

STATUS OF THE NORTHERN PIKE FISHERY



**ILLINOIS DEPARTMENT OF
NATURAL RESOURCES**

DIVISION OF FISHERIES

MARCH 2008

STATUS OF NORTHERN PIKE FISHERY IN ILLINOIS REGION 1

DISTRICT 1: JO DAVIESS, STEPHENSON, WINNEBAGO, BOONE, DEKALB, OGLE, AND CARROLL COUNTIES

In addition to the muskie waters of Pierce Lake and Shabbona Lake, there are several quality northern pike lakes in northwest Illinois.

Lake Le-Aqua-Na has a strong pike population estimated to be near 5 per acre of pike ranging in size up to 38" at 13 pounds.

Four Lakes in Winnebago County has strong numbers of pike with one of them of newspaper quality size.

Olson Lake has been stocked on a yearly basis but many of the stocked pike escape downstream to Pierce Lake where, in addition to muskie, a self-created pike fishery occurs.

Developing pike fisheries can be found in Lake Victoria at South Beloit and Levings Lake in Rockford. Spencer Lake in the Boone County Conservation District in Belvidere has an excellent pike population but anglers can only access the lake after a long hike.

DISTRICT 2: ROCK ISLAND, HENRY, BUREAU, LEE, LASALLE, AND WHITESIDE COUNTIES

JOHNSON SAUK TRAIL LAKE - This lake is a very fertile 58 acre lake in Henry County. The lake has a maximum depth of 23 feet and an average depth of 8.2 feet. Dense vegetation had plagued this lake until the introduction of 115 triploid grass carp in 1990. The results were excellent in 1991 and 1992 until late fall when Eurasian milfoil started to establish itself. The lake was first stocked with northern pike in 1989. The lake was stocked annually with 8 inch northern pike at 1 to 3 per acre. In 2001, we started stocking muskie instead of northern pike. The 14 inch northern pike fingerlings stocked in 1992 were purchased by the Kewanee Wethersfield Sportsman's Club.

The lake developed a fairly good northern pike population. In 1997, 12 trapnets set overnight resulted in the collection of 9 northern pike between 17 and 36 inches. In 1998, 12 trapnets resulted in the collection of 11 northern pike between 22 and 37 inches. In 1999, 12 trapnets set overnight resulted in the collection of 11 northern pike between 20 and 38 inches. In 2000, 12 trapnets resulted in the collection of 12 northern pike between 19 and 38 inches. In 2001, 10 trapnets resulted in the collection of 23 northern greater than 19 inches. There are now several year classes of northern pike present in the lake for anglers. The lake should provide a few large northern pike in 2008.

Johnson Sauk Trail Lake has the statewide regulation of 3 fish daily creel limit with a 24

inch minimum. The Lake was switched to a muskie stocking program in 2000. The lake also received a stocking of 58 muskellunge in 1988. One of these muskies collected in 2002 weighed over 40 pounds. A 48 inch muskie was caught by an angler in October of 2003.

DISTRICT 4: PEORIA, FULTON, AND STARK COUNTIES

BANNER MARSH - Northern pike had been consistently stocked in Johnson Lake from 1988 to 2000. In 2006, 15 northern pike were sampled from 20 to 31 inches in length.

In 2008, a low density northern pike population will be available in Johnson Lake.

DISTRICT 5: MARSHALL, PUTNAM, TAZEVELL, AND WOODFORD COUNTIES

SPRING LAKE SOUTH (Tazewell County) - In 1978, Spring Lake was divided into two distinct waters for the purpose of capital improvement and the restructuring of the fish population. Prior to 1916, Spring Lake was part of the Illinois River system as a lateral freshwater marsh. In 1916 it was separated from the river by a high levee and has remained a separate body of water. From 1916 until 1981, the quality of the fishery habitat and the fish population declined due to rough fish populations such as carp and bullheads. In 1986 the lake was treated with rotenone to remove the existing fish population and encourage the growth of aquatic vegetation. The key to the rehabilitation was the re-establishment of lush aquatic vegetation which had occurred by summer of 1986.

