

Fishing access:

There are two boat ramps to access the water with a boat. The ramp on the east end of the lake is the better of the two, but both are good ramps. There is also shoreline fishing opportunities around most of the lake.

Condition of all structures (i.e. spillway, boat ramps, level regulators, etc.):

Dam and spillway are in good condition. Access to the shoreline is a dirt trail, which is impassable when wet.

Field observations of aquatic vegetation condition:

Emergent vegetation is present in both arms of East Morristown Dam. Submergent vegetation is scattered throughout the lake and is heaviest in the shallow areas.

CHEMICAL DATA**Field observations of water quality and pollution problems:**

No pollution problems were evident during the present survey. Water clarity was good with a secchi disc reading of 4.5 feet. Other water quality characteristics were measured in the field on June 25, 2012, using a HACH water quality kit and a Hanna multiparameter meter. Results are found in Table 1.

Presence of a thermocline and depth from surface: No

Station for water chemistry located on attached map: Yes

Table 1. Water chemistry results from East Morristown Lake, Corson County, June 25, 2012.

Station	Depth (ft)	Temp (F)	DO (ppm)	CO2 (ppm)	ALK (mg/L)	HRD (mg/L)	pH	Cond. (µS/cm)	TDS (ppm)	Sal.	ORP	Secchi (ft)
A	Surface	70.9	4.17	65.0	453	733	9.03	3081	1543	1.61	-50.4	4.5
A	22	71.6	4.15	91.6	455	699	9.12	3120	1559	1.63	-99.6	

BIOLOGICAL DATA**Methods:**

East Morristown Lake was sampled on June 25-27, 2012, with ten overnight trap net sets. The trap nets have 3ft x 5ft frames, 60ft leads, and ¾ in. knotted mesh. Two experimental gill nets were also set. The gill nets are 150ft x 6ft with 25ft panels of ½, ¾, 1, 1-1/4, 1-1/2, and 2 inch monofilament mesh. No electrofishing was done this survey period. Fish indices and statistics were completed using Winfin.

Results and Discussion:

Trap Net Catch

Table 2. Total catch of ten, overnight ¾-inch frame nets at East Morristown Lake, Corson County, June 25-27, 2012.

Species	#	%	CPUE	80% C.I.	Mean CPUE*	PSD	RSD-P	Mean Wr
Northern Pike	14	87.5	1.4	± 0.8	1.7	54	0	93
Black Crappie	2	12.5	0.2	± 0.2	30.3	--	--	100

*Nine year mean (1981, 1989, 1994, 1997, 1999, 2002, 2005, 2009, 2011)

Gill Net Catch

Table 3. Total catch of two, 150ft experimental gill nets at East Morristown Lake, Corson County, June 25-27, 2012.

Species	#	%	CPUE	80% C.I.	Mean CPUE*	PSD	RSD-P	Mean Wr
Yellow Perch	55	75.3	27.5	± 32.3	7.9	12	5	114
Northern Pike	18	24.7	9.0	± 6.2	4.1	22	0	97

*Seven year mean (1981, 1994, 1997, 1999, 2002, 2005, 2011)

Fish Population

The fish populations in East Morristown Lake appear to be on the increase. Yellow perch from the gill nets were the largest numbers seen with a CPUE of 27.5, which is well above the seven year mean of 7.9 (Table 3). No perch were seen in the trap nets. Growth is good with means right on with statewide, regional and SLI means (Table 4). Condition is also good with a mean Wr of 114. Figure 1 illustrates the length frequency histogram for the fish sampled this survey. The population is dominated by young fish, but that is a sign that young fish have been being produced to build this population.

Northern pike were the next highest in density. The gill net CPUE of 9.0 is above the 4.1 seven year mean (Table 3). The trap net CPUE of 1.4 is right on with nine year mean of 1.7 (Table 2) as well as the 1.8 from the 2011 survey (Table 6). Figure 2 illustrates the length frequency histogram for the fish sampled from this survey with most of the fish in two categories. Condition is good with a mean Wr of 95.

Black crappies were the only other species sampled this survey and with only 2 fish sampled no inferences can be made. The hope was to see an increase with the stockings that have been done the last couple years (Table 5). Black bullhead, bluegill and walleye were the species not sampled this survey that had been in years past (Table 6). Hopefully walleye numbers will increase in the next couple years with the stocking that was done this past summer (Table 5).

Table 4. Average back-calculated lengths (mm) for each age class of yellow perch sampled from East Morristown Lake, Corson County, 2012.

Year Class	Age	N	Back-calculated Age		
			1	2	3
2011	1	41	103		
2010	2	1	98	174	
2009	3	4	93	159	226
All Classes		46	98	167	226
Statewide Mean			86	145	190
Region II Mean			91	152	196
SLI* Mean			87	142	185

*Small Lakes and Impoundments

Figure 1. Length frequency histogram for yellow perch sampled from East Morristown Lake, Corson County, 2012.

