

Muskellunge Standing Team Notes  
Kemp Natural Resources Station – Lake Tomahawk  
Tuesday August 24, 2010, 9 a.m. to 5 p.m.

In attendance: Tim Simonson (CO –Chair), Scot Stewart (Sponsor), Dave Rowe (NER), Steve Gilbert (NOR), Terry Magenau (NOR), Kurt Welke (SCR), Doug Welch (SER), Gary Lindenberger, and Bruce Underwood; John Aschenbrenner and Joe Weiss (Conservation Congress); Greg Wells (Muskie, Inc.); Matt Faust, Brian Sloss, Dan Isermann, Becka Pavak (UWSP)

1. 2011 Spring Hearing Regulation Proposals –

- a. Statewide 40" minimum – Simonson presented an update provided to the FM Board in June, 2010. The FM Board requested that we provide a specific list of exempt waters as part of the proposal for the spring hearings. Simonson developed a draft list of exempt waters by applying the criteria developed by the Musky Team to waters where we had appropriate data. A version of this list was distributed by Steve Avelallemant for review, but that needs to be finalized. We were able to make some corrections to the list today, but Simonson will finalize ASAP and include with the 40-inch proposal. The Team stressed that additional waters could continue be proposed over time, and that approval would hinge largely on the criteria. The Team reiterated their recommendation to make this category "no minimum". The team also strongly recommended that any proposals to increase the existing 45" lakes to 50" be put on hold and not be part of the 40" statewide proposal. The Team also agreed to modify the criteria slightly to remove the requirement for natural reproduction, to allow for some put-grow-take fisheries, at the request of Steve Gilbert. As part of this modification, a compromise was reached to recommend creating a priority 4 stocking category for these stocked "exempt action" lakes, so that they don't take away from any of the existing quotas.
- b. GL Spotted Brood Stock Lakes – 50" minimums – Approved – (Deferred in 2009) resubmit as written last year.
- c. Lower Wisconsin River – 50" minimum – Approved (new in 2010)
- d. Lake Redstone – 50" minimum – Approved (new in 2010)
- e. Rice Lake – 50" minimum – Approved (deferred in 2009) – Resubmit as written last year
- f. Quick-set rigs – Approved as edited (deferred in 2009) - resubmit as edited. We modified to address anticipated concerns from catfish anglers by increasing the size of minnows covered by this proposal. We also changed the strict requirement that only treble hooks be allowed on live bait – this will allow for common, readily available rigs that use a single hook in the nose of the sucker.

2. Brood stock management 2010 update – Revisions to the plan were developed and recommended by a sub-group of this team, along with other NOR staff in mid-June, 2010. These recommendations were reviewed by the Musky Team and were generally ratified at this meeting:

- a. Drop back to either a 4-lake (spawn each lake in 2 consecutive years) OR 3-lake rotation. Brian Sloss will provide as analysis and final recommendation on this soon.
- b. Spawn 25 to 36 pairs at 1 female : 1 male.
- c. PIT Tag spawned adults for documentation of re-use rates.
- d. Allow stock-back of large fingerlings in brood lakes in years when eggs are collected there (only in one of the years in the case of 2-consecutive spawning years). If possible, the Team suggested stocked fish be PIT tagged to document survival and lineage.
- e. Take genetic samples from production fish for 2 more years.
- f. Evaluate Pelican and Rhinelander Flowage in 2011 as potential brood lakes; obtain genetic samples and fyke net catches.
- g. Evaluate Sand and Sissabagama, Sawyer County, in 2011 as potential brood lakes; obtain genetic samples and fyke net catches.
- h. Retain the following lakes in the rotation: UPPER WI – Minocqua Chain, Big and Little Arbor Vitae, Pelican (potential), Rhinelander Flowage (potential); UPPER CHIPPEWA – Lac Courte Oreilles, Lost Land/Teal, Chippewa Flowage (west), Chippewa Flowage (east), Sand/Sissabagama (potential). Drop North/South Twin, Moen Chain, Plum Lakes.

