

UNITED STATES DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE

New England Area Office P. O. Box 1518 Concord, N. H. 03301

November 17, 1979

• 1 4

Thomas R. Pero, Editor P.O. Box 992 Taunton, Ma 02780

Dear Mr. Pero:

The attached proposal is for your review and comment. The document was prepared by the USFWS and has been discussed with the Merrimack River and the Connecticut River Policy and Technical Committees as well as representatives from NMFS.

Both Policy and Technical Committees enthusiastically endorsed this proposal on October 16, 1979. The representatives from NMFS have presented favorable comments. However, they will not act on this proposal until comments have been received from the private sector.

The USFWS and the State resources agencies view the proposal and its potential implementation as a major positive step in restoring the Atlantic salmon to Southern New England rivers--notably the Merrimack and Connecticut River systems. Hopefully, you to will come to this conclusion.

Your comments should be sent to the following address as soon as possible.

Mr. Allen E. Peterson, Jr., Regional Director National Marine Fisheries Service Federal Building, 14 Elm Street Gloucester, MA 01930

Sincerely,

Charles R. Maloy

Charles R. Maloy Area Manager Prepared by the USFWS October, 1979

Introduction and Background

Programs to restore Atlantic Salmon to the Connecticut and Merrimack Rivers have been on going since 1967 and 1969, respectively. The effort to restore salmon to the Pawcatuck River in Rhode Island was initiated in 1978 when the State Fish and Wildlife agency obtained 20,000 salmon eggs.

From 1967 through the mid-1970's the southern New England restoration programs primarily addressed fish passage needs. The release of juvenile salmon was relatively minor in quantity and confined to the Connecticut River.system. Atlantic salmon eggs did not significantly limit the development of the program. Salmon smolts and some fry and parr were annually released. This production was in line with the production capabilities of the existing fish cultural program.

Since the Connecticut River Program had no brood stock returning to the river that could meet the egg requirements as dictated by the hatchery program, alternative sources were utilized. Salmon eggs were obtained, as available, from Canada (New Brunswick and Quebec), Maine (Penobscot River Stock), hatchery-held and reared brood fish and landlocked salmon which were usually crossed with various sea-run salmon stocks. Although in most cases the egg requirements were satisfied, the sources were unpredictable relative to stocks and quantity.

In 1975, juvenile salmon were released into the Merrimack River and the salmon egg-requirements increased within Southern New England. By 1978, the egg requirements for southern New England could not be met. Not only had the Merrimack River effort impacted these needs, but the fish cultural program itself, had greatly expanded its capabilities. The State of New Hampshire was rearing Atlantic Salmon at the Milford Hatchery, the National Fish Hatchery in Nashua was converted totally to Atlantic salmon, the National Fish Hatchery in Berlin was producing some fry for various Merrimack River studies, and the White River National Fish Hatchery was nearing completion. Even the egg requirements in Maine dramatically increased with the completion of the Green Lake

National Fish Hatchery.

With the Atlantic salmon runs dramatically low in most of the Canadian Rivers and the run in the Penobscot River down, the egg requirements for southern New England would not be met in 1979. The USFWS was faced with the real possibility that several of the Federal Hatcheries would have few salmon eggs available to them. This situation was thoroughly assessed in September and several short-term alternatives discussed.

The availability of landlocked salmon in Vermont, New Hampshire, and Maine was explored. The potential egg supply (300,000-600,000) from these sources was only tentative. It does appear however, that some landlocked salmon eggs will be obtained and crossed with Penobscot and/ or Connecticut River sea-run stocks. Another alternative assessed was the National Marine Fisheries Service's culture program in Puget Sound. National Marine Fisheries Service personnel were contacted and the USFWS was advised that between 300,000 and 400,000 Atlantic Salmon eggs could be made available. These are of Gaspe' Bay origin and are six or seven generations removed from sea-run stock.

In relation to the latter alternative, the transmission of new disease organisms to the East Coast was thoroughly discussed. The possibility that these eggs could carry Kidney Disease was determined to be strong. Since Atlantic salmon reared at the Milford Fish Hatchery and the National Fish Hatchery in Berlin are possible carriers of Kidney Disease and are continuing to be released into the Merrimack River System, this alternative egg source was discussed with the Merrimack River Technical Committee. This group, provided that the eggs could be certified disease-free from the stand point of new diseases, was willing to accept them for the Merrimack River Program. It was also concluded that the Puget Sound eggs would be fertilized with sperm from Penobscot River males. It is now anticipated that Atlantic salmon eggs from Puget Sound will be arriving in January, 1980.

Stabilization of the Egg Supply.

Even if the egg requirements needed for the smolt production program in southern New England are met in 1979, the remedial action discussed thus far is only short-term. There is no assurance that the egg requirements in 1980, and future years will be satisfied.

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The USFWS has recently addressed this problem from the standpoint of developing a brood stock program in Puget Sound. Representatives from the National Marine Fisheries Service in Gloucester, Massachusetts and Seattle, Washington were contacted and a joint meeting was generated and held in Concord, New Hampshire on October 12th of this year. Those individuals present from National Marine Fisheries Service were enthusiastic toward the USFWS proposal.

Two important areas were discussed: disease transmission and the needed magnitude of the program. Every effort would be made to minimize the transmission of diseases -- certification, handling procedures, etc. The magnitude of the program would be developed around an annual egg requirement of 5,000,000 eggs.

It is important to realize that this potential egg supply can be developed from the most desirable salmon stock. Program development utilizing Penobscot River stock was discussed. It is also important to realize that an egg supply of 5,000,000 will not satisfy the needs of southern New England nor would a brood stock development program in Puget Sound replace the current egg sources.

A program of this magnitude would act as an insurance policy for the continuation of the restoration effort at a relatively high level, and would provide a great degree of program stabilization and flexibility.

Southern New England Egg Needs.

There are two factors that can likely provide southern New England restoration efforts with giant successes in a relatively short time frame: 1) maximization of hatchery smolt output, and 2) maximization of smolt production in the nursery habitat through fry stocking programs. These two factors were utilized in developing the information in the following table.

Atlantic Salmon Egg	Needs in	Southern New England	for Maximum Results
Program		Egg Needs Smolt Production	Egg Needs
		(Hatchery)	Fry Releases
Connecticut River		1,300,000	3,100,000
Merrimack River		550,000	1,000,000
Pawcatuck River		50,000	80,000
	Total	1,900,000	4,180,000

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The projected annual egg supply for southern New England, excluding the proposed 5,000,000 eggs from National Marine Fisheries Service, is between 1,000,000 and 1,800,000. This is far short of the 6,080,000 eggs depicted in the preceding table. Thus, from the standpoint of a strong restoration program in southern New England, the addition of a new egg supply (5,000,000) from Puget Sound would have a tremendous positive impact.

Conclusions.

A brood stock development program in Puget Sound will not assure success of the southern New England restoration program. It will increase the capability of the various efforts to generate Atlantic salmon smolts in far greater numbers than would otherwise be possible. This in turn could produce the adult returns projected within the planning process.

Provided the brood stock development program receives the necessary support here in New England from the participating resource agencies and the private sector, the first shipment of 5,000,000 eggs from Puget Sound could occur during the fall of 1983.

It should be clear that a program of this nature will require a rather intensive effort by the National Marine Fisheries Service. Those of us within the USFWS envisage a program encompassing at least a period of 10 years; a program that could within that time frame produce nearly 35,000,000 eggs for southern New England.

The United States Fish and Wildlife Service initiated this proposal and requests your input and <u>support</u>.

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KEITH A. ARGOW, Ph.D. Executive Director

November 21, 1979

Mr. Allen E. Peterson, Jr. Reg. Dir., Nat'l. Marine Fisheries Service Federal Bldg., 14 Elm Street Gloucester, MA 01930

Dear Mr. Peterson:

Trout Unlimited has received the proposal of November 17, 1979, by FWS New England Area Office for an Accelerated Atlantic Salmon Brood Stock Development Program in Puget Sound.

Needless to say, an innovative proposal of this magnitude requires thoughtful and thorough review. We are forwarding the program to members of our Scientific Advisory Board and Anadromous Fisheries Committee for comment. At this time we have three concerns which we feel you have dealt with, but nonetheless need mentioning:

- We are most concerned about introducing any new diseases into the three rivers concerned. We urge you to take every possible precaution for shipping disease free eggs.
- 2) We are concerned about introducing new strains of <u>Salmo</u> <u>salar</u> into the three rivers. As the historic brood stock is no longer available we hope every effort will be made to use a number of strains that could contain river and tributary strain specific characteristics.
- 3) We understand this program of egg development is only for Atlantic Salmon eggs. Considerations of other salmonid programs, specifically, a Coho program in Southern New England, would be addressed in a completely different proposal.

Our initial reaction is very positive. We are aware of the rather close time schedule that must be followed to get the program implemented in January 1980. We urge you to proceed with the

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Mr. Allen E. Peterson, Jr.

- 2 -

planning schedule proposed. We see many good results worth pursuing and will lend our expertise to help identify possible problems before they develop.

Sincerely,

Reette a gaup

Keith A. Argow Executive Director

cc: Dr. Robert Behnke Mr. Leon Chandler Dr. Wilfred Carter Mr. James Gracie Mr. Lynn Greenwalt Mr. Terry L. Leitzell Mr. Alfred Meister Mr. Charles R. Maloy Mr. Michael Owen Mr. Tom Pero Mr. C. C. "Red" Pittack Dr. Ernest O. Salo Mr. Andrew V. Stout Dr. Dwight A. Webster Dr. Ray J. White



KEITH A. ARGOW, Ph.D. Executive Director

November 21, 1979

MEMO

TO: Scientific Advisors and Anadromous Fisheries Committee

FROM: Keith A. Argow

SUBJECT: Atlantic Salmon Brood Stock Development Program

The enclosed proposal to enhance the Southern New England Atlantic Salmon program will help solve a current problem: insufficient number of eggs. Although we have given preliminary support to Al Peterson to encourage his planning, we would very much like to have your input. The project is not without risks and we would regret the cure being worse than the ill.

Please note the attached schedule. An early reply will be appreciated.

KAA Keite Cogan

cc: Michael Owen Leon Chandler Jim Gracie

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PROPOSED SCHEDULE

...

1)	Nov.	26-30	Collect comments
2)	Dec.	1	Present to Executive Committee
3)	Dec.	3	Tom Pero presents work to Atlantic Salmon planning committee, East Hampton, Mass.
4)	Dec.	7	Mail letter and proposal to Councils and Chapters

4.

Mr. Zone Joy Mc Fadden N.Y. Council Troot Unlimited 28 Elm Hill Wox Camillus, N.Y. 13031

Dear Mr. Mc 7 adden: I am in the process of conting on article on landlocked salmon for the autumn issue of Trout Magazine and the material you sent concerning the confision and emotion caused by problems of correct identification of a specimen as Salmo solar or S. trutta is timely & had planned to mention this problem in regards to Lake Michigan. I would agree with mr. Shupp of the N.Y. Conservation Department that the evidence is overwhelmingly in his favor and that Mr. Worwin "shot from too kup" in declaring the fish to be a salmon because of the shape of the tail as seen from a photograph. I would, however, caution persons in Mr. Shupp's position about the degree of certainty expressed on matters such as species identification. Mr. Shuppe is ... certain that it is a brown trout - no doubts, no questions. This certainty is based on the teeth on the vomerine bone. To illustrate my point, let as suppose the a worst case scenario for lesting the credibility of the n. y. Dept. m. Darwin sues. Mr. Shupp for slander and hires a sharp attorney. The attorney obtains 100 vomers from known salmon and 100 vomers from brown trout. The bones are coded and given to Mr. Shepp in court for correct identification. Would be be 100% correct of in any ston son his identification ? Aflact, The character of the teeth on the vomer is typically used as deagnostic for identification of S. salar from S. trutte, but I know of me publication based on ma critical study to demonstrate the degree of certainty for correct identification. Does it work 90-95on 100% of the time? Odvously, here is a study that the n. y. Dept. "can do to better establish then 2

credibility as similar questions and expected to occur with increasing frequency in the future. Accord Department personal of vomerenebones from known salmon and known brown troat of known age and size con which to bas as a basis for identification. The most common field character used To identify an unknown fish as & brown trout or a altantic salmon is The adipose fin. Brown The adipose fin of brown trout is spotted and this fin lacks spots in salmon - but again, I have never seen The results of any strict where this character has been tested for its percent accuracy. The brown Trout and atlastic salmon are examples of parallel evolution -- they are not nearly so closely related as they appear to the. 5. salar has 56-58 chromosomes and 5. truther has 50 (For 100 years it was argued if the large trout of the Black and Caspion seas were salar or trutha until their chromosomes were examined and found to be truthe). It wouldn't be feasible to examine chromosomes from dead fish, that the ferring tissue with rapidly deviding cells must be used. There are also several protein (engymes) defferences between The Two species That can be quantified by electrophonesis, typen Electrophonesis also requires fresh on fresh frozen tissue, This, modern technology will probably be limited for resolving future problems and I would unge that the W. Y. Dept. begins to assemble factual evidence such as a collection of vomers and recording and quantifying spotting patterns on adipose fins as a basis for their identification and their degree of certainty). Ain Cerety,

9 July, 1987

Dear Howard,

I'm writing in reference to the note in the last newsletter about the Central "Record Fish" identification site. I conpletely agree that the fish should be examined by qualified people so that our records are beyond reproach. Perhaps rather than one location I think our present state bioligists involved with the fisheries should be qualified or recieve the necessary training to make proper identification.

The reason I'm writing though, is the reference to the NY State Record Brown. I certainly hope your not spreading the slanderous story that was in the "Great Lakes Trolling Annual" without checking with the D.E.C. in Avon who checked the fish or the Captain who landed the fish. The author based the story solely on a picture of the fish, he didn't check with the biologists' who identified the fish, the taxodermist who mounted the fish or anyone else. The article was nothing more than a cheap-shot directed at the Lake Ontario fishery and the NYS D.E.C. I personally contacted the author and I'm convinced of this.

The story has angered several of us Charter Captains who are friends of the Captain who boated the fish. The fish is a Brown Trout, come see it here in Sodus Point, check with Bill Abraham at the D.E.C. in Avon, or do whatever it takes to justify to yourself of the fish's identity. Then ensure that all the newsletter readers are informed that the state record brown is inviolate. Please take this concern seriously, the article has caused a lot of resentment and harm to some very special people, and deserves immediate attention.

Sincerely,

1 Jon

Tom Plantz

P.S. Please contact me for any questions or clarification.

Tom Plantz P. O. Box 210 7571 Ontario Street Sodus Point, NY 14555 (315)-483-8083



28 Elm Hill Way Camillus, NY 13031 March 20, 1988

Dr. Robert Behnke Department of Fisheries and Wildlife Biology Colorado State University Ft. Collins, CO 80523

Dear Dr. Behnke:

Enclosed is a copy of the <u>Great Lakes Trolling Annual No. 4</u>. Please refer to the article "Is It A Brown Trout or Atlantic Salmon" found on pages 106 and 107. Also enclosed are copies of two letters written in response to this article and a newspaper article(one of many) on the same subject.

Now that the dust has settled somewhat, regarding this controversy, Ms. Pam McClelland, Trout Unlimited's Director of Resource, suggested asking you for your professional evaluation and comment. As indicated in the enclosed article, this exact same controversy took place in Michigan. After being embarrassed twice, the Michigan Dept. of Natural Resources did indeed establish a central location for state record identification by a qualified taxonomist.

Hence, in general what is your opinion regarding the most accurate method and methodology for identifying a record salmonid and more specifically in the differentiation of a brown trout vs. an Atlantic salmon, please contrast the accuracy of the use of a book of ichthyological keys by a field biologist vs. an examination by a qualified taxonomist in a university setting.

While we are probably all prejudiced by our backgrounds, I think you will agree that in this day of gas chromatographs and chromosome identification, at least species identification can be quantified as to probability of error rather than ferocity of emotion.

Sincerely yours,

Zone Jay Mc Fadder

Zane Jay McFadden D.D.S. National Director New York State Council of Trout Unlimited

Note: the following Letter was written in response to the Article in The "GREAT LAKES TROlling ANNUAL" where by Mr. DARWIN questioned DEC'S Ability to positively identify A state Record brown Trout.

New York State Department of Environmental Conservation 50 Wolf Road, Albany, New York 12233-1010



Commissioner

June 30, 1987

Mr. Ken Darwin Editor Great Lakes Trolling Annual P.O. Box 977 East Lansing, Michigan 48823

Dear Mr. Darwin:

I am writing in response to the article "Is It A Brown Trout or Atlantic Salmon" that was recently published in the <u>Great Lakes Trolling</u> Annual No. 4.

The four fisheries biologists and technicians who personally examined the specimen in question have handled thousands of Finger Lakes and Lake Ontario brown trout and several hundred Atlantic salmon in their combined 68 years of experience with the Department of Environmental Conservation.

While the tail of an Atlantic salmon is <u>one</u> characteristic that might aid a taxonomist in species identification, it is not the distinguishing characteristic used in accepted ichthyological keys in separating <u>Salmo salar</u> from <u>Salmo trutta</u>. Most keys utilize the character of the vomerine teeth as the final dichotomy. The New York State record brown trout that you claim is an Atlantic salmon had strong, well-developed vomerine teeth, characteristic of this species. On the other hand, vomerine teeth in older Atlantic salmon are either absent, or few, weak and deciduous. The Department of Environmental Conservation staff who examined the fish are <u>certain</u> that it is a brown trout -- no doubts, no questions!

I am disappointed that you did not at least consult with DEC staff before publishing the story. We are always open to honest criticism and have good rapport with even our most ardent critics. Your attempt to accurately identify the subject fish from a photograph is difficult, if not impossible. The brown trout was photographed hanging in a vertical position. Obviously, there was tail curvature. See the enclosed photos which document the fish in guestion did have a square tail.

All of our Great Lakes Region offices and field stations have competent biologists to positively identify the salmonids and other species. If there are questions, then specimens are sent to the American Museum for further examination. This is usually done when skeletal examination through x-rays are needed for positive ID. The system works very well and we have no reason to change.

Your challenge of this well-documented record was ill-founded and based on nothing but opinion; the photo is of no value. We do not know what motivated you to attack this particular New York State record fish, but you are wrong.

We are also surprised that you would challenge the professional competence of an experienced Charterboat Captain and our biologists with only a photograph. I expect your readers wonder about the same thing!

Sincerely,

Bruce D. Shupp Chief Bureau of Fisheries

Mystery Fish Qualifies as Two Record Catches

HERE WAS a state fish record set last year, but exactly what kind of fish it is may remain a mystery.

The fish in question was a 29-pound, 14ounce monster caught out of Sodus Point in Lake Ontario last June. It was officially inspected and registered as the biggest brown trout ever caught in the state. The Albany office of the Department of, Environmental Conservation put the lunker in its books, and Wayne County sent out a series of magazine advertisements.

Michigan guide Dick Swan saw the pictures and said the fish may be a record but not a brown trout. The fish, Swan swears, is an Atlantic salmon. The same sort of situation happened in Michigan, he reports.

Autopsies on two huge browns, weighing 32 pounds and 32 pounds, 10 ounces, respectively, were completed after Swan claimed a mistake had been made. Both were found to be Atlantic salmon.

DEC senior aquatic biologist Les Wedge acknowledges that the Michigan guide may have a point. Identification can be tricky when fish get that big. He also points out that although the state has been stocking Atlantic salmon in three Lake Ontario tributaries for several years in an experimental project, none of those fish could have reached the 30-pound size yet.

If it really is an Atlantic salmon, he says, it would have had to come from somewhere else, maybe Cayuga Lake.

That really is easier than it sounds. Atlantics from Cayuga have been taken out of Oswego harbor in recent years.

Maybe the big brown is a big Atlantic,



10 pounds bigger than the best already on the record books.

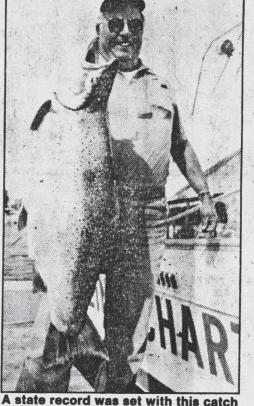
No way, says Don Chamberlin, the charter boat captain who was with the Massachusetts angler who caught the controversial fish. He inspected the fish, he says, and, better still, it was carefully checked out by Carl Widmer, the DEC supervising biologist in the region where the fish was caught.

"Maybe we're not as smart as those fellows over there in Michigan," Chamberlin said, "but we know it was a brown trout."

He also noted that he had the mount of the fish on display in Syracuse last month during the outdoor show at the New York State Fairgrounds.

The controversy goes on just as another season is ready to start with an armada of anglers preparing to chase more Lake Ontario monsters. One thing is certain, however. That 29-pound, 14-ounce fish hit a No. 35 Luhr Jensen flutter spoon rigged behind a Dipsy Diver.

There was no controversy with the big fish caught through the ice last week at Cazenovia Lake. It was a trophy walleye. Two hours after it was landed, it weighed 8 pounds, 8 ounces and measured $27\frac{1}{2}$ inches. Peter Zaleski of Syracuse took the walleye Thursday on a homemade jig bait-



A state record was set with this catch off Sodus Point last summer, but exactly what kind of fish was caught is debatable.

ed with a grub.

Very few walleyes appear to be left in Cazenovia Lake, but those survivors are certainly big enough to brag about. Has all this big fish talk got you excited about fishing? Reserve a seat now for the free J.C. Penney College of Fishing Knowledge Saturday at the Shoppingtown Mall store. Hours will be from 1 p.m. to 4 p.m.

Prof. Walt Schiess will be in charge, with many local angling experts also on the program.

You must reserve a seat by calling 445-1130 and asking for sporting goods.

Limits of brown trout from 2 to 8 pounds were taken Sunday by boats trolling the steam plant boil at Oswego. Chartreuse and orange Rapalas were good lures.

Club News

Eastern Lake Ontario Salmon & Trout Association meets at 7:30 p.m. Wednesday at Mexico BOCES. A program on sporting knives and a report on that day's Sportsman's March on Albany are scheduled.

CNY Chapter of the National Wild Turkey Federation has a spring turkey hunting seminar Friday at Cortland BOCES.

Izaak Walton League of America meets at 7:30 p.m. March 23 at the Liverpool Junior Achievement building across from Griffin Field. All are invited to help form a local chapter.

The video "Gary Borger: Fly Casting" will be shown at 7:30 p.m. March 24 in Room 145 of Oswego High School during a meeting of Tug Hill Trout Unlimited.

Rod Hunter's column will appear once a week, on Tuesday, while he recovers from an operation.

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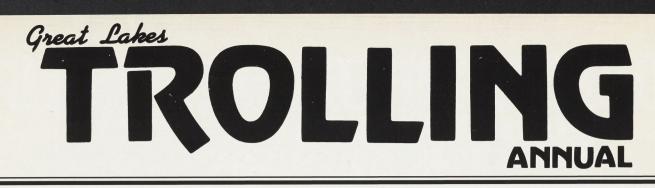


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Cover Photo: A twilight troller plys the Great Lakes for salmon.

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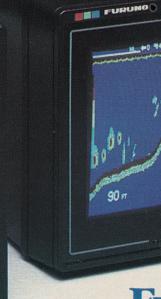
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Ken Darwin, Editor



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EARLY SEASON TROLLING

by Ken Darwin

In April and May, Great Lakes trollers with seaworthy boats can score on chinook, coho, steelies and brown trout.

The southern Great Lakes provide anglers with a fishing bonanza. The fast-paced trout and salmon action begins in April when pack ice breaks up and continues into late May. This is a season of big catches, cool weather and a unique opportunity to sample Great Lakes trolling at its best.

Many anglers travel long distances to sample spring trolling along the southern coast of Lakes Michigan, Huron, Erie and Ontario. For several weeks in early spring the southern basins of the Great Lakes become a feeding area for thousands of trout and salmon who migrate there to dine.

A classic example of this point is indicated by Lake Michigan fisheries biologists who feel that most of the salmon stocked in Lake Michigan migrate to the southern end. This massive salmonid migrational pattern takes place during late fall or winter and stocks are vulnerable to spring trollers. The same phenomenon occurs on other Great Lakes as fish sense the subtle difference in water temperature and move south to the shallow warmer water.

Salmon and trout have a sense that guides them to warm water during spring. After ice-out sunlight penetrates shallow water and the sand bottom absorb the sun rays, surrounding water warms quickly and soon microorganisms begin to grow. This activity draws baitfish which feed on the organisms. Alewife, shad, and smelt also draw salmon and trout to the warming water.

Excellent fishing opportunities are available during spring as trout and salmon concentrate in the southern part of the Great Lakes. Early season action is action-packed and fast becoming known as the best trolling time of the year. Trout and salmon are often found in the top 20 feet of water where they find the comforts of warming water, baitfish, and the pooling effects of microorganisms, slick lines or thermal bars.

Much of the early season success is a comparatively new concept regarding trolling and the exact methodology is still being researched. But one thing is certain, spring trolling is the best time of year to cash in on some unbelievable fishing action. More and more anglers are finding excellent fishing this time of year and captains agree that knowing where to go is important for consistent catches.

Between early April and late May most of the fishing activity occurs within five miles of shore in a narrow band along southern shorelines. Most fishing takes place in shallow water less than a mile from the beach but spring trollers are also finding good action within five miles of shore. Coho salmon contribute heavily to the catch. Coho are school fish by nature, traveling in packs to feed. They are very bold and are often taken by shore or pier anglers as groups swim close to shore. Chinook also contribute heavily to early spring catches. Brown and steelhead trout are present in good numbers during spring, too.

Fisheries biologists feel that feeding habits revolve around instinctual senses. In recent years the importance of water temperatures, sight, hearing, moon phase, season or time of year, and rainfall have led professionals to believe salmon simply increase activities during spring.

Sure, some trout and salmon follow schools of baitfish into the shallows.

But more importantly, as warm weather approaches the changing season simply stimulates feeding activity. Most fish are not jammed full of baitfish during spring, yet their fiesty behavior seems to key them into striking trolled lures.

