Steelhead Trout:
Lake Erie’s Best Kept Secret

by Dave Kelch, Ohio Sea Grant Extension

When anglers think of Lake Erie, thoughts of walleye, smallmouth bass and yellow perch come to mind. Yet after boats are stored for the winter, one species continues to provide plenty of action for anglers—steelhead trout. In fact, steelhead offer year-round opportunity for anglers, and the action gets better every year.

What are steelhead trout and why are they now in Lake Erie? Steelhead trout are simply rainbow trout with different genetic characteristics. Unlike rainbow trout, which live their entire life in landlocked streams or rivers, steelhead migrate from streams as juveniles to a large lake or ocean environment. These food-rich environments permit steelheads to attain sizes far larger than their stream-run cousins. Within the United States, the Pacific Northwest and Great Lakes regions are the most popular areas for these giant rainbows. In Ohio, as in other Great Lakes states, steelhead have been introduced to provide diversity to the fishery, and to add more angling opportunity.

In order to provide for an adequate sport fishery, steelhead are hatchery raised. This is true for not only Ohio but for other Great Lakes states. Although some Great Lakes streams may provide adequate spawning habitat and stream temperatures, the numbers of naturally spawned steelhead would not provide a viable sportfishery for the species. Ohio streams are, for the most part, too warm and silty, with limited streambed spawning substrate (riffle areas with a gravel bottom). However, some natural reproduction may occur in northeastern Ohio and western Pennsylvania tributary streams.

Juvenile steelhead from six to nine inches long, called smolts, are released into select tributary streams, where they migrate to the open lake. As steelhead prefer cooler, deeper waters in which to live and grow, Ohio raised steelhead are stocked in tributaries from Cleveland to Conneaut, with 400,000 stocked every spring. Because of the success of the stocking program, Ohio is considering more streams for stocking. Due to abundant food resources in Lake Erie, these juveniles achieve rapid growth, reaching an average length of 18 inches and weighing two to three pounds in their

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Stream Fishing Tips for Steelhead Anglers

Now that you’re interested in catching a Lake Erie steelhead, how do you go about doing it? First, find out what streams concentrate steelhead during the fall, winter, and spring months. Review the map in this article, then contact the visitor’s bureau in the county you want to fish and request a road map. An Ohio topographical map is also a good idea, as it will show all the small tributaries. Check with lake bordering bait and tackle shops. Make sure you are fishing on public accessible property or that you have the landowner’s permission if you want to fish on private property.

Dress for the weather! Gloves, a warm cap, insulated underwear, and insulated waders (if you plan to wade and fish) are essential. Although not a necessity, waders allow the angler freedom to travel in and along the stream, and can place you closer to fish holding pools. And don’t forget a landing net!! Even a small steelhead is difficult to land and unhook by hand, especially if you plan to catch and release.

During early to mid fall, concentrate efforts in stream pools closer to the lake. You may even want to try beach fishing (casting spoons and spinners) where small tributaries enter Lake Erie. In deeper pools, try drifting live shiner minnows, worms, salmon eggs, or maggots just off the bottom below a bobber. Use only enough split shot weight to keep the bait down. You may also want to cast small spinners and spoons in deeper stream pools and in wide, deep stretches of larger rivers. Keep all baits near the bottom, and expect to occasionally become snagged!

During late fall and winter, steelhead will have moved further upstream, providing more fishing opportunity. Concentrate on deeper pools where current is visible, using live bait fished near the bottom. Be careful of frozen areas; river and stream ice are never safe to walk upon.

Come spring, steelhead can be found in deep pools, yet will also move to shallow, rock and gravel riffle areas for spawning. Live bait and spinners still work well, yet the best spring bait is fresh steelhead spawn (eggs), which you can obtain from a successful angler, or purchase from select bait shops. Many anglers will use salmon eggs, with fly fishermen using fresh spawn, yarn flies, or larger nymph imitations.

Although many experienced steelhead anglers prefer a long, 8-10 foot, steelhead rod and spinning reel, or a fly rod outfit, a 6-foot medium weight spinning rod and reel spooled with 8-10 pound test line will perform just fine. TL

For more information on steelhead and salmon identification and methods for preparing, request the following Sea Grant publications: FS-022: Lake Erie Salmon and Trout: Handling and Preparation (free); FS-031: Getting to Know Your Catch: Lake Erie Salmonid Identification (free); FS-032: Fish Smoked at Home (free); GS-005: Lake Erie Cookbook ($4.00).

