

# **STATUS OF THE MUSKIE FISHERY**

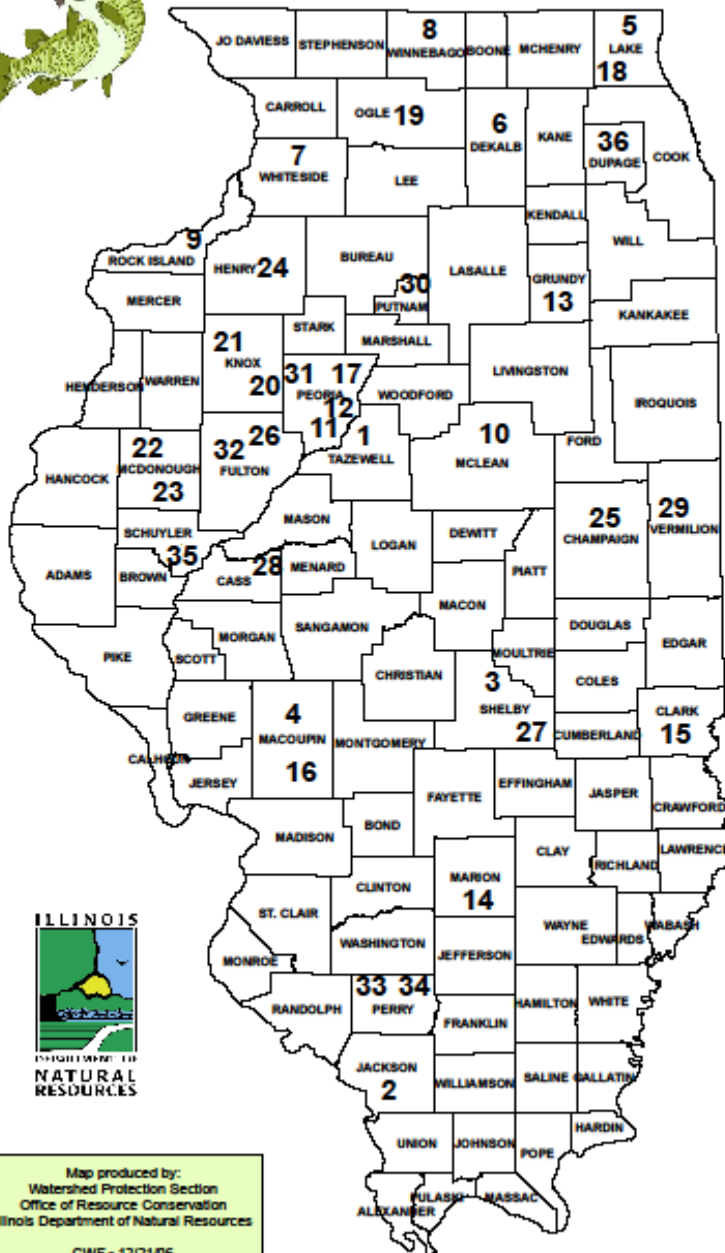


**ILLINOIS DEPARTMENT OF  
NATURAL RESOURCES**

**DIVISION OF FISHERIES**

JANUARY 2012

# Illinois' Public Muskie Lakes



## Legend

### Muskie Lakes

- 1, Spring Lake (North)
- 2, Kinkaid Lake
- 3, Shelbyville Lake
- 4, Otter Lake
- 5, Fox Chain
- 6, Shabbona Lake
- 7, Lake Carlton
- 8, Pierce Lake
- 9, Lake George
- 10, Evergreen Lake
- 11, Wheel Lake
- 12, Shovel Lake
- 13, Heldecke Lake
- 14, Forbes Lake
- 15, Mill Creek
- 16, Staunton City Lake
- 17, Johnson Lake
- 18, Sterling Lake
- 19, Lake Sule
- 20, Lake McMaster
- 21, Lake Storey
- 22, Spring Lake
- 23, Argyle Lake
- 24, Johnson Sault Trail
- 25, Lake of the Woods
- 26, Canton Lake
- 27, Pana Lake
- 28, Prairie Lake
- 29, Lake Mingo
- 30, Hennepin Hopper Lake
- 31, Deep Lake
- 32, Double T Lake
- 33, Goldeneye Lake
- 34, Canvasback Lake
- 35, Schuy - Rush Lake
- 36, Mallard Lake



Map produced by:  
 Watershed Protection Section  
 Office of Resource Conservation  
 Illinois Department of Natural Resources  
 CWF - 12/21/06

## 2011 STATEWIDE MUSKIE STOCKING SUMMARY

DATE	SIZE	LAKE NAME	NUMBER	SOURCE
08/18	11.3	Kinkaid Lake	2,000	Illinois
08/18	11.3	Evergreen Lake	926	Illinois
08/18	11.3	Hennepin-Hopper Lakes	1,000	Illinois
08/18	11.3	Lake Shelbyville	5,500	Illinois
08/19	11.3	Shovel Lake – Banner Marsh	200	Illinois
08/19	11.3	Heidecke Lake	1,955	Illinois
08/19	11.3	Otter Lake	765	Illinois
08/19	11.3	Staunton City Lake	84	Illinois
08/19	11.3	Johnson Lake – Banner Marsh	600	Illinois
08/19	11.3	Wheel Lake – Banner Marsh	350	Illinois
08/19	11.3	Lake George	167	Illinois
08/19	11.3	Carlton Lake	76	Illinois
08/22	11.3	Shabbona Lake	319	Illinois
08/22	11.3	Sam Dale Lake (R)	194	Illinois
08/22	11.3	Pierce Lake (R)	162	Illinois
08/24	11.6	Mill Creek Lake	366	Illinois
08/24	11.6	Busse Lake	840	Illinois
08/24	11.6	Mallard Lake	89	Illinois
08/24	11.6	Fox Chain O'Lakes	1,500	Illinois
08/24	11.6	Three Oaks South Lake	282	Illinois
08/24	11.6	Captain Super Lake – Pyramid State Park	230	Illinois
08/24	11.6	Lake Mingo (R)	170	Illinois
08/25	11.6	Canton Lake	500	Illinois
08/25	11.6	Fulton Co. Cons. Area Lake #3	90	Illinois
08/25	11.6	Fulton Co. Cons. Area Lake #4	36	Illinois
08/25	11.6	Double T SFWA	64	Illinois
08/25	11.6	Argyle Lake	93	Illinois
08/25	11.6	Spring Lake – McDonough Co.	277	Illinois
08/25	11.6	Lake Sule	77	Illinois
08/25	11.6	Deep Lake – Wildlife Prairie SP	25	Illinois
08/25	11.6	Schuy-Rush Lake	185	Illinois
08/26	11.6	Prairie Lake	200	Illinois
08/26	11.6	Lake of the Woods	26	Illinois
08/26	11.6	Lake Storey	164	Illinois
08/26	11.6	McMaster Lake	164	Illinois
08/26	11.6	Pana Lake	219	Illinois
08/26	11.6	Lake Shelbyville	728	Illinois

**TOTAL: 20,623**

(R) - Research

## 2011 GREEN GENE STOCKING SUMMARY

DATE	SIZE	POPULATION	NUMBER	STOCK	SOURCE
<b>Sam Dale Lake</b>					
08/22	11.30	North Spring Lake, IL	194	Illinois	Jake Wolf Hatchery
			TOTAL: 194		
<b>Lake Mingo</b>					
08/24	11.60	North Spring Lake, IL	170	Illinois	Jake Wolf Hatchery
			TOTAL: 170		
<b>Pierce Lake</b>					
08/22	11.30	North Spring Lake, IL	162	Illinois	Jake Wolf Hatchery
			TOTAL: 162		
			<b>GRAND TOTAL: 526</b>		

Total Illinois muskie = 526

Note: Sam Dale Lake, Lake Mingo, and Pierce Lake did not receive any out of state muskie stockings this year as the project is nearing completion.

## **STATUS OF MUSKIE FISHERY IN ILLINOIS REGION I**

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

**SHABBONA LAKE** - This lake was built in 1974 and first opened to fishing in 1977. The lake is 319 acres and the basin was shaped and designed with Sport Fish Restoration funds. Standing timber, stump fields, fish cribs, anchored trees, rock piles, fish piers, a gravel road bridge, and a cement block house provide some very interesting structures for the angler. The shoreline is well-vegetated with a variety of aquatic plants including water lily.

In addition to muskie, the lake's predator population includes largemouth bass in substantial numbers, walleye, smallmouth bass, and hybrid striped bass are stocked yearly. The prey population includes gizzard shad, bluegill, yellow perch, golden shiners, white suckers and brook silversides.