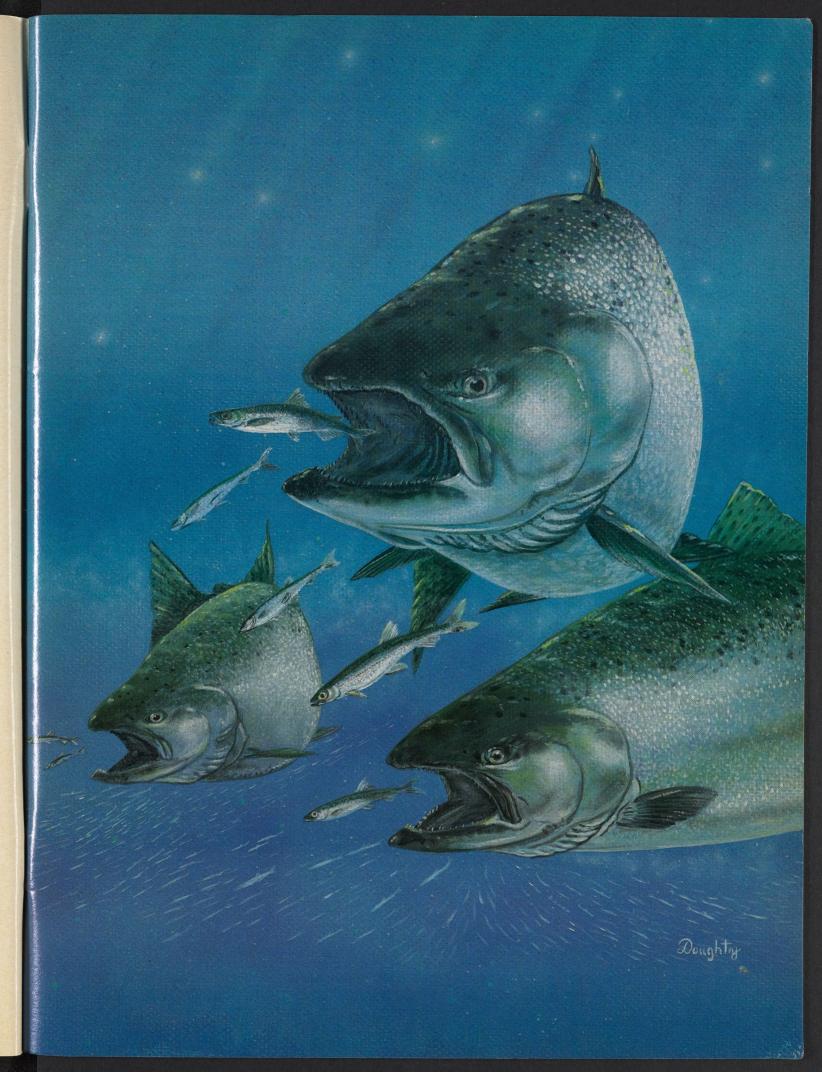
Look for early season trout and salmon to congregate at rivermouths, warm water discharges, power plant outlets or in shallow warm water bays. But also count on fish to be active far from shore as a spring shower or bright sun causes a layering of warm water near the surface. This phenomenon can occur in a matter of hours, causing pockets of congregated fish to go on a feeding spree. The action can be short lived as fickle fish turn on then off when conditions quickly change.

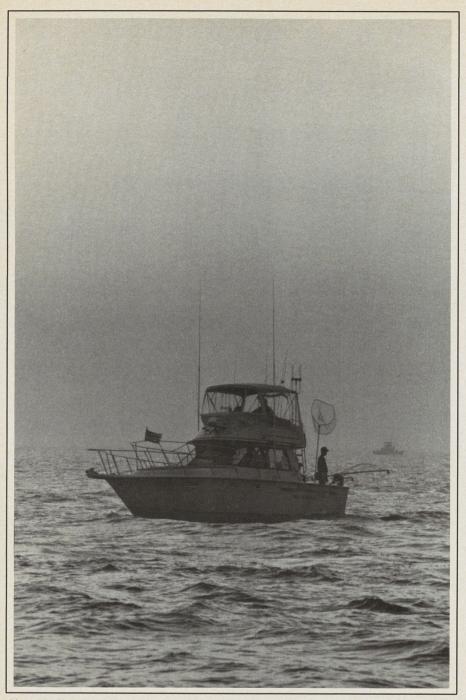
I've seen a warm spring rain or bright sun excite salmon into striking. This point is best made by the following anecdote:

There was a gray haze hovering close to the dunes as the early morning light made distant objects appear like ghosts in the night. Paul Weikert and I trolled slowly along the southern Lake Michigan coast in search of spring trout and salmon. The lake was calm and a fresh breeze came from the south.

An hour after dawn we hooked a couple salmon, boated one small coho but the fishing action was slow as dark ominous clouds moved from the south. Rain drops began to dapple the lake's calm surface and we doned rain gear and crawled under the boat top to escape the impending shower. Soon it was pouring.

In the comfort of our warm, dry cabin we sipped hot coffee and snacked on donuts. The air had the





Slow trolling small lures is one technique that produces top flight early season action.

refreshing smell of a spring rain and the falling droplets felt warm against my fingers that stretched out from a crack in the window. We relaxed, but continued to troll for early season trout and salmon.

An hour later the clouds opened and a bright sun appeared as we checked lines and took raingear off. Then Paul pointed to a group of seagulls that were diving to the lake surface about two hundred yards from us. As we approached the gull-infested spot, Paul noticed several baitfish jumping out of the water, then he spotted the tail fin of a feeding salmon.

We motored to the outside edge of the suspected school, lines set far behind the craft wiggled directly into the center of where the gulls were feeding.

A loud "twang" signaled a strike on an outrigger line, then a downrigger rod jumped to the action of a thrashing salmon. I grabbed the downrigger rod as Paul held tight to the outrigger rod. Soon a pair of coho came to net and we readied lines for another pass over the hot spot.

The second pass produced three strikes and we boated one chinook. We continued to work the region and in less than two hours we limited out with nine salmon and one steelhead.

The action was fast and furious, we were convinced that we had found a huge school of salmon. But after talking to several other captains back at the dock we found out that everyone was catching fish. Apparently the warm rain had excited fish into striking. Some boats caught fish close to the beach, others took limit catches a mile from shore; all the fish were caught within 15 feet of the surface.

During spring, trollers should concentrate on running lures in the top ten feet of water because warming water floats on the surface. Sure it's a safe bet to troll lures near a warm water outlet, rivermouth or shallow bay. But more importantly, keep your lines set close to the surface and cover a lot of water. Some captains like to get far away from other boats during spring.

Trollers wishing to try the Great Lakes southern coast for early season trout and salmon should plan a trip to coincide with good catch reports. It's a good idea to call local bait shops, marinas, charter captains or Chambers of Commerce to determine fish activities. Information on license fees, fishing regulations, lodging, and launching permits should be attained in advance.

There are several tips that will help you to locate and catch early season fish. First, it's a good idea to monitor the surface water temperature and look for the salmon's optimum range. The warmest water in early spring is found at power plant discharges. It is important to make note of the slightest variation in water temperature. Often feeding trout and salmon will be found near a small pocket of water that is only one to five degrees warmer than the rest of the lake. The water at this time of year is very cold and will average 34-36 degrees F. The effect of this cold water on fish activity is something you should consider. Their metabolism rate is slowed, they move slower than they would during summer, and they seek areas where water temperature is somewhat warmer. The trick is to find thermal bars, warm water pockets, or layering

of warm water. Areas that trap warm water will hold baitfish and predator salmonids.

It is always a safe bet to check with local captains or fishermen for suggested locations to try. A hot tip from a local pro can save you time trying to find where fish are concentrated. It is also a good idea to ask about recommended trolling methods and lures to try. Some folks like to observe where other boats are fishing and move to the suspected hot spot. This method is not always productive during spring when salmon packs are found near surface, fish are spooked easily and always on the move. A better idea is to troll outside the area where other boats are working over fish.

Most charter captains feel that the secret to catching early season fish is to cover as much water as possible. They set lines and troll like crazy until some active fish are found. Then they make several passes over the trout/ salmon hangout. When the action slows, they move to find new groups of active fish. At times, spring trolling will provide a fish here, or a fish there, but no true pattern is established.

Therefore, in addition to covering a lot of water, charters like to stagger lines and use multiple lure rigs. Add-alines, sliders, add-a-lures, stackers, and double bait rigs are all tossed over. The trick is to put as many lures as possible in the water to attract the occasional strike. The idea is to make trolled lures look like a massive school of tantalizing baitfish. Once fish consistently strike a particular setup, then more lines are placed utilizing the effective pattern. Attention must be given to depth, lure size, lure color, distance from cannonball, lure action, whether a swivel is used, and more. . . to consistently outwit early season fish.

Small spoons seem to be most productive for spring trout and salmon. Try silver, chrome, silver/blue, silver/ red, hammered chrome or other metallic combinations.

Some trollers like to use imitation baitfish lures while spring fishing. Productive baits include: *Rebel* Deep Diver or Fastrac, *Bagley Bang-o-Lure*, *Rapala #*9 jointed, *Bomber As, Bill Norman Reflect'n Lure*, and *Shad Rap*.

Deep diving crankbaits are also a good bet for early season fish. Try a *Hot 'N' Tot* in gold/black back or silver/red back, *Anglers Price* TD20, *Tadpolly, Wiggle Wart*, or *Rebel* Wally Diver. It is a good idea to have a selection of lures aboard in a variety of colors.

Spring weather is unpredictable so it



Spring trollers wear hats, heavy jackets, snowmobile suits and wool socks in order to stay warm while fishing.



Anyone who puts a brown like this in the boat should smile. The brute smashed a Tadpolly used from an outrigger.

is a wise idea to bring appropriate gear while fishing. Snowsuit, rain gear, stocking hat, polaroid sunglasses, heavy socks, gloves and long johns are often needed.

Trolling speed can be important for consistent catches. It pays to experiment, and you are smart to have electronics aboard to monitor it. *EMS* and *Datamarine* make speed indicators that are reliable and measure speed precisely. Many captains feel that trolling speed is the biggest variable that can affect your catch. Without a trolling speed indicator you can troll for hours at an incorrect speed and not even know it. A difference as slight as one half mile per hour can increase lure action too much and reduce the number of strikes significantly. Lure action should first be checked alongside the boat. Experienced Great Lakes fishermen rely on mechanical speed indicators to provide them with an accurate indication of lure action for a particular speed setting. Trolling speed obviously has a critical effect on lure action. Spring fishermen often troll slower during the early season than later. Trolling speed is also affected by water currents, wave conditions, and wind intensity or direction. Again, a speed indicator can be precisely adjusted to suit current or weather conditions.

There are several trolling methods you can use during the early season. Each method must be modified to keep baits working in the upper 20 feet of water for best success. All of the methods can be used simultaneously from one boat. Diving planers pull lures to the side behind the boat, planer boards take lures way out to the side, downriggers pull lures below while outriggers or highlines drag lures far behind.

A diving planer is a device that is deadly on surface hugging spring fish. This rig is set to the side of the boat and it works best outside the downriggers. Stiff rods are needed for divers. A diving planer utilizes a trip mechanism that releases when a fish strikes a trolling lure. Diving planers are a sure fire way to outwit spooky fish. Spring trollers should use small spoons from four to eight feet behind the diver. I like a Lucky Lure for diving planer trolling. Divers rock up and down with the boat providing an erratic action to lures. This motion draws ferocious strikes and attracts trout and salmon like crazy.

Planer boards are utilized to send trolled baits far to boatside. You can use three or four lures from one board and this method is dynamite for surface or shallow water trout and salmon. This method is perfect for spring brown trout trolling, when lures are run close to the beach.

Usually a passing boat will cause trout and salmon to swim around the craft. When fish swim to the side they pass under lures pulled by planer boards. Most captains prefer to use crankbaits or minnow-imitation lures from boards. This method is one I have used to take limit catches of walleyes from Lake Erie.

Downriggers are used to get lures deep during summer. In the spring downriggers are only lowered a few feet. Many times lures are run very close to the prop-wash, or slightly to the side with long arm downriggers. Charter captains feel that early season trolling with downriggers is easy fishing, when compared with the work of setting lines deep during summer. Small spoons work best behind downrigger weights, lures are set six to 20 feet back. Lines are staggered in the upper 20 feet of water.

Cruisers use outriggers to ply the lake surface with lures. Baits are pulled far behind boats by use of outriggers that extend like huge cane poles to the side of the craft. Outriggers use a laundry-like rope to get lures boatside. There are few sounds that are more exciting than the sound of an outrigger line "twanging" to the strike of a big fish.

The highline approach is accomplished by running a diving bait, like a *Hot 'N' Tot*, far behind the boat. Rods are set in holders and an "S" trolling pattern places trailing lures in the strike zone for fish that have moved away from the passing boat. Highlines are very effective for surface oriented trout and salmon. This style of fishing produced Michigan's state record brown trout, a 34-pound monster. It's no secret that the Great Lakes hold thousands of trout and salmon just waiting for early season fishermen. This is the time to experience exciting trolling action as spring brings warming water and a trout and salmon go on a feeding spree. Great Lakes trollers are proclaiming early season angling to be tops for coho, chinook, steelhead and brown trout. The action is exciting, the fish are firm fleshed and full of zip, plus it's only fitting to begin the trolling season with a flurry of action.



Getting a big chinook in often requires help. Spring trout/salmon are many times found close to shore in warm water.

LAKE ERIE WALLEYES

by Mike Tontimonia



The good ol' days are here again— Lake Erie walleye populations are booming, providing exciting fishing and limit catches.

ake Erie's central basin, stretching from Huron, Ohio to Erie, Pennsylvania, is no small chunk of watery real estate. It looked especially expansive to me one summer afternoon as I stood at the wheel of my boat, steering a trolling course that would, I hoped, take us into a school of hungry walleyes.

In every direction, the rolling waves disappeared into the horizon without a hint of land to be seen. The morning forecast and water conditions matched, with neither being encouraging. Afternoon promised to be better so we left port at midday.

Two friends and I had ramped in at Fairport Harbor, Ohio, a wellprotected river port about midway in the central basin. The trip out was rough as we nosedived into a steady headwind and high waves. I backed the engine down about ten miles out when the chart read 72 feet of water. We knew from talking to other anglers that the sought-after walleyes seemed to be favoring this depth.

It didn't take long to set a combination of six trolling lines, the legal pair for each of us.

The chart recorder indicated only a few marks but it did show several large blobs of etchings; packs of bait fish we hoped. As if on cue, the heavily rolling cloud cover screaming by overhead then began to open up, letting blue sky and rays of sun shine through. Even the heavy waves lost some of their fierceness. Things were looking up.

A wire line outfit, resting at attention in a rod holder began to bob and jerk then took on an arc that put a serious strain on the holder. I was closest and in seconds the rod was in my grasp.

After a few desperate runs the fish quieted so I started a typical troller's retrieve of pumping and reeling. Apparently the fish had other ideas. It ran sideways, down, and anyway but toward the boat. "We've hooked into a good coho," I said, enjoying the battle.

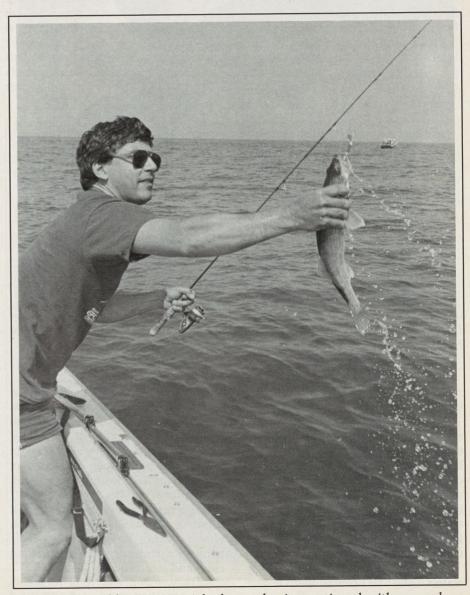
I cranked the star drag a bit tighter.

The wire line telegraphed every move the fish made.

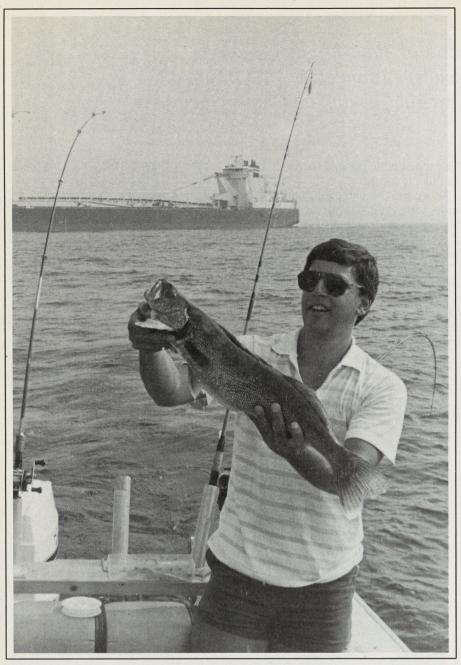
When the fish came into sight it was indeed the yellow belly of a walleye that greeted us. We couldn't believe it! A walleye that fought like a crazed muskie.

Just to make sure we were believers, the big walleye ran once again, this time sounding for the bottom where he was only minutes before. With a net under him, we lifted our prize into the boat then quickly reset our lines. As we iced this first walleye of the day, we admired its bright green and yellow coloring and its chunky build. The fish, caught deep below, was ice cold and obviously a fighter.

The wire line, as well as the downriggers, accounted for several more walleyes that afternoon. Out to the sides, a couple of lures were attached to side planer boards. The boards can be dynamite on the central basin, and



Some trollers like to use weight forward spinners tipped with a crawler.



Downriggers, planer boards, wire line, and keel sinkers are used to ply Lake Erie for walleyes.

on that day lived up to all expectations.

Central basin walleyes are building a reputation rivaling that of their cousins in the western basin. Several years back, when gill netters still worked the central basin, it was a rare day when many walleyes were boated. But then little was known at the time about trolling methods that would work or for that matter, where there were catchable numbers of fish.

But like all potentially good fishing waters, Lake Erie's central basin began to give up some answers. Fish were beginning to show up in places no one suspected them to be. For instance, we all thought that walleyes related to bottom structure almost constantly. But then, walleyes were being caught out in the wide open expanses of water over flat, featureless bottom. And in water depths of 60 to 80 feet?

The pioneers who can claim at least some of the credit are the salmon chasers who were trolling their beloved spoons for Erie's growing coho and steelhead population.

As they trolled, electronic recorders gave away the presence of schools of good size fish, usually suspended above the thermal line where the salmon hung out. Then when a growing number of big walleyes were caught by trolling, anglers began to put two and two together.

Each year, more attention was turned to the walleye fishery until perhaps the late '70s when it became apparent that walleyes in the central basin weren't simply rogues straying from the crowded western basin. Now it is known the central walleyes were resident fish and available in worthwhile numbers.

Another bonus has been the banning of gill netting. With the passing of that era of commercial harvesting, came a newly discovered trophy walleye sport fishing industry.

It was only a matter of time until charters began popping up along the deep water coast. Each port, although limited in access, offered only one or maybe two charters. And until only five years ago, there was no formal association of charters, a necessary link in perfecting productive fishing techniques.

Conneaut, Ohio, a now busy little port city near the Ohio-Pennsylvania line was a prime example of the developing charter captains. Jim Perrine, a long time Erie guide and current president of the Lake Erie Charter Boat Association, is one of those pros. Perrine, like most walleye guides has always gone with the flow, so to speak, running drift fishing charters out of western basin marinas. And why not, after all, the fishing is usually good and the clients leave smiling.

But Perrine learned of the increasing catches of the central basin and formulated a plan that today is proving sound. He moves his boat to Conneaut, a port practically in his backyard, during the dog days of summer when the drift fishing is spotty but the deep water trolling is picking up. In the last six years, according to Perrine, the walleye trolling techniques have been fine tuned until now, every charter out has consistent luck.

Deep water walleyes in areas of big water like the central basin, present a unique set of problems to anglers. First, locating roving schools of walleyes can be a hassle. Trolling, the preferred technique in the area, fills the bill because a lot of water can be covered in the search. Most trollers set lines then troll in a straight line until active fish are found. It's not uncommon to travel two or three miles before hungry 'eyes turn up. Then it's usually best to work the school by making large loops or figure eight trolling patterns.

I like to troll with the waves because the boat handles easiest that way and the lures move around because of the up and down action of the craft. At times, though, if going with the wind isn't paying off, I'll turn into the waves or any other angle until I find the formula for that day.

Locating walleyes on a video screen or chart is not always a guarantee. It's a common situation for chart watchers to bring home a roll of paper with inverted vees all over it, along with a sparsely filled cooler. Walleyes, in the clear water of Erie's central basin, don't seem to bunch up in those easy to mark schools when they're feeding. It seems that the classic "top to bottom" marks are resting fish. However, it is just as common to be catching walleyes without hardly a mark on the screen. Look first for the clouds of baitfish. The walleyes will be around.

Each year brings a different set of conditions to the big lake so it's almost impossible to send a new troller to the correct depth ahead of time. Walleyes might be found anywhere from the 25or 30-foot depths near shore to the 80foot depths several miles out. After several days of heavy offshore winds the best fishing might be found 18 to 20 miles out and after onshore winds, in as close as three or four miles. Generally, the open waters ranging from 45 feet to 80 feet will hold fish consistently.

There are several techniques in use on the central basin. Like in most deep water trolling situations, downriggers are the number one choice for deep hanging fish. Downriggers are precision trolling tools and can keep a lure near bottom, just under the surface, or anywhere in between. Where one fish is caught is usually the best place to look for more. Downriggers make that easy.

My father joined the crew on another day this past summer. This time the lake was so calm we had to look for a ripple. Bright sun forced us to wear hats and sunglasses. The first lines set that day were on my two downriggers. I lowered spoons within a few feet of the bottom then picked up a third rod to prepare it.

Just that quick, a downrigger rod sprung to life and Dad went to work on it. After several minutes it became evident that he had a whole lot of fish coming to net. Both rigger rods had hooked a walleye and both were coming in on the one rod. Apparently, the first fish had managed to wrap itself into the other line, too. And equally apparent, was over ten pounds of walleye in the mesh when we finally netted the pair. It was a nice way to begin a day.

That pair of fish told us something about the preferred depth and in minutes both rods were back to work at the exact depth. And work they did as one deep water walleye after another tried to eat our spoons.

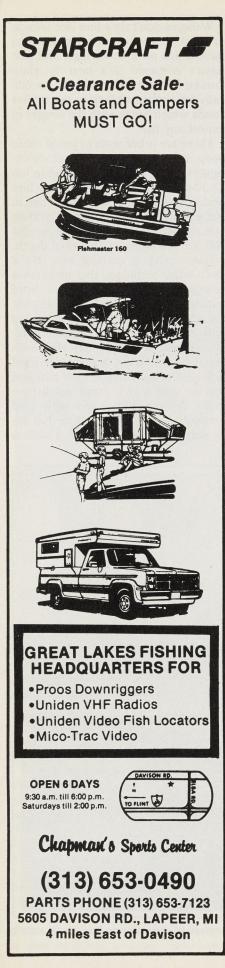
Downrigger lines for walleyes are sometimes set with lures close behind the ball, then at other times dropped far back. We find that body plugs work better well behind the boat but spoons produce best when closer. It's my theory that a spoon on a short line is affected more by the rising and falling ball as the boat moves. Because of that extra action, a spoon jumps around more, adding to its enticement. Walleyes don't rip a lure like salmon or trout do so it's not uncommon to have a fish on a downrigger rod that hasn't released. It's best to shop around for light releases made specifically for walleye trolling or use rubber bands which break with the weight of almost any fish.

There are other ways to get at those deep water walleyes without downriggers. My favorite is wire line in ten or 12-pound test. Depending on lure design, the wire line will draw a bait to see extreme depths. At times, adding one or two ounces of in-line weight will get you an extra 15 feet of depth.

Wire lining is nothing new. It's a deep water technique that deserves a complete article itself, but a brief explanation is needed here because the system is so productive. By staying with the lighter sizes of ten or 12pound test, a troller can stay with equally light tackle. A good size level wind reel will handle several hundred feet of wire and the rod needn't be fancy. A long, flimsy rod with hard ceramic guides is best. Wire has no stretch and is very unforgiving when a



Captain Clay Garrett, Lucy-J Charters, prefers to run planer boards to catch Lake Erie fish. (517) 723-6071.



strong fish meets up with an excited angler. A rod with plenty of flex cushions the system preventing hooks from ripping out. I've watched in desperation as several walleyes have escaped because of too much muscle applied to the unyielding wire line.

Diving planers are also used by many central basin walleye hunters. *Dipsy-Divers* are the favored ones because they can be adjusted to run well out to the side of the boat. This directional feature adds to a troller's ability to run several lines by keeping tangles to a minimum. When the fish are hiding out near bottom, the divers can't reach them, but for suspended walleyes between 30 and 45 feet, they are effective.

Diving planers put a lot of stress on tackle requiring heavier line as well as a stiffer rod to handle it. Seventeenpound mono is about the lightest for the divers. Lighter line will not hold up well with the result being lost terminal tackle as well as fish.

Luhr Jensen's Dipsy-Diver is, by far, the most widely used diving devise on the central basin. Besides featuring the side directional adjustment, they double as an attractor. The bright chrome finish is the number one choice among their fans.

Any one of these popular trolling modes will put lures into the deeper fish holding zones with a high degree of consistency. But not all central basin walleyes are hugging the bottom. Not by a long shot.

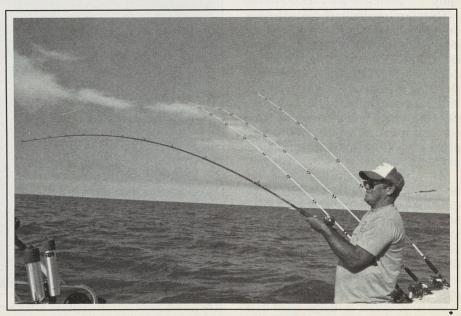
The most active of the big water wall-

eyes are those in the upper 25 feet of water. They also present the greatest challenge because of the tendency of a passing boat to spook them. Electronic gear might indicate lots of fish just below but as the shadow of the boat passes overhead, the school separates and quickly disperses well out of the boat's line of travel. When lures, trolled directly behind the boat pass, the water that seconds before held fish, is now barren. It's a problem shared by trollers of clear water everywhere.

By trolling extremely long lines, it is possible to catch walleyes as they begin to regroup, filling in the void, or another approach is zig zagging. But there is an answer and they are called side planer boards.

The side planers are a dream come true to central basin walleyers. Each season more and more anglers are adding them to their bag of tricks and for good reason.

Planer boards create a trolling swath up to 200 feet wide. That's a problem in boat traffic, but a blessing on the central basin where a troller seldom passes within several hundred yards of another boat. The advantage is obvious. Searching several acres of water is much easier when you're cutting a wide path. According to Joe Prince, the fishing entrepreneur who produces the highly perfected Super Ski boards, an experienced side planer fisherman can troll up to six separate lines on each board adding up to a dozen busy lures. Prince agrees that two lines per side is a reasonable number to start out with



The pull of a fat walleye would make anyone smile.



Planer boards run lures to the boatside.

because planer boards require a bit of boat handling expertise.

Some trollers like to use *Wille Products Sea Ski*. Wille also produces a quality line release that works like a charm when setting planer board lines. Quality planer boards are also available from *Cannon, Invader* and *Big Jon*, corporations best known as downrigger manufacturers. *Invader* and *Cannon* planer boards fold flat for safety and easy storage.

Although the wide trolling pattern created by side planers is an attractive big water advantage, their real forte lies in their ability to place a lure in the right place at the right time.

Remember the scattering walleyes that spooked from the passing boat? They are in perfect position for a lure trailed behind a planer board. As soon as they begin to settle down after fleeing and start to forget the overhead shadow, along comes a nice looking meal. To bad it has hooks!

Planer boards require releases just as downriggers do. Since the tow cords to the boards aren't as taut as a steel downrigger cable, releases need to be even lighter. *Jolly* releases, with sponge pads and adjustable tensions, are the best I've used. It's seldom that a walleye can release one and equally as seldom that a hookup is missed with them. Some planer board trollers



- A removable base mount. A single screw easily removes unit from base for storage or to interchange mounts.
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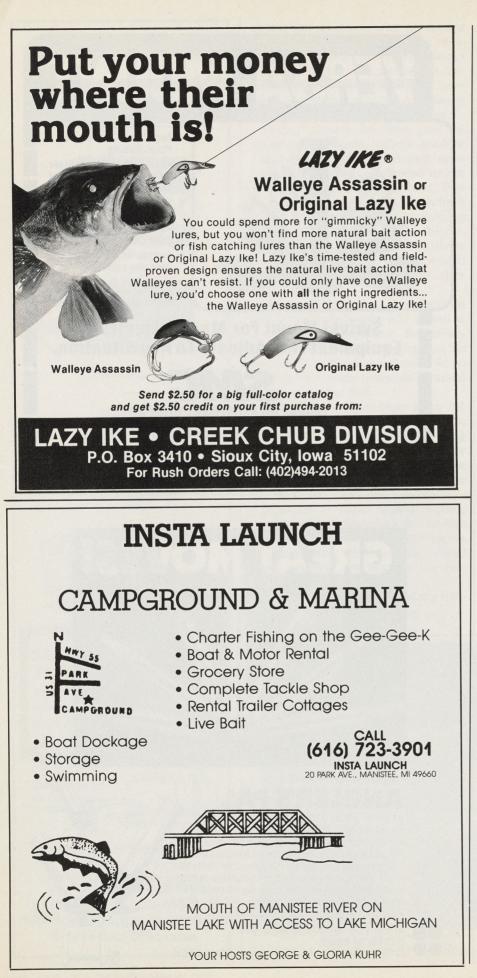
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PERMANENT

MOUNT

C-CLAMP MOUNT



use a plain shower curtain hook to slide out the tow line with a rubber band from it to the fishing line to act as a release. Others prefer tubingcovered alligator clips. With a bit of tinkering both can work well.

