North Central Division of the American Fisheries Society

Walleye Technical Committee Business Meeting Minutes

July 24th, 2014 LaCrosse, Wisconsin

The North Central Division Walleye Technical Committee (WTC) met during July 23rd-24th in Lacrosse, Wisconsin. The meeting was held in conjunction with the Centrachid and Esocid Technical committees. Approximately 36 people attended the meeting and we had 12 technical presentations. The business meeting was called to order at 8:30am. There were no meeting minutes to report from the winter 2013 meeting in Kansas City, Missouri.

State and Provincial Reports:

- **North Dakota: Todd Caspers (NGFD)**

  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 last year.
  We recently finished up our Standard Adult Sampling on Devils Lake. Results are still preliminary, but the overall CPUE of walleye fell slightly to 24.8 walleye/net-night in our 125' variegated gill nets. (26.8 last year)
  During the summer of 2013 and winter of 2014, a creel survey on Devils Lake was completed. Some highlights of the survey include:
  1,327,509 hours of angler effort, which is roughly 7.8 hours per acre.
  Anglers harvested roughly 430,000 walleye, which equates to about 2.7 pounds per acre. Anglers also harvested around 136,000 yellow perch and 48,000 pike. Most pike are released as 88% of the pike that are caught are released.
  Overall, anglers harvested nearly 4.5 pounds of game fish per acre during the survey periods.
  Overall, about 38% of Devils Lake anglers were non-residents.
  We asked a size preference question of our anglers. The question was: If total weight were equal, would you rather keep 5-15" walleyes or 2-20" walleyes in a day's fishing? 84% of open-water anglers and 81% of ice anglers said that they would prefer to keep the smaller 15" walleyes.

The North Dakota Game and Fish Department is working with the US Fish and Wildlife Service and local angling groups to open up the Lake Alice National Wildlife Refuge to ice fishing. It is fairly likely that ice fishing will be allowed starting in the winter of 2015-2016. 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 1993 we have added 51 new walleye lakes totaling over 55,000 acres. State-wide there are currently about 156 waters that have walleye populations and we seem to be able to add a few on to the total each 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. Things are slowly getting better forage-wise though.

Our department stocked a record number of lakes this year with walleye, as they were stocked in 133 lakes. The 10 million fingerlings were generally about 30 days old and were around 1.25" long.

South Dakota: Hilary Meyer (SDGFP), Eli Felts (SDSU) and Bob Hanten (SDGFP)

Missouri River Walleye Otolith Microchemistry Research Highlights

- Water chemistry
    - We evaluated spatial variability in trace element (Sr, Ba, Mg, Mn, Na) strontium concentrations in tributaries and mainstem/embayment sites in four Missouri River reservoirs (Oahe, Sharpe, Francis Case, Lewis & Clark) in South Dakota, USA.
    - Spatial variability: north-south gradient in Sr:Ca signatures
    - Tributaries exhibit greater heterogeneity in Sr:Ca and Ba:Ca signatures than mainstem/embayment sites, laying a foundation for reliable otolith microchemistry
- Water-otolith relationships
    - Positive and proportional, especially for tributaries (Lake Oahe in particular). Thus, these sites are best for evaluating Walleye environmental history (natal origins, movements, entrainment)
- Natal Origins

    - Bivariate (e.g., Sr:Ca and Ba:Ca) adult natal (i.e., core) otolith signatures exhibited site-specific heterogeneity sufficient for identification of natal tributaries and mainstem/embayment sites.
    - Discriminant function reclassification accuracies to natal sites were high (≥ 79%) from age-0 and adult walleye.
    - The majority of tributary-natal walleye (67.27%, n = 74) and Lake Oahe walleye (77.08%, n = 74) hatched in Lake Oahe tributaries, as did 32.31% of all adult walleyes collected in this study.
    - The Moreau River and Cannonball River were particularly important natal sites in Lake Oahe, as were North Shore, West Bend, Platte Creek, and the Lewis & Clark Delta in southern reservoirs.
    - 38.54% and 18.75 % percent of Walleyes captured in Lake Oahe hatched in the Moreau River and Cannonball River, respectively. These tributaries are important natal sites for downstream walleye populations and could be prioritized for protection, habitat improvement, harvest regulations, and other management actions.
    - Overall, otolith microchemistry is an effective, reliable tool for studying natal origins of walleye in Missouri River reservoirs, permitting estimation of relative natal contribution from tributaries and mainstem/embayment locations.
- Movement and Entrainment
    - Bivariate (e.g., Sr:Ca and Ba:Ca) natal and flood signatures of adults exhibited site-specific heterogeneity and low (< 15%) discriminant function reclassification accuracies to collection locations, indicating inter- and intra-reservoir movement.
    - The percentage of entrained Walleye progressively increased moving downstream from Lake Sharpe (18.87%) to Lake Francis Case (24.39%) to Lewis & Clark Lake (34.15%), as did percent flood-entrained Walleye.
    - Nearly two-thirds (64.71%) of entrained walleye moved through dams during the disturbance. Entrainment was approximately two times more extensive during the flood than other years combined.
    - Locations with the highest entrainment percentages by reservoir included Lake Sharpe Stilling Basin (23.53%), Chamberlain Area in Lake Francis Case (29.41%), and Gavin's Point Dam in Lewis & Clark Lake (42.86%).
    - Overall, otolith microchemistry is a precise, high-resolution technique for examining walleye entrainment in Missouri River reservoirs.

