

# **STATUS OF THE BASS FISHERY**



**ILLINOIS DEPARTMENT OF  
NATURAL RESOURCES**

**DIVISION OF FISHERIES**

**JANUARY 2010**

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

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

**SHABBONA LAKE** - This 319-acre lake was built in 1974 and partially funded with Sport Fish Restoration monies. With fishing as the main purpose of the lake, it was first opened to anglers in 1977 with standing timber, stump fields, fish cribs, anchored trees, rock piles, and earthen fishing piers in place.

In addition to largemouth bass, Shabbona Lake's predator population includes sizeable walleye and muskie populations along with the recently-introduced hybrid striped bass.

Shabbona Lake was opened with a 14" size limit in effect, but as time passed and the exploitation rate increased, a daily limit of one bass per day was implemented.

Creel census data from 1990 documented a fishing effort of 624 man-hours per acre. The largemouth bass catch totaled 12,784 fish weighing 8,300 pounds with a harvest of 1,431 bass (11%) weighing 2,639 pounds. The average size of bass caught weighed 3/4 of a pound and those harvested weighed 1.85 pounds for a total of 8.3 pounds per acre.

The 1997 creel census found a fishing effort of 502 man-hours per acre. The largemouth bass catch was estimated to be 29.9 bass per acre or 36.3 pounds per acre of fish that averaged 1.21 pounds while harvest was 1.4 bass per acre (4.7%) or 3.96 pounds per acre of bass that averaged 2.8 pounds. The 2002 creel census reported a fishing effort of 534 man hours per acre. Largemouth bass were caught at 49 pounds per acre and the average size of harvested bass was 2.5 pounds.

There are three fish rearing ponds at Shabbona Lake. From 1996 through 2002, at least one or two ponds have produced 11,810 largemouth bass 4.5" to 5.5" and 21,172 smallmouth bass 3.5" to 5.5". In 2003, two ponds produced 4,268 largemouth bass at 4.4" and the smallmouth bass pond produced 2,226 fish at 5.2". In 2005, two ponds produced 3,522 largemouth bass that averaged 5 inches. In 2006, one pond produced 1,599, averaging 3.8" largemouth bass and 785 smallmouth bass that averaged 6 inches. In 2007, the two ponds produced 1,303, 7.9" smallmouth bass and 489, 8.1 inch largemouth bass. In 2008, the two ponds produced 2,904, 4.8 inch largemouth bass and 290, 6.5 inch smallmouth bass. In 2009 the large nursery pond was kept dry to be reshaped. The small nursery pond produced 1,481, 4 inch largemouth bass.

The largemouth bass population of Shabbona Lake is continually improving. Fall electrofishing surveys find 8 to 9 year classes of bass with several individuals up to 20" in size.

From 1990 through 1994, bass were electrofished at a rate of 100 per hour with 23 per hour of these fish 8" in size or larger. From 1995 through 1999, bass were electrofished at an average rate of 161 per hour with 39 per hour of these fish 8" and larger in size. From 2000 to the present, bass were electrofished at an average rate of 147 per hour with 55 per hour 8" or larger. Smallmouth bass were collected in record numbers in 2008 (130 per hour). In 2006 largemouth bass greater than 12 inches were sampled at 90 per hour and 56 per hour in 2008. In 2009, largemouth were collected at 195 per hour and bass greater than 12 inches at 41 per hour.

Bass fishing has been good for the past several years and it will be good this year with many large fish taken. A fairly strong smallmouth bass population is also available.

**PIERCE LAKE** - This 162-acre lake was constructed in 1960 by damming Willow Creek, a tributary of the Rock River. The lake was completely drained in 1970 due to a rupture in the drain valve. The lake was restocked in 1971 and from then to 1986 the lake had a strong bass population. Fall electrofishing catch rates averaged 145 bass per hour over this period. Surveys from 1987 to 1992 documented a serious decline in the catch rate of bass to an average of 31 per hour with 19 of these being young-of-the-year.

A lake creel survey conducted in 1992 indicated that the bass harvest was zero. The catch-and-release of bass was also extremely low with only 0.52 bass per acre reported caught at only 0.15 pounds per acre. A research project conducted by the Illinois Natural History Survey included a population estimate of largemouth bass. This estimate indicated there were only 149 bass 8" and larger for the entire lake.

A supplemental stocking of fingerling largemouth and smallmouth bass was made in 1993. Fall electrofishing surveys from 1994 to the present have determined that the lake's bass fishery has shown a great recovery. An upward trend continued in 2002 with 173 bass per hour collected with 44 per hour 8" or larger. Of these 8" plus bass, 55% were greater than 12".

Pierce Lake participated in a statewide bluegill study between 1999 and 2005. During this time a harvest restriction of ten bluegill per day and a minimum size length of 8" were implemented. Along with this bluegill restriction, 21,755 bass 4" and larger with a distinctive fin clip were stocked from 1999 to 2006.

To go along with the enhanced largemouth bass population, smallmouth bass are gaining in prominence. A total of 24,315 smallmouth bass at 2" have been stocked from 2000 to the present time (4,860 yearly). Smallmouth are typically electrofished at 44 per hour in the fall.

There is a 14" minimum size limit with a harvest rate of one per day of large or smallmouth bass.

**LAKE LE-AQUA-NA** - This 43-acre lake was built in 1955 and first opened to fishing in 1957. It was rehabilitated and restocked in 1977 following a severe winter fish kill. In addition to largemouth bass, northern pike is the only other predator. The forage base is comprised of warmouth sunfish, bullheads, brook silversides, bluegill, black crappie, golden shiners, and gizzard shad.

The 1989 creel survey documented an effort of 545 man-hours per acre with a harvest of 3.23 largemouth bass per acre weighing 2.2 pounds. The overall harvest of bass was 7.2 pounds per acre. The combined harvest and catch-and-release was found to be 23.9 bass per acre weighing 23.7 pounds per acre.

The 1994 creel found an increase in fishing pressure to 742 man-hours per acre with a decline in harvest of bass to 2.13 bass per acre again weighing 2.2 pounds. The overall harvest of bass was 4.7 pounds per acre. The combined harvest and catch-and-release was found to be 47.34 bass per acre weighing 20.1 pounds per acre.

Fall electrofishing data 1995 through 1998 found an average catch rate of 8" and larger bass at 16 per hour. From 1999 to the present, the fall surveys found an average catch rate of 8" and larger bass at 26 per hour. In 2006 the fall survey resulted in 65 per hour greater than 8 inches and of these 40 were greater than 12 inches. A statewide bluegill study beginning in 1999 involves this lake with no catch or size limit on bluegill and a yearly stocking of bass. From 1999 to the present, 6,089 - 4" bass with a distinctive fin clip have been stocked.

A 14" minimum size limit was enacted in the 1970's and a daily creel limit of one bass was implemented in 1990. Although large bass are not common in this lake, they can always be found by the dedicated angler.

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

**LASALLE LAKE** - This 2,058 acre cooling lake in LaSalle County was opened for public fishing in 1987. LaSalle Lake is like most cooling lakes; there is excellent growth but poor reproduction and recruitment of largemouth bass. Despite the excellent growth of largemouth bass in LaSalle Lake, the lake was on the brink of disaster by the mid-1980's. To protect the precarious bass population two strategies were employed: 1) a stringent creel of one bass over 18 inches and, 2) an aggressive stocking program.

Between the years 1986 and 1990, the lake was stocked annually with approximately 10, 1 to 2 inch bass fingerlings per acre or approximately 20,000 fish. This program was not very successful. In 1991 - 79,746 (39/A) 4 inch largemouth bass were stocked into LaSalle Lake. Thanks to local Bass Clubs approximately 56% of these fish were

either marked by a fin clip or a freeze brand. By marking we were able to ascertain more accurately the contribution this program was having on the bass population.

<u>YEAR</u>	<u>4" LMB STOCKED</u>	<u>YEAR</u>	<u>4" LMB STOCKED</u>
1998	40,926	2007	60,891(2.6- 4.4)
1999	50,175	2008	45,077(4.0)
2000	63,796		
2001	44,477		
2002	44,146		
2003	39,908		
2003	38,241 (2.7")		
2004	51,901 (3.0-4.5")		
2005	51,645 (3.5-4.3")		
2006	62,051 (2.4-5.0")		

Approximately 50 percent of the bass were marked with a freeze brand between 1991 and 1997. No bass were marked after 1999. The results for the past nine years have been tremendous. Young-of-year largemouth were collected at a rate of 30 to 40 times the lakes historical average. The stockings have accounted for up to 96% of the YOY bass. LaSalle Cooling Lake is scheduled to be stocked annually with 40,000 - 4" largemouth bass fingerlings.

The bass fishery looks promising especially for the chance of catching a trophy bass. Bass from the 1991 year-class started reaching legal size (18") as early as the fall of 1993. The largemouth bass population declined dramatically in 1997, 1998, and 1999. In 2000 - 2003, the largemouth bass population was much stronger. There is still an excellent population of 4 to 7 pound bass.

LaSalle Cooling Lake also receives a reduced stocking of smallmouth bass about 20,000 a year or 10 per acre. This program also appears to be working, with an excellent population of trophy-sized smallmouth bass. Excellent numbers of smallmouth bass were collected in the 1999 - 2009 fall surveys. Gizzard and threadfin shad are the main forage in LaSalle Cooling Lake.

Remember when fishing LaSalle Cooling Lake that it is a perched lake and gets very rough when the wind picks up.

**LAKE CARLTON** - Is a small 78 acre lake that has gained its reputation as being the premiere muskie lake in the State. Although the lake has an excellent muskie fishery it also has an excellent largemouth bass fishery. The lake has a number of 4 to 6 pound bass present and every spring a few 6 to 8 pound bass are caught.

In 1998, stock size bass were collected at a rate of 106 bass per hour and the PSD had improved to 35.2. In 1999, stock size bass were collected at a rate of 77 bass per hour and the PSD continued to 38.5. In 2000, stocked size bass were collected at a rate of 72 bass per hour and the PSD was 28.7. In 2001, stocked size bass were collected at a rate of 151 bass per hour and the PSD was 20.5 and in 2002, they were collected at a rate of 119 bass per hour and the PSD was 20.2. In 2003, they were collected at a rate of 74 bass per hour and the PSD was 15.5. In 2004, they were collected at a rate of 137 bass per hour and the PSD was 28.5. In 2005 bass were collected at a rate of 109 bass per hour and the PSD had improved to 48.0. In 2006 bass were collected at a rate of 196 bass per hour and the PSD was 32.1. In 2007 bass were collected at a rate of 175 bass per hour and the PSD 53.9. In 2008 bass were collected at a rate of 87 bass per hour and the PSD was 36.4. in 2009 bass were collected at 140 bass per hour and the PSD was 34.3.

In 1994 a population estimate put the number of bass greater than 8 inches at approximately 50 pounds/acre. The number of stock-sized bass collected in the fall survey in 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008 and 2009 were 106, 77, 72, 151, 119, 74, 137, 100,168, 89, 44 and 140 respectively. Quality sized bass during the same period were collected at a rate of 23, 28, 22, 15, 24, 12, 39, 48, 54, 48, 16 and 48 fish per hour, respectively. Six strong year-classes were present.

The black bass fishing regulations for Lake Carlton are a 14 inch minimum length limit and a one per day creel. These stringent regulations were enacted because Lake Carlton receives annually between 600 and 800 man-hours fishing pressure per acre. Lake Carlton should have an excellent bass fishery for years to come. Prime fishing areas include the edge of the weed beds and the brush piles or fish cribs.

**JOHNSON SAUK TRAIL LAKE** - Is a shallow, very fertile 58 acre lake in Henry County. Dense vegetation had plagued this lake until the introduction of 115 triploid grass carp in 1990. The results were excellent in 1991 and in 1992 until late fall when Eurasian milfoil started to establish itself.

The lake has an excellent bass population with good numbers of 4-6 pound fish available to the angler. Stock and quality size largemouth bass were collected at an excellent rate (100 and 59/hour respectively) in the fall 1997 survey. In 1998, the numbers were 78 and 35 per hour respectively. In 1999, the numbers were 100 and 65 per hour respectively. In 2000, the numbers were 116 and 80 per hour. In 2001, the numbers were 169 and 44 per hour respectively and in 2002, the numbers were 146 and 83 per hour. In 2003, the numbers were 158 and 85 per hour, respectively. In 2004, the numbers were 124 and 34 per hour respectively. In 2005, 2006, 2007 and 2008 the numbers were 183,153, 81, 79 and 69, 57, 32, and 24 per hour, respectively. The lake currently has a 14 inch minimum length limit. The lake was stocked with 4,343 - 4.7 inch largemouth bass in 2001.

Sauk Trail has an excellent bass fishery with 5 to 6 strong year-classes present. Prime bass fishing areas include edge of the weed beds and the brush piles. Most trophy bass are caught in the spring and late fall.

**LAKE GEORGE** - Is a 167 acre lake in Rock Island County. Lake George is developing into one of the premiere muskie lakes in the State. The Illinois Natural History Survey completed research projects on both the walleye and muskie stocking programs in 1994. While the muskie population steadily improved in the early 1990's, the bass and bluegill populations began to deteriorate. The exact cause of the deterioration is not understood at this time. Lake George has historically had an excellent bass population until the late 1980's. The lake historically had a good population of extremely large bass, and reproduction and recruitment were always consistent.

In 1992 largemouth bass fingerlings became available when the State purchased Sand Prairie property. This property contained a few extremely shallow ponds that contained bass of different sizes. In October of 1992, Region 1 personnel were able to harvest 540 of these bass and stock them in Lake George. These bass ranged from 4 to 16 inches. In 1993 and 1994 Lake George was stocked with 1,670 - 4 inch bass fingerlings. In 1995 and 1996, the stocking was doubled to 3,340 - 4 inch bass fingerlings or 20 per acre. In 1997, the lake was once again stocked with 1,670 - 4" bass fingerlings. In 1998, 1999, 2000, and 2001, the number was doubled again to 3,468; 3,610; 3,489; 3,340 - 4 inch bass. In 2002 - 3,500 - 4.5 inch bass; in 2003, 2,754 - 4.0 inch; in 2004, 3,344 - 3.6 inch bass were stocked and in 2005 - 3,480- 4.2inch bass were stocked.

The results have been encouraging with bass levels back to historical levels. In 1995 and 1996 largemouth bass of all sizes were collected at a rate of 77 and 76 bass per hour respectively. In 1997, largemouth bass of all sizes were collected at a rate of 134 bass/hour. Bass 14" and larger were collected at a rate of 52/hour. In 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008 and 2009 largemouth bass of all sizes were collected at a rate of 232, 238, 255, 146, 121, 89, 135, 85, 220,204, 92 and 98 per hour. Bass 14" and larger were collected at a rate of 22 per hour in 1999 , 25 in 2000, 18 in 2001, 22 per hour in 2002, 29 per hour in 2003 ,30 per hour in 2005, 16 per hour in 2006 and 26 per hour in 2007 and 19 per hour in 2008 and 21 in 2009. Bass quality size and larger were collected at 94 per hour at night in 2002 and 88 per hour in 2004.

Currently on Lake George there is a 14 inch minimum length limit. The fishing pressure derived from creels conducted in 1989, 1993, and 1994 reported the fishing pressure to be at approximately 200 man-hours per acre. Fishing for largemouth bass in the early 90's was tough. The two main reasons were 1) a decrease in the bass population and 2) someone introduced gizzard shad in the lake in 1990 and the shad population exploded. As a result, the bass have an over abundance of forage. The bass population has dramatically improved over the last 7 years. Bass numbers are back to historical levels. Bass fishing should be excellent in 2010.

**HENNEPIN CANAL** - Is a 96 mile long canal which travels through 4 counties. The canal is very shallow, averaging between 4 and 5 feet and approximately 80 feet wide. The canal had an excellent bass fishery. Prime bass fishing areas were the brush piles and water lotus bed. Water was reintroduced to different sections of the far east end in 1986 and 1996. Bass and walleye have been stocked annually in these pools to try and

prevent the overpopulation of bullheads and bluegill. The program appears to be working with numerous 2 to 4 pound bass available to anglers. The mouth of the feeder has suffered several fish kills of various degrees of severity in recent years due to low dissolved oxygen levels during the summer. The whole western half of the Canal suffered a severe fish kill during the 2000 and 2001 winter. This section was restocked in 2001, 2002, 2003, 2005, 2006, 2007, 2008 and 2009. The bass fishing on the west end has greatly improved. The eastern half of the Canal still has excellent bass fishing.

