

# Walleye Technical Committee Business Meeting Minutes

## Dakota Nature Park Brookings, SD

July 23<sup>rd</sup>, 2015

- At the beginning of the morning, chair-elect J. Bruner reported on his efforts to plan the joint technical committee meeting in Chicago, IL for summer 2016
  - Chair elect Bruner wanted to hold the social at the Shedd aquarium
  - Wants to hold the talks and business meeting at Loyola University
  - Thinks that we can get dorm rooms for cheap
- There was some opposition from the WTC membership
  - Many folks voiced their concerns about the location being cost prohibitive
  - Transportation in and around Chicago would likely be difficult
- Chair Schultz recommending giving chair-elect Bruner more time to get a budget together for the Chicago meeting, and then having the state representatives vote on the location since no consensus was reached
- Chair R. Schultz called the meeting to order at 9:08am and sent around attendance sheet
- D. Isermann motioned to approve the agenda, P. Cieslewicz seconded the motion and the agenda was approved
- Secretary H. Meyer sent out the summer 2014 and winter 2015 prior to the meeting for members to review
- Chair Schultz wanted to wait to approve the minutes from the Winter 2015 meeting because no one was in attendance that was present at the winter meeting
- Chair Schultz passed around copies of the summer 2014 meeting minutes for approval
- D. Isermann motioned to approve the summer 2014 meeting minutes and P. Cieslewicz seconded.
- State Updates

### Illinois – Update sent from Jason DeBoer and Mike Garthaus

#### **IDNR**

Our current statewide walleye management plan is over 15 years old, although revisions and updates are currently underway.

#### *Current Fishing Regulations*

Illinois has a statewide regulation for walleye, sauger, and saugeye. The statewide regulation is a 14" minimum length limit with a 6 per day harvest limit. Some water bodies have site specific regulations for walleye, sauger, and saugeye (e.g., larger minimum size, smaller/larger daily bag limit, protected slot).

#### *Proposed 2015 Stocking*

Illinois stocks walleye, saugeye, and sauger in a variety of large and small lakes, reservoirs, and rivers. All of our stocked walleye, saugeye, and sauger come from local broodstock and in-state hatcheries.

	Fry (< 2")	Fingerling (2-4")	Sub-adult (4-8")
Walleye	11,989,070	1,479,612	
Saugeye		171,845	3,450
Sauger	1,000,000	394,364	
<i>total</i>	<i>12,989,070</i>	<i>2,045,821</i>	<i>3,450</i>

*Northern Illinois Rivers Stocking Evaluation – Steve Pescitelli IDNR*

We have been stocking walleye on the Kankakee and Fox Rivers since 2000. We also started a sauger stocking program on the Des Plaines River in 2001. These programs have been successful based on electrofishing surveys and angler reports (no creel studies); the target CPUE range for walleye in Illinois is 15-20/hr.

For the Kankakee River, prior to stocking, catch rates were in 1-3/hour range. Since then the catch rates have averaged 30/hour in spring sampling. For 10 years the stocked walleye fingerlings were marked with OTC, and fish of all sizes were harvested for otolith analysis. Based on that study, about 70% of the walleye were of hatchery origin. For this program, brood stock have always been obtained from native Kankakee River walleye. We release about 90,000 2" fingerlings into the Kankakee and Iroquois Rivers. Anglers have also reported increased catch rates since the program began.

For the Fox River, 50,000 2" walleye fingerlings are stocked per year in the area between Montgomery Dam and Silver Springs State Park. Catch rates are a bit lower for the Fox River, generally between 5-10/hour. In fall 2014, 79 walleye were collected below the Montgomery Dam including many YOY. The upper Fox River appears to get walleye "overflow" from the Chain-O-Lakes stocking program, with catch rates in selected areas exceeding 20/hour.

Prior to stocking, sauger did not occur in the 'upper' Des Plaines River (upstream of Brandon Road Dam), at least in recent history. As part of the Illinois River system, they were endemic to the upper Des Plaines prior to dams and historic water quality limitations. Brood stock for this program is obtained from the Illinois River. On average about 20,000 2" sauger fingerlings are released per year. At prime habitat locations, catch rates were as high as 40 per hour (average 10-15) and anglers reported good catch as well. Sauger move throughout the system and many appear to over winter in the deep tailwaters below the Lockport lock.

**INHS**

*Lake Shelbyville – Matt Diana INHS*

Project underway to determine the status of the walleye and sauger fishery as well as evaluate sampling protocols.

