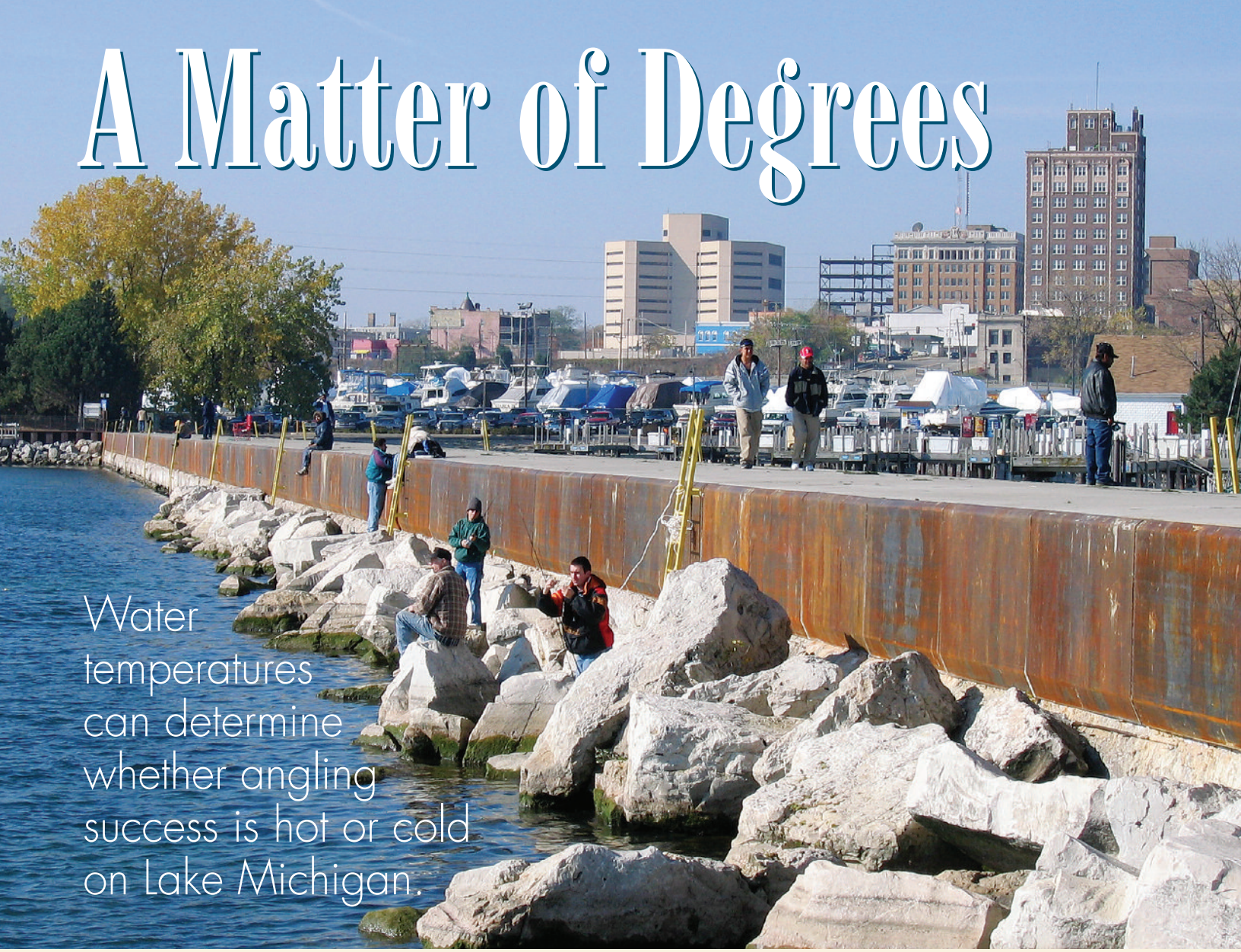
A Matter of Degrees



Water temperatures can determine whether angling success is hot or cold on Lake Michigan.

