First Ohio Sea Camp Successful

The Sea Camp concept is not a new one, and has taken root in many states. Examples include Virginia State University's 4-H Marine Camp, Texas A & M's Marine Education Camp, New Jersey's 4-H Marine Science Weekend and the University of Hawaii/University of Guam's 4-H Summer Youth Fishery Workshop, all of which were developed by Sea Grant Extension Agents in cooperation with 4-H extension personnel. In the past, Ohio Sea Grant District Specialists Dave Kelch and Fred Snyder have conducted youth education programs involving all facets of Lake Erie at camps, field trips, and schools. Kelch and Snyder developed the idea for a youth camp related to Lake Erie, presented the concept to the 4-H camp board, and planned the camp with a committee of Sea Grant and 4-H personnel.

The major objective of the camp was to provide youth with the opportunity to learn about Lake Erie through direct interaction. Traditional 4-H camp activities were intertwined with lake-related educational programs, including learning about weather and weather forecasting, field trips to study Kelleys Island natural history, collection trips to the lake and an estuary, the use of scientific equipment to collect specimens and conduct environmental studies, laboratory sessions following field collection, swimming, basic sailing, water safety and rescue, snorkeling, an introduction to SCUBA at the Kelleys Island quarry, Lake Erie fishing techniques, making fishing lures, shoreline fishing, fish cleaning and cooking, and an evening charter boat fishing trip.

The campers gained a new appreciation of the beauty and value of the lake and marsh after standing knee-deep in the sandy bottom or muddy ooze and observing the diversity of organisms that appear in a seine net. One look through a microscope at a freshly collected water sample will reveal just how 'alive' Lake Erie really is. Donning mask, fins and snorkel, and swimming among the fish in a crystal clear quarry gives one a different view of life beneath the surface.

Many realize that Lake Erie and its resources are essential to life in northern Ohio. Young people can see the fun and excitement Lake Erie offers, but are often unaware of the biological processes and economic value of the lake. To capitalize on the natural appeal of water while developing awareness of the importance of Lake Erie, the first Ohio 4-H Sea Camp was held this summer at the Kelleys Island 4-H Camp. An effort of Ohio's Sea Grant Program and the Ohio Cooperative Extension Service, the four day camp was planned and conducted by Sea Grant District Specialists and 4-H Extension Agents. Attendance was set at a maximum of 40 4-Hers between the ages of 13 and 17 from northern Ohio for this pilot year camp. (continued on page 2.)
Fishing Invitational To Stress Lake Erie’s Economic Development

Approximately 50 community leaders and government officials participated in the 1985 Northeast Ohio Fishing Invitational, Saturday, September 7, 1985. For some it was their first experience on Lake Erie. For others it was a welcome return.

Walleye, salmon, trout, yellow perch, and smallmouth bass were the primary species sought by the anglers. In recent years the walleye fishing boom has spread east to Lake Erie’s central basin. Also, central basin salmon and trout offer anglers the opportunity to catch a hard-fighting trophy fish.

Improved recreational access and facility development is essential to capturing the economic growth potential of the coastal communities in Lake and Ashtabula counties.

The event was organized by the Northwest Ohio Sea Grant Extension Advisory Committee in order to educate local, state, and federal decision-makers on the economic opportunities and constraints to Lake Erie recreational development.

The Ohio Department of Natural Resources recently underwent some changes in high-level administrative personnel, including a new director, Joseph Sommer, and a new chief of the Division of Wildlife, Clayton Lakes. With changes in the ODNR administration in Columbus, it is important to familiarize these officials with Northeast Ohio and Lake Erie. The Fishing Invitational is a fun way to educate the Columbus-based decision-makers,” said Jeff Frischkorn, News Herald Outdoors writer and Invitational Chairman.

Boats, baits, and tackle were supplied by local anglers and fishing associations. A picnic lunch followed the fishing.

