

## Proposed Muskie Management in East Battle Lake

The Minnesota Department of Natural Resources, Fisheries Section, is considering implementing a muskie management program in East Battle Lake, Otter Tail County. Here is a list of commonly asked questions regarding muskie management.

**Q: I heard the Minnesota DNR is proposing to stock muskies in East Battle Lake. Why was East Battle Lake chosen?**

**A:** Back in 2008, a statewide group of northern pike and muskie fishing participants put together a long range plan for muskellunge and large northern pike to guide the DNR in management of these two species. That plan can be seen in its entirety at ([http://www.dnr.state.mn.us/fisheries/muskiepike\\_2020.html](http://www.dnr.state.mn.us/fisheries/muskiepike_2020.html)). A recommendation in the plan was the DNR should select up to 8 additional waters for muskellunge management before 2020. In 2011, three new waters were added. In the summer/fall of 2013, DNR Fisheries pulled together a work group consisting of members from the East and West Otter Tail County Chapters of the Minnesota Dark House and Angling Association (MDAA) and Muskies Inc. (MUE Inc.) in Fargo/Moorhead. Participants sat down together to begin discussion on a potential new lake to begin muskellunge management in Otter Tail County. A list was provided consisting of 46 lakes over 500 acres located in the County. During the first meeting in August, 2013, this list was narrowed from 46 lakes to 15 lakes. A meeting held in October, 2013 narrowed the list further from 15 lakes to nine lakes. The work group did not want to narrow the list any further. Listed below are the nine lakes the group agreed would have the best potential to support a muskie population, based on suitable physical and biological attributes. The potential lakes are located in geographical areas of Otter Tail County. East Battle Lake is included in this list.

Lizzie, Crystal, Franklin Lakes-Northwest

Loon, Trowbridge/Leek, McDonald/Big McDonald Lakes-North Central

Clitherall, East Battle, South Turtle Lakes-South Central

**Q: What do you mean by more suitable biological and physical attributes?**

**A:** Biological and physical attributes used to rank lakes for consideration to stock muskie include:

- 1) Lake size (acres)
- 2) Maximum depth (ft)
- 3) Secchi depth (ft)
- 4) Littoral area (% < 15' depth)
- 5) Shoreline development factor (SDF – length of shoreline)
- 6) Northern pike population
- 7) Forage (species, size, quality, abundance, diversity)

**Q: I have heard that because of their size and predatory nature, muskie will decimate other sportfish and forage populations. What is the truth behind these concerns?**

**A:** These myths are unfounded in Minnesota waters. The DNR is very selective about the types of waters managed for muskellunge in Minnesota, and manage this top predator at low densities. Studies have shown that muskies do not negatively affect other species. In fact, they prefer soft-rayed, torpedo-shaped prey such as white sucker and tullibee. Muskies coexist well with other game fish in many Minnesota waters with no detrimental effects. See the DNR Fergus Falls Fisheries web site for more detailed information on the studies referenced: <http://www.dnr.state.mn.us/areas/fisheries/fergusfalls/index.html>

**Q: Will muskies, once stocked, spawn and over-populate East Battle Lake?**

**A:** We do not expect muskies to develop a self-sustaining population in East Battle Lake. Muskies are notoriously poor spawners in stocked lakes. Successful spawning is limited by a wide range of environmental factors and they can negatively affect spawning success and egg survival.

Post-hatch predation at shared spawning sites can also reduce survival of the muskie spawn. Muskie mortality due to fry predation is extremely high. Predation from young-of-the-year (YOY) pike, largemouth bass, crappie, and walleye can decimate a natural muskie year class. Survival of large fingerlings (8-10") is much higher and it is this reason, to reduce predation, that large muskie fingerlings are stocked. Since the population is dependent on stocking, there is virtually no chance the population will over-populate East Battle Lake.

**Q: When and how often would muskies be stocked?**

**A:** Stocking muskies in East Battle Lake is dependent on public support and would be only considered after extensive public input. The earliest muskies would be stocked would be in the fall of 2015. The stocking rate would be one fish per littoral acre or about 825 fish, stocked every year for five years. Stocking would then change to every other year at this same rate.

**Q: If muskie management is initiated on East Battle Lake what plans do you have to monitor the muskie population?**

**A:** Standard Fisheries lake surveys and spring muskie assessments would be conducted every three years to monitor and evaluate the muskie population. If assessments indicate a problem in the fish community then remedial actions (reduce or eliminate stocking) can be taken quickly.

**Q: Approximately how many anglers fish for muskies in Minnesota?**

**A:** A report in 2007 estimated that 14% of resident anglers (127,000) target muskies when angling, with another 18% of non-muskie anglers (163,000) moderately, or very interested in fishing for muskies. So in any given year approximately 290,000 anglers are fishing for, or interested in, muskie angling.

**Q: Do you expect an increase in fishing pressure as a result of muskie stocking? What about the chance that aquatic invasive species (AIS) could be introduced into East Battle Lake by muskie anglers?**

**A:** Over time, as the fishery develops, we expect more people will seek out muskie angling opportunities in East Battle Lake. It is possible that resorts will see an increase in their clientele base as a result of this effort. Muskie anglers do not impose any greater risk of introducing AIS into East Battle Lake than any other angler, recreational boater or other recreational lake users. Minnesota laws, intended to reduce the spread of AIS, apply to all those using any accesses and waters of the State.

**Q: Would northern pike spearing be restricted if muskie management is implemented?**

**A:** No. Northern pike spearing will remain open.

**Q: If muskies are stocked in East Battle Lake, how will this affect the management of other game fish?**

**A:** No changes will be made to game fish management in East Battle Lake. Walleye is a priority species in East Battle Lake. The lake is stocked with walleye fry in alternate years. Walleye fingerlings have been stocked by the Association in years not stocked by the DNR. Management would remain the same through stocking, season closures, bag limits and statewide length limits.

**Q: What type of muskie fishery do you see developing in East Battle Lake in the future?**

**A:** While the interest in muskie angling is growing, the opportunities are limited. Stocking muskies would, over time, create new angling opportunities where none existed before. Our management goal would be to manage the muskie population for trophy angling opportunities through stocking, size regulations, season closures, and promoting voluntary catch and release.

**Q: What opportunities will the public have to learn more about this proposal and provide input with the decision-making process.**

**A:** The DNR, Section of Fisheries, is committed to an open, transparent public input process. Only after extensive public input (informative briefings/presentations, lake association meetings, and general public input) and support from the East Battle Lake Association, would we consider stocking muskies in East Battle Lake. The summer of 2014 will be used to gage public support for this initiative. If there is sufficient public support for moving this forward, the formal public input process would begin in late 2014/early 2015 with formal public input meetings and comment period.