Planer boards can be extra productive by using inline weights several feet ahead of a lure. During dim light situations such as dawn, dusk, or overcast, walleyes may be in the upper 15 feet of water where a bare lure can dive and reach them. At other times they may be congregating at 25 to 35 feet, well below the reach of a bare lure. By adding several ounces of inline weight which drops the lure into that depth range, you can get to them. Keep in mind that you'll have to troll farther behind the planer boards to allow the weighted line to sink.

Experiments continue to go on. Some enterprising fishermen are developing ways to use wire line outfits and diving devises on planer boards. That will put lures at the best depths plus scatter them in a wide trolling swath. And it's not uncommon to see walleyers trolling with any or all of these trolling methods because by using a combination of high and low running lures, it's not too hard to find the fish. On any given day, half the fish will come off the deep water lures and the other half from the planer boards.

Try different speeds but favor a faster troll as the water warms in midsummer. Varying speed between 1.5 and 3 miles per hour is productive.

Lure selection varies from port to port. Each season seems to bring out a hot lure or special color: 1986 was the year of the spoons. Yes, walleyes love spoons. Green and silver are generally good choices but black and gold hold their own too. I ran an all brass Lil Doctor spoon by Arbogast with fantastic results all last summer. Producer made Hookster spoons and Fin Weavers also turned in some impressive score cards. Top lures are Wiggle Warts, Bill Norman Deep N's, Hot 'N' Tots, Bomber and Long A's. At times, Rapalas can do their part too. A real sleeper is a sixinch minnow imitation lure made for salmon but attractive to the plump walleyes that cruise the open waters.

Great Lakes' trollers will find central basin walleyes can be consistently taken using the same lures, tackle, and techniques that take salmon and trout.

The walleyes are fat and sassy in Lake Erie's deep water. And best of all, there are enough for everyone.



TWILIGHT SALMON

by Mike Tontimonia

When sunlight fades and baitfish become active, big salmon are on the prowl.

t least we wouldn't get skunked, I happily thought, as Paul Fedorchak, my fishing partner on this trip, layed into the downrigger rod, putting a damper on any ideas the big chinook had about leaving the area. It was the first fish of the day and at six p.m. we all knew it could be the last.

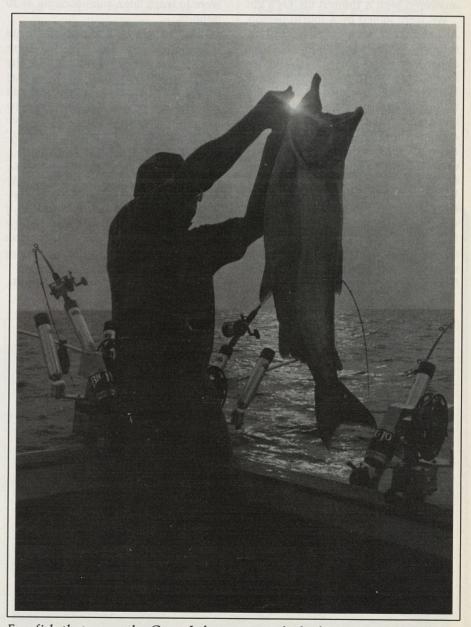
Paul leaned a little harder on the struggling salmon and tightened the drag a bit. The rod, a Shakespeare Ugly Stick, did just what our host, Captain Pete Ruboyianes had said it would, whipping the hard fighting fish in short order. The rods, some of the lightest l've seen on a charter boat. seemed to tire the salmon sooner than most other rods, just as Captain Pete had promised. In fact, as Paul pumped the fish, closing the last few yards to the net, I thought back to a late winter afternoon when well-known Ruboyianes and I set this outing up. One of the things I remembered was the talk of downrigger rods when he said, "Wait till you try my Shakespeares. They seem to work a fish harder because of their flexible action that runs clear down the shaft. You'll really like them." And like them I did.

It was cold that winter day. Ruboyianes and I talked about the standard chartered trolling trip that he would run countless times during the coming summer's fishing out of Ludington. It would be, up before the chickens then down to the dock to check tackle and warm the engines. With heavy eyelids, he would shake hands with arriving anglers then shove off in the blackness of morning. Lines would be set in the gray of dawn and all would be well as gray turned to pink and the awakening salmon would strike.

Sometime after lunch, Captain Pete, as well as about 99 percent of the other trolling charters, would crank up the RPMs to make the run in. A time at the cleaning station, some back slapping, then goodbyes as the party of clients load their car to head home. Then it's a couple hours for business like returning phone calls, mending equipment, and those other tasks that customers never see.

Captain Pete's eyes lit up for an instant then he announced matter of factly, "How about coming up to Ludington when you're in Michigan this summer, we'll 'rip some tuna' and have a good time but it won't be a typical day." He went on to explain that we would do some fun fishing after hours. It seems that Ruboyianes knows a few secrets about salmon fishing that he hadn't shared with me before. We would fish the twilight, a very short period just before dark when, Ruboyianes predicted, "We'll rip them good or miss them altogether."

We compared notes setting an early



Few fish that roam the Great Lakes can match the brute strength and phenomenal fighting power of chinook.

August date then separated with a handshake and a, "I'll see you at four o'clock." But not the pre-dawn four o'clock, instead a leisurely, sleep in and enjoy a big lunch type, four in the afternoon o'clock. Sounds good, doesn't it?

As if it was only a few days before instead of half a year, we again shook hands on the deck of Captain Pete's big *Sea Ray* the *Dreamweaver II*, at the appointed hour on a beautiful late summer afternoon. The popular guide described the current chinook fishing as very good, in fact his clients for that morning had left several hours before with their limit of salmon. "What about big fish?" I queried, Ruboyianes and I both knowing I meant fish in excess of 20 pounds. My question was answered with a thumbs up. Let's go!

We were joined by a fourth person, Al Laaksonen, a charter captain himself, who had lucked into an invitation aboard by Ruboyianes. With the Sea Ray slicing north toward the Beach House and Big Sable Point, a popular trolling area north of the port, Ruboyianes gave me a guided tour of his wellequipped boat. Even after setting lines, he went on to explain the importance of each piece of his equipment stressing how each helps him be successful. We were right in the middle of a primer course on his Northstar Loran unit when that first king said hello to a Fin Weaver spoon at 47 feet. "Fish On," screamed big Captain Pete, apparently spotting the popped corner rod through eyes in the back of his head.

We admired the first fish for only seconds because a second rod jumped wildly to life and just as wildly, Ruboyianes was shifting rods first one way then another as this king, a bigger version of the first, was running through lines.

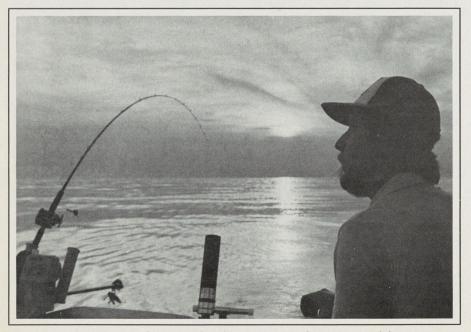
"Work that tuna," yelled Ruboyianes, frantically trying to clear a twisted line. Like a computer, he started listing the factors that we were dealing with.

First, the jumbo fish were here. Not just a typical mixture of kings which might include fish from seven or eight pounds to those in the high teens, with a pair or two of over 20s thrown in. Rather we were into a school of big boys, all in excess of 20, and as we were to learn later, some looking at 30 pounds.

"That's the way it is at night," said Ruboyianes, "the trophies that were run off the shelf this morning by the fleet work their way back in just before dark. When you hit them, it's tuna time, fast and furious." And he just about finished saying, "And we've found them, and they're hungry," when another rod flipped.

"Over there on rod number one," cheered Ruboyianes, prodding Paul to grab a live rod. Paul, in a panic stuttered, "Which is number one?" As if he were on stage in Las Vegas, Ruboyianes chided, "The one with the fish on." And it was good for the best laugh of the day or evening.

Laaksonen, the visiting captain,



A sunset angler waits for downrigger rods to snap to life.

acted as mate, trying madly to keep rods in the water. A few lost hookups plus our boated fish told the story. Ruboyianes listed the second of his computer-like factors. They wanted only one or two items on the menu, *Fin Weaver* spoons or a light yellow *Jon's Fly* behind a chrome dodger. "So why put anything else out," said Ruboyianes, explaining that the evening fishing frenzy would be cut short by darkness so every lure in the water must be productive.

The third factor was depth. Ruboyianes used his auto pilot to slide along an underwater shelf. "We'll work this level until it cools off," he audibly planned. As dusk approached, he would work the next shelf in shallower because the feeding school would move in with the security they felt as darkness fell. "Then it will be over just as quickly as it starts," cautioned Captain Pete. We would quit when the action slowed but it didn't matter because the cooler already held a few dandies.

In a few minutes, we were to find out what Captain Pete meant by "rippin' tuna," a phrase, if you'll recall, he first used on that long past winter afternoon. Al was resting his weary arms when a rod near him went berserk. Not a simple rod springing up to indicate a strike mind you, but berserk. The drag was screaming just as hard as the Ugly Stick was straining. Al had to brace himself to pry the rod from the holder. He was doing his best to hang on as the boat climbed a high wave then settled into a trough. What a classic salmon battle it was, Ruboyianes dancing among the rod holders moving one here and there and shouting instructions to Al who obviously didn't need any. And it was a test of tackle. Big kings can put a real show on, making long runs and sounding deep or slicing the surface as the mood strikes. Al's big king lived up to the reputation easily.

Several minutes later the best king of the evening joined our growing catch. "This one is the biggest I've caught this season," said Al. A few back slaps and handshakes later everything was reset.

Al kidded Ruboyianes, "Get ready Captain, I feel a double coming." Magic or not who knows, in minutes we were up to our downriggers in crossed lines with a pair of 20-pound plus salmon doing the damage.

But things were to get better! Ruboy-

ianes, who seldom gets to handle the reel handle of one of his own rods was setting a drop weight line back in its proper holder when his arm was nearly pulled from its socket. "Take this rod," he said, trying to give away the long, arching glass rod. "No way," we all answered in turn, each rubbing sore shoulder muscles. About then, we realized that Ruboyianes was into a real monster.

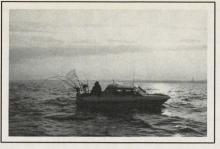
"I'll take it," we each chimed in, reaching for the rod. "No way," answered Ruboyianes, now playing the part of an excited angler instead of the cool captain. He was having fun and we really poured it on. "Keep your rod tip up, pump, watch your drag, move over here, no, over there, back up, work him," three tired quasicaptains worked him over.

And I'll admit, it was satisfying for me to net Ruboyianes' big king, the trophy of the trip.

A quick scan of the watery horizon didn't turn up many other trollers. Of course, why should there be? Most pros followed the early morning to afternoon schedule that pleased their clients, allowed plenty of time on the water, and generally, good fishing. That's a good day's work for most and a tiring one at that.

Our friendly host, Ruboyianes, was pumped up because of the fast action and tremendous success but he was tiring as twilight approached. He had been going since four that morning and would have little time left this night for his beauty sleep.

It ended, as he said it would, just as



Great Lakes trolling is productive during low light conditions.

quickly as it started. "We could work a while longer," said Ruboyianes, "maybe pick up one or two more." But we all had enough. Lots of big kings and the fastest action you could ask for.

And we all learned something. The lesson included things about the habits of big kings as they move into the feeding areas in the quietness of evening. And we learned how to follow their feeding frenzy onto each shelf as the school drove the baitfish toward shore.

But I think the most important lesson we learned was just how much fun an outing like this can be. Even the two professionals aboard took time to land fish, enjoying the thrill of a running chinook. And that's a thrill that keeps thousands of anglers coming back to Great Lakes waters each year to fish with the best of the pros like big Pete Ruboyianes.

I'll tell you one thing. If Captain Pete asks me out for another evening of "rippin' tuna," he won't have to ask twice.



Paul Weikert and Rich Foster fight a "double header" as night approaches.

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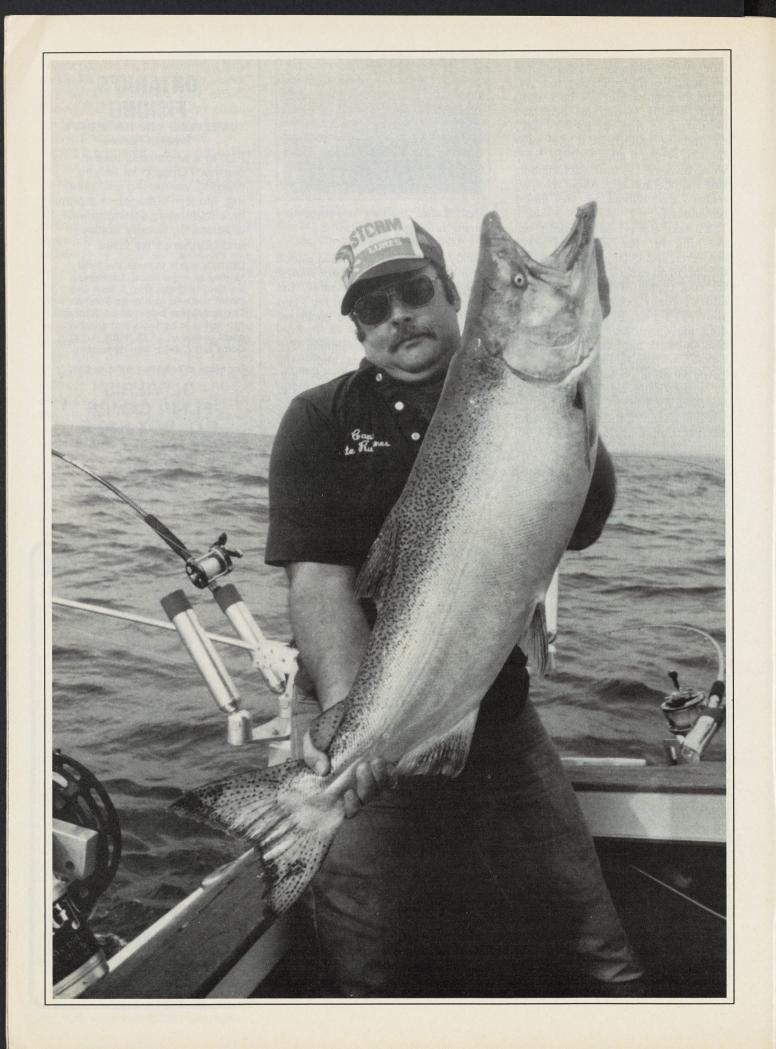
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IN SEARCH OF GIANT CHINOOK

by Ken Darwin and Paul Weikert

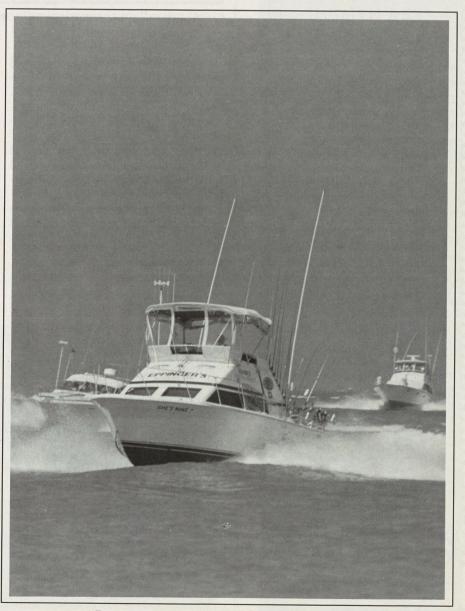
Slugging it out with superstar giant kings is the ultimate test for the Great Lakes angler's tackle and skill.

The Great Lakes angling world's attention is focused on Lake Ontario. This unique salmon fishery produces chinook that weigh 35 pounds, trophy kings weigh over 40 pounds. The Lake Ontario stocking program is still growing: it now includes Atlantic salmon, brown trout, coho, and skamania steelhead, but the monster chinook produced here draw trollers yearly to the smallest Great Lake.

The reason kings grow so big in Lake Ontario is a puzzle to fisheries biologists. Some perceive the exceptional chinook sizes are related to the vast forage base. Awesome populations of baitfish, primarily alewife and smelt, are available to prowling salmon packs. In fact, fisheries biologists estimate that baitfish populations number about 12 billion. Over 200,000 metric tons of food is swimming around just waiting to be gulped by hungry salmon.

Baitfish populations are plummeting in Lakes Michigan and Huron as commercial netters exploit the resource. Over three million pounds of alewife are harvested for animal food annually by commercial netters out of Wisconsin alone. Many Great Lakes anglers in Indiana, Wisconsin, Indiana, Illinois, and Canada feel that commercially harvesting baitfish has a detrimental effect on the size and number of salmon available for sport fishermen. Anglers are hopeful that fishing associations along with state and federal agencies will delimit commercial exploitation of fish stocks from the Great Lakes.

If your quest is to locate and catch big kings, then Lake Ontario provides a superb opportunity, one that is best explained by the following anecdote. It was barely light enough to see PHOTO FACING PAGE: MIKE TONTIMONIA Wayne County's shore as we set lines and made a wide sweep. Downrigger lines were set to intercept salmon headed for the appealing waters of Sodus Bay. We worked to position *Dipsey Diver* rods when suddenly the side downrigger bounced to the strike of a husky fish.



Big water trollers race to a salmon hot spot.





A call on the marine radio sends this boat to a salmon lair.

I grabbed the thumping rod and positioned the butt against my stomach. But the rod didn't bounce back up, the way it would with a small fish, instead it stayed bent double until the *Shimano* rod blank eased the breaking point. Line squealed from the reel as the fish stood ground, then the rod speared forward as the king ran away from our boat.

The king had no plans of stopping and headed toward Sodus Bay. I braced my knee against the stern as line melted away. Paul turned the boat in a slow circle toward the runaway salmon.

Just then a *Dipsey Diver* rod nosedived. With his right hand, Tom pulled it from the rod holder, but the line snapped with a loud crack. "Damn it," he barked, "I knew I had the drag set too tight. I should have rechecked it after placing the *Dipsey* out. That fish felt very heavy. What a way to blow a chance at a double."

Luckily my fish was well hooked. I pumped the rod up, then reeled frantically to gain line as I dropped the tip. The salmon turned left then zagged right in an effort to shake the hook. I gained about 20 feet of line, only to watch it sizzle from the reel as the brute made a second run.

After a long see-saw battle, the king broke surface and rolled far behind the boat. Paul slowed the speed as I eased the fish to net.

You could hear the line hiss in the still morning air as the fish ran parallel to our craft. The line cut the water like

a sharp knife when the big king made a final seaward sprint before I inched him toward Tom's waiting net. Tom scooped him aboard and I couldn't believe the scrappy king pulled a hand scale to the 29-pound mark.

By mid-day we had boxed six chinook, all over 20 pounds and one fat laker. We also missed six or eight strikes.

This anecdote happened last summer and depicts typical chinook salmon action available to the trolling angler on Lake Ontario.

I spend a lot of time in trolling boats all over the Great Lakes, fishing with old and new friends. I take a lot of photos and note fish habits spring through fall and observe things that make trolling effective. One thing is certain, Lake Ontario offers the best fishing in the Midwest for trophy-sized chinook. But in order to cash in on the action, it is important for you to understand the specie, its feeding habits, and trolling methods that work best for trophy catches.

Now, I'm no scientist and have no way of knowing if moon phase, light intensity, time of day, or other circumstances make salmon shun lures or gobble them like candy. At times, trollers take fish all day long with no lull in action. I've also seen salmon stacked up on the graph like cord wood with only a few fish caught at daybreak or sunset. More often than not if you locate schools of baitfish, (smelt and alewife look like clouds or mounds that show up like smudged fingerprints on a graph), then troll near them and predator trout or salmon will be present. Baitfish seem to make salmon feed because they appeal to their predator-prey instinct. Salmon have an aggressive strike instinct and if baitfish swim tantalizingly past their nose, they will simply begin biting.

Once salmon become active and go on a feeding spree, the fishing action is unmatched. The fast-paced action may last for a few short hours or days on end. The trick is to be in the middle of the activity and identify the key elements that cause the fish to strike.

Perhaps the best time of year to catch salmon is early spring, shortly after ice-out. Usually during April to mid- May the Great Lakes warm with changing climatic conditions. This minor change in water temperature often keys the best feeding spree of the year. Salmon seem to almost respond to spring weather by going on an Easter eating binge. The warming waters off rivermouth, power plants, or in shallow bays trigger fish into feeding. Perhaps the minor water temperature change increases their metabolism and they become hungry. In fact, they become downright ferocious. The same is true after a long hot spell during summer. A north wind often brings cool air temperatures and salmon become absolutely ravenous.

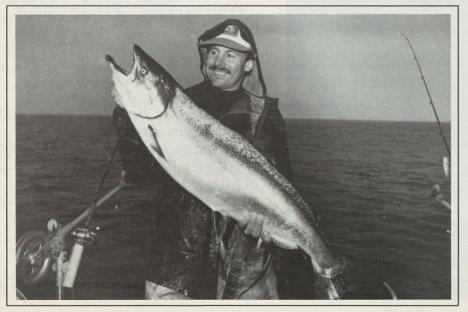
Changing water conditions often force salmon to the lake surface where they smash lures as though they realize that existing conditions are short-lived. During this time look for good catches to come on lures run in the upper 20 feet of water.

Most savvy trollers know that salmon are often found close to the thermocline layer when the great Lakes stratify. Now, don't think that salmon are restricted to this area of oxygen-rich water. A trophy king will feed where, when, and how he pleases. But often from late June through August, chinook like to restrict feeding activities to the layer where oxygen, baitfish, and preferred water temperatures combine. Some captains feel that locating the thermocline will guarantee catches, others seem to like to run lures where the thermocline and 55-degree water flow close to bottom. Fishing where the water temperature is comfortable for chinook will increase your catch, water that is too cold or warm means fewer fish in the box.

It is important to understand water temperature relative to depth at which salmon feed. Salmon have a preferred water temperature zone in which they are comfortable. This is where they suspend while digesting baitfish, a socalled resting strata, which is often also the thermocline.

Some folks feel the thermocline is a narrow layer of water where temperature changes. This strata undergoes a rapid change over a short distance. The thermocline can also be relatively thick and it is often a comfortable zone for salmon.

The location and thickness of the thermocline is dependent upon sea-



Ken Darwin admires a big king.

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Great Lakes TROLLING ANNUAL No.IV 31

PHOTO: PAUL WEIKERT



The fight of a big chinook keeps your heart pounding and hands full.

son, depth of lake, and wind. It should be noted that water clarity, storm fronts, and other factors affect the thermocline, and the thermocline can vary from day to day.

Chinook salmon like water tempera-

tures from 44 to 60 degrees F. Their preferred temperature range is 50 to 55 degrees F. where they are most active and feed often. However, a trophy king can certainly chase and strike a lure in 45-degree or 60-degree water. It is also worth noting that there are several baitfish that like the same water temperature as salmon. Herring, shad, and whitefish like 52 to 55degree F. water. Smelt prefer water from 48 to 52 degrees F., while alewife enjoy temperature form 53 to 55 degrees F.

Obviously then, it is a good idea to monitor water temperature and to find the zone where both baitfish and salmon are active. This, then is the feeding zone.

During the early spring and late fall it is difficult to find a feeding zone. So during this period, it is a safe bet to stagger lures to cover the upper 40 feet of water. Once you catch a few salmon at a proven depth, then other lines can be set at the desired depth.

Chinook salmon, unlike coho, do not feed in large packs. Kings are seldom found in massive groups, except prior to migrating up tributaries for spawning, and most chinook travel and feed in groups of two to five fish. Trophy-sized chinook are thought to be creatures that travel and feed alone. Perhaps their awesome size presents a much too formidable profile to attract friends.

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The trolling methods used to outwit a big chinook are somewhat different than those used for run of the mill counterparts. First, the real secret to catching a big salmon is not a secret lure, but a simple philosophy. One that says, "Catch as many fish as possible. . . let size take care of itself." This rule means that you simply attempt to land as many salmon as possible and there is bound to be a big one in the catch. However, if catching a big king is your goal, then you need to make a few minor changes to your trolling methodology.

Let's assume that you have a salmon hideout located. You have the feeding zone identified, lines set and lures working. You are having fun catching salmon, but most of the fish are small. You want to boat a whopper, but don't know how to get one to strike. What should you do?

Well, don't pull lines and run to a new location. Stay where you are and continue your trolling pattern. Pull a couple lines and put on big lures. Big lures don't always catch big fish, but they often attract them. A monster king will charge an oversized lure then turn and swallow a smaller bait. My favorite big salmon lure is a No. 5 chrome *J-Plug*. Super magnum spoons will also attract big kings. Try a couple super magnum *Northport Nailers, Evil Eyes, Yecks,* or *Southport Slammers*. Don't make the mistake of running these giant spoons too close to the ball. Keep them from 12 to 40 feet behind the cannonball. Big salmon can be downrigger weight shy.

Another system that produces strikes from overgrown chinook is a super magnum spoon behind a *Dipsey Diver*. Place the spoon about six feet behind the diver. Check the action of the spoon at boatside before you let it back.

Set your diving planer rods so that the *Dipseys* run to the side of the outside downriggers. Most captains like to use *Perko* or *Bystrom* rod holders so *Dipsey* rods can be placed parallel to the water.

One trick that fools kings is to let the *Dipsey Divers* go way back. At times I run *Dipseys* 100 yards behind the boat. The action of a big spoon following the diver seems to drive kings mad.

The rocking action of the boat causes the diver to dive, then suddenly pull the lure fast. This rhythm is the action needed to draw monster kings from their deepwater lair.

Chinook will slam this outfit with a ferocity you will find hard to believe. Many fish will grab the big spoon, strip line 40 yards or more, then spit the lure because they smashed the bait out of anger, clamping jaws around the metal object and never getting hooked. On one occasion I brought a salmon to net that had the lure sideways in his mouth, like a dog holding a bone, with the hook dangling free to the side. On another occasion I found a salmon's tooth imbedded in the plastic diver.

Dipsey Divers should increase your catch by 30 percent and by using big spoons you will be surprised to see the number of big fish you take on this outfit. Favorite super magnum spoon colors include: fluted silver/white, black/gold prism tape, green/black, green/white, and blue/silver. Lures colored chartreuse, silver, and fluorescent red work best late in the season to spawning runs.

Big chinook seem to favor structure during mid-summer and it is not uncommon to find them near drop-off shelves, around rock piles, suspended

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Luhrs, 12 Timber Lane, Marlboro, NJ 07746 'A fishing heavyweight on a lightweight budget". —Boating Magazine over rock or clay bottom, or near contour breaks. Last summer, for instance, we caught chinook in Lake Ontario where the bottom made a sharp drop.