As was the case last year, this year’s event was co-sponsored by a number of local organizations, including the Fairport Harbor Rod and Reel Association, the Chagrin River Salmon Association, the Northeast Ohio Walleye Association, the Western Reserve Federation of Conservationists, Lakeshore Marina, Lake Erie Marine Trades Association, Rutherford’s Landing, Ohio Division of Wildlife (District Three in Akron), The News Herald, Wayne’s Bait and Tackle, Storm Manufacturing, Ohio Steelheaders Association, and the Ashtabula Rod and Reel Association.

An example of the growth in Lake Erie recreational development is the expansion of the Northeast Ohio Charter fishing industry. This year approximately 25 local Lake Erie charter captains have provided professional Lake Erie fishing charter service from ports in Northeast Ohio. Three years ago the western basin of Lake Erie was the only place anglers could go to enjoy Lake Erie charter fishing. This year the charter captains have attracted many anglers and dollars spent in Northeast Ohio.

—Frank Lichtkoppler

Special thanks goes to the following for their support:

- Reliance Fishing Tackle Company, St. Paul, Minnesota
- Johnson Fishing Tackle Company, Manikato, Minnesota
- Ohio Bass Tournament Circuit, Willoughby Hill, Ohio
- Lindy-Little Joe Fishing Tackle Co., Brainerd, Minnesota
- Dan Kalo’s Nite Crawler Bait and Tackle, Elyria, Ohio
- Kilus Freeze-Dri Taxidermy, Bedford, Ohio
- Mr. Fred Walcott & Daughter, Sandusky, Ohio
- The Sea Merchant, Kelleys Island, Ohio

The following charter captains donated time, equipment, baits and provided services at a reduced cost for the charter fishing trip:

-Captain Bill Allen — “Accipiter”
-Captain Pat Dolan — private vessel
-Captain Gary Jennrich — “Spin drift”
-Captain Jim Johnson — “J.J.”
-Captain John Metta — “Whatta Matta”
-Captain Bill and Linda Meszaros — “Andiamo”
-Captain Al Nixon — “Sunfisher”

Again, the Ohio 4-H Sea Camp would not have been successful without the generosity and interest of these individuals. They deserve a hearty thanks for their interest in the education of our young people toward the importance of our Lake Erie environment.

—Dave Kelch and Fred Snyder

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The Ohio Sea Grant Program is administered by the Center for Lake Erie Area Research (CLEAR) within the College of Biological Sciences of The Ohio State University. The Advisory Service is a component of the Ohio Cooperative Extension Service (OCES). All educational programs and activities conducted by OCES are available to all potential clientele on a nondiscriminatory basis without regard to race, color, national origin, sex, or religious affiliation.

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Twine Line is published bimonthly by the Advisory Service of the Ohio Sea Grant Program.

To add a name to our mailing list write the Ohio Sea Grant Program office.

OSU
The Ohio State University
Shark — Your Chance To Bite Back!

Sharks comprise one of the oldest groups of animals on earth, changing very little over their 300 million years in existence. Prehistoric sharks grew as long as 100 feet, with teeth the size of human hands. Today’s shark ranges in length from 1 to 50 feet, with over 300 species throughout the world.

As members of the cartilaginous family of fishes, sharks have no bony skeleton. Their thick, rough hides, covered with denticles (microscopic tooth-like structures), provide protection. Sharks have no air bladder, and must swim constantly to remain afloat. Their streamlined bodies provide quick and graceful movement, maintaining buoyancy by creating an “uplift” effect (similar to an airplane) in the water.

Sharks reproduce by two methods — laying eggs or bearing live young. Larger sharks generally produce live young, which emerge as miniature replicas of the parent and are equipped with a full set of teeth. The life span of sharks can be as high as 20 to 30 years.