Lake Oahe Walleye Tagging project (Eli Felts, SDSU)

Objectives of this project are to look at Walleye mortality, Walleye movement and to model effects of regulation changes on the population. We are using jaw tags (as well as dorsal spine removal in 2013 for tag loss) to mark fish. A proportion of tagged fish were tagged with a $100 reward tag to assess non-reporting rates. In 2013, we tagged a total of 9,176 walleye, with 394 of those receiving a reward tag (4.3%). A total of 1,592 tags were returned, with most of them caught in May, June and July. A total of 14.9% of the standard tags were returned, and 24.6%

of the reward tags were returned, with an estimated reporting rate of 60.7%. The mean distance moved for tagged fish was 23 river miles, and the longest distance moved was 298 river miles (from Garrison Dam, ND to Okobojo point, SD). Fish tagged in the upper reaches of Lake Oahe moved greater average distances than fish in the middle and lower reaches of Lake Oahe. In 2014 we were able to tag 7,795 walleye, with 462 of those being reward tags. So far, 367 tags have been reported (as of May 2014). We plan to continue tagging fish through 2016, with a goal of 10,000 Walleye per year.

Nebraska: Zach Woiak (UNK)

Nebraska biologists Tony Barada and Daryl Bauer commented that walleye fry stocking evaluations and advanced fingerling walleye and saugeye stocking evaluations are either ongoing or planned in the near future for Nebraska. Also, biologist Jordan Katt reported an experimental protected slot limit at Sherman Reservoir (one of the state's important brood stock lakes) has been successful at protecting and enhancing the numbers of brood stock walleyes.

The growth potential, seasonal food habits, and ontogenetic diet shifts of age-0 walleye are currently being investigated by Zach Woiak (MS student – University of Nebraska at Kearney) within Harlan County Reservoir. The scope of this project is to investigate the underlying energetic factors influencing age-0 walleye growth within Harlan County Reservoir and to help explain the large intracohort variability in length documented within the reservoir. The collected age-0 walleye are also being analyzed for OTC marks to distinguish between stocked and naturally produced fish.

Kansas: No Report

Missouri: Paul Cieslewicz (MDC)

<u>Lost Valley Hatchery</u>
Lost Valley Hatchery was assigned to raise 557,350 (<4 inch) fingerlings. In March, 176 females and 175 males were collected which produced 10,782,207 eggs. Of the 4,500,183 fry, 2,029,000 fry were stocked into 15 production ponds. Surplus fry were stocked into Lake of the Ozarks below Truman Dam. A total of 766,923 fingerlings were produced and stocked into the following lakes:

Bilby	3,150
Mozingo	3,520
Longview	19,700
Smithville	218,800
Stockton	89,269
Long Branch	27,456
Pomme De Terre	40,339
Truman	171,273
Table Rock	93,575
Norfork	53,228
Kept for advanced walleye production	26,613

Chesapeake Hatchery

In March, 150 males and 60 female walleye were collected from Bull Shoals Reservoir. These fish produced 5,734,579 fry. Eleven, one acre ponds were stocked with 150,000 fry each. These ponds yielded 804,809 fingerlings (avg, 1.5"). On average, each pond produced 72,469 fingerlings (43.7% return). Fingerlings were stocked in the following lakes:

Stockton	214,015
Bull Shoals	353,359
Pomme De Terre	12,768
Norfork	224,667

Black River Walleye Strain Research Project

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

Goals and Highlights:

- **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 February and March, 27 Current River male walleye and 12 Black River female walleye were collected and transferred to the Chesapeake Fish Hatchery. All walleye underwent genetic testing to determine haplotype. A total of 875,397 Black River fry were produced. Two ponds were stocked with 150,000 fry each from the middle 40% of hatching fry. A total of 17,148 fingerlings were produced. These fingerlings were marked with OTC and stocked into the Eleven Point River.