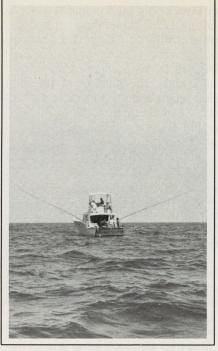
As a general rule, kings like to suspend from 10 to fifteen feet above bottom. Here, they cruise within eyesight of bottom and within striking distance of baitfish that come from behind the cover of bottom debris.

During the dog days of summer, kings seem to change their feeding habits. For some unknown reason they refuse to take a spoon or plug offerings but will charge and slam a fly or squid following a dodger attractor. No one knows why salmon are attracted by the waving action of a dodger. It seems like the huge attractor would spook wary trout or salmon. But instead, the big attractor brings them in for the strike when other lures fail to entice a nibble.

Does a dodger provoke a strike because the attractor is invading the salmon's territory? Does it draw a strike from anger, hunger, or simply reflex? No one knows, but dodgers are a surefire method to catch big kings.

Some folks like to use small attractors but I recommend the "0" size for big chinook. The larger dodger gives a trolling fly, squid, or spoon the action that draws salmon like a magnet. Dodgers are very effective when fishing deep water and many captains prefer to use dodgers while fishing depths from 50 to 150 feet.

Most trollers prefer to use several dodger rigs at one time; lines are staggered to avoid line tangles. Productive dodger colors include: chrome,



Chinook are often found far from shore.

chrome fluted, chrome/prism tape, chartreuse, chartreuse/lime green, lime green, and red.

Lures can to used from 18 to 24 inches behind dodgers. Flies or squids seem to have a whip-like darting action that draws ferocious strikes. At times a spoon run 24 to 48 inches behind a dodger can bring super results.

Heavy line from 15 to 30 pounds should be used when trolling with a dodger. The action of the attractor has a way of diminishing line strength and break-offs are frequent. It is a good idea to regularly replace line if you are trolling dodgers.

The secret to catching big kings on dodgers is to use the correct trolling speed. Proper dodger action should be a slow rocking side-to-side motion. Test the action of dodgers by setting a line shallow, then observe the dodger to make certain the action is O.K. Dodgers that spin or lie motionless will not attract salmon. Trolling speed can make the difference between a strike or two, and a box full of fish. At times, a downwind trolling direction is necessary to keep dodgers at a precise speed. Most boaters have a tendency to troll dodgers too fast.

When the lake is flat calm from the blistering summer sun and kings go deep, it's time to use dodgers. But there is a lot to learn about running dodgers and catches are always dependent upon mastery of technique. One trick that pays big dividends is to run the dodger back far. Most captains like to use dodgers about three to six feet from the ball. To consistently outsmart big salmon I recommend setting lines so that dodgers are from 40 to 80 feet behind the downrigger weight. This method provides a wide-scooping whip-like action to the dodger that kings find irresistible. Chinook are often shy about striking rigs set close to downrigger weights and by placing dodgers back you will catch more fish.

It pays to experiment with dodgers and trolling speed to determine the combinations that work best for you and your boat. Personally, I feel the

HOT 'N TOT - WIGGLE Pick a Pair of Power Packers for WALLEYE Castin	wart g and Trolling
Walleye fishermen	NEW! WALLEYE 4-PACK
all over the country are keen observers of what works for taking their favorite fish. What they have been ob- serving the last few years is	HOT'N TOT WIGGLE WART
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penetrate the depths where the powerful big fish lie, our new "MAGNUM WIGGLE WART" gives Into only the necessary deep- diving action, but adds a new fish-	NAME
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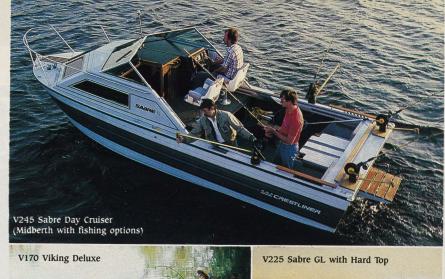
EMS speed indicator can be relied upon for accurate trolling speed. Some captains like to keep an extra rod close by so they can place lures or dodgers alongside to monitor trolling speed.

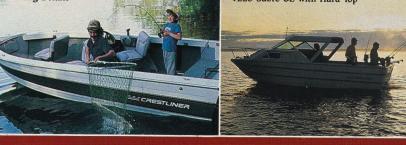
Sometimes big kings will hug bottom like lake trout. During this period trollers often confuse V-shaped marks on bottom as whitefish or lakers. One trolling method that is a surefire way to outwit structure-hugging salmon is to drag dodgers on bottom. This is accomplished by setting lines in deeper water, then trolling to the area where salmon are hiding. Downrigger weights are allowed to drag bottom for a short distance while the boat makes a sharp turn toward deeper water. This technique allows the dodger to flutter along bottom making the sand fly in fish-attracting clouds. Chinook are drawn to this commotion and will slam lures.

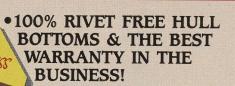
One important variable is lure color. Scientists claim that all colors turn to black as lures go deep. Well, this is true but you must remember that what a fish can see 100 feet down is certainly different from what man can see. I feel that lure color selection is very important for consistently catching salmon. It is a precise science. If you find that fish are slamming a pink, orange, green, or yellow-colored lure then it is a safe bet that they are color selective and you should try to troll baits the same color. I've seen days when salmon will hit only lures that are a particular color; use a different shade lure and you will get no strikes.

Salmon will also swim any direction to slam a lure. If they want it they will go after it. Some folks feel that they will only grab baits trolled above them. Well, let me tell you a big king will go up, down, sideways, or even backwards to smash a bait he wants. Most salmon attack lures and baitfish from behind and attempt to swallow the prize whole.

The experience of catching a big salmon on the Great Lakes is something you will never forget. When we begin to study that vastness of the Great Lakes we understand the need to hone trolling skills. Salmon are not hoodwinked easily, they strike only at lures trolled correctly. So, concentrate your efforts on refining skills that consistently catch fish and soon a trophy will be yours.







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REATL & TROLLIN TIPS G The growth of the king fishery on the Great Lakes is Pg.38 CHINOOK SALMON phenomenal. These huge silvery fish provide top notch trolling action. Great Lakes steelies are respected by trollers for their unique fighting Pg. 40 STEELHEAD abilities. These trophy-size trout display tarpon-like acrobatics when hooked. Pg.42 BROWN TRO Great Lakes browns are awesomely fat and highly rewarded by anglers as strong fighting, hard striking and good eating. Pg. 44 COHO SALMON These mint silver salmon are best known for their boldness, arm jolting strikes, and coho fever. Prized for their tasty fillets, walleyes have fast become Lake Erie's number one Pg. 46 WALLEYES sport fish. . . and with the rebirth of the fishery, folks are turning to effective trolling methods. Lakers are native to the Great Lakes but through stocking programs they Pg. 48 LAKE TROUT are known as the "bread and butter fish" for trollers. Pg.50 FISHING INFORMATION A rundown of state-by-state contacts to help you better enjoy Great Lakes opportunities. SPECIAL SECTION

CHINOOK SALMON

he great size of chinook and powerful fighting qualities make it a prize among Great Lakes trolling circles. Chinook, often called king salmon, readily strike trolled lures and their tremendous strength makes them valued by sportsmen throughout the Great Lakes region.

Unlike coho or steelhead, kings seldom jump when hooked but resort to long line stripping runs, sea-sawed hook shaking maneuvers, and powerful surges of energy at boatside. The Great Lakes chinook fishery has become more popular than any other salmon or trout.

Chinook are silver-sided with a greenish back. Large spots are found on the entire tail of kings. Chinook, nicknamed "black mouth salmon" by native Americans, have a black lower and upper jaw. Their anal fin has 15-17 rays.

Chinook are big-water fish that like to relate to bottom. They often congregate 10-15 feet from bottom structure and are found shoreward of coho. Chinook are less bold than coho and more wary than most trout. During summer they congregate where Great Lakes current sweeps past steep banks.

Chinook are planted in the Great Lakes when they are smolt or yearling fish. They are stocked in tributaries and after migrating to the Great Lakes they feed voraciously. Kings return to spawning streams when they are four years old. The average weight attained by Lake Michigan kings is 15 pounds. Lake Ontario salmon are more deep bodied and average 20 pounds, 30-35 pound fish are not uncommon in Lake Ontario. Natural reproduction takes place in many Great Lakes tributaries during fall. Chinook prefer to spawn where the stream bottom is gravel or stone and where their is ample flow. Female kings select spawning sites and dig a redd with their broad tail. Most spawning takes place during October. The female deposits thousands of eggs in the redd while the male fertilizes them with milt. Shortly after spawning, both male and female die.

Of the more than 20,000 fish species known to man, the one specie that is most popular with Great Lakes trollers is the chinook salmon. He truly deserves the title as "king." His popularity and highly respected fighting abilities are renown. The name "king salmon" suggests electrifying fishing action, line stripping runs, slam dunk strikes, rod breaking power.

Chinook like water temperatures around 50 degrees F. During spring they seek the warmest water they can locate, found near the surface or at river outlets and warm water discharges, but in the summer they go deep. It is the dream of every big water angler to locate a suspended school of hungry kings on a warm summer day. Lures are trolled through the school from 2.5 to 4.5 mph. Most fish are taken from 50-100 feet deep.

Trolling speed is often determined by the action of the lures used. *J-Plug* type plugs can be trolled at a fast speed while dodger/fly or squid combinations require a slow troll.

Most captains like to use spoons for chinook and during the summer lures are placed 8-16 feet behind cannonballs. Magnum or super-magnum size spoons seem to be preferred by kings. Downriggers are used to take spoons deep and extra spoons are set on adda-lines so each downrigger sports at least two lures. Weights are set at staggered depths to avoid tangles and the deepwater rigging is trolled through waiting schools.

Most trollers use four downriggers and two big *Dipsey Divers* for deepwater summertime trolling. The rigging provides good coverage on both horizontal and vertical planes.

Another chinook trick is to set "O" dodgers trailed by a fly so that the attractor is about 60 feet behind the ball. A relatively slow speed is needed when placing dodgers way back and downriggers must be staggered to avoid tangles. Chinook seem to prefer lures that are placed far from the cannonball. Perhaps they are downrigger shy, more than likely offerings placed far back have the action that kings prefer.

Big spoons or plugs are used behind Dipsey Divers. Some captains like a four to six-foot leader while others opt for six to eight-foot leads. A short leader is necessary if you plan to use a small lure. When kings slam a lure trailing a Dipsey they seem to strike out of aggravation or anger. They absolutely blast the bait and the battle displayed is berserk.

Most captains prefer to use a heavy rod and line when rigging *Dipseys*. Flutter-type spoons are effective behind *Dipseys*.

One surefire trick that catches kings is to set *J-Plug* type plugs far behind the boat. Lures placed 40-80 yards back are lowered to waiting salmon, best size is #4 or #5, and a relatively fast speed is utilized. Prowling chinook often trail the plug for a distance and will grab the offering when it makes a sharp turn or abrupt change in action.

GREAT LAKES FISH

Lake Ontario Contacts

Wilson Boatyard & Marina Off Rt. 18 (follow signs) Wilson, NY 14172 (716) 751-9202

Olcott Bait & Tackle Route 18 – Box 166, Olcott, NY 14126 (716) 778-7296

Miller's Boathouse 320 Manitou Beach Rd., Hilton, NY 14468 (716) 392-9904 Vic's Three Bridges Inn Oak Orchard Creek at the Bridges Intersection of Rts. 98 & 18 Waterport NY 14571 (716) 682-3235

Haher's Bait Shop & Restaurant 8487 Greig Street (off Rt. 14 North) Sodus Point, NY 14555 (315) 483-9865 Rochester Weigh-In Station Port Authority – End of Lake Avenue Rochester, NY

Fair Haven State Park (Follow the signs) Fair Haven Bay, NY (315) 947-5205 Port City Sports

Port City Sports 157 West First Street, Oswego, NY 13126 (315) 342-2189 Salmon Country, Inc. Box 393, RD #1, Mexico, NY 13114 (315) 342-8049

Green Point Marina Rt. 3 – Sandy Pond, Mannsville, NY 13661 (315) 387-3513

West View Marina 4001 Harbor Rd., Henderson Harbor, NY 13651 (315) 938-5445

Lake Ontario Hotlines

Monroe County ... (716) 467-7320 Wayne County ... (315) 483-4454 Orleans County ... (716) 682-4223 Oswego County ... (315) 342-5873 Niagara County ... (716) 433-5606 Jefferson County ... (315) 782-2663

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STEELHEAD

he Great Lakes area is the hottest trolling spot in the world to catch steelhead. Big silvery trout of trophy standards are taken regularly and superb catches are available to those willing to use specialized methods.

An overlooked steelhead fishery is available each year and some call it "fantastic." During spring as Great Lakes waters warm it pushes cold water out into the lake forming a thermal wall with warm water toward shore and colder water seaward (during fall the temperature breaks are reversed with cold water toward shore and warm water seaward). The warmer water is called a "thermal plume" and where it brushes against cold water is the hot spot for steelies. Some call it a "temperature break" and this structure has the same fishdrawing capabilities as a weedbed or timberline found in inland lakes. The thermal bar is a structural break and where the temperature has the coldest point is called the "wall."

Steelhead are surface oriented fish that often feed on microorganisms, baitfish and insects found close to the surface. The structural break offered by the wall is a pooling region for food that steelies prefer. Plus, the wall offers them temperature extremes that they feel comfortable spending time in. Here, they search for food and spend time following the edge of the break.

The key to catching steelhead is to locate the thermal wall. This is often more difficult than expected and requires special equipment. A surface temperature probe is required as you motor seaward. Look for thermal walls to be found at least six miles offshore. Often they can be identified visually by a slick-line, mudline, or convergence of different colored water (green/blue, green/brown). There is usually a two- to five-degree temperature change at a thermal wall, sometimes it is more subtle. Depending on wind direction, most breaks are parallel to shore and often appear as a calm strip on the lake surface.

Some smart trollers will follow seagulls that are flying to a distant location found offshore. These captains know that gulls prefer to feed along thermal breaks because the wall often causes refuse to churn on the surface. This effect is identified by gulls at great distances—they can actually see a thermal bar. Other indications of a thermal bar include: dead baitfish on surface, trash, slick, debris and seaweed.

The primary method for catching steelies along a bar is to use downriggers, diving planers and highlines. Steelhead are found within 30 feet of the surface near walls and in most cases are caught five to ten feet below the boat.

Some folks feel that the only way to consistently catch steelhead is with highlines—this is true for most trolling situations. But steelies found along the wall seem active and will eagerly slam lures set eight to 12 feet behind the downrigger weight. You have to think of the thermal break as being the steelie's dining room and anything trolled through this region is gulped by hungry trout. Breakwall steelhead are actively feeding and appear naive about engine noise, downrigger weights, or poor lure presentation.

Another misconception seems to exist that *Dipsey Diver* lures need to be placed far behind the diver and run deep. Not so, with breakwall steelies. Set *Dipsey Divers* to run about five to 15 feet deep and place a small spoon about four to six feet behind the diver. Steelhead will zip in and smash this outfit like a runaway freight train. Nothing is more exciting than the sight of a huge trout leaping skyward within 30 feet of the transum with lure inmouth and *Dipsey Diver* rattling to the frantic head shake.

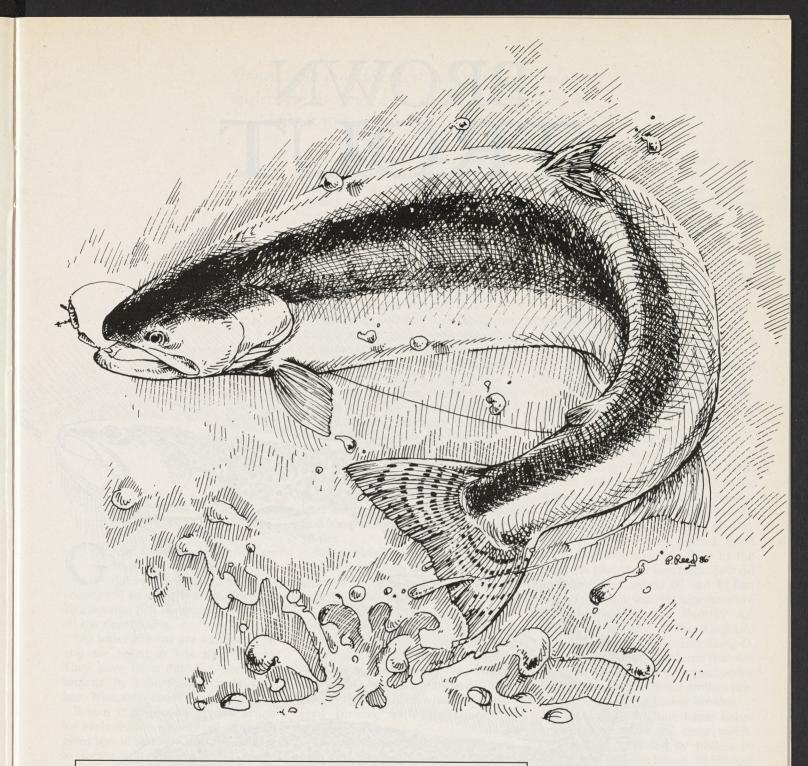
Steelhead are ranked by trollers as the hardest fish to fool and most difficult to locate in the Great Lakes. But there are plenty of them found along thermal breaks and they are anxiously waiting for trolled lures. The problem is getting them to the net—they fight like crazy and provide heart pounding excitement.

Steelhead are special, indeed, and that is why trollers hold them in the highest esteem. Wherever trout anglers gather-in restaurants, at T.V. meetings, on streams or lakes-they discuss ways to catch more fish. Well, trolling the thermal bar is a surefire method to catch Great Lakes steeliesit makes steelhead fishing simple, almost too easy. It seems that this wellkept secret is the most productive way to land a multitude of big trout. Well, please do yourself a favor-Don't overharvest steelhead. Always remember that these fish are very special and it's best to limit your catch, not catch your limit. Leave some fish for another day, some to run streams to spawn and keep in mind that - the pleasure of catching trout is not how many fish you kill, but how you play the game and the enjoyment of being outdoors. Many steelheaders are restricting their kill to two fish per angler in order to maintain the natural resource.

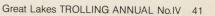
Steelhead are built for battle, well muscled, strong and powerful enough to do somersaults above water when hooked. These sleek-sided monster rainbows come complete with a racing stripe, steel grey face and fuel injected fighting capabilities. Whether you catch them on downriggers, highlines, planer boards, Dipsey Divers or outriggers steelhead are tremendously exciting fish. Some say they are more fun to catch than any other Great Lakes fish because they are strong-willed, midair acrobats that provide a scrappy fight. Once they strike, steelies have a unique ability to toss hooks because of their explosive power and schizophrenic battle tactics. They simply fight like the gamesters they were meant to be.

Steelies prefer water 58-61 degrees F for optimum feeding. This top-water species often is located less than 30 feet from the surface in several hundred feet of water. Look for schools to congregate far from shore along thermal bars.

GREAT LAKES FISH



WORLD RECORDS								
		te sar- Balana utana karang						
SPECIES	WEIGHT	NAME	WHERE CAUGHT	DATE				
Rainbow	27 lb. 3 oz.	Albert Landry	Ontario, Canada	1984				
Coho	31 lb.	Lee Hollberg	Cowichan Bay, B.C.	1947				
Brown	34 lb. 6 oz.	Robert Hendericksen	Arcadia Lake, Michigan	1984				
Chinook	97 lb. 4 oz.	Lester Anderson	Kenai River, Alaska	1985				
Lake Trout	65 lb.	Larry Danius	Great Bear Lake, Canada	1970				
Walleye	25 lb.	Mabry Harper	Old Hickory Lake, Tennessee	1960				
Atlantic Salmon	79 lb. 2 oz.	Henry Henricksen	Norway	1928				



BROWN TROUT

P.Reep 86

GREAT LAKES FISH

11/1

42 Great Lakes TROLLING ANNUAL No.IV

Brown trout provide superb action for early season anglers but as spring gives way to summer they are difficult to locate and often hard to catch.

> Today the species thrives from coast to coast and browns have provided the backbone of America's trout fishery. Brown trout are highly respected by trout fishermen.

Like brook trout and salmon, browns are fall spawners. Kype jawed males and bright females start gathering over gravel in rivers during September and October. Mating can occur during November through February.

Spawning behavior among brown trout is similar to the egg-laying ritual of salmon. Pairs select gravel streams with good flow of high oxygenated water. Males guard the redd that is fanned by egg-laden females. When the gravel is fanned clean and formed into a dish-shaped bowl, the female settles into the nest. By pushing her head up and thrusting her tail down. eggs are deposited on the redd. The male moves aside and quivers to deposit milt on the eggs. Spawning lasts about one week but both male and female reside in the stream during winter.

The world's largest brown trout was caught by William Muir in 1866. The western Scotland trophy weighed 39 pounds, 8 ounces.

Great Lakes brown trout are well suited to the freshwater sea. Studies have found that they are difficult to catch and trollers often use special methods to outwit wary fish. Twenty percent of Great Lakes stocked fish are caught by fishermen while 70-80 percent survive both predation and anglers.

Its wolf-like hardiness and cunning help Great Lakes brown trout to survive. Last summer in Michigan biologists confirmed rumors of huge brown trout living in harbors along the coast. Browns are structure oriented and often cling to piers at natal stream outlets.

Outstanding Great Lakes trolling for browns exists during early spring. From April until late May good numbers are taken by anglers. During this period browns are found in shallow water and are often gorged with smelt or alewife.

Savvy brown trollers use shallow water methods for spring catches. Minnow-imitation lures work best from highlines, outriggers, planer boards, or downriggers.

This style of trolling requires use of light line eight to ten-pound test. Shallow water browns seem reluctant to take offerings trolled from heavy line rigs, they appear line shy. Clear mono leaders are needed and many captains feel that six-pound line is necessary.

A slow "S" trolling pattern is used for shallow browns. Lures are run in five to 30 feet of water, along piers, rivermouths, drop-offs or other structures.

During a six-week period from late April through May browns go on a feeding binge. Trollers work lures where structure offers cover for schools of spawning baitfish. Browns move into the shallows to gorge themselves on spawning smelt and alewife.

Try a planer board pulling three lines. The first line, set close to the board, is placed 80 feet back. Second and third lines are set 60 and 40 feet behind the main line. Popular lures are *Bill Norman, Rapala, Bomber As, Rebel, Fastrac, Hot 'N' Tot, Kwikfish, Tadpolly, Wiggle Wart* and *Bang-O-Lure.* Minnow-imitation lures that are smelt look-alikes are very productive with this technique. Some trollers prefer jointed lures for lunker browns.

As May turns to June Great Lakes brown trout move to deep water. Downriggers are used by trollers to outwit sly browns found 30-50 feet below the surface. Small spooks and minnow-imitation lures catch beer bellied browns during the day.

Some captains feel that smart browns feed only at night, chasing baitfish in the shallows. Try highlines for early morning brown action. Use a *Hot 'N' Tot, Tadpolly* or jointed #9 *Rapala* set 100 yards behind the boat. Troll in a lazy "S" pattern over brown trout hangouts.



G reat Lakes brown trout are huge by most fishing standards. Five-pound fish are considered small by most trollers and 15-20-pound fish are caught yearly on all the Great Lakes.

Big water browns are extremely fat and are noted as ferocious feeders. They have been dubbed "beer-belly browns" by trollers along the Milwaukee, Wisconsin coast.

Brown trout provide superb action for early season anglers but as spring gives way to summer they are difficult to locate and often hard to catch. Some trollers feel browns stay close to bottom during summer while others swear that they suspend near the surface. Both situations offer a challenge to seasoned big water trollers.

Brown trout were brought to America in 1883 from Europe. Branded as weak and ugly, many felt that browns were uncatchable, wary, and a poor addition to a thriving brook trout and rainbow fishery.

COHO SALMON

he coho salmon might be considered as the grandfather of modern midwest salmon programs. They were the first species introduced into the Great Lakes in the '60s, thus came the term "coho craze"—a term that describes how sports fishermen reacted to the presence of newly found game fish.

Coho salmon *(oncorhynchus kisutch)*, once introduced to the Great Lakes, created for anglers an atmosphere of optimism and fishermen flocked to rivers and Great Lakes to cash in on the salmon bonanza. Soon the Great Lakes salmon fishery became world-wide news and coho salmon paved the way for midwest fisheries biologists to plant other strains of trout and salmon.

Wild coho spawn in autumn and most fish have a three-year life cycle. Young coho hatch from eggs and live in streams for 16 months before smolting and going to the Great Lakes. Smolt average five to seven inches long and they grow in the Great Lakes for 18 months before returning to spawning streams. Growth in the Great Lakes is extremely rapid and their main diet is alewife, chub, stickleback sculpin, smelt, herring, and shad. In 1970 a coho was taken at the Little Manistee weir in Michigan that weighed 33 pounds. In 1971 a Lake Michigan troller boated a coho that tipped the scales at 30 pounds. In recent years the size of coho has diminished to six to eight pounds on the average and in 1986 less than half of the expected run returned to the Michigan Platte River wier. Biologists feel that commercial gill nets from Wisconsin and Indiana are ruining coho plants.

The coho fishery in Lake Michigan during the '60s and '70s was fabulous. Fish were large, firm fleshed, and easy to locate. But as time went on populations disappeared and outstanding fishing was found in southern Lake Michigan during spring and in Platte Bay prior to spawning runs.

Today the coho fishery on Lake Michigan is almost nonexistent. Stocking programs have failed to produce expected runs of adult fish and trollers catch few coho. Natural resources biologists are taking a critical look at the overall management program and greater emphasis is expected to be placed on stocking chinook salmon, steelhead, Atlantic salmon and brown trout.

One dilemma that has always overshadowed the coho salmon fishery is the fact that these fish disappear during summer. Unlike chinook that can easily be caught by trollers from ice-out until ice-up, coho have always been difficult to locate and catch during midsummer. Some trollers feel they move 40 miles from shore and congregate near the Great Lakes surface to feed on insect clicks. Others are convinced they run to deep water lairs and feed on bottom hugging sculpin. Hatchery reared coho tend to wander more than other salmon strains.

Coho do provide a fine fishery for Lake Ontario anglers. Fish stocks seem to be strong and big coho are taken yearly by trollers.

Coho are bold fish and a properly presented lure is irresistible to prowling packs. Coho are easy to catch compared to chinook or trout; they are seldom shy about slamming trolled lures.

Coho are acrobatic fighters capable of giving the angler a strong hard battle he will long remember. The coho's silvery body is metallic blue on the back. Small black irregular spots cover the back and the upper tail fin. The gums of the mouth are grayish and the anal fin has 13 to 15 rays.

It is felt by most trollers that coho salmon relate to the surface of the lake more than the bottom oriented chinook. Coho are often found suspended over extremely deep water.

Sea gulls often give away the location of coho schools that are chasing baitfish to the surface. If you see this happening, it's a safe bet to run surface lines through this area. Try to guide the boat around the surface hugging salmon and drag lures through the edges of the school. Productive lures for this brand of trolling include: Hot 'N' Tot, Rapala, Bagley Bang-O-Lure, Rebel Fastrac, Tadpolly, Bill Norman Lures, and Bomber As.