The lake was initially stocked with 30,000 tiger muskie fry in 1976. The stocking success was excellent with 53 tiger muskie collected in the fall electrofishing survey of 1976. The lake was again stocked with 286 tiger muskie fingerlings in 1980.

Two state record tiger muskie were claimed from Shabbona Lake; the first in 1982 from the original stock and the second in 1986 from the supplemental stock.

From 1983 to 1989 the lake was stocked with 2,229 pure 11" muskie at from the Carlton Silt Basin and Muskie, Inc. This stocking effort has been a success since two state records came from the 1985 stocking at 34 pounds, 3 ounces in 1994 and a latter state record in 1997 at 37 pounds, 13 ounces.

From 1990 through 1999 - 4,812 muskie 8" to 12" were stocked from Jake Wolf Hatchery or through a purchase by the Shabbona Lake Sportsmen's Club. Muskie were stocked only in odd years beginning in 2001 with 638 fish or 2 per acre followed by 638 fish in 2003. In 2005, 850 - 10 inch muskie were stocked. In 2006, 1,150 10 inch muskie were stocked. In 2007, 319 - 11 inch muskie were stocked. In 2008, 319, 11.4" muskie were stocked on August 27. In 2010, 319, 11.4 inch muskie were stocked and in 2011, 319, 11.3 inch muskie.

April trap netting for walleye (1997-2002) yielded 283 muskie, with two estimated to be over 40 pounds. With reduced efforts in 2003, 28 muskie were captured. In 2005, 6 trapnets resulted in the collection of 66 muskie of which, 65 were greater than 30 inches. In 2006, 6 trapnets resulted in the collection of 26 muskie of which, 25 were greater than 30 inches. In 2007, 6 trapnets resulted in the collection of 46 muskie of which, 45 were greater than 30 inches and 21 were greater than 36 inches. The largest muskie collected in 2007 weighed just under 37 pounds. In 2008, 6 trap nets resulted in the collection of 48 muskie of which, 46 were greater than 30 inches and 35 were greater than 36 inches. The largest muskie collected in 2008 was just under 28 pounds.

In 2009, 6 trapnets resulted in the collection of 20 muskie of which, all were greater than 30 inches and 12 were greater than 36 inches. The largest was 30.4 pounds.

In 2010, 6 trapnets resulted in the collection of 40 muskie of which, 32 were greater than 32 inches. In 2011, 6 trapnets resulted in the collection of 55 muskie greater than 29 inches. Thirty one of these muskie were greater than 36 inches and 9 were greater than 40 inches. Two of the muskie were greater than 36.3 pounds.

The long-awaited barrier net was completed on August 4, 1998 completely blocking the exit of larger fish over the spillway. Prior to the net's installation, members of Muskie, Inc. collected 22 muskie below the dam in the Indian Creek tailwaters. A similar September survey in 2000 found only one muskie. A new barrier net was installed on July 9, 2008, after an 11 inch rain the nets collapsed. The nets were repaired on 9-23-08. A muskie salvage in the tailwaters after the net was repaired resulted in the collection of 102 muskie. All of these muskies were safely returned to the lake. The 2010 fishing season was very good for muskie anglers.

There is a 48" size limit on muskie at Shabbona Lake with a limit of one per day.

**PIERCE LAKE** - This 162-acre lake at Rock Cut State Park was built in 1960. It was completely drained in 1970 due to a defective valve. The lake's predators in addition to muskie include largemouth and smallmouth bass, and walleye stocked supplementally each year. Among the many prey species are gizzard shad, brook silversides, white suckers, and carp.

The muskie stocking program began in 1983 and thru 1989 - 1,274 large fingerling muskie (11") were stocked from the Carlton Silt Basin, state hatcheries, and Muskie, Inc.

The muskie sign-in program from 1987 to 1991 has reports of 59 fish caught with 42% of these fish being harvested. Creel data from 1993 found an estimated 30 muskie caught with none reported as being harvested. Creel data from 1999 estimated 50 muskies caught with 3 harvested. The latest creel census report indicated that 4.6 % of all fishermen at Pierce Lake were seeking muskie.

An Illinois Natural History Survey study began in 1990 to determine the comparative survivability of stocked 4", 8", and 10" fish. In 1990, 3,335 muskie were stocked as part of this study of which 1,000 were 10" fish. The study was continued in 1992 and 3,772 muskie were stocked of which 709 fish were 10" in size. The lake was monitored through 1997. The preliminary results were that no survival occurs on muskie stocked under 8.0" in size.

From 1997 to 2003, Jake Wolf supplied 1,301 muskie 10" - 13" and the Flatlanders Muskie, Inc. supplied an additional 330 muskie with 51% of these fish over 20" and 79% from the Leech Lake Strain. Jake Wolf production was good in 2003 and Pierce Lake was stocked with 824 - 6.0 to 10.0" fish.

Pierce Lake is also participating in the project "Green Gene" muskie research project being conducted by the Illinois Natural History Survey comparing the survival and growth of various muskie strains. The project continued in 2011 with information on growth and condition of marked fish being collect during a trap net survey in the spring.

From 1997 through 2002, 60 muskie were taken below the dam with 25 of them taken during the wet 2000 year. This generated interest from the Flatlanders in installing a barrier net to prevent fish escapement. Initial planning and fund-raising began in 2001, but by mid-2002, the State Water Survey determined a net could not be installed due to possible dam failure. Retrieval of muskie below the dam will continue in future years.

The Lake and Willow Creek tailwaters has a 48" size limit on muskie with a limit of one per day. Facilities at the lake include boat ramps and parking as well as food, bait and boat rental.

**LAKE SULE** - This lake is a borrow pit that was constructed during the construction of Interstate 39. It is 76.6 acres in size with a maximum depth of 34.0 feet. Muskies have been stocked into Lake Sule since 1992. Being a borrow pit, there is very little structure or cover in the lake. A stream flows into and out of the lake and becomes Kyte Creek downstream (tributary to the Rock River).

The fish population at Lake Sule is one that is dominated by stream fishes including gizzard shad, smallmouth buffalo, and carpsuckers. As part of an attempt to manage game fish populations, muskies were stocked as a large predator fish that may result in a trophy fishery in future years. An annual stocking of 150 non-vulnerable muskies takes place. Harvest regulations for muskie are one fish per day with a minimum size of 36".

Lake Sule is managed by the City of Rochelle and Rochelle Park District under a cooperative agreement with the Division of Fisheries, Department of Natural Resources. In 1991 a boating development grant was awarded to the park district to develop facilities and a boat launching ramp.

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

**LAKE GEORGE** - This 167 acre lake in Rock Island County was built in 1966 and has a maximum depth of 62 feet with an average depth of 24 feet. Because Lake George is located near a heavily populated area, it receives between 200 and 350 man hours per acre fishing pressure.

Other predators in Lake George, in addition to muskie, are largemouth bass, walleye, and striped bass hybrids which are stocked supplementally each year. The main prey species in the lake since 1990 is gizzard shad.

The lake was first stocked with pure muskie fingerlings in 1983. By 1993, Lake George had developed into one of Illinois' premiere muskie lakes especially for muskie over 40 inches. In 1993 and 1994, Lake George suffered some mortality to larger muskie. Approximately 50 muskie 36 to 42 inches died. The cause could not be determined. Lake George was not stocked with muskie in 1995, but was stocked with 167, 12 inch Leech Lake strain muskie fingerlings purchased by the Mississippi Valley Chapter of Muskie, Inc., in 1996 and 1997. In 1997, the state also stocked 169, 10" muskie. In 1998, the lake was doubled stocked again to make up for muskie lost in 1993 and 1994 with the Mississippi Valley Chapter of Muskie, Inc. purchasing 169 muskie. In 1999, the lake received 1000, 4 inch muskie; 334, 11-13 inch muskie from state stockings. The lake also received 170, 11 inch muskie from the Mississippi Valley Chapter of Muskie, Inc. In 2000, the state stocked 167 - 10.0" muskie and 167 - 11.0" muskie. In 2001, the state stocked 334 - 11.2" muskie. In 2002, the state stocked 334, 6.8 inch muskie and 167, 11.9 inch muskie. In 2003, 332 - 10 inch muskie were stocked. Muskie were not stocked in 2004. In 2005, 167 - 10.0 inch muskie were stocked. In 2006, 367, 11 inch muskie were stocked and 1,190, 5 inch muskie were also stocked. In 2007, 167, 10.8 inch muskie were stocked. In 2008, 501, 11.0 inch muskie or 3 per acre were stocked. In 2009, 167, 11.2 inch muskie were stocked. In 2010, 334, 11.4 inch muskie were stocked and in 2011, 167, 11.3 inch.

