procedures to minimize the presence of fat soluble contaminants in fish flesh. An analysis of the variation in contaminant accumulation by species, size and source of fish is given.

Guide to Freshwater Fishes of New York. D. J. Decker, et al. 1980, 140 pp., \$2.50. (Order Miscellaneous Bulletin S-108 from the Distribution Center.)

Appealing to beginning and experienced anglers, this guide describes and illustrates more than 100 fish species found in New York's and in most of the Northeast's fresh waterways. References are to both common and scientific names. Perfect size for a pocket or tackle box. Comes in a water-proof bag.

Make Your Own Fish Trophy. S. P. Schuman. 1977, 20 pp., illustrated, 50¢. (Order from Sea Grant in Ithaca.)

This collection of articles explains different ways of making fish trophies including photographs, outlines and silhouettes, fish

printing, mountings and plaster casts. The instructions are concise and well illustrated, making the publication valuable to both anglers and teachers alike.

Proposed Lake Ontario Salmonid Stockings: 1980-1983.

1980, 1 pp., single copy free, additional copies 5¢ each.
(Order from Sea Grant in Brockport.)

Provides information on stocking Lake Ontario with salmon and trout. Based on information from New York's Department of Environmental Conservation, the report includes a breakdown of projections by year, species and number of fish to be stocked.

So You Want to Build an Artificial Fishing Reef? See

Coastal Planning and Development listing.

Youth Education

Aquatic Activities for Youth. H. D. Greene, editor. 1980, 38 pp., \$2.75. (Order from Sea Grant in East Aurora.)

This series of publications (excluding the Cobbler's Cove slide script program mentioned below) consists of eight separate youth activities on water-related topics, namely: aquaria, earthworms, stream-flow calculations, entomology and water, rope in fishing, coastal planning, saltwater world in a jar, and nutrition. Intended for club, classroom or 4-H use. Separate instructions for adult leaders and young participants are included.

Beach and Sea Animals (Second Edition). 1957, 11 min., color, ijsa, \$8.00 rental. (Order from the A-V Resource Center.)

Explains the characteristics of invertebrate animals living on or around the sea and its beaches. Shows the body plan, adaptations, and interrelationships of these animals through close-up photography. Included are the osprey, egret, starfish, sea urchin, lobster, sea horse, octopus, snails, barnacles, anemones, sponges nudibranch, and fishes (angler, blue, and porcupine.) *Encyclopaedia Britannica*.

Chautauqua County's Lake Erie Coast. A Field Guide. L. B.

Ware. 1979, 32 pp., \$1.75. (Order from Sea Grant in East Aurora and Fredonia.)

Intended for Chautauqua County teachers of grades 3-10 who are interested in planning field trips. Includes background on the history, recreation, erosion, pollution and lakeside industry of Lake Erie. Describes 28 tour sites and activities including maps, addresses, directions, costs, parking and restroom information, time of day and year to visit, names and telephone numbers of people to contact, and suggestions for student projects. A list of books and films on the Great Lakes is included.

The City Splash. R. Folit, editor. 1980, 8 pp., single copy free; additional copies 15¢ each; over 50 copies, 20% discount. (Order from Sea Grant in New York City.)

Intended for elementary and junior high students, this eight-page tabloid-sized newspaper focuses on articles, activities, puzzles and cartoons in keeping with the publication's light and fun tone. Printed in a typeface larger than most newspapers, the tabloid can be used in classroom development of basic skills to teach about New York's often ignored waterfront.

Cobbler's Cove: A Coastal Planning Simulation Game.

S. Schuman. 1980, 53 color slides, script, and activity, 4 pp., \$25.00. (Order from Sea Grant in Ithaca.)

A slide presentation is used to introduce a simulated game about an imaginary coastal community called Cobbler's Cove which must decide on the development of a marina or the preservation of the natural habitat. For 4-H, club or school use with adult supervision.

Cry of the Marsh. 1972, 12 min., color, jsa, \$11.00 rental. (Order from the A-V Resource Center.)