GREAT LAKES FISH

E.S.L.O. TOURNAMENT CALENDAR

SPRING TROUT/SALMON DERBY	April 23-26
BUSCH BROWN TROUT DERBY	
E.S.L.O. TOURNAMENT OF CHAMPIONS	
SPORTCRAFT LAKE ERIE INTERNATIONAL	Aug. 6-9
SHAKESPEARE KING SALMON DERBY	Aug. 22 - Sept. 7



DIPSEY DIVER

Diving planers are used by trollers to run lures outside and above downrigger lines. Typically a heavy rod and reel is used. Many captains prefer the *Luhr Jensen Dipsey Diver* planer because it has a release pin that trips when a fish strikes the lure. They also have a weighted keel to help it dive and the keel can be adjusted to make the planer swim to boatside.

STATE RECORD COHO SALMON

STATE	WEIGH	-IT	
NY	30 lb.	12 oz.	
MI	30 lb.	9 oz.	
WI	24 lb.	6 oz.	
IL	20 lb.	12 oz.	
IN	20 lb.	9 oz.	
PA	15 lb.	5 oz.	
OH	13 lb.	10 oz.	

NAME
NAME
St. Clair Cornish
Paul Lewandowski
Diane Vilian
Carry Vandevusse
John Beutner
Jack Scheirer
Barney Freeman

-	
	DATE
	1985
internet	1976
	1975
	1976
	1972
	1985
	1985



ake Erie has fast become the nation's walleye capital. Big fish and limit catches are the norm rather than the exception. Walleyes in Lake Erie are easily accessible to fishermen.

Lake Erie is open year-round for walleye anglers. In addition to tremendous spring, summer and fall angling, good ice fishing is reported. Lake Erie has 10,000 square miles of surface and its shoreline includes Michigan, Ohio, Pennsylvania, and New York. Lake Erie is 212 miles long and about 60 miles wide. Once thought to be dying, it is now full of fish and fishermen.

Old time Lake Erie anglers feel the best way to catch walleyes is by casting weight forward spinners tipped with a nightcrawler. It is not uncommon to see huge flotillas of sport boats using this method during the summer. But most savvy walleye anglers agree that the most productive way to catch Lake Erie walleyes is trolling.

While the boat is trolling, rods are bent in a C-shape as lures search for fish. Many lines can be utilized at one time while trolling and multiple lures can be rigged on each line.

Trolling allows you to cover more water and find feeding schools of fish. Lines are seldom set deep for Lake Erie fish because walleyes prefer to suspend close to the surface. Some captains catch all of their fish using planer boards pulling lures in the top five feet of water.

Lake Erie walleyes seem to school in huge groups. Trolling boats can usually move back and forth through the school without spooking fish. Some captains like to troll in a big circle around schools of hungry fish. But the trick to catching Lake Erie walleyes is to always have several lures working at eye-level to the fish. A troller has a big advantage over cast or drift fishermen because he presents more offerings, covers much more water, and can stay on the fish.

During the summer when walleyes go deeper, a troller can simply drop downrigger lines to waiting fish. Gold and silver lures seem to work well for

GREAT LAKES FISH

Great Lakes walleyes but natural colors work too. By using trolled lures many anglers have found that this technique produces bigger fish than traditional methods. Some old timers stick with weight forward spinners tipped with a worm, but they troll the rig from downriggers, Dipseys, planer boards, highlines and have increased the catch. Trollers can lower any offering near bottom with downriggers and keep the lure in the feeding zone. It is a lot of fun to fight a five-pound walleye hooked deep in Lake Erie.

Michigan hosts a fine fishery with over one million walleyes taken by anglers per year. The extreme western basin is a holding spot for droves of good eating walleyes. Sportsmen enjoy the great fun, good catches, and tasty game fish taken from the freshwater sea. Monroe has a year round fishery, but peak season is during June and July as schools of feeding walleyes become active during summer.

Ohio anglers harvest about three million walleyes yearly from Lake Erie. The Ohio hot spot is located around a chain of islands found in the western basin. Fish weighing 10-12 pounds are caught here. Average walleyes are one to two pounds. For family fun the walleye fishery found in Ohio waters of Lake Erie is hard to beat. Look for outstanding catches from June through August; June is the best month for guaranteed catches of husky fish.

Walleye anglers the world over know that these fish require a very delicate feel to catch them. However, Lake Erie is the exception to this rule. Even if you miss the fish that hit your lure, keep trolling, another will strike. Catching Lake Erie walleyes is a lot like perch fishing, plenty of easy action.

During June, when Lake water temperatures increase and algae begins to bloom, walleyes suspend over deepwater hangouts and feed ferociously. Generally, walleyes are somewhat inactive, compared to trout and salmon, but during this period they will chase and strike any lure brought past their nose.

Minnow-imitation lures or small spoons are top choices of walleye troll-

ers. Highlines, outriggers and downriggers are appropriate tools for catching suspended walleyes. But sideplaners are fast becoming the most productive technique for consistent trolling catches.

Sideplaners, or planer boards, are easy to run and they take lures off to the boatside. Most captains set planer boards 75-100 feet out and a board is used from each side of the craft. Planer boards allow trollers to set three or four lines from each side; that's six to eight lines trolling at once. Lures are placed 30 to 60 feet behind the board and seldom is a sinker or split shot used to make lures run deeper. Some captains feel that if the planer board lure is diving 12 feet deep that it is too deep and is passing below feeding walleyes. Don't overlook this method for big walleyes.

Spoons work fine on downriggers and most captains prefer small, lightweight spoons. Trollers using downriggers for Lake Erie walleyes like to set spoons eight to 12 feet behind cannonball weights. Weights are often lowered three to ten feet for most trolling situations and lines are staggered. As fish move deeper, the weights are lowered.

The eastern end of Lake Erie also offers trollers top notch walleye fishing opportunities. Here, downriggers are used almost exclusively and lures are set much deeper than they are in the western basin. Most east-end trollers like to work spoons near drop-offs or along points where fish congregate. Downrigger weights are lowered so lures come close to bottom. By using some type of sonar unit, a troller can target downrigger lures to the exact location where fish are being marked.

Trolling speed is important for consistent walleye catches. Speeds can change from day to day depending on wind, wave and other fishing conditions. Determining the proper speed takes experimentation and requires a speed indicator for accurate evaluation. For walleyes you seldom move slow as a crawl, nor as fast as you would troll for salmon. Medium speeds work best and straight trolling patterns are more productive than zigzag patterns.

Lake Erie Contacts:

Rickards Bait	_(419)734-2039	. ,
Rickards Bait	_(419)734-2496	
Clinton Reef Marina	_(419)734-3107	
Anchors Away Marina_	_(419)734-1395	. /
Floro's Marina	_(419)898-1572	14
Put-in-Bay		1
Chamber of Commerce_	_(419)285-2832	
Ted's Tackle Shop	_(419)285-3172	
South Passage Charters_	_(419)285-4631	

.11"

P. Read

LAKE TROUT

Ithough the Great Lakes harbor nearly every sport species of game fish: bass, walleyes, perch, muskie, catfish, it is trout and salmon that have captured the attention of fishermen. Trout and salmon have drawn anglers to the Great Lakes like bees to honey, providing the region with a title of "America's greatest fishing hole."

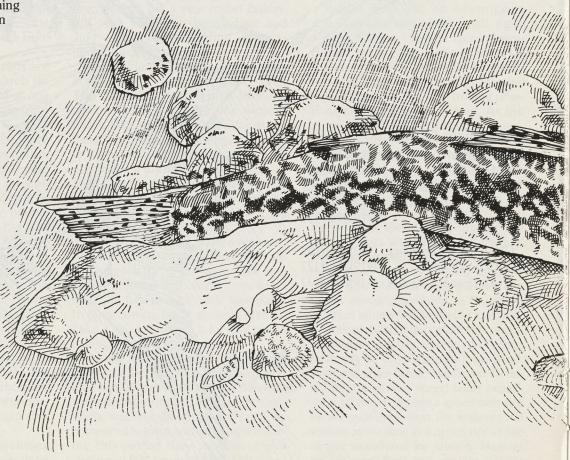
The Great Lakes stretch the entire length of northeast America. States that border the edge and surround these huge bodies of fresh water have seen the improvement of fishing for over two decades. When you consider the size of the average fish taken and the total number of fish caught each year by trollers, it boggles your mind.

Black-mouthed chinook, silversided coho, sleak steelhead all draw anglers to the Great Lakes. But lake trout are highly respected by most trollers and a welcome addition to any big water fisherman's catch.

Lake trout are best identified by a deep forked tail, large head, elongated body and the entire fish is covered with lightcolored dots. Most lakers sport a white edge on the anal fin and tail. Lake trout are native to the Great Lakes and strictly found in North America. Common names include grey trout, lakers or mackinaw trout. Brook trout and lake trout belong to the same group of fish as the Dolly Varden, which is a member of the char family.

Lakers are usually grey-colored but variations in color are seen from lake to lake. Some lake trout are green or bluish colored, others appear brownish or almost black. The average fish weighs six to 15 pounds with big fish weighing 15 to 20 pounds; trophies are over 20 pounds. Michigan's state record lake trout weighed 54 pounds.

Lake trout spawn during the fall on



GREAT LAKES FISH

Lake trout are best identified by a deep forked tail, large head, elongated body and the entire fish is covered with light-colored dots.

rock strewn reefs. Early November is peak spawning season and the average female lake trout lays five to ten thousand eggs. It takes from four to six weeks for laker eggs to hatch. Biologists feel that today's Great Lakes lakers are not reproducing naturally. More studies are needed to evaluate and hopefully create natural production of lake trout.

Although federal and state fisheries biologists have planted millions of lake trout in the G r e a t Lakes, the fish are not naturally reproducing and researchers began studies in '80 to find out why. Suspected possible causes were water contamination and eutrphication (better known as aging) of the lakes.

The National Oceanic and Atmospheric Administration (NOAA) brought a research submarine to northern Lake Huron during '86. Studies were made near Six Fathom Bank in central Lake Huron, a well-known laker spawning site. The sub examined the bottom, took samples of rocks and water.

Researchers evaluated conditions on the reef with southern Lake Huron and northern Lake Huron where some lake trout spawning activity was noted. High levels of hydrogen sulfide, and phosphorus were noted, which speeds up aging and also contributes to reproduction failure.

Research continues this winter with young lake trout placed in cages on Six Fathom Bank. Scientists are monitoring survival and growth.

Lake trout are open-water fish that relate to the Great Lakes bottom. The average laker will reach two pounds in weight by the end of its first year. During this time lake trout prefer to stay in water that is 100 feet deep. After another summer fish will triple their growth and weigh from five to ten pounds. Lake trout of this size make up the bulk of the Great Lakes population. Those that live longer become much larger in size.

Small lakers feed on plankton or larvae of aquatic insects and bottomdwelling baitfish. Later they feed on cisco, smelt, whitefish, sculpin, alewife, herring, johnny darters and chubs. Stomach biopsies have revealed that adult lake trout feed primarily on alewife. Stomach analysis has also revealed that lake trout gorge themselves when they feed. Few adult fish carried less than six baitfish in their stomachs, most had eight to 14 baitfish in their digestive system. It is believed that lake trout feed during the night. Lakers are somewhat light sensitive and become active after sunset, relying on the cover of darkness to move within easy striking range of unsuspecting baitfish.



Wisconsin Department of Natural Resources Box 7921 Madison, WI 53707

Phone: [808] 266-2621

Bureau of Fish Management Box 7921 Madison, WI 53707 Phone: (608) 266-1877

RESIDENT:

Daily\$ 6.00

PUBLICATIONS:

WISCONSIN INFORMATION

Guide to Wisconsin Hook/Line Fishing Regulations Fishing Wisconsin Great Lakes

LICENSE FEES:

NON-RESIDENT:

One Day\$ 6.00
Four Day
15 Day
Family 15 Day
Family Annual

Wisconsin Tourism Department — (608) 266-2161

PENNSYLVANIA INFORMATION

Pennsylvania Fish Commission Box 1673 Harrisburg, PA 17105-1673 Phone: [717] 657-4519

PUBLICATIONS:

1987 Fishing Regulations Anglers Cook Book Pennsylvania Boating Pennsylvania Salmon Fishing

NON-RESIDENT:

 Seven Day
 \$15.00
 Annual
 \$12.00

 Annual
 .20.00
 No Trout/Salmon Stamp

Erie Chamber of Commerce. [814] 454-7191

OHIO INFORMATION

Ohio Department of Natural Resources Publications Center Fountain Square, Bldg. B-1 Columbus, OH 43224 Phone: [614] 481-6343

NON-RESIDENT:

 Three Day
 \$ 8.00
 Annual
 Annual
 \$ 8.00
 Lake Erie Ohio Walleye Limit – 6 fish

LICENSE FEES:

RESIDENT:

FISHING CONTACTS:

Put-In-Bay Chamber of Commerce. . . . (419) 285-2832

Floro's								.[419] 898-1572
Ted's Tackle								.[419] 285-3172
Walleye Charters								.[419] 285-4631

NEW YORK INFORMATION

New York Department of Conservation 50 Wolf Road Albany, NY 12233 Phone: [518] 457-5400

PUBLICATIONS:

1987 Fishing Guide I Love New York Trout/Salmon

LICENSE FEES:

NON-RESIDENT:

Three Day	
Annual	
Sportsman's License	
Trout/Salmon stamp not needed	

RESIDENT:

Public Hunting & Fishing Areas

LICENSE FEES: RESIDENT:

COMMUNITY RESOURCES:

PUBLICATIONS:

1987 Fishing Regulations

INDIANA INFORMATION

PUBLICATIONS:

"Where to Fish in Indiana"

1987 Fishing Regulations

Indiana's Shoreline - A Recreation Guide

RESIDENT: Annual.....\$ 6.00*

*Salmon/trout stamp not required with one day license.

LICENSE FEES:

NON-RESIDENT:

Indiana Department of Natural Resources

Division of Fish & Wildlife

607 State Office Building

Indianapolis, Indiana 46204 Phone: [317] 232-4080

Une Day [salmon stamp not required]	
Three Day	
Seven Day	
Annual	
Trout/salmon stamp	

COMMUNITY RESOURCES:

Portage Chamber of Commerce Phone: [219] 762-3300

> Michigan City Chamber of Commerce Phone: (219) 874-6221

Lefty's Coho Landing

[219] 762-7761

East Chicago Chamber of Commerce Phone: [212] 398-1600

LaPorte County Convention Visitors Bureau Phone: [219] 872-5055

Michigan City Port Authority Phone: [219] 872-1712

Boat launching ramps sites include: Michigan City, Gary, East Chicago and Burns Waterway (locally referred to as Burns Ditch).

Fishing Conditions Information:

Doyne's Marine [219] 762-7622 South Shore Marine [219] 762-2304

MICHIGAN INFORMATION

Michigan Department of Natural Resources Fisheries Division P.O. Box 30028 Lansing, Michigan 48909

Phone: [517] 373-1280

PUBLICATIONS: Michigan Fishing Guide - Rules & Regulations Know Your Great Lakes Salmon & Trout

"Hot Line Number" (DNR) (517) 373-0908

Mollhagens Fishing "Hot Line," St. Joe-Benton Harbor (616) 983-3381

LICENSE FEES:

NON-RESIDENT:

Dne Day.....\$ 5.35 *Both license holder & spouse must purchase salmon/trout stamp

COMMUNITY INFORMATION:

St. Joe-Benton Harbor Twin Cities Chamber of Commerce Phone: [616] 925-0044

New Buffalo Oselka's Snug Harbor Marina Phone: [616] 469-2600

ILLINOIS INFORMATION

Illinois Dept. of Conservation Division of Fish & Wildlife Resources Lincoln Tower Plaza 524 South Second Street Springfield, IL 62706 Phone: [217] 782-6424

Illinois Dept. of Conservation State of Illinois Building 10.0 W. Randolph, Suite 4-300 Chicago, IL 60601-3184 Phone: [312] 917-2071

PUBLICATIONS:

Illinois Fishing Regulations & Guide Fishing Lake Mcihigan

Directory of Licensed Charter Operators

Outdoors Report [Dept. of Cons.] — (312) 793-4024 Salmon Unlimited: "Hot Line" — (312) 282-7100

LICENSE FEES:

One Day [Lake Michigan only].....\$ 2.50 . . . 10.75

NON-RESIDENT:

One Day [Lake Michigan only]	.\$	2.50
Annual		7.50
Salmon stamp		2.50
Sportsman's License		.13.75

RESIDENT:

COMMUNITY RESOURCES:

Chicago Park District Marine Division Phone: [312] 295-2270 Waukegan Port Authority Phone: (312) 623-6520

Chicago Chamber of Commerce Phone: [312] 786-0111 Waukegan Chamber of Commerce

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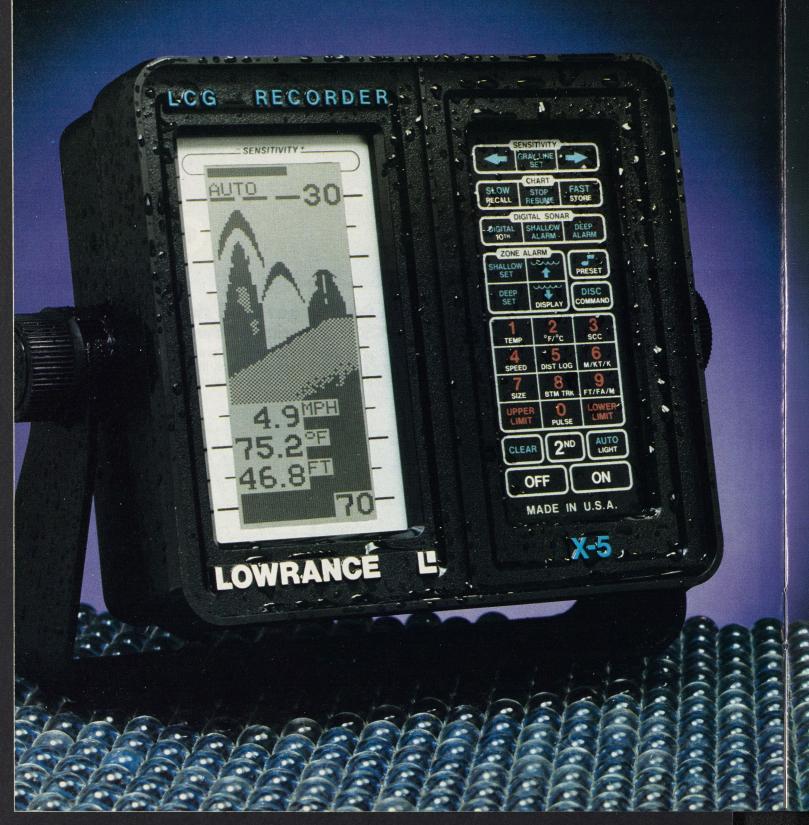
Cetec	Ror	mar	

3320 W. MacArthur Boulevard/Santa Ana, California 92704/(714) 540-5120

CUT HERE

NAME A	DDRESS			
CITY	STATE	ZIP		
BOAT MAKE		_ LENGTH		
STEERING SYSTEM				NICAL
IF HYDRAULIC, STEERING CYLINDER VOLUME OR MODE	EL NO			
IF MECHANICAL, TOTAL HELM TURNS LOCK TO LOCK				
IS SECOND STATION REQUIRED			□ YES	
IS LORAN INTERFACE REQUIRED			□ YES	
IS SAT-NAV INTERFACE REQUIRED			□ YES	
DO YOU WISH TO BE CONTACTED BY TELEPHONE			□ YES	
PHONE NUMBER ()				

Clearly Finds Lowrance X-5 LCG image beats all



Fish!

paper graphs except one.

You're a serious sonar user. You've been intrigued by the promise of liquid crystal units, a pictorial sonar that doesn't use paper, and is easy to see in sunlight (unlike video). But so far, you've been disappointed by the pictures they produce. The "blocky" pictures just aren't clear enough.

Enter the Lowrance X-5 LCG. The resolution, zooms, grayline, and total sonar system are so superior to competitive products that it's almost a shame to call it a liquid crystal unit. And while the resolution isn't quite as good as the industry standard for excellence — the Lowrance X-16 paper graph — the X-5 leaves competitive liquid crystals and paper graphs far behind in its wake.

The X-5 has such an advanced microcomputer that it runs itself with the simple touch of a button. Or, you can take as much control as you like. It has 3,000 watts* of power, the most watertight case ever developed, and a new faceplate that's easy to see even with polarized sunglasses. Plus, the X-5 is several units in one: a graph recorder, a digital sonar, a speedometer,** a trip log,** and a surface temperature gauge.

Lowrance X-5 and the companion X-4. Sonar will never be the same again.

*375 watts RMS **Requires Optional Speed Sensor (LSS·5).



A Word About Liquid Crystal Resolution



Competitive Liquid Crystal Units Most competitive units have 30-75 pixels (dots) vertically. Fish are shown as "blocks" that you

often can't distinguish from the bottom, bottom structure, interference, or other suspended objects. A poor value to the user *especially* without a good zoom. Not as good as a flasher. Lowrance would never put its name on such a product at any price. (See NOTE below.)



Lowrance X-4 Has 82 pixels (dots) vertically with a telescopic zoom of *any* segment as small as 10 feet. Fish are usually revealed as

clearly defined arches, *especially* when using the zoom feature. Excellent value to the user. Better than a flasher for all but the most experienced flasher users.



Lowrance X-5 Has 192 pixels (dots) vertically, grayline feature, plus variable zoom of any segment as small as 10 feet. Excellent

value to the user. Far better than any competitive liquid crystal unit. Even better than competitive paper graph machines.

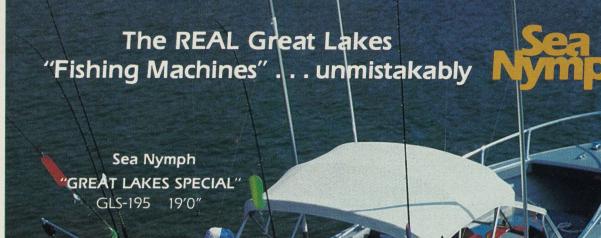


The Industry Standard for Comparison The Lowrance X-16 paper graph.

Note: As a sales gimmick, some competitive units show pixels above the bottom in a color such as red. This actually provides less contrast than black pixels and is of no value other than a sales "novelty." Only with better resolution and grayline can you really distinguish fish from the bottom, random noise, thermoclines, downriggers, buoylines, nets, tree branches in man-made reservoirs, shipwrecks in the ocean, baitfish, plankton, etc.

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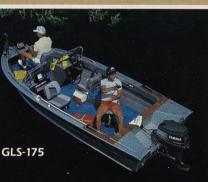
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Performance-Matched Reel & Downrigger Models On the Great Lakes. In the Pacific Northwest. Wherever kings and coho run deep, now you have the Penn *Salmon SystemTM*... performance-matched reel and downrigger combinations that make deep trolling easy on you, deadly on salmon.

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The Great American Tackle Company Penn Fishing Tackle Mfg. Co. 3028 W. Hunting Park Ave., Dept.GLTA Philadelphia, PA 19132

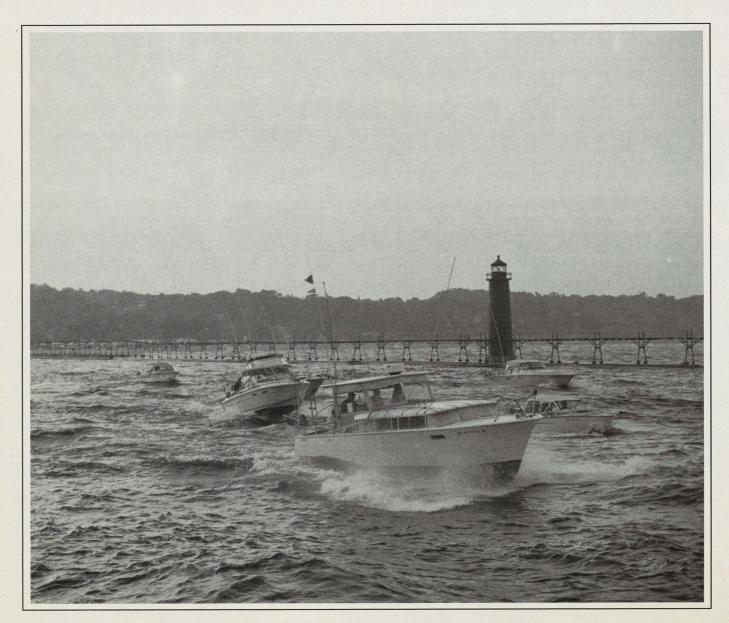


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MY FAVORITE FISH RECIPES by Kay L. Richey

The Great Lakes offer a smorgasbord of fish but proper care and preparation is the key to superb eating.

The table quality of fish is best when it is cooked fresh. Fish flesh should be firm, not soft, and the longer the delay in cooking the less flavor it will offer at the table. There are several ways to preserve the flavor of your catch. The most important is how it is cared for after the lure is removed. Keep fish on ice in a covered cooler. Immediately upon reaching shore, prepare them for later use by filleting, skinning and boning in



some cases, or just removal of entrails in others. If you have room, freeze the whole fish, the table quality of the flesh will be the next best thing to the day it was caught.

Fish is higher in protein and lower in calories than any other food we eat. Fish are loaded with the minerals we need in our daily diet. Some fish are high in vitamins A and D.

Fish is one meat that is easily digested. I've never had a tough piece of fish. The cooking time is only minutes for most fish dishes.

Proper handling and preparation methods help in keeping your catch fresh. If you are going to freeze your fish whole, entrails and all, the fish should be killed immediately and put on ice. Wrap the fish in Saran Wrap and make sure all the air is out of the package. Then wrap it in two layers of waxed freezer paper. Freeze immediately, making sure enough air circulates around the fish to freeze it thoroughly. When ready to use the frozen fish, place the fish in cold water and let it thaw until pliable and prepare it according to the recipe you wish to use it for.

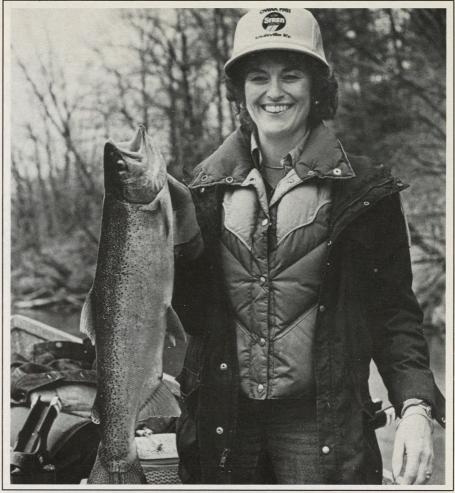
Pan fish are easily skinned and filleted and then frozen in water. Again, remember the water will start to evaporate and the flesh of the fish will start to deteriorate. This is commonly called freezer burn. Some of it can be trimmed away and the meat will still be very tasty.

Trout and salmon are oily fish. What I cannot use fresh I will can. Home canned salmon and trout is far superior to commercially canned fish. It is easy to prepare and long lasting.

You can greatly reduce the contaminants in fish by removing the skin, cutting away all belly fat, lateral line and cutting a deep "V" along the dorsal fin of the fish.

I'm one fisherman who would rather spend time on the Great Lakes, an inland lake or on a stream fishing instead of the kitchen. You will find my recipes very simple and the average cook has most of the ingredients at home. Most of the recipes will take less than 10 minutes of preparation, however many take longer to cook.

One word of caution... most people over-cook fish, taking the flavor out. If I use the microwave, I check thin fillets every minute, thick fillets every 3 minutes. Test by flaking the thickest part of the flesh with a fork. Always remember food cooked in a micro-



Author holds a Great Lakes steelhead.

wave continues to cook after being removed from the microwave.