The volunteer muskie creel program from 1987 to 1991 recorded 106 legal muskie caught with 90 being released. Creel report data from 1994 reported 83 muskie caught with only 3 harvested. The lake has a 36 inch size restriction on muskie with one fish per day creel limit. In 1999, thirteen trapnets set overnight in April resulted in the collection of 9 muskie greater than 33 inches. The largest was over 35 pounds. In 2002, 28 trapnets set overnight resulted in the collection of 37 muskie greater than 24 inches. In 2003, 10 trapnets resulted in the collection of 23 muskie greater than 25 inches. In 2005, 10 trapnets resulted in the collection of 24 muskie greater than 30 inches. In 2006, 15 muskie of which 14 were greater than 32 inches. In 2007 and 2008, 6 trapnets were set and they collected 10 muskie each year. All except 1 were greater than 36 inches. In 2009, 6 trapnets resulted in the collection of 12 muskie of which 3 were greater than 44 inches, In 2010 6 trapnets resulted in the collection 9 muskie. In 2011 no trapnets were set because we were on flood detail in Southern Illinois. The lake has a good number of 40 inch plus muskie with several muskie collected near the Illinois state record. Lake George is scheduled to be stocked in 2011 with one, 12 inch muskie per surface acre. With the large gizzard shad population that has developed in Lake George, muskie fishing is tough because of the prey density.

**LAKE CARLTON** - This 76.7 acre lake was built in 1969 with a maximum depth of 27 feet and an average depth of 12 feet. The lake was originally stocked with tiger muskie in 1978. Pure muskie were not stocked until 1983. Since then, 1,630 - 12 inch muskie have been stocked in the lake. The 75 - 11.5 inch muskie stocked in 1995 were purchased by the Illinois Chapter of Muskie, Inc. In 2002, 76 - 11.9 inch muskie, and in 2003, 76 - 11.0 inch muskie were stocked by the State. Muskie were not stocked in 2004. In 2005, 2006, 2007, 2008, 2009 and 2011 76-10.0-12 inch muskie were stocked by the State. In 2010 152, 11.4 inch muskie Lake Carlton possess high water clarity

with visibility occasionally extending down 15 feet. The lake has numerous bays, points, and extremely shallow flats of submerged vegetation and water lotus beds.

Lake Carlton, although only 77 acres, has been one of the better muskie lakes in the State since 1987. The lake has produced more legal sized muskie than any other lake in the state. Creel data from 1994 found a catch of 148 muskie and a harvest of only three. The fishing pressure was reported as 606 man hours per acre. Lake Carlton should remain as one of Illinois' premiere muskie lakes for years to come. The fall electrofishing survey in 1995 produced five muskie in excess of 40 inches. Ten trapnets set in April of 1998 resulted in the collection of 32 muskie greater than 28 inches. Eleven trapnets set in April of 1999 resulted in the collection of 29 muskie greater than 30 inches and five trapnets in April 2000 collected 11 muskie over 33 inches. Twelve trapnets in 2001 resulted in the collection of 23 muskie greater than 19 inches. Six trapnets set in April of 2002 resulted in the collection of 29 muskie between 30 and 46.5 inches. Fourteen minutes of night electrofishing resulted in the collection of 4 muskie. Two of the muskie were greater than 42 inches. Five trapnets set overnight in April of 2003 resulted in the collection of 12 muskie greater than 26 inches. The muskie body condition showed improvement in 2003. In 2005, 6 trapnets set over night resulted in

the collection of 33 muskie of which 32 were greater than 30 inches. In 2006, 8 trapnets set over night resulted in the collection of 25 muskie of which 24 were greater than 30 inches. In 2007 only 6 trapnets were set. They caught 12 muskie greater than 34 inches. Three of the muskie were greater than 24 pounds. In 2008 only 6 trap nets resulted in the collection of 16 muskie of which 11 were greater than 36 inches and 4 were greater than 40 inches. In 2009 6 trapnets resulted in the collection of 3 muskie two were greater than 40 inches. In 2010 6 trapnets resulted in the collection of 18 muskie and 12 of these were greater than 36 inches. In 2011 in 6 trapnets we collected 9 muskie of which 8 were greater than 36 inches and 4 were greater than 40 inches. The lake has a 36 inch size restriction on muskie with a one fish per day limit.

### **DISTRICT 3: HENDERSON, KNOX, MCDONOUGH, MERCER AND WARREN COUNTIES**

**LAKE McMASTER** - This 165 acre watershed impoundment, located in the center of the 2,500 acre Snakeden Hollow State Fish & Wildlife Area, has several unique physical and chemical features that support a quality muskie fishery. The lake's physical habitat consists of a maximum depth of 65 feet in the main lake basin with adjacent shallow bars and abrupt drop-offs, numerous bays and points, flooded timber, and extensive shallow flats of submerged vegetation and cattails. The lake also has very clear water with clarity occasionally extending to the 25 foot depth.

Since the 1<sup>st</sup> stocking in 1991, Lake McMaster has received 3,020 muskie of the Leech Lake strain having an average size of 12 inches. The management goal for muskie at Lake McMaster is to maintain a population density of 1 to 3 fish/acre that will produce a

trophy fishery of healthy fish. To date, several muskie over the 50 inch trophy size have been taken at Lake McMaster.

Spring trap net data for 2011, revealed an overall average catch rate of 1.26 muskie/net night, which is slightly below the historic Lake McMaster catch rate of 1.40 muskie/net night. Data from pit tagged muskie that were recaptured in recent surveys revealed that the average muskie (males & females combined) grew 1.13 inches and 0.82 pounds/year. In general, female muskie have a faster rate of growth. A 2009 creel survey (218 days) at Lake McMaster revealed that 193 muskie having an average size of 8.96 pounds were caught and released with only 7 fish having an average size of 14.09 pounds being harvested. Muskie anglers in 2012 can expect this unique lake to offer fish up to and over 50 inches and a satisfactory catch rate for smaller muskie. Lake McMaster has a 42 inch minimum length and a 1 fish/day harvest limit.

**LAKE STOREY** - This 133 acre public co-op watershed lake, located in Knox County at the northwest edge of Galesburg, is a very fertile impoundment that supports high poundages of various sport fish. The lake's fishery is managed by the Illinois Dept. of Natural Resources for the following sport fish: largemouth bass, black & white crappie, bluegill, redear sunfish, channel catfish, walleye and muskie. A fall water level drawdown of 5 to 6 feet for the purpose of predator-prey balance is an annual fish management practice. The lake is heavily fished with an estimated annual pressure of 300 to 600 hours/acre for all fish species. A 2007 creel survey revealed that 3.3 percent of the Lake Storey anglers named muskie as their sought fish species.

Tiger muskie were originally stocked at Lake Storey in 1976 which resulted in a 20 pound 13 ounce state record in 1982. Since 1993, only Leech Lake strain pure muskie have been stocked. During the 1993 to 2011 period, a total of 2,191 muskie (9 to 14 inch) and 405 muskie (6 inch) have been stocked at Lake Storey. The management goal for muskie at Lake Storey is to maintain a population density of 1 to 3 fish/acre that will produce a trophy fishery of healthy fish. To date, several muskie over the 50 inch trophy size have been caught.

Spring trap net data for 2010 at Lake Storey revealed a favorable muskie catch rate of 0.71 fish/net night, but lower than the historic lake catch rate of 1.81 fish/net night. Very clear water at time of the survey could have had a negative effect on the current catch rate. The average muskie in the current 2011 survey was 34.4 inches and 9.91 pounds. Muskie anglers in 2012 can expect a normal catch rate of 30 to 45 inch fish with a few trophy sizes up to 50 inches. A 42 inch minimum length with a 1 fish/day limit is enforced at Lake Storey.

## DISTRICT 4: PEORIA, FULTON AND STARK COUNTIES

**LAKE #3 FULTON COUNTY CAMPING AND RECREATION AREA** - This lake is south of Canton near St. David, IL. It is a 46 acre former strip mine lake that is long and narrow in shape. The lake's major fish species are largemouth bass, bluegill, redear sunfish, channel catfish and black crappie. The recreation area has an entrance fee, camping and electric motors only restriction. The site phone number is (309) 668-2931. Lake #3 has two gravel boat ramps and a minimum size limit of 36" for muskie.

### Lake #3 Esocid Stocking Data:

<u>Year</u>	<u>Species</u>	<u>Size</u>	<u>Number</u>	<u>Source</u>
2007	Muskie	11.2"	90	J.W. N. IA
2008	Muskie	11.4"	90	J.W. Spring Lk IL
2010	Muskie	11.5"	90	J.W. Spring Lk IL
2011	Muskie	11.5"	90	J.W. Spring Lk IL

**LAKE #4 FULTON COUNTY CAMPING AND RECREATION AREA** - This lake is south of Canton near St. David, IL. It is a 19 acre former strip mine lake that is steep, deep and clear. The lake's major fish species are largemouth bass, bluegill, redear sunfish, channel catfish and black crappie. The recreation area has an entrance fee, camping and electric motors only restriction. The site phone number is (309) 668-2931. Lake #4 has two gravel boat ramps and a minimum size limit of 36" for muskie.

