NORTH CENTRAL DIVISION OF THE AMERICAN FISHERIES SOCIETY



# Walleye Technical Committee



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# 2009 Summer Meeting Minutes

WTC-ETC-CTC Joint Meeting, Best Western Midway, La Crosse, WI • July 28-30, 2009)

Chair John Kubisiak called the meeting to order at 8:50 AM on Thursday, July 30, 2009. Nine members were present. A request for additions to the agenda was made, and hearing none, the agenda was approved as written. Minutes from the 2008 Winter meeting were approved as sent to members and posted on the website.

# State and Provincial Reports:

<u>Missouri</u>: A. J. Pratt reported that their statewide walleye plan is nearly complete. Two lakes, Stockton and Smithville, have been designated top priority for walleye stocking. This information has been loaded onto their website. They have had a good year, with an increased electrofishing CPUE over prior years. Hatchery production has been good and all stocking requests were met including some surplus. They have determined that walleye in the Black River system are genetically different from populations in the rest of the state. As a result, they plan to stock only this strain into this river system, but they have had difficulty with production after pond culture. Problems include poor condition and low survival. A research plan is being devised to understand why this occurs. Speculation is that perhaps there is an unusual food source requirement for this strain, as fish from other areas seem to adapt well to culture conditions. As a consequence of limited or no stocking, the CPUE in this system has fallen dramatically and significant fish movement out of the system is suspected.

<u>Texas:</u> Charlie Munger stated that for the ninth consecutive year, Texas is dealing with drought-related issues. Only one-third of the normal pool of water remains in Meredith Reservoir, which is their primary walleye fishery. Supplemental stockings of walleye have been down due to difficulties obtaining them from Colorado, which cannot meet their own stocking requests. Their standard trade is walleye fry in exchange for palmetto bass provided by Texas, but they only received 900,000 of the 4 million they requested. There are two lakes that receive saugeye, which have also been difficult to obtain from Kansas.

Kansas: Andy Jansen reports that there are a couple of publications by Mike Quist in the works that may be of interest to the committee. These include the modeling of harvest regulations for Glen Elder Reservoir, which had 65% walleye exploitation with 85% of harvest occurring during April through June. They are considering imposing a 21-inch length limit during the months of April through June with the regulation being the same as other local lakes (either 15 or 18 inches) during the remainder of the year. The second publication found similar harvest rates between walleye and saugeye, in contrary to a common angler perception that saugeye are easier to catch. Otherwise, they had a good egg take and are having a good production year.

<u>Minnesota</u>: Tom Heinrich spoke about a research project that began this year examining unintended consequences of size restrictions in Minnesota lakes. Case in point is the spring fishery of Rainy River, which has shown a severe reduction in the proportion of male fish when sampled. With a minimum length of 19.5 inches, 90% of the harvest is male fish and females are maturing at a larger size. Similar issues have arisen in other parts of the state. The cormorant population seems to be down on Lake of the Woods because of an outbreak of Newcastle Disease virus beginning in 2007 and peaking last year. In 2008, nesting was down 40% from 2006, and 2009 saw a further reduction of 85% below 2008. In contrast, lethal control of adults at Leech Lake has not shown any obvious impact to that population.