	Percent Return from Pond (Goal = 25%) (number of fingerlings produced)				
Pond Number	2010	2011	2012	2013	2014
13	21.4% 26,429	--------	34.9% 52,393	2.8% 419	5.8 % 8,784
14	0.8% 1,050	0.8% 1,137	28.8% 43,231	8.7% 13,070	5.5% 8,364

Ozark Region

Bull Shoals was stocked with 352,000 walleye fingerlings (<2") in mid-May (8 fish/Acre), fulfilling the annual stocking request. Sixty broodstock walleye were utilized to determine VHS presence and fortunately the results came back negative. To maximize these fish, otoliths and dorsal spines were also removed to provide an age estimate comparison between the two structures.

Norfork was stocked with 270,000 walleye fingerlings (<2") in mid-May (12.3 fish/Acre), exceeding the annual stocking request by 50,000.

Kansas City Region

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

Southwest Region

The Pomme de Terre Lake walleye population is annually assessed by electrofishing at three sites (lake dam, Pomme de Terre River tributary, and Lindley Creek tributary). In 2014, the lake dam was not sampled due to poor weather conditions. The walleye catch rate in the two tributary sites was 38.2 fish per hour, compared to 44.9 and 73.2 fish per hour in 2012 and 2011, respectively. Overall, catch rates in the tributaries seem to be more variable when compared to those of the dam site, probably due to greater fluctuations of water conditions. Size structure is also more variable than that of the dam site, with RSD(20) values ranging from 48% to 81% during the period 2011 through 2014. 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 five out of the last six years (2009 – 2014)

Stockton Lake: 300,000 fingerlings were stocked, meeting the request of the current annual stocking regime. Spring electrofishing catch rates were the highest since 2008 at 59 stock size fish/hour. PSD (15) and RSD (20) were 66% and 17% respectively. Planning is currently underway to conduct a two year angler creel on Stockton Lake in 2015-2016. A major objective of the creel is to get a more accurate measure of walleye angling statistics such as harvest and angling effort.

Iowa: No Report

Minnesota: No Report

Michigan: Cory Kovacs (MIDNR)

Hatchery and Culture Updates:

-Little Traverse Bay Band of Odawa Indians (LTTB) operated 2 new rearing ponds for the 2014 rearing season. Results of the harvest have not been reported to date.

-Sault Ste. Marie Tribe of Chippewa Indians (ITFAP) operated 5 rearing ponds in 2014. They harvested and stocked out about 1.7 million spring fingerlings. They stocked 16 sites within the 1836 treaty area. A rearing pond (250 ac.) holding 300,000 walleye for stocking fall fingerlings will be harvested sometime in September or October.

-Thompson State Fish Hatchery-MDNR-Bay de Noc Strain- Egg take this year occurred during a more normal time period than the previous two years (2012 earliest on record; 2013 latest on record). Due to poor fertility the previous 2 years, a more selective egg take in 2014 resulted in much higher fertilities than in 2013. Fertilities were in the 60%'s (20%'s in 2013). The high egg survival resulted in a 4 million fry surplus. Total fry put out of hatchery was **8.33 million** with 3 million of the surplus fry going back to Little Bay de Noc (egg source). Had been using fuller's earth for de-adhesion, but in 2015 tannic acid will be used on a portion to see if fertility can be improved. OTC marked fry requests were at an all-time low due to management units dropping requests for marked fry due to concerns OTC marked fry survival. Only 15% of fry were marked for 2014 and only one rearing pond received marked fish. Marked a total of 1.25 million fry. Contact: Jan Vanamberg, MDNR

-Wolf Lake State Fish Hatchery-MDNR-Muskegon River Strain-Egg take was difficult this year due to extremely high water and a late spring. River temperatures were unseasonably cold at the beginning of the egg take and may have contributed to lower fertility rates. Wolf Lake hatchery typically sees a fertility rate of 70-75%. All fry requests for rearing ponds were covered, but direct fry plants were not completely filled. Total fry put out of hatchery was **13.15 million**. Contact: Matt Hughes, MDNR

