



NORTH CENTRAL DIVISION OF THE AMERICAN FISHERIES SOCIETY

Walleye Technical Committee

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2011 Winter Business Meeting Minutes

72nd Annual Midwest Fish and Wildlife Conference, Des Moines, Iowa

December 4, 2011, Des Moines Marriott

1. Chair Jansen called the meeting to order at 4:01 PM. Introductions of the 16 members present were made.
2. No additions were made to the agenda and it was approved as written.

Old Business

1. **Presentation of the Sander travel award:** Jason DeBoer (University of Nebraska—Lincoln) was presented with the travel award to the 2011 Midwest Fish and Wildlife Conference. Jason was given \$100 from the WTC. Jason's research involves studying recruitment bottlenecks of walleye and white bass in irrigation reservoirs of southwest Nebraska. He gave two oral presentations and one poster presentation on his research at the conference. There were nine applications received this year.
2. **Approval of the 2010 summer meeting minutes:** Some discussion followed about the 2011 summer meeting. There were 52 attendees and 15 students from the three committees – Walleye, Esocid, and Centrarchid – with fourteen presentations made. Mark Kaemingk of the CTC set up the Program Mark Workshop and Bob Klaver presented. A total of seventeen professionals and 7 students attended. The meeting was a big success thanks to Chair Andy, Mike Steuck, and Megan Thul. No changes were made to the minutes and they were approved.
3. **State reports:**

Iowa: Randy Schultz reported the following:

Iowa is working on two impoundment walleye projects.

Big Creek walleye stocking evaluation.

Big Creek Lake is an 883 ac impoundment located near Des Moines. Intense angling pressure (116 h/ac) and numerous angler trips (32,000) reflect the importance of this fishery to central Iowa anglers. Preferred stockings of 8-in walleye fingerlings have been reduced due to the popularity of this size fish. We are attempting to evaluate the contribution of fry, freeze-branded 2-in and freeze-branded 8-in walleye at this impoundment. Tributaries to Big Creek are believed to have the capability to provide adequate habitat and prey for 2 in fingerling stockings, and this stocking method warrants further investigation.

During 2011 32,000 2-in walleye fingerlings were freeze-branded and stocked in two tributaries to Big Creek. Fall nighttime electrofishing will be