Contrary to popular belief, sharks do not seek human flesh as a mainstay in their diet. Their diet depends upon size and species, with fish being the largest portion of most sharks’ daily nutrition. Some species, however, feed on marine mammals such as seals and penguins. The small dog fish shark consumes crabs; the large basking and whale sharks are plankton eaters.

Carnivorous sharks have keen senses of taste and smell, and for detecting the vibration movements of injured fish. These species can have up to a thousand sharp teeth for ripping and tearing flesh. Some sharks (such as the white) lose teeth when they eat; these are replaced by new teeth.

Sharks make excellent tablefare, with over 4.7 million pounds of shark harvested annually by U.S. commercial anglers and the sportfishery. Sharks are harvested with ginnets or longlines baited with bloody fish.

Flesh is processed into fresh and frozen fillets as well as dried and salted products, and marketed in the United States with some foreign export. Shark livers provide oil high in Vitamin A. Hides are tanned for high grade leather and are used by woodworkers for polishing wood. The familiar jaws and teeth are sold as souvenirs and curios.

While most Americans are still not familiar with shark as a food, many other countries have long been utilizing this delicacy. Most of Great Britain’s famous ‘fish and chips’ contain shark meat. Orientals use the gelatinous fins in their prized ‘shark fin soup,’ and fillets are served commonly throughout Mexico and South America. The taste of many shark species is comparable to haddock for flavor and texture.

Qualities such as lack of bones, firm texture, white and flaky flesh, pleasant taste and ver-
1985 State Legislature/Congressional Day

“Lake Erie is truly Ohio’s ‘Lake of Gold’ and its value to the economy of the state can be counted in the hundreds of millions of dollars,” Jack Waldock of Waldock Investment Company in Sandusky, stated in the invitation to Ohio’s state and federal congressmen for 1985’s “State Legislature/Congressional Day on Lake Erie.”

The three Ohio Sea Grant Program Advisory Committees sponsored and organized the June 21 event which was co-chaired by Waldock and John H. Hildebrandt, marketing director of Cedar Point.

The day’s festivities began at Bay Harbour Restaurant at Cedar Point. After lunch those interested in fishing in the “Walleye Capital of the World” departed and the rest of the participants cruised to Franz Theodore Stone Laboratory at Put-in-Bay on one of Cedar Point’s ferry boats. A picnic dinner was held on the Gibraltar Island lawn overlooking Put-in-Bay Harbor.

State Legislature/Congressional Day provided an opportunity to over 100 congressmen and advisory service committee members to receive the latest information on the importance of Lake Erie to Ohio, and to allow for a firsthand experience of some of the activities which are so popular with Ohio residents.

Many people were instrumental in making the day a success. The Ohio Sea Grant Program would like to thank each person who participated. Just a few that donated time and facilities include:

**Fishing Boat Donors**
- Bill Allen
- Dan Brattain
- John Caputo
- Bill Cherry
- Tom Conley
- Pat Dolan
- Bill Edmonds
- Bud & Eileen Kazor

**Meeting Space/Ferry Boat**
- Dale Koch
- Ken Lindsey
- Al Nixon
- Lenny Partin
- Bruce Smith
- Glen Spohn
- Tony Trifiletti
- Jack Waldock

**Cedar Point**
**Dock Space**
- F.T. Stone Laboratory
- Ohio Dept. of Natural Resources

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National Marine Business
Financial Data Bank

After two years of research that involved writing comprehensive computer programs, designing an appropriate data collection system, and devising a useful reporting format for the data generated, a National Marine Business Financial Data Bank has been implemented.

The University of Rhode Island's Sea Grant Marine Advisory Service and College of Business Administration have developed a financial ratio analysis scheme for marine-oriented firms. The purpose of the data bank is to collect and publish financial characteristics of representative marine industries. In addition, descriptive information about the types and sizes of businesses will be published.

The data bank will provide marine businesses with a financial management tool to determine how well they are doing relative to the industry as a whole. Each firm that consults the data bank will receive a computer generated financial ratio analysis and a booklet with interpreting results. Managers will then be able to identify strengths to be capitalized upon and weaknesses to be corrected.