Many of the recipes following are from my cookbook SAVOR THE WILD and from MY 10 FAVORITE WALLEYE RECIPES and MY 10 FAVORITE SALMON AND TROUT RECIPES minicookbooks.

BAKED CHINOOK SURPRISE

2 pounds of salmon fillets 1/4 teaspoon salt 1/4 cup grated Parmesan cheese 1/3 cup French dressing 1-1/2 tablespoon lemon juice 1 small can french fried onions

Cut salmon fillets into individual sized portions (figure about ³/₄ pound per person). Place salmon in a shallow baking dish, and combine french dressing, lemon juice and salt. Cover the fish with this mixture, and marinate for 30 to 40 minutes. Turn fish over once in marinade, and place in

dish. Crush onions, and add cheese. Sprinkle cheese-onion mix over fish, and bake in a 350-degree oven for 30 minutes.

BAKED TROUT OR SALMON WITH HORSERADISH SAUCE

1 large filleted trout or small salmon 1/2 cup fresh lemon juice 1/2 pound melted butter Fresh ground horseradish sauce

Marinate trout or salmon in lemon juice for one hour. Brown butter in a deep baking dish. Place fish in dish, and bake approximately 15 minutes at 400 degrees. Serve with horseradish sauce made by mixing 1 teaspoon fresh horseradish, 1 tablespoon fresh lemon juice and 1/2 cup mayonnaise. Salt and pepper to taste.

BAKED SALMON SAUTERNE

1 pound salmon fillets 2 green onions



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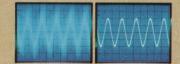
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Tests show noise levels of a conventional VHF (left) compared to Titan's Clearwave circuitry.

HumiSeal[®] moisture protection lets you mount Titan even in spray-soaked cockpits.

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Represented in Canada by: Cardon Communications, Inc., Hamilton, Ontario 416/527-1040 *GaAsFET: Gallium Arsenide Field Effect Transistor 1/2 cup California sauterne
1 tablespoon butter
1 tablespoon flour
Salt and pepper to taste
1 dash cayenne pepper
1 tablespoon chopped fresh parsely
1/2 cup sliced black olives
2 teaspoons lemon juice

Sprinkle fish with salt and pepper and arrange in greased, shallow baking dish. Chop green onions and sprinkle over fish. Add wine and bake at 400 degrees for 15 minutes.

Melt butter and blend in flour, cayenne pepper and salt to taste. Drain wine off fish into butter and flour roux. Cook and stir until it is thickened. Add parsley, olives, and lemon juice. Pour this sauce over the fish. Serve immediately.



Chinook salmon have firm flesh and provide great table fare.

STEAMED WHITE FISH CASSEROLE

1 white fish 1/2 teaspoon dried parsley 1/2 cup flour 1 quart milk 1/4 pound butter salt and pepper to taste Italian bread crumbs

Steam fish on a rack in a dutch oven if you do not have a fish steamer until fish is tender and flakes with a fork. Remove all bones while the fish is hot. Set aside.

Make a sauce by bringing the milk to a gentle boil, add parsley, butter, salt, pepper and flour (which has been moistened with a little water). Stir until thickened and smooth. Set aside to cool. When cool stir in the beaten eggs.

In a greased casserole dish place a layer of fish, pour sauce over the fish and cover with a layer of bread crumbs. Bake 20 minutes in a 400 degree oven. "With Cannon downriggers on my boat, the only tournament competition I worry about are the other guys with Cannons."

Professional freshwater fishermen choose Cannon's full-sized downriggers, the Magnum 10A II[™] and Uni-Troll 6 II[™]. Called the Freshwater Series, these new-generation models are tougher, more corrosion-resistant and lighter than earlier Cannon models.

Both units have frames made of Lexan[®] polycarbonate, an incredibly tough high-tech resin composite that is stronger and lighter than aluminum. The new Freshwater Series

downriggers also have

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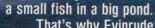
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TOOT'S BAKED BROWN TROUT

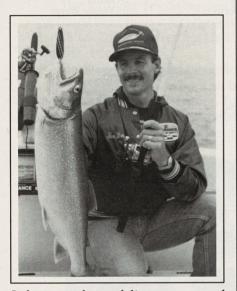
1 five-pound gutted and gilled brown trout

- small package of Pepperidge Farms stuffing mix
 package frozen small shrimp
 can cream of shrimp soup
- 1 small diced onion

1 stalk diced celery

butter

Saute celery and onions in butter. Add soup, shrimp and stuffing mix. Lay trout on heavy aluminum foil, season cavity with salt and pepper, stuff trout with stuffing mixture and wrap foil securely around fish. Bake at 350 degrees for one hour, check thickest part of fish and if not done bake another half hour.



Lake trout have delicate meat and must be placed on ice immediately after being boated.

TROUT SUPREME

Trout or salmon steaks (one per person) 1/2 teaspoon Worcestershire sauce 1 teaspoon dried mustard 1 tablespoon lemon juice 1 cup heavy cream 3 sliced hard boiled eggs 1/2 cup butter 1-1/2 tablespoons corn starch paprika

Melt butter while broiling steaks. Mix corn starch, lemon juice, mustard and Worcestershire sauce, and slowly add cream while stirring constantly. Add eggs to thickened sauce, stir and pour over broiled steaks. Add paprika for color.

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For a copy of our Shimano catalog and a Team Shimano patch, please send \$2.00 to: Shimano American Corp., One Shimano Drive, Irvine, CA 92718.



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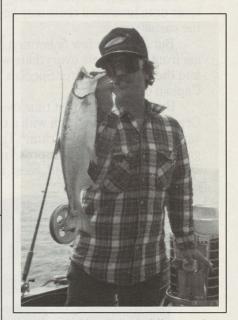
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BROILED WALLEYE DELIGHT

3 pounds filleted walleye Lawrey's seasoning salt and pepper Miracle Whip salad dressing paprika lemon wedges

Place fillets on broiling pan, season with Lawrey's seasoning salt and pepper, and liberally spread Miracle Whip salad dressing over the fish. Sprinkle paprika over fish, and broil for five minutes. Check to see if fillets are cooked. Do not over-cook. Serve with lemon wedges.



Small coho have pink fillets and are highly regarded for fine eating.

CREAMED WALLEYE WITH ASPARAGUS

1-1/2 pound filleted walleyes 1 bay leaf 1 sliced garlic clove pepper 1/4 cup dry white wine 1/4 cup water 1 package frozen asparagus spears 3 tablespoons butter 1 tablespoon cornstarch 1/2 cup sour cream parsley springs

Place fillets in buttered microwave cooking dish. Add wine, water, pepper, bay leaf and garlic. Cover with Saran Wrap, and microwave at high temperature for three minutes.

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"Once a walleye looks at an Erie Dearie, he might as well be lookin' at a fryin' pan."

Walleye, beware, you're looking at the famous Erie Dearie lures that Captain Dan



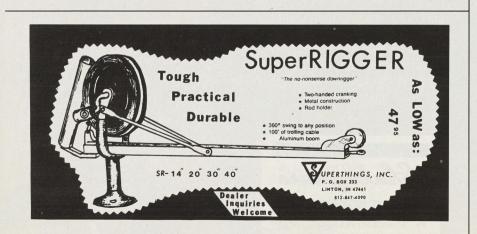
Galbincea's all-women team used to capture top prize in the 1986 Lake Erie Pro-Am Walleye Tournament. But anglers, you'd better beware, too, because if it doesn't say "Erie Dearie" on the blade, it's just a cheap imitation of Captain Dan's original weight-forward lure that made Lake Erie the walleye capital of the world.

Snap the new All-Gold, All-Silver, Shimmy or any other lure from the Erie Dearie line on your line and you'll quickly remember why you went fishing in the first place.

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Captain Dan's

Made in USA



Steam asparagus according to package directions. Melt butter in fry pan, add cornstarch, add liquid from fish and cook over medium heat until it thickens. Add sour cream, and salt to taste.

Arrange asparagus around fish fillets, pour thickened sauce over fish, garnish with parsley sprigs and serve immediately.

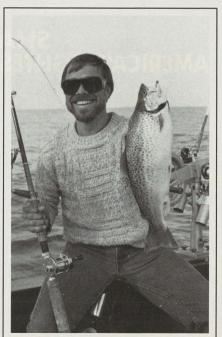
MICROWAVE WALLEYE IN SOUR CREAM

3 pounds walleye fillets salt and pepper to taste 2 tablespoons of finely chopped green onions 2 tablespoons butter 1/2 cup Parmesan cheese 1/2 cup Italian bread crumbs lemon wedges

Place fish in a microwave-proof dish. Salt and pepper fillets to taste, mix onions with butter and spread over fillets.

Mix sour cream, cheese and bread crumbs. Spread mixture over fish.

Cover dish with Saran Wrap and cook three minutes at high temperature.Check to see if fish is done, and if needed return to microwave at oneminute intervales until done. Do not overcook.Serve with lemon wedges if desired.



Most brown trout fillets need to be trimmed of body fat.

PAN FRIED WALLEYES

3 pounds filleted walleyes 1 egg beaten 3 tablespoons Worcestershire sauce 2 tablespoons table mustard 1 tablespoon water flour salt and pepper to taste finely crushed cracker crumbs

Mix egg, Worcestershire sauce, mustard and water. Salt and pepper fish to taste, dip fish in flour, and then in egg mixture, roll in cracker crumbs. Heat Crisco or Planter's Peanut oil in heavy fry pan, and fry quickly until golden brown.

MARINATED BASS

Mix a marinade of: 2-1/2 cups salad oil juice of 3 limes 3 teaspoons salt dash tabasco 1 cup white vinegar 5 teaspoons celery seed 1 package cheese-garlic seasoning dash Worcestershire sauce

Other ingredients: 1 package pickling spices 2 cups finely chopped green onions 1 large chopped green pepper 1 bunch finely chopped celery tops

Place whole or filleted bass in a pan and cover with water. Place pickling spices, celery tops and 1 tablespoon salt in a large tea strainer or cheesecloth bag. Place this in pan with fish and bring to a boil. Simmer until done (about 5 minutes) and test with a fork for flakiness.

Strain and let cool, remove all bones. Alternate layers of fish, onions and green peppers in a large glass bowl. Pour marinade over ingredients, cover and store in refrigerator for 12 hours. Then stir gently. Lift bass out of container with slotted spoon, and serve on stone-ground crackers. This will keep up to two months.

TANGY BASS

Fillet fish and cut into cubes approximately 1-1/2 inches square. Place cubes in shallow pan and cover with Heinz-57 sauce. Marinate fish for 12 to 24 hours, remove cubes of fish, roll in self-rising cornmeal and deep fry until golden brown.

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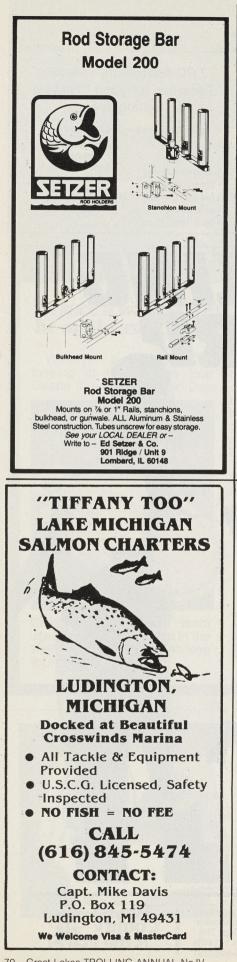
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ROCK BASS OLE'

2 pounds rock bass fillets 2 tablespoons tabasco sauce 1 egg Frito corn chips 1/2 cup milk salt and pepper to taste flour melted shortening

Make a batter of one egg and ¹/₂ cup milk, add tabasco sauce, salt and pepper to taste, and mix thoroughly. Dip fillets in batter, roll them in mixture of flour and blenderized Frito corn chips which add a special south-of-theborder flavor. Use one part white flour to two parts finely ground Frito chips. Place the batter-dipped fish fillets in the hot shortening and turn them when they attain a golden brown color.

PHOTO: TOM HUGGLER



Great Lakes walleyes are superb eating.

BUTTERMILK BASS

3 cups buttermilk Aunt Jemima buttermilk pancake mix 2 pounds bass fillets cooking oil

Few people drink buttermilk, but in this recipe it cannot be tasted. The buttery-flavored milk enhances the flavor of largemouth, smallmouth or spotted bass. Place the bass fillets in a bowl and cover completely with buttermilk. Let stand for one hour, add the pancake mix to a brown paper bag and remove the fillets one at a time from bowl. Shake them lightly, two at a time, in the bag until well coated. Lay fillets in a skillet containing 1/2inch of cooking oil that is not quite as hot as is used for deep frying. (The milk solids will clarify and burn) and fry until golden brown. Drain on absorbent toweling.

SWEET AND SOUR PERCH

A perfect recipe to cook those small, bite-sized perch. Heat deep fryer to 380 degrees. Skin and fillet perch, salt and pepper to taste, and mix a thin batter with buttermilk pancake mix and club soda. Dip perch in batter and fry until golden brown. Drain on paper toweling. Heat a jar of La Choy sweet and sour sauce and pour over fried fish.

FRIED PERCH

Fillet fish. Place 1/2 cup white flour, 1/4 cup cornmeal, salt and pepper to taste and 1/2 teaspoon paprika in a paper bag. Shake fish fillets in flour mixture. Fry in 1/2 cup butter and 1/2 cup shortening.

STIR FRIED PERCH FILLETS

2 teaspoons butter

1/4 to 1/2 teaspoon curry powder
1 teaspoon soy sauce
1 large onion, cut in ring
1/4 teaspoon ground ginger
1 pound perch fillets, cut into 2-inch pieces

Melt butter over medium heat in an electric frypan or wok. Stir fry onions until soft. Sprinkle curry powder and ginger over onions, add soy sauce, lower heat, add fish fillets and gently stir to coat perch with seasoned butter.Cover and cook over low heat for 10 minutes. Serve with rice.

BAKED NORTHERN PIKE IN DILL SAUCE

1/2 pound fish per serving
1 can stewed tomatoes
1 chopped oinion
3/4 tablespoon dill seeds

Place fish in baking dish, and mix onions, tomatoes and dill seed together. Pour over fish, bake 30 minutes at 400 degrees. The Bottom Line TBL 300 is the most advanced LCD Depth Sounder on the market . . . a strong statement but true.

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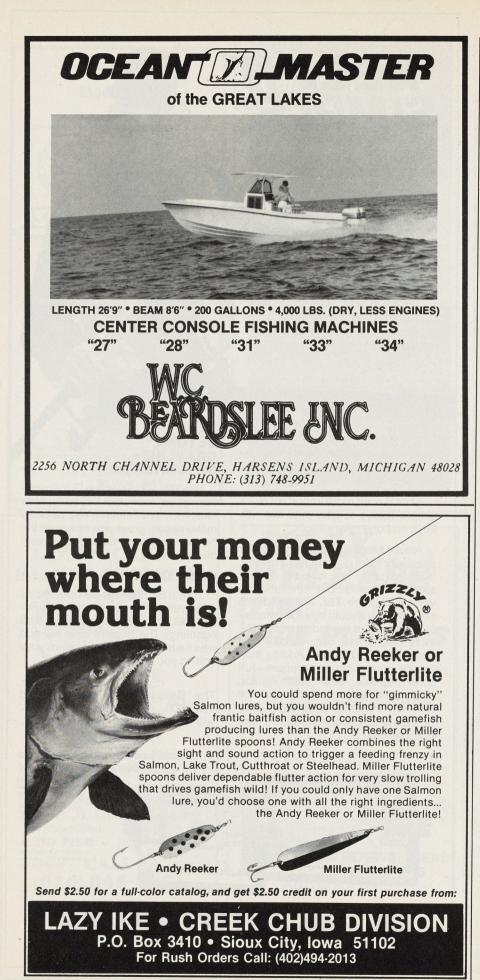
The TBL 300 Selective Discrimination goes one step beyond either Grayline® or Whiteline. You can now make weeds, grass, stumps, even the bottom disappear, leaving fish clearly displayed.

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Your TBL 300 can be updated as new features become available. For just \$49.00 (plus \$5.00 shipping and handling) The Bottom Line will add new features, service and return your unit to you in three days.

The Bottom Line TBL 300 and TBL 200, we kept it simple . . . without sacrificing performance.





72 Great Lakes TROLLING ANNUAL No.IV

PIKE CAKES

1 large pike 1 lemon 1/2 teaspoon salt 1/2 teaspoon pepper 4 eggs flour milk 2 cups bread crumbs

Fillet pike. Put the fish fillets through a meat grinder. Add bread crumbs and mold into patties. Season with salt and pepper. Dip the patties in the beaten egg, then into milk, and finally into flour. Melt shortening in heavy frypan and cook the patties over medium heat until golden brown. Serve with lemon wedges.

SMOKED FISH

Brine: 2 quarts water 1 cup salt 1 cup brown sugar 2 tablespoons soy sauce

Place fish cut into thick steaks in brine and let stand at least 10 hours. Remove from brine and let dry on paper toweling for about an hour. Place steaks on smoker rack. Place brine or water in smoker pan (if you are using a hot smoker). Using hickory or cherry chunks smoke/cook for 3 hours or until done at about 250 degrees.

DEEP FRIED SMELT

Shake cleaned smelt in seasoned flour. Mix 1 cup buttermilk pancake mix with 1 teaspoon paprika. Stir in enough club soda to make a very thin batter. Dip smelt in batter, let most of the batter drain off, deep fry in hot oil, 350 degrees until golden brown.

WHITEFISH LIVERS

Clean livers and wash thoroughly. Be sure the gall is completely removed. Blot excess water off livers with paper toweling. Season with Lawry's seasoned salt and pepper. Roll livers lightly in flour mixed with paprika. Fry in hot butter. Whitefish livers do not have a fishy taste. They really don't taste like liver at all. A delicious hors d'oeuvre.

CEBICHE

Dice fish fillets and put in bowl. Squeeze enough real lime juice to

cover the meat. Put foil over bowl and refrigerate for 24 hours. Wash in cold salt water, rinse in cold water. Chill and serve with cocktail sauce.

CAT 'N KRAUT

Place cleaned and skinned catfish of 1/2 to one-pound size on a square of Reynold's Wrap foil belly up. Fill body cavity with shredded kraut and arrange additional kraut around fish. Fold foil up to form a pouch and seal tightly to hold steam. Bake in oven for 30 minutes at 350 degrees.

CANNED FISH

Filleted, skinned fish cut into 11/2 inch pieces

1 teaspoon Kosher salt per pint jar 1 tablespoon catsup per pint jar 1 tablespoon apple cider vinegar per

pint jar

pressure cooker

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Cut up the fish and make sure all blood is drained from the meat. Pack snugly to within 1-inch of the top of the pint jar. Add salt, vinegar, and catsup. Wipe jar mouth clean and seal with lids and screw down tight. Place the jars in pressure cooker and process according to pressure cooker directions. In most pressure cookers at 10 pounds of pressure for 90 minutes. Let pressure cooker cool overnight before removing lid. If you take the lid off the pressure cooker just as soon as the pressure is reduced the liquid will boil in the jars and you might not get a good seal.

CRAWFISH SNACK

If crawfish are to be used for table food they should be kept alive. Be sure they are rinsed thoroughly before cooking. This eliminates all silt and mud which may cling to their shells.

Crawfish should be sorted, for purposes of cooking-a technique that allows the larger ones to be eaten first, seeing that they take the longest to cook. Dump them alive into a pot of boiling water seasoned with salt, pepper and seafood seasoning. Keep water at a rolling boil and cook for 20 minutes to make sure any parasites are killed.

When thoroughly cooked, place the hot crawfish tails on a warm platter and serve with melted butter or shrimp sauce.



Great Lakes Fishing

Each of these craft is designed with the Great Lakes Fisherman as its first priority. Cruising features are added only if they don't compromise Tiger Craft's intended purpose-a first class fishing craft.

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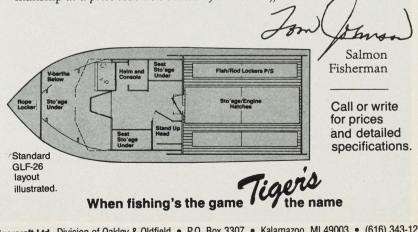
	TigerCraft-24	TigerCraft 26	TigerCraft-29
LOA	24'0"	26'2"	29′5″
Beam	8'4"	10'3″	11′2″
Standard Power	175 I/O*	205 I/O*	Twin 215

A personal note from Tom Johnson

I looked for over two years to find a new boat. When I did find one that came anywhere near my requirements, the price knocked my socks off. I was frustrated.

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Today we very possibly have what you have been looking for-the designs and a blend of modern technology and old-fashioned craftsmanship at a price that won't knock your socks off!



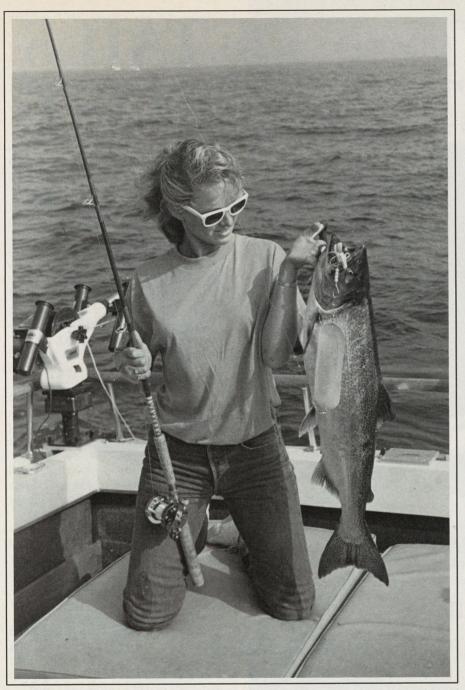
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by Joe Wolff

Topflight Great Lakes captains use this instrument to guide them into trophy fish and home safely.





Instructions from charter captains helped Kim Darwin to find, hook and boat a fiesty chinook.

E lectronic fishing aids by the dozens have appeared on the market in the last decade or so. Surface and deep water temperature gauges, trolling speed indicators, fish finders, graphs, videos, Loran Cs, color selectors, even electric pulsating downriggers have a specific purpose. All are designed to help catch fish and as each new tool is added to the array of fishing gear, the odds of locating and landing some of the trophies of the Great Lakes increase.

Way down the list and often taken for granted is a piece of electronic equipment that can give you a wealth of fishing information—the Marine VHF radio.

That's easy to understand. Marine radios have been around for quite a while. Furthermore, their primary purpose is for your safety and the safety of others on the big water.

It's foolish to consider going offshore on the Great Lakes without some type of communication system,



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and the VHF marine radio is specifically designed for that purpose. The Great Lakes can be a mighty lonely place if you don't have some means of calling for assistance in the event of engine problems, an illness or injury on board or some life-threatening situation.

It should be the first piece of equipment installed when rigging a new fishing boat. It should have top priority over all other gear.

Your safety and the safety of the friends or loved ones with you is certainly worth the couple of hundred dollars it takes to have one aboard. Prices of many of the new synthesized, multi-channel marine radios are well within the budget of a Great Lakes fisherman, whether he has a large cruiser or a small outboard driven open boat.

As long as you've got one on board, take advantage of it to help you get into the fish.

Whether you regularly fish out of one port or trailer your boat to different harbors during the fishing season, that marine radio can be a prime source of fishing information.

Teamwork with other fishermen through the use of your marine radio can be the key to a successful day on the lake for everyone.

There is something inbred in fishermen that causes them to talk. They like to tell someone (usually anyone who will listen) about their victories, and their defeats as anglers. Out on the lake, the marine radio is the only way they can tell their story.

To be successful at using the radio to find and catch fish you first must be a good listener, and at the same time be ready and willing to share your successes with others.

There are plenty of fish in the Great Lakes, enough for all of us, so most fishermen are willing to exchange information with another fisherman.

Some of the information you can glean from your radio include the color and type of lures that are working best, the depth downriggers are set, water depth, and perhaps a certain type of bottom structure where the fish are located.

Just as often you might hear that a faster trolling speed is working for one captain, another might be trolling tight along the shore, or success might be good in a certain area fishing just off the bottom. Maybe the steelhead are active near a scum line found sev-

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VHF Marine Radios Marine Instruments • Reverse Osmosis Desalinator eral miles offshore. All this information is available if one ear is kept to the radio while your eyes are watching for one of the fishing rods to twitch with a strike.

To be a good listener, you will have to be a good communicator and lay some groundwork even before you start out on the lake.

Talk to people at the marina or the launching ramp. Be sociable. Make some new friends. Put faces with the names, and remember boat names. Then get in touch with them on the water. If you have met them, they won't feel they are talking to a total stranger and will answer your call. Tell them where you intend to start fishing, and say you'll give them a call if you get some action.

Ask what radio frequencies (channels) they and the local fishermen use so you can monitor calls when you are out on the water.

It's also a good idea to find out quickly the "lay of the land." Fishermen from every port on the Great Lakes use landmarks as a means of identifying their location. The problem is that fishermen familiar with the area have nicknames for these spots, and sometimes two or three names for the same landmark.

For example, a radio report that a school of salmon is feeding in 100 feet of water off the "Green Onion" is of no value to you unless you know the "Green Onion" refers to a water tower north of the harbor.

As you head out to your fishing spot make some mental notes on the direction some of the other fishermen are heading. Again note boat names.

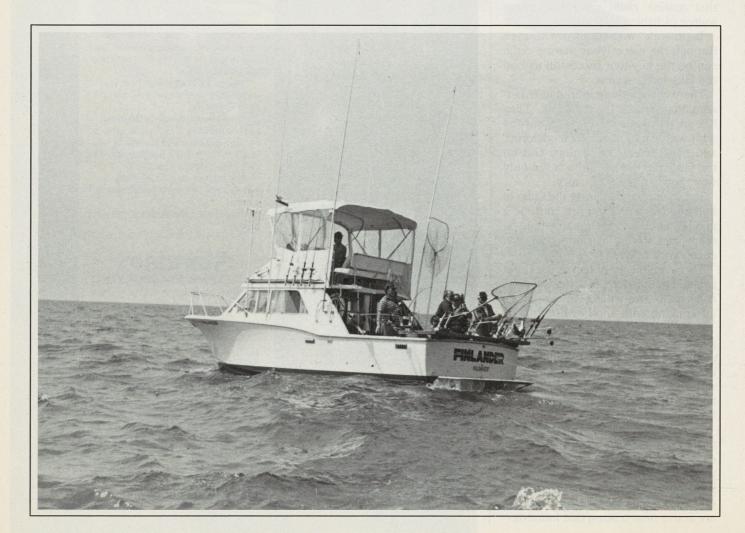
Now, listen to your radio. If you hear a particular boat captain who headed south out of the harbor report he is catching fish you'll have a general idea where his boat is located. By the same token, you might hear that a boat you spotted heading for deep water is having problems finding fish. You'll know not to bother fishing this area.

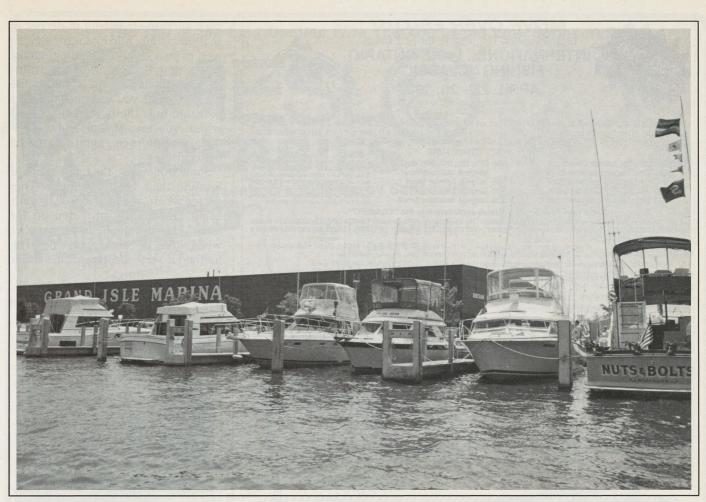
There are precautions to be used when you are considering use of radio information. It might be best in some cases to use discretion. As mentioned, fishermen love to talk. If you hear someone gabbing constantly on the radio, take the conversation with a grain of salt. If he is having great luck he wouldn't have much time to spend chattering over the airwaves.