### Lake #4 Esocid Stocking Data:

<u>Year</u>	<u>Species</u>	<u>Size</u>	<u>Number</u>	<u>Source</u>
2007	Muskie	11.2"	36	J.W. N. IA
2008	Muskie	11.4"	36	J.W. Spring Lk IL
2010	Muskie	11.5"	36	J.W. Spring Lk IL
2011	Muskie	11.5"	36	J.W. Spring Lk IL

**CANTON LAKE** - This lake is a 250 acre water supply reservoir located on the northeast side of Canton. The lake has a maximum depth of 35 feet, housing development near about half of the shoreline and woody debris is the main structure in the lake.

The lake's major fish species are largemouth bass, crappie, bluegill, yellow bass, channel catfish, flathead catfish, blue catfish, carp, and gizzard shad. The City of Canton has various user fees for boat use and a 85 horse power motor limit. The lake has a concrete boat ramp and camping. The phone number for Canton City Hall is (309) 647-0288.

The spring 2011 trapnet survey collected 25 muskie in 15 trapnet nights of effort. These fish ranged from 27 to 39 inches long. The muskie length limit is 42 inch minimum.

Canton Lake Esocid Stocking Data:

<u>Year</u>	<u>Species</u>	<u>Size</u>	<u>Number</u>	<u>Source</u>
1985	Tiger Muskie	8.3"	250	J.W.
1985	Tiger Muskie	8.5"	250	J.W.
1987	Tiger Muskie	6.0"	250	J.W.
1988	Tiger Muskie	8.0"	250	J.W.
1989	Tiger Muskie	8.0"	250	J.W.
1990	Tiger Muskie	8.0"	250	J.W.
1991	Tiger Muskie	8.0"	413	J.W.
1992	Tiger Muskie	10.0"	250	J.W.
1993	Tiger Muskie	10.0"	250	J.W.
1994	Tiger Muskie	10.0"	250	J.W.
1995	Tiger Muskie	10.0"	250	J.W.
1996	Tiger Muskie	10.0"	750	J.W.
1997	Tiger Muskie	10.0"	750	J.W.
2000	Muskie	3.5"	2,500	J.W.
2001	Muskie	10.0"	650	J.W.
2002	Muskie	6.8"	250	J.W.
2003	Muskie	6.0"	2,500	J.W.
2006	Muskie	Fry	134,962	J.W.
2006	Muskie	5.0"	750	J.W.
2006	Muskie	11.0"	1,521	J.W.
2007	Muskie	11.2"	500	J.W.
2008	Muskie	10.8"	750	J.W. Spring Lk
2009	Muskie	6.0"	1,247	J.W.
2010	Muskie	11.5"	500	J.W.
2011	Muskie	Fry	34,591	J.W.
2011	Muskie	2.0"	25,132	J.W.
2011	Muskie	11.5"	500	J.W.

**DOUBLE T SFWA** - This site is located 3 miles northwest of Canton and was acquired by the state of Illinois in September 2001. The big lake is approximately 64 surface acres in size and has very steep and deep profile that is typical of a stripmine lake.

The lake's major fish species are largemouth bass, crappie, bluegill, carp and gizzard shad. A concrete boat ramp was installed in 2005 and the lake is electric motors only. The site office can be reached at phone number (309) 647-9184.

The spring 2011 trapnet survey collected 19 muskie in 11 trapnet nights of effort. These fish ranged from 29 to 43 inches long. The current muskie regulation is a 42 inch minimum.

Double T SFWA Lake Esocid Stocking Data:

<u>Year</u>	<u>Species</u>	<u>Size</u>	<u>Number</u>	<u>Source</u>
2002	Muskie	10-13"	179	J.W.
2003	Muskie	10"	64	J.W.
2005	Muskie	10"	64	J.W.
2006	Muskie	10.4"	64	J.W.
2007	Muskie	10.8"	64	J.W.
2008	Muskie	10.8"	64	J.W. Spring Lk
2009	Muskie	10.9"	64	J.W.
2010	Muskie	11.4"	64	J.W.
2011	Muskie	11.5"	64	J.W.

**FITCH AND BOND LAKE (Canton Park District)** - This lake is located on the northwest edge of Canton in Lakeland Park. The lake is a 64 acre former stripmine lake that has a large basin (38 acres) connected to a long narrow section (26 acres).

The lake's major fish species are largemouth bass, bluegill, redear sunfish, crappie, channel catfish, carp, and gizzard shad. The Canton Park District has user access fees for fishing and electric motors only restriction. The lake has a concrete boat ramp and a concession stand. The Canton Park District can be reached at phone number (309) 647-1345.

A spring trapnet survey in 2005 collected 11 muskie in 10 trapnet nights of effort. These fish ranged from 31.9 to 37.8 inches long. The current muskie regulation is a 42 inch minimum.

Fitch and Bond Lake Esocid Stocking Data:

<u>Year</u>	<u>Species</u>	<u>Size</u>	<u>Number</u>	<u>Source</u>
1985	Tiger Muskie	8.3"	61	J.W.
1985	Tiger Muskie	8.5"	40	J.W.
1986	Tiger Muskie	8.0"	150	J.W.
1987	Tiger Muskie	6.0"	63	J.W.
1987	Tiger Muskie	10.0"	64	J.W.
1988	Tiger Muskie	8-10"	64	J.W.
1989	Tiger Muskie	8-10"	61	J.W.
1990	Tiger Muskie	8.5"	128	J.W.
1991	Tiger Muskie	8-10"	96	J.W.
2000	Muskie	12-14"	180	L.H.
2002	Muskie	10-12"	100	L.H.

**WHEEL LAKE (Banner Marsh)** - At normal pool the 350 acre lake is composed of a deep final cut section and a large series of strip mine wheel cut lakes. The wheel cut portion (280 acres) contains a maze of points, islands, flooded brush and diverse aquatic vegetation, while the final cut portion (70 acres) has a maximum depth of 60 feet and rocky structure.

The lake's major fish species are largemouth bass, bluegill, white and black crappie, and gizzard shad. Other fish species present are smallmouth bass, walleye, channel catfish, yellow bullhead, carp, green sunfish, and yellow perch. The lake has a concrete boat ramp, restrooms and picnic area. There is a 25 horse power limit at Banner Marsh. The site office can be reached at phone number (309) 647-9184.

The spring 2011 trapnet survey collected 18 muskie in 16 trapnet nights of effort. The fish ranged from 24 to 41 inches long. The current muskie regulation is a 42 inch minimum.

Wheel Lake Esocid Stocking Data:

<u>Year</u>	<u>Species</u>	<u>Size</u>	<u>Number</u>
1996	Muskie	8.6"	350
1997	Muskie	10.0"	351
1998	Muskie	10.0"	350
1998	Muskie	19.0"	100
1999	Muskie	4.0"	2,000
1999	Muskie	11.3"	350
2000	Muskie	10.0"	350
2001	Muskie	11.4"	350
2002	Muskie	11.4"	350
2003	Muskie	10.0"	350
2005	Muskie	10.0"	350
2006	Muskie	10.0"	350
2007	Muskie	10.8"	350
2008	Muskie	10.8"	350
2009	Muskie	10.9"	350
2010	Muskie	11.4"	350
2011	Muskie	Fry	55,350
2011	Muskie	11.3"	350

**SHOVEL LAKE (Banner Marsh)** - Shovel Lake was enlarged to over 200 acres by the end of 2000. It is a "T" shaped final cut strip mine lake (74 acres) with a maximum depth of 65 feet that was attached to approximately 100 acres of littoral zone surrounding deep water pockets (25 acres of strip mine ponds).

The lake's major fish species are largemouth bass, bluegill, white and black crappie, walleye, channel catfish, carp, and gizzard shad. The lake has a concrete boat ramp, restrooms and picnic area. There is a 25 hp limit at Banner Marsh. The site office can be reached at phone number (309) 647-9184.

The spring 2011 trapnet survey collected 18 muskie in 16 trapnet nights of effort. The fish ranged from 30 to 44 inches in length. The current muskie regulation is a 42 inch minimum.

