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LIVING

Jeremy Holden, special to The Examiner

Walleye (above) usually begin to spawn shortly after ice-out in mid-April.

Walleye under siege

Although a warming climate should support faster pickerel population growth than in the past, other factors are working against these fish

OUR CHANGING SEASONS
Drew Monkman

April was once a time when area residents could easily observe the annual spectacle of "wall-to-wall walleye" gathering every night near local dams and locks to spawn. The Water Street power dam near Langton Street was a particularly productive spot for fish-watching. "All you could see were thousands of big yellow eyes," recalled one city resident. Although this intriguing display of nature's reproductive cycle remains a rite of spring for many of us, it is not quite what it used to be.

Walleye, or pickerel, as they are often called, usually begin to spawn shortly after ice-out in mid-April, when water temperatures reach 7 C. In the Kawarthas, there are two different spawning modes. Some populations breed exclusively in fast-flowing water over gravel and rocky bottoms. At one time, spawning walleye could be seen in the fast water areas below almost any dam in the Kawarthas. Other populations spawn on rocky shoals in large lakes such as Pigeon, Buckhorn, Chemung and Clear. In the latter two lakes, the fish spawn primarily along the eastern shorelines.

A large, 10-pound female walleye can produce close to 250,000 eggs. After she deposits the eggs and they are fertilized by the male, the eggs are subsequently deserted. Because the growth of the young depends on water temperature, the best reproductive success occurs in years when the walleye spawn a little later than usual, and there is a steady warming of water temperature without any significant cold periods. Extremely cold water can kill the fry. The spawning period can last up to three weeks.

Spawning activity makes for excellent fish-watching. Although some fish can be seen during the day, the largest numbers are usually observed only at night, when the spawning itself takes place. Walleye are most active between about 9:30 p.m. and midnight, so you will need a strong-beamed flashlight to see the action. The walleyes' eyes glow when a light is shone upon them. On average, the spawning run locally lasts about two weeks, with about five days of intense activity. There should still be some activity this week, although it's difficult to predict.

At Lock 19, located just south of Lansdowne Street where it crosses the Otonabee River in Peterborough, the gravel-covered spawning beds are located below the lock and dam along both shores. Currently, the Ministry of Natural Resources as well as the Ontario Federation of Anglers and Hunters are monitoring the runs of walleye at Lock 19. They are working closely with staff from the Trent-Severn Waterway to enhance spawning success at the lock.

Walleye can also be seen spawning in many other locations of fast-flowing water in the Kawartha Lakes system including Lock 32 in Bobcaygeon, Lock 31 in Buckhorn and Lock 27 in Young's Point. At Young's Point, the fish can be viewed from the pedestrian bridge. Fish can sometimes even be seen spawning along the causeway across Chemung Lake.

When you are out walleye-watching, you also stand an excellent chance of seeing white suckers and yellow perch. Suckers move up from lakes in the spring to deposit their eggs and sperm in fast-flowing sections of rivers and streams, often at the same sites as walleye. Gathering in dense schools by the thousands, suckers are one of the most easily observed spring spawners and can usually be seen both during the day and at night. These fishes are a favourite spring food of bears, which have no trouble catching them in shallow water.

Serious fish-watchers should also keep their eyes open at this time of year for trout-perch. It is chubby, three-to-five-inch fish with a deeply forked tail. It spawns close to shore in shallow water and, as the name suggests, has characteristics of both the trout and perch families. The trout-perch is an important food fish for many game species including walleye.

Traditionally, muskellunge and smallmouth bass were the dominant species in the nutrient-rich, relatively shallow Kawartha Lakes. In fact, muskellunge were so abundant that they were actually fished commercially until around 1900. Walleye, however, are not native to the Kawartha Lakes. They were introduced by the Ontario government from the 1920s through the 1940s. The program included stocking millions of fry, eyed eggs, and breeding-sized fish, many of which were from the Bay of Quinte.

There is considerable concern about the future of walleye populations, particularly in southern Ontario. Both the size and number of walleye caught has declined. Although a warming climate should support faster walleye population growth than in the past, other factors are working against these fish. A major stressor is, of course, the extremely high rate of angler harvest. More than 25 per cent of all fishing in southern Ontario is directed at walleye. In 2000, anglers fished more than 11 million days in the MNR southern region, which includes all of the districts south of North Bay.

Another major concern is the impact of introduced or invading species. They can greatly reduce the number of walleye a given lake can support. Because walleye are adapted to low to moderate light conditions, these fish do not do well in lakes with high water clarity. However, zebra mussels, filter-feeders which are now present in all of the Kawartha Lakes, are making our lakes increasingly clearer and thereby decreasing their suitability as walleye habitat. Another invader, the black crappie, competes directly with adult walleye for food and often preys on young walleye.

Shoreline alteration is another threat. The construction of docks, boat houses and retaining walls has the cumulative effect of drastically altering many shorelines and, in doing so, adversely affecting the spawning, nursery and feeding habitats of near-shore fishes such as walleye.

Extensive studies by the Ministry of Natural Resources have also determined southern Ontario walleye are not only less abundant than further north, but there are far fewer large adult female fish.

To address these concerns, a reduction in walleye limits will come into effect in 2008 along with a size restriction. A four-fish limit, with only one fish to be greater than 18 inches, will be introduced across the Southern Region.

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