

Wisconsin Muskellunge Team Meeting Notes
August 25, 2015
Cabela's, 1499 Lombardi Avenue, Ashwaubenon, WI 54304

- 1) In attendance – Tim Simonson (CO), Scot Stewart (SD), Aaron Cole (ND – Barron), Gene Hatzenbeler (Treaty-Spooner), Steve Hogler (ED – Green Bay), Jeff Kampa (ND - Spooner), Greg Matzke (ND – Florence), Luke Roffler (SD-Sturtevant), Neal Rosenberg (CO), Dave Rowe (SD –Fitchburg), Jordan Weeks (WD – La Crosse), Bob Haase (Muskellunge Clubs Alliance of Wisconsin), Joe Weiss (WI Conservation Congress-Washburn Co.), Roger Sabota (WI Conservation Congress-Oneida Co.), Peter Levick (Muskie Canada), Dan Isermann, Janice Kerns, Justin VanDeHey and Dan Dembkowski (UWSP), Chip Long (ED- Peshtigo) Max Wolter (ND-Hayward), Steve Haas (Tittletown Muskies Inc.).
- 2) Team Structure, Charge, and Annual Work Plan – We reviewed the team structure and charge ([Musky Team Web Site](#)). Suggested/Outstanding Annual Work Plan Objectives for 2015-2016: 1) Transition all the 45” minimum length limit waters to 50” (by 2018); 2) Transition all the 28” minimum length limit waters to “No minimum” (by 2018); 3) implement the spawning habitat model/generate a GIS layer of “high-probability” spawning grounds; 4) increase the application of the Sensitive Area Designation program; 5) Initiate research on spawning/rearing habitat enhancement; 6) Explore removing the 2500 fish cap on large stocked waters/balance requests within management areas (evaluate requests based on performance measures related to density goals); 7) Begin to examine ways to increase the size of stocked fingerlings, e.g., evaluate stocking densities in ponds, etc.; 8) insure that fish stocked with PIT tags are entered into the statewide database; 9) Determine recurring PIT tag needs and coordinate statewide purchases for all species get the best price possible; 10) Evaluate prices for “edible” PIT tags; 11) Update Team charge to include Habitat Protection/Improvement; **12) Have at least 5 WDNR presenters at the 2016 Musky Symposium, with at least 10 WDNR staff in attendance.** We have an ambitious plan for the coming year!
- 3) Muskellunge Surveys and Assessments -
 - a) Evaluation of Methods to Estimate Musky Abundance - Janice Kerns (UWSP) gave an update of her project looking at better methods of predicting muskellunge abundance from lake features. Her modeling has resulting in a significant increase in the amount of explained variation in musky densities over the traditional model using only lake area. She will now be looking at estimating inter-annual variability in muskellunge population estimates to see whether a single estimate might be valid for safe harvest calculations for more than 1 year (as is currently the case).
 - b) Validation of fin-ray aging with known-age fish – A team of collaborators, including Derek Crane (Coastal Carolina), Dan Isermann, Simonson, Kevin Kapuscinski (LSSU), Mike Rennicke (SD) and Jeff Kampa (ND) have received a Becker grant to evaluate the use of fin rays for aging muskellunge. The objectives of the project are to: 1) evaluate the accuracy of fin rays as an aging structure; 2) determine if rays from different fins result in the same estimated age; 3) determine if rays from within a fin result in the same estimated age; 4) determine if the location viewed within a ray affects age estimation; and 5) validate fin rays as an aging structure. This field season, 241 fin samples were submitted from known age fish (2 to 21 years of age) from across the Midwest, including a large sample of fish from IA DNR (132 fish). A copy of the report from Derek is available on the FH_Projects common drive in the [“FM MUSKY TEAM\2015 Musky Team Meeting Green Bay”](#) folder.
 - c) PIT Tag all muskies handled in our surveys – Last year, the team recommended that all muskies handled in surveys be PIT tagged. We were fortunate to obtain funding for this recommendation, so an approximately 3 year supply of PIT tags was purchased and distributed to field staff prior to the spring 2015 field season. There were no problems reported and it appears that many fish were handled and marked this year. We discussed making sure that fish stocked with PIT tags are entered into the statewide database, and that in the future, we need to coordinate PIT tag purchases for all species get the best price. We may also consider evaluating prices for “edible” PIT tags for future purchases.
- 4) Propagation/Stocking
 - a) Evaluation of pellet-started vs. pond reared muskellunge survival – VanDeHey (UWSP) gave us an update on the project and discussed logistics. Earlier this year, a pump failure in the hatchery at Wild Rose resulted in the loss of most of the fish started on dry food in the hatchery building. It was decided that we would postpone the study for this year and complete the study in 2016. This affords us an opportunity to compare annual vs. alternate year stocking, as well. There are enough fish left to compare the two feeding treatments in a subset of the study lakes, including 2 lakes that were not stocked last year due to production limitations: Upper Gresham (Vilas Co.), Stella (Oneida Co.); as well as all the study lakes in the Fitchburg Field Unit (which are typically stocked annually and have all been PIT tagged since the start of

the project. The remainder of the fish will be stocked in non-study lakes this year. Study fish for the limited number of study lakes will be harvested, marked and stocked on 9/23 and 9/24. If you would like to assist the process at Wild Rose, let me know. Also, Tim will send a reminder to all biologists that have study lakes to be sure and collect age 1+ and 2+ muskies in these lakes if they happen to be out sampling for other purposes. These fish should be examined for fin clips and PIT tagged. The question was raised as to whether it would be worth taking genetic samples of the fish at the stocking phase to determine if there are any differential selection pressures in the hatchery for pellet-tank started/minnow finished versus strictly pond reared fish. Justin will consider this.