Marked bass fingerlings were stocked in this area of the canal in 1991-1994, and 1996 - 2000. Additional bass were stocked in 1994, 1997, 1998, 1999, 2001, 2002, 2004 and 2005 from money given to the Chris Harris Memorial. Preliminary results from stocking the feeder have been encouraging as many of the bass are remaining in this area. Largemouth bass were stocked in the east end in 1996 through 2008 where water was reintroduced in 1996. In 2002 - 82,342 largemouth bass between 1.4 and 4.3 inches were stocked in different sections of the Canal to replace bass lost in winter kill. In 2003,- 96,631 largemouth bass between 2 and 4 inches were stocked in different sections of the Canal. In 2004 - 34,446, 1.6" and 1,035 - 3.5 inch largemouth bass were stocked. In 2005 - 77,404, 1.7", 5,906, 3.4" and 3,000, 5.5 inch bass were stocked. In 2006-46,467, 1.7" and 1,488, 5.3" inch bass were stocked. In 2007-76,828, 2.0" and 656. In 2008 23,253, 2.8" bass were stocked. In 2009, 68,664, 1.5" and 554, 4.0".

Several of the boat ramps were improved in 1991 and 1992. The location of the boat ramps can be obtained by writing the Hennepin Canal Parkway Office or stopping in at the Visitors Center. Because the water level in the Canal is controlled at the mouth of the feeder, the water level remains constant year round. This results in the Canal having consistent fishing year round. The Visitors Center and the Izaak Walton Camp Ground offer two of the Canal's favorite ice fishing areas.

The Hennepin Canal currently has a minimum length limit of 14 inches. The Canal offers many anglers enjoyment fishing for largemouth bass. The Better Fishing Association and Izaak Walton have been very instrumental in working for Canal improvements.

**LAKE KAKUSHA** - This is a shallow 52 acre watershed lake on the edge of Mendota in LaSalle County. The lake has an excellent bass population with an abundant number of 2 to 4 pound largemouth bass available for the anglers. Bass of all sizes were collected at a rate of 105, 97, 135, 50, 127, 67, 57, 84, 166 and 63 per hour in 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2006, 2007 and 2008, respectively. Because of the lake was to low due to effectively sample in 2004, 2005 and 2006. Bass over 12 inches were collected at a rate of 39 bass per hour during the fall survey in 1997, 29 per hour in 1999, 28 per hour in 2000, 18 per hour in 2001, 33 per hour in 2002, 31 per hour in 2003, 22 per hour in 2004, 42 per hour in 2006 and 66 per hour in 2007. The lake currently has a 14 inch minimum length limit with a three fish a day creel limit. The bass fishing should be strong for several years.

The boat ramp on the north side of the lake has been dredged to make launching much easier. When the lake level is low, boating can be difficult because of the shallow littoral

areas. In 1999, Lake Kakusha became part of the Illinois Natural History Survey Bluegill study. As a result, the lake got stocked annually with between 1,300 and 1,700 - 4 inch largemouth bass fingerlings. In 2002 - 1,377 - 4.1 inch bass were stocked. In 2003, - 1,587 - 4.0 inch bass and in 2004, 1,414 - 3.5 inch bass were stocked in Lake Kakusha. In 2008, 2,280 2.5" bass were stocked.

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

**ARGYLE LAKE** - This 92.7 acre state lake, located west of Macomb in McDonough County, has been a popular fishing site since construction in 1951. The most recent "creel survey" at Argyle Lake in 2002 (197 day survey) revealed the overall fishing pressure at 154 hours/acre (down from 378 hours/acre in 1995). The 2002 survey also revealed that 3,517 (4,724 in 1995) largemouth bass were caught and released (1.23 lb. avg.) with only 242 (457 in 1995) being harvested at a 2.23 pound average size.

The current 2010 largemouth bass fishing regulations at Argyle Lake reflect an attempt to increase the quality of bass fishing by a modified 12 to 15 inch slot limit, where only one largemouth bass can be harvested over 15 inches/day/angler. Bass within the 12 to 15 inch slot are not legal to harvest.

Largemouth bass population data from the most recent 2009 fishery survey at Argyle Lake has revealed a quality size electrofishing catch rate of 0.26 fish/minute for 15 inch or larger fish. This most recent quality sized electrofishing catch rate is slightly less than the minimum lake management goal of 0.30 fish/minute. However, bass anglers in 2010 should find good numbers of 12 to 15 inch fish for catch & release and sufficient numbers of quality sized fish (15 inches & larger).

**SLAKEDEN HOLLOW STATE FISH & WILDLIFE AREA** -This 2,500 acre coal surface-mined area southeast of Victoria in Knox County was purchased by the Illinois Dept. of Natural Resources in 1987. The site contains 112 water impoundments (282 total acres of water) of various sizes up to 160 acres. Providing public sport fishing opportunity is one of the secondary site objectives. The fish management strategy at the site is to provide a diverse sport fishery which includes: largemouth bass, bluegill, black crappie, muskie, walleye, channel catfish, smallmouth bass and redear sunfish.

Lake McMaster, the site's largest impoundment, had a new spillway installed in 2005 which increased the lake size from 141.5 acres to 165.0 acres. At full water level, the lake has a maximum depth of 65 feet. The lake's habitat is diverse and is characterized by shallow bars adjacent to very deep water, numerous bays and points, abrupt drop-offs, islands, flooded timber, extensive shallow flats of submerged aquatic plants and cattails. Lake McMaster is the only impoundment at the site with a boat ramp.

To enhance the largemouth bass fishery, Snakeden Hollow Fish & Wildlife Area has a restrictive daily limit of 3 fish/person with only one (1) fish in the take over 15 inches. Largemouth bass population data obtained from several site impoundments in 2009 revealed a good response to the current bass regulations. In 2010, the larger site

impoundments, including Lake McMaster, will support high densities of 12 to 15 inch bass with limited numbers in the 15 inch or larger range. The remote, smaller walk in ponds on the site that have less fishing pressure than the larger lakes, will produce higher angler bass catch rates.

Snakeden Hollow State Fish & Wildlife Area is closed to all fishing each year during the late fall and early winter permit waterfowl hunting period (2 weeks before duck season through the close of Central Zone Canada goose season).

**LAKE STOREY** - This 133 acre public co-op lake, located at the northwest edge of Galesburg in Knox County, is a watershed impoundment having a high carrying capacity of 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. The lake is estimated to have a high overall annual fishing pressure in the range of 400 to 800 man hours/acre. To prevent an over-harvest of quality sized largemouth bass at Lake Storey, a 12 to 15 inch slot limit with only one fish over 15 inches in the daily take/angler is in effect. A City of Galesburg ordinance restricts all mechanically powered watercraft to electric trolling motors. The lake is one mile in length (east to west) with boat ramps at each end.

Largemouth bass population data obtained from 2009 surveys has revealed an overall high density fishery (fall electrofishing catch rate of 4.12 fish/minute) with excellent numbers of fish larger than 15 inches (fall electrofishing catch rate of 0.60 fish/minute). Bass fishing prospects for 2010 at this heavily fished lake are good for the experienced angler.

#### **DISTRICT 4: PEORIA, FULTON, AND STARK COUNTIES**

**ANDERSON LAKE STATE FISH & WILDLIFE AREA** - Due to the annual inundation of Anderson Lake by the Illinois River, fish species management is a difficult objective. The associated sedimentation, loss of lake water volume, and loss of aquatic plants have all negatively impacted the sportfish habitat present. Fishery data from the 2009 fall survey indicated a low density of bass from 8 to 16 inches in Anderson Lake, with .43 fish collected per minute of electrofishing.

Illinois River bass regulations are in effect at Anderson Lake with a 12 inch minimum size in effect. The lake has no horsepower motor limit, but caution is advised due to numerous stumps. Contact the site staff, in advance, at 309/759-4484 about water conditions.

**BANNER MARSH** - The 2009 fall survey and angler success indicated the largemouth bass 12" - 18" protected slot length limit (no possession) and a 3 fish daily creel limit were having a positive effect on the bass population. The RSD 14, RSD 16, and RSD 18 values have remained high with 24% of the bass sampled over 16 inches in length. The overall water level in the marsh remained at historical high mark in 2009.

East Point Access, Wheel Lake: 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. This lake has a water clarity average of 1 foot and the least rooted aquatic plants on the site. The fall 2009 survey showed a strong bass population from 6 inches to 19 inches. The RSD18 value showed 7% of the bass were over 18 inches with an overall collection rate of 1.78 bass per minute of electrofishing. The lake's major fish species are largemouth bass, bluegill, white and black crappie, muskie, channel catfish, walleye, carp and gizzard shad.

Bell's Landing Access, 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). This lake has a water clarity average of 4 feet and good rooted aquatic plant growth. The fall 2009 survey showed a strong bass population from 6 inches to 19 inches. The RSD value showed 7% of the bass were over 18 inches with an overall collection rate of 1.24 bass per minute of electrofishing. The lake's major fish species are largemouth bass, bluegill, white and black crappie, muskie, walleye, channel catfish, carp, and gizzard shad.

Main Access, Johnson Lake is approximately 600 acres and is composed of a maze of deep strip mine water connected to shallow flats of flooded trees. This lake has a water clarity average of 4 feet and good rooted aquatic plant growth. The fall 2009 survey showed a strong bass population from 7 inches to 19 inches. The RSD 18 values showed 11% of the bass were over 18 inches with an overall collection rate of 1.27 bass per minute of electrofishing. The lake's major fish species are largemouth bass, bluegill, white and black crappie, walleye, channel catfish, northern pike, muskie, carp, and gizzard shad. There is a 25 horse power limit at Banner Marsh.

The 2010 fishing season at Banner Marsh will offer a good supply of 1 to 4 pound bass with a limited number of trophy fish from 5 to 8 pounds. Weedlines and large areas of aquatic vegetation are present in summer, so bring your weedless lures.

Organized bass fishing tournaments need to register the date and location with Rob Hilsabeck at (309) 446-9143.

**CANTON LAKE** - Canton Lake has produced its share of trophy largemouth bass over the years. The 2009 spring survey revealed a diverse fishery composed of yellow bass, white and black crappie, and a numerous carp population. Gizzard shad have also been introduced into the lake from an unknown source. The gizzard shad may provide additional forage for the larger bass, but may also hinder bass recruitment.

The overall bass fishery in 2009 was characterized by a medium density population but, the size structure and body condition of the bass population is very good. Twenty nine percent of the bass sampled were over 15 inches in length with an overall collection rate of .82 bass per minute of electrofishing. In 2010 dedicated anglers can expect fish over twelve inches (1 to 2 lbs.) and a limited number of trophy bass (4 to 8 lbs.). The

combination of sedimentation, lack of aquatic vegetation, and competition from other fish species is the cause for poor bass recruitment and average bass density. In 2004, a stocking of 5000, 2.9 inch bass was completed to assist natural reproduction. In 2006, 1 million fry bass were stocked. In 2007, a bass stocking of 36,000 fish at 2.2 inches long and a stocking of 6,250 fish at 4.5 inches long were completed.

The lake regulations include a 15 inch minimum length limit and a daily creel limit of three largemouth and/or smallmouth bass per day.

The lake's major fish species are largemouth bass, muskie crappie, bluegill, yellow bass, channel catfish, carp, and gizzard shad. The City of Canton has various user fees for boat use and a 85 horse power motor limit.

**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 largemouth bass population is defined by a high density of fish from 6 to 19 inches long with average Relative weight values.

The 2009 electrofishing survey collected 4.1 fish per minute. Eight percent of the bass collected were over 18 inches in length. The current bass regulation is a 21 inch minimum size limit and 1 fish per day. A concrete boat ramp was installed in 2005 and the lake is electric motors only. Organized bass tournaments need to register with Rob Hilsabeck at (309) 446-9143.

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

**POWERTON LAKE** - This 1,426 acre lake was opened for fishing in 1983. It has a history of very limited largemouth bass populations. Almost no aquatic vegetation resulted in very limited successful reproduction and survival of young bass. Many attempts to initiate good populations through stocking and other management techniques had only marginal success. The fishery was characterized by numerous white bass, channel catfish and green sunfish with gizzard shad as a forage base.

In 1987, a stocking of smallmouth bass was made to ascertain if they would be able to reproduce, survive and create a black bass fishery. Since the available fish habitat includes large rock along most of the shoreline, and appropriate sized forage was available, this initial stocking prospered. Smallmouth bass were stocked at a rate of 10 fingerling fish per acre each year until 1991, when it was determined that the smallmouth bass population was being maintained by strong natural reproduction.

As a result of the initial stocking success, a good population of smallmouth bass was established. Fast growth and good body condition of smallmouth was promoted by the survival and reproduction of threadfin shad and brook silversides this year in Powerton Lake. During the fall population sample, many fish of intermediate size were collected. However, only two smallmouth collected were of legal size. A collection rate of almost 0.5 fish per minute of electro-fishing indicates a fair abundance of smallmouth bass.

Reproduction of smallmouth bass was less than has been observed in recent samples. The level of reproduction and recruitment of smallmouth bass shown by this year=s sample indicates some decline in the smallmouth bass fishery in 2008 and again in 2009. It takes three years growth in Powerton Lake to produce a legal fish.

As a result of the review of population survey data trends, the outlook for smallmouth bass fishing in 2010 is not as good as it has historically been. Best months to fish are March and April with early October also good. Best baits are jigs or shad imitators fished off the rock ledges along the levees in the coolest water available. Fly fishing has proven effective when a hatch of midges is occurring. The use of streamers and fly fishing tackle has also proven effective early in the season.

No services, food, or gas are available at Powerton Lake. A double concrete ramp provides boating access, and there is no horsepower restriction in effect at Powerton.

**SPRING LAKE** - In 1978, Spring Lake (Tazewell County) was divided into two distinct waters for the purpose of major rehabilitative management of fish and wildlife populations. North Spring Lake consists of 578 acres and South Spring Lake has an area of 610 acres. Both Lakes have an average depth of 2.9 feet. Historically, they were part of the Illinois River and as such were a lateral, freshwater marsh with luxuriant aquatic vegetation growth. The management of these lakes was intended to result in a "recreation" of this marsh environment. North Lake was rehabilitated in 1981 and South Lake in 1986. For the purpose of defining the largemouth bass populations, they need to be considered separately.

**SPRING LAKE (NORTH)** - This lake is characterized by heavy growth of aquatic vegetation for much of the spring, summer and fall. There is an excellent population of intermediate to large bass, mainly in the 2 to 5 pound range. A window of opportunity for fishing exists from March 15 through April 30 or until aquatic vegetation becomes excessively abundant. At that time of year, largemouth bass fishing could be rated as excellent. In May, largemouth bass fishing becomes much more difficult due to the tremendous coverage of aquatic weeds and very clear water. Many bass fishermen select the hours of darkness to fish during the warm summer months. They catch a large number of big bass on weedless surface lures at that time. The extensive weed beds serve as a fish preserve, creating growth problems for intermediate and larger sized bass. Aquatic vegetation consists of lily, lotus and heavy growths of Eurasian milfoil, coontail and algae.

As a result of the review of data generated by field surveys in 2009, fishing for largemouth bass should be excellent on North Spring Lake in 2010. The 2009 fish population survey showed that a good number of the largemouth bass collected were 15 inches or longer. In the past, condition and growth of largemouth have been impacted by the extremely dense Eurasian milfoil beds. Because of vegetation treatments, more open area was created in 2009, resulting in better growth. We were able to collect largemouth at a rate of over 1 fish per minute of electro-fishing. This indicates an excellent density of largemouth bass. Strong reproduction and recruitment of largemouth bass over the last 2 years was also indicated by the fall population

sample. A 3 fish daily limit and a minimum size of 15 inches is in effect. The best largemouth bass fishing at North Spring Lake occurs early, before weeds become a problem. Try fishing this Spring along the levees and around duck blinds using crank baits or after dark using surface plugs later in the summer.

**SPRING LAKE (SOUTH)** - The coverage of aquatic vegetation in 2008 was much less abundant than was seen in previous years. The Eurasian milfoil was treated in 2009 using 2,4-D. This treatment using Navigate helped to reduce the milfoil coverage. The South Lake's largemouth bass population size structure in 2009 was characterized by numerous intermediate sized fish, good reproduction, and good numbers of largemouth over 15 inches in length. Strong reproduction, recruitment and growth was observed from this year's largemouth bass sample data.

Based on the results of sampling efforts in 2009, the fishing prospects for largemouth bass in South Spring Lake are good. The best results for bass fishing in 2010 will be early in the spring before weeds become a problem. Best areas will be along the center ditch and the spring hole areas along the bluff. Best baits will be crank baits, spinners and top-water plugs.

All bass tournaments must pre-register at the site on a first come, first served basis at least 60 days prior to the event. A 25 horsepower restriction is in place at Spring Lake. Food, bait and boat rental are available at the lake.