More information will be provided in the next issue of Twine Line.

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Seafood Consumption

U.S. per capita consumption of fish and shellfish was a record 13.6 pounds of edible meat in 1984. This total was 0.5 pounds greater than 1983 consumption.

In addition to consumption of commercially caught fish and shellfish, recreational fishermen catch and consume an estimated 3 to 4 pounds of edible meat per person.

Source: National Marine Fisheries Service

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Fall Fishing Invitational

Twenty-seven outdoor writers from near and far (Pennsylvania, Ohio to Troy, Virginia, and Angola, New York) attended the first “Fall Fishing Invitational on Lake Erie” held September 12 - 14. The invitation was created to showcase the region, and specifically fall fishing when the chances of landing a trophy-sized walleye or smallmouth bass are best. The invitational was sponsored by the Ohio Sea Grant’s Northwest Advisory Committee and hosted by The Harbour Resort Community.

Although the six to eight feet waves kept everyone from fishing until Saturday morning many activities kept all busy. The writers took an area tour that included the Marblehead Lighthouse, Dempsey Public Access Ramp, Big Island Wetland, The Harbour, and investigated the North American Sail and Power Show in the water at Cedar Point.

The regularly scheduled activities included a banquet for “top catch of the day” awards and prizes which, because of the weather became a random drawing with top prize of a commemorative issue of Lawrence “little green box” depth finder going to Gary Ponting of Ohio Out-of-Doors magazine. Ed Bair of the Findlay Courier drew second prize of a Shakespeare President spinning rod with a matching Sigma reel. Vince Kuniak, also of Ohio Out-of-Doors, third prize, an ultra-light Shakespeare President outfit.

Dick Kotis, a nationally known fishermen and sportsman was the guest speaker for the banquet. Kotis explained to those present how important it is to explain to others why Lake Erie is the way it now is and why it improved. To the first he explained that “good management, actual cleaning up of the lake environment, and mother nature all helped improve Lake Erie. We have a responsibility to Lake Erie which is now a viable and available recreational lake with fabulous recreational facilities and a large economic impact.”

---

Motels:
- Green Tree Inn
- Best Western
- South Shore Inn
- L & R Motel
- Vacation Inn

Charter Boat Captains:
- Capt. Bart Blaha — “Sportsman”
- Capt. Clodie Blaha — “Sportsman Too”
- Capt. Ed Kish — “Cigany”
- Capt. John Matte — “What’s Matta”
- Capt. Bill Messaros — “Andiamo”
- Capt. Jim Bergeman — “Can’t Miss”
- Capt. Pete Walderzak — “Eye Team”
- Capt. Dick Haskins — “Rigo”

---

—Maran Brainard
Attention Charter Captains

This fall the Ohio Sea Grant Charter Captains Survey will be mailed to a random selection of approximately one-third of Ohio’s Lake Erie Charter Captains. The purpose of the survey is to characterize the Ohio charter industry and document its economic impact. The survey will include questions on the problems, concerns, and trends in the Lake Erie charter industry and the charter industry’s needs for Lake Erie information will be identified.

If you receive a survey, please take the time to fill it out carefully. Plans are to report the results at Ohio Sea Grant’s 1986 Spring Charter Captains Conference. Data will not be associated with an individual in any way and only a summary of the responses will be reported. We are hoping to get a high percentage return of the surveys in order to gather reliable data. Similar surveys conducted by Sea Grant programs in Wisconsin, New York, and Michigan have been very useful to the charter industry.

Charter Boat Journal

The Charter Industry Trade News is a new publication promoting U.S. charter boating and will feature news and articles on fishing and boat-for-hire operations in the Great Lakes and ocean coastlines including items from Sea Grant programs throughout the U.S.

For further information, call the Charter Industry Trade News at 312/310-0750.

