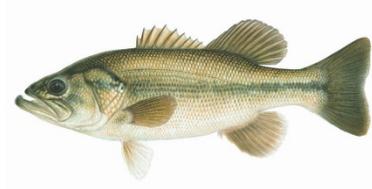




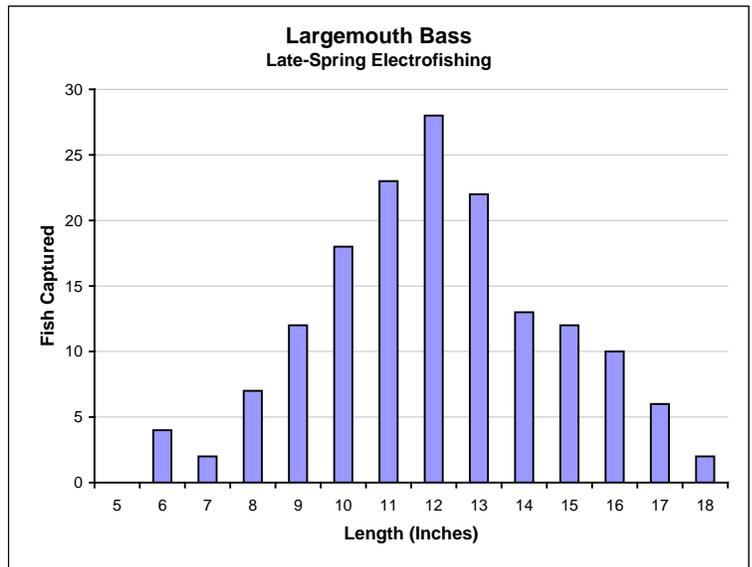
Late-Spring Electrofishing Survey Summary Nelson Lake, Sawyer County, 2011

The Hayward DNR Fisheries Management Team conducted an electrofishing survey on Nelson Lake during June 1-2, 2011 as part of our baseline monitoring program. A total of 3 miles of shoreline was sampled (1 mile sub-sampled for panfish). Primary target species were largemouth bass and bluegill. A fyke netting survey conducted by our team in April documented the status of the northern pike, walleye, yellow perch, 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 by the American Fisheries Society.

Largemouth Bass



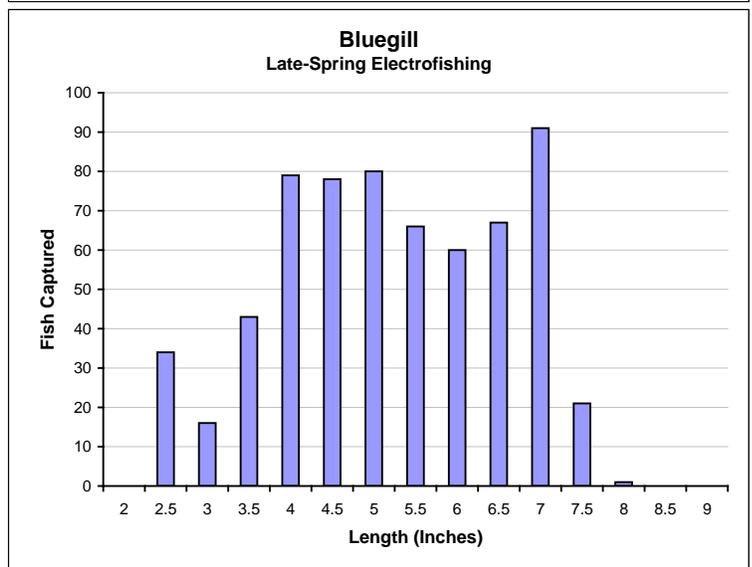
Captured 51 per mile $\geq 8''$	
Quality Size $\geq 12''$	61%
Preferred Size $\geq 15''$	20%



Bluegill



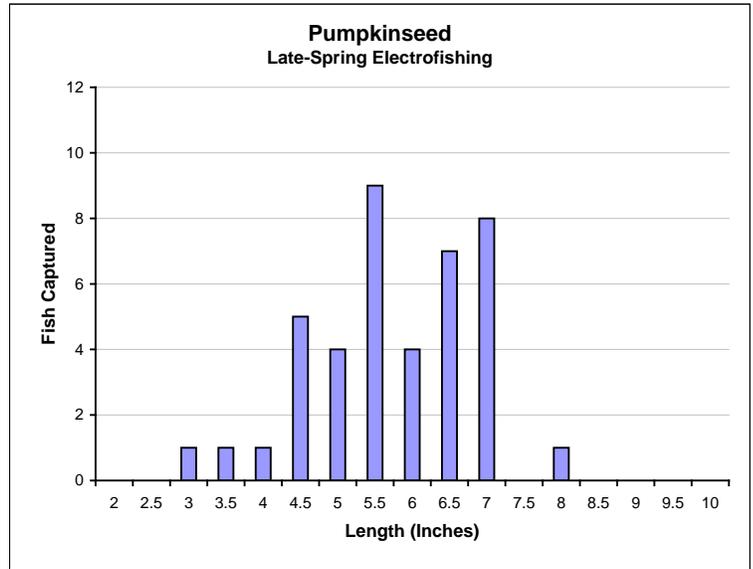
Captured 602 per mile $\geq 3''$	
"Keeper" Size $\geq 7''$	19%
Preferred Size $\geq 8''$	0%



Pumpkinseed



Captured 41 per mile $\geq 3''$	
“Keeper” Size $\geq 7''$	39%
Preferred Size $\geq 8''$	2%



Summary of Results

Several cold fronts affected bass spawning activity during the spring of 2011, leading to a prolonged spawning season. Despite these events our crew was able to obtain a representative sample of largemouth bass on Nelson Lake. Bluegill nesting had not begun in full, but fish were occupying the shallows, allowing a good survey of this species as well.

Largemouth bass were captured at a high rate (51 per mile, ~100 per hour), well above the stated goal of 10-20 per mile as outlined in the 2004 Nelson Lake Fishery Management Plan. Size structure was very good; the proportion of preferred-size fish (bass ≥ 15 inches) was within the range specified in the Management Plan. But continued angler harvest (in the absence of a minimum length limit) is needed to minimize competition among bass, promoting satisfactory growth rate and size of remaining fish. Controlling largemouth bass numbers is also critical to accomplishing management goals for walleye, black crappie, and bluegill. We encourage anglers to harvest and enjoy eating small and medium size largemouth bass in Nelson Lake.

Nelson Lake has a history of producing exceptional sized bluegill. But in this survey bluegill were found to be abundant in Nelson Lake (over 600 per mile), and size structure was relatively poor (few fish of “keeper size” and no fish over 8 inches). Significant reductions in the number of juvenile bluegills must occur if we are to meet our Management Plan objective (20% of bluegills over 3 inches also being over 8 inches). It is likely that the size structure of this population is negatively influenced by high exploitation of large fish and low predation pressure in the absence of a dense walleye population. Increased walleye abundance is necessary in order to create a moderate density bluegill population with more large individuals. Pumpkinseeds were captured in moderate numbers and size and provide an interesting additional fishing opportunity. The reduced daily bag limit of 10 panfish is an important component of our Management Plan, but compliance must occur for it to be effective.

Report by Max Wolter – Fisheries Biologist, Sawyer County

Approved by Dave Neuswanger – Fisheries Supervisor, Hayward Field Unit 4/8/13

Approved for Web Posting by Steve Avelallemant – Northern District Supervisor 10/18/13