Shovel Lake Esocid Stocking Data:

<u>Year</u>	<u>Species</u>	<u>Size</u>	<u>Number</u>
1999	Muskie	11.0"	250
1999	Muskie	11.0"	200
2000	Muskie	10.0"	200
2001	Muskie	Fry	191,788
2001	Muskie	11.4"	600
2002	Muskie	11.4"	200
2003	Muskie	10.0"	200
2005	Muskie	10.0"	200
2006	Muskie	12.5"	18
2006	Muskie	10.4"	200
2007	Muskie	10.8"	200
2008	Muskie	10.8"	200
2009	Muskie	10.9"	200
2010	Muskie	11.4"	200
2011	Muskie	Fry	55,791
2011	Muskie	11.3"	200

**JOHNSON LAKE (Banner Marsh)** - Johnson Lake is approximately 600 acres and is composed of a maze of deep strip mine water connected to shallow flats of flooded trees.

The lake's major fish species are largemouth bass, bluegill, white and black crappie, walleye, channel catfish, northern pike, carp, and gizzard shad. The lake has a concrete boat ramp, restrooms, and handicap dock and picnic area. There is a 25 hp limit at Banner Marsh. The site office can be reached at phone number (309) 647-9184.

The Spring 2011 trapnet survey collected 39 muskie in 20 trapnet nights of effort. The fish ranged from 28 to 40 inches long. The current muskie regulation is a 42 inch minimum.

Johnson Lake Esocid Stocking Data:

<u>Year</u>	<u>Species</u>	<u>Size</u>	<u>Number</u>
2001	Muskie	11.4"	600
2001	Muskie	11.8"	1,574
2002	Muskie	10.9"	725
2003	Muskie	10.0"	1,333
2005	Muskie	10.0"	600
2006	Muskie	10.4"	600
2007	Muskie	10.8"	600
2008	Muskie	10.8"	600
2009	Muskie	10.9"	600
2010	Muskie	11.4"	600
2011	Muskie	Fry	47,713

2011	Muskie	3.0"	3,594
2011	Muskie	4.0"	6,000
2011	Muskie	11.3"	600

**DEEP LAKE (Wildlife Prairie State Park)** - Wildlife Prairie State Park is located 10 miles west of Peoria. This lake is a 14 acre manmade impoundment. The lake has a maximum depth of 33 feet and 50% of the basin is flooded timber.

The lake's major fish species are largemouth bass, bluegill, redear sunfish, crappie and channel catfish. The lake has no boat ramp and is accessible by a trail system. Boats are allowed with electric motors only. The site has an entrance fee, concession stand, picnic area and restrooms. The site office can be reached at phone number (309) 676-0998.

The current muskie regulation is a 42 inch minimum.

**Deep Lake Esocid Stocking Data:**

<u>Year</u>	<u>Species</u>	<u>Size</u>	<u>Number</u>
1992	Tiger Muskie	12-14"	5
2001	Muskie	11.8"	25
2002	Muskie	11.4"	25
2003	Muskie	10.0"	25
2005	Muskie	10.0"	25
2006	Muskie	10.4"	25
2007	Muskie	10.8"	25
2008	Muskie	10.8"	25
2009	Muskie	10.9"	25
2010	Muskie	11.4"	25
2011	Muskie	11.5"	25

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

**SPRING LAKE NORTH (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 1981 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 1983, and has remained ever since.

Always a shallow water marsh, Spring Lake today has an average depth of 2.9 feet. Of the 578 acres of water, at least 75 percent is covered with 17 identified different species of aquatic vegetation by late May of each year. The majority of this coverage now

consists of Eurasian milfoil, lotus and lily. The tremendous spring recharge from the bed of the lake amounts to 52 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 muskie.

Because of its proximity to the Jake Wolf Hatchery, North Spring Lake has been used as a brood source for muskie the past 24 years and has provided most of the early muskie stocks for statewide stocking each year. In an effort to collect fish for egg production, extensive population assessment data has been gathered since 1991. 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 muskie is in the normal range when making a similar comparison. There is a big difference in the length at age between sexes! A 32 inch female is usually 4 years old, whereas a 32 inch male is 5 years old, on average.

North Spring Lake is stocked with muskie every third year at a rate of between 2 and 3 fish per acre. It has been observed that significant cannibalism occurs if muskies are stocked every year. Young of the year muskie are especially vulnerable to 1 and 2 year old male muskie at North Spring Lake.

A muskie tag reading project is in its 12<sup>th</sup> year on North Spring Lake. It is important to gain information regarding growth of fish by sex and age as well as potential egg production data. This tagging project has answered many questions concerning muskie biology in Illinois.

In 2011, 366 muskies were collected by trap nets in March. Of these fish, 115 were females and 13 were flowing eggs when captured. All fish were taken to Jake wolf hatchery for processing and then were returned in good condition to the lake. There were 7 recaptures of muskie tagged in previous years, resulting in good growth data information. A total of 485,028 eggs were obtained from these brood fish which resulted in 406,842 fry.

Fishing for muskie on North Spring Lake is a challenge. The water temperatures rise quickly and usually result in fish feeding actively in late March. Aquatic vegetation becomes thick and hard to fish no later than May 15<sup>th</sup> of each year and lasts until the lake closes for regular waterfowl season. The narrow window of opportunity that exists between the middle of March and mid May results in some excellent fishing. 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 muskie fishermen.

North Spring Lake has three useable boat ramps and is accessible by the Manito Blacktop, 12 miles south of Pekin. No fuel or services are available; however, camping and food is. There is a 25 horsepower limit at Spring Lake. The majority of the lake is

closed for fishing for regular waterfowl season. Information for Spring Lake can be obtained by calling (309) 968-7135.

## **STATUS OF MUSKIE FISHERY IN ILLINOIS REGION 2**

### **DISTRICT 6: DUPAGE, KANE AND MCHENRY COUNTIES**

**MALLARD LAKE** - Mallard Lake is an 89 acre reclaimed gravel pit lake owned by the Forest Preserve District of DuPage County. It is the largest fishing lake in the DuPage County Forest Preserve system and it was selected to receive muskie because of its size, depth, and suitable prey base that includes large gizzard shad and yellow bass populations. To ensure the successful establishment of a muskie population and future sport fishery, IDNR stocked pure muskie at a rate of two advanced fingerlings per acre during fall 2006, 2007, and 2008 ( $N = 178-180$  fingerlings; average length = 11.2-11.4 inches). In 2010 the number was dropped to one fish per acre. Eighty-nine muskies were stocked in both 2010, and 2011, to maintain the fishery.

Yearling muskies were captured by electrofishing during spring in 2007, ( $N = 7$ ), 2008 ( $N = 6$ ), and 2009 ( $N = 3$ ). While still small, these yearlings averaged between 12.0 and 14.9 inches long and weighed about 0.5 pounds. Although older muskies have not yet shown up in electrofishing surveys or a spring trap net survey conducted during early April 2008 (effort = 4 net-days), a 30- to 35-inch long individual (probably from the 2006 stocking) was observed last spring when it went airborne to avoid capture by the DC shock boat. In addition, a stratified-random angler creel survey conducted for IDNR by the Illinois Natural History Survey estimated 150 juvenile muskie averaging 0.78 pounds were caught and released by anglers from March through October 2007. Most of the muskies caught by anglers were taken incidentally, as effort directed toward muskies was only 1% of the 22,493 angler-hours of total fishing effort. The plan is to survey anglers again in 2013 to further examine effects of muskie introductions on the Mallard Lake fishery. Electrofishing or trap netting surveys also will be conducted annually to monitor survival and growth of the developing population. A fish population survey is planned for 2012.

At this time, only shoreline fishing is allowed at Mallard Lake, but an extensive trail system and bridges to islands make for plenty of good fishing spots. Handicap accessible fishing piers are available and further access development is likely in the future. There is a 48-inch minimum length limit for muskie at the lake.

**THREE OAKS SOUTH** - A new fishing opportunity opened to the public in 2011. The City of Crystal Lake opened the 282 acre reclaimed gravel mine in April which quickly became a popular spot for local anglers. The city has signed a cooperative management agreement with the IDNR for fishery management assistance. The city has implemented a catch and release regulation on the lake until further notice. Three Oaks South Lake has a maximum depth of 41 feet. There are several areas with shore

fishing access and numerous walking and biking paths. Boat rentals are available seasonally. There is a parking fee for non-residents.

An initial stocking of 282 fish (approximately 11 inches) took place during 2011. Two fish surveys (2005 and 2011) have occurred since the city took ownership of the property. No muskie were captured in the 2005 survey. One of the recently stocked muskie (12¼ inches) was captured in the 2011 survey. Northern pike, walleye, smallmouth and largemouth bass are also present in the fishery.

## **DISTRICT 7: LAKE COUNTY**

**FOX CHAIN O'LAKES** - The Fox Chain O' Lakes has been stocked with muskie since 1982 and has developed into a consistent and outstanding pure muskie fishery. Since the mid to late 1990's spotted (Leech lake strain) muskie have been stocked through donations from SOB Chapter of Muskie Inc. Fishermen have reported spotted muskie up to 46" long and many have been captured in our sample nets. We collected a 51.25" fish that appears to be a spotted muskie in spring 2010. This suggests fish surviving remain elusive to our sample gear most of the time.