Great Lakes Lighthouses Featured on 1986 Calendar

Pen-and-ink drawings of lighthouses along the Great Lakes are presented in an 11 x 17 inch wall calendar now available from the Historical Society of Michigan. Sketches and accompanying descriptions by marine artist Leo Kusche include lighthouses on each of the Great Lakes. The calendar, with space for notecard appointments, is $5.95 plus $1.25 for mailing can be obtained from the Historical Society at 2117 Washtenaw Ave., Ann Arbor, MI 48104.

Lake Erie Salmon And Trout Food Habits To Be Studied

In Lake Erie’s central basin, bait fish populations are represented by emerald shiners and gizzard shad in the upper strata of water and smelt in the deep water. As anglers call for increased stockings of salmon and trout, concern is growing in some management circles that these hungry predators might have a negative impact on Lake Erie’s forage base.

That’s why Ohio Sea Grant has joined the other Great Lakes Sea Grant programs in studying the food habits of salmon and trout. To avoid needless killing of fish, stomachs of salmonids caught by volunteers are being collected. Predictably, most of the stomachs collected are empty, but those having any contents are shedding some light on the foods preferred by these fish. This information can be used by management agencies as a basis for decisions.

Fish and Seafood Month

October is a great time of year to try fish and shellfish products because of the tremendous variety of seafood products available so it was deemed “Fish and Seafood Month.” stated Lee J. Weddig, Executive Vice President of the National Fisheries Institute.

A bountiful selection of fish and shellfish products to choose from is not the only reason to eat seafood. Seafoods are high in polyunsaturated fatty acids, low in cholesterol, and are especially good for low sodium diets. It is a nutrient dense source of protein and certain polyunsaturated fatty acids found in fish oils play a part in actually reducing the risk of heart attacks by lowering cholesterol levels.

—Fred Snyder
Great Lakes Fish Consumption Agreement

Uniform health advisories, available since early spring to guide consumers of Lake Michigan fish, may soon be expanded to other Great Lakes.

Environmental and health agencies from Wisconsin, Illinois, Indiana, and Michigan announced the historic agreement for Lake Michigan in March. The agreement was coordinated by Dave DeVault of the U.S. Environmental Protection Agency's Great Lakes National Program Office.

Minnesota and New York agencies expect to endorse the same testing methods in the near future and to issue uniform advisories based on them for Lake Superior and Lake Ontario. Ohio and Pennsylvania also approve the concept but currently issue no lakewide health advisories for consumption of fish in Lake Erie.

DeVault said anglers have long complained that they were given conflicting information by different states about the safety of eating fish of various species and sizes in waters shared by those states. “For example, Indiana used to advise against all consumption of lake trout while Illinois merely cautioned pregnant women and pre-school children from eating lake trout over seven pounds.”

Anglers were understandably confused, and many may have chosen not to fish in the lake at all, DeVault said. The new approach takes into account the fact that fish migrate throughout the system.

One difficulty apparently arose from the fact that different states elected to analyze different parts of the fish for levels of such contaminants as DDT, PCBs, chlordane, and dieldrin that accumulate in the fatty tissue. Methods used include sections of a fish steak, a lean dorsal muscle, fillets with the skin on, or fillets with the skin taken off before testing. The amount of data on which the advisories were based also varied significantly from state to state.

Ohio’s Fish Consumption Action

“...the collection and analysis of fish tissue from Ohio’s portion of Lake Erie open waters has not been given a high enough priority in Ohio agencies for any action to be initiated,” explained John Estenik of the Ohio Environmental Protection Agency, Toxics Evaluation Group of the Division of Water Quality Monitoring and Assessment.

In Ohio three agencies are involved in issuance of fish advisories. Ohio EPA and Department of Health collect, analyze, and compare the findings against impact assessments. Warnings are issued jointly by these two agencies. Department of Health is also responsible for posting warning signs. The Department of Natural Resources issues the fishing licenses and enforces the fishing laws.