Story By Sara Creque and John M. Dettmers
Photos By INHS Lake Michigan Biological Station

With 63 miles of shoreline, 28 main public areas providing pedestrian access, 11 public boat launch facilities and something always biting during the peak fishing season from April through September, Illinois' near-shore areas of Lake Michigan provide abundant sport fishing opportunities.

Salmonids and yellow perch are the most commonly caught sport fish and an understanding how water temperatures affect their movements can greatly increase an angler's success.

Generally, salmonids are found near shore in relatively shallow water (less than 30 feet deep) only during fall through early summer when surface water temperatures are below 60-65 degrees Fahrenheit. However, anglers should look for strong westerly winds during summer that can cause upwelling events. These occur when the warm surface water is pushed offshore by west winds, causing cold bottom water to circulate up into the near-shore region. This drastically reduced water temperature can bring salmonids back closer to shore and create mid-summer shore angling opportunities.

Brown trout are one of the first salmonid species available to anglers in early spring and are commonly caught directly from shore. The highest catches occur in April, dropping off drastically as lake temperatures rise and fish move to colder, deeper waters offshore. During warm springs with early ice break-up, March also can be a good month to catch them. Brown trout move back closer to shore during the fall for spawning and thus again become available to harvest.

Waukegan Harbor provides a picturesque backdrop for reeling in brown trout and coho salmon in the early spring, yellow perch in the spring and summer and salmon returning to spawn in the fall.

Coho salmon—the most commonly caught salmonid in Illinois waters—is an extremely popular catch throughout the spring and early to mid-summer. Fishing for coho is generally best from late April through early June, although people continue to catch them through September. Although most coho salmon are caught

Nearly 30 public-access areas offer easy fishing along Illinois' portion of Lake Michigan. Anglers catching a yellow perch with a Floy tag (left) should record the tag number(s), length of fish, location where the fish was caught, if it was kept or released, and send this information to the address on the tag.

by boat anglers, almost 5,000 are caught by people fishing from shore each year, primarily during April and May when water temperatures are still cool.

Chinook salmon provide the bulk of the action for offshore salmon anglers from mid-summer to late fall. Most Chinook salmon are taken by boaters trolling in cold, deep water from July through September. However, shoreline anglers have a chance to fish for Chinook salmon in the fall when they return to harbors to spawn.

More yellow perch are harvested by sport anglers in the Illinois waters of Lake Michigan than any other fish species, and approximately 84 percent are caught by people fishing from shore. In late spring when water temperatures warm above 45 degrees Fahrenheit, yellow perch move inshore to rocky areas to spawn. Perch may move inshore up to three weeks earlier near Chicago compared with near the Wisconsin border. Although yellow perch are present and caught near shore from April through early October, research sampling and recent creel data show that abundance and catch rates are highest in June. Numbers of yellow perch close to shore decline once bottom temperatures climb above 60 degrees Fahrenheit. Cold water upwelling events also can bring large numbers of yellow perch

(Photo by Mark Carter.)

Michael Weber caught his first Coho salmon while trolling from a private boat in late June near North Point Marina.

Coordinates for the artificial reef can be found at the Applied Marine Acoustics website at www.sonarsearch.com/custdata/IDNR/Reef/Default.htm. Drive east and west between these coordinates (as the reef is long and skinny and runs north-south) and look for a sudden 3 to 10 foot rise on your depth finder. That's the artificial reef.

back near shore during summer.

Although yellow perch and salmon are the most popular sport fish, Lake Michigan also offers numerous other species that can be caught both from shore and boat. The most frequently caught of these other species is rock bass, which prefer rocky habitat or other structures such as docks, and are tolerant of temperature extremes. They present a great fishing opportunity for shoreline anglers and put up a feisty fight on light tackle.