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

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

**McCULLOM LAKE** - Recent surveys indicate that anglers will find a mature and balanced population of largemouth bass in McCullom Lake. The electrofishing catch during fall 2009 (35 bass/hour) was typical and size structure remained in good shape for anglers seeking large fish (PSD = 50%, RSD-15 = 20%, and RSD-18 = 10%). The largest bass sampled was 19 inches long and weighed 4.1 pounds. Although bass reproduce naturally in the lake, moderate catches in recent surveys and reports of declining catches by anglers suggests the lake may benefit from supplemental stocking. IDNR initiated largemouth bass stocking in 2006 and has stocked 5,000 to 7,000 advanced fingerlings (4.0 inches long) annually for the past four years. Good numbers of small bass in recent surveys (bass 4-8 inches long made up 54% of the total catch in 2009) indicate good stocking success and a bright future for bass fishing at McCullom Lake.

Access at this lake is limited to shoreline fishing at several small parks and a single narrow, public boat ramp on the lake's south shore. Outboard motors are limited to 9.9 horsepower. A one fish daily creel and 15 inch minimum length limit for largemouth bass is enforced at the lake. A handicap-accessible fishing pier is available in Petersen Park on the lake's northeastern shoreline (access from McCullom Lake Road). The

lake is moderate in size (244 acres), shallow (average depth = 5.3 feet), and lacking in good structure for bass. Try targeting the edges of lily pad beds on the north and west end of the lake, the overhanging trees at the northeast end, or any submerged logs or deadfalls where the water is deep enough to hold fish. This lake also supports a moderate northern pike population so be prepared to hook into some healthy northerns while fishing for bass. Ice fishing is very popular here, in part, because of improved access on the ice. There is an aerator that runs when needed so beware of open water and areas of thin ice.

**SILVER LAKE** - This DuPage County Forest Preserve lake has an abundant bass population. Good natural recruitment combined with abundant vegetation and low angler harvest has resulted in density dependant “stunting” of several abundant largemouth bass year classes. This slow growing population had a size structure skewed toward intermediate-sized fish (8-12 inches long; PSD = 3.3%; PSD management goal = 40-60%). Scale aging indicated that growth rates were well below the northern Illinois average and that 6 years is needed for bass to reach the 12-in. mark. A bass removal program (via electrofishing) was initiated in 2006 to reduce the number of intermediate bass present and allow for faster growth of remaining fish. To date, we have removed 716 bass less than 13.5 inches long that had a combined weight of 495 pounds. The removal effort has resulted in an improvement in bass body condition and population size structure. Based on data from spring fish surveys, average relative weight increased from 75 in 2005 to 93 in 2008, PSD increased from 3% to 35% over the same time period, and RSD-15 increased from 0% to 3%.

Angling restrictions at Silver Lake include two pole and line only fishing for all fish and a 15-in. minimum length limit and three fish daily creel for bass. An improved launch, rental boats, and handicap accessible fishing piers are available at this 62-acre lake. Anglers can launch their own non-gasoline-powered boats up to 20 ft. in length.

**DEFIANCE LAKE** - Located in a beautiful natural setting in Moraine Hills State Park, Defiance Lake is popular with largemouth bass and northern pike anglers. 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. Outside boats have been excluded in the past, but anglers can now bring in canoes and kayaks to fish the lake.

A combination of poor sampling efficiency for bass and low natural recruitment has resulted in low catches of largemouth bass ( $N < 10$  fish/hour) in many past annual electrofishing surveys. However, a spring 2008 survey indicated that bass numbers

may be improving at this 48-acre natural glacial lake due, in part, to the supplemental stocking of 1,200 advanced bass fingerlings (> 4 inches long) in alternate years since 2001. The electrofishing catch rate in the last survey was 39 bass/hour, and the good news for anglers is that a high proportion of the sampled fish were large. Sixty percent of bass larger than 8 inches long (stock-sized fish) were over 15 inches long and 23% of the stock was over 18 inches long. The largest fish sampled was 19.5 inches long and 4.7 pounds.

**LAKE ATWOOD** - The McHenry County Conservation District owns this 20-acre reclaimed quarry that offers an opportunity to fish for bass from shore or non-motorized boats (no gas or electric motors allowed). An improved boat launch and handicap-accessible fishing pier are available at the site. The lake is deep and clear (30-foot maximum depth; 18-foot visibility is typical) and heavily vegetated. These conditions make for some challenging fishing, but local anglers flock to this lake because it holds nice-sized bass up to 20 inches long and over 4.0 pounds. Based on a spring 2009 survey, bass were very abundant (electrofishing catch = 1.4 bass/minute) and population size structure was skewed towards large fish (PSD = 93%; RSD-15 = 25%; and RSD-18 = 1%). The lake is stocked annually with about 500 bass fingerlings to supplement natural reproduction and the program appears to be very successful. There is a one fish daily creel limit and 15-inch minimum length limit for largemouth bass at the lake. Easy access and numerous fish make this a great place to take a kid fishing.

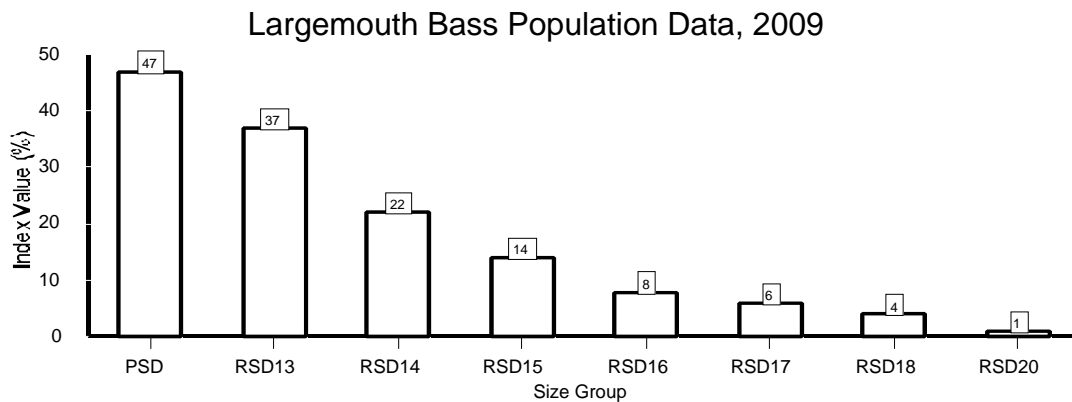
**MALLARD LAKE** - At 89 acres, Mallard Lake is the largest fishing lake in the DuPage County Forest Preserve system, and it supports an excellent largemouth bass population. We captured 133 bass in 70 minutes of electrofishing during May 2009. Small and large fish were well represented in the sample. About 16% of the sampled bass were yearlings, which indicated adequate natural reproduction. A good proportion of the bass 8 inches and larger were over 12 inches long (PSD = 67%) and 12% were over 15 inches long. The biggest bass captured was 17 inches long and weighed 2.8 pounds. Regulations include two pole and line only fishing for all fish and a 15-inch minimum length limit and three fish daily creel for largemouth bass.

Favorable largemouth bass population dynamics observed in electrofishing surveys were reflected in angling statistics provided by an IDNR sponsored creel survey conducted by the Illinois Natural History Survey from March through October 2007. The survey showed that bass were targeted most by anglers seeking a specific species (directed effort = 30% of 22,493 angler-hours of total fishing effort) and this popular species ranked second behind bluegill in the number of fish caught (3,914 bass total or 44 bass/acre; average weight = 1.0 pound). Anglers harvested only 54 bass that had an average weight of 1.8 pounds. These harvest statistics suggests compliance with regulations and a willingness of most anglers to practice catch-and-release bass fishing.

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.

## DISTRICT 7: LAKE COUNTY

**FOX CHAIN O'LAKES** - Bass fishing is very popular on the Chain O' Lakes. Tournaments are numerous. The intense fishing pressure targeting a resource limited to backwaters, channels, and vegetated lakes means fishermen target basically the same resource whether they are a weekly tournament angler or an occasional fisherman. Catch data shows fish survive fairly well to 12" (maturity- PSD Value) then become less abundant as they approach legal size (14"- RSD14), abundance continues to drop-off as fish age.



While electrofishing, we occasionally collect bass over 18" long but fishermen report them more frequently. Larger fish probably tend to inhabit deeper water than our sampling gear is effective so we under-sample their presence. The above graph illustrates population indices derived from recent catch data. From the management perspective this population doesn't look too bad. It shows a population with high reproductive potential that should be able to maintain itself through natural reproduction. **Practicing catch and immediate release, in May, would go a long way to increasing the number of successful nests and ultimately more bass.** When male bass are pulled off their nests their nest success is diminished. Electrofishing catch rates matched management objectives of 0.5 fish per minute at 0.52 fish per minute. When fish over "stock size (6")" are removed from the sample, catch rates dip to 0.35 or slightly below management objectives. It should be noted that historical sampling locations are used which may not be the most suitable for bass. Our sampling goal on the Chain is to collect a diversity of fish and not target one species, this way system wide changes can be detected but subtle species specific changes might be missed. Special projects are established as need warrants.

Supplemental bass stockings which began in 1989 have helped offset reproductive limitations and habitat issues in the system (winter drawdown, nearshore disturbances, etc.). Bass abundance varies lake to lake depending on habitat type and the quality of near shore habitat but vegetation is always important to key in on.

Smallmouth bass are present in the system but represent only a small proportion of the bass population. Fishermen report smallmouth bass to 18". Smallmouth have a "Catch and Release" season from April 1 to June 15 since the Chain is ultimately an impounded portion of the Fox River.

Bass stockings are concentrated in backwater lakes and deeper channels where habitat is more appropriate to fingerling survival and away from larger open lake predators.

In 2008, the Chain O' Lakes was stocked with approximately 77,510 four inch fingerlings and approximately 154,052 (1.5" to 3") fingerlings. Stocking information for 2009 was not available at the time of this summary.

**INDEPENDENCE GROVE LAKE (Lake County Forest Preserve District)** - The Lake County Forest Preserve District developed this lake with fishing in mind and provides ample shorefishing access. The lake was stocked early in it's impoundment with a compliment of panfish and predators so that a balanced fishery exists. Lake County opened the Park with a users-fee for non-County residents and a "Catch and Release" management philosophy in spring 2001.

A standardized fish survey in May 2006 yielded 1.8 per minute of electrofishing. This exceeded the Management goal of 1 fish per minute. Bass ranged in size from 2.5" to 21" and had a Proportional Stock Density (PSD) of 88. PSD Management Objectives for a balanced fishery generally fall between 40 and 60 so you can see the population is composed of larger sized fish and is unbalanced. In a Catch and Release system this may not pose the same collapse potential as in a harvest system but there is some concern about sustainability of the system and the current regulations effects. The Relative Stock Density value for fish greater than 14" (RSD-14) was 48. What do these population indices mean? They suggest bass fishing is really good right now with a large proportion of fish from 12" to 14" long and occasional beasts up to 20 inches long in the 4 to 5 pound range. As older, larger fish die from either hooking mortality or natural causes the population will adjust to more normal proportions. Biologists generally like to see a PSD between 40 and 60 meaning roughly half the population is larger than 12". In this sample 88% of the sample was larger than 12".

Independence Lake is an appealing Park to be in, it offers an abundance of shore fishing opportunities, and can provide a lot of action at the end of your fishing pole. This is a great place to take your Mom or Dad fishing. Largemouth bass exceeding 7 pounds have been reported. There will be some adjustment to the population as the older larger fish, which grew fast as part of the initial impounding, are replaced by slower growing but abundant fish as the lakes second generation.

**STERLING LAKE (Lake County Forest Preserve District)** - This lake offers a varied fishery including panfish, channel catfish, bass, muskie and walleye. It is located east of the intersection of Route 41 and Route 173 in Van Patton Woods Forest Preserve and can be fished from shore or from a car top boat or canoe. Electric motors are allowed but no gas motors.

A fish survey in May 2006 yielded 1.7 largemouth bass per minute of electrofishing. Fish ranged in length from 2" to 17.5" long. The sample's Proportional Stock Density (PSD) was within Management Objective of between 40 and 60 at 58. Catch rates were high and population indices were within target ranges. Roughly 20% of the catch exceeded the legal length (legal length = 15") so a fair number of fish are available for fishing action. Sterling Lake offers bass fishermen the chance to catch decent size fish, from shore, on a public access lake: this is a tough combination to achieve in northeastern Illinois. When electrofishing we collect bass near vegetation, near shore, in less than 5 feet of water!

## **DISTRICT 8: COOK COUNTY**

**BUSSE LAKE (COOK COUNTY FOREST PRESERVE DISTRICT)** - This 590 acre lake system is divided into two portions; the Main Lake and South Pool. Both lakes offer ample opportunity to shore fish or bring a small boat (electric motors only) to get away from the crowds. Outboard motors cannot be attached to boats using Cook County Forest Preserve District lakes. Bass have a 14" inch length limit, 6 fish per day creel. This holds for all Cook County Forest Preserve Lakes. Largemouth bass were collected via electrofishing at a rate of 1.0 fish per minute and 0.9 fish per minute in the Main Pool and South Pool, respectfully in 2004.

Catch rates met sampling goals for these lakes. Population indices were also similar for the two lakes and were within management objectives. The Proportional Stock Density (PSD), which describes the number of fish over 12 inches long compared to the total number of fish over 8 inches long, was 58 in the Main Pool and 67 in the South Pool. The Management objective for this index is for the data to fall between 40 and 60. The interpretation is that 40 to 60 percent of the sample should be at least 12 inches long to maintain a strong reproductive potential and conversely the opposite proportion of fish (60 to 40 percent) of the sample should range from 8 to 12 inches to will replace older fish. Mortality increases with age so fewer older, larger fish should be present in the population and the majority of fish should be those approaching or just reaching sexual maturity or 12". The Relative Stock Density (RSD) index offers a way to evaluate specific lengths. We use an RSD - 14 to evaluate the 14 inches length limit on Busse's Lakes. Our sampling showed that 31 percent of the bass caught in the Main Pool (RSD-14 = 31) and 27 percent of the bass caught in the South Pool (RSD - 14 = 27) were at least 14 inches long. Both these values are slightly above management objectives and suggest bass fishing should be good in both pools. These lakes are maintained through natural reproduction. No bass have been stocked in these lakes for several years and things look pretty good. Busse Lake has a variety of habitats including deep water, hard substrate and natural shoreline (vs. sheetpiling), these factors combine to provide adequate habitat for bass to thrive.

**SKOKIE LAGOONS (COOK COUNTY FOREST PRESERVE DISTRICT)** - This 190 acre lake system contains 7 lagoons, many are divided by low-head dams and are not negotiable by boat. A developed boat launch for small boats (electric motors only with no gas motor attached) is located off Tower Road and a variety of shore fishing access and parking locations are scattered throughout the system. Patches of aquatic vegetation and downed timber offer structure to hold fish as well as many fish cribs spread throughout the system. Forage species include gizzard shad and small bluegill. Bass over 4 pounds were collected during the survey and larger fish have been

reported by local anglers so the potential for good action abounds. The electrofishing catch rate for largemouth bass, in 2004, was 1.0 fish per minute, in-line with management objectives. The PSD was 58 and RSD - 14 was 31. These data indicate a balanced fishery with plenty of larger size fish to catch and carry the population forward with natural reproduction. Local bait and tackle shops can offer insight into which portions of Skokie Lagoons offer better shorefishing opportunities than others since there are multiple "pools" in the Lagoon system and a variety of locations to park.

**WOLF LAKE (WILLIAM POWERS STATE FISH & WILDLIFE AREA)** - This 390 acre urban lake sits on the Illinois - Indiana border and offers a considerable amount of shoreline fishing. Boats are allowed on the lake (motors over 10 hp must remain at a "No Wake" speed). Both largemouth and smallmouth bass are present in the system. Wolf Lake has a 6 fish, 14" length limit for bass (either singularly or aggregate). Aquatic vegetation in late summer becomes dense and makes motoring around the lake difficult. In spring and fall vegetation is less dense. Bass over four pounds have been collected and reported by anglers. The combined black bass (both largemouth and smallmouth) catch rate was 64 fish per hour in 2009. This matched management goals and corresponding population indices showed a nicely balanced urban fish population. In lakes with a lot of shorefishing pressure bass populations have a tendency to shift toward off shore habitats which makes them more difficult to sample via electrofishing. Bass which consistently inhabit near shore habitats can be cropped off by fishermen so only fish with non-traditional habits survive. Population statistics indicate a balanced fishery with a largemouth PSD of 68. PSD values give a good indication of the percent of the population that could reproduce naturally if allowed too. Managers use another index to compare fish at specific sizes. Relative Stock Densities allow managers to pick a size and see what proportion of the sample equals or exceeds that value. The RSD - 14 value for largemouth bass at least 14 inches long (legal in Wolf Lake) was 52. These data indicate that 52% of the largemouth bass were at or above legal size so fishing can be quite good. Catch and release fishing and heavy vegetation in late summer probably combine to protect black bass during summer when fishing pressure and lake use can be extremely heavy. With continued restraint on harvest, this fishery should continue to flourish.