Since fall 2006 our stocking protocol has been to stock 3,000 fingerlings per year. We will continue this protocol until catch rates during spring sampling increase from pre-2006 numbers and an increase in abundance is detected. Three-thousand fingerlings per year equates to a stock rate of just approximately 0.4 fish per acre. Prior to 2006 the stocking goal was 0.3 fish per acre every other year (or 2,130 fingerlings every other year); as you can see this was quite a jump in the number of fingerlings stocked. The change sets up a more predictable stocking time-table and allows for adjustments based on the quantity of fish donated verses anticipating donations that sometimes never materialize. If growth rates slow due to density dependent factors stocking rates will be reduced. Trend data could take 5 to 7 years to evaluate since fish become vulnerable to our sampling gear after 3 or 4 years of age. Through 2011 catch rates have remained relatively constant at around 2 fish per net night of targeted effort.

No Leech Lake fingerlings were stocked in 2006 because of the Viral Hemorrhagic Septicemia (VHS) quarantine placed on importation of vulnerable species by the USDA. Approximately 500 Leech Lake Strain fingerlings were stocked in fall 2007, none were stocked in 2008, 1,250 were stocked in November of 2009 and no Leech Lake fish were stocked in 2011.

Catch rates have exceeded Management Objectives established by the Esocid Task Group for several years. The objective is 0.3 fish per trap net night, catches have historically hovered around 2.3 muskie per trap net night overall with catch rates up to 2.6 fish per trap net night at peak catches. Each year there are several reports of fish in the 50 inch class. The Chain has had a 48" length limit since 1997. The average muskie is about 36" long, males average around 33" long and females around 39" long. The largest fish collected by IDNR staff was 51.25" long and the heaviest weighed 36 lbs. Gizzard shad were first detected in fall 2007 and have since moved throughout the

system and had several spawns. Their presence should increase growth rates and sizes of all predators so things may get exciting around here the next few years!

Tagged fish have been reported from all lakes in the Chain and in the Fox River as far south as Yorkville and north into Wisconsin. The longest a floy tagged fish swam at-large before being recaptured was 8 years! A cleithra collected from a dead 47" muskie (in 2006) was estimated at 12 years old so growth rates are a little slower than in southern Illinois.

Generally speaking, male muskie in the Chain only occasionally exceed 40 inches but females easily grow beyond 40 inches and make up almost all fish over 42". The Fox Chain O' Lakes has a muskie length limit of 48" and 1 fish per day creel from the Wisconsin line south to the Algonquin Dam.

**STERLING LAKE** - This 74.4 acre lake is managed cooperatively with the Lake County Forest Preserve District. It is the only actively managed muskie water in Lake County, outside of the Fox Chain, that is open to the public. Sterling Lake has received intermittent muskie stockings of pure strain fingerlings from either Muskie Inc. or the IDNR since 1990. It was stocked with 150 State produced fingerlings from Jake Wolf Hatchery in 2009 and 2008, 300 in 2007, and 150 in both 2006 and 2005. These year classes should carry the fishery forward for years to come.

Spring sampling in 2006 yielded 7 fish ranging in size from 13 inches to 37 inches. The catch rate of 6 fish per hour of electrofishing (A/C gear) exceeded Management Goals established by the Esocid Management Committee of 1.0 fish per hour of electrofishing. Survey data from spring 2009 yielded three muskie electrofishing with a D/C rig and one fish from two trapnets. The big fish was a 45" fish weighing 23 lbs. Both sampling methods exceeded management goals established for the lake. Sterling Lake has produced fish exceeding 48 inches long but none of these monsters have been collected by the IDNR, yet.

There are no concession facilities at the lake though it offers ample picnic, pit toilets, and shorefishing access. Sterling Lake has a variety of sport and pan fish species present so everyone can have a happy time catching fish. A 48 inch length limit and 1 fish per day creel limit exist on the lake for muskie.

## **DISTRICT 8: COOK COUNTY**

**BUSSE LAKE** - Busse Woods was added to the Coolwater Stocking List for muskie in 2007 and has received approx. 800 fall fingerlings (approx. 12"-14" long) each fall since. Just fewer than 200 fish from the 2007 stocking were implanted with PIT tags (Passive Integrated Transponders) to attempt to track their growth over time. In spring 2010 thirteen net nights of effort yielded a catch rate of 0.8 fish per net night. This exceeded the Management Goal of 0.3 fish per net night. No tagged fish were collected. The largest muskie collected in spring 2010 was a female, 31.2" long. Of the

10 fish collected three were females, four were males and three were immature. In 2011 six net nights of sampling effort yielded no muskie. Nets were fished overnight on April 6<sup>th</sup>. Water temperature was 52 degrees so fish should have been moving but no muskie were collected. Nine northern pike and 18 walleye were collected and those data will be presented in their specific Status Reports.

Busse Lake has an abundance of white suckers, gizzard shad and small sunfish which provides ample forage for these fish to grow large and relatively fast. Additional spring surveys will be conducted to monitor the fishery and to confirm progress reported by the fishing public.

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

**HEIDECKE LAKE** - As part of a research project 1,955 acre Heidecke Lake, which is located in Grundy County near Morris, received an initial stocking of pure muskellunge in 1980. Annual additions of muskellunge (which were purchased fish pond-reared in Wisconsin) commenced in October of that year. Field data from these early stockings indicated slightly accelerated growth rates but only fair recruitment. Pure muskellunge stockings ended in 1986 with the completion of the research project. Muskellunge x northern pike hybrids (tiger muskie) were initially stocked in 1981 and were released on a somewhat annual basis through 1997. Tiger muskie released from 1993 through 1997 were "minnow-finished", larger in size and released later in the year. No tiger muskie have been stocked since that time. In 1999 when surplus fish produced by the state hatchery system became available, pure muskellunge were once again released into Heidecke Lake and continue to be stocked at the rate of one per acre (1,955 fish) on a biennial schedule. The muskie population is evaluated via ancillary and biennial standardized surveys, formal angler creel surveys, voluntary angler survey (green card) and via annual spring trap netting.

In mid-April, 2011, a total of 8 trap nets (4-foot frames w/1-inch mesh) were deployed along the "natural" (south) shoreline area of the lake. A total of 24 net-nights of effort were expended, resulting in the collection of nine (9) muskellunge. Although an improvement over the preceding year which saw no muskies collected, this effort fell short of the long-term averages for spring trap net collections. Surface water temperature during the course of this survey did not vary appreciably, ranging from 55.0°F (12.1°C) to 57.0°F (13.2°C). Air temperatures started in the low-60's (°F) but fell to the low 50's (°F) on the final day of the survey. Strong WNW to ENE winds prevailed throughout the survey. The moon was in its first phase beginning with the deployment of the nets. The 2011 muskie catch was dominated by males with fish collected ranging from 31.3" (782mm ) to 46.8" (1170mm) averaging 36.1" (903mm). None of the muskellunge captured in the 2011 trap net survey had been previously collected. Since 2005, a total of 68 muskellunge have been fitted with PIT tags (internal) which provide valuable age and growth data. A number of fish have also been marked with Floy tags (external). Voluntary angler or "green card" information for 2011 was not yet available at the time this report was being compiled. Angler harvest of muskellunge at Heidecke

Lake is presently regulated by a one fish daily creel and a 48-inch length limit. The decommissioning and demolition of the Collins Generating Station has eliminated thermal loading to Heidecke and has resulted in ambient water temperatures. A partially perched lake, Heidecke can become very rough under windy conditions. Gasoline-powered motors are required and there is no horsepower limit. Heidecke Lake is open to fishing from April 1<sup>st</sup> to mid-October, closing ten days prior to the opening of the North Zone waterfowl season.