A nonverbal, sensitive film showing the cruel destruction of a

once peaceful ecological unit. Opens with lyrical marsh scenes — deer, birds, flowers, and fish in their natural environment. Then, focusing on the perils of one fleeing duckling, shows the marsh being burned over, drained, and graded for subdivision and development. ACI Films.

Great Lakes Leader. H. D. Greene, editor. 4 pp., free. (Order from Sea Grant in East Aurora.)

Intended for teachers in the Great Lakes area, this newsletter is published monthly during the school year and once in the summer. Focus is on lesson ideas, programs and corresponding dates related to coastal education.

Marine Fisheries of Maine. See *Commercial Fishing* listing.

New York Faces the Sea. See *General Information* listing.

Our Environment: Everybody's Business. See *General Information* listing.

Role of Youth, Teachers, and Education in Environmental

Awareness. 1976, audiotape, 61 min. sa, \$5.75 for sale only. (Order Audiotape 180-5 from the A-V Resource Center.)

Describes the 4-H Community Development Program in New York and discusses specific examples of youth projects with Cornell University staff members. Recorded at Environmental Leaders' Forum V, Syracuse, New York. Straight talk/panel discussion.

Smoking Seafood at Home. See *Consumer Use of Fish* listing.

So Little Time. See *Coastal Protection* listing.

Waterfront Curriculum Guide Series for Teachers:

Marine and Aquatic Field Trip Guide to New York State.

R. Jaeger. 1980, 138 pp., \$3.00. (Order from Sea Grant in Albany.)

Written by teachers for teachers, this illustrated guide describes 39 field trips in New York City, Suffolk, Nassau, Westchester, Rockland, Erie and Niagara Counties. Specific information regarding arrangements, directions, public facilities, etc. and on-site educational activities plus a glossary of marine terms is included.

The New York City Waterfront: An Interdisciplinary

Discovery Curriculum. H. Reese and S. Jackson. 1978, 134

pp., \$3.00. (Order from Sea Grant in Albany or New York City.) Over 134 interdisciplinary activities are described in the context of awakening New York City's children's awareness of the waterfront. The emphasis is on on-site learning activities where students discover for themselves problems and solutions. Intended for teachers, the guide is well illustrated and includes a separate reference section.

Please Go Near the Water. S. Jackson. 1980. 153 pp., \$3.00. (Order from Sea Grant in Albany.)

Designed to accompany the **New York City Waterfront: An Interdisciplinary Discovery Curriculum**, this teacher's manual focuses on a series of waterfront field trips as a means of understanding the urban marine environment.

Research Publications

Research results are published by the New York Sea Grant Institute in Albany. These publications, highly technical and scientific in content, are intended for use by academic, research and industrial organizations engaged in research similar to Sea Grant's. Those listed here are only a small sample of the 400 research publications available. For more information, write to Sea Grant in Albany.

An Aquaculture Pilot Plant for Lobsters. S. Turner, J. W. Zahradnik, and O. Terry. 1979, \$1.50.

Battered and Breaded Smelt. R. C. Baker and J. M. Darfler, 1979, \$.75.

Beach Access: An Historical Overview. M. Kaplan and R. I. Reis, editors. 1979, \$5.00.

The Demand for Construction Minerals in the Greater New York Metropolitan Area. K. Courtney, J. Dehais, and W. A. Wallace. 1979, \$1.50.

Financing Boating with Tax Dollars: Trends and Alternatives in New York State. T. L. Brown. 1979, \$1.50.

Landscape Visibility Mapping: Theory and Practice. J. P. Felleman. 1979, \$2.00.

Long Island Surf Fishermen: 1975. E. G. Carls and R. G. Bresnan. 1979, \$1.25.

The New York City Waterfront Series:

Beach Use and User Constraints in the New York City Coastal Region. C. Heatwole and N. West. 1980, \$1.50.

Beach Use and Water Quality in New York City. C. Heatwole and N. West. 1980, \$1.50.