Wisconsin: John Kubisiak reports that the DNR Spooner hatchery had to hold fish longer than planned while waiting for VHS test results, and had poor recovery of small fingerling walleye due to predation and cannibalism. The other hatcheries made up most of the difference and most quotas were filled. Jeff Kampa and Gene Hatzenbeler recently published a comparison of size at stocking and cost-effectiveness (NAJFM 29:996-1000). The found that large fingerling walleyes (7-8" fish stocked in September) resulted in higher densities and more consistent yearclasses the spring after stocking compared to small fingerlings (1-2", stocked at 5 times the density in June). One change in hatchery practices in the last decade is that small fingerlings are now produced in lined ponds where they were previously produced in unlined ponds, and are usually less than 1.5 inches in length when they must be harvested. Managers are finding that these very small fingerlings, or "frylings", do not survive well in Centrarchid-dominated systems where stocking has historically worked. The hatchery system contends that there is not sufficient evidence that large fingerlings are more cost-effective, so large fingerlings are not highly available. Sue Beyler found that small fingerlings survived better when stocked by boat into the deeper portions of the lake rather than stocked from the shoreline. Ben Heussner talked about a proposal to raise the minimum length limit from 15 to 18 inches for southern Wisconsin waters. Many of these waters have poor recruitment but excellent growth rates. Adult abundance was three-to-five times higher on lakes with minimum length limits of 18 (2 lakes) or 20 inches (1 lake) compared to the standard 15-inch lakes. This is attributed to the fact that at 15 inches, most females are subject to harvest before they mature at around age 4. The goal is to get away from supplemental stocking and rely more on natural reproduction. Some modeling likely needs to be done before this could be implemented, and it would not apply to northern Wisconsin waters where growth rates are slower and recruitment is generally much better.

**Iowa:** Donna Muhm reported that Iowa is also looking at size, survival, and cost-effectiveness of stocking walleye across the state. Since most Iowa lakes are managed for multiple predator species and are not designated as "walleye" lakes, varying stocking strategies have variable success depending upon lake and river characteristics. Some lakes have great success with fry stockings. River systems generally have good luck with two-inch stockings. Logic would dictate that larger or "advanced" fingerlings would demonstrate greater survival, but these fish are costly to produce and costly to distribute around the state. Also, there is only one hatchery currently capable of producing these fingerlings in numbers approximating those requested, and since it is near the southern border of the state fish must be transported considerable distances to the northern lakes which receive them. To date, there has been little evidence gathered which indicates that these fish are indeed demonstrating higher survival and that their cost is justified. Studies are being initiated to answer these questions. Iowa has not found any instances of VHS in any of its waters, but hatcheries are often required to provide testing to those states receiving fish from Iowa hatcheries just as a precaution.

**South Dakota:** Justin VanDeHey stated that the toolbox is completed and being implemented. Water is finally back in the Oahe reservoir, which had been down 35 feet at its lowest point. Indications are that reproduction was good this year but the walleye egg take was down considerably, possibly due to a strange weather cycle. They noted a low number of larval gizzard shad this year, which may be a forage issue. John Kubisiak asked about perch spawning on artificial weeds – he has been contacted by Lake Associations interested in habitat enhancement using plastic plants and citing their use in South Dakota (Reelweeds is one brand). South Dakota State University researchers have found that yellow perch will readily spawn on artificial plants, and Brian Blackwell uses them as an easy way to collect perch eggs for the laboratory. This has not been used to enhance perch recruitment and Justin suggested that old Christmas trees would be a better choice if suitable spawning habitat is lacking.

Indiana: Sandy Clark-Kolaks submitted the following report:

- Advanced walleye fingerlings continue to be stocked into Crooked, Steuben Co Winona, Kosciusko Co and Sylvan, Noble Co, lakes. So far, all three fisheries are performing well and angler's response has been positive.
- The Brookville Reservoir walleye fishery, the source for Indiana walleye broodstock, is being evaluated. Scales, spines, and otoliths were collected from walleye during broodstock collection at the beginning of April. During eight nights of netting 1,516 walleye were collected with aging structures being collected from 117 males and 135 females. A creel survey is also being conducted April through October get estimates of harvest. FAST will be used to model walleye growth and assess the current bag limit of 5 walleye and the 14 inch minimum size length.
- The walleye telemetry project on Monroe Reservoir will be winding up this fall. Preliminary results indicate site fidelity in spawning sites and summer locations. Walleye movements decrease during lake stratification and are greatest during spawning periods. Most locations have been consistent with angler fishing reports but several walleye have moved into areas that have not been considered desirable to walleye previously. Public participation has been great and articles about the project have been published in Indiana Game and Fish and Walleye Insider magazines. The 2008 interim report is available on the project webpage. <a href="http://www.in.gov/dnr/fishwild/3280.htm">http://www.in.gov/dnr/fishwild/3280.htm</a>
- The Indiana Chapter of AFS voted to donate \$500 to the Walleye Technical Committee in support of the Walleye Synopsis