#### *Lake Michigan – Josh Dub, Charlie Roswell INHS*

In terms of yellow perch, we have several long-term datasets: our spring spawning assessment (started in the early 90's with fyke nets and occurs now with 600' multi-panel gill nets), our juvenile, small-mesh gillnet assessment (started in 2005), and our fall bottom trawl survey for YOY yellow perch (started in 1987). We also survey perch prey items, zooplankton, benthic invertebrates, and fishes. Our creel survey also has a long-term dataset on yellow perch harvest, catch rate, and perch directed effort in Illinois waters of Lake Michigan going back to 1986.

In addition to these multi-year datasets I am working on a few new projects:

1) I examined the relationship between cleithra length and fish total length for several Lake Michigan prey species; I am using these relationships to re-create the size of juvenile yellow perch prey items in an effort to better understand when and why yellow perch become piscivorous. **Results suggest that round goby are allowing yellow perch to transition to piscivory earlier than previously described in Lake Michigan;** we are hoping to evaluate what this means for growth and survival.

2) Charlie and I are working on a project that uses external characteristics (shape, size and color) of the urogenital papilla (UGP) to determine the gender of yellow perch. We collect spines from angler-harvested fish for age estimation and are hoping to apply our UGP method to photos of angler-harvested fish to get a better idea of the sex ratio of angler harvest.

3) It is generally believed that Illinois waters of Lake Michigan have substantial rocky substrate suitable for yellow perch spawning; a relatively new project I am working on is mapping historical yellow perch spawning grounds in Lake Michigan using side scan sonar in an effort to quantify and qualify the suitability of nearshore spawning habitat.

4) Lastly, while not targeted specifically at yellow perch, our creel survey is working on an economic project this year to evaluate the spending habits of anglers which could be used to identify differences in perch fishing relative to other (e.g., salmon) fisheries.

#### **Iowa – Update by Randy Schultz**

Iowa continues to evaluate a potential barrier to walleye and crappie escapement at Rathbun Reservoir. This is particularly concerning for the walleye population because Rathbun Reservoir is a major brood stock source for the Iowa DNR. We are working with the Corps to provide them requested data in hopes they will assist with funding the barrier. Walleye were tagged and Program MARK was used to estimate apparent survival, detection, and escapement probability. Probability of escapement increased with increasing mean daily discharge and decreased with increasing fish length and release distance from Rathbun dam. Variable weights indicated that discharge was the primary factor related to escapement.

Escapement probability increased exponentially with daily discharge and doubled as discharge increased from 40 to 60 m<sup>3</sup>/s. In a related study, we utilized a laboratory experiment to evaluate the effectiveness of a bioacoustics bubble-strobe barrier at reducing Walleye escapement rates. Walleyes approached the barrier and were successfully deterred most often when lights were off and sound was on. Walleye escapement rates declined from 89.3% with the barrier off to 44.1% with low and medium sound, whereas up to 100% of the fish escaped with the addition of light. Most Walleyes escaped around sunset indicating that fish were most active during the crepuscular period. Due to these results, an electric barrier is being evaluated.

The Iowa DNR's Interior Rivers and Streams research team is evaluating the relative contribution of intensively reared Walleye fingerlings to interior river Walleye fisheries due to improved methods for producing Walleye fingerlings in plastic lined ponds at Rathbun Hatchery. Using intensive fry culture may produce a larger product than the traditional extensively cultured Walleye raised at Fairport Hatchery. The Iowa DNR's pond stocking program has been discontinued, in an effort to provide additional time to raise river strain Walleye at Fairport Hatchery.

Donna Muhm, Spirit Lake Hatchery management biologist and long term WTC secretary retired December 2014. Donna was acknowledged by the WTC with a certificate of appreciation and received the NCD's Meritorious Service award for her 14 years serving as WTC secretary. Her position was recently posted to be filled.

### **Kansas- Update by Jeff Koch**

The percid egg demand in Kansas is slightly increasing in recent years. In 2014, 85M walleye eggs, 7M saugeye eggs, and 4M sauger eggs were collected from brood reservoirs.

Milford Reservoir was the site of the 2015 NTC tournament sponsored by Cabelas. A total of 185 teams participated and the winning three-day bag was 10 fish weighing 43 lb. Public pressure from local anglers and agency personnel led to an evaluation of the tournament by angler diary (prefishing and tournament diary) and concurrent exploitation study. Participation in the angler diary was poor, with only about 10% of anglers participating, and the data acquired was poor as well. A follow-up online survey was sent to all tourney anglers, but only ~15% of anglers responded. Take home messages were that anglers did not like wipers and blue catfish, generally did not report tagged fish, and did not harvest fish as assumed. Current exploitation rates to date suggest about 45% annual exploitation with mostly poor walleye fishing months ahead.