The New Prospects for the New York City Waterfront. M. Moss. 1980, \$1.50.

The New York City Waterfront: An Analysis of Municipal Ownership and Leasing of Public Land: A Data Report. M. Moss and M. Drennan. Dec. 1976, \$1.50.

The Revitalization of Fulton Ferry: A Prototype for Waterfront Redevelopment in New York City. D. Hoffman. 1979, \$1.50.

The Urban Waterfront and the Low-Income Community, Potential for Low-recreational Useage. W. Gran. 1980, \$1.50.

Ordering information

To order from the **A-V Resource Center**, make your check payable to Cornell University and send your request to:

Audio-Visual Resource Center
8 Research Park
Cornell University
Ithaca, New York 14850
(607) 256-2090

The base rate is for two days consecutive use and the cost of shipping. The audio-visual user is responsible for return shipping charges via United Parcel Service (UPS) or by parcel post, Special Handling. Late returns and damage are the responsibility of the user. When ordering, please give complete title, showing dates, alternate dates and substitute titles, if any. Include name, shipping address, invoicing address, phone number, and purchase order number, if appropriate.

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For single copies, please include 15¢ for handling. For 6 or more copies, there is no handling charge. For 25 or more copies, there is a 10% discount. For 100 or more copies, there is a 20% discount. Be sure to give the publication's title and number, quantity, price, handling and total, along with your name, title, institution, address and purchase order number, if appropriate.

To order from the **New England Marine Advisory Service**, make your check payable to NEMAS, and send your request to:

New England Marine Advisory Service
New England Center for Continuing Education
Durham, New Hampshire 03824

To order from **Sea Grant in Maine** make your check payable to the University of Maine, and send your request to:

Maine Sea Grant Publications
Ira C. Darling Center
University of Maine
Walpole, Maine 04573

To order from **Sea Grant in New York**, make your check payable to Cornell University and send your request to the appropriate address. Please be sure to include the title, quantity, price, along with your name, title, institution, address and purchase order number, if appropriate.

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SUNY/Stony Brook
Stony Brook, New York 11794

To order from **Sea Grant in Virginia**, write to:

Barbara T. Hall, editor
Extension Division
Virginia Polytechnic Institute and State University
Blacksburg, Virginia 24061

To order **research publications**, make your check payable to New York Sea Grant Institute and send your request to:

New York Sea Grant Institute
SUNY at Albany
411 State Street
Albany, New York 12246

Please include the publication's title, quantity, price, along with your name, title, institution, address and purchase order number, if appropriate.

Aquatic Activities for Youth

The necessity of water to mankind, the influence of the sea on people living in coastal areas, and a growing interest in aquatic science have prompted the writing of **Aquatic Activities for Youth**, a new Sea Grant activity package for youth. Designed to meet the diverse educational needs of youth groups, this aquatic program consists of eight individual lesson units, each devoted to a different aspect of our world of water. The units need not be used in a specific order, nor do any set number need to be completed. The activities can be used for year-long pro-

jects. Included in the series are: fish aquariums; raising earthworms; entomology and water; rope—understanding the making of rope; calculating stream flow; Cobblers Cove—coastal planning simulation game; a saltwater world in a jar; fish in your diet.

The cost of each individual activity is 35¢. The packaged set is \$2.75. They may be obtained by writing to **Aquatic Activities for Youth**, Sea Grant Extension Program, 21 South Grove Street, East Aurora, N.Y. 14052. Please make checks out to Cornell University.



Special Tabloid for New York City Youth

Get your next year's students' feet wet from the start with **The City Splash**. An eight-page tabloid about the New York City waterfront, **The City Splash** is designed for upper elementary and junior high school kids. Puzzles, activities, and cartoons keep the tone of the publication light. Articles featured include:

- **Stranded on an Island**, an introduction to New York City — the city of islands — and how its waters are used. How many of the 19 islands located in the city do YOU know?