Estenik recommends a committee be created to represent the three agencies and should review the Lakes-wide Agreement and issue an acceptance of the agreement.

Coastal Erosion, Real Estate Professionals, and Extension

The Ohio shoreline of Lake Erie is one of the most heavily developed coastlines on the Great Lakes. Pressures for development have increased in the last decade with the rebirth of Lake Erie recreational fishing. Unwise development or redevelopment of coastal properties could lead to increased economic losses from future coastal erosion and flooding.

Record high lake levels in 1985 have exacerbated coastal erosion and flooding problems. Real estate professionals working in the coastal zone have a need for current information on coastal erosion and flooding in order to better serve their clients.

In the spring of 1985, three workshops for real estate professionals were conducted by Sea Grant Extension. One workshop qualified for in-service education credit from a national real estate appraisal organization, and the other two were certified for continuing education credit by the Ohio Division of Real Estate. Certification workshops were the first Extension Sea Grant programs they had participated in. A large majority (96%) are planning on sharing the information they learned with their coworkers and clients.

Nine out of ten respondents felt better prepared to make decisions concerning coastal property and coastal erosion problems as a result of the workshops.

One-quarter of the survey respondents valued the information learned at over $150. Six out of ten respondents expect the workshops to help increase their businesses’ productivity. Almost 55% expect the workshops to help increase their businesses’ profitability.

Results of the surveys indicate that Extension Sea Grant teaching efforts were successful in educating a new audience concerning the continuing problem of coastal erosion.

—Frank Lichtkoppler and David Kelch

DeVault said.

The method on which the Lake Michigan states agreed and which the region’s other states are now considering is referred to as “the FDA fillet” because it has long been used by the U.S. Food and Drug Administration to test salmon for contaminants. It is a whole fillet with the skin intact.


Purposes of the Triflod Agreement

1. Development of a consistent, comparable data base on a lake wide and, for applicable species, a Great Lakes Basin wide basis.

2. Jointly develop consistent consumption advisories that are based on consistent data bases and represent similar advice for a given contaminant concentration.

3. Through pooling of experience and resources improve our accessment process and the quality of advice to consumers.

—Maran Brainard

However, this acceptance would only state Ohio agrees on the testing methods (using FDA fillet) which would allow for comparable results of Great Lakes fish.

If the Ohio EPA is to collect and analyze fish in Ohio’s Lake Erie portion a funding appropriation is necessary for purchase of equipment (a gel permeation unit and a fish tissue grinder), additional laboratory space, and personnel.

There are currently many areas of difficulty to acknowledge. For example, only selected contaminants are analyzed and, in many instances, chemical specific human impact assessments are not available.

Certain levels of contaminants (acceptable daily, ADI, volumes) are issued by the Food and Drug Administration (FDA) but, again, these refer only to a few of many possible contaminants and do not take into consideration the many variables such as health of the specific consumer and the interaction of contaminants.

If Ohio’s Lake Erie fish are comparable to Canada’s Lake Erie fish, the Canadian advisories issued (based on five contaminants) indicate that only large fish of certain species are moderately contaminated. Estenik believes fish consumption at “reasonable” levels should create no adverse health problems.

Ohio has a few options that would increase the knowledge of Ohio’s fishermen concerning consumption of Ohio’s Lake Erie fish. The fishing licences could, like in many states, contain a list of fish advisory areas and health advisory consumption information. And the Lakes-wide Agreement could be accepted.
Recreation Commission Formed

The White House announced August 13 the formation of the President’s Commission on Americans Outdoors (PCAO), a new commission appointed to review outdoor recreation policies, programs, and needs. Governor Lamar Alexander of Tennessee has been appointed chairman of the commission. Commission members include prominent members of Congress, conservationists, representatives of state and local governments, and recreation leaders.

