



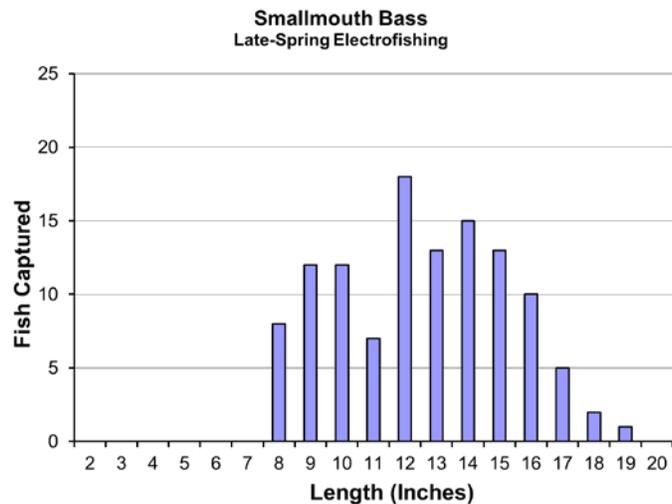
Late-Spring Electrofishing Survey Summary Chippewa Flowage (East), Sawyer County, 2012

The Hayward DNR Fisheries Management Team conducted an electrofishing survey on the east side of the Chippewa Flowage during May 14-22, 2012 as part of our baseline monitoring program. A total of eight miles of shoreline was sampled (two miles sub-sampled for panfish). Primary target species were smallmouth bass, largemouth bass, and bluegill. We also obtained useful data on the status of juvenile walleye. A fyke netting survey conducted by our team in April and May documented the status of the muskellunge and black crappie populations. Those results are presented in a separate survey summary. Quality, preferred, and memorable sizes referenced in this summary are based on standard proportions of world record lengths developed for each species by the American Fisheries Society.

Smallmouth Bass



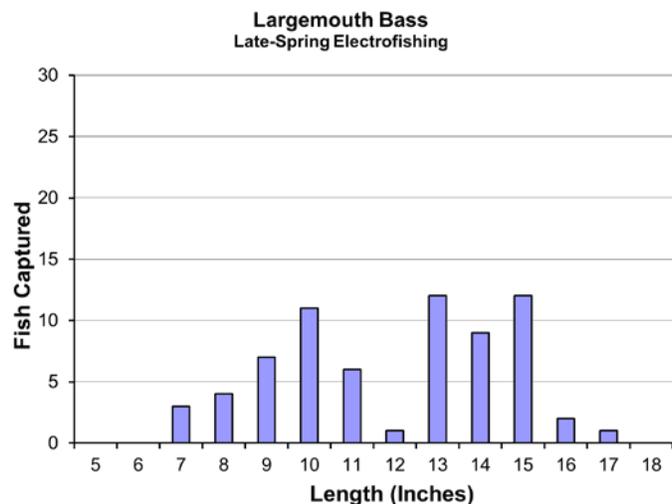
Captured 14 per mile $\geq 7''$	
Quality Size $\geq 11''$	72%
Preferred Size $\geq 14''$	40%
Memorable Size $\geq 17''$	7%



Largemouth Bass



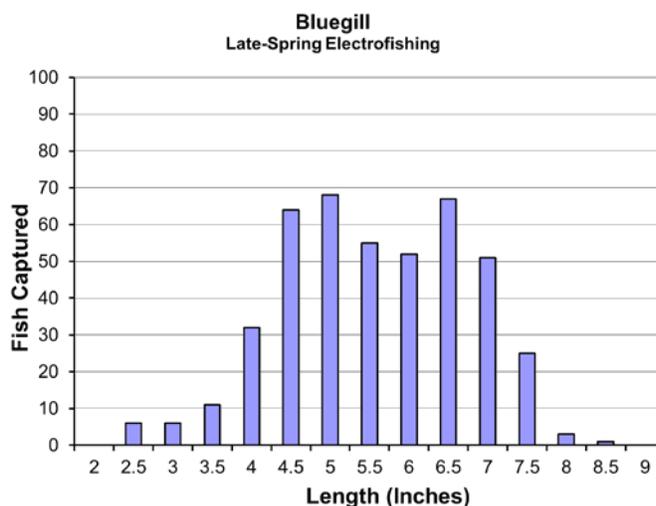
Captured 8 per mile $\geq 8''$	
Quality Size $\geq 12''$	57%
Preferred Size $\geq 15''$	20%



Bluegill



Captured 250 per mile $\geq 3''$	
“Keeper” Size $\geq 7''$	18%
Preferred Size $\geq 8''$	1%



Summary of Results

Electrofishing sampling was spread throughout the east side of the Chippewa Flowage (east of County Highway CC) in four 2-mile transects. Sampling focused around the bass spawning season when adults were present in the shallows attending nests. Bluegills were also in the shallows at this time staging for their spawning season.

Smallmouth bass were captured at a moderate rate of 14 per mile of electrofishing – a substantial decline since spring of 2010 (28 per mile). But the proportion of preferred-size fish more than doubled since 2010, from 17% to 40%. The Chippewa Flowage, particularly the east side, has excellent rock and wood habitat for smallmouth bass, which also have access to riverine habitats that may be important for recruitment. Smallmouth bass are not thought to be detrimental to walleye populations and are protected with a 14-inch minimum length limit in the Chippewa Flowage. The relative abundance at which smallmouth bass were sampled in this survey was slightly below the target range in the Chippewa Flowage Fishery Management Plan of 30-50 per hour (equating roughly to 15-25 per mile) of electrofishing, but the relative proportion of fish over 17 inches (7%) met the target objective for size distribution (5-15%).

Largemouth bass were observed in low abundance (8 per mile of electrofishing), which was consistent with other recent survey data for the east side (7 per mile in 2010). An unusual gap in the length distribution at around 12 inches may reflect angler harvest of formerly abundant 10- to 12-inch largemouth bass during 2011 – the first year of size limit exemption for largemouth bass on the Chippewa Flowage. Largemouth bass are more abundant on the west side of the Flowage where habitat appears to be more suitable (clear water, more vegetation) than the east side (darker water, fewer aquatic plants). Unlike smallmouth bass, largemouth bass are currently managed with no minimum length limit; and selective angler harvest of 10- to 14-inch largemouths is encouraged to maintain a low-density population that is less likely to interfere with survival of young walleyes. Relative abundance of largemouth bass on the east side was close to the lakewide target range in the Management Plan (5-10 per mile).

Bluegills were captured at a very high rate (240 per mile of electrofishing), but size structure could be considered only average for the area. Though 18% were ‘keepers’ over 7 inches long, the proportion of “preferred-size” bluegills over 8 inches (1%) was well below the desired range of 5-15% in the Chippewa Flowage Fishery Management Plan. Angler harvest of panfish is high in the Flowage (close to 200,000 bluegills in 2011) and is a likely factor influencing the size structure of the bluegill population. A higher density walleye population (to reduce numbers and competition for food among juvenile bluegills) and more restrictive angling regulations (including reduced bag limits to conserve fish that reach preferred sizes) could be considered to attain this objective.

Some juvenile walleyes were captured during this survey (2 per mile <10 inches). While these fish could be natural recruits, it is more likely that they were stocked by the Chippewa Flowage Area Property Owners Association, Lake Chippewa Flowage Resort Association, and Lac Courte Oreilles Band of Lake Superior Ojibwe in fall 2011. Natural recruitment has been poor in recent years but will hopefully improve as largemouth bass numbers are reduced.

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