Wolf Lake has been stocked with approximately 4500 smallmouth bass fingerlings annually since the early 2000's so it has a continued source of fish help expand the population. Fish are divided proportionately between the North (isolated lake) and the Main Lake.

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

**HEIDECKE LAKE** - Located in Grundy County just southeast of Morris and under an hour's drive from the Chicago metropolitan area, Heidecke Lake offers a diverse angling experience and provides very good black bass fishing opportunities. Impounded in the late 1970's, Heidecke Lake previously served as a cooling reservoir for Midwest Generation's Collins Station, a fossil fuel peaking plant. However, this generating station was decommissioned at the end of 2004 and has since been completely razed. This has eliminated thermal loading and any flow which was created by the circulation of cooling water through the plant, resulting in an ambient lake. Water clarity has remained relatively unchanged and as such the rate of expansion of aquatic plant growth has been less than anticipated. Zebra mussels are very prevalent in the lake.

In the late 1970's and early 1980's, largemouth bass dominated the black bass fishery but over time this changed. Even though an intensive stocking program attempted to bolster the largemouth bass population, no appreciable improvement was noted in either IDNR fisheries surveys or, more importantly, in angler's creels. At the same time, the smallmouth bass population was flourishing via natural reproduction and recruitment, without the benefit of additional hatchery stockings. The supplemental stocking program for largemouth bass was terminated in 1997 and although this species is present, the fishery is not what it was back in the early days of Heidecke Lake (an all-time high of 540 largemouth bass were collected in 1980 and many of these fish exceeded 16 inches). If aquatic vegetation proliferates in response to improved water clarity, it will be interesting to see how this will effect the largemouth bass population. To improve spawning efforts for largemouth bass, artificial spawning logs have been placed at various locations in the lake. The smallmouth bass population has been very strong for the past several years and this species was collected in a greater than 2½ to one margin in comparison with largemouth bass in the 2008 fall standardized biennial survey. Incidence of their occurrence in IDNR surveys began to increase in the mid-1980's and by 1992 smallmouth bass outnumbered largemouth bass in fall sampling, this despite the fact that significant numbers of largemouth bass fingerlings were being stocked. The 2008 fall survey overall electrofishing catch rate for smallmouth bass remained unchanged from the 2006 survey (0.56/minute) and was very close to the long-term average (average catch rate for the period 1995-2006 of 0.64/minute). The density of smallmouth bass which met or exceeded the legal limit declined from the previous survey and this size group comprised 8.1% of the total fall collection. Similarly, the number of 18-inch and larger smallmouth also declined, contributing less than 2% to the total collection. The average size smallmouth bass collected decreased from the previous survey (11.2" to 10.5") but remained very close to the long-term average. Despite a slight increase in electrofishing catch rate, the largemouth bass population continues to struggle. Largemouth bass collected in the fall 2008 survey exhibited an average length of 6.0" which dropped markedly from the long-term average of 8.5". Largemouth bass were collected at the rate of 0.21/minute, which is slightly up from 2006 but less than half of the long-term average. Both catch rate and number of fish collected were heavily influenced by the nearly 104,000 4-inch fingerlings which were stocked in June, 2008. Stocked fish contributed heavily to the fall collection and hopefully this year class will recruit strongly into adulthood. A lone largemouth bass 18 inches or larger was collected and less than 3% of the sample met or exceeded the minimum length limit.

Based on the results provided by the 2006 angler creel survey, smallmouth bass are a mainstay of the Heidecke Lake fishery and ranked fourth behind striped bass hybrids, walleye and channel catfish in terms of the total number which were caught; largemouth bass were eighth on this list. Catch-and-release angling for black bass and especially smallmouth was indicated by a low exploitation rate as less than 2.5% of the smallmouth bass caught were kept. (Note: The estimated average size smallmouth caught by anglers weighed 1.47 pounds at an approximate length of 14 inches). A modification to the black bass harvest regulation will become effective in 2010. The new regulation is a 12- to 18-inch protected slot, which allows the harvest of two (2) fish under 12 inches and one fish over 18 inches (either singly or aggregate). The daily creel limit will remain as it was at three (3) fish per day. The present condition of the largemouth bass population would be better served with a very restrictive harvest limit which may help this population regain some of its former prominence. However, the smallmouth bass population has dominated for many years and it is felt that the

regulation proposed will better serve the black bass community as a whole. In many cases slot limits do not work correctly due to angler's reluctance to harvest smaller fish. If this occurs on Heidecke, what remains is a very restrictive harvest limit which will likely prove more a benefit to the largemouth than smallmouth. If fishermen do harvest the smaller fish, especially smallmouth bass, the reduction in the number of recruits should prove to ease competition and improve body condition and growth rates. Increases in the density of larger fish is anticipated, the lack thereof which is a common complaint among bass anglers who regularly fish the lake.

Heidecke Lake is open to fishing from April 1st until 10 days prior to the opening of the North Zone waterfowl season. The lake is open daily at 6:00 a.m. and closes at sunset. The bank fishing area access is located at the eastern side of the lake and is handicapped accessible, featuring a barrier-free fishing pier. A concessionaire located at the boat ramp offers bait and tackle as well as boat and motor rentals. Heidecke Lake is a partially perched lake and can become very hazardous in windy conditions. There are no boat motor horsepower restrictions but boats must have a working gas-powered motor. Larger boats and watercraft with high windshields may have difficulty passing under the railroad trestle to access the north side of the lake.

**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. Most all of the larger ponds and lakes have similar fish species composition and support naturally recruiting largemouth bass populations. Smallmouth bass, if present, are incidental. To protect these populations, this entire area is governed by a 15 inch minimum length limit and a three (3) fish daily creel limit. Among the lakes which were surveyed in 2009, Mazonia Lake #7, or Bullhead Lake, continues to exhibit a good largemouth population with bass collected at an overall rate of 2.1/minute of electrofishing effort. The average size bass collected during this survey declined from the previous survey, falling nearly two inches to 9.3". Evidence of angler exploitation is reflected in the length frequency distribution which showed a rapid decline of bass once they reach 15 inches; legal size bass comprised just 3.7% of the collection. Lake #8 (Carp Lake) and Lake #9 (Gar Lake) are connected by a shallow channel and were also sampled in 2009. At Lake #8 largemouth were captured by electrofishing at the rate of 2.8/minute for all sizes which slightly exceeded the long-term average (2.1/minute). The average size bass collected from Lake #8 increased from the 2007 survey and measured 11.2". The density of legal size bass collected in the 2009 remained virtually unchanged. Electrofishing catch rates remained unchanged for Lake #9 as bass were captured at the rate of 1.3/minute. Most all other population structural indices remained the same from the 2007 survey.

Fish population surveys were also completed on two water areas at the South Unit - Doc's Club and Wilderness Lakes. Both of these lakes are typified by extremely clear water and high conductivity which greatly reduces sampling efficiency. Shoreline access is made difficult by the growth of tall reed grass which encircles most of the Mazonia lakes and ponds. As a result, float tubes or "belly boats" have become a very popular way to fish these areas. Typical of strip mine lakes, water clarity is usually very good and successful anglers take this into consideration in regards to both tackle and tactics. Boat access is available at several of the larger lakes, with propulsion limited to electric trolling motors at the Mazonia Main Unit. 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. These lakes are governed by a strict no-wake

regulation for boaters. Primitive but serviceable gravel boat ramps are presently available at Monster, Ponderosa and Eagle Lakes only. Best bets for bass fishing success include: in the Main Mazonia Unit Lakes 3, 7, 8 and 9 and Monster and Wilderness Lakes in the South Mazonia Unit. The Doc's Club and Wilderness areas presently offer bank fishing and carry-in boat fishing. 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.

**BRAIDWOOD LAKE** - A 2,308 acre partially perched cooling reservoir, Braidwood Lake is located in Will County near the town of Braidwood. Braidwood Lake has two boat launching facilities, located at the north and south ends of the lake as well as extensive bank fishing areas. Boats must have a gasoline powered motor and there are no horsepower limitations.

A cooling facility for Exelon's Braidwood Nuclear Generating Station, lake temperatures can soar into the high 90's and approach 100 degrees (Fahrenheit) during the summer months. As a result of several consecutive seasons of extended periods of high water temperatures, the aquatic plant community has shifted from one which hosted a variety of both emergent and submersed rooted plants, to one which is almost completely dominated by phytoplankton. These same conditions appear to have had an adverse effect upon the largemouth bass population as well. In recent years, bass sampled in fall surveys tended to be of larger average size but the number of fish collected began to decline. In 2005 largemouth bass electrofishing catch rates fell to 0.17/minute which was an all-time low. To augment the shortfall in natural production of largemouth bass, a supplemental stocking program was initiated in 2006. Since the inception of this stocking program a total of more than 265,000 largemouth bass fingerlings have been released. Size at stocking has ranged from 2.3 to 5.6" but has averaged close to 4". A total of 18,158 largemouth bass fingerlings were released in 2009.

Results from the 2009 fall survey were somewhat encouraging as although the catch rates declined slightly the density of bass which were 12 inches and larger was almost three times greater than the previous survey. Nearly one-half of the collection was comprised of bass 6 inches and less which indicates the contribution of stocked fish.

For the third consecutive year, MEHS fish habitat units were once again purchased by Exelon's Braidwood Generating Station. This activity was a cooperative effort between Exelon, IDNR and local bass fishing clubs. A total of 88 units were placed in groups positioned at previously selected locations throughout the lake in late May. Smallmouth bass have been incidental in most all IDNR sampling efforts. Anglers are restricted to a daily limit of one (1) black bass 18 inches or larger. The impact of the restrictive harvest limit (18-inch minimum, one fish per day creel) is observed in relative stock density values, e.g. RSD16 improved from 7.7 in 2007 to 16.8 in 2009 and the RSD18 value for 2009 was 3.8. No largemouth bass 18 inches or larger were collected in 2007.

Braidwood Lake is open daily from 6:00 a.m. until sunset, March 1<sup>st</sup> until 10 days prior to the opening of waterfowl season in the Central Zone. Like many other cooling lakes, fog can cause problems during the first and latter portions of the fishing seasons. Anglers should also be wary of windy conditions which can make the lake extremely dangerous.

**LAKE MILLIKEN** - Located near Wilmington within the Des Plaines Conservation Area in Will County, this 26 acre lake is often over-looked, yet supports a very strong largemouth bass population. Largemouth bass provide the majority of the action with smallmouth bass considered incidental. Bass harvest on Lake Milliken is restricted to fish a minimum of 15 inches in length (statewide creel) and float tubes (belly boats) and boat fishing are not allowed. However, shore fishermen will find ample targets in a variety of weed beds, stumps, lay-downs, brush piles and other features which can hold fish. Data from the 2008 fall IDNR survey indicated a very stable population, producing good numbers of legal-size bass as well as a few fish of trophy caliber. Catch rates for the 2008 survey greatly exceeded the previous survey and were right at the long-term average of 1.35 bass/minute of electrofishing effort. The average length for bass collected in the 2008 survey was more than 11.4" with nearly 11% of the collection legal size or better and 2% exceeding 18". For those bassers who lack the "big rig", bank fishing for trophy bass at Lake Milliken can be very rewarding. Lake Milliken is open to fishing year 'round from 6:00 a.m. until sunset.

**MONEE RESERVOIR** - A public co-op lake owned and operated by the Forest Preserve District of Will County, Monee Reservoir is a 44 acre water area located near the town of Monee and just off I-55. A minimum length limit of 15 inches coupled with a restrictive daily creel of just one fish has resulted in a substantial bass population which provides fast action for sub-legal fish with some "big fish" potential. No smallmouth bass are present in Monee Reservoir. The 2009 fall survey yielded the poorest bass collection in many years as catch rates fell below 1/minute for the first time since the reservoir was reconstructed in the mid-1990's. Most population structural indices fell well below long term averages and there is speculation that the reservoir may have suffered from a partial winter kill in 2008-2009. Ancillary sampling will be conducted in the spring of 2010 to determine if this was the case. Monee Reservoir offers diverse habitats, both natural and man-made. Boat rental is available at the site and boat fishing is restricted to those boats only. Serious bass fishermen are advised to utilize this service. Monee Reservoir is open year 'round but is closed to ice fishing.

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

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

**HOMER LAKE** - During the 2009 survey, 57.3 bass per hour of electrofishing were collected. Based on bass collected in 2009 that were larger than 8 inches, 79% were larger than 12 inches, 49% were larger than 15 inches, and 3% were larger than 20 inches. The 2009 survey resulted in the highest catch rate for bass over 15 inches in 15 years. The bass regulation at Homer Lake is a 14-inch minimum length limit with a 6 fish daily creel limit.

**LAKE OF THE WOODS** - Lake of the Woods is a 25.5 acre lake in Mahomet and is part of the Champaign County Forest Preserve District. During the 2009 fall survey, 58 bass per hour of electrofishing were collected. Approximately 41% of the bass were longer than 12 inches, but only 7% were longer than 15 inches. The bass regulation on Lake of the Woods is a 15-inch minimum length limit and a 1 per day harvest restriction. Lake of the Woods has an electric motor only restriction.

**SUNSET LAKE (LAKES AT RIVERBEND)** - This lake will provide anglers a chance to fish clear water for largemouth bass. This lake is a gravel pit with deep water, but does have some shallow water with vegetation. In 2008, a catch rate of 138 bass per hour of electrofishing was obtained. All of the bass collected were less than 15 inches. Even with the majority of the population being small, there are large bass in this lake. Two bass over five pounds were collected during the 2004 survey. The largemouth bass regulation is a 15-inch minimum length limit with a 1 per day harvest restriction. Sunset Lake has an electric motor only restriction.

**CLINTON LAKE** - The fall 2009 survey resulted in a catch rate of 38 bass per hour of electrofishing. The seventeen-year average is 37.1 bass per hour. There are good numbers of larger bass in the lake, with 81% being over 12 inches in length and 42% over 15 inches. There was a good spawn in 2006 and produced the second highest catch rate for bass under 6 inches since 1992. The spawn in 2007 and 2008 were below the seventeen-year average. The best spawn was in 2002 and is the year class that is responsible for the majority of the bass larger than 15 inches.

In order to improve the smallmouth bass fishery, the State Hatchery System started stocking smallmouth bass in Clinton Lake in 2001. The highest catch rate for smallmouth bass was obtained in the 2009 survey. The majority of the smallmouth bass were less than 6 inches, but this relates to a strong year class and will provide excellent smallmouth fishing in a few years.

The bass regulation on Clinton Lake is a 16" minimum length limit with a 3 fish daily creel limit. Major access areas have bulletin boards with area rules, fish creel and size limit regulations and other visitor information posted. All state boating, hunting, fishing and park regulations remain in full force where applicable. Various portions of the lake are designated as no-wake, electric motor only, or no boat areas for safety and security reasons. Areas closed to public access include: the water intake area for the power plant (new buoy line across lake), the spillway and dam areas east of the spillway, and the bank or water surface of the discharge flume (ditch). Boats and fishermen are not allowed in designated swimming areas when swimming is permitted. Please pay special attention to such areas designated by the maps, posted signs, and buoys. The entire portion of the lake between the DeWitt County Highway 14 Bridge and the Illinois Route 48 Bridge is designated as a fish and waterfowl refuge and is closed to all public use for the period of October 10<sup>th</sup> through March 31. The land portions of the site in this designated area will still be open for authorized hunting activities (except waterfowl) during this time period. As on all large lakes, Clinton Lake can become very rough when the wind exceeds 15 mph. All boaters are advised to be aware of the weather. Although there is no horsepower or speed limit on Clinton Lake, shallow areas and underwater hazards do exist in numerous portions of the lake. Boaters should operate their craft accordingly.

**WELDON SPRINGS** - This lake provides an excellent opportunity to catch a big largemouth bass. The catch rate for the 2009 fall survey was 64 bass per hour. Of the bass 8 inches and longer that were collected, 67% were longer than 12 inches and 43% longer than 15 inches. Weldon Springs has one boat ramp and the lake is limited to electric motors. The largemouth bass regulation is a 15-inch minimum length limit and a one per day harvest restriction.