- **Ship Watching in NYC**. The basics of ship watching in the city's harbor are described with illustrations and explanations of what the ships do and where to go to see them;

- **Carlos' Corner**. Carlos, the Clam, introduces some of his friends — moon snails, barnacles, horseshoe

crabs, and others likely to be found at local beaches;

- **The Bronx River Cleanup**, an interview with Ruth Anderberg, the director of a grassroots effort relying on teenage volunteers to restore the riverfront;

- **Happy Time Maritime**. Two students from the John W. Brown Schoolship tell what it's like to go to school in Manhattan aboard a retired Liberty ship.

Developed and edited by Ruth Folit, **The City Splash** is produced by the New York Sea Grant Extension Program. Single copies are available free. In bulk, copies are 15¢ each with a 20 percent discount for orders of 50 or more. Send your order to: **The City Splash**, Sea Grant Extension Program, 111 Broadway — Suite 1700, New York, N.Y. 10006. Please make checks payable to Cornell University.

Also Available

Promises to Keep, a 12-minute slide-tape show, and **Great Lakes Water Quality Agreement, 1978**, a 20-page publication which explains development, purpose, content and implementation of the Great Lakes Water Quality Agreement between Canada and the United States, are available for use by individuals and organizations from both countries. The slide program uses color, graphics, narration and music to tell the agreement story while the publication uses numerous photographs, diagrams and charts.

For more information on the use of these materials, write to the Great Lakes Regional Office — International Joint Commission, Suite 800, 100 Ouellette Avenue, Windsor, Ontario, N9A 6T3.

Three ¾-inch color video tapes on fishing vessel investment and financing may be borrowed at no charge from the University of Rhode Island (URI) Marine Advisory Service, Narragansett Bay Campus, Narragansett, Rhode Island 02882 (phone 401-792-6211). The tapes are based on a conference held at URI in 1979. They include the following:

- **Decision Making Procedures for the Management of New England Stock**, featuring Allen Peterson, regional director, National Marine Fisheries Service (30 minutes);

- **Vessel Economics — Cost Runs, Profits and Risks: Part I**, featuring Dr. Andreas Holmsen (30 minutes);

- **Vessel Economics — Cost Runs, Profits and Risk: Part II**, a panel discussion featuring Dr. Andreas Holmsen, Captain Charles Follett and Jake Dykstra (45 minutes);

- **Obligation Guarantee Program with James Meehan**, financial services specialist of the National Marine Fisheries Service and Capital Construction Fund, and Robert D. Sedgwick of the National Marine Fisheries Service (60 minutes).

Sister Kress *continued from page 1*

Greenpoint is an older community which was originally settled by the Dutch in the 1600s. Its greatest growth occurred in the mid-nineteenth century, stimulated by the completion of the Franklin Turnpike in the late 1830s. The waves of new residents quickly transformed the tranquil countryside. The pervasive gridiron street pattern and the new residences spawned a new, densely developed suburb. Meanwhile, industrial and commercial use of the shoreline grew more intensive. However, these waterfront uses have since come to be regarded as barriers between the upland residences and the nearby shoreline.

"People used to swim in these waters," explains Sister Kress, "but now they wouldn't dare to go in them." Hopefully water quality will improve in the future as the New Town Creek Water Pollution Control Plant is upgraded with federal funds. Kress is keeping a watchful eye on these developments through her participation on the New Town Citizens Advisory Committee. "When we get the water cleaned up,

then we'll have more interest in shoreline development," she says.

As the president of the Greenpoint Civic Council, Sister Kress is working on that angle, too. On June 9, 1980, the council co-sponsored a waterfront workshop with Sea Grant. A New York City Board of Education boat, the Pisces, took a small group of community activists, and elected and appointed local officials on a tour of the Greenpoint waterfront. Potential development sites were discussed including the street ends of Greenpoint Avenue and Manhattan Avenue, which may be appropriate for public access. "I'd like to see some change here," says Kress.