Kansas is experimenting with Iowa protocols to produce fingerlings and advanced fingerling walleye in tank culture. The pilot project was met with some success. Stocking large fingerlings may be attempted in reservoirs with high densities of nuisance white perch where getting walleye recruitment is difficult.

Kansas may be implementing more restrictive regulations in attempt to provide high-quality walleye fisheries and reduce the likelihood of overfishing, as Mike Quist's work suggested. Restrictive seasonal length limits (i.e., 24" MLL), are being discussed in some large reservoirs.

Kansas continues to stock quite a few saugeye in small impoundments and reservoirs with marginal walleye habitat. Triploid saugeye have been produced the last several years, and an evaluation is being conducted to assess growth and survival of triploids and diploids. After year one, diploid saugeye had about 50% higher survival than triploids. Three years of stocking will occur for this evaluation.

Human dimensions work regarding angler perception of walleye management in Kansas was conducted in the last Kansas licensed angler survey. In general, most anglers preferred a moderate minimum length limit over liberal and restrictive regulations. Most anglers did not prefer restrictive regulations; however, anglers that fished waters with restrictive regulations were generally supportive of them after seeing effects on populations.

A recently conducted graduate study at Fort Hays State University regarding food habits and biological control of invasive white perch via piscivores indicated that walleye generally consume white perch at a greater rate than other predators. As such, walleye may be the best management option available for this problem species.

### **Minnesota- update by Dale Logsdon**

Stocking and production:

2024 stocking:

294,628,228 fry

334,517 small fingerlings

3,054,285 large fingerlings

140,335 yearlings

16,172 > age 1

2015 egg take: 4,636 quarts = 579,809,000 eggs

Research projects underway:

Grace Loppnow (UofM) - Induced nest failure as a mechanism for controlling invasive smallmouth bass (recent modeling paper published in TAFS)

Paul Venturelli (UofM) - Continued research on use of growing degree-days to describe life history and predict sustainable exploitation rates

Jake Graham (BSU) - Red Lakes walleye population dynamics (pelican predation responsible for <1% total annual walleye mortality)

Ethan Karppine (BSU) - Factors influencing the success of walleye fry stocking

Tyler Ahrenstorff (MNDNR) - Bioenergetics of predator species in Mille Lacs

Tim Cross (MNDNR) - Substrate characterization and spawning habitat in Southern Minnesota

Dale Logsdon (MNDNR) - Impacts of walleye stocking in lakes with walleye egg take operations (density dependent effects on YOY growth on Woman and Winnibigoshish)

Melissa Trembl (MNDNR) – Population modeling on Mille Lacs

## Large Lakes:

Mille Lacs continues to experience poor survival beyond age 1 without a clear explanation of why or what can be done about it. Understanding walleye dynamics is confounded by spiny water flea, zebra mussel, and Eurasian water milfoil infestations, reduced nutrient loading and increased water clarity, increasing temperatures and reduced Tullibee abundance, as well as increased abundance of northern pike and smallmouth bass. Walleye harvest has been restricted to a daily bag of 1 fish that must be between 19" and 20" with no night fishing during the open water season. Smallmouth bass limit increased from 1 to 6 (1 over 18") and northern pike from 3 to 10 (1 over 30" but you must keep 2 below 30" before harvesting the one over 30").

Leech Lake rehabilitative fry stocking discontinued after 10 years (and a cumulative total of 149 million fry) due to the recovery of the population and the subsequent density-dependent reductions in YOY growth and recruitment that accompanied the higher fry densities from increased natural reproduction. Sharpshooters continue to cull cormorants and will be experimenting with exchanging cormorants eggs in the nest with clay eggs to reduce nesting success.

Upper Red Lake regulations planned to be relaxed to reduce apparent density dependent reductions in walleye growth and perch abundance.

Lake Pepin experienced a major increase in perch abundance; perhaps in response to recent reductions in walleye and sauger abundance.

Lake Vermilion is experiencing walleye recruitment issues in west basin and system-wide reductions in perch. Vermilion is an egg source lake that is part of stocking study. Cormorant control through egg oiling has recently been initiated.

## Statewide:

There has been a reduction in yellow perch abundance across state.

Increase in night fishing for walleyes is likely biasing our creel estimates.