Always a shallow water, South Spring Lake today has an average depth of 2.9 feet. Of the 610 acres of water, at least 75 percent is covered with 13 different species of aquatic vegetation by late May of each year. The tremendous spring recharge from the bed of the lake amounts to 100 acre feet a day, creating very cold water temperatures under the insulating layer of vegetation for the majority of the summer months. This is a unique situation and only occurs in Spring Lake within the State of Illinois. The resulting temperature regime and water quality is excellent habitat for pike.

Because of its' proximity to the Jake Wolf Hatchery, South Spring Lake has been used as a brood source for northern pike the past seven years and has provided most of the early northern stocks for statewide stocking of northern pike and tiger pike each year. In an effort to collect fish for egg production, extensive population assessment data has been gathered since 1994. We know quite a lot about the size structure and age of the population as well as growth. It appears that growth of female fish is excellent when compared to nation-wide populations. Growth of male northern is in the normal range when making a similar comparison. There is a big difference in the length at age between sexes! A 28 inch female is usually 4 years old, whereas a 25 inch male is 5 years old, on average. In 2007, we were able to collect 72 fish in 10 net nights of effort. From those fish we were able to spawn 24 females at Jake wolf Hatchery. A total of 907,000 eggs were produced, resulting in 300,000 fry. These fish were the source for state-wide stockings of northern pike in 2007.

Fishing for northern pike on South Spring Lake is a challenge. The water temperatures rise quickly and usually result in fish feeding actively in early March. Aquatic vegetation becomes thick and hard to fish no later than May 15th of each year and lasts until the lake closes for regular waterfowl season. The narrow window of fishing opportunity between the first of March and mid-May results in some excellent catches of northern pike. The fish are then refuged by the thick vegetation until the following year. Sometimes fishing the holes in the vegetation in June is quite effective. There are a number of large fish in the population available to northern fishermen. Based on the size structure of the fish sampled during the spring of each year, it may be possible to catch northern up to 20 pounds in weight. Large white or yellow spinner baits are among the best choices early in the year with many larger fish caught by surface plugs and jerk baits later in the spring! A number of fish are caught in the winter in the large spring area located at the south end of the lake. State-wide regulations apply to the northern pike fishery at Spring Lake.

South Spring Lake has one boat ramp and is accessible by the Manito Blacktop, 12 miles South of Pekin. No fuel or services are available; however, camping and food service are both located on the facility. There is a 25 horsepower limit at Spring Lake. The lake is closed to fishing north of Pike Hole Bridge during the waterfowl season each year.

HENNEPIN-HOPPER LAKE (Putnam County) - Located along route 26, 2 miles south of Hennepin Illinois, the lake is accessed from a gravel parking lot and boat launch. In April of 2001, a drainage district adjacent to the Illinois River was reclaimed to its' former backwater status and allowed to fill with seep water. The resulting lake was a re-established backwater known as Hennepin – Hopper Lake. This shallow backwater covers approximately 1500 acres. Stocking of northern pike occurred shortly after the filling of the lake and a very fast growing northern pike population resulted.

The Wetlands Initiative, a private organization controls this site but has opened it for public fishing. The purpose of their project is the re-establishment of lateral marsh systems in the Illinois River floodplain. Since the initial stocking of game fishes, carp have gotten established through reproduction and have negatively affected the marsh habitat of the site.

A strong population of northern pike has resulted in an excellent fishery and pike of more than 10 pounds in size are common. The Wetlands Initiative allows public fishing on the weekends from May through September. No bank fishing is allowed and boats are not allowed to have motors. The shallow water and abundant cattails make canoe or car-top boats a necessity.