Think twice when considering pulling lines and running several miles to a spot where fishermen are catching fish. If you are boating some fish stay where you are. By the time you make a run to the hot spot the fish may have turned off.

I recall an outing when I relied on such information, pulled lines and ran five miles. When I got there I found the caller had three fish and I had left a spot where I boated six!

The same can hold true for lures you hear are taking fish. A fellow captain may be having great success with a particular color and brand of spoon, and you may be running the same lure without attracting a strike. Consider using the recommended color but try a spoon that matches your trolling speed.





Marine radios are used by Great Lakes trollers to get fishing information, wave conditions, and at times directions back to port.

When using lures that are proven fish catchers don't be too quick to switch to a lure that you hear about on the radio. Some captains use the radio after every strike. At the same time, don't completely ignore information regarding lure action, color or size.

Remember that radio receives signals from as much as 15 miles away and under certain atmospheric conditions many many more miles.

While fishing offshore from Frankfort, Michigan, I heard another fisherman was having superb success in very shallow water.

When I talked to him he suggested I pull as soon as possible. With a few more questions I discovered his shallow water location was off the Wisconsin shore!

Keep in mind that there are rules and regulations governing the operation of a marine radio. There are also some common courtesies.

Channel 16, the emergency and distress channel must be monitored. It is used only for emergency or making initial contact with another station.

Always monitor before calling and do not interrupt other calls in progress. Remember to give your call sign at the beginning and end of every communication.

When you are exchanging information keep calls as brief as possible. All boaters share the same handful of channels so don't make idle chatter.

Once contact is made with another fisherman on channel 16, a working channel must be selected to carry on a conversation. For pleasure craft these channels are 9, 68, 69, 70, 71, 72, and 78.

There are charter boats working out of almost every harbor on the Great Lakes. These captains are fishing almost every day and are a good source of fishing information. Eavesdrop on their conversations. They usually can be found exchanging information on one of the marine radio commercial channels 7, 8, 9, 10, 11, 18, 19, 67, 79, 80, or 88.

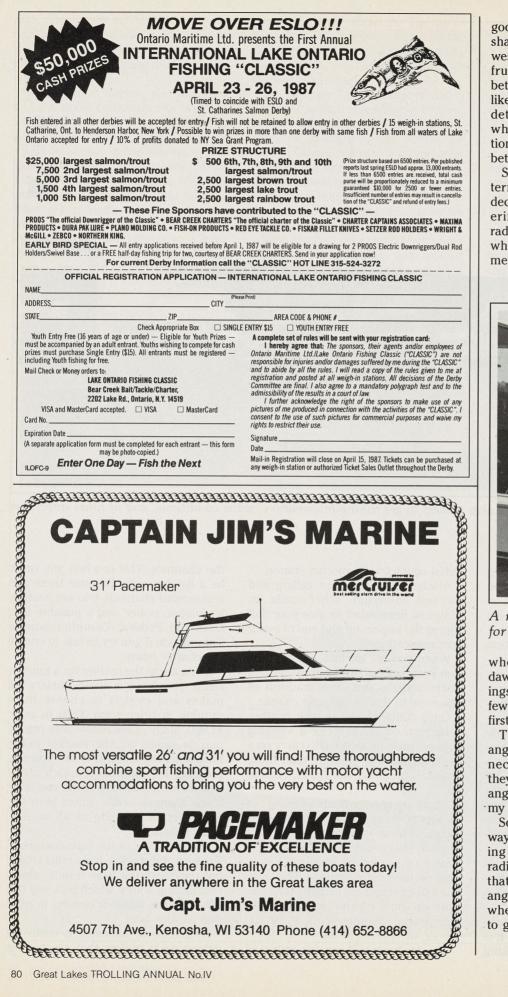
Charter boats will use one or two of

the channels. This is when you must be a listener only. Because these are commercial channels, you are inviting a violation notice and a possible fine from the Federal Communications Commission if you try to talk to one of the charter boats.

If you are in the market for a marine radio you have a wide variety of makes and models to choose from ranging in price from \$200 to over \$1,000. Many of the reasonably priced marine radios on the market today have scanning features which you can program to continually search channels for conversations. Some can scan a few channels while others have the capability of listening to all marine radio channels.

At least two radio manufacturers, *Regency* and *Apelco*, have units which not only scan but have a radio direction finding ability which tells you the direction the signal is coming in relation to your boat.

A directional indicator is useful to determine if trollers that are having



good success are fishing in deeper or shallow water, north, south, east or west of your location. Nothing is more frustrating than to monitor traffic between boats that are catching fish like crazy but you have no means of determining their direction from where you are. Marine radio directional indicators can point you toward better fishing.

Some trollers use the radio to predetermine their fishing strategy. They decide where and how to troll by gathering information provided on the radio. This technique can be applied while sitting dockside or offshore. This method is very effective for fishermen

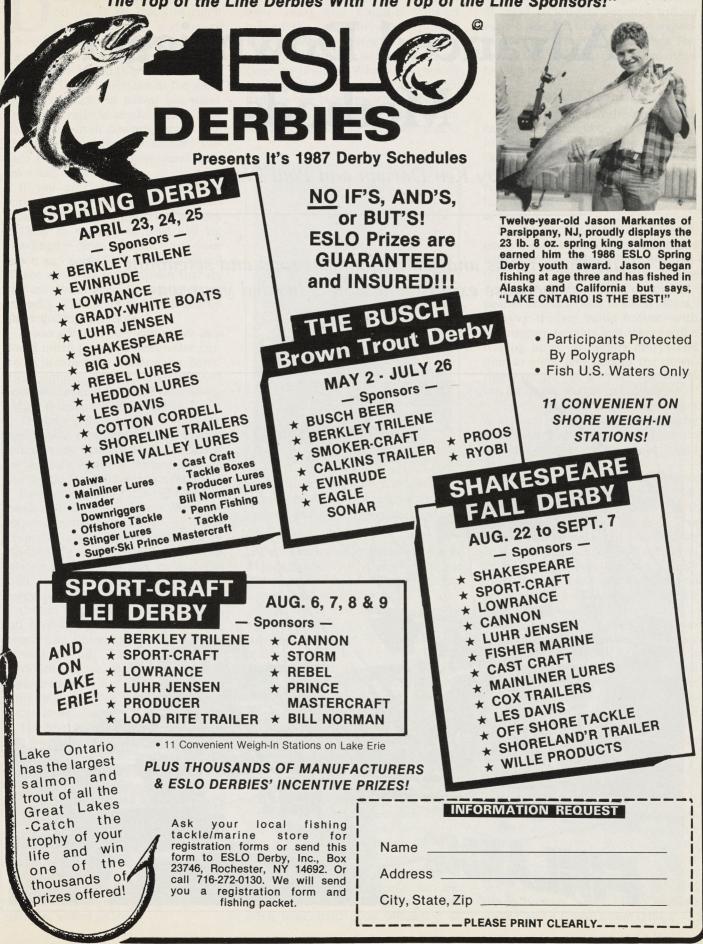


A marine radio is required by law for charter boats.

who do not intend to be afield at dawn. Late morning or afternoon outings are best suited to this method. A few trollers refuse to go out until they first hear good fishing reports.

The marine radio is the Great Lakes angler's greatest friend. VHF units are necessary for safety purposes and they allow fishermen to share valuable angling information. More than once my radio has helped put me on fish.

So, if you are looking for a surefire way to keep tabs on Great Lakes fishing action then make certain your radio is on. I'm certain you will agree that a marine radio is the big water angler's number one fishing tool. And when the lines start popping feel free to give me a shout. "The Top of the Line Derbies With The Top of the Line Sponsors!"



Advanced Downrigger Methods

by Ken Darwin and Paul Weikert

Use these tricks and watch for bent rods and screaming drags because explosive action is headed your way.



D ownriggers have been used on the Great Lakes to catch trout, salmon, and more recently muskie and walleyes. These devices have proved to be reliable fish catching tools and they are respected by Great Lakes fishermen as the number one gadget to outwit big water fish. With reliable predictability, lines can be set from downriggers to fool deepwater lake trout or salmon, surface steelhead or shallow water walleyes and brown trout.

If you are interested in catching more fish then learn to use advanced downrigger trolling methods. Mastery of how to equip your boat and rig downrigger lines can increase your catch and double your fishing action. There are a lot of boatsmen that do not use downriggers to their intended capacity. This point is best made by the following anecdote.

It was a bright July day as we motored north to where deepwater currents brushed the underwater bank. Here, summer chinook congregate and soon we readied lines and sent downrigger weights 80-100 feet down.

The lake surface lay flat calm as the orange sun promised another steamy summer day. Downrigger lines whined as we trolled over a chinook salmon lair but no fish grabbed our offerings.

Paul noticed big "V"s tight to the bank and we lowered lines. We were experimenting with extra-long leads from the downrigger cannonball to dodger/fly lures. Attractors were placed from 40-100 feet behind the ball and downrigger weights were staggered to avoid tangles.

On our first pass by the sharp dropoff a downrigger rod slammed seaward. Kim Darwin scrambled for the straining rod. The big chinook sprinted deeper as 20-pound mono screamed from the reel. After a ten minute battle the mint silver king came to net.

The boat made another pass along the bank, but this time all the lines were set deeper. Dodgers waved far behind the boat and waiting salmon slashed at trailing flies as the combo skimmed bottom. Soon Kim and Jason Darwin were busy fighting a double header.

Nothing is more exciting than hooking two mean kings at once. The back of the boat resembled a Chinese fire drill as fish crossed lines, anglers switched poles and the net man, Ken Darwin, yelled orders. Soon the double came to net, lines were reset and Captain Weikert turned the craft for another pass. When downrigger weights neared the bank and trailing attractors came close to bottom, Wham, we would hook another salmon. By midday we had a cooler bulging with fat chinook.

The trick we used to catch fish in this anecdote was to get lures close to



Jason, Kim, and Ken Darwin hold salmon taken using a special trolling pattern and downrigger method.

bottom and we set dodgers way back. This method really works during those summer doldrums when salmon stop striking spoons or plugs.

From one end of the Great Lakes to another, anglers ply their offerings in search of game fish. The predominant trolling method is with downriggers. Yet, some captains seem to outproduce other fishermen. This is because they do not simply toss baits over the side and troll about haphazardly. Successful trollers have an indepth grasp of how to use downriggers effectively. They have a game plan, a methodology to the madness of fishing the Great Lakes. Their trolling techniques are honed to a fine edge.

Great Lakes fishing demands expertise if you want to be successful. Planer boards, *Dipsey Divers*, flatlines, outrigger lines, and downriggers require you to have knowledge in order to run them correctly. But the difference between use and success is often dependent upon utilization of advanced fishing techniques. Mastery of these techniques requires trolling experience and trial and error experimentation. However, here are a few tactics that can help you to become a trolling pro.

Bottom Bouncing

Many Great Lakes fishermen like to catch lake trout but do not know how to make trolling for them easy. Lakers like to lie near bottom. Lake trout are found in all the Great Lakes and highly respected by anglers. Lakers are structure fish and congregate within inches of bottom.

The key to consistently catching lakers is a slow trolling speed combined with use of downrigger lures near bottom. Most fishermen prefer to use dodger/fly, dodger/squid or cowbell/ peanut combinations to catch lakers.

Savvy trollers bump bottom with downrigger weights and lakers strike trailing lures. Attractors are placed four to eight feet behind the downrigger weight and lines are attached to the fin of the weight (see figure 1).

This results in stirring up bottom debris and hungry lakers are drawn by the action. The trailing flashers excite fish into striking the fly, spoon, squid or peanut.

There are a number of line releases that work great for this brand of trolling but I prefer a rubber band that is wrapped twice around the line. This release will let you know if a small fish is hooked because the rod will throb or jump to the pull. Big lakers really make the rod jump and at times you will have to jerk the rod to set the hook and snap the release.

If you are fishing where the lake bottom is flat, occasionally let downrigger weights bounce bottom. If the bottom is steep set lines in deep water then troll the offering until downrigger weights hit bottom, then turn to deeper water. Lakers will grab the lure when it comes off bottom. Use an "0" size dodger for this style of fishing. A set of chrome cowbells is a natural for this method. Productive dodger colors include: chrome, fluted or hammered chrome, gold, chrome with prism tape or white.

Some sport anglers use a banana shaped downrigger weight with this method. *Cannon* makes banana weights. Yet other fishermen use a downrigger weight that has a 12-inch wire below it. The wire is dragged along bottom which like a walleye angler uses a *Lindy* bottom cruiser.

Stackers

There are several ways to attach a second line to each downrigger. This trick helps you to double the number of lures you have in the water and by staggering downrigger depths you cover a lot more water. Stackers are a great way to make trolled spoons appear more like a school of baitfish.

One surefire method is to use a *Walker* release above the downrigger weight. Take the swivel off the *Walker* release and run the downrigger cable through the hole in the release (see figure 2). Place a small brass collar about ten feet above the downrigger weight so the stacker will not move more than ten feet above the bottom line.

This tactic requires two rods. Once the bottom line is set, lower it a few feet as you place the stacker line out. Both lines lower simultaneously and most trollers like to use a light spoon or small plug on the stacker.

It is wise to use a stacker on each downrigger. This tip will double the number of lures you offer waiting fish and often will up your catch by 30 percent.

Add-A-Lure

Another double bait rig that is popu-



"Big Jon" John Emory introduced many anglers to downrigger fishing tips.

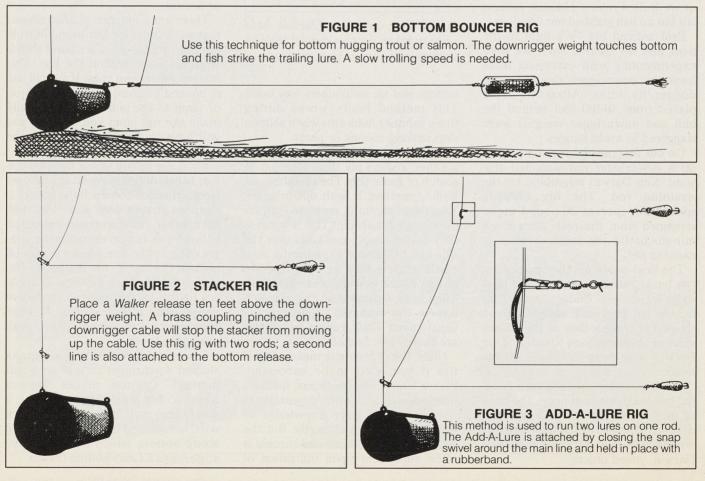
lar with trollers is the add-a-lure technique. Captain Al Laaksonen and Pete Ruboyianes are pros at using this method for catching trout and salmon.

Al likes to lower the first lure about seven feet into the water before he attaches a second lure. The second lure is attached by wrapping a rubberband around the main line, then the swivel from the add-a-lure is closed around the main line and through the rubberband. The add-a-lure is on a three- to five-foot leader. When set, both lures are lowered to the desired depth. The result is two lures running from a single fishing line. This method works like dynamite. Nothing is more exciting than catching two salmon on a single rod (see figure 3).

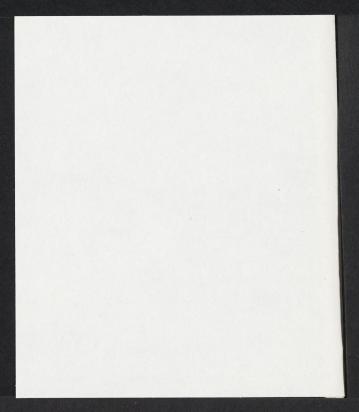
When a fish strikes the upper lure the rubberband breaks and the add-a-line swivel slides down the main line. Once again, light spoons are preferred on add-a-line rigs. Try a Lucky Lure, Fin-Weaver, Southport Slammer, Northport Nailer, William Wobbler, Evil Eye or Miller spoon.

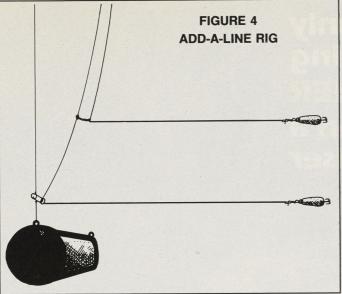
I'll always remember an outing with Dick Swan, famous light line angler. We were showing Dick how to rig adda-lures when we hooked a pair of chinook.

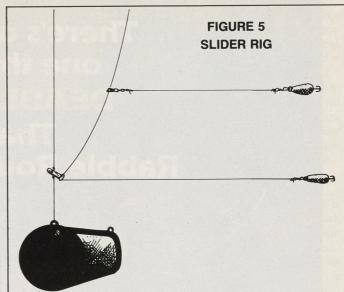
Darwin held the rod as two silvery monsters surfaced near the boat. Ken passed the rod to Dick, despite Swan's comments about meat fishing with heavy line. Swan smiled with joy as the rod bent double from the fight of two kings. Then one fish sprinted north





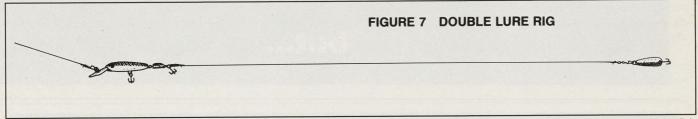




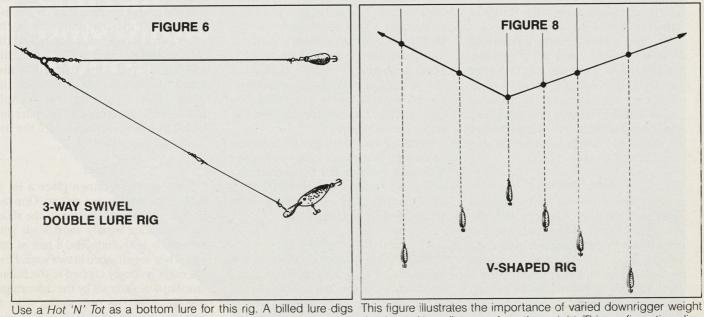


ond line.

Use this method to set two lines from a single downrigger. A rub- Sliders are attached by simply closing the snap swivel around the berband is attached to the main line, then knotted around the sec- main line. The lure seeks its own depth and moves with current and trolling speed.



This method is used when trolling two lures on a single line from outriggers, planer boards or highlines. The system works well for fish found within 5 feet of the surface. Use snap swivels at all knot locations.



head and brown trout.

deep while the spoon flutters above. Great trick for walleye, steel- depths and lure distances from the weight. This configuration eliminates line tangles and allows multiple lures to be used.



while the other switched directions and blasted south. Swan yelled, "Thanks, Darwin, now what do I do?" as the pressure from the runaway salmon snapped the line.

The add-a-lure method is guaranteed to increase your catch by 50 percent. On certain days you will catch all your fish on the second lure. There is something very enticing about the action of the add-a-lure, salmon and trout love 'em. Plus this tactic puts the add-a-lure far above the downrigger weight and away from the cable.

Line Releases

There are several on the market that work well. Offshore, Cannon, Jolly, Big Jon, Roemer, Wille, Black and more. But try a Walker adjustable line release. It is a tube-shaped release that is spring loaded. If the tension is set properly a half wrap will hold most lures for trolling. At times a full wrap is needed to keep rolled rigs from releasing.

Dick Swan prefers to use rubberbands as line releases. He says that this method does not put knicks or weak spots in trolled lines. Try a #16 rubberband.

Rubberband releases offer many advantages: low cost, dependability and easy rigging. Some trollers prefer them so they can detect light strikes. This is an important point if you plan to troll for Lake Erie walleyes. In addition to making a *Quick Release, Cannon* makes rubberband releases available 100 per pack along with two *Elasticlips*. Rubberband releases work great if you hook a small trout or salmon, called "shakers" by big water men. You can see the hit and the shaker will make the rod jump.

Adjustable or variable tension line releases minimize line abrasion. Releases that put knicks in your line will cause you to lose fish. Don't overlook the importance of a good release in catching Great Lakes fish.

Add-A-Line

When fishing three lures from the same downrigger a second rod is utilized. Typically the first line is lowered seven feet, then a second line is attached with a rubberband to the main line. The second line is attached to a second rod. Both lines are lowered again about seven feet and a third lure or add-a-lure is placed on the second main line. The entire offering is lowered and you have three offerings on one downrigger.

The best part about this system is that you never know which lure the fish will grab. One lure attracts the fish and he will usually grab one of the other two. Once a fish is hooked on the *Add-a-Line* the first rod is often still trolling for you. One fish will sometimes follow another and strike the extra lure. This system simply increases your catch, and it is sure fun trying to figure out which lure the fish is striking (see figure 4).

Slider

Some sport fishermen place a lot of faith in the double lure system. One tactic that has proven effective is the slider rig. Sliders are simply short leads with swivels on both ends, and a lure at one end. They are attached in two ways. First, the outfit is simply clipped to the fishing line that is already set by the downrigger (see figure 5). This permits the slider to ride downward until it comes to rest where the main fishing line bellies out. The second method is to place the slider on while the downrigger is sinking or taking the main line down. This ensures the slider will go deep, then slowly ride upward to the line belly.

Sliders and *Add-a-Lures* are the same but sliders are not attached with rubberbands to the main line. Sliders are very popular with small boat trollers who need as many lures as possible in the water. The fish attracting power of multiple lures can certainly increase your catch.

Double Bait Rigs

Captain Clay Garrett, Lucy-J Charters, likes to use two lures on each line when running planer boards for Lake Erie walleyes. Clay uses a three-way swivel at the end of the main line. A three-foot leader is used with a Hot 'N' Tot from one swivel, while a four-foot leader is rigged with a Lucky Lure. This outfit helps Clay to double his catch. The billed lure digs deep while the spoon flutters above (see figure 6). This method is best suited to planer boards, highlines, outrigger or upper level fishing. This tactic offers a diving plug and shiny spoon at depths of six to ten feet.

It is not uncommon to spot Great Lakes trout or salmon breaking the lake surface. Most crankbaits or billed baits dive too deep for these fish but the trollers from Lake Superior have a unique double bait trick. They rig a small silver spoon behind a *Bomber* "A" or #11 *Rapala* (see figure 7). The spoon will pull the stickbait toward the surface and hold the offering about one foot under water. Trout or salmon will investigate the action of the minnow-imitation lure and gulp the trailing spoon. It is important that quality swivels are used with double bait rigs to guarantee good lure action and prevent line twist or tangles.

Successful Great Lakes trolling requires use of specialized tactics. Skillful application of advanced downrigger methods can help you to catch more and bigger fish. When coupled with sophisticated electronic fish locators, downriggers are deadly fish catchers. The best downrigger trollers do not practice their trade in a haphazard manner—they utilize precise trolling patterns.

Sure, trolling speed, water temperature, currents, wind direction, season, sun, presence of baitfish and other factors all effect trout or salmon feeding habits. But successful trollers outfish everyone else because they know how to use trolling patterns. Trolling with predetermined patterns requires technique and good technique leads to hefty catches. Most trollers try to get as many lures in the water as possible, without line tangles. They know that catching Great Lakes fish is a lot like hunting and a shotgun approach guarantees strikes.

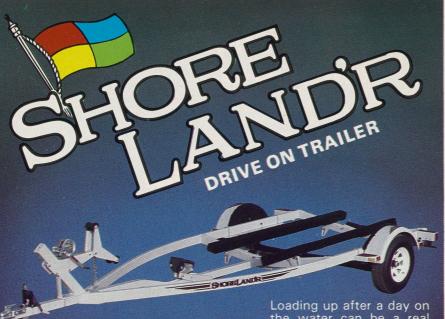
Adding stackers, sliders or add-alures is one advanced method to enhance downrigger setups. But you also need a good understanding of how to place downrigger lines to attract fish and avoid tangles. Try these riggings:

V-Shaped Setup

The simplest downrigger pattern is the V-shaped rig (see figure 8). This pattern is easy to use, helps to eliminate line tangles, allows for use of several downriggers and is very popular with big water trollers. The pattern is achieved by setting inside (stern) downriggers the deepest and outside downriggers are set shallower. This pattern allows the boat to make turns without fouling lines provided you follow a few rules. Try to keep leads short for inside downriggers, outside downrigger lines can use long leads. If you are using an attractor to bring fish to trolling baits put the attractor on a stern line.

Try to stagger distances between downrigger weights, 5-10 feet is prefer-







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red. When using stackers, add-a-lures, or multiple lines it is a good idea to place downrigger weights from 10-15 feet apart.

When trolling with the V-shaped setup avoid sharp turns, especially if you have multiple lines for each downrigger. Straight line or slow-U trolling directions will provide fewer tangles and bigger catches.

The big advantage with the V-shaped downrigger pattern is that you have a lot of room from the stern to net fish. By setting inside downriggers deep you do not have to worry about tangled lines when fish come to the net. Most captains use this pattern because it gives them the best opportunity to net fish.

Alternate Downrigger Patterns

Once you have mastered the Vshaped downrigger pattern, then you may want to experiment with other patterns. At times fish seem to strike more readily if an inverted V-shaped rigging is used. This system calls for outside downriggers set deep while inside downriggers are shallow.

When trout or salmon are found down deep some trollers like to use "M" or "W" downrigger patterns. When using these riggings it is a good bet to set deep lines first and shallow lines last. Usually shorter leads are used with deep lines and long leads with shallow lines. But when the "M" or "W" pattern is used down deep many captains like to use long leads from all downrigger weights.

It is a safe bet to use a V-shaped pattern and if strikes only occur on the inside deep lines then use the inverted V-shaped pattern.

Usually the outside downriggers will produce more strikes than inside riggers. So, it is a good idea to make certain you have both outside downriggers placed at depths where you know fish are striking.

If you want to catch fish from the Great Lakes there are many places to go and thousands of miles of open water to fish. The season lasts from iceout in spring until ice-up in December. But in order to cash in on the hot action you need to refine trolling techniques and utilize effective methods. Downriggers provide a golden opportunity to sample Great Lakes trolling action at its best. Downriggers help you to locate and catch fish, they save you fuel and money, and they are the big water angler's best tool for successful outings.

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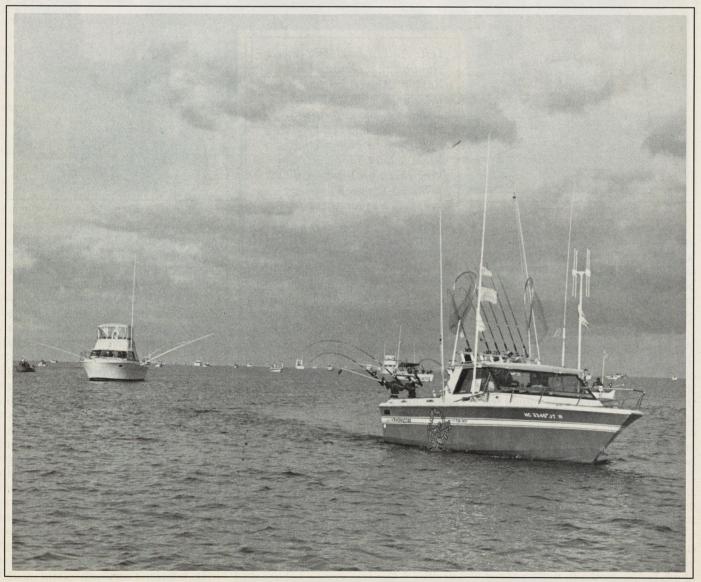
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SURFACE LINES AND HOW TO RUN THEM

by Ken Darwin and Paul Weikert

Shallow running lures provide Great Lakes trolling thrills from crashing strikes, dazzling runs and awesome leaps.