Remnant populations of a unique walleye strain has been identified in some southern Minnesota lakes. DNR staff working to locate pure egg sources for rearing and comparison to strains from northern Minnesota.

New joint DNR/citizen workgroup has recently been formed. Besides the typical discussion about stocking, there was genuine interest by many in the group to consider reduction of the statewide bag limit from 6. Discussion continued about how large a reduction would be required to see a response in the fishery and what effects a bag reduction might have on tourism and license sales. No consensus was obtained, but this will likely be pursued further.

DNR is proposing a 3 zone northern pike regulation that may also benefit yellow perch and walleye populations in the Central part of the state where the proposed regulation would increase the bag limit from 3 fish to 10 fish with 22-25 inch protected slot and only 2 fish over 26

inches. The southern part of the state would see a 24 inch minimum with a bag of 2 and the northeast corner of the state would see a maximum size of 30 inches and a bag of 2.

**Missouri – Update by Paul Ciezlewski**

Chesapeake Hatchery

In March, 150 males and 60 female walleye were collected from Bull Shoals Reservoir. These fish yielded 6,464,193 eggs which resulted in 4,547,545 fry (70%). Fry per gram was 250. Twelve, one acre ponds were stocked with 154,000 fry each. These twelve ponds yielded 1,099,809 fingerlings (ave, 1.6”). The walleye fingerling return from fry stocking was 58%. Fingerlings were stocked in the following impoundments:

Bull Shoals Reservoir	366,855
Lake Jacomo	19,400
Lake of the Ozarks	243,033
Longview Lake	18,600
Norfolk Lake	225,625
Pomme De Terre Lake	18,000
Stockton Reservoir	158,296

Northwest Region

Mozingo Lake: This 1,000 acre impoundment was stocked with 20,000 walleye fingerlings (20/A) in 2014. This impoundment is stocked every other year. In March 2015, the walleye catch rate was 102 /hr. The PSD(15) was 97 and the RSD(20) was 56.

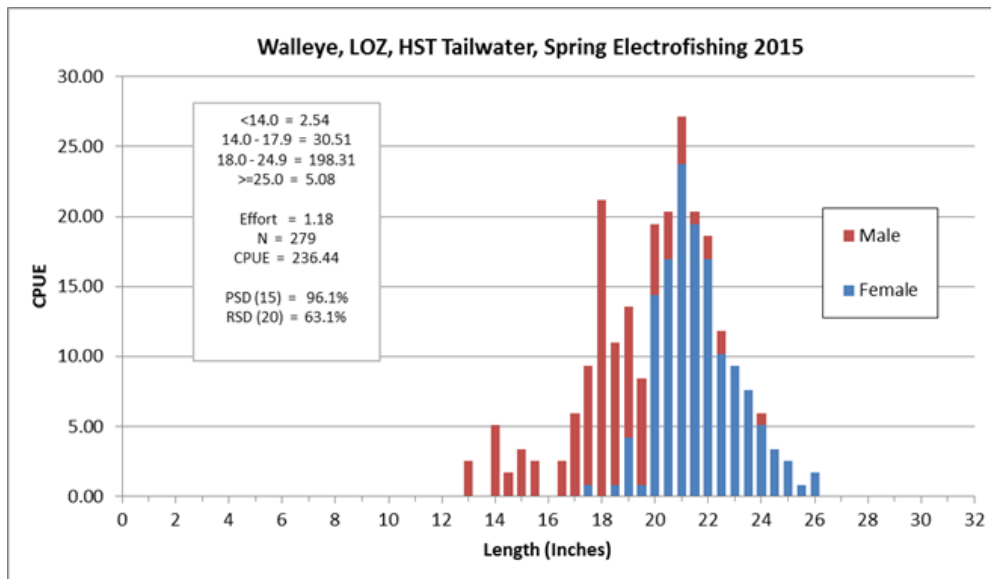
Bilby Ranch Lake: This 110 acre impoundment was stocked with 2,200 walleye fingerlings (20/A) in 2014. It is stocked on a two year rotation. In March 2015, the walleye catch rate was 50 /hr. The PSD(15) was 100 and the RSD(20) was also 100.