Through her position as chairperson of the Environmental Committee of the Community Board, she will hopefully be able to initiate action on additional public access at the waterfront. "First, though, we have to collect our facts," claims Sister Kress. "The city still doesn't know who owns certain sites and we have to find out!"

Innovative Teacher *continued from page 1*

But the questions and search for answers didn't end in the local environment. Once the students gained an understanding of local waters, a comparison to a different water environment was needed.

Carla prepared for a trip to Cape Cod. The cost for such a venture was not in the Lake Shore budget. The students scrimped and saved, and all the cost cutting measures they could think of were taken. The students of the class made up the first and only marine education 4-H club in the Great Lakes area of New York. This has made it easier to organize and also aided in making a more enjoyable Cape Cod trip with 4-H support at this end and 4-H support when the students got to Cape Cod. Barbara Waters, a 4-H marine specialist from Massachusetts, provided support at that end for Carla. Over Easter vacation the advanced biology class traveled to Cape Cod.

Once there, the students were treated to a visit to Woods Hole and spoke to commercial fishermen first hand in Provincetown. Plenty of time

was available for field work to investigate a salt marsh, a tidal beach, and a sandy beach. The students not only were able to transport a chest full of treasures such as sea stars, hermit crabs, whelks and anemones back to New York, but also gained a head full of knowledge and understanding to compare the salty sea with the fresh water sea at their own doorstep.

But Carla's search to improve her advanced biology class and to better educate the students of Western New York didn't stop there.

For Carla Borrelli was one of the enthusiastic teachers at the Rochester Institute of Technology's Year of the Coast workshops in late April. Here she and other teachers learned more about the existence of marine education associations, the use of available resource materials, and aspects of the local Great Lakes environment. She has also lent support to the Sea Grant newsletter, the **Great Lakes Leader**, by her critiques among teachers in the Great Lakes area.

And she doesn't seem to have any



Snapshot of Sister Kress, with (left to right) Issac Heimovitz from Mayor Edward Koch's office; Vincent Abate, chairman of the Brooklyn Community Planning Board 1, and Al Mizgalski of Congressman Frederick Richmond's office.

COASTLINES is published bi-monthly by the New York Sea Grant Extension Program. This program is funded by the National Oceanic and Atmospheric Administration, the State of New York, and the New York Sea Grant Institute. Subscriptions to COASTLINES are free for New York residents. Two-year out-of-state subscriptions are \$2. Request COASTLINES from Editor Sally Willson, Sea Grant Extension Program, Fernow Hall, Cornell University, Ithaca, N.Y. 14853.

plans to rest either. Her efforts now are leading to a search for funding to ease the financial burden on her students of future trips to Cape Cod. She envisions other local districts being involved. She dreams, "If we can take students to Cape Cod," she says, "Why not an exchange? Why not students from there visiting Lake Erie?"

Why not?

Update on Staff

This summer marks the start of the fourth year of our Term Specialist Program which prepares extension specialists for Sea Grant advisory program positions nationwide. This year two Term Specialists will be located at Potsdam and Riverhead. **Mark Wiley** will emphasize St. Lawrence River resource management issues drawing upon his formal

training in natural resources and recreation management. **Gene Feldman**, with a fisheries resource background, will emphasize commercial fishing safety and gear development.

Residents along New York's Lake Erie Coast once again have a Sea Grant Extension Specialist at our Fredonia office. **Christine Hager-**

man assumed that position on August 20. Chris joins the Sea Grant Extension Program with degrees in coastal resources management and oceanography from the University of Washington and professional experiences in coastal land use and recreation. Her educational programs will emphasize coastal protection and resource management.

I Want More!