-Platte River State Fish Hatchery-MDNR-Muskegon River Strain- Second attempt at hatching WAE fry. This has been a coldwater facility, primarily rearing Coho, chinook, and Atlantic salmon. WAE rearing is being attempted here to see what type of success there will be. Hatchery relocated and rebuilt the WAE incubation unit in a separate building isolating it from the coldwater rearing areas. A total of 286,027 fry were produced (16% hatch rate) and sent to management unit rearing ponds for spring fingerling production. A total of 50,000 fry were OTC marked at Platte with good success (first year for marking procedures here). Staff is excited for another chance to produce more fry at Platte River SFH. Contact Aaron Switzer, MDNR

MDNR Management Unit Rearing Pond Summaries:

-Northern Lake Michigan MU (UP): harvested 5 ponds with a total of 568,593 spring fingerlings

-Western Lake Superior MU (UP): No walleye rearing occurred in 2014

-Eastern Lake Superior MU (UP): harvested 2 ponds with a total of 113,501 spring fingerlings; total return for the ponds was 37.8%

-Central Lake Michigan MU: harvested 2 ponds with a total of 594,900 spring fingerlings

-Southern Lake Michigan MU: harvested 5 ponds with a total of 475,907 spring fingerlings; rearing fall fingerling WAE in 3 ponds and feeding with fathead minnows (reared in house)

-Northern Lake Huron MU: harvested 2 ponds with a total of 416,429 spring fingerlings

-Southern Lake Huron MU: harvested a total of 1,173,127 spring fingerlings

-Lake Erie MU: harvested 2 ponds with a total of 331,369 spring fingerlings

Research and Management Activity Updates:

Contribution of stocked and wild fish to the Lower Saint Joseph River Walleye Population (in review)
Contact: Brian Gunderman, MDNR South Lake Michigan MU

Abstract.–The Michigan Department of Natural Resources has been stocking walleyes in the lower St. Joseph River since 1980. Age-frequency data from creel surveys conducted on the river during the 1990s suggested substantial natural recruitment of walleyes in this system. As part of an effort to more accurately quantify the relative contributions of stocked and wild fish to the lower St. Joseph River walleye population, oxytetracycline-marked spring fingerlings were stocked at various locations downstream of the Niles, Buchanan, and Berrien Springs dams during 2005-2011. Fall electrofishing surveys were conducted annually at six sites between the Niles Dam and Benton Harbor during 2005-2012. Sagittal otoliths were removed from each walleye and examined for oxytetracycline marks, and ages of captured walleye were ascertained from dorsal fin ray samples. The total catch for all sampling efforts was 431 walleyes from the 2005-2012 year classes. Marked fish composed 47% of the catch. The percentage of marked fish varied by sampling site and cohort. Upstream movement of walleyes through the Berrien Springs fish ladder was limited. However, downstream movement of stocked walleyes past one or more dams was common. Catch-per-effort of unmarked young-of-year walleyes was highest in the stream reaches immediately downstream of dams. No significant correlations were observed between mean April discharge during the year of hatching and subsequent electrofishing catch rates for unmarked juvenile walleyes. Mean lengths at age for walleyes in the lower St. Joseph River exceeded statewide averages. General linear model results indicated that marginal mean lengths at age were significantly greater for walleyes collected downstream of the Berrien Springs Dam compared to fish captured upstream of the dam. Stocked fish strongly contribute to the walleye population in this system, and biennial stocking of spring fingerling walleyes is recommended to maintain the existing fishery.

Bays de Noc Study (MDNR) Contact: Troy Zorn, MDNR

Highlights: Since 2004, MDNR has been conducting a long term study to determine the contributions of hatchery-reared walleye in Bays de Noc and how management strategies may be affected. Of the 2,194

walleye examined from Little Bay de Noc (LBDN), 76% were naturally reproduced. Of 763 walleyes examined from Big Bay de Noc (BBDN) 62% were naturally reproduced. Wild and hatchery walleye were found to have no differences in growth, however walleyes in BBDN grew faster than those in LBDN. Primary conclusion was that walleye management for BBDN should focus on the use of reef-spawning strains rather than river spawning strains for stocking due to the lack of suitable high-quality spawning rivers. Also as a part of this study is an assessment of the fish community status in Bays de Noc. Gill net CPUE shows an increasing trend in walleye abundance for LBDN, but relatively unchanged for BBDN. Bottom trawl samples show a fish community dominated by round goby at every station (n=8).