Kansas City Region

Longview Lake: Longview Lake is a 930 acre reservoir on the southeast corner of Kansas City, MO. Longview was stocked with three different size walleye in the late 1980's and genetics were used to detect which size-class contributed more to the fishery. It was determined that 2-inch fingerlings were the most cost-effective size-class. The original walleye population was maintained by stocking 30 fingerlings/acre every three years but the population crashed when two consecutive stockings, 1993 and 1996, failed. Based on an evaluation of stocking 50 walleye fingerlings per acre per year, we have reduced the stocking rate to 20/acre and maintained annual stockings

Central Region

Lake of the Ozarks: The annual population survey/brood stock collection below the Truman Dam in Lake of the Ozarks was conducted on March 16th. Through a long-standing agreement, the COE adjusts discharge to 3,500 cfs from Units 1 and 2. This flow adjustment is initiated approximately 36 hours prior to the MDC survey. Discharge is from Units 1 and 2 concentrate walleye along the rocky south bank of the power channel. If Units #3-6 are used, flows concentrate walleye in the center of the channel where MDC staff can't effectively sample.



Southwest Region

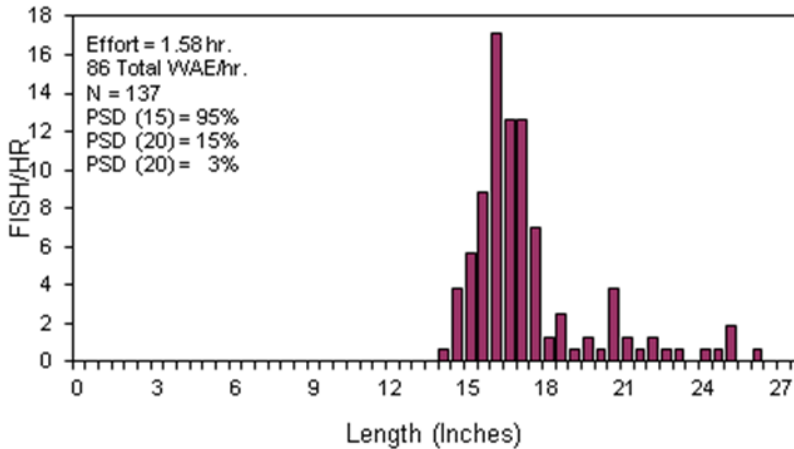
Table Rock Lake: Between 2003-2005, MDC stocked 291,377 walleye fingerlings in the James River Arm of Table Rock Lake. These walleye were produced from brood stock that were collected from the Kings River Arm of Table Rock Lake and raised in the MDC hatchery system. We first documented natural reproduction of these stocked fish in 2008. Since that time, surplus walleye have been stocked in the James River Arm at a rate of 10 per acre (90,000) in 2010, 2013, and 2014.

On March 23, 2015 we conducted a walleye sample on the James River to evaluate the stocking success and relative contribution from stocking. A total of 137 walleye were collected in 1.58 hours of electrofishing for a CPUE of 86 walleye/hour. This represents the highest catch rate of walleye since the initial stockings in 2003. PSD(15) was 95% and RSD(20) was 15%. Based on past aging of the original OTC marked walleye that were stocked, the majority of the fish collected (14"-17") were 2 years



old. Although natural reproduction has been documented in the James River Arm, these fish were likely a result of the 2013 stocking and should reach the legal size limit of 18" by 2016. Surplus walleye were also stocked in 2014 and should greatly contribute to the walleye fishery in the James River Arm of Table Rock Lake.

2015 WALLEYE LENGTH FREQUENCY  
TABLE ROCK LAKE - JAMES RIVER



Pomme de Terre Reservoir: The Pomme de Terre Lake walleye population is assessed by spring sampling using electrofishing gear along the lake dam and in the lake’s two main tributaries (Pomme de Terre River and Lindley Creek). In 2015 within the lake, the total walleye catch rate was 66.7 fish per hour. Walleye size structure within the lake is good with RSD(20) values ranging from 23% to 53% during 2011 through 2015.

In 2015 within the tributaries, total walleye catch rate was 45.0 fish per hour. Overall, catch rates in the tributaries seem to be more variable when compared to those of the lake sites, probably due to greater fluctuations of water conditions. Size structure is also more variable than that of the lake sites, with RSD(20) values ranging from 48% to 81% during the period 2011 through 2015. In accordance with Missouri’s Walleye Management Plan, walleye are stocked into Pomme de Terre Lake if surplus are available (up to 47,000 per year). Fortunately, surplus walleye have been available six out of the last seven years (2009 – 2015). In 2012, no surplus was available; therefore, no walleye were stocked.