- b) Habitat use and survival of stocked fall fingerlings using micro radio telemetry – Janice Kerns provided an update on this project, which is intended to track newly stocked fingerlings in order to evaluate catchability and habitat use by these fish. They also plan to employ side-scan sonar to look at habitat use. This study was partially funded with a Becker grant but several musky clubs have also contributed considerable funds to the project. There are enough transmitters to start this work this fall in conjunction with the limited pellet-minnow study in Upper Gresham and Stella. This will allow an additional objective of comparing survival, behavior, etc., of fish reared using these two methods. They hope to add at least on more lake next year. The Musky Clubs Alliance may be able to contribute additional money to the project. Bob Haase will check on this.
- c) Evaluation of alternate and annual stocking strategies – Dan Dembkowski (UWSP) discussed an idea for a project to evaluate annual vs. alternate stocking practices. There are indications from other species that adjacent year-classes may negatively impact each other so he is interested in looking at existing data to see if this is an issue.
- d) [Brood Stock Management](#) - 2015 North District Spawning/rearing report – Neal Rosenberg provided reports on musky spawning in the ND hatcheries. He also provided a nice overview of the entire process of spawning, hatching, and rearing muskies. For Pelican Lake, crews spawned 15.3 quarts of eggs from 44 fish (29 males with 15 females – the goal is 19-26 females). They fell a little short of the goal because the spawning season ended abruptly on Pelican. For Lost Land Lake, crews spawned 26 quarts from 73 fish (38 males and 35 females) and met their goals. Neal's PowerPoint presentation and reports are available on the FH_Projects common drive in the ["FM MUSKY TEAM2015 Musky Team Meeting Green Bay"](#) folder.
- e) PIT tags for stocked fingerlings in Brood Lakes – We discussed whether we could continue to PIT tag fingerlings stocked back into our brood lakes, given the expense, and recommended that this practice continue, if possible, at least for Pelican Lake and the Chippewa Flowage (see Wolter presentation, below). Simonson will try to track down funding for this year (Pelican). If no funding can be found, these fish will be fin clipped.
- f) GL Spotted Musky Update – Steve Hogler provided an update on GL Spotted musky program. The Lake St. Clair Yearlings (2104 year class) at Wild Rose were harvested and stocked July 28 and 29; the 3 inland brood stock lakes were stocked at 3 yearlings/acre (2,583 total). The rest of the fish were stocked into Green Bay at various locations (6,348) and the Lake Winnebago System (650). This is by far the most yearlings ever stocked into Green Bay in a given year (previous high – 640 in 2007). 2015 MI egg take was very good at Lake St. Claire and we expect to receive approx. 9,000 small fingerlings at Wild Rose soon in exchange for 1,510 Upper Wisconsin River fall fingerling muskies from the Art Oehmcke Hatchery to be stocked by MIDNR in the Upper Peninsula. Also, due to generous contribution from a variety of musky clubs, we were able to repair a second pond at the Kewaunee facility (BAFF) and should be able to double production of fall fingerlings in this and future years (approx. 8,000). Directed effort for muskellunge has increased considerably on Green Bay over the last 2 years, and as such, the catch per unit effort has declined. Actual estimated catch over the last 2 years was on par with previous years and up from 2010-12. A copy of Steve's report is available on the FH_Projects common drive in the ["FM MUSKY TEAM\2015 Musky Team Meeting Green Bay"](#) folder.
- g) ["Early PIT Tag returns – Possible implications for muskellunge stocking?"](#) – Max Wolter provided a brief presentation on some of the PIT tag data he has been collecting, including a couple of his brood lakes, where about 10,000 stocked fish have been PIT tagged to this point. PIT tags were used to generate a PE on Lost Land and made it possible to detect natural reproduction. He has also documented movement of fish among connected waters, in one case over 3 miles in a small stream! He has also discovered that the stocked fish surviving to older ages tend to be the upper end of the size distribution of the fish stocked. In the case of LCO and the Chip, the modal length at stocking of survivors was 12"+. This can be explained by the abundance of northern pike in these systems and their ability to consume a large proportion of stocked muskellunge < 11" in length. In some of these waters, larger fish may be needed for stocking in order to increase survival. This may also suggest that NR muskellunge (which tend to be smaller than hatchery fish) may be impacted in some waters with higher northern pike densities. This PowerPoint

presentation is posted on our FH_Projects common drive under [“\FM MUSKY TEAM\2015 Musky Team Meeting Green Bay”](#) folder.