Commissioners appointed by the President include:
- Representatives Morris Udall (D-AZ) and Barbara Vucanovich (R-NV);
- Senators Bennett Johnston (D-LA) and Malcolm Wallop (R-WY);
- Frank Bogert, Mayor of Palm Springs, CA;
- Sheldon Coleman, Chairman, The Coleman Company;
- Gilbert Grosvenor, National Geographic Society;
- Derrick Crandall, President, American Recreation Coalition;
- Rex Maughan, Conference of National Park Concessioners;
- Charles R. Jordan, Parks Administrator, Austin, TX;
- Wilbur F. LaPage, Director, New Hampshire State Parks;
- Patrick F. Noonan, Conservation Resources Group, and
- Stuart Northrop, Chairman, Huffy Corporation.

Senator Wallop applauded the selection of commissioners and predicted a fruitful effort. "We are starting from an enviable position," the Senator said. "We have a wealth of recreation lands and a vast network of public and private recreation providers. Our task is to fine-tune existing programs and policies and exhibit similar creativity in devising ways to deal with constant and rapid changes in recreation."

Issues the commission is expected to consider include:
- funding for public recreation programs;
- integration and dissemination of information on private and public recreation resources;
- the role of for-profit and non-profit organizations as recreation providers on public lands, and
- appropriate changes in federal recreation programs and policies.

The President’s Commission on American Outdoors will conduct public hearings across the nation and will use special task forces to facilitate the gathering of information and ideas. A board of advisors made up of recreation and conservation leaders is also planned. Submission of PCAO's findings to the President will be in December, 1986.

Source: Boating News, 8/31/85, National Marine Manufacturers Association

U.S. Great Lakes Shoreline Use
(As percentage of total shoreline)

<table>
<thead>
<tr>
<th></th>
<th>Urban Residential</th>
<th>Recreational Forest</th>
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<td>Lake Huron</td>
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<td>Lake Michigan</td>
<td>39%</td>
<td>56%</td>
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<td>27%</td>
</tr>
<tr>
<td>Lake Ontario</td>
<td>48%</td>
<td>45%</td>
</tr>
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</table>

Source: Michigan Sea Grant College Program

Boat Titling Guidelines

In its continued drive for nationwide uniform state boat titling laws, the National Marine Bankers Association has joined with allied boating industry interests to produce guidelines for states to follow in implementing such laws. A coalition of lending, manufacturing, retailing, consumer, insurance, and boating law administration groups petitioned the Coast Guard to issue guidelines last fall to carry out its responsibility under the Recreational Boating and Fishing Enhancement Act of 1984. The Coast Guard, however, has yet to act.

In the meantime, NMBA and coalition members drafted their own guidelines for the states to follow. Included are these key points:
- Boat titling would cover all undocumented vessels required to be registered; outboard motors could be titled separately.
- States would honor titles issued by other states and incorporate information from former titles in a new title when the boat is moved from state to state.
- Title information would contain a record of liens as required by the Uniform Commercial Code, plus the hull identification number.
- It is recommended that the state titling agency be the same as the state vessel registration agency; also suggested is that hull numbers be filed in a centralized repository to aid in the detection and recovery of lost or stolen vessels.

In addition to mailings made to those states where boat titling initiatives have been underway, the guidelines have also been forwarded to the Council of State Governments. The Council is considering recommending the guidelines to members across the U.S. Copies are available through the National Marine Bankers Association, 401 N. Michigan Ave., Suite 2950, Chicago, IL 60611.

Dempsey Fishing Access Area

The newly created Dempsey Fishing Access Areas is the only public access to Sandusky Bay. "A facility like this has long been needed in this area especially on windy days when Lake Erie is too rough for boaters and fishermen," said Barry Appear of the Division of Wildlife.

Although the total cost for land acquisition and development totaled approximately $1.3 million about $700,000 was reimbursed from the Dingell-Johnson (D-J) funds appropriated to the state.