Lake Huron-Walleye Update (MDNR, GLFC, Clarkson UNIV. and OHDNR) Contact: Dave Fielder, MDNR

The statistical-catch-at-age model for the Saginaw Bay stock of walleye has been finalized. That stock hit recovery targets in 2009. Stocking was discontinued in 2006. The SCAA model gives updated information on mortality rates and population estimates. The 2011 estimate was over 2.5 million walleyes (age 2+). Telemetry using Vemco transmitters and receivers show that about half the adult walleye are making a migration from the bay to the rest of Lake Huron in most years with emigration as early as June. This is early than expected and a greater proportion of the population than previous thought. This has implications for our predator/prey balance in the lake. The collapse of alewives has allowed for improved survival of newly hatched walleye fry.

Walleye Population Estimates-Tribal Coordination Unit, MDNR Contact: Patrick Hanchin, MDNR

Currently, the TCU is working with the tribes to better handle poor estimation of the number of female walleyes in spring population estimates. This is a joint effort with 1836 Tribes and GLIFWC. Try to improve methods or possibly use some type of correction factor. Many population estimates have been found unsuitable due to the lack of females being represented in the estimate.

Walleye Committee (MDNR) Contact Patrick Hanchin, Tim Cwalinski, or Cory Kovacs

In the summer of 2013, Fisheries Division Management Team tasked the Walleye Committee with rewriting the Fish Division policy and procedure, which is outdated (1975) and a mixture of documents that cover a wide variety of topics. In the winter of 2014, Tim Cwalinski and Patrick Hanchin conducted a survey of management units which operate rearing ponds seeking knowledge of rearing pond selection and operation. The policy and procedure went to the Walleye Committee for review and then onto Management Team for their review in spring of 2014. The revised policy and procedure will be used when selecting locations for new rearing ponds and in operations of current and future rearing ponds.

Wisconsin: Steve Gilbert (WIDNR)

1. **Wisconsin Walleye Initiative**
   The biggest news regarding walleye management in Wisconsin is this two year, $13 million, program designed to increase the number of walleyes in state waters by expanding production of large fingerling walleye. This program is funded by legislation sponsored by the Governor's office. Funding of the program started in the late summer if 2013. Prior to this the state reared about 40,000 large fingerlings. The total large fingerling production for 2013 was a record 416,506 from state hatcheries and an additional 23,975 from private sources. The goal for 2015 is about 750,000 large fingerlings from these two sources combined.

Key items of the program are:

- $8.2 million for infrastructure improvements an $1.3 million each year for annual operating costs to expand walleye production at DNR fish hatcheries
- One time funding of $2 million for grants to municipal, tribal, and private aquaculture facilities to enhance their capabilities to produce large fingerling walleye.
- $500,000 annually to purchase large fingerlings from private sources.

There is also a plan for the department to evaluate the success of this stocking effort. Stating in the fall of 2013, lakes already selected by local biologists to receive lager were randomly selected to be stocked at a rate of 5, 10, 15, and 20 per acre. Lakes across the state were selected and treatments were stratified by acreage. All lakes in the program will be stocked on an alternate year basis as long as fish are available.

Lakes in the program will be surveyed annually using electrofishing gear in the fall to determine recruitment status, young or year and yearling walleye abundance. A subsample of sentential lakes will receive additional survey work over the next ten years. More detailed information is available at: dnr.wi.gov/topic/fishing/outreach/walleyeinitatiave

2. **Wisconsin Walleye Management Plan**

In 1998, the department in conjunction with many user groups developed this document to identify current walleye population and fishery management issues in the state; develop updated management objectives; recommend actions to address these issues and objectives. The department plans to update this document over the next two years using the same process used to draft the original document. The timeline for this project is to have a draft ready for review by the winter of 2014.

3. **Experimental Bass – Walleye lakes Project**

This project was initiated due to concerns related to the increase of largemouth bass and decrease of walleye in some waters. Special regulations were adopted on twenty waters in the northern part of the state to increase largemouth bass harvest and limit walleye harvest. The base regulation selected for these waters was no minimum length limit on bass (largemouth and smallmouth) and a bag of five in total. These waters would also have an 18” minimum and a three fish bag limit on walleye. The regulation went into all project waters by the spring of 2012. A committee was formed to evaluate these waters and designate several (14) reference waters to see if the regulation has had the desired effect. Over the next eight years these water will be monitored for changes in the fish community.