Nebraska: Daryl Bauer submitted the following report:

At Elwood Reservoir we have an 18-24-inch protected slot limit; our 15-inch statewide minimum also applies so that means anglers can keep walleyes between 15 and 18 inches and they could keep one fish larger than 24 inches at Elwood (statewide daily bag limit is 4 walleye/sauger/saugeye in combination). We implemented that regulation at Elwood to improve the quality of the walleye fishery there (i.e. produce more big fish). This year we implemented a 20-28-inch protected slot at Sherman Reservoir solely for the protection of brood fish (Sherman has been one of our best reservoirs for collecting walleye eggs for hatchery production). Again anglers can harvest 15 to 20 inch walleyes at Sherman, but they can only harvest two of those fish at Sherman and then 1 over 28 inches can be harvested if they catch a big fish.

#### Michigan: Patrick Hanchin submitted the following report:

*VHS and walleye rearing* - Surveillance for VHSv continued in Michigan in 2009, although at a lower level because of budget constraints. We again tested walleye broodstock sources from the Muskegon River, the Tittabawassee River, and Little Bay de Noc. Walleye production expanded slightly in 2009 by making use of both Muskegon River and Little Bay de Noc broodstocks. Because of differences in the timing of walleye spawning runs in the Muskegon River and Little Bay de Noc, using both brood sources allowed crews to run egg-take operations over a longer period and improve other program efficiencies to provide an expanded program in 2009. Because VHSv was found in southern Green Bay and southwest Lake Michigan, we believed the addition of the Little Bay de Noc strain presented no more risk of transferring VHSv into our hatcheries than the Muskegon River strain did. Our decision was also made in light of the fact that the Chippewa Ottawa Resource Authority (CORA) had used this same broodstock source in 2008 and extensive testing of those fish at the time also came back negative for VHSv. Despite no detections of VHSv in Tittabawassee River walleye, it was our opinion that close proximity of this broodstock source to places where the virus caused large fish kills made this location a higher risk than the other two for having diseased fish. CORA conducted an egg take on the St. Marys River, primarily for stocking back into that system. The State's incubation of walleye eggs was again limited to a single hatchery (Thompson), which limits production to 6 million fry. CORA incubated their eggs at the Nunn's Creek Hatchery. Testing for VHSv began with pre-spawn testing of adult walleye in the Muskegon River and Little

Bay de Noc. No fish tested positive for VHSv, but if they had, eggs would only have been taken during the spawning runs for experimentation with egg disinfection protocols (not for production). The second round of testing included sacrificing all adult walleyes used for the egg takes in the Muskegon River and Little Bay de Noc so that kidney, spleen, ovarian fluid, and milt samples could be collected (no positive detections). Fillets from all walleye sacrificed for testing were again donated to local food banks. The third round of testing evaluated walleye fry. Since the results of these tests are not available prior to transferring fry to rearing ponds, this evaluation really only would have provided us with an early warning of the existence of the virus and the ability to track the transmission of the virus. Although we did not detect VHSv, any positive detection of VHSv from fish being reared in a pond would have lead to all fish from that rearing pond being destroyed. The fourth round of testing targeted spring fingerlings from rearing ponds to ensure VHSv was not transmitted via water in the ponds. No fingerlings tested positive for VHSv. Because of this extensive testing regime at each life stage in our rearing process we believed the possibility of transferring VHSv through our activities was extremely low. We only use rearing ponds that were non-drainable and without connections to other surface waters. Additionally, walleye fingerlings were only stocked into waterbodies isolated from other inland waters, or those with an open connection to the Great Lakes. Walleye were not reared or stocked in the Lake Superior drainage in 2009 because the basin remains a VHSv Free Management Area.