The D-J program is funded by an excise tax on certain items of sport fishing tackle and provides monies for managing recreational fisheries. It is administered by the U.S. Fish and Wildlife Service. The funds are apportioned to the states annually based upon the number of fishermen and the state's size. In Ohio, more than $9 million has been received since 1952. This money has been spent on fisheries research and surveys (62%), development of lakes and fishing access (30%), and acquisition of lake sites and access to lakes and streams (6%).

Dempsey Access, located on the north shore of Sandusky Bay, provides easy access for fishing of perch, catfish, drum bass, and walleye. And not only for those in boats but for those fishing off the 725 foot breakwall/fishing pier that is wheelchair accessible.

The facility features four launching ramps, two courtesy docks, two boat launching docks, 154 car/boat and 50 car parking spots, and latrines.
Artificial Reefs Update

The evaluation of artificial reefs as fish attractors in the central basin of Lake Erie has begun. Off of Lakewood two sample reefs have been placed 1/2 mile off the south shoreline of Lake Erie, and are marked by regulatory marker buoys. The reef farthest west is composed of six rock piles ranging in size from two to six feet high with a total area of 80 yards. The other reef, approximately 1/2 mile from the western site, is composed of four piles ranging from 6 to 8 feet tall and approximately 80 yards in total area. Both reefs consist of dolomite rock pieces ranging from pebble size to boulders.

Sampling methods which are being used in this artificial reef evaluation include test netting, controlled angling, fathometer runs, and fish larvae tows. Test netting is conducted once a week to determine whether fish are using the artificial reefs, which fish species are using them, and which type of artificial reefs (i.e. 2-6 foot high or 6-8 foot high) the fish prefer. Controlled angling is a method where researchers fish an area of interest and control different fishing factors, such as type of bait used and time spent fishing. By using this method, we hope to determine if anglers' catch rate will be increased on artificial reefs compared to non-reef areas. We will also be comparing the catch rates between the two different types of artificial reefs. Fathometer runs are conducted by motoring over the top of the artificial reefs sites while recording the number of fish above the reefs. Although this sampling method does not identify the individual fish recorded, it does provide information on the number of fish using the reefs. Finally larval fish tows are being used to determine if fish are using the artificial reefs as spawning grounds. Larval tows are conducted by pulling a one meter diameter net for five minute periods around the artificial reef sites.

Sampling of the artificial reefs sites began last May and is scheduled to continue throughout the spring, summer, and fall of 1986. Conclusions on the effects of the artificial reefs will not be made until all sampling is finished and the data is analyzed. Fish species which have been sampled on the reefs this past summer include yellow perch, walleye, freshwater drum, gizzard shad, alewife, white bass, white perch, and channel catfish. Several large yellow perch were caught in test nets late in the summer.

The success of future sampling depends on the cooperation of fishermen to stay clear of test nets. A special thanks is extended to Mr. Wayne Bratton, president of Trident Marine Corporation, for his time and expertise.

—Michael Gerber, Graduate Research Associate with Ohio Sea Grant Program, Artificial Reef Project

Who's Minding the Shore?

A citizens' conference to develop goals and strategies for Ohio's Lake Erie coastal area is being sponsored by the Ohio Coastal Resource Management Project (OCRMP) on November 12, 1985 in Westlake Ohio.

The coastal conference has been designed to involve Ohioans with a variety of views in setting goals for Ohio's north coast. Today, many conflicting interests compete for the shore and its resources. The issues will be highlighted by a panel of speakers from US Environmental Protection Agency (EPA), Great Lakes Environmental Research Laboratory (GLERL), Ohio Department of Natural Resources: Division of Water, Center for the Great Lakes, Hiram College Environmental Resource Center, and Toledo Metropolitan Area Council of Governments.

For more information or to register, write Nancy Marti, OCRMP, 278 Bentlyville Road, Chagrin Falls, OH 44022.