The Hayward DNR Treaty Fisheries Team conducted a fyke netting survey on Grindstone Lake on April 16-23 to assess the adult walleye and muskellunge populations in the lake. Up to 14 nets were set overnight for seven nights which resulted in 75 total net-nights of effort. The Hayward DNR Fisheries Management Team returned on May 1 to conduct supplemental netting for muskellunge and yellow perch. An electrofishing survey conducted on May 24, 2013 documented the status of largemouth bass, smallmouth bass, and bluegill. Seven miles were shocked throughout the lake. 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.
**Muskellunge**

- Captured 0.2 per net-night \( \geq 20 \) inches
- Quality Size \( \geq 30" \) 86%
- Memorable Size \( \geq 42" \) 14%

**Smallmouth bass**

- Captured 12 per mile \( \geq 7 \) inches
- Quality Size \( \geq 11" \) 79%
- Preferred Size \( \geq 14" \) 26%
- Memorable Size \( \geq 17" \) 7%

**Largemouth bass**

- Captured 2 per mile \( \geq 8 \) inches
- Quality Size \( \geq 12" \) 93%
- Preferred Size \( \geq 15" \) 27%
Summary of Results

The early netting for walleye was well timed to capture spawning fish, resulting in a high adult catch rate. Adult walleye were given a fin clip to allow fisheries crews to return and estimate the total number of adult walleye in the lake. That analysis was not completed in time to be included in this report. However, it is safe to say that Grindstone Lake is a walleye dominated fish community and is one of the better bets for catching walleye in the Hayward area. A three daily bag limit with a 14-18 inch protected slot limit and only one fish over 18 inches is currently in effect. Many juvenile walleye were captured in the electrofishing portion of this survey and gives a strong indicator of how Grindstone Lake is a continual walleye producing powerhouse. The abundant 5-8 inch walleye represent the 2014 year class.

Muskellunge were captured in low abundance, but showed excellent top end size with a 50 inch fish being captured and another 47 inch female that was estimated to weigh over 40 lbs. The natural characteristics of the lake dictate a lower density fishery but fish of exceptional size should continue to be produced if habitat and prey conditions can be maintained as they currently are.

Smallmouth bass were 5-6 times more abundant than largemouth bass which is expected in a lake with very little near shore aquatic vegetation and an abundance of rocky habitat. We were unable to time this survey with the peak of the smallmouth bass spawn, and so this sample may
not be fully representative of the adult population. We feel that there are more large smallmouth in Grindstone Lake than what is represented in this report.

Yellow perch were moderately abundant overall but were highly abundant in the few areas that have suitable spawning habitat (shallow vegetation around islands). Perch are a cornerstone of the fishery both as prey for walleye and muskellunge and as the most abundant panfish available to anglers. As mentioned previously, areas of the lake supporting good perch spawning habitat are somewhat limited. Promoting more near shore wood may give the perch population a boost.

Unlike most other lakes in northern Wisconsin, bluegill are relatively rare in Grindstone Lake. There is limited bluegill habitat and abundant predators which both act to limit their abundance.