

EVALUATION OF SUPPLEMENTALLY STOCKED  
WALLEYE

**Name and Description of Water Area:** LAKE DECATUR is located on the east side of the City of Decatur, in Macon County. The lake covers 2905 surface acres with a maximum depth of 22 feet and average depth of six feet. The lake is the primary water supply for the City of Decatur. Recreational use includes fishing, boating, skiing, and limited waterfowl hunting. A large portion of the lake shoreline has been developed for residential use. Public boat launching facilities are available.

**Walleye Stocking History:** Supplemental stockings of walleye have occurred for 15 of the last 16 years (Table 1).

**Rational for Stocking:** An abundance of gizzard shad forage in Lake Decatur allows for the stocking of additional predator species to create an additional fishery. Previous stockings of fingerling walleye have proven very successful in establishing a fishery in this lake.

**Method of Assessment:** This fishery has been evaluated every two years through three 60 minute electrofishing surveys and two gill nets. Supplemental electrofishing surveys have been performed every other year in mid-October to evaluate stocking success for largemouth bass, walleye, and striped bass hybrids.

**Summary of Assessment Results:** The CPUE in the October, 1999 supplemental survey had a catch rate of 0.9 walleye per hour (Table 2). Both of these fish were adult walleye. These results are significantly lower than previous surveys and likely represent a fishery failing, due to stocking inadequate size walleye. In recent surveys it appears that the stocking of 2 inch walleye contributes more to the fishery than stocking fry (Table 3).

Previous evaluations of growth rates appear to be well above state averages.

**Comparison with Stocking Success Criterion:** Although all surveys since 1995 fell short of the goals established for electrofishing surveys (10-20/hour, all sizes), the 1994 survey by far exceeds these goals and indicates the potential strength of the fishery that could be developed with 2-inch fingerlings. The recently developed Lake Decatur Nursery Pond will be utilized to raise walleye, however it has not been satisfactorily completed to facilitate a successful harvest. Attempts will continue to secure 2-inch fingerlings for future stockings to again meet stocking success goals for this lake.

Table 1. Walleye stocking history of Lake Decatur, Macon Co. Illinois.

Stocking Date	Number Stocked	Size Stocked
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1974	6	adult
1984	3.1 million	fry
1985	0	
1986	38,225 19,500	2 inches
1987	1,650	4 inches
1988	3.093 million	fry
1989	1.89 million	fry
1990	3.093 million	fry
1991	2.793 million	fry
1992	3.093 million	fry
1993	87,722	2 inches
1994	74,740	2 inches
1995	3.093 million	fry
1996	3.150 million	fry
1997	3.093 million	fry
1998	3.035 million +2848	fry 2.4 inches
1999	4.071 million	fry

Table 2. Effort and catch rates of walleye in fall surveys, Lake Decatur, Macon Co. Illinois.

Year	E.F. Effort / Survey		CPUE	
	Standardized	Supplemental	Age II+ & Older	Age 0 & I+
1994*	3.0 hrs.		0.0	7.7
1994		1.25 hrs.	1.6	31.2
1995		2.8 hrs.	1.2	4.3
1996*	3.0 hrs.		1.0	0.0
1996		1.5 hrs.	8.0	0.0
1997		3.03 hrs.	6.7	0.7
1998*	3.0 hrs.		0.0	0.0
1998		1.6 hrs.	2.5	0.0
1999		2.1 hrs.	0.9	0.0

\* includes effort from two gill nets

Table 3. Number and catch per effort data for young-of-the-year and Age I walleye collected during supplemental surveys on Lake Decatur, Macon, Co., Illinois.

<b>Year</b>	<b>Effort</b>	<b>Number Collected</b>	<b>CPUE</b>	<b>Size Stocked</b>
1994	75 min.	20 Age 0 19 Age I	16/hr 15/hr	2 inch 2 inch
1995	168 min.	0 Age 0 12 Age I	0/hr 4/hr	fry 2 inch
1996	90 min.	0 Age 0 0 Age I	0/hr 0/hr	fry fry
1997	182 min.	2 Age 0 0 Age I	0.7/hr 0/hr	fry fry
1998	96 min.	0 Age 0 0 Age I	0/hr 0/hr	fry fry
1999	128 min.	0 Age 0 0 Age I	0/hr 0/hr	fry fry