**LAKE BLOOMINGTON** - The fall night survey resulted in a catch rate of 103 bass per hour. Approximately 49% of the bass collected were young-of-the-year bass. The last strong year class was in 2006. Of the bass collected over 8 inches in 2009, 58% were longer than 12 inches, 20% longer than 15 inches and 2% longer than 20 inches. The bass regulation on Lake Bloomington is a 15" minimum length limit with a 6 fish daily creel limit. Lake Bloomington has one boat ramp and charges an access fee. Boats are limited to 40 horsepower. For information on fees and Lake Bloomington call 309/747-2615.

**DAWSON LAKE** - The largemouth bass population on this lake provides anglers with a great opportunity to catch a quality largemouth bass. Based on bass collected during the night survey in 2007, the size structure of the bass population looks good. Approximately 60% of the bass were over 12 inches and 14% were over 15 inches. The catch rate for bass larger than 15 inches was higher than the six year average. The strong 2006 year class increased catch rates in the 8 to 12-inch size range from 18 bass per hour in 2006 to 56 per hour in 2007. The results of the 2008 day survey were very similar to the 2007 day survey. The catch rate in 2007 was 94.3 bass per hour and 103.3 in 2008. The 2009 day survey resulted in a catch rate of 119.3 bass per hour. Strong year classes have been produced the past 2 years and should sustain this good bass fishery. The bass regulation on Dawson Lake is a 15-inch minimum length limit with a 6 fish daily creel limit. Dawson Lake has a no wake restriction on motors over 10 horsepower.

**EVERGREEN LAKE** - The catch rate for the 2009 fall night survey was 362 per hour and was the highest catch rate ever obtained at Evergreen Lake. Recruitment has been a problem on Evergreen Lake for many years. A vegetation project was initiated to produce cover for small game fish in Evergreen Lake, with the goal of increasing natural recruitment. Starting in 2005, vegetation was planted in Evergreen Lake to increase habitat available to small bass. In the fall of 2007 bass spawning structures were placed in the lake to help bass find better nesting sites. The 2008 and 2009 year classes were very strong and should improve the quality of the bass fishery. The catch rate for bass less than 6 inches was the highest catch rate in 16 years. The catch rate for bass less than 6 inches was 143 per hour and that exceeded the previous overall catch rate of 126.5 obtained in 1998. The catch rate for bass less than 6 inches in 2008 was the second highest catch. The catch rate for bass over 15 inches was the fourth highest catch rate in 16 years. The bass regulation on Evergreen Lake is a 15-inch minimum length limit with a 6 fish daily creel limit. 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.

**WHITE OAKS PARK LAKE** - Even though this lake is located in the City of Bloomington, it still provides an angler a good chance of catching a largemouth bass. In 2003 and 2007, a catch rate of 80 bass per hour of electrofishing was obtained. This catch rate exceeded the objective of 65 per hour. The majority of the bass in the lake are less than 15 inches, but the high density will give anglers an easier time at catching a bass. The lake has no boat ramp, but can easily be fished from shore. The bass regulation is a 15-inch minimum length limit with a 1 per day harvest restriction.

**MILLER PARK LAKE** - This is another lake located in the City of Bloomington and offers a good bass fishery. A catch rate of 97.8 bass per hour was obtained in 2007. Of the bass collected over 8 inches, 54% were longer than 12 inches and 22% were longer than 15 inches. Bass are plump at all sizes, with the largest bass tipping the scale at 4.9 pounds. The lake has no boat ramp, but can be easily fished from shore. The bass regulation at Miller Park Lake is the statewide bass regulation.

**TIPTON LAKE** - Tipton Lake is a relatively new park lake in Bloomington that provides an angler with a good bass fishery. The catch rate in 2007 was 164 bass per hour. Approximately 46% of the sample was bass less than 6 inches. The bass are producing strong year classes and as this pond gets older it should produce some nice fish. Of the bass collected over 8 inches, 65% were longer than 12 inches and 35% were longer than 15 inches. The lake has no boat ramp and shore access is limited to fishing piers. The bass regulation is the statewide bass regulation.

**LAKE MINGO** - In 2006 catch rates for bass under 6 inches were the highest rate since 2000. Since the Lake Mingo survey is completed in May, these fish were from the 2005 year class. There has been an increase in catch rate for small bass since 2000. The overall catch rate for bass was 56 per hour and failed to meet the objective of 60 per hour. Of the bass collected over 8 inches, 49% were longer than 12 inches and 15 % were longer than 15 inches. The bass regulation on Lake Mingo is a 15-inch minimum length limit with a 6 per day harvest restriction. Lake Mingo has one boat ramp and charges a fee to launch a boat.

**LAKE VERMILION** - The largemouth bass population continues to be good and should continue to get better, especially with the cooperative stocking program between the Vermilion County Conservation District, Consumer Illinois Water Company and the Illinois Department of Natural Resources. The total number of bass collected per hour was 41 in 2001 and 54 in 2003. In 2007 the catch rate increased to 76 bass per hour. Approximately 23% of the bass collected were stocked fish. Each year the lake is stocked with 2,400 8-inch bass that are marked. The size structure of the bass population also looks good with 45% being over 12 inches in length and 18% over 15 inches (based on bass collected that were 8 inches and larger). Lake Vermilion has a good number of large bass in the population and with the help of the stocking program bass fishing should be good. The bass regulation on Lake Vermilion is a 15" minimum length limit with a 6 fish daily creel limit. Lake Vermilion has one boat ramp and charges a fee to launch a boat. This lake is part of the Illinois Environmental Protection Agency=s Clean Lakes Program. This program will help to improve water quality and fish habitat in Lake Vermilion.

**CLEAR LAKE (KICKAPOO STATE PARK)** - In 2007, a catch rate of 84 bass per hour of electrofishing was obtained. The density of largemouth bass has increased in this lake over the past ten years. The population is dominated by small bass, but larger bass are present in the lake. Only 8% of the bass collected were larger than 12 inches. Even though this lake is very clear, it does have shallow areas with aquatic vegetation. The bass regulation is a 14-inch minimum length limit with a 3 per day harvest restriction. This lake does have a boat ramp.

**INLAND SEA LAKE (KICKAPOO STATE PARK)** - In 2007, a catch rate of 75 bass per hour of electrofishing was obtained. The population is dominated by small bass, but larger bass are present in the lake. Only 7% of the bass collected were larger than 12 inches, but 2% were larger than 20 inches. Even though this lake is very clear, it does have shallow areas with aquatic vegetation. The bass regulation is a 14-inch minimum length limit with a 3 per day harvest restriction. This lake does have a boat ramp.

**LONG LAKE (KICKAPOO STATE PARK)** - This lake is another deep clear lake that was formed from strip mining. In 2009, a catch rate of 47 bass per hour was obtained. Bass density is relatively low but density increased from 34 per hour in 2006. The bass regulation is a 14-inch minimum length limit and a 3 per day harvest restriction. The lake has two boat ramps.

**SPORTSMEN LAKE (KICKAPOO STATE PARK)** - This lake has a relatively low density of bass. The bass population is dominated by small bass, but an experienced bass angler may catch a large bass in this lake. In 2008, a catch rate of 45 bass per hour was obtained. Only 4% of those bass captured were larger than 15 inches. The bass regulation is a 14-inch minimum length limit with a 3 per day harvest restriction. This lake does have boat access.

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

**MILL CREEK LAKE** - Is located approximately eight miles west of Marshall, in Clark County. The lake covers 811 surface acres with a maximum depth of 60 feet and average depth of 22.7 feet. Public boat launching facilities are available and the Clark County Park District (217-889-3901) collects a boating access fee. A 12-15 inch protected length limit is in effect for largemouth bass.

This lake supports an abundant self-sustaining bass fishery due to the abundant aquatic vegetation, which grows in the lake. Historically, an excellent largemouth bass population exists with the average catch ranging from 1 to 2 pounds. A good catch and release fishery exists for bass within and above the protected slot length limit of 12-15 inches. Angling pressure on this lake, non-organized and tournament from both Illinois and Indiana residents is very heavy, attesting to this lake's popularity. A significant fish kill, comprised primarily of largemouth bass, occurred in late summer 1999. The fishery has recovered very well and catch rates by fishermen have improved significantly in recent years. The results of the fish population survey of fall 2009 resulted in a catch rate of 33 bass, age 1+ or older, per hour. This is much lower than 77 per hour in 2007, 82 per hour in 2005, and 56 per hour in 2003. Bass were collected from 3 to 21 inches, with the largest weighing 5.5 lbs. It is unlikely that the reduced catch rates are due to a lower number of bass in the lake, but likely environmental factors at the time of sampling. This fishery is always very popular with Illinois and Indiana anglers and ranks with the best in the state. Bass fishing prospects are rated as very good to excellent for catch rates and very good to excellent for size.

**LINCOLN TRAIL LAKE** - Is located within Lincoln Trail State Park, approximately two miles south of Marshall in Clark County. The lake covers 146 surface acres with a maximum depth of 35 feet and average depth of 15.9 feet. Free public boat launching facilities are available. There is a 10 h.p. motor limit on this lake. A 14-18 inch slot length limit for largemouth bass became effective in April 2002. There is a four (4) fish daily creel limit, of which only one (1) can be over 18 inches.

Largemouth bass in this lake have excellent natural recruitment due to abundant aquatic vegetation, resulting in a self-sustaining bass fishery. A good catch and release fishery exists at the present time. The results of the fish population survey in fall 2009 resulted in a catch rate of 51 bass, age 1+ or older, per hour, which is slightly higher than the average of the two previous surveys of 42 bass/hr. Catch rates vary due to abundance of vegetation, water clarity, and less than ideal conductivity levels. A high density of bass occurs in this lake, however the size structure is not as high of quality as desired. The bass collected in the most recent survey ranged from 3 to 19 inches and the largest fish collected weighed 4.2 lbs. Low harvest rates of bass below the slot length limit contributes to slower growth rates and reduced recruitment through the protected range. **This is a lake that would benefit greatly from increased angler harvest of largemouth bass below the slot limit's protected range.** This would increase growth rates and recruitment through the protected range. Bass fishing prospects are rated as good for catch rates, fair to good for size.

**LAKE DECATUR** - Is located in Decatur in Macon County. The lake covers 3093 surface acres with a maximum depth of 22 feet and average depth of 6.0 feet. Several public boat launching facilities are available and the City of Decatur (217-424-2837) collects a boating access fee. A 14-inch minimum length limit is in effect for largemouth bass.

Due a lack of aquatic vegetation, natural recruitment of bass fry is poor in Lake Decatur. Fingerling bass have been stocked in 1990 and 1992-2004 by the Illinois Department of Natural Resources and 1999-2003 by the Decatur Angler's Association to try to boost the bass population with only moderate to poor results. The results of the fish population survey of fall 2008 resulted in a catch rate of only 20 bass, age 1+ or older, per hour. High water levels and high turbidity may have played a factor in reduced catch rates. Bass were observed in higher number during a walleye survey in October. The average catch rate from the standard fall survey is much lower than the catch rate from 2006 survey of 30/hr, but similar to the 2004 survey of 18/hr. Bass collected ranged from 2 to 17 inches, with the largest weighing 3.2 lbs. Catch rates of the 2008, 2006, and 2005 year classes were well represented. The 2008 year class was collected in relatively numbers, exhibited good growth, and should recruit very well into this fishery. The contribution of these three year classes should provide an outstanding boost to this fishery in the next couple of years. Bass fishing prospects are rated as fair for catch rate and size.

**LAKE MATTOON** - Is located approximately eight miles southwest of Mattoon and about 1.5 miles northwest of Neoga, in Shelby, Coles, and Cumberland Counties. The lake covers 1050 surface acres with a maximum depth of 31 feet and average depth of 11.4 feet. Public boat launching facilities are available and the City of Mattoon (217-234-3611) collects a boating access fee which covers Lake Paradise as well. A 14-inch minimum length limit is in effect for largemouth bass.

Bass recruitment is not as high as desired due to a lack of suitable aquatic vegetation for nursery habitat in the lake. Catch rates from the standard fish population survey in fall 2008 (48/hr) were better than catch rates in fall 2006 (32/hr), but below the results of the 2004 survey (56/hr). A very good distribution of fish from 6 through 18 inches was collected with the largest fish weighing 5.0 lbs. A fair number of 1-2 pound bass are available with bass up to 7 pounds caught. Bass fishing prospects are rated as fair to good for catch rates and good for size.

**CHARLESTON SIDE CHANNEL LAKE** - Is located approximately three miles southeast of Charleston, in Coles County. The lake covers 330 surface acres with a maximum depth of 10 feet and average depth of 4.7 feet. Free public boat launching facilities are available. The entire lake is designated as a no-wake area. A 14-inch minimum length limit is in effect for largemouth bass.

Fingerling bass have been stocked in 1990 and 1992-2005 and 2008-2009 due to poor natural recruitment of bass fry in the lake, due to the lack of suitable aquatic vegetation for nursery habitat in the lake. Although bass density is low a wide variety of sizes of bass exist in the lake. Overall the collection rate was very poor in the fish population survey in fall 2009, with only 20, age 1+ and older bass collected per hour. The size of bass collected ranged from 3 to 18 inches, with the largest weighing 4.0 lbs. None of the bass collected in this survey appeared to be stocked fish due to a lack of marks. Despite consistent stocking at high densities, bass fishing prospects are rated as poor to fair for catch rates.

**PARIS TWIN LAKES** - Are located on Route 1 on the north edge of Paris in Edgar County. The two lakes have a combined surface acreage of 220 acres. Public boat launching facilities are available and the City of Paris (217-465-7601) collects a boating access fee. A 14-inch minimum size limit is in effect for largemouth bass.

Catch rates during the 2008 fall survey for age 1+ and older bass were 31 in the east lake and 68 per hour in the west lake. This is much improved for the west lake. Bass collected ranged from 2 to 21 inches with the largest weighing 6.3 lbs. Catch rates from the 2006 survey were 27 in the east lake and 39 per hour in the west lake. Bass fishing prospects are rated as fair to good for catch rates and good for size.

**PANA LAKE** - Is located approximately two miles east of Pana in Christian and Shelby Counties. The lake covers 219 surface acres with a maximum depth of 36 feet and average depth of 14.7 feet. Public boat launching facilities are available and the City of

Pana (217-562-3626) collects a boating access fee. A 14-inch minimum size limit is in effect for largemouth bass.

Although sporadic reproductive success occurs in this lake, a fair to good quality largemouth bass fishery exists. Low catch rates of largemouth bass in biological surveys may be attributed in part to relatively low conductivity levels. Good numbers of bass over the 14-inch minimum length limit are reported caught by anglers in recent creel surveys. In the fish population survey in fall 2008, catch rates for age 1+ and older bass averaged 45 per hour, which is greater than the results of the 2006 survey's catch rates of 21, but similar to the 2004 survey of 43/hr. Bass were collected from 3 to 20 inches with the largest weighing 4.8 lbs. Bass fishing prospects are rated as fair to good for catch rate and size.

**LAKE PARADISE** - Is located approximately four miles south of Mattoon in Coles County. The lake covers 176 surface acres with a maximum depth of 16 feet and average depth of 8.5 feet. A new public boat launching was built in 2006 which should enhance access to this lake. The City of Mattoon (217-234-3611) collects a boating access fee which covers Lake Mattoon as well. A 10-horse power boat motor limit is in effect. A 14-inch minimum length limit exists and compliance appears good.

Although reproductive success is sporadic in this lake, bass population quality remains at least fair. Densities of bass are not as high as desired, with catch rates in the 2008 fish population survey averaging 23 age 1+ and older, bass per hour. This is much lower than the fall 2004 survey, which averaged 40, age 1+ and older, bass per hour. Bass were collected from 4 to 17 inches with the largest weighing 3.1 lbs. Bass fishing prospects are rated as fair for catch rate and good for size.

This lake has been targeted for an aquatic plant introduction program to help provide critical nursery habitat for largemouth bass fry. Aquatic vegetation was planted in 2007 and 2008, with modest, but positive results. Continued work is warranted to produce significant habitat. American pondweed performed the best, with wild celery also doing well.

**WALNUT POINT LAKE** - Is located in Walnut Point State Park, approximately 3 miles north of Oakland in Douglas County. The lake covers 52 surface acres with a maximum depth of 32 feet and average depth of 12.5 feet. Free public boat launching facilities are available. Only the use of electric motors is allowed on this lake. Largemouth bass in this lake have excellent natural recruitment of bass fry, resulting in a self-sustaining bass fishery. A 12-15 inch slot length limit is in effect for largemouth bass.

Bass collection rates in the fish population surveys of fall 2009 (40/hr) were significantly improved over catch rates from the two previous surveys, 29 and 27, of age 1+ and older bass collected per hour of electrofishing, respectively. Bass were collected from 2 to 20 inches with the largest weighing 3.9 lbs. Although bass numbers are good, fishing can be difficult. Jig and pig combinations seem to work especially well due to high

numbers of crayfish present. Bass fishing prospects are rated as fair to good for both catch rate and size.