STATUS OF NORTHERN PIKE FISHERY IN ILLINOIS REGION 2

DISTRICT 6: DUPAGE, KANE, AND MCHENRY COUNTIES

McCULLOM LAKE - This lake receives an annual supplemental stocking of about 750 late-summer fingerlings (about 8 in. long) from the State hatchery system. Consistent stocking over the past 10 years and harvest regulations (i.e., 24 in. minimum length limit and 3 fish daily creel limit) have helped to create an excellent northern pike fishery at McCullom Lake. Trap nets set during March 2007 captured 167 northern pike (28 fish/trap net-day) that ranged in length from 14 to 32 in. long. Most of the sampled fish (86%) were between 20 and 28 in., and a high proportion of them (36%) were over the legal limit. Big pike also can be found in this lake. One individual this past spring was 32 in. long and 10 lbs. and another caught in fall 2004 was 38 in. long and weighed 13 lb.

Access at the lake is limited to shoreline fishing at several small parks and one small, undeveloped boat ramp. Outboard motors are limited to 9.9 horsepower. The lake is moderate in size (244 acres) and shallow (average depth = 5.3 ft.). Try targeting the lily pads on the north and west end of the lake for northern pike. A handicap-accessible fishing pier is available in Petersen Park on the lake's northeastern shoreline. Ice fishing is very popular here, in part, because of improved access on the ice. There is an aerator that runs periodically during winter so beware of open water and areas of thin ice.

DEFIANCE LAKE - Located in a beautiful natural setting in Moraine Hills State Park, Defiance Lake is particularly popular with northern pike anglers and ice fishermen. Shoreline fishing is limited during summer due to dense shoreline vegetation and abundant submersed plants in shallow areas around fishing piers. Vegetation treatment is not an option due to the presence of State endangered and threatened plants. Boat rental is available through a concessionaire and electric trolling motors are allowed at the lake; gasoline motors are not allowed. Anglers now may launch their own canoes and kayaks for fishing. Check with the park office (815-385-1624) for the most current access information.

The northern pike fishery in this 48-acre natural glacial lake remains stable. We captured 17 pike during March 2006 trap netting (8.5 fish/net-day). Fish from numerous size groups were represented in the sample and the largest pike captured was a 28-in. long female that weighed 5.0 lbs. Trap netting during April 2007 (water temperature = 65 degrees F) produced only one spent female that was 25 in. long and 2.6 lbs. Because netting during the post-spawn period proved to be ineffective, future stocking evaluations will begin as soon as possible after ice out. The Defiance Lake pike fishery is maintained through the annual stocking of about 150 late-summer fingerlings provided by the State hatchery system. Harvest regulations include a 24 in. minimum length limit and a 3 fish daily creel limit.

DISTRICT 7: LAKE COUNTY

FOX CHAIN O'LAKES - Northern pike are native to the Fox Chain system and maintain themselves through natural reproduction. Population data are restricted to fish collected in spring trap nets. Fish collected are almost always mature individuals from 28" to 36" long and caught in a post spawn condition by late March. The IDNR rarely collects northern pike outside of their early spring netting but ice fishermen report catches relatively commonly. The future success of this fishery depends on protecting wetlands adjacent to lakes and rivers in the drainage which encompasses an area of approximately 1,280 square miles above the Stratton Lock and Dam in McHenry. There is a high likelihood that northern pike "run" up streams, creeks, and drainage ditches in the spring in search of spawning habitat. Spring floods in 2007 may have benefitted reproduction and thus the population. In 2009 or 2010 we should be able to detect if reproduction was successful.

DIAMOND LAKE - This 149.0 acre lake is managed cooperatively with the Mundelein Park District. The lake receives annual stockings of northern pike to balance this urban glacial lake's fishery. The average size fish collected in 2003 was 21 inches (n = 4), one 28" fish was collected in 2006. Fishermen report some success catching northern pike, ice fishermen are the most successful. Northerns are stocked to diversify the predator base and help control an abundant yellow bass population. Yellow bass have been shown to hurt populations of fish that nest like bluegill, crappie, and largemouth bass. All yellow bass caught should be harvested to reduce their abundance. Open water access is limited to a Park District boat launch but ice fishing opportunities are more available. Diamond Lake offers the potential for larger size fish since it has a variety of different vegetation types, relatively good water quality, and some deeper water.