ART BY MICHAEL GALE, COURTESY BERKLEY

couldn't believe my eyes. No sooner had Ken Darwin placed the J-9 Rapala behind the boat and set the Shimano rod in the older and wham!! His hands were full as he grabbed the rod to fight a big chinook. The monster had snapped the offering from Lake Michigan's surface and line melted from the Charter Special Shimano Triton reel. Ken giggled as he fought the fish and I thought to

and lure selection.

Each year more Great Lakes anglers are learning how to use surface lines. By the way, for sake of discussion we are referring to lures trolled in the top 20 feet as surface lines.

So, why is this system deadly on Great Lakes sport fish? Well, big water trout, salmon, and walleyes often oriand cut spawn. Suddenly, I watched a big male steelie roll from the pack, swim upstream 20 feet and swallow the bait. If a trout can see a clump of cut spawn 20 feet away, I'd bet he can spot a fast-moving lure at twice that distance in the Great Lakes.

Great Lakes brown trout are known to hug the surface where warm water pools. Browns will feed in the top layer of water then dive to bottom and

> STR NER MA COPINE.



myself, "How did he know that salmon would be striking so close to the surface?" Well, Ken's lesson proved a point-surface lines work when trolling for Great Lakes trout, salmon, and even walleyes.

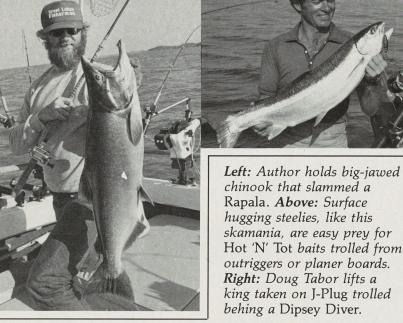
Using highlines, outriggers or planer boards is nothing new to trollers but this technique is often overlooked. Surface trolling is something Darwin is a pro at and I will always remember the smile on his face as he fought the salmon. The sparkling hues of the chrome-sided king cast a halo of silver around the fish as it turned sideways below our boat. Soon it came to net, 20 pounds of silvery power, with a tail as wide as a man can fan his hand; over 30 inches of fightin' fish. Darwin scurried to reset the outrigger line.

For most trollers learning how to use surface lines is relatively easy, provided you have a good understanding of productive methods, trolling speed, ent to the lake surface. Here they feed on baitfish that are bathing in the sunwarmed upper layer of water. Biologists have always maintained that coho and steelhead are surface fish by nature. They like to feed on insects, insect larvae, and baitfish that hold in the upper layer of water. Chinook salmon are also found with steelhead and coho during the entire year and many fishermen feel that they are regularly located close to the lake surface.

Shallow trolled lures can attract and be seen by salmon far below. No one knows how far fish will move to strike lures but I would guess the distance is from ten to 40 feet. I've watched salmon trail a lure at a distance of three to five feet, then charge and strike ferociously. I also remember an outing to Michigan's Platte River when Ken Darwin made a cast to a school of steelhead. Ken was using a bobber rig digest their food. On several occasions I've seen browns rolling on the surface chasing baitfish. If you troll shallow running lures through surface breaking trout or salmon you are guaranteed hot action. But the secret to catching these fish is to use planer boards or outriggers that get lures far to the boatside.

Surface fish are often very spooky and will move away from a trolling boat. By setting lines to the side you can motor past surface schools without disturbing feeding fish. It is also a good bet to set some lines so lures run 100 yards behind the boat. Such long lines will allow fish to relax after the boat moves past and they will be more likely to chase or strike trolled lures.

On certain days boat traffic does not affect fish at all. In fact, there are times when the sound and action of boats actually seems to draw fish to trolled lures. Coho will often move



into the prop wash and slam baits. When this occurs, I like to use spoons set four feet deep and four feet behind the downrigger weight. This 4×4 technique is popular during spring when trolling southern Lakes Michigan, Huron, Erie, and Ontario for coho, chinook, and steelhead.

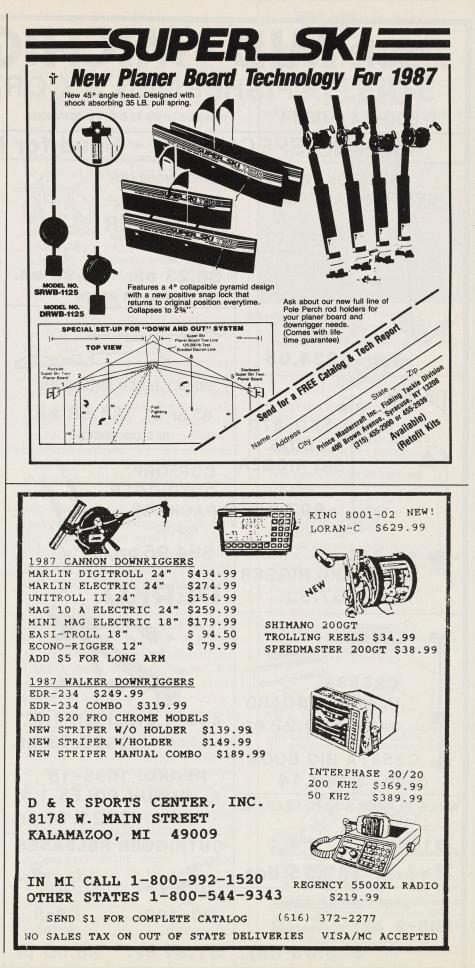
With fond memories I recall an outing with Darwin to Michigan City. We were in search of spring salmon and Darwin trailed our *Starcraft* boat with a camera boat. Lines were set from seven to 20 feet deep from downriggers. The camera boat moved directly over the top of our lines as Darwin snapped shots.

Suddenly a downrigger rod popped up then snapped double as a salmon grabbed an *Eppinger Flutter Chuck* lure. John Mazurkiewicz grabbed the throbbing pole and steadied himself as the fish stripped line from the reel. The salmon charged below Darwin's photo boat then spit the lure, but soon we hooked a second fish. In less than one hour we hooked seven trout and salmon. The fish seemed aggressive and were not the least bit spooked by the presence of the photo boat.

Now, don't get me wrong. I'm not saying that boat traffic has no effect on trolling success. More than once I've had speeding cruisers blast directly over a salmon hot spot and the fish stop feeding or move elsewhere. But slow moving trollers seldom cause feeding fish to become inactive. More often than not trout and salmon simply stop feeding.

Trout and salmon are fickle fish and their feeding activity is dictated by the forces of nature. It is not uncommon for fish to suddenly go on a feeding spree. Once this occurs trollers have a heyday. The action can be almost indescribable as schools of fish attack any properly trolled lure. During these sprees it is common to hook two or more fish at a time. But usually the hot excitement will come to a sudden halt as feeding fish once again change moods.

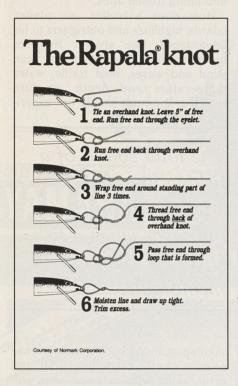
Lure selection can often be the key to big catches. Trollers match lure size, action, and color to suit the preference of biting fish. Selecting lures that appeal to trout and salmon is usually an exact science. Minnow imitation lures are productive for use on outriggers, highlines, and planer boards. My favorite lure is a *J-9 Jointed Rapala* with a gold body and orange back. Other preferred lures include: *J-11*





Rapalla, Bagley's Bang-o-Lure, Variant Smelt, Rapala Shad Rap, Bomber Long "A", Rebel Fastrac, Rebel Deep Diving Minnow, and Cordell Wally Diver. This season we will be field testing Norman's Rip-N-Minnow, Angler's Pride Deep Diver, Mann's 20+, and more. Other surface lures include: Hot'N'Tot, Wiggle Wart, Tadpolly, Variant Silver Shad, and J-11 Rapala.

It is a good bet to use the *Rapala* knot when trolling with minnow imita-



tion lures. This knot allows the lure maximum action and provides maximum line strength. Some captains prefer to use a quality ball bearing swivel or coastlock snap swivel.

Planer boards are fast becoming the number one method for catching surface hugging Great Lakes fish. Boards are easy to operate and most captains use three lines from each planer. It is possible to use up to six lures from one board. Most captains like to use double planers, heavy duty versions of a single board, because these stronger models can handle Great Lakes wave action.

Planer boards, called "skis" by many trollers, are set 75-150 feet to boatside. The trolling lane for such rigging is two or three hundred feet wide, the length of a football field. This system plys the lake surface for curious fish and seldom spooks trout or salmon. Some captains use a small *Dipsey Diver* from the center line on a planer board. Others use spoons, *J-Plugs* and deep diving crankbaits. I'll always remember an outing to St. Joseph, Michigan, when we used *Lindy-Little-Joe Shadling* for limit catches of spring coho. Lures were placed 30-60 feet behind the *Cannon Dual Plane-R-Board* as our craft paralleled shore in 60 feet of water. Wow! We couldn't keep the *Lindy Shadling* in the water.

Board fishermen sometimes increase their catch by using two lures on each line. This is accomplished by using a three-way swivel with a twofoot leader to a diving crankbait. Try a *Lucky Lure* and *Hot'N'Tot* for this technique.

Captains Lucille and Clay Garrett, of Lucy-J Charters use the double lure method for remarkable catches of Lake Erie walleyes. That's the great thing about planer boards—they can be used for shallow water browns, Lake Erie walleyes, surface steelhead and salmon or Lake Superior lake trout. A friend of mine even uses boards for inland lake smallmouth bass and walleyes.

Outriggers are long fiberglass poles that extend to the boatside. Usually only one line is used from each outrigger. The purpose of these long rods that are set at a 45-degree angle from the water, is to get lures to the side of the boat. They make a wide trolling lane and excite fish into striking lures that wiggle far from the noise of the boat.

A clothes line type tether rope is used from outriggers to pull lines out to the end. On this line is a snap release that lets go when a fish strikes. I like a *Black* outrigger release. Just place the lure behind the boat, attach the mono line to the outrigger release and hand-over-hand pull the mono to the end of the outrigger.

The loud sound of a fishing line that "twangs" from the outrigger when a fish strikes is exciting and memorable. Popular lures for outrigger fishing are the same used for planer boards. Some trollers like to use keel sinkers, lead core sinkers, or *Dipsey Divers* to take outrigger lines deep. Try a oneounce keel sinker about three feet ahead of a *Hot'N'Tot* for good action. A growing number of captains use one pound weights off the outriggers when trolling extra deep. The outfit is often bounced along bottom and the pressurized sinker release opens to

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drop the weight when a fish is hooked. A few outrigger anglers sometimes add extra lines along the outrigger tether.

Great Lakes trollers feel that the main reason that outrigger lures or planer board lures produce strikes is because of increased action. When the boat makes a slight shift from side-toside, or during a turn, the outside lines are pulled faster and the action of trailing baits is increased. This speedup slow-down maneuver excites fish into biting trolled lures.

How does a troller use planer boards, highlines and outriggers to his advantage? The answer involves many considerations—time of year, wind and waves, boat traffic, water temperature and depth, or lure selected. You must simply use experi-

The loud sound of a fishing line that "twangs" from the outrigger when a fish strikes is exciting and memorable.

mentation, along with common sense to consistently catch fish. Trial and error, along with patience often will show you which system is best suited for your trolling style.

Most modern Great Lakes trollers are favoring planer boards to catch shallow water or surface fish. Planer boards can be folded flat and stored easily and they work well on boats using downriggers.

Some folks like to use divers or diving planers for Great Lakes fish. Planers are usually set to run at boatside and can take lures to a prescribed depth. Dipsey Divers are very popular with trollers and are available in two sizes. Both are suitable for surface trolling. Dipseys have a dial which can be set to angle lines away from the boat. Lures are placed from two to six feet behind the diver. A strike trips the release which allows you to retrieve both the diver and your fish. Long heavy action rods are preferred by diver trollers; Eagle Claw makes a special diver rod.



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Dipseys are easy to operate and cheap to buy compared to other trolling devices. They are certainly a poor man's downrigger. Like planer board lines, lures pulled by a Dipsey Diver have an erratic action as the boat turns or rocks with the wave action. This action excites fish into striking Dipsey lines.

Spoons or plugs work well behind divers. Try a silver spoon about three feet behind the diver for surface fish. Let out enough line to get the offering



Steelhead are considered prized trophies by most trollers.

from 10-20 feet below the surface. When a salmon grabs a diver lure he goes berserk. The fight is usually fastpaced and extra exciting. Some captains feel that the diver causes hooked fish to panic and run to escape the trailing intruder. One thing is certain, when you hook into a big kind using this rig the fight is enough to rattle your teeth.

Some fishermen use three divers for spring fishing, one on each side and one straight back. The line set straight back has the *Dipsey* dial set at zero so the diver follows directly behind the boat. Usually the smaller diver is used behind the boat and it is set farther back than the other divers.

Downriggers are very useful to catch fish found near the Great Lakes surface. They can be used without putting weights on your line and they efficiently let you troll spoons that appeal to feeding trout or salmon. Downriggers are used to set spoons in the top 20 feet of water directly below the boat. Each downrigger utilizes one line and most trollers use four to six riggers to make the offerings look like a school of baitfish.

Successful downrigger trolling requires the skillful use of line releases, distance from cannonball to lure and proper lure for surface fishing. The angler who knows exactly how and where downrigger lures are running will outfish the fellow who is unfamiliar with the tactic. Again, trial and error experiences help you to become an effective downrigger angler.

Some captains like to use stackers or sliders when fishing downriggers. But I do not like multiple rigs when downriggers are set shallow. Here is my easy-to-use trolling pattern:

I prefer to use a general "V" shape when using more than two downriggers. Set inside lines deep (downriggers on stern) and outside lines shallower. This allows you to set outside lines far back and inside lines close to the ball. This rigging will allow you to use up to six downriggers without line tangles.

The popular V-shaped rigging is a superb way to use several lines and cover more water. Lines must be staggered so lures do not tangle. Some trollers keep leads about the same length but stagger depths. It is important to spread lures with this pattern. so that the offerings look like a school of moving baitfish.

If fish are located in the upper 20 feet then stern downriggers are set at 20 and 15 feet, corner downriggers are placed at ten and five feet, outside downriggers are set at seven and three feet. All productive depths are covered with this pattern.

Stern lures should be placed five to eight feet behind the ball. Corner lures can be set about ten to 12 feet from the downrigger weight, while outside lures are placed 15-40 feet back.

Other productive downrigger patterns include W-shape, M-shape, but the inverted V-shape is most popular. This pattern reverses the order of the



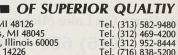
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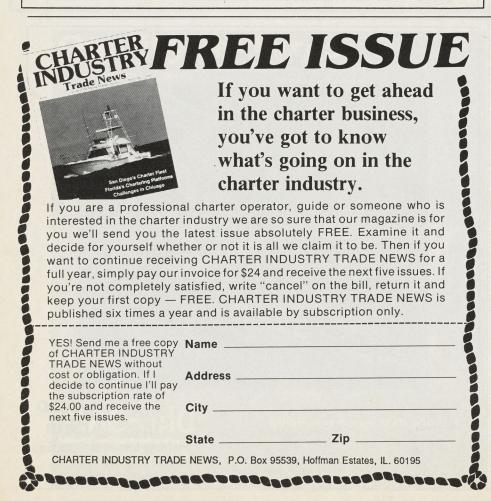
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V-shape, outside lines are set deep and inside lines are shallower.

You can modify trolling patterns to suit your needs and fishing conditions. Boat traffic, wave action, water color, and water temperature all affect trolling methods.

I prefer to use spoons from the downriggers, especially when fish are found near the surface. Silver lures work best, but at times white, black, purple, green, or blue varieties provide more strikes. On occasion I'll set a chrome dodger behind the stern downrigger to attract fish into hitting outside spoons.

The more lures you get the more critical line leads become. Fine-tuning your leader lengths require trial and error. Some captains like short leads while others like to use extra long leads for outside downriggers. One of Darwin's tricks is to set outside lures 100 yards behind the boat. He likes to use *Rapala*, small chrome *J-Plugs* and *Hot'N'Tots* using this method.

Because surface fish are often scattered you must work to find them. This requires setting as many lines as possible and covering a lot of water. Most trollers use a straight line trolling direction and they cover water fast. Once fish are located, the boat is slowed a bit and a slow-circle trolling direction is utilized. No two lures track exactly the same and it is important to fine-tune your trolling speed and lures that work best for you. A trolling speed indicator is an advantage to determine productive speeds. Lure action is often affected by wave action, wind direction, currents, and boat movement.

Having a good understanding of trout and salmon feeding characteristics and effective trolling methods is the key to successful fishing. Confidence in technique is very important... use highlines, outriggers, planer boards, diving planers, and downriggers so that you develop a productive style. Keep a sharp eye on trolling speed, water temperature, and lures that excite fish into strikes.

No one will probably ever have a full understanding of why fish strike lures. Less is known regarding why they suspend or congregate near the Great Lakes surface. But they do, and at times knowing how to use surface lines can make the difference between fast-paced fishing action or a boat ride.

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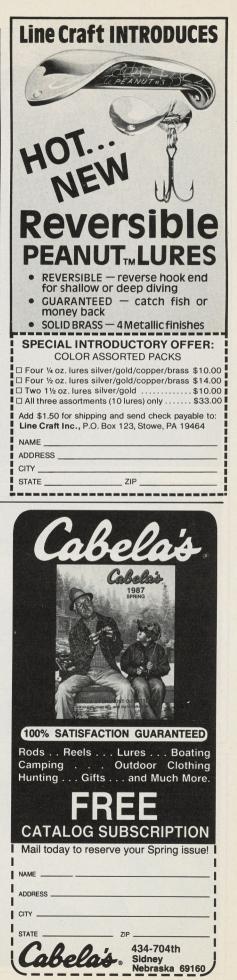
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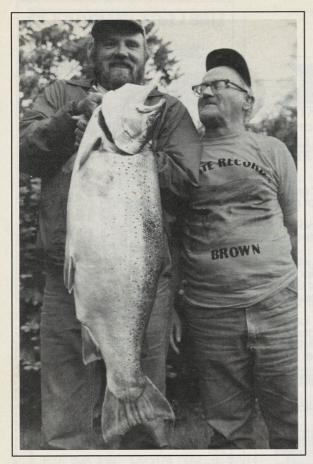






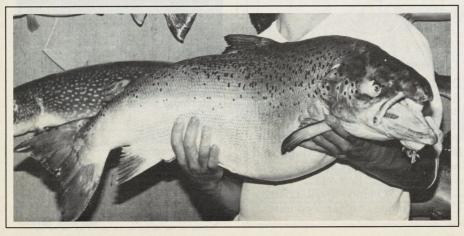


Great Lakes TROLLING ANNUAL No.IV 105



IS IT A BROWN TROUT OR ATLANTIC SALMON?





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Upper Left: Misidentified New York Atlantic salmon. **Left:** 32 lb., 10 oz. Elaine Bender Atlantic and 32 lb. Atlantic taken by Randy Acker. **Above:** 29 lb., 6 oz. Atlantic taken by Benny Smith.

29-pound, 15-ounce monster fish was caught last June out of Sodus Point, New York, in Lake Ontario. It was officially inspected and registered as the largest brown trout ever caught in the state. But unfortunately, the brute is not a trout at all. In fact, it is a salmon—an Atlantic salmon. More importantly, this brand of misidentification took place in Michigan during 1981.

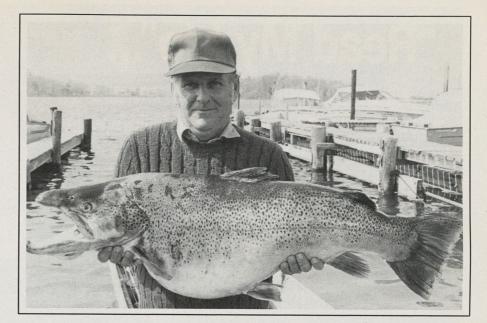
Autopsies of two huge brown trout identified by state biologists were requested by Ken Darwin and wellknown guide Dick Swan. Both men claimed the big browns were Atlantic salmon—guess what? Both fish were found to be absolute Atlantics.

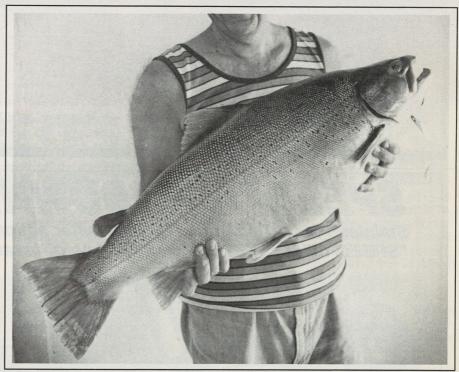
It seems that Great Lakes Atlantic salmon are brown trout look-alikes to the average fisherman or biologist. Upon close inspection, there are some big differences. Atlantic salmon have a half-moon shaped tail. The tail is slightly V-shaped. The concaved tail is a surefire giveaway when compared with Great Lakes brown trout that sport a tail that is absolutely square.

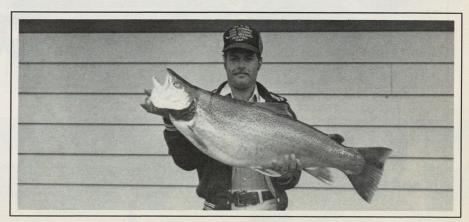
Just take a look at these photos. Now, does the New York fish have a square or slightly forked tail? Keep in mind that a brown's tail is often so square that it actually appears convex.

Brown trout usually are covered with dots found on top of their head, back, and body. Many times a brown will have a generous proportion of dots on the gill cover. Atlantic salmon seldom have a lot of dots and few below the mid-line. They display just a few dots on the gill plate and no dots on the head. Some biologists feel that Atlantics have X-shaped dots. This is not the case with Great Lakes monster Atlantic salmon.

Now, there is a lot more to identifying a fish than just looking at it but the evidence is overwhelmingly against the New York fish being a brown. In the case of the Michigan Atlantics, a qualified taxonomist was recruited for positive identification. Now all state record fish are keyed and scientifically studied. New York needs a central location for state record identification and a qualified taxonomist should study each sample to prevent further misidentification.







Top: Robert Henderson holds world record 34 lb., 6 oz. brown trout. **Middle:** 26 lb. brown caught by Bernie Michels. **Bottom:** 30 lb. brown landed by James Lamb.

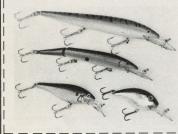
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FRESHWATER FLEAS ARE INVADING THE GREAT LAKES

by Joe Wolff

Bythotrephes cederstroemi Schoedler. Add that to your fishing vocabulary.

These are tiny freshwater fleas that many captains have found by the thousands clinging to their downrigger cables and fishing lines.

The fall of 1986 was the first time they have appeared in Lake Michigan and many captains have been wondering just what they were. Well, here's the story.

These mysterious little creatures, with tiny black eyes and a fuzzy appearance, were first discovered in 1984 in Southern Lake Huron. Then in 1985 they were found in Lakes Erie and Ontario. This year they have expanded into Lake Michigan.

They have been identified by biologists from the U.S. Fish and Wildlife Service, the Great Lakes Fishery Laboratory in Ann Arbor and several biologists from Ohio as freshwater fleas known only to inhabit freshwater lakes in Europe, including Lake Varden, Sweden's largest lake where salmon are prevalent.

How they got to the Great Lakes remains a mystery, but they apparently first arrived in southern Lake Huron. There is an outside chance that they came in the bilge water of European ships traversing the Great Lakes, but this is highly unlikely because they are native to inland European lakes and it's doubtful that these ships would have freshwater in their bilges.

Another theory is the eggs arrived through some sort of direct atmospheric means, perhaps in the mud on the feet of migrating aquatic birds. Their eggs can withstand long periods of adverse environmental conditions.

Nor are the biologists sure what effect their introduction and growth in our waters has on the Great Lakes ecosystem or what their fate may be here.

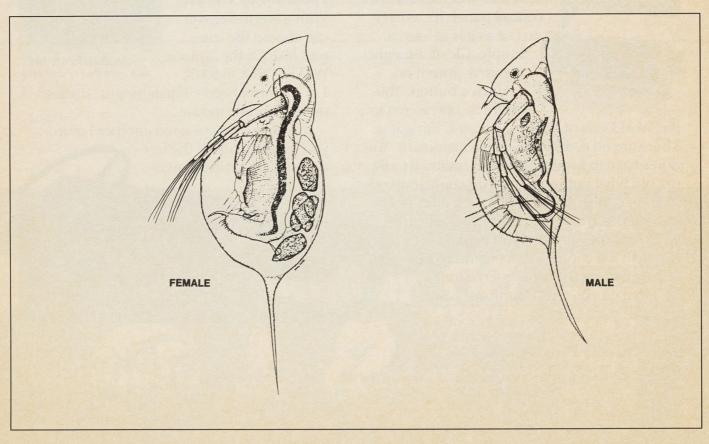
These freshwater fleas float and drift

in the water and are generally filter feeders feeding on microscopic plants but they also feed on other tiny animals, on zooplanton, and apparently on each other.

Because they are so new to the Great Lakes, scientists can only speculate on their effect on the environment. They could be an asset to the fishery or detrimental. Only time will tell.

However, biologists already have found, at least some species of fish in Lake Erie are feeding on these fleas. They include walleye, yellow and white perch, and white bass. It hasn't been determined whether our trout and salmon have a taste for them.

Biologists are continuing to study them and their effects on the Great Lakes. Some are hopeful fleas will provide a richer biomass for baitfish, which means increased food for trout, walleyes, salmon and other sport fish.



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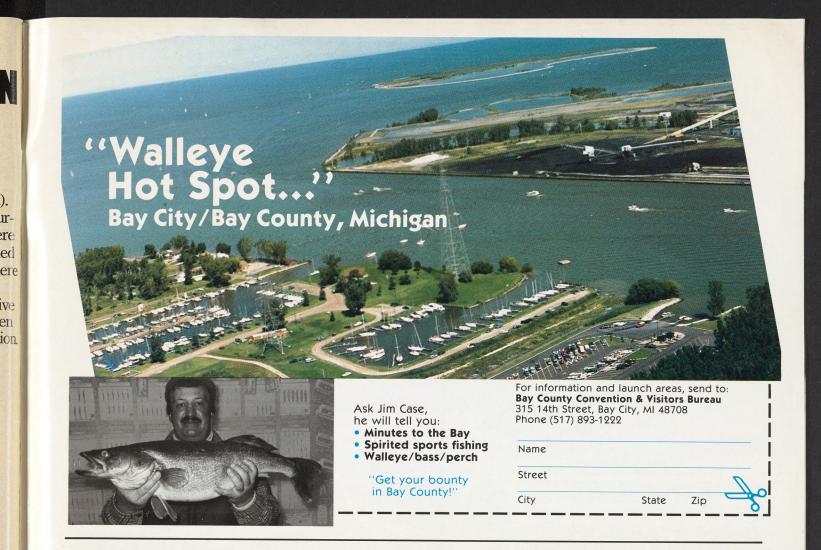
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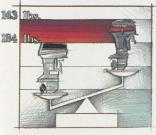
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