**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. Numerous public boat launching facilities are available, with a fee assessed on U.S. Army Corp of Engineers' (217-774-3951) developed access area boat ramps, and free access on state park or Corp gravel boat ramps. A 14 inch minimum length limit and statewide creel limit of six fish daily is in effect for largemouth bass.

Recent large floods and a few well-timed smaller flood pulses have resulted in excellent natural recruitment of largemouth bass. It appears that strong year classes have been or will be recruited to the lake from spawns in 2001, 2002, 2003, 2004, 2006, 2007, 2008, and 2009! Recruitment of the 2009 year class of bass appears to be potentially good, especially in the upper part of the lake. The strong year classes produced should sustain this fishery for many years.

This lake has become a very popular tournament destination due to the high quality of the fishery. Fishermen catch rates in 2006, 2007, 2008, and 2009 were much improved over 2004 and 2005. Fishermen reported catching good numbers of bass both below and above the size limit through the 2009 season. Unlike 2008, high water levels in 2009 had little impact on catch rates for most gamefish species in the lake. Water clarity was much improved over 2008. The three greatest single day tournament total weights were 588, 619, and 814 lbs. Average weight of bass weighed into the larger tournaments ranged from 1.9 to 2.5 lbs. The largest bass weighed into the larger tournaments ranged from 5.3 to 6.3 lbs with the exception of the new lake record bass, caught in a tournament by Chuck Ditto in April, which weighed 8.55 lbs.

The number of bass collected in the 2009 fall survey (80/hr.) was well above the 2006, 2007, and 2008 survey results (24, 31, 22/hr). Collection rates were higher at mid lake and upper lake sights. Incidental sampling later in the season indicated the potential for high catch rates. The largest bass collected during the 2009 fall survey was 20 inches and weighed 4.3 lbs. The largemouth bass fishing prospects for 2010 remain good to excellent for numbers and good to excellent for size and should improve significantly in future years.

There has been a recent attempt to establish a founding population of smallmouth bass in Lake Shelbyville through stockings in falls 2006, 2007, and 2008. Approximately 200 fingerling smallmouth, averaging 6.5", were stocked in 2006, 279 averaging 7.1" were stocked in 2007, and 366 averaging 6.4" were stocked in 2008. No smallmouth bass were stocked in 2009 due to the inability to collect broodstock from the Kaskaskia River due to high flows. All smallmouth bass were stocked into the lower part of the lake. Good recruitment of largemouth bass will allow for continued efforts to establish smallmouth bass in Lake Shelbyville. 1,435 smallmouth bass averaging 4.4" were

stocked into the Kaskaskia River just above Lake Shelbyville in 2008 as well. No smallmouth bass were collected in the 2007, 2008, or 2009 fall fish population surveys. A few reports from fishermen indicate that the initially stocked fish are doing well. There has been no evidence of spawning success as of yet. Tournament fishermen are asked to release all smallmouth bass where caught and are not allowed to weigh them in tournaments on Lake Shelbyville. Fish fishing prospects for smallmouth bass are poor due to low stocking densities.

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

### **DISTRICT 12: ADAMS, BROWN, CALHOUN, HANCOCK, MORGAN, PIKE, AND SCHUYLER**

**LAKE JACKSONVILLE** - This 476 acre lake, located south of Jacksonville, Illinois was rehabilitated and restocked in 1986. Since the rehabilitation, an above average largemouth bass population has developed and serious bass fishermen have taken note. This lake has consistently produced quality largemouth bass and has attracted the attention of many bass clubs resulting in a weekly schedule of tournaments during the fishing season. Since so many anglers wish to fish Lake Jacksonville, the City has adopted a policy where it controls the number of tournaments conducted each year. Applications are accepted beginning January 2 of each year on a first come-first serve basis. If your group or club wishes to schedule a tournament the number to call is 217/479 - 4641. During the 2009 fall, fish population survey, largemouth bass collection decreased from 86.3 largemouth bass per hour in 2008 to 56 largemouth bass per hour. During four hours of daytime, A.C. electrofishing, ten (10) year classes were represented in the collection. Year class delineation is based upon average largemouth bass growth in Illinois. Largemouth bass in the 9 - 11" size range comprised 19.3% of the collection. In 2009, largemouth bass 12" to 16" inch size range comprised 43% of all bass collected. Largemouth bass 16 inches and larger comprised 66% of the sample. Largemouth bass greater than 18" comprised 13% of all bass collected with 6% greater than 20" The largest individual collected measured 22.4 inches and weighed 6.5 pounds.

Natural spawning in the early 1990's resulted in poor reproduction and subsequent recruitment. In an attempt to improve the overall bass population, the City of Jacksonville built a 2.8 acre nursery pond that would normally produce 4,000 to 7,000 largemouth bass fingerlings each year. In 2008, the City of Jacksonville, following IDNR recommendations, drained and removed a portion of the sediment that had entered the rearing pond. In 2009 the rearing pond was allowed to fill to normal pool and stocked with 15,000, 2" largemouth bass fingerlings. Fathead minnows were stocked for forage as usual. However, when draining the rearing pond in the fall, extensive contamination by green sunfish was observed. In 2009, a total of 7875 largemouth bass fingerlings were produced averaging 3.25 inches. The rearing pond produced fish are

supplemented with an additional fingerling stocking with bass produced from the Illinois Hatchery System.

**SILOAM SPRINGS STATE PARK LAKE** - Nestled at the end of long winding roads thru the State Park lies this beautiful 58.0 acre lake. Surrounded by dense forest, this lake is fed by cold, clear springs providing clear water with extremely high visibility. In 2009, the secchi disc reading was 8.5 foot at the time of the survey. Due to such high visibility, fishing and survey collections are difficult at times. A small sample was collected during 2009; however, the following was observed. Largemouth bass measuring between 8" and 12" comprised 57%. The 2+ year class individuals comprised 36% of the collection. The largest individual collected in 2009 measured 19.4" and weighed 3.17 pounds.

**LAKE PITTSFIELD** - Located in Pike County in Western Illinois, Lake Pittsfield, a 240 acre, city owned lake, is a major recreational area, flood control reservoir and primary water source for the City of Pittsfield. Lake Pittsfield in 2009 received above average precipitation causing repeated flushing of the lake. This lake maintains a stable and well proportioned largemouth bass population. During the 2008 fall survey, a total of 356 largemouth bass were collected during 2 hours of daytime electrofishing or 178 bass per hour as compared to 308 largemouth bass or 154 bass per hour in 2009. Reproduction was successful as exhibited by nearly 14 % of the collection being comprised of young-of-year. Largemouth bass ranging from 11" - 16" comprised 54% of the 2009 collection. Bass 16" and greater comprised 6% (N = 17). The largest individual collected during the 2009 survey measured 21.2" and weighed 6.5 pounds.

A 14" minimum length limit is in effect with most anglers practicing "catch and release". Overall, the largemouth bass population is rated good; however, slow growing. Dense beds of coontail on the eastern shoreline provide "refuge" areas for young-of-year, but also create foraging obstacles for larger fishes. Sporadic, quality, gizzard shad spawns also affect growth. Anglers utilizing weedless rigs do best. There is a 25 hp "no wake" regulation in effect. All propellers **must** be removed from motors larger than 25 hp.

**WEINBERG-KING LAKE** - This small 3.8 acre lake located in Schuyler County is heavily fished by visitors to Weinberg-King State Park. The lake is a major attraction to Equestrian groups that overnight and utilize the campgrounds and the miles and miles of equestrian trails as well as school groups from the surrounding communities. Latest survey data indicates young-of-year largemouth bass comprising slightly over 70% of the collection and will hopefully recruit into the population. The additional largemouth bass that were collected were all over 12 inches in total length indicating a fair amount of angler harvest to be occurring.

A large "T"- shaped fishing pier, extending over the water, is available for anglers and lies in close proximity to the parking facility and pavilion. Only bank fishing is allowed with 2 pole and line fishing only.

**LAKE MT. STERLING** - This 26 acre lake that lies in Brown County is somewhat overlooked by local anglers. Lying in the Southeastern portion of the City Park, largemouth bass fishing appears to be second behind channel catfishing. However; the lake supports a rather respectable largemouth bass population. Bass ranging from 8" - 12" comprised 45% of the collection. Twenty-six percent (26%) of the bass collected measured between 12" - 16", while largemouth bass measuring 16" or greater comprised only 10%. The largest individual collected during the survey measured 20.1" and weighed 4.09 pounds.

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

**LAKE SANGCHRIS** - This 2,235 acre lake located 20 miles southeast of Springfield remains one of the better bass lakes in the state although it hasn't produced electrofishing numbers indicating that in the past two fish population surveys. The fall 2008 catch and structural indices were off the decade-long norm. The 2009 were more in line with that norm, with a catch rate of 80 bass per hour. Twenty-one percent (21%) were over 15" but only 4% were over 18". This lake has produced numbers better than that historically and the goal is to get back to those figures. In the period 1996-1999 for example, the lake produced an average of nearly 10% of the bass collected over 20". This year that figure was 2%. The current regulation of 2 bass less than 15" and one bass equal to or larger than 15" allows for the harvest of smaller bass while protecting those over to a larger size. One very positive note is that the bass were heavier (weight/length ratio) than in past years. This is probably due to the cooler summer, when the electric generation plant was operational less than most. In power plant cooling lakes summer water temperatures are many times so hot that the fish burns off more calories than it can take in.

**LAKE SPRINGFIELD** - Bass fishing should remain very good-to-excellent on this 3,866 acre lake. Since 1992 fish population surveys have consistently produced 100+ bass per hour of electrofishing with the upper third of the lake (west of the I-55 Bridge) producing over 150 bass per hour. In the fall 2006 electrofishing survey the total catch was a record 137 bass per hour. The fall 2007 survey was nearly identical with 134 bass collected per hour. There are no lakes of that size in the state that can boast such high numbers of bass. The fall 2009 survey produced a lower than average catch rate of 84 fish per hour but that is still very good for a lake of this size. The population structure remains about the same with 20% of the bass collected over 15" but an unexplainably low number (1%) are over 18". Bass weights are 10-20% over the average for fish of their lengths. While the numbers of fish over 15" and 18" are relatively low, with the total bass density as high as it is and their body conditions so good, the population would be described as very good. One consideration, the lake gets very high recreational boat, skiing and wave runner traffic in the summer. The best time to fish this lake is in the spring and fall. The winter too can produce excellent fishing opportunities in the warm-water area of the lake.

**LAKE TAYLORVILLE** - Lake Taylorville is a 1286 acre lake in Christian county that has made a tremendous turn-around in the bass population over the past fifteen years. From 1982-1992 average catches were approximately 25 bass per hour of electrofishing and all fish were over 12". This indicates poor spawns and recruitment. That number steadily increased from 1992 to a then all-time high of 100 bass per hour of electrofishing in 2001. The fall 2007 survey produced a record 132 bass per hour of electrofishing. The fall 2008 survey was conducted under poor weather conditions and produced only 40 bass per hour of electrofishing. The 2009 survey was conducted under poor weather conditions as well but still managed 88 bass per hour with 25% of the bass collected young of the year. So there was a good spawn this year. Sixty per cent (60%) of the bass collected were over 12" which is about normal for this lake but only 5% were over 15" and a paltry 1% were over 18". These, lower than average, figures are probably due to the weather. Normally 20-30% of the population is over 15" and 4-8% is over 18". As with Lake Springfield the strong gizzard shad population produces very heavy bass. The Lake Taylorville bass are 10-15% heavier than bass of the same lengths from other lakes.

As some of you may know, in 1992 the city and the Department of Natural Resources began a sport fisheries recovery program attempting to increase the numbers of bass in the lake. The city built several nursery ponds on arms of the lake. Initially two were used to raise largemouth bass and one was used to raise young crappie or sauger depending upon what is needed in the lake. Since the bass and crappie are doing so well, in 2009 all three ponds were used to raise sauger. These ponds are drained every fall releasing the young fish into the lake. To date the lake has been stocked with nearly 51,000 largemouth bass fingerlings, 63,000 crappie, and over 10,000 sauger from those ponds. Because of the strong shad population bass, crappie and sauger grow very well once they are released. **One note;** the lake is very shallow, averaging less than six feet deep. Caution should be taken when boating on the lake to avoid submerged flats and islands. The upper half of the lake averages only three feet deep and little bass habitat exists except for the lotus pads.

### **JIM EDGAR/PANTHER CREEK STATE FISH & WILDLIFE AREA LAKES** -

**PRAIRIE LAKE** - At 210 acres, Prairie Lake is the largest of the three lakes built on the 15,575 acre site in Cass County. It was initially stocked in the fall of 1999 with bluegill, redear sunfish, channel catfish and muskies. The following Summer 21,000 largemouth bass fingerlings were introduced. As in any new lake, growth rates were excellent. In total the number of bass collected per hour has remained constant for years at around 100 per hour (111 in 2006 and 95 in 2007). That number dropped to 75 in 2008 but it is hard to say, with just that one data point, if there is a decline in the bass numbers. The 2009 survey continued a trend of very few bass under 12" but a strong number over that. The population is skewed to the high side for fish over 15", where those fish made up 82% of the population. That has to do more with electrofishing sampling bias than the real number of bass. Small bass, including young-of-the-year are very difficult to collect in the crystal clear lake, so the percent of larger fish is exaggerated. Twelve

percent (12%) of the bass collected were over 18". All of the bass were in good body condition. The bluegill/ redear sunfish are providing a good forage base for the bass. There is a rearing pond on-site that has been used for largemouth bass production since the lake was constructed. That pond was used for smallmouth bass production beginning in 2008. The pond draining in November of 2009 produced a very small number of 720 smallmouth but they averaged 9.1". Raising them the second year produced an 8"-10" fish that is not as likely to become largemouth food. It will be interesting to see if they recruit into the fishery. The smallmouth will probably not reproduce naturally in the lake but it is hoped those stocked from the pond will do well enough to contribute to the lake's fishery.

This lake has an unlimited hp limit for boats but those boats over 10 hp must run at No Wake speed. There is a two-lane concrete ramp at Prairie Lake. In addition, there are camping facilities and rental cabins for those who want an extended stay.

**GRIDLEY AND DRAKE LAKES** - Both of the smaller lakes at Jim Edgar Panther Creek are being managed for quality panfish (bluegill and redear sunfish) so the bass are purposely being crowded to keep the sunfish from overpopulating. In other words, there are so many bass in these lakes that they are not growing well. In Gridley, the bass are nearly stunted with most averaging 13". The same is happening at Drake Lake but the bass are not quite in as bad of shape. So the bass catching is very good-to-excellent on those lakes but there are very few quality bass.

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

**BEAVER DAM LAKE** - The spring 2009 sample showed a dramatic decrease in numbers of largemouth bass in this shallow, fertile impoundment. 60 bass (60 fish/hr.) were boated during one hour of daytime electrofishing effort. Even though numbers dropped, 60 per hour is still a decent catch per unit effort value. These fish measured 4.5" to 19.0" and weighed up to 3.9 lbs. Reproduction and recruitment are excellent as 38 bass (63%) were found in the 8" to 12" area. Larger fish (>14"-16") are still lacking in this population. 9 bass (15%) were 14" or longer, and 7 (11.7%) exceeded 16" in total length. Trophy fish reside in this water body (greater than 5 lbs.), as they have been collected, and caught by anglers up to 8 lbs. in the past. On the other hand, their overall abundance is suspect. This is not a dire concern for me due to the fact high densities of smaller bass are desired to better manage for trophy panfish. This population is rated average for this report period.

**COFFEEN LAKE** - The fall 2009 survey was solid for this fish group. 846 bass were collected in 6.0 hours of electrofishing (141 fish/hr.). This species appears to have exploded since the fall of 2004, and the 2007 through 2009 samples exhibit no signs of this ending. The bass measured 2.5" to 21" and topped the scale at 4.7 lbs. Reproduction is good as 217 fish (26%) were less than 8" in length. 239 (28%) were 12" to 15", and 15 (1.8%) topped 18". This water body has one heck of a bass population,

in terms of overall abundance. Huge numbers of intermediate sized bass swim in this impoundment. My only concern is larger bass above 16" are declining. This is most likely due to the extreme thermal regime, or possibly hooking stress/mortality from anglers. I rate this fishery as good for this report period.