*Inland 1836 Consent Decree* – The spring of 2009 was the second year of tribal harvest under the 2007 Consent Decree. Tribal effort was similar to other years in most waters, which is generally low. The State conducted population estimates on tributaries to the Bays de Noc, the State and Tribes collaborated on one population estimate, and the Tribes completed one PE on their own.

### Walleye Synopsis Update (submitted by Patrick Hanchin, Steering Committee Chair)

As of late July, chapter reviewers were still needed for 6 chapters (listed below). If you are interested, please send a note to Managing Editor Bruce Barton (<u>bbarton@xplornet.com</u>):

Ch. 4: Distribution, Genetics, and HybridizationCh. 5: Reproductive and Environmental PhysiologyCh. 6: Feeding Ecology and BioenergeticsCh. 7: Life HistoryCh. 10: Habitat Protection and EnhancementCh. 13: Stocking

# Update on the "Biology and Management of Walleye and Sauger"

For those that are not aware of the project, the Walleye Technical Committee (WTC) is producing a book entitled "The Biology and Management of Walleye and Sauger" that will be published by the American Fisheries Society Books Department. We have contracted Dr. Bruce Barton to oversee completion of the manuscript, who has been working diligently over the past 1.5 years with a collection of great authors and editors. First drafts for several chapters have been submitted and a few have been reviewed. A few drafts are tardy, which is understandable when many of us are being asked to do more with less. Our Dec 31, 2009 deadline for completing the manuscript is fast approaching, but I do not envision us being too tardy in that regard. Bruce and I agree that a good product arriving a little late will be superior to an on-time product that was rushed through. We are still soliciting editors for a few chapters, so let Bruce (bbarton@xplornet.com) know of your interest and area of expertise, and he will let you know if we can use the help.

I recently sent four choices for book covers to the WTC email list. Thanks to all that replied. The winning cover design is below (by Bruce Barton), which utilizes Joseph Tomelleri's artwork. Also thanks to Scott Zoellick, who offered his artwork "Heads or tails" to us at a bargain price, which was a close second place in votes.



The book has an estimated production cost of \$30,000, of which the WTC is responsible for one half (\$15,000). Compensation for the managing editor is \$20,000, so our fundraising goal is \$35,000. To date, we have commitments for \$33,950, though only \$27,950 has been secured. Thus, we are still making funding requests to cover the remaining balance of our goal. If you are interested in assisting in any way, please contact Patrick Hanchin (contact information listed below).

Chapter 1: Introduction – To be completed after others have finished drafts.

Chapter 2: Systematics of Percidae – First draft submitted and returned to author with managing editor's comment for some restructuring. This should be done by the end of July.

Chapter 3: Molecular Sytematics and Hybridization – Significant portions are completed; majority of the chapter draft should be completed by mid-August, but entire draft probably won't be completely finished until the fall.

Chapter 4: Population Genetics and Distribution – Significant portions are completed; target is to have chapter draft 85% complete by the end of August, but entire draft probably won't be completely finished until the fall.

Chapter 5: Reproductive and Environmental Physiology – Main components of both components of chapter are completed. Sections on some aspects of fish health and reproductive endocrinology are in progress for target completion within next two months.

Chapter 6: Bioenergetics and Feeding Ecology – Parts written, other parts still synthesizing information re: feeding across multiple systems. Target date for completion of draft is end of August / early September.

Chapter 7: Life History – Rough copy of first draft was submitted; it is being re-structured and polished for draft submission by the end of July.

Chapter 8: Population Dynamics – Rough has been sent to co-authors for edits and some additional data. Target date for submission is end of August.

Chapter 9: Exploitation – Initial draft has been circulated for co-author edits, and those are being incorporated. Target date for draft submission is the end of July.

Chapter 10: Habitat – Habitat components from different authors have been amalgamated and forwarded back to authors for comment/input; lead author plans to have draft submitted by mid-August.

Chapter 11: Management – Draft has been completed and reviewed by one; review comments have been returned to author for incorporation.

