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

The Hayward DNR Fisheries Management Team conducted an electrofishing survey on Windfall Lake on May 31, 2011 as part of our baseline monitoring program. A total of 1.6 miles of shoreline were sampled (0.5 mile sub-sampled for panfish). Primary target species were largemouth bass and bluegill. We also obtained useful data on the status of juvenile walleye. A fyke netting survey conducted in mid-April documented the status of the walleye population. 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.

**Largemouth Bass**

- Captured 4 per mile ≥ 8”
- Quality Size ≥ 12” 43%
- Preferred Size ≥ 15” 14%

![Largemouth Bass Chart](chart1.png)

**Bluegill**

- Captured 72 per mile ≥ 3”
- “Keeper” Size ≥ 7” 25%
- Preferred Size ≥ 8” 17%

![Bluegill Chart](chart2.png)
Summary of Results

Water temperature at the time of this survey was 64°F, allowing for a representative sample of the largemouth bass and bluegill populations. Both juvenile and adult walleyes were also occupying the shallows, allowing for an unusually good sample of this species as well.

Windfall Lake continues to be a walleye dominated system despite shifts in species dominance in many other area lakes. The fyke netting survey and population estimate conducted in April documented a high-density population of adult walleyes at 13.7 per acre (full results in separate report). The late-May electrofishing survey was more appropriate to document recent recruitment in the lake. We captured walleyes less than 10 inches long at a high rate of 43 per mile. High natural recruitment of walleye is facilitated by a low-density largemouth bass population (captured only 4 per mile) in a lake with clear water but sparse aquatic plant growth.

The presence of a high-density walleye population appears to have a positive impact on bluegill in Windfall Lake. Bluegills were captured at a low rate in comparison with many other area lakes, but size structure would be considered good, as a high proportion of bluegills were “keeper-size” and larger. Predation on juvenile bluegill by walleye may be a primary factor keeping bluegill density low and allowing for good growth and size structure. Therefore, by maintaining walleye dominance in this lake, it should be possible to continue producing quality-size panfish as well.

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