DISTRICT 8: COOK COUNTY

WOLF LAKE - This 390 acre urban lake sits on the Illinois - Indiana border and offers a considerable amount of shoreline fishing. In June of 2002, a northern pike caught during a survey was 35 inches and 12.3 pounds. Wolf Lake was added to the northern pike supplemental stocking list in 2003 to enhance the population and add predatory pressure to the system. It is stocked when surplus fish are available from the State Hatchery system. Vegetation in summer gets thick and the added cover afforded by Eurasian milfoil (an exotic species) harbors small bluegills which, if left unchecked, could become over abundant. Fishermen report good success catching northern pike on tip ups during cold winters when ice covers the lake. Statewide limits apply to northern pike on Wolf Lake (3 fish per day, 24" minimum length). Wolf Lake is also a 2 pole and line only area to limit the use of un-attended fishing gear. Wolf Lake was stocked with approximately 2000 fingerlings in 2005.

TAMPIER LAKE - This 160 acre urban lake provides anglers with some nice angling opportunities. The lake has a population of gizzard shad as the primary forage so "catching" is probably tougher than "fishing", but the fish are there and some nice size fish have been collected there over the years. Approximately 360 northern pike are

stocked annually to diversify the predator population in the lake and provide sportfishing opportunities to those who seek these fish. Pike have been collected in both the marsh north of 131st and south in the main lake so either portion could hold your next catch.

BUSSE LAKE - This 390 acre system offers shore anglers and small boat (electric motors only) anglers access to an urban esocid fishery. Northern pike to 34 inches have recently been collected by IDNR and Cook County Forest Preserve District Fisheries staff. Supplemental stocking of 1752 northern pike maintains their population and offers some diversity to these lakes. Fish likely “run” up Salt Creek in the spring and some likely move over the spillway as well so these locations may be areas to concentrate on during early spring as fish “move.” There is a 3 fish per day, 24" length limit for northern pike on Busse Lake (North and South Pools).

SKOKIE LAGOONS - This 190 acre lake system contains 7 connected lagoons. It offers both small boat (electric motors only) and shore fishing access. The system has an excellent multi-species fishery and northern pike are part of the equation. Gizzard shad provide a strong forage base for larger fish to flourish. This is the furthest north gizzard shad seem to survive so enjoy the opportunity to catch well fed fish. Regulations on Skokie Lagoons are 3 fish per day and a 24" length limit.

DISTRICT 9: GRUNDY, KENDALL, WILL, AND KANKAKEE COUNTIES

MAZONIA STATE FISH AND WILDLIFE AREA - Located in Grundy and Kankakee Counties, this reclaimed strip-mine area contains water bodies ranging in size from 0.1 to 150 acres in size. The current state record northern pike was caught from Monster Lake, Mazonia South Unit, in 1989. Northern pike have been supplementally stocked into Mazonia Lake #8 (18.7 acres) and Lake #9 (35.5 acres). These lakes are actually joined by a small channel which allows for movement of fish, and fishermen, from one lake to another. The stocking program was initiated in 1993 and fish have been released at low densities on a more-or-less annual basis since that time. For the past three years northern pike fingerlings have been reared to a larger size at an on-site facility and released at an average length of 13 inches. This added length will hopefully equate to improved recruitment of this species. Ice-out trap netting and biennial spring surveys have yielded poor returns and recruitment of stocked fish is surmised to be fairly low. Boat access is available at several of the larger lakes at the Mazonia Main Unit, with propulsion limited to electric trolling motors. The Mazonia South Unit contains several large lakes ranging from 50 to 150 acres and as such gas-powered outboards (no horsepower limit) will be permitted. Gravel boat ramps are available at Monster (where the present state-record northern pike was caught), Ponderosa and Eagle Lakes only. Although anglers have reported catching pike from the South Unit lakes, IDNR surveys have failed to substantiate these claims. With the exception of Monster Lake which offers year ‘round fishing opportunity, Mazonia is closed to fishing during upland game and waterfowl season. Following the completion of the hunting seasons, Mazonia reopens for ice fishing dependent upon ice conditions.