**OTTER LAKE** - Two-hundred and eighty (70 per hour) largemouth bass were netted during our spring 2009 LMB evaluation. This study consisted of four hours of daytime electrofishing throughout the lake. This amount of fish relative to the effort expended is now above average. We are in the midst of a stocking program in order to boost this fishery even further. Hopefully when this program concludes, bass densities will improve even further. 39 fish (13.9%) were 9" or less. This group would show the fish stocked over the past year since our stocking program is releasing 4" to 8" individuals. Sixty-two (22.1%) were found in the 12" to 14" zone, while 77 (27.5%) topped 15", and 18 (6.4%) were 18" or larger in size. 24 (8.6%) were 3 lbs. or more, and 2 (.71%) topped out at 5 lbs. or higher. I will rate this population as average for this time frame.

**PALMYRA CITY LAKE** - Only 49 (49 per hour) largemouth bass were collected during the spring 2009 electrofishing survey. This isn't terribly surprising since we've always had trouble with collection efficiency in this clear, steep sided impoundment. I believe this value may underestimate the population since IDNR has stocked this lake, and a 15"-3 fish per day limit has been in place for some time. On the other hand, yellow bass densities could be limiting bass reproduction, and recruitment. This problem has gotten worse since our last survey. Fourteen (28.6%) fish were less than 8" in size, 12 (24.5%) were 12" to 14", and 9 (18.4%) exceeded 16" in total length. As well, 10 (20.4%) topped 1.5 lbs., and 3 (6.1%) were 3.5 lbs., or larger. This water body may need additional stockings of bass just in an attempt to control yellow bass densities. If this is the case, the initial stocking will begin in 2010. I rate this fishery as below average for this time frame.

**PALMYRA TERRY PARK POND** - Thirty-nine (78 per hour) largemouth bass were picked up in one half hour of daytime shocking during the spring of 2009. This value represents a solid population when compared to the goal of 60 bass per hour of electrofishing. Thirteen bass (33.3%) measured less than 8", 6 (15.4%) resided in the 12" to 14" zone, and 5 (12.8%) topped at least 16" in size. In terms of weight, 7 (17.9%) were at least 1.5 lbs., and 4 (10.3%) were 3 lbs., or better. The yellow bass don't appear to have taken hold in this impoundment yet. This situation will be closely watched in the samples to come. I rate this water body as average for 2009.

**LAKE LOU YEAGER** - The fall 2009 survey had the best showing for largemouth bass since 2000. Two hundred and forty-eight bass (62 fish/hr.) were captured in 4 hours of daytime electrofishing. Fish collected measured from 3" to 19.3", and weighed up to 5 lbs. Reproduction looked excellent as 154 (62%) were fish found 8 inches or less in total length. This huge increase in younger fish may be attributed to annual stockings from the rearing pond, and via the City of Litchfield stocking 5" to 8" bass. Forty (16%) were intermediate sized fish in the 12" to 15" zone, while 4 (1.6%) were 18" or longer.

This lake is rated average for this report period.

## **DISTRICT 16: BOND, MADISON, AND ST. CLAIR COUNTIES**

**SILVER LAKE** - The 2006 fall survey shows a continued increase in bass numbers from the previous surveys. Seventy four bass per hour were collected as compared to 43 bass per hour in the 2004 fall survey. The number of larger bass has remained good with 18% greater than 15 inches collected in the 2006 survey. This lake has been stocked with approximately 13,750 4 inch largemouth bass annually for the past 3 years. These stocking combined with an apparent improvement in reproduction and recruitment of bass has resulted in continued improvement in the bass population and size structure in this lake. The angling prospects for bass would be rated as good and improving on this lake. A permit from the city of Highland is required for boat access to the lake. There is a 25 HP motor limit, a 15 inch length limit and 3 fish daily creel limit on largemouth bass.

**HORSESHOE LAKE** - This is a large, shallow, flood plain lake that floods from the Mississippi River during high water. This flooding results in a very diverse fish community in the lake. The fish community includes lots of carp, buffalo, drum, gar, and yellow bass that compete for space and food with largemouth bass. However, the lake maintains an impressive population of bass. The electrofishing survey conducted in the fall of 2008 showed good numbers of quality largemouth bass. The survey produced 87 bass per hour, of which 28% were greater than 15 inches in length and 6% were greater than 18 inches. These numbers are up from the previous two surveys in 2004 and 2006. The lake gets a lot of shoreline anglers but not a lot of boat fishing targeting largemouth bass. The lake could be considered a “sleeper” bass lake. Quality bass can be found around woody structure, rip-rapped banks and duck blinds. There is a 50 HP motor limit on this lake. There is a 15 inch length limit and 3 fish daily creel limit.

**PEABODY RIVER KING STATE FISH & WILDLIFE AREA (Various Lakes)** - This area is a reclaimed strip mine with 504 acres of fishable water. This site has a lot to offer the adventuresome angler. Most of the recent surveys on these lakes have been less than accurate. Very high conductivity, clear, and deep water have prevented reliable survey information. Good numbers of bass are present in most lakes. Some lakes appear to have high numbers with small average size and others have fewer bass but very good average size. In general the number and quality of bass increases with the degree of difficulty of access. Bass over 19 inches in length have been collected from some of the more remote lakes. Anglers willing to hike or take a boat to these remote lakes will be rewarded with good fishing. Use of lighter line and smaller baits would likely increase success in the lakes with very clear water. The larger lakes have a 10 HP motor limit, other lakes are restricted to electric motors only, and others are bank fishing only. A 15 inch length limit and 3 fish daily creel applies to all lakes.

**GOVERNOR BOND LAKE (GREENVILLE NEW CITY LAKE)** - The largemouth bass population of this lake has improved dramatically over the past few years. The 2008 fall

survey produced 54 bass per hour. Of the bass collected in the 2008 survey 24% were over 15 inches and 4% were over 18 inches. Supplemental stockings of largemouth bass by the city of Greenville is likely responsible for this improvement. A permit from the city of Greenville is required for boat access to the lake. There is a 120 HP motor limit, a 15 inch length limit and 3 fish daily creel limit on largemouth bass.

## **DISTRICT 17: CLINTON, MONROE, RANDOLPH, AND WASHINGTON COUNTIES**

**CARLYLE LAKE** - High water levels in the lake for the past few years created ideal conditions for successful bass spawns, and the flooded vegetation acted as a nursery for the young fish. At the same time, the Illinois Dept of Natural Resources stocked the lake with hundreds of thousands of fingerling bass. As a result, the bass population has experienced a fantastic increase in numbers. These young fish have had a dramatic effect on the density and size structure of the population. And because the water level in the lake was down to normal pool at the time of our population survey, we were able to see the positive results of these occurrences/actions.

From 2001 to 2008, we collected an average of 30 bass per hour during our population surveys. In 2009, we collected 102 bass per hour. Currently, forty-two percent of the adult population is 12 inches or greater in length, 30% is 14 inches or more, and 19% 15 inches or greater. While a large percentage of these fish are sub-legal, legal fish, which have a 14 inch minimum length limit, are abundant and should provide good fishing. Legal fish range in length from 14 to 21 inches, and weigh 1.7 to 5.8 lbs. Within this range is a strong class of 14 to 17 inch bass. Bass weighing up to 6 lbs are present, with a seven pound fish being very rare. The great number of young fish should continue to provide excellent fishing in the years to come. Growth and condition of all sizes classes are excellent, in part fueled by the tremendously successful gizzard shad spawn.

The best spring fishing will be in coves and other protected areas as the bass come in to spawn. The last week of April/first two weeks of May is a good time to catch some keepers. A 14" minimum length limit/6 fish per day creel applies.

**BALDWIN LAKE** - Growth rates for largemouth bass are exceptional in this cooling lake. Average growth rates for 1+ year old fish are 14.8" and for 2+ year old fish are 17.5". During our 2009 population survey we collected 49 bass/hour compared to 33 in 2008, a 48% increase in catch rates. This increase is probably due to ideal weather conditions during our survey. Our goal is at least 60 fish/hour. Currently, the largemouth bass population contains a high percentage of large fish. Eighty-one percent of the bass stock is 15 inches or greater in length, while 20% is 18 inches or more. The largest bass collected weighed 5.6 lbs. The bass are exceptionally plump, and are in excellent condition overall. I would rate bass fishing as good overall, and excellent for large bass.

The smallmouth bass population is expanding slowly. During our latest survey we collected 12 fish. Average weight is 1.4 lbs. The largest smallmouth weighed 2.3 lbs. A few anglers have caught smallmouth bass in the 4 lb range.

An 18 inch minimum length limit/3 fish per day creel applies for both species. Most of the good habitat consists of rip-rap. The southern end of the lake is closed annually as a waterfowl refuge from November 1 to February 1.

**WASHINGTON COUNTY LAKE** - The bass population continues to look good, with little or no change. Even though our latest catch per unit effort was 43 bass/hour compared to 112 bass per hour in 2008. This substantial decrease was due to a very high water level at the time of our survey that caused the bass to be out of reach of our electrofishing gear. Current data show that twenty eight percent of the bass stock is 15 inches or greater in length, while 9% is 18" or more. The bass population structure is very well balanced, with several strong year classes ranging from young of the year up to trophy sized fish. A typical survey shows that three and four pound fish are fairly common, with several five pound fish in the mix, and usually a trophy bass as well. The largest bass from our latest survey weighed 5 lbs. Many seven and eight pound fish have been collected during past surveys. This lake is very fertile and has abundant woody habitat. The points can hold some decent fish. Often times, larger bass are found fairly deep. Gizzard shad is the principal prey item. I would rate the bass population as excellent, although some anglers report that large bass are difficult to catch. A 14 inch minimum length limit/3 fish per day creel applies.

**RANDOLPH COUNTY LAKE** - This lake has a bass population characterized by large numbers of smaller fish due to very successful spawns and recruitment. Our latest survey produced 101 bass/hour of electrofishing which is typical for this lake. Thirteen percent of the adult bass are 14 inches or greater in length. The largest bass collected during our survey weighed 4.4 lbs. We have collected fish in the past weighing 7 + pounds, so the big bass are here, though relatively rare. Water willow and woody cover provide good habitat, and the points can produce some decent fish. I would rate fishing as good for smaller bass, with a chance to catch a trophy bass in the spring. A 14 inch minimum length limit/3 fish per day creel applies.

**WORLD SHOOTING COMPLEX LAKES** - The World Shooting Complex has three strip mine lakes open to the public. They are East Lake, 134 acres, Derby Lake, 21 acres, and RV Lake, 15 acres. East Lake and Derby Lake have boat ramps. All three lakes possess largemouth bass. East Lake has a nice population of mid-size to larger bass 12 to 17 inches in length, with many larger fish present topping out at 6 lbs. Derby lake has a population of smaller to mid-size fish, most are under 15 inches, with a few larger bass. RV lake is small and clear, but holds bass of all sizes. A 18 inch minimum length limit/1 fish per day creel applies.

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

### **DISTRICT 18: CLAY, EFFINGHAM, FAYETTE, JEFFERSON, MARION, AND WAYNE COUNTIES**

**FORBES LAKE** - The fall 2009 fish population survey indicates that the population continues to improve, although the catch per effort was slightly low at 57 fish per hour. Reproduction was poor as indicated by the YAR of 0.2/1. The PSD increased but remained within the preferred range at 49% and the RSD -14 at 33.3% was significantly improved. No supplemental stockings were made and the contribution of previously stocked fish was 0.4 % of bass collected. The big bass of the survey was 21.2 inches in length at 5.97 pounds.

**SAM DALE LAKE** - The fall 2009 fish population survey indicated that the bass fishery continues to do fairly well. Densities are good as indicated by the catch per effort of 69 fish per hour, though reproduction was poor, as indicated by the YAR of 0.2/1. Stock indices improved, the PSD was within the preferred range at 48.3% and the RSD-14 increased to 18.3%. The big bass of the survey was 21.2 inches in length at 5.05 pounds.

**LAKE SARA** - The fall 2009 fish population survey indicated some continued improvements, though densities were low. The catch per effort was 36.5 per hour, due perhaps to the absence of vegetation in one of the typically better stations. Reproduction was lower as the young adult ration was 0.4/1. The PSD at 60% increased and RSD-14 at 25.5% was slightly lower. The big bass of the survey was 19.0 inches in length at 4.43 pounds.

### **DISTRICT 19: CRAWFORD, EDWARDS, JASPER, LAWRENCE, RICHLAND, AND WABASH COUNTIES**

**NEWTON LAKE** - The annual population survey produced excellent numbers of bass. Although CPUE fell, it remained high at 102 bass per hour. The size structure of the population also remained excellent. The number of fish over 15" in length rose by 33% in the last year. Currently over 56% of the bass in the population exceeds 15 inches in length. The percentage of bass greater than 18" in length remained stable at its highest level in over 15 years. Over 16% of the bass population exceeds 18" in length. Of some concern is recruitment. Recruitment was poor in 2008, and as a result PSD rose to well above the target range in 2009. However, recruitment was excellent in 2009 and should provide a strong year class of younger fish in the coming year. Growth rates for bass in Newton Lake remain above average, and the mean  $W_r$  value for bass over 8" in length is 99. If recruitment and growth rates remain good and mortality low, the bass population should remain strong in the coming year. Newton Lake has a 25 h.p. limit, and current regulations include an 18" minimum length limit and three fish daily creel limit for largemouth bass. In addition, the cold arm of the lake is closed to fishing during

the waterfowl season and the entire lake is closed to fishing during the regular firearm deer season.

**EAST FORK LAKE** - For several consecutive years this lake has contained one of the better bass populations in southern Illinois. However, over the last two years the numbers of fish have declined by 50%. The Catch per effort declined to 60 bass per hr., the minimum for a healthy population. The Wr of bass over 8 inches in length also declined for the second straight year to 90, and the number of larger fish over 18" declined by 33%. These declines are cause for concern, and appear to be closely related to increased angling and disease related mortality. In spite of the decline in numbers, the size structure of the East Fork bass population remains good with 38% of the bass population larger than 15" in length (down 10%). The PSD remains high, and the number of fish just below the 15" minimum length limit remains strong as well. Growth rates remain good and if mortality is low in the coming year these smaller bass (12" – 14") should help the fishery recover. In spite of the decline in the numbers and condition of bass, this lake should provide better than average fishing in the coming year. Boat permits and tournament permits are required on this city-owned lake, and may be purchased in advanced. For permit information contact the Olney City Clerks office at 618/395-7302.

**REND LAKE** - Supplemental stocking efforts have helped to improve and stabilize the Rend Lake bass population. Over 473,000 bass fingerlings have been stocked in the last eight years including over 88,000 this year alone. These fish have had a significant impact on the density and size structure of the population, and population indices have improved significantly. Data from the most recent population survey show all population indices met the target goals, and the condition of all sizes of fish is excellent (mean Wr 100). Bass numbers remain strong, and growth rates continue to be good. Excellent sampling conditions and persistent stocking resulted in a 21 percent increase in catch per effort. The total number of bass collected in the recent population survey was at a six year high with a catch rate of 121 bass per hour of electrofishing. Overall, the size structure of the population remains very similar to last year. The PSD and RSD 15 declined slightly due in part to the large number of smaller fish entering the population. However, the percentage of the total population exceeding the 14" minimum length limit remained almost identical to the previous year. Currently 31% of the adult bass population exceeds the 14-inch minimum length limit. This number should further improve over the next two years. The number of bass over 20" in length also remains low but stable and if growth rates remain good and mortality low this number should also improve next year. Overall, bass fishing in the coming year should be similar to last year with significant improvements in 2011. Tournament permits are available at Wayne Fitzgerald State Park, 618/629-2320.

**DISTRICT 20: GALLATIN, HAMILTON, HARDIN, POPE, SALINE, AND WHITE COUNTIES**

**JONES LAKE** - This lake is an artificial impoundment located five miles southeast of Equality on the Saline County Conservation Area. The lake has a surface area of 105 acres, maximum depth of 35 feet, with an average depth of 13 feet. Fishing regulations for Jones Lake are as follows:

All Fish	2 pole and line fishing only
Largemouth bass	Largemouth bass between 14 - 18 inches must be released immediately, 5 fish under 14 inches and 1 fish over 18 inches can be harvested daily
Channel catfish	6 fish daily creel limit

Jones Lake has a 10 horsepower or less outboard motor limit

Stock indices from survey data are within recommended ranges for a healthy largemouth bass population. Fish collected in electrofishing surveys indicated a slight increase in the numbers of 14 and 18 inch fish from last years samples, indicating good numbers of quality size fish. Mean relative weights are within recommended ranges and the young adult ratio has increased. The largemouth bass population appears to be in good condition and will provide good fishing opportunities.