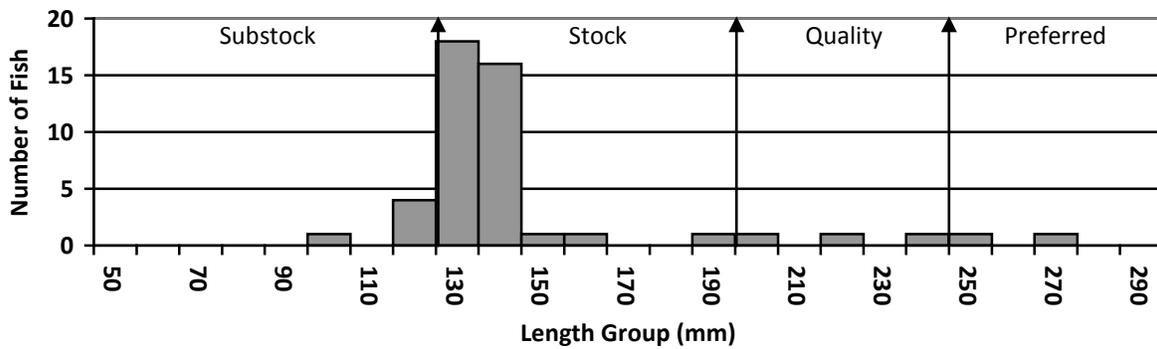


Figure 2. Length frequency histogram for northern pike sampled from East Morristown Lake, Corson County, 2012.

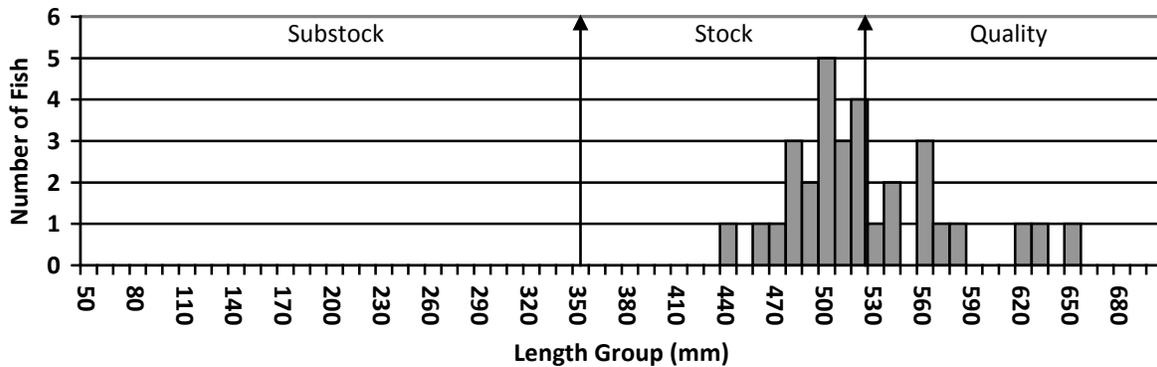


Table 5. Stocking records from 1999 to the present for East Morristown Lake, Corson County.

Year	Number	Species	Size
1999	135	Bluegill	Adult
2000	824	Bluegill	Adult
2001	80	Black Crappie	Adult
2002	124	Black Crappie	Adult
2003	640	Black Crappie	Adult
2004	300	Black Crappie	Juvenile
2009	23,400	Largemouth Bass	Small Fingerling
2010	185	Black Crappie	Adult
2010	9,650	Largemouth Bass	Fingerling
2011	135	White Crappie	Adult
2012	16	Smallmouth Bass	Adult
2012	120	Smallmouth Bass	Juvenile
2012	9,730	Walleye	Small Fingerling
2012	300	Yellow Perch	Adult

RECOMMENDATIONS

1. Continue to monitor and stock fish according to the management plan as needed to rebuild the populations after the recent drought and loss of fish.
2. Resurvey in 2015 to monitor the fish populations in East Morristown Lake.

Table 6. Gill net (GN) and trap net (TN) CPUE for all fish species sampled from the first survey to the present in East Morristown Lake, Corson County.

Species	1981	1989	1994	1997	1999	2002	2005	2009	2011	2012
BLB (GN)	--	--	--	--	--	--	--	--	--	--
BLB (TN)	--	0.63	--	--	--	--	--	--	--	--
BLC (GN)	73.0	--	--	--	--	--	--	--	--	--
BLC (TN)	134.0	132.5	2.75	0.63	0.5	1.0	1.2	--	0.2	0.2
YEP (GN)	36.0	--	--	--	--	19.5	--	--	--	27.5
YEP (TN)	22.0	0.88	--	0.5	--	--	0.1	0.1	0.2	--
NOP (GN)	4.0	--	6.0	8.0	4.0	1.5	5.0	--	--	9.0
NOP (TN)	2.0	0.63	1.63	1.25	3.5	1.5	2.3	0.5	1.8	--
BLG (GN)	--	--	--	--	--	--	--	--	--	--
BLG (TN)	--	--	--	--	--	1.5	--	--	--	--
WAE (GN)	--	--	--	--	--	--	--	--	--	--
WAE (TN)	--	--	--	--	--	--	0.1	--	--	--

BLB – Black Bullhead, BLC – Black Crappie, YEP – Yellow Perch, NOP – Northern Pike, BLG – Bluegill, WAE - Walleye