4. **Statewide Trolling Rule Modification**

Trolling with three lines with hook and line is currently allowed in most counties statewide. Seventeen of the state's 72 counties are covered by regulations that prohibit trolling or allow it only on select waters.

Based on public hearings conducted in the spring of 2014, trolling would now be allowed in these counties with the following restrictions:

- Only one line can be trolled per angler with a limit of two lines per boat.
- You can cast and retrieve up to two additional lines per angler.
- There is a 3 year sunset clause on this regulation.

If this regulation gets final legislative approval it will go into effect in the spring of 2015. There are plans that started in the spring of 2014 to use our statewide creel program to evaluate the effects of trolling on fish harvest.

5. **Staff Issues**
   Ron Bruch is our have a new fisheries bureau director as of early this year. There will also be numerous fisheries supervisor positions available statewide in the next year. The filling of these vacancies will likely create additional biologist openings in the future.

Illinois: No Report

Indiana: Jason Doll (Ball State University)

Statewide stocking in 2014: 870,180 fingerlings and 27,846,800 fry

Historically the walleye program was built on June fingerlings at stocking rates between 50 – 100/acre. However, declines in stocking success at some Northern Indiana natural lakes resulted in experimentation of stocking advanced fingerlings. Thus, around 2001 a select few lakes received an annual stocking of walleye advanced fingerlings at a rate of 10/acre. This proved successful and this program has been expanded to more Northern Indiana lakes. Alternate year stockings have also recently been conducted at two lakes. Here, the lakes alternate between traditional June fingerlings and advanced fall fingerlings.

INDIANA WALLEYE RECRUITMENT:
EVALUATING PREDICTORS OF STOCKING SUCCESS

Doll, Jason C.[1], Lauer, Thomas E.[1], and Clark-Kolaks, Sandra[2]

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Contact email: jcdoll@bsu.edu

Walleye *Sander vitreum* are one of the most sought-after sport fish in Indiana, and to meet this demand, the Indiana Division of Fish and Wildlife annually stocks this species statewide. However, there is a paucity of information that describes what variables influence recruitment in Indiana reservoirs. The objective of this study was to determine whether Walleye stocking abundance, Walleye distributional stocking patterns (number of stocking days), moronid stocking abundance, spring/summer warming rate, and maximum spring/summer discharge are related to fall electrofishing catch rates of age-0 Walleye in six reservoirs. We used a Generalized Linear Model with a Poisson distribution to model these relationships. Parameters of the model were estimated using Bayesian inference in a hierarchical framework. Here, model parameters for each reservoir are assumed exchangeable and thus come from a global distribution to "share" information among reservoirs. The most parsimonious model was selected by using the penalized expected deviance. Up to 20 year classes from six reservoirs were included in this analysis. The best model included moronid stocking, distributional stocking patterns of Walleye, and maximum discharge. Reservoir specific trends were variable and no consistent patterns were observed. The effect of moronid stocking was negative at two reservoirs and positive at one reservoir. Similarly, discharge was negatively related to age-0 electrofishing catch rate at two reservoirs and positive at three reservoirs. The effect of distributional stocking patterns was positive at three reservoirs. Our results suggest that variables influencing Walleye recruitment to the fall is reservoir specific. These results will be used to optimize future stocking regimes to maximize recruitment to harvestable size.

Ohio: No Report

Financial report: Hilary Meyer for Andy Jansen

07/09/2014				
2014 WTC	Description	Expenses	Deposits	Balance
01-Jan				13,469.62
02-Jan	plaque	$25.00		
30-Jun	ytd interest		$26.64	
		$25.00	$26.64	13,471.26

Chair-Elect nominations: None

Future Meeting Locations and Dates: The 2015 winter meeting will be in Indianapolis, IN at the Midwest Fish and Wildlife Conference February 8th-11th 2015. Due to low attendance of past winter meetings, it was suggested that the WTC, CTC and ETC have a joint winter business meeting.

The 2015 WTC Summer business meeting will be held in Brookings, SD July 21-23rd 2015. The exact location is yet to be determined. Hilary Meyer will be planning and coordinating the meeting. If anyone has any suggestions for a continuing education course for the summer 2015 meeting, please send them to: Hilary.Meyer@state.sd.us.

Old Business: There was no old business to discuss.

New business: There was no new business to discuss.