Chapter 12: Culture – Chapter is about 60+% complete; all of which the Managing Editor has seen, and has reviewed portions of it. Target date for completion of the full draft is end of July.

Chapter 13: Stocking – Draft has been completed and reviewed by one; review comments have been returned to author for incorporation

# Financial Report:

|                                   | INCOME             | BALANCE     |
|-----------------------------------|--------------------|-------------|
| Beginning Balance,                |                    | \$25,422.41 |
| December 1, 2008                  |                    |             |
| Monthly Interest Earned           | \$262.66           |             |
| December 2008 – June 2009         |                    |             |
| Synopsis Donations:               |                    |             |
| Kansas Chapter                    | \$250.00           |             |
| Dakota Chapter                    | \$500.00 TOTAL     |             |
| Wisconsin Chapter                 | \$500.00 \$2750.00 |             |
| Walleyes for Tomorrow             | \$1,000.00         |             |
| Nebraska Chapter                  | \$300.00 ·         |             |
| Ending Balance as of July 1, 2009 |                    | \$28,435.07 |

## Pending Synopsis Donations:

| USFWS                | \$5,000.00 |
|----------------------|------------|
| Indiana Chapter      | \$500.00   |
| NCD (avail. Dec '09) | \$500.00   |

# Sander Travel Award:

The Sander travel award gives \$100.00 for student travel to the Midwest Fish and Wildlife Conference in December, and a matched is requested from the student's state chapter AFS for an award total of \$200.00. The current deadline for application for this award is August 31. Chair Kubisiak entertained a motion to change the application deadline to September 30<sup>th</sup>. The deadline for submitting abstracts for the Midwest is mid-September. The August 31<sup>st</sup> deadline comes at a time when most students have not yet returned to school and have not yet prepared a presentation. A motion to change the application deadline to September 30 was made, seconded, and passed.

#### Chair-elect and Secretary positions:

To be awarded the Chair-elect position, a person volunteers, is selected by the membership of the WTC, and the name is submitted to the NCD which "appoints" the person to the position. The Committee is actively seeking nominations or volunteers to serve as Chair-elect, which automatically translates into the Chair position the following year. Several persons were mentioned, including Corey Mason from Missouri and Andy Jansen from Kansas. Anyone who is interested in becoming Chair-elect should let current Chair Kubisiak know and a selection will be made. Donna Hanen Muhm has agreed to continue as Secretary.

#### **Old Business:**

None discussed

#### New Business:

The Dakota Chapter is hosting a special walleye session for their 2010 Chapter meeting and would like to invite the WTC to participate. It will be held from Monday February 22<sup>nd</sup> through Wednesday February 24<sup>th</sup> at the Spearfish Convention Center. The overall theme for this meeting is: New Fisheries Solutions for a New Decade, with the special walleye session entitled: Changing Percid Management to Meet Changing Angler Expectations. Right now, Gene Galinat and Dave Lucchesi are on board lining up speakers for this session and hopefully we will be able to get some folks from the neighboring states to participate n addition to the students and professionals in North and South Dakota. Walleye Unlimited and other angler groups may be involved in this session as well. Please work with Gene and Dave to make this a successful session. Contact person is Michael Barnes, Dakota Chapter President-elect, 605.642.6920.

**Time, place and theme - 2010 summer meeting:** This was discussed jointly with Centrarchid and Esocid Committee attendees prior to separate business meetings. It was mentioned that travel restrictions are unlikely to be much improved next year, and a joint meeting in a central location may help agencies justify the time and expense of sending staff to the meetings. After some discussion, we tentatively settled on coupling the meeting with a one-day age and growth workshop during the 3<sup>rd</sup> or 4<sup>th</sup> week of July, in either Dubuque, IA or LaCrosse, WI. More details are to be ironed out by the Winter meeting.

Adjournment: Meeting adjourned at 10:20 AM

Respectfully submitted, Donna Hanen Muhm, Walleye Technical Committee Secretary