- i. 50" minimum length limits for all Brood Stock lakes? The team did not feel this was absolutely necessary at this time.
3. Great Lakes Spotted Musky Management Plan – Dave Rowe provided an update on activities related to the GLS muskies and sought input on the draft management plan for the outlying waters. The Green Bay Great Lakes spotted musky project is continuing, and in 2009 WDNR established 3 inland brood lakes for fish that are being imported from Georgian Bay, Lake Huron with the Ontario Ministry of Natural Resources and Sir Sanford Fleming College. So far 2 year classes of fish (2008 and 2009) have been stocked into the lakes. These fish have been marked (Fin Clips or PIT tags) to differentiate family groups to prevent inbreeding when gametes are collected in the future. The fish should begin maturing by 2015 allowing collection and production of offspring for Green Bay. In 2009 and 2010 we used oviduct radio transmitters to study spawning behavior and location selection of muskies in Green Bay. At identified spawning sites habitat characteristics were quantified at the time of deposition and twice more throughout the summer as well as fish community composition. We have documented natural reproduction now for the last three years. This study is funded by a FWS Great Lakes Fish and Wildlife Restoration Act grant and conducted in cooperation with Jim Diana and University of Michigan. We are also doing some genetic sampling to evaluate the genetic structure and diversity of the re-established population and comparing that with the original and new source populations. A public meeting on the management of the Green Bay musky population was held on February 17th. Using stakeholder input from this meeting the management plan is being re-written to incorporate goals for the recreational fishery as well as the restoration of a self sustaining population..
4. Graduate Research Proposal – Matt Faust (UWSP) presented his proposed research to the group and sought input on his plan of study. Matt is proposing to determine the extent to which various levels of harvest affect the size-structure of muskellunge populations. He proposes to collect growth information and categorize lakes into slow, medium and fast growth, determine growth potential, and model the influence of a variety of exploitation levels on population size-structure. Discussion ensued regarding some of the aging techniques/procedures he was proposing (expanding cleithra ages to scales) and the level of hooking/handling mortality; all in all will be a valuable project to the agency.
5. Evaluation of NOR Stocking Framework – Some progress has been made, in that a handful of lakes were sampled this past spring. More are scheduled for this coming spring, and we will be developing workplanning guidance for 2012-14 specifically to complete this effort.
6. Musky Angler Survey – Dan Isermann reported on progress. We discussed questions that might address current topics of interest, including quick-set rigs, musky stamps, tags, registration, size limits, etc. Dan will provide a draft to the team and plans to conduct the survey in January of 2011. The Bureau will provide support by supplying a random list of license holders. Greg Wells will provide a list of Muskies, Inc., members.
7. Musky Research directions/priorities/ideas – We set aside some time to discuss the Team's ideas for future research. Currently, SS staff are focused on age and growth research, with ancillary objectives related to recruitment in stocked fisheries, spawning behavior (site fidelity) relative to brood stock objectives, and method evaluation for conducting population estimates. They continue to provide support of propagation program on brood management, stocking framework evaluation, and assisting with the 40-inch minimum evaluation. There is also a pilot program involving volunteer anglers as PIT tag readers in SS study lakes. Ideas from the floor were recorded and we allowed each person in attendance to vote on their top 3 ideas. What follows are the research ideas, listed in order of priority (with number of votes):
  - a. Catch and release mortality: live bait (quick-set), artificial, etc. (8)
  - b. Bass/Walleye/Esocid interactions (the main interest was ensuring that adequate research resources are devoted to bass-walleye issue) (7)
  - c. Do female muskies spawn every year? Implications for population estimate methodology and brood stock management (5)
  - d. Fry/small fingerling stocking successes (where, when how) in light of continuing difficulties with forage for large fingerling rearing (4)
  - e. Systematic evaluation of stocking practices to increase returns (4)
  - f. Evaluate traditional natural reproduction lakes to determine reasons for reductions in recruitment (1)

- g. Fall young-of-year sampling methods development – catchability, etc. (1)
- h. Population statistics on Lake Superior – St. Louis River populations – evaluation of other locations for establishing populations in Lake Superior (1)
- i. Development of a brood stock genetics database (1)
- j. Radio telemetry in Green Bay – fixed station acoustics (0)

#### INFORMATIONAL ITEMS

- 8. ETC Report – Dave Rowe drafted a report for WI and distributed. If you have anything to add (or would like to review the report), contact Dave.
- 9. Cool water fishes symposium – 2010 Midwest Fish and Wildlife Conference, Twin Cities, December 12-15, 2010.
- 10. Muskies, Inc., Musky symposium - 2016 – Twin Cities. Date to be determined - Likely in late winter.
- 11. Revision of Musky Waters Booklet/Classifications (=designated trophy waters)/Categories; on hold for the field season – will resume this fall - Simonson
- 12. Updates on 2010 Rule Proposals -
  - a. 50" minimums for GL Spotted Brood Lakes – Hold – Re-submit for 2011
  - b. Quick-set sucker rule proposal – Hold – Re-submit for 2011
  - c. Plan for 50" minimums statewide (inland brood lakes, etc.)- Hold
  - d. Whitefish and Round Lakes (Sawyer Co) - Pratt - 50" min/1bag – Congress Advisory (Whitefish)
  - e. Rice Lake (Barron Co) - Benike - 50" min/1 bag – Hold – resubmit for 2011
  - f. Little St. Germain Lake (Vilas Co) - 45" min (10 year sunset expiring) - Approved
  - g. Chip FI, LCO, Grindstone, Whitefish, Round lakes (Sawyer Co) - one line after Oct 1 – Hold
  - h. Pelican – Remove 50" minimum – Congress Advisory – Voted down.
  - i. Redstone – 50" minimum – Congress Advisory – Approved statewide.
- 13. Winter Meeting – 2011 – We discussed meeting in Madison in February/March.