Steelhead Fishing Locations

1. Cranberry Creek 14. Nine Mile Creek
2. Chappel Creek 15. Euclid Creek
3. Sugar Creek 16. Chagrin River
4. Darby Creek 17. Grand River
5. Sherod Creek 18. McKinley Creek
6. Vermilion River 19. Arcola Creek
7. Brownhelm Creek 20. Wheeler Creek
8. Beaver Creek 21. Cowles Creek
9. Black River 22. Indian Creek
10. French Creek 23. Red Brook
12. Cahoon Creek 25. Conneaut Creek
13. Rocky River 26. Turkey Creek

A. Lorain Power Plant: warm water discharge
B. Avon Lake Power Plant: warm water discharge
C. E. 72nd Street Power Plant: warm water discharge
D. Eastlake Power Plant: warm water discharge

Lake Erie

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first year. Three year old steelhead can average 30 inches, weighing eight to ten pounds. The current state record, caught October 2, 1996, weighed 20.97 pounds and measured 36 inches!

Steelhead return to tributary streams during the fall and winter months for spawning, similar to the fall spawning activities of coho and king salmon. However, unlike salmon which die after spawning, steelhead return to their lake environment and grow larger, returning year after year to spawn.

Why are steelhead important to Lake Erie? Certainly they add to the Lake Erie fishery, making it more diverse. More importantly, steelhead provide year round angling opportunities. During the summer months, offshore boat anglers from Lorain to Conneaut experience excellent catches of steelhead, referred to as “silver bullets,” during June through August. Prior to 1998, steelhead were caught occasionally by anglers trolling deeper central basin waters for walleye, and were a welcomed bonus trophy fish.

In the past four years, however, steelhead numbers have increased to the point where deep water trollers are
Anglers must secure written landowner permission prior to fishing from or walking across private property.

And unlike the open lake, stream and river steelhead anglers are not concerned about high wind and waves. This rapidly developing fishery has the potential to attract both in and out of state anglers for multiple day fishing trips, boosting local tourism economic impacts.

Where can you catch steelhead? Begin first by obtaining Ohio stream fishing maps, county road maps, and topography maps of lake-bordering counties in Ohio (see map). Although steelhead are occasionally caught in tributaries west of Huron, best angling success is experienced from Vermilion (Erie County) to Conneaut (Ashtabula County). Steelhead are currently stocked in the Rocky River (Cuyahoga County), Grand River (Lake County), Chagrin River (Lake County), and Conneaut Creek (Ashtabula County). However, not all steelhead return to the tributary in which they were stocked. The Vermilion River in Lorain and Erie Counties experiences excellent steelhead returns, so steelhead have not been stocked in the Vermilion River. In addition, virtually any central to eastern Ohio Lake Erie tributary stream or creek, regardless of size, will attract and hold steelhead. Very small creeks, some which may only flow into the lake during heavy fall or spring rains, experience excellent spawning returns of steelhead. Steelhead have actually been observed in drainage ditches which connect to a Lake Erie tributary stream or creek. Much of Ohio’s stream, river, and creek property is privately owned, and anglers must secure written landowner permission prior to fishing from or walking across private property. Shoreline power plant intakes and discharges are also popular sites for steelhead anglers. Again, check with local authorities and the power plant for access rules and regulations and necessary permission.

The ODNR, Division of Wildlife publication #276, Lake Erie Fishing Guide, offers a detailed map of popular steelhead tributaries and indicates public access sites. Publication #34 and Trout Fishing in Lake Erie, provides steelhead fishing methods and techniques for all four seasons. For more information about steelhead angling, contact local fishing tackle shops in lake bordering counties, the ODNR, Division of Wildlife (1.800.Wildlife), or a Sea Grant Extension Specialist.
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Twine Line is published six times a year by Ohio Sea Grant Communications.
To subscribe for one year, send $6.00 to the Columbus office.

The opinions expressed are those of the authors only. Contact the office before
reprinting articles or graphics. Ohio Sea Grant is a statewide program 
that supports greater knowledge and stewardship of Lake Erie and the Great Lakes. It is part of the
National Sea Grant College Program (NOAA grant NA06R0053, project M/P-2),
which includes 30 state programs. Support of Ohio Sea Grant is provided by
National Sea Grant, the State of Ohio, The Ohio State University, Ohio State
University Extension, and participating universities, agencies, and businesses.

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ISSN 1064-6418

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