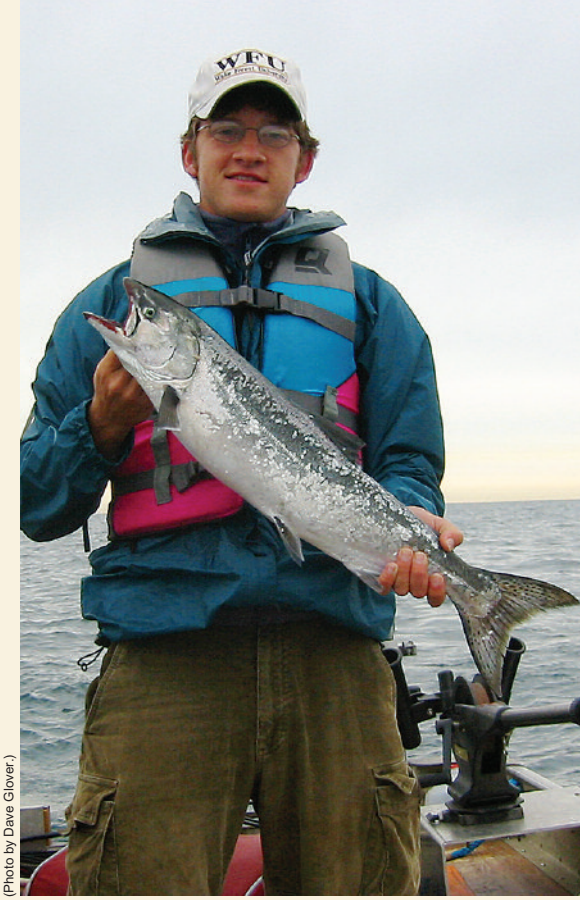
Smallmouth bass and largemouth bass—both good fighters—are most frequently caught by people fishing harbors. Largemouth bass prefer shallow (less than 20 feet), calm, vegetative habitats with warm water, and seldom occur in the open waters of Lake Michigan. Smallmouth bass like current and rocky habitats and are less tolerant of high temperatures. After spawning is complete in late June and water temperatures climb above 70 degrees Fahrenheit, many smallmouth bass move out of harbors to rocky areas along the shoreline or farther out.

A relatively unused resource for recreational angling is the 57th Street artificial reef off of the Museum of Science and Industry, just northeast of Jackson Harbor. This 800-foot-long reef, modeled after those in Lake Erie, was constructed in November 1999. It is located about 1.4 miles from shore in water 25 feet deep. During six years of study at the reef, the Illinois Natural History Survey, Lake Michigan Biological Station found adult smallmouth bass were 5.2 times more likely to be present at the artificial reef than at the nearby featureless reference site from July through October. Adult smallmouth bass have not been found at the reef until surface water temperatures warmed above 71 degrees Fahrenheit, which usually occurred during mid-July, and are most abundant there from August thru mid-September. Observations of up to 45 smallmouth bass have been made on a single SCUBA dive along the reef. Smallmouth bass do temporarily leave the artificial reef if summer upwellings occur and water temperatures decline sharply (to less than 65 degrees Fahrenheit). Smallmouth bass generally leave the reef in October when temperatures decline to 57-63 degrees Fahrenheit. Rock bass also use the artificial reef more than the reference area during summer and early fall. Unlike salmon, rock and smallmouth bass prefer structural habitats throughout the year. People who fished the artificial reef have caught smallmouth bass, rock bass and yellow perch.

Whether you have a boat or fish from shore, Illinois offers plenty of year-round opportunities to catch fish in Lake Michigan. Knowing seasonal and temperature preferences of the various sport fish, and when they use the near-shore area, can help increase your chances of angling success.

(Photo by A. Bovenzo.)

Fishing offshore of North Point Marina while on a charter boat trip, Jeff, Sara and Eileen Creque caught three chinook salmon ranging in size from 10 to 15 pounds.



(Photo by Dave Glover.)

Trolling for salmon from a private boat near North Point Marina proved profitable for Mark Carter.

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