Stockton Lake: A two year access creel survey was initiated in 2015 which aims to collect walleye harvest rates, catch rates, and angler information during the walleye spawning period on Stockton Lake. The creel ran from February 15th- April 15th and was conducted in dam area of the lake. The dam area has the highest concentration of spawning walleye at Stockton Lake. This creel is the first one that has targeted walleye creel data from the walleye spawning period on Stockton Lake. A roving creel is also being completed on Stockton from March 15th to November 15th. It has been 10 years since a creel has been conducted on Stockton Lake. Data collected during the 2015-2016 Stockton creel surveys will be available and useful when the Missouri State Walleye plan is revised/updated in 2017. The annual

stocking of 300,000 walleye fingerlings into Stockton Lake continues to result in more consistent year classes observed in spring samples.

#### Ozark Region

Bull Shoals Lake: Walleye brood stock were collected from Bull Shoals Lake on March 16th. This effort resulted in a very good production year as Bull Shoals was later stocked with 452,805 (<2") fingerlings. The lake's annual stocking request is 352,000 fingerlings (8 fish/acre), so this year's production includes a surplus stocking of 100,805 fingerlings.

Norfork Reservoir: Norfork Reservoir was stocked with 225,625 (<2") fingerlings, which includes 5,625 surplus stocked fingerlings. The annual stocking request for Norfork is 220,000 (10 fish/acre). Both reservoirs are shared with Arkansas, and the above stocking rates are based on the each lake's entire size and not just Missouri's portions.

#### Southeast Region

Black River Walleye Strain Research Project: Ongoing Project: Identification of Factors Limiting Hatchery Production and Post-Stocking Survival of Black River Strain Walleye Fingerlings

#### Goals:

- Increase fingerling returns from ponds to 20 - 25%
- Stock rivers on four year rotation
- Stocked fingerlings > 50% of year class
- Conduct exploitation studies
- Conduct angler mail surveys to estimate angler interest, effort, and catch (on going)

In March, 17 male and 8 females were collected from the Black River. All walleye underwent genetic testing to determine haplotype. Five females produced 914,165 eggs which yielded 263,706 fry (29%). Fry per gram was 143. All 263,706 fry were stocked into a 1-acre pond. A total of 72,472 fingerlings were produced (27% return from fry). These fingerlings (ave, 1.5") were marked with OTC and 70,472 fingerlings were stocked into the St. Francis River

#### **Nebraska- update by Brett Miller for Casey Schoenebeck**

NGPC biologists Jordan Katt, Keith Koupal, and Brad Eifert in collaboration with Casey Schoenebeck at UNK reported an experimental protected slot limit at Sherman Reservoir has been successful at protecting and enhancing the numbers of brood stock walleyes (well, at least the females, abundance of males has decreased). Future work on this population includes continued monitoring of the females and the declining male abundance using mark recapture.

Zach Woiak (MS student – UNK) in collaboration with NGPC has completed investigating the energetic benefits of the age-0 walleye ontogenetic diet shifts within Harlan County Reservoir, Nebraska. Food

habits of age-0 walleye were similar between years and showed an ontogenetic diet shift directly from zooplankton to piscivory during the sampling week of June 4<sup>th</sup>, 2012 at an average length of 61 mm and during the sampling week of June 24<sup>th</sup>, 2013 at an average length of 68 mm. Peak larval gizzard shad densities occurred on June 3<sup>rd</sup> and June 18<sup>th</sup> during 2012 and 2013 respectively, which likely influenced the timing of the age-0 walleye switch to piscivory during both years. Intracohort variability in length of age-0 walleye was documented throughout the entire duration of both growing seasons. The high contribution of stocked age-0 walleye documented throughout this study (greater than 90% for both years) suggests that the intracohort variability in length observed was not due to differences in growth between naturally produced and stocked age-0 walleye.

Brett Miller (MS student – UNK) in collaboration with NGPC is currently creating a standardized sampling protocol for age-0 white bass and age-0 walleye comparing three gear types across three months over two years on Harlan County Reservoir, Nebraska. CPUE values will be calculated for each gear type to determine which gear type is most appropriate for each month. Diet analysis will also be conducted on age-0 white bass to determine food habits.

Matthew Perrion (MS student – UNK) in collaboration with NGPC is focusing on early life-stages of white bass and walleye in Lake McConaughy, Nebraska. He will describe the seasonal diets of juvenile white bass and walleye (age-0 and age-1) and evaluate walleye (using OTC) and white bass (using otolith microchemistry) stock contribution.

BJ Schall (MS student – UNK) in collaboration with NGPC will be assessing the population dynamics of the sportfish community in Lake McConaughy, Nebraska. Additionally, he will be examining the seasonal spatial distribution of fishes throughout the reservoir.