**HARRISBURG NEW CITY RESERVOIR** - This lake is located approximately one mile east of Galatia and has a surface area of 209 acres. The lake has a maximum depth of 30 feet and an average depth of 10 feet. Fishing regulations for Harrisburg New City Reservoir are as follows:

All Fish	2 pole and line fishing only
Channel Catfish	6 fish daily creel limit
Striped, White, or Hybrid Striped Bass	17" minimum length limit
Striped, White, or Hybrid Striped Bass	3 fish daily creel limit

Largemouth bass fishing prospects look very good. Recent survey data revealed a balanced fishery with an abundance of bass 3 - 4 pounds. Population indices are within recommended ranges, and the number of bass greater than 18 inches has remained stable in recent years.

**DOLAN LAKE** - This lake is an artificial impoundment located 8 miles southeast of McLeansboro within the Hamilton County Conservation Area. The lake has a surface area of 71 acres, maximum depth of 18 feet, with an average depth of 8 feet. Fishing regulations for Dolan Lake are as follows:

All fish	2 pole and line fishing only
Bluegill or Redear Sunfish	25 fish daily creel limit
Channel Catfish	6 fish daily creel limit
Largemouth Bass	18" minimum length limit
Largemouth Bass	1 fish daily creel limit

Dolan Lake also has a 10 horsepower or less outboard motor limit.

Dolan lake was rehabilitated in 2005 and re-stocked with sportfish in 2006. The sportfish have matured and growth has been better than expected. Stock indices from survey data are within recommended ranges for a quality largemouth bass population. A total of 236 bass were collected in an hour of electro fishing with an abundance of fish measuring between 14 and 18 inches. The largemouth bass population appears to be in good condition and will provide good fishing opportunities.

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

**CEDAR LAKE** - Cedar Lake is located five miles southwest of the City of Carbondale in Jackson County off of Route 51 South. Largemouth bass fishing in Cedar Lake should be excellent in 2010. Largemouth bass are very abundant in Cedar Lake. There is a 14-18 inch protected slot limit on this lake. In 2002, the daily creel limit on this lake was changed from two bass under 14 inches and two bass over 18 inches to five bass under 14 inches and one bass over 18 inches. Bass anglers are encouraged to harvest bass under 14 inches to improve the overall condition of the bass population. Thinning out the smaller bass will increase bass growth rates and body condition which should result in a faster growing bass population. During the 2009 sample, largemouth bass were collected at a rate of 143 fish per hour which is the second highest rate on record. The percentage of bass collected that were in the 14-18 inch protected slot (25%) was the second highest on record. The percentage of bass over 18 inches (20%) was the second highest on record. Overall, the 2009 Cedar Lake spring bass survey the best sample on record (comparable records began in 1993). There is a 10 HP motor limit on this lake.

**KINKAID LAKE** - This 2750-acre lake is located five miles northwest of Murphysboro in Jackson County. Largemouth bass fishing in Kinkaid Lake should be excellent in 2010. There is an abundance of bass less than 16 inches including numerous bass between 15-16 inches. Bass more than 16 inches are present but tend to be difficult to catch. The bass in this lake are relatively slow growing but they are long-lived. Smaller bass, less than 12 inches, tend to be skinny but once bass reach 12-13 inches the growth rates and body condition greatly improves. The best chance to catch bass in this lake is in the spring and fall as this lake receives a lot of recreational boat traffic during the summer months. Because of excessive angling pressure and lots of recreational boat traffic, anglers may have better luck if they fish slower and deeper than most bass anglers typically fish. During the 2009 spring survey, largemouth bass

were collected at a rate of 125 per hour which is the highest rate on record. Of the 498 bass collected during the 2009 spring survey, 28% were over 15 inches and 21% were over 16 inches. Overall, the 2009 spring survey was the best on record. Approximately 7500 smallmouth bass were stocked (4-6 inches in length) in September 2009. Since 2005, over 28,000 smallmouth bass (> 4 inches) have been stocked into Kinkaid Lake.

**LAKE MURPHYSBORO** - This 145-acre state park lake is located two miles west of Murphysboro in Jackson County. Largemouth bass fishing in Lake Murphysboro should be excellent in 2010. The opportunity to catch bass over 15 inches and weighing 2-3 pounds is excellent. Other bass in the 12"-15" range are also very abundant. Bass were collected at a rate of 161 fish/hr with 14% of the bass measuring 15 inches or larger in the 2009 fall survey. Overall the 2009 fall bass survey was the highest on record. This lake receives more fishing pressure for crappie and bluegill than for largemouth bass. There is a 10 HP motor limit on this lake.

**PINCKNEYVILLE CITY LAKE** - This 165-acre lake is located 3 miles northwest of Pinckneyville off of Route 127 West. This lake has an 18" size limit/1 fish per day creel limit which has resulted in excellent bass fishing in the past. Largemouth bass fishing in Pinckneyville City Lake should be fair in 2010. Of the 127 bass collected during the 2009 fall survey, 13% were over 15 inches and only 2% were over 18 inches. Although the fall 2009 survey catch rate was one of the highest on record, there was a large decrease in bass collected over 15 inches and 18 inches, respectively. Pinckneyville City Lake currently has a high density bass population but it may be a few years until the number of legal-sized bass (18 inches) increases. There is a 10 HP motor limit on this lake.

## **DISTRICT 22: FRANKLIN, JOHNSON, MASSAC, AND WILLIAMSON COUNTIES**

**CRAB ORCHARD LAKE** - Crab Orchard Lake is a 6,965-acre impoundment located in Williamson County approximately one mile south of Carterville, Illinois. Largemouth bass fishing prospects at Crab Orchard Lake for the 2009 season are very good. More stringent harvest regulations (implemented in April 2002), increased bass and threadfin shad stocking efforts, habitat enhancement, and designation of a spawning refuge seem to be positively influencing population quality.

During the 2009 fall survey an average of 102 bass were collected per hour of electrofishing, easily exceeding the management plan goal of 60 per hour. In addition, 28% were larger than the 16 inch minimum size limit, and 13% were larger than 18 inches, representing increases compared to data collected in 2007 and 2008. Growth rates for bass remain good and are attributed to lake productivity and abundant gizzard and threadfin shad. Over 30,000 advanced bass fingerlings (4 to 8 inches) plus 157,000 small fingerlings (1 to 1.5 inches) were stocked in Crab Orchard Lake during 2009 to assist in maintaining the population.

A portion of Crab Orchard Lake east of Wolf Creek Road is closed to boat traffic October 1 to March 15 to reduce disturbance of resting waterfowl, and the extreme southern end of Grassy Bay is closed from April through June for a spawning sanctuary.

**LITTLE GRASSY LAKE** - Little Grassy Lake is a 1,000 acre impoundment located on the south side of Crab Orchard National Wildlife Refuge between Marion and Carbondale. Largemouth fishing prospects at Little Grassy Lake for the 2009 season are good. During the spring 2009 electrofishing survey, 70 bass were collected per hour. Proportional stock density was within the goal range at 44, and 18% of bass collected were larger than 15 inches, the upper end of the protective slot limit. Largemouth bass spawning success in Little Grassy Lake continues to be adequate, so no supplemental bass stocking has been conducted, although threadfin shad are stocked each spring that they are available to provide a strong forage base. Little Grassy Lake has a ten horsepower outboard motor limit.

**DEVILS KITCHEN LAKE** - Devils Kitchen Lake is an 810 acre impoundment located just east of Little Grassy Lake on the south side of the Crab Orchard National Wildlife Refuge between Marion and Carbondale. Devils Kitchen Lake is very clear and infertile, but contains large numbers of largemouth bass. An average of 90 bass were collected per hour of electrofishing during the Spring 2009 survey. The lack of fertility in Devils Kitchen has a negative impact on relative weight, and many bass are 8 to 12 inches in size (PSD in 2009 was 32, slightly below the goal range), but trophy bass over 9 pounds are also present. Anglers are encouraged to remove small bass from Devils Kitchen Lake to boost growth, and therefore no minimum size limit is in effect. Devils Kitchen has a ten horsepower outboard motor limit, and a portion of the lake's southeast side has been designated as electric motor or paddle propulsion only.

All fishoffs and tournaments at Crab Orchard, Little Grassy, or Devils Kitchen lakes are required to be pre-registered with the refuge, and all anglers are required to have a refuge user permit. Write USFWS, Crab Orchard National Wildlife Refuge, 8588 Rt. 148, Marion, IL 62959 or call 618/997-3344 for information.

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

**ROCK RIVER** - The Rock River continues to have an excellent smallmouth bass fishery. From Prophetstown north to the Wisconsin border, the smallmouth fishing is good to excellent. A survey completed in 2008 revealed that the exceptional year class produced in 2005 has reached quality size and is doing very well. Catch rates for smallmouth bass during this survey were excellent with a catch per unit effort (CPUE) of 54 fish/ hour or 0.9 fish/minute. The catch rate of stock size fish, those greater than 11", was 10.4 fish/hour which is very good. The proportional stock density (PSD) of 35% was in the expected range for a healthy population.

Slightly over one third of the larger fish collected were over 14" in length, and the relative stock density of 14" fish (RSD14) was 13%. The target range for RSD14 is 10%. The RSD16, which is the relative stock density of fish over 16" in length was 5% (Target range 1-2%) which indicates excellent fishing prospects. The greatest number of large fish were surprisingly collected near Prophetstown State Park.

The 2008 year class appears to be strong with 40% of the sample composed of fish smaller than 7". Overall the smallmouth bass population of the Rock River appears to be healthy and doing very well.

**FOX RIVER** - Smallmouth bass surveys for the Fox River are conducted every 2 years during the late fall to determine population density and size structure. Fall surveys were completed in 2004 and 2006 and showed very similar results in terms of average catch rate (78 and 70/ hour, respectively). The areas with the consistently highest catch rates are St. Charles, Batavia, and Oswego, although fish are present throughout the river where habitat is favorable. The population was dominated by fish in the 7-10 inch range, however, larger fish (>15 in.) were very common. Very few young of the year were captured in 2006, which may indicate poor spawning success and/or recruitment during the drought year of 2005, as described in the 2007 report.

Fish community samples were taken throughout the Fox River Watershed in the summer of 2007, including many mainstem sites. This survey is part of statewide program conducted jointly by EPA and DNR, designed to gauge the current health of rivers and streams. Major watersheds like the Fox River are sampled every five years allowing identification of major changes and long term trends, which is very important, especially in urbanizing watersheds like the Fox. Results from this survey will be available next year. Although the survey was not designed to assess smallmouth bass due to the timing and location of the survey sites, we did observe many yearling and young-of-the-year bass, suggesting recent reproductive success.

**DUPAGE RIVER** - The DuPage River system typically produces smallmouth bass catch rates lower than the Fox River, however, populations are very good some areas, particularly in the lower West Branch, and the DuPage River mainstem. The last survey was conducted in 2005 near Shorewood, producing 28 stock-sized fish (≥7 inches) per hour, including several larger fish up to 17 inches. Reproduction was very good in 2005, as indicated by high number of Y-O-Y (46 per hour). Drought conditions apparently we offset by the high number of wastewater plants which discharge to this system. A survey of the entire watershed in planned for 2008.

**DES PLAINES RIVER** - Sport fish surveys were conducted near Riverside and Hodgkins in 2007. Largemouth bass were reasonably abundant in the Riverside area, with 24 captured in one hour of electrofishing. No large individuals were collected, although about one-third of the individuals were over 12 inches in length. Largemouth bass were in very low abundance at the Hodgkins locations. The Des Plaines River was sampled extensively in 2008.

The Des Plaines River is not well suited for smallmouth bass due to the low gradient channel, and possible water quality problems, especially in the lower stretches. Fish are occasionally taken in the higher gradient area downstream of Hofmann Dam, downstream of Romeoville, and in Salt Creek near Graue Mill. Attempts to stock these higher gradient areas has been largely unsuccessful, presumably because of water quality limitations. These short, isolated segments of higher quality habitat may be unable to sustain populations through natural reproduction. Frequent high flows, and rapidly changing water levels in this urbanized watershed may also have a detrimental effect on spawning.

**KANKAKEE RIVER** - The most recent sampling for the Kankakee was conducted in the fall of 2006, however, high water levels and lower than normal temperatures were present during the survey. Catch rates were lower and fish were generally smaller than in previous surveys due primarily to poor sampling conditions. More typical results were obtained in 2005 when samples were performed at 13 locations from the State Line to the Des Plaines Conservation Area. The higher gradient areas at Momence and in Kankakee State Park are the most productive, with catch rates ranging from 94 to 110 per hour. The catch rate for fish 14 inches or larger was 19-21 per hour in these well known hot spots. Smaller fish and Y-O-Y were also very abundant in many areas of the mainstem and tributary streams as well, with up to 68 captured per hour. The low gradient areas at the State Line and near the confluence with the Des Plaines River consistently produce the fewest total number of smallmouth bass (5 and 12/hour respectively).

**KASKASKIA RIVER (Upstream of Lake Shelbyville)** - Population assessments have shown that the river is responding well to a smallmouth bass supplemental stocking program started seven years ago, as fall electrofishing catch rates have increased dramatically. These catch rates increased from 20.5 smallmouth bass per hour in 2003 to over 40 smallmouth bass per hour in 2009. Fall survey results showed a successful year of reproduction for smallmouth bass in the high water conditions throughout most of 2009, and notable increases at all sizes show promise for an increasing adult population, which have translated to general population increases through successful spawning years. Efforts to establish smallmouth bass in Lake Shelbyville and the Kaskaskia River upstream of the lake are progressing nicely, although high water conditions prevented brood fish collection for pond propagation in 2009. However, the current adult smallmouth bass population, both upstream and downstream of the lake, continues to be relatively small and vulnerable. Catch-and-release fishing for smallmouth bass in the Kaskaskia River is strongly recommended.

A 2009 survey of the Kaskaskia River, upstream of Lake Shelbyville at Chesterville, produced only 8 largemouth bass per hour with the largest fish in the 2-pound range. Downstream of Lake Shelbyville at Vandalia only 1 largemouth bass per hour was collected. These sites have typically not been good bass producers in the past, and this year was no exception.

**KASKASKIA RIVER (Downstream of Carlyle Lake)** - The most recent electrofishing survey (2007) shows continued recovery of the largemouth bass fishery in the lower Kaskaskia River (from Carlyle Lake to Kaskaskia Lock and Dam). Best fishing remains in the navigation channel below Fayetteville and in many of the oxbows still connected to the channel. Tournament anglers report a successful 2008 season despite prolonged high water; most winning stringers included 3-4 pound bass. Biannual bass stockings started in 2004 should be providing plenty of catchable fish. Habitat in the form of downed treetops, rootwads and brushpiles is more prevalent in the oxbows but the riprap and submerged willow along the navigation channel can be productive as well. The heavily fished Carlyle Lake tailwater harbors decent numbers of bass as well, some in the 5 lb range.

**EMBARRAS RIVER** - This river continues to be a strong producer of spotted bass. A few ramps along the river will accommodate small boats and canoes, as the river is generally shallow throughout its length. Electrofishing catch rates during the 2006 basin survey produced up to 12 spotted bass per hour at the mainstem river sites. Unfortunately, these fish topped out in the 11-inch range. Largemouth bass were much less numerous, but they were bigger. Numbers tended to increase to the south.

**WABASH RIVER TRIBUTARIES** - The small streams that flow into the Wabash River can produce a nice mix of spotted bass, largemouth bass, and smallmouth bass. Brouillets Creek in Clark County is particularly good for smallmouth bass up to 13 inches. Most of the adjacent land is in private ownership along these small streams.

**UPPER SANGAMON RIVER** - A basin survey was conducted in 2008 on the Sangamon River Basin. Sangamon River mainstem sites produced from zero to 17 largemouth bass per hour with an average of 4.75 largemouth bass per hour and the largest at 12 ½ inches. The most productive mainstem site for largemouth bass in the upper Sangamon River basin was at Monticello. The mainstem sites also produced a few smallmouth bass, with 14 inches being the largest collected at Mahomet.

The tributaries produced similar results with up to 9 largemouth bass per site and 4 smallmouth bass per site. Smallmouth bass were widespread throughout the Upper Sangamon River Basin, but they occurred in low numbers. The Salt Creek basin continues to produce more smallmouth bass than the other parts of the Sangamon River basin. Fishermen should be conservative with their take of bass from this river basin.

The tailwaters of Lake Decatur were not sampled in 2009, but electrofishing catch rates in 2005 produced 54 largemouth bass per hour. This stretch of river is under-utilized and worthy of a canoe trip. A canoe launch is available on the north side of the river below the dam. The tailwaters of Clinton Lake is also a popular bank fishing destination. Routine sampling in 2005 produced electrofishing catch rates of 36 largemouth bass per hour and 4 smallmouth bass per hour. The largemouth bass were up to 16.5 inches, and the smallmouth bass were up to 9 inches.

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