## **STATUS OF MUSKIE FISHERY IN ILLINOIS REGION 3**

### **DISTRICT 10: CHAMPAIGN, DEWITT, FORD, IROQUOIS, LIVINGSTON, MCLEAN, PIATT AND VERMILION COUNTIES**

**EVERGREEN LAKE** - This lake was first stocked with muskie in 1990. A spring netting survey was initiated in 2002 to monitor the muskie population. In 2011, 78 muskie were collected with 20 net-nights of effort. The muskie ranged in size from 15 inches to 48.5 inches. Approximately 14% of the muskie collected were larger than 38 inches and only one muskie was larger than the length limit of 48 inches. The largest muskie weighed 33.6 pounds. We captured 1.7 muskie per net-night in 2007. Approximately 90% of the muskie captured in 2007 were larger than 30 inches, 29% were larger than 38 inches, and 13% were larger than 42 inches. In 2008 the catch rate improved to 3.7 per net-night. In 2008, approximately 92% of the muskie captured were longer than 30 inches, 24% were longer than 38 inches and 5% were longer than 42 inches. In 2009, we collected 3.2 muskie per net-night. The seven-year average is 2.4 muskie per net-night. Approximately 92% of the muskie captured in 2009 were larger than 30 inches, 29% were larger than 38 inches, and 11% were larger than 42 inches. The largest muskie collected in 2009 was a female that was 46.8 inches long and weighed 32.5 pounds. In 2010, the catch improved to 7.4 muskie per net-night. The eight-year average is 3.1 muskie per net-night. In 2010, approximately 78% of the muskie collected were larger than 30 inches, 28% larger than 38 inches and 9% larger than 42 inches. The heaviest muskie collected in 2010 was a female that was 47.2 inches long and weighed 40.2 pounds.

Muskie exhibit ideal weights at all sizes in Evergreen Lake. Muskie have now been in Evergreen Lake long enough to allow them to reach a large size. The muskie population in this lake is developing nicely and starting to show its true potential. Muskie were collected over the current state record during spring netting surveys in 2006, 2007, and 2010.

Evergreen Lake has two boat ramps and has a 10 horsepower limit on all boats. In order to launch a boat on Evergreen Lake, a sticker must be purchased. The stickers can be purchased at the boat ramps, Comlara Park Visitor's Center, or by calling 309/726-2022.

**LAKE MINGO** - In 2002 muskie were first stocked into Lake Mingo as part of a research project conducted by the Illinois Natural History Survey and the Illinois Department of Natural Resources. The project is titled *Evaluation of Growth and Survival of Different Genetic Stocks of Muskellunge: Implications for Stocking Programs in Illinois and the Midwest*. Muskie have been stocked each year since 2002. Netting surveys were conducted in April of 2006, 2007, 2008, 2009, 2010, and 2011. In 2006, a total of 52 muskellunge were netted during the 4 days resulting in an average of 1.2 fish per net-night.

In 2007, a total of 98 muskie were netted during 4 days of sampling resulting in an average of 1.7 fish per net-night. The largest muskie captured in 2007 was over 40 inches. In 2008, a total of 99 muskie were collected during the 4 days resulting in an average of 1.87 fish per net-night. There was also one muskie collected over 40 inches in 2008. In 2009, a total of 63 muskie were captured in 6 days of netting. The catch rate declined to 0.83 muskie per net-night. The largest muskie collected in 2009 was 38.8 inches. In 2010, a total of 51 muskie were collected in 6 days of netting. The catch rate declined to 0.59 muskie per net-night. The largest muskie collected in 2010 was 42 inches and weighed 21.25 pounds. In 2011, a total of 97 muskie were collected with 211 net-nights of effort. This resulted in a catch rate of 0.46 muskie per net-night. The largest muskie collected in 2011 was 41.3 inches long and weighed 20.6 pounds.

The muskie are exhibiting good growth rates and survival. Lake Mingo has a good muskie fishery and will only improve with time. For more information regarding Lake Mingo and Kennekuk Cove County Park call 217-442-1691.

#### **DISTRICT 11: CLARK, COLES, CUMBERLAND, DOUGLAS, EDGAR, MACON, MOULTRIE AND SHELBY COUNTIES**

**MILL CREEK LAKE** - Located approximately 8 miles west of Marshall, in Clark County. This lake has a surface area of 731 acres, with a maximum depth of 60 feet, and an average depth of 22 feet. Public boat launching facilities are available and the Clark County Park District (217-889-3901) collects a boating access fee. A 42-inch minimum length limit with a one (1) fish per day creel limit is in effect for muskie.

This lake was stocked initially in fall of 1999 with pure muskellunge to diversify the fishery and take advantage of outstanding habitat, water quality, and abundant adult gizzard shad and white suckers for forage. Recent reports indicate that this fishery is developing well, with reports of 48"+ fish being caught in recent years. No muskie were observed during either the standard fall survey or during the later stocking success survey. Fishing prospects are rated as fair to good in 2012.

**LAKE SHELBYVILLE** - Located in Shelby and Moultrie Counties in east-central Illinois. This lake has a surface area of 11,100 acres, with a maximum depth of 67 feet, and an average depth of 18.9 feet. Public boat launching facilities are available, with a fee assessed on U.S. Army Corp of Engineers (217-774-3951) boat ramps, and free access

on state park or Corp gravel boat ramps. A 48" length - 1 fish daily creel limit will remain in effect. The limit is in effect in the headwaters up to the Corps of Engineers project boundary and extends below the dam, downstream to the State Route 128 bridge near Cowden.

Pure muskellunge were first stocked in Lake Shelbyville in 1978. It wasn't until 1988, however, that somewhat consistent year-to-year stockings of 5,500 fingerlings per year were initiated. Compared to the known potential longevity of this species, this fishery is still relatively young compared to the many well known fisheries in northern United States and Canada. In past years this lake has produced an outstanding muskie fishery; however catch rates since 2007 have been depressed for unknown reasons. A large kill was observed in 2007 below the lake in the spillway area due to stress from an extensively long spawning season. Some dead fish were reported observed in the lake, but not reported in numbers that appeared to be significant. Floods may have been partially to blame for poor catch rates in '08 and '09, allowing muskies to use heavy brush for cover which makes fishing for them more difficult; however water levels were close to normal in fall 2010 and 2011. Fishing for muskie was improved significantly in 2011 below the spillway and somewhat on the lake.

Two major muskie tournaments held on Lake Shelbyville in 2010. The catch as reported was distributed as no fish (LSMC, May 21<sup>st</sup>, 17 anglers) and 6 fish (IMTT Fall Classic, Oct. 1<sup>st</sup> & 2<sup>nd</sup>, 43 anglers, largest fish 42"). One angler caught two fish in the fall tournament.

Without extensive sampling it is difficult to assess muskie numbers on Lake Shelbyville. Six muskies were collected in the 2011 fall fish population survey by the IDNR crew with the largest being 35". Illinois Natural History Survey employees collected several muskie in subsequent surveys while collecting fish for a diet study of muskie. Although collection rates were fair, muskie numbers likely remain good on the lake and improved in the area below the dam. Fishing prospects for 2012 are fair for numbers and size on the lake and good for size and number below the spillway.

## **STATUS OF MUSKIE FISHERY IN ILLINOIS REGION 4**

### **DISTRICT 13: CASS, CHRISTIAN, LOGAN, MASON, MENARD, MORGAN AND SANGAMON COUNTIES**

**PRAIRIE LAKE (Jim Edgar Panther Creek State Fish & Wildlife Area)** – Initial stockings in 1999 on this newly constructed lake included the standard largemouth bass, bluegill, redear sunfish and channel catfish. This was followed by a stocking of pure muskies. It received 210, 10"-12" fingerling muskies in October of that year and has received 210 fish every other year, on the odd years, since then. The 2011 spring muskie population survey on Prairie Lake produced nearly identical total numbers as the past two years. Sixteen were brought into the boat for measuring and weighing.

Several more were seen as they exploded out of the water and disappeared. The largest fish to date was surveyed in 2011 at 46.5" although larger fish over 50" have been reportedly caught. The down-side was that the weights of the muskies were still below average with that 46.5" fish weighing only 26 pounds. To correct that problem the biologist has stocked gizzard shad the past two years and is raising them for stocking in an on-site nursery pond. With luck the shad population will take off and the muskie weights will improve. Muskie will continue to be stocked at the rate of one per acre every other year as has been the stocking protocol since the lake began filling in 1999.

By the way, there are reports of tiger muskies (hybrids between northern pike and muskies) being caught in the lake. The IDNR has not stocked hybrid muskies anywhere in the state since the mid-90 and there haven't even been any tigers in the state's hatchery system since that time so these cannot be tigers in Prairie Lake. The fish in question are strongly barred pure muskies. All from Spring Lake (IL) stock. The crystal clear water really brings out the color pattern. Note: A few tigers have been stocked in a couple of lakes in the state by Muskie clubs, in cooperation with the Department, but our hatchery does NOT raise any. Currently there is an unlimited horsepower limit but the entire lake is a No Wake Zone except for boats 10hp and less which can operate as normal. Two concrete ramps and campgrounds are found on site and there are rental cabins on the lake as well. For more information on Prairie Lake contact the site office 217/452-7741 or the district fisheries biologist's office at 309/543-3316.