NGPC biologist Tony Barada reported that an intensive effort to produce and stock advanced walleyes and saugeyes is underway. In previous years very few water bodies were stocked with advanced fish (8-9"). Nine Nebraska water bodies were stocked with advanced walleye during the fall of 2014. The 2015 plan includes nine water bodies to be stocked with advanced saugeye and 17 water bodies to be stocked with advanced walleye. A regulation change was implemented on most waters stocked with advanced fish where the daily bag limit may now include only one fish 15-18" and three greater than 18" OR four greater than 18", with no more than one 22" or longer. This change from the statewide 4 daily bag and 15" minimum length limit is intended to limit premature harvest of the expensively raised advanced walleye and saugeye, while still allowing some harvest of smaller individuals.

### **North Dakota – Update by Tod Caspers**

The walleye population in Devils Lake is doing well. There are many age-classes of walleye in the lake and some of the fish can become quite old, as a 21 year old was sampled two years ago.

We recently finished up our Standard Adult Sampling on Devils Lake. Results are still preliminary, but the overall CPUE of walleye fell to 18.2 walleye/net-night in our 125' variegated gill nets. (24.8 last year)

The North Dakota Game and Fish Department has continued working with the US Fish and Wildlife Service and local angling groups to open up the Lake Alice National Wildlife Refuge to ice fishing. If everything happens on schedule, ice fishing should be allowed starting this winter. This would allow anglers access to what has become a 15,000 acre lake that supports walleye, pike, perch and white bass.

In the Northeast District of the state, some of our most impressive walleye waters continue to be new fisheries that were formerly duck-marsh type habitats. Some of these waters are also able to produce good numbers of walleye over 24" long.

Across the rest of the state, the good old days of walleye fishing continue to be right now. We are still relatively wet and the fish populations have responded very well to the abundance of water. Since 1997 we have added 87 new walleye fisheries. State-wide there are currently 146 waters that have fishable walleye populations and we seem to be able to add a few on to the total each year, as there were 141 last year. About the only place where walleye are not doing so well is the Missouri River system below Lake Sakakawea. This is due to habitat degradation and poor forage production since the flood of 2011. Conditions are improving, but there are still some areas where the walleye populations are still in tough shape.

Our department stocked walleye in 131 lakes this year. The 8.5 million fingerlings stocked were generally about 30 days old and were around 1.25" long.

### **South Dakota – Mark Finsel**

#### **Spawning:**

During 2015, a total of 75.7 million walleye eggs were collected from 9 South Dakota Lakes (I can get you the list of lakes if needed.) and this resulted in 36.1 million walleye fry (48% hatch) being stocked into South Dakota lakes or hatchery ponds. Also, 7.1 million yellow perch eggs were collected which resulted in 4.5 million eyed eggs being available to either stock hatchery ponds, natural rearing ponds, or use to produce fry. Yellow perch fry production attempts were unsuccessful during 2015.

#### **Projects:**

#### **Natal contribution and movement of walleye in Lake Sharpe, SD evaluated using otolith microchemistry.**

Previous microchemistry research pointed to North Shore, Fort George, and West Bend being the most important natal contributors to the Lake Sharpe walleye population. Current research suggests West Bend is the most important natal contributor, with all other sites contributing less than 8%. Also, entrainment in 2013 was 19% with 70% entrained during the flood. 2014 entrainment seems to have decreased to only 1%. Hipple Lake doesn't seem to be important at any stage of Lake Sharpe walleyes' life histories, but contributes to 20% of natal gizzard shad production.

#### **Lake Oahe walleye tagging**

Approximately 9,100 walleye jaw tagged in 2015 with over 2,000 returns to date. This project is currently in its third (of five) years.

Questions to answer:

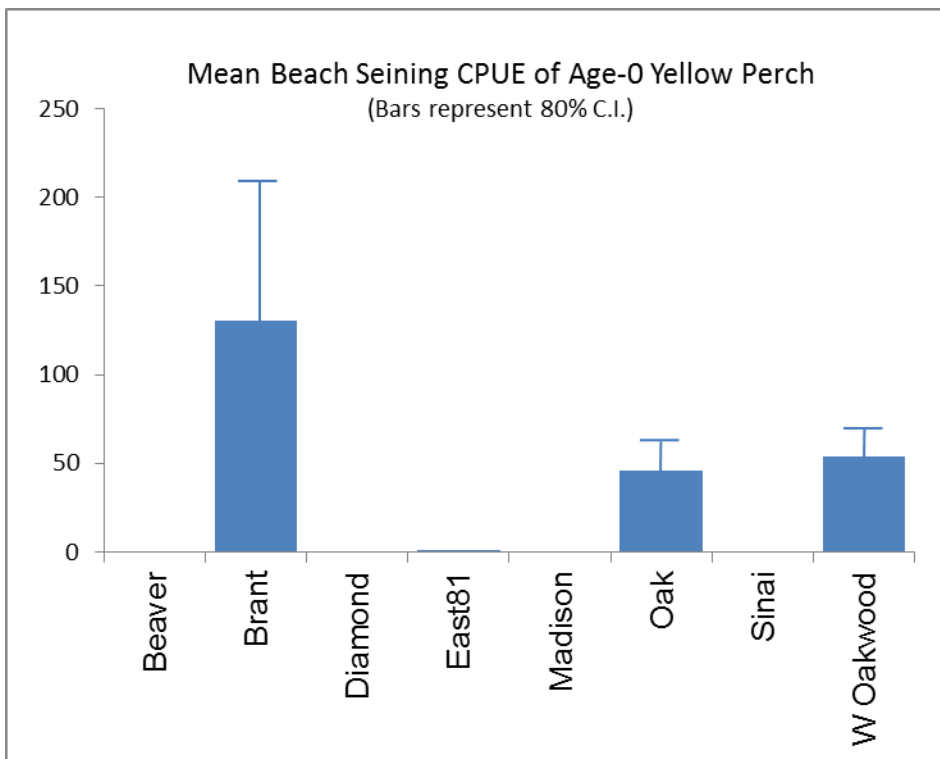
- Movement of walleye
- mortality rates
- model effects of different regulations

### Stocking Produces a Large Yellow Perch Year Class in Brant Lake, South Dakota

In 2014, the stocking of 499,000 (500/acre) hatchery-reared yellow perch fingerlings (600-950/lb) into 987-acre Brant Lake has apparently produced a large year class. The lake was stocked due to several consecutive years of poor natural recruitment. About 75% of the fingerlings were OTC-marked so stocking contribution could be assessed.

More age-0 yellow perch were caught while beach seining Brant Lake than any of the other waters sampled last fall (see figure below). Bright OTC marks were present on the otoliths of 43 of 61 fish (70%) indicating a 93% stocking contribution.

The Brant Lake stocking represents our first success at producing a strong yellow perch year class in a large lake. Fingerling stocking has increased yellow perch abundance in some smaller waters (< 400 acres), but success has varied. The abundance of naturally-produced fish has often exceeded that of stocked fish. Additionally, the contribution of perch fry stocked into natural rearing ponds has also been negligible. Continued evaluation will be needed to ultimately determine whether yellow perch stocking can significantly improve fishing in South Dakota.



- Chair Schultz updated the committee on the budget of the WTC

07/07/2015

2015 WTC	Description	Expenses	Deposits	Balance
01-Jan				13,450.22
27-Jan	Sander Schultz Midwest	\$100.00		
19-Feb	reg	\$310.00		
23-Mar	plaque	\$25.00		
07-Jul	MM interest		\$19.92	
		\$435.00	\$19.92	13,035.14

- The WTC has the second largest budget of all the technical committees
- D. Isermann moved to approve the budget and M. Wuellner seconded
- Chair Schultz mentioned that the WTC would be donating money to the SDSU student Sub-unit for their help in catering the WTC summer meeting
- Chair Schultz inquired about the Sander Travel award for students to attend the Midwest
- Secretary Meyer advised that the award announcement was sent out the NCD and WTC listserv, as well as to a number of professors that are involved with the WTC.
- The executive committee is looking for a chair-elect for next year

### **Old Business**

- Secretary Meyer is currently working with Chair Schultz on up-dating the WTC procedures manual and will eventually put it on the website to provide better description of job duties
  - If anyone is interested in being involved in working on the procedures manual contact secretary Meyer

### **New Business**

- Chair Schultz recommended contacting IL and IN members about whether they might be able to attend a meeting in Chicago next year
  - D. Isermann suggested that travel restrictions in IL are so tight that they may not even be able to afford a meeting in state
- M. Wuellner asked about when the best time would be to hold a mid-year governing board meeting for NCD at the Midwest Fish and Wildlife Conference in Grand Rapids, MI
  - Did not want to overlap with the joint tech committees
- The group discussed holding a joint WTC/CTC/ETC winter meeting due to low attendance; most members were supportive of this