LAKE MILLIKEN - Located within the Des Plaines Conservation Area in Will County near Wilmington, this 26 acre lake has received northern pike fingerlings annually since

1998. The spring trap net survey in 2006 yielded a collection of 7 northern ranging in length from 526mm/20.7" to 645mm/25.4" averaging 56mm/22.4". Fall sampling resulted in the collection of one northern pike measuring 667mm/26.3". Recruitment of stocked fish is impacted by predation of stocked fish by largemouth bass while the long-term survival of this fish is compromised by the lack of depth in this lake. While IDNR surveys have failed to produce any numbers of fish or fish of large size, site reports indicate that occasionally anglers catch fish in excess of 36 inches. Lake Milliken is open to fishing year 'round from 6:00 a.m. until sunset. Boats are not allowed.

STATUS OF NORTHERN PIKE FISHERY IN ILLINOIS REGION 5

DISTRICT 21: ALEXANDER, JACKSON, PERRY, PULASKI, AND UNION COUNTIES

MALLARD LAKE - This 75 acre strip cut is located in the Denmark Area of Pyramid State Park in Perry County. This lake has a concrete boat ramp and a 10 HP motor limit. Northern pike have been stocked in this lake in 2002, 2003, 2004, and 2006. Another stocking is scheduled for 2008. Because of the difficulty sampling northern pike in this Lake, no additional information is available for this pike fishery. An attempt to sample northern pike in this lake will be made in the spring of 2008.

BLUE WING LAKE - This 35 acre strip cut is located in the Denmark Area of Pyramid State Park in Perry County. This lake has a concrete boat ramp and a 10 HP motor limit. Northern pike have been stocked in this lake in 2002, 2003, 2004, and 2006. Another stocking is scheduled for 2008. Because of the difficulty sampling northern pike in this Lake, no additional information is available for this pike fishery. An attempt to sample northern pike in this lake will be made in the spring of 2008.

STATUS OF NORTHERN PIKE FISHERY IN ILLINOIS RIVERS

FOX RIVER - No Northern Pike were collected in 2003 during 6 hours of electrofishing at locations from the State Line to Wedron. Lack of spawning habitat (except in the upper river and Chain-O-Lakes), the presence of many dams, and competition from muskie, may be limiting factors

DES PLAINES RIVER - This low gradient river, with associated wetland and backwater areas, historically provided excellent habitat for pike. Although degraded for many years, recent water quality improvements have allowed limited recovery of northern pike in some areas of the river although at relatively low abundance. In 2003, sampling was conducted at 17 stations from the Wisconsin State Line to Joliet. Northern pike were found at Daniel Wright Woods in Lake County, Dam # 2, Dempster Avenue and Lyons. A total of 6 fish were collected, ranging from 18-25 inches. In 2004 samples were taken at Riverside and Hodgkins, both producing northern pike at a catch rate of 4-5 per hour. Fish ranged in size from 13 up to 29 inches in length. Anglers have also been catching northern pike, particularly in the spring in the area around Riverside, where sizes in the 20-30 inch range are not uncommon.

KANKAKEE/IROQUOIS RIVERS - Northern pike is a difficult species to collect in rivers. Surveys have noticed an apparent increase in the incidental take of northern pike, and anglers appear to be catching more of them in recent years. The regulation on northern pike remains at 3 per day and they must be 24 inches or longer.