#### **DISTRICT 14/15: GREENE, JERSEY, SCOTT, MACOUPIN AND MONTGOMERY COUNTIES**

**OTTER LAKE** - Data obtained from the 2011 spring netting evaluation revealed Muskie numbers have steadied in comparison to the 2010 survey (29 Muskie), and came in moderately below the historical catch rates. Twenty-two (22) fish were captured in March of 2011, which is a minor decrease compared to 2010. These individuals measured 26.1" to 39.6", and weighed 4.5 lbs. to 15.6 lbs. in total weight. The length frequency shows the following: 5 fish (23%) measured 24" to 30", 11 Muskie (50%) were 31" to 35", and 6 individuals (27%) ranged from 36" to 40" in total length. The 15 year mean for this annual sample (1996 - 2010) is 32.8 Muskie collected per year. The best three sampling years were from 2000 - 2002 (avg. 60.1 fish per year) prior to the two 100 year flood events that occurred. The 2011 survey would rank tied for 11th since these evaluations began.

Once again, in discussing Muskie management with local anglers, and the Otter Lake Water Commission, this fishery is slowly improving since the floods. Anglers are very happy with the population in place. These anglers are more content with catching muskie rather than hooking a trophy fish. The barrier net was re-worked during the summer of 2011. This management tool should only aide in creating a solid Muskie fishery in this impoundment.

When fish are available, Otter Lake is stocked with at least one fish per acre per year. With the solid stocking program, a new barrier net, and a restrictive 48" length limit with a 1 fish per day creel limit, this population/fishery should only improve into the future.

## **STATUS OF MUSKIE FISHERY IN ILLINOIS REGION 5**

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

**KINKAID LAKE** - Built in 1972 and first stocked with muskie in 1985, this 2,750-acre lake is located just west of Murphysboro in Jackson County. Muskie habitat at Kinkaid is abundant with high water clarity, good depth, and 82 shoreline miles of necks, bays, and points. Weed beds can be found in certain shoreline areas. Large numbers of gizzard shad and spotted suckers are available and preferred as forage. During the summer of 1996, it was discovered that a high number of muskie escape over the spillway during periods of heavy rain. Since June 1996, electro sampling by biologists has resulted in over 230 muskie (28-47 inches in total length) being returned to the lake. At least 12 of these muskie had been rescued below the spillway, tagged and returned to the lake, and subsequently recaptured again below the spillway. One fish has been documented as going over the spillway on three separate occasions. During the fall of 1998, a spillway barrier was installed across the dam to reduce muskie escapement during periods of high water flow. This barrier should greatly enhance opportunities to grow trophy muskie and keep them in the lake. After heavy 2011 spring rains the Kinkaid Lake water level rose above the barrier for a few days. A total of 28 muskie were salvaged from below the spillway in 2011 after these rain events. Two of these fish were caught by anglers in the lake within a couple of weeks after the rescue date. Sampling efforts will continue to assess the effectiveness of the spillway barrier and the resultant effect on the Lake's muskie population.

The largest documented muskie known from Kinkaid Lake was collected in an IDNR net in 2002. The female measured 50 inches and weighed 34.7 pounds (she had already lost most of her eggs). Kinkaid Lake was stocked with 2,000 ten inch muskie during 2011. Spring 2011 trap netting resulted in the collection of 118 muskie with the largest fish measuring 47 inches and the heaviest fish weighing just under 28 pounds. The 2011 spring trap netting catch rate was down considerably from recent years but was still the 4<sup>th</sup> best survey on record. Unseasonably cold weather during the entire week of the spring survey reduced catch rates compared to the three previous record setting spring surveys.

If you catch a tagged muskie from Kinkaid Lake **DO NOT REMOVE THE TAG**. Please contact Shawn Hirst, District 21 Fisheries Biologist by phone at 618/687-4546 or via email at [Shawn.Hirst@illinois.gov](mailto:Shawn.Hirst@illinois.gov) with the following information: date of catch, length of muskie, tag number (If number is covered with algae simply scrap the algae away with your fingernail or a knife). Anyone providing a tag number will receive the history of that

particular fish.

**CANVASBACK LAKE** - This 60 acre strip cut is located in the Denmark Area of Pyramid State Park in Perry County. Muskie were first stocked in August 2002. Canvasback Lake is stocked with 50 ten-inch muskie in even-numbered years. This lake has a 10 HP motor limit. Fishing is prohibited from October 28 through February 28. Muskie up to 47 inches have been caught at this lake. If you catch a tagged muskie from Canvasback Lake **DO NOT REMOVE THE TAG**. Please contact Shawn Hirst, District 21 Fisheries Biologist by phone at 618/687-4546 or via email at [Shawn.Hirst@illinois.gov](mailto:Shawn.Hirst@illinois.gov) with the following information: date of catch, length of muskie, tag number (If number is covered with algae simply scrap the algae away with your fingernail or a knife). Anyone providing a tag number will receive the history of that particular fish.

**GOLDENEYE LAKE** - This 125 acre strip cut is located in the Galum Area of Pyramid State Park in Perry County. Muskie were first stocked in August 2002. Goldeneye Lake is stocked with 50 ten-inch muskie in even-numbered years. This lake has a 10 HP motor limit. From October 28 through February 28 fishing is permitted in designated areas only, and fishing hours are from ½ hour before sunrise to 2 pm. Muskie up to 47 inches have been caught at this site. If you catch a tagged muskie from Goldeneye Lake **DO NOT REMOVE THE TAG**. Please contact Shawn Hirst, District 21 Fisheries Biologist by phone at 618/687-4546 or via email at [Shawn.Hirst@illinois.gov](mailto:Shawn.Hirst@illinois.gov) with the following information: date of catch, length of muskie, tag number (If number is covered with algae simply scrap the algae away with your fingernail or a knife). Anyone providing a tag number will receive the history of that particular fish.

**SUPER LAKE** - This 230 acre strip cut is located in the Captain Area of Pyramid State Park in Perry County. This is a newer muskie lake. Super Lake was stocked with 460 ten inch muskie in August 2008. In the future Super Lake will be stocked with 230 ten inch muskie in even-numbered years. This lake has a 10 HP motor limit. Fishing is prohibited from October 28 through February 28. IDNR collected three mid-thirty inch muskies from this lake in the spring of 2011. If you catch a tagged muskie from Super Lake **DO NOT REMOVE THE TAG**. Please contact Shawn Hirst, District 21 Fisheries Biologist by phone at 618/687-4546 or via email at [Shawn.Hirst@illinois.gov](mailto:Shawn.Hirst@illinois.gov) with the following information: date of catch, length of muskie, tag number (If number is covered with algae simply scrap the algae away with your fingernail or a knife). Anyone providing a tag number will receive the history of that particular fish.

## **STATUS OF MUSKIE FISHERY IN ILLINOIS RIVERS**

**FOX RIVER** - Muskie occur in the Fox River as a result of escapement from stocking programs in Chain-O-Lakes, Lake Shabbona, and Lake Holiday. Although not abundant, they are common in many areas in Kane and Kendall Counties with most individuals ranging from 30-45 inches. Mouths of larger creek are preferred summer

habitat, but they can be found ranging throughout the free flowing areas of the river in especially at Montgomery, Yorkville, and near Silver Springs. Electrofishing catch rates in these areas range from 2- 8 fish per hour.

Northern pike are generally very rare in the Fox River. Higher gradient conditions, combined with lack of spawning habitat (except in the upper river and Chain-O-Lakes), may be limiting factors.

**DES PLAINES RIVER** - This low gradient river, with associated wetland and backwater areas, provides good habitat for northern pike in some areas. In 2007, a total of 5 pike were collected by electrofishing near Riverside and Hodgkins. Most of the fish were in the 20-25-inch range. Catch rates were similar to those found in previous years. Anglers report frequent catches of northern pike, especially in the early spring months.

**KASKASKIA RIVER (Shelby County)** - The Kaskaskia River, in the tailwaters of Lake Shelbyville, is the home of the current state record for Muskellunge. The record fish was caught in 2002 and weighed over 38 pounds. 2009 and 2010 fall surveys in the tailwaters raised several large muskie. The muskie are still there in good numbers, although they are spread throughout waters reaching further downstream. As flow regimes at the dam continue to follow a more normal pattern, muskie fishing should be excellent at Shelbyville.

Equal opportunity to participate in programs of the Illinois Department of Natural Resources (IDNR) and those funded by the U.S. Fish and Wildlife Service and other agencies is available to all individuals regardless of race, sex, national origin, disability, age, religion or other non-merit factors. If you believe you have been discriminated against, contact the funding source's civil rights office and/or the Equal Employment Opportunity Officer, IDNR, One Natural Resources Way, Springfield, IL 62702-1271; 217/785-0067; TTY 217/782-9175.

This information may be provided in an alternative format if required. Contact the IDNR Clearinghouse at 217/782-7498 for assistance.

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