- 5) Information and Education – Peter Levick, President of Muskies Canada, was in town and agreed to stop by and give us an update on the background and recent activities of his organization. We learned that most of their activities center on protecting and restoring natural, self-sustained musky fisheries. There is very little stocking that occurs in Canada. One exception was the Lake Simcoe restoration project, which is similar to our restoration project on Green Bay, in terms of scope and scale. They stock much fewer fish and do more habitat restoration projects. This PowerPoint presentation is posted on our FH_Projects common drive under the [“\FM MUSKY TEAM\2015 Musky Team Meeting Green Bay”](#) folder.
- 6) Report from NCD ETC meeting – There were only a handful of muskellunge presentations at the Joint meeting with Walleye and Centrarchid Tech Committees in SD earlier in the summer. The ETC will hold their winter meeting in conjunction with the Hugh Becker Muskie Symposium in Minnesota, rather than at the Midwest Fish and Wildlife Conference in 2016. They intend to hold a raffle to support the publication of the proceedings of the symposium. There was some discussion of skewed sex ratios in stocked fish –follow up coordinated with Justin VanDeHey. A copy of the draft minutes of the summer ETC meeting is posted on the FH_Projects drive [“\FM MUSKY TEAM\2015 Musky Team Meeting Green Bay”](#).
- 7) Fishing Regulation Proposals -
 - a) 2015 Conservation Congress Resolutions ([Link to 2015 Resolutions](#)).
 - i) 640515 – Chemically treat Sparkling Lake to eliminate smelt – Reject – Question not needed for Spring hearings – not a rule change;
 - ii) 640615 – 50” minimum length limit on North and South Twin lakes, Vilas County (45-18) - Support;
 - iii) 640715 – 50” minimum length limit on Trout Lake, Vilas County (47-15) - Support;
 - b) 2015 WCC Rule Simplification Committee Suggestions – These suggestions were rejected by the Warm Water Study Committee (they met the Saturday prior to our meeting this year), as reported by Joe Weiss.
 - i) 1-line trolling, Oneida County – This will be covered by our treatment of the trolling proposal for 2017 (see below);
 - ii) Eliminate all fish zones – not discussed;
 - iii) One fish refuge date statewide – not discussed.
 - c) 2016/18 Fisheries Management Proposals
 - i) Allow motor trolling/clarify position fishing – We discussed this proposal again in light of the fact that the NRB established a 2018 sunset for the current rule, which was adopted in 2014 and approved by the Governor’s Office/Legislature in early 2015, with an effective date of July 1, 2015. The content of the current rule contains 3 basic county-wide treatments for trolling: 1) In 55 counties, trolling is allowed with up to 3 “lines” (hooks, baits or lures) per angler; 2) In 10 counties, trolling is allowed with only 1 “line” per angler, with a maximum of 2 “lines” per boat, EXCEPT on 27 specified waters, where up to 3 “lines” may be used with no limit on the number of lines per boat; and, 3) In 7 counties, trolling is allowed with only 1 line (hook, bait or lure) per angler, with a maximum of 2 “lines” per boat in ALL waters. We discussed the idea of presenting an Advisory Question at the 2016 Spring Hearings but it was agreed that we would take a year off and try not to have a trolling question every year! For the 2017 rule proposal, the committee agreed that there were several elements of the rule that we could address to make the proposal more consistent across the state: 1) We agreed that the sunset should be eliminated as part of an improved proposal; 2) there was general agreement that the limitation of 2 “lines” per boat was unnecessary and should be dropped from the new proposal; 3) we agreed that there could be either 3-line or 1-line counties, but there should not be inconsistency within a county (such that some waters are 3-line and some are 1-line). So, in developing the proposal, we will work with our Fisheries Biologists to determine whether counties with a mix of rules should be proposed as either all waters with 3-lines or all waters with 1-line. The goal is to reduce or eliminate the number of exceptions and have consistency within counties. In special cases, we agreed to consider rare exceptions for particularly troublesome areas with strong opposition.
- 8) Review/update Management Plan – Simonson provided a preview of a presentation in development for the 2016 Muskie Symposium on “Long-term Changes in Wisconsin’s Muskellunge Fishery”. A copy of the PowerPoint presentation has been posted on the FH_Projects common drive in the in the [“\FM MUSKY TEAM\2015 Musky Team Meeting Green Bay”](#) folder.

9) Upcoming Meetings

- a) FYI – Hugh C. Becker Muskie Symposium/ETC, Minnetonka, MN. March 13-16, 2016. Please consider attending/presenting a paper (presenters get free lodging and registration – Simonson will solicit interest from across the state and will coordinate group Out of State Travel Approval.
- b) 2016 Musky Team Meeting – The general consensus was to continue to meet during this general time frame (late August) and at this location, at least for 2016.

Proposed Musky Team Charge

1. Develop/review regulation guidance/proposals/resolutions;
2. Develop/review stocking guidance/plan;
3. Develop/review habitat protection/improvement methods;
4. Develop/review sampling protocol and assessment metrics;
5. Review/update management plan; assess status of the fishery;
6. Identify research needs; coordinate evaluations;
7. Develop/review classification criteria/proposed classifications.