Additional information is available from New York Sea Grant. Please check the publications which interest you and send to your nearest Sea Grant Extension Office. For the following publications, make checks payable to Cornell University:

- _____ **Hurricane Watch . . . Hurricane Warning: Why Don't People Listen?** C. Ruch and L. Christensen, 1980, 4 pp., 35 cents.
- _____ **Biology of Muskellunge (*Esox mosquinongy*) in the Upper Niagara River**, Sea Grant Reprint Series, E. J. Harrison and W. F. Hadley, 1979, 8 pp., \$1.00.
- _____ **Food and Habitat Partitioning between Rock Bass (*Ambloplites rupestris*) and Smallmouth Bass (*Micropterus dolomieu*) Young of the Year**, Sea Grant Reprint Series, E. L. George and W. F. Hadley, 1979, 8 pp., \$1.00.
- _____ **Design Criteria for Floating Tire Breakwaters**, Sea Grant Reprint Series, V. W. Harms, 1979, 21 pp., \$1.00
- _____ **Modeling Ice Regime of Lake Erie**, Sea Grant Reprint Series, A. Wake and R. R. Rumer, Jr., 1979, 18 pp., \$1.00.
- _____ **Combined Wave Refraction and Diffraction**, Sea Grant Reprint Series, P. L-F. Liu and C. J. Lozano, 1979, 20 pp., \$1.00.
- _____ **Battered and Breaded Smelt, Development of Products from Underutilized Species: Booklet 6**, R. C. Baker and J. M. Darfler, 1979, 15 pp., \$.75.
- _____ **Microbial Properties of Mechanically Deboned Fish Flesh**, Sea Grant Reprint Series, M. Raccach and R. C. Baker, 1978, 3 pp., \$1.25.
- _____ **Lipid Composition of Dark and White Muscle from White Sucker (*Catostomus commersoni*)**, Sea Grant Reprint Series, J. Mai and J. E. Kinsella, 1979, 6 pp., \$1.25.
- _____ **Estuarine Graveyards, Climatic Change, and the Importance of Estuarine Environment**, Sea Grant Reprint Series, J. R. Schubel and D. J. Hirschberg, 1978, 19 pp., \$1.00.
- _____ **Access to Great Lakes Salmonid Fishing via Private Lands: A Study of New York's Riparian Landowners**, Sea Grant Reprint Series, T. L. Brown and D. J. Decker, 1979, 8 pp., \$1.00.
- _____ **The Relative Performance of Various Estimators of Recreation Participation Equations**, Sea Grant Reprint Series, V. K. Smith and V. G. Munley, 1978, 12 pp., \$1.00.

If you would like to be notified of additional publications by New York Sea Grant, please check the appropriate category and send to the Albany Sea Grant office. Be sure to include your name and address.

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| _____ General information on Sea Grant | _____ Aquaculture, Fisheries, Seafood |
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Hurricane Watch . . . Hurricane Warning:

Why Don't People Listen?

Why do some people respond to hurricane warnings while others don't? What specific types of information promote a timely response? These questions were the focus of a research study recently completed by Sea Grant at Texas A&M University.

In an effort to learn why people respond the way they do, psychological experiments were conducted with residents of Galveston, Texas, an island 75 miles southeast of Houston that last experienced a major hurricane in 1961. The experiments were grouped into five subject areas: (1) simulated hurricane variables; (2) consequences of exposure to hurricane fury via television; (3) influence of other residents, authority figures and events; (4) response as a function of media presentation; and (5) response to fear, information and testimony in current hurricane material.



While the conclusions of this experiment reflect the uniqueness of Galveston, the need for hurricane awareness programs is just as vital in New York as in Texas. And although New York last experienced a hurricane in 1972, in the words of one Sea Grant specialist, "It's time."

Here's just a sample from the conclusions of the Galveston Study which might be of interest to New York residents: (1) People need to be told specifically what they should do during a watch and during a warning; (2) People should be informed of the differences in severe hurricanes,

and need to perceive all hurricanes beyond force 1 as "bad"; (3) People need to be informed about the amount of tidal rise that will block evacuation; (4) People should know how long it takes to evacuate an area. In Galveston, for example, nearly 30 percent of those interviewed believed the entire island could be evacuated in six hours while the most recent studies indicated a minimum of 12 hours was necessary; (5) The media should emphasize certain messages to get people to respond safely.

For a copy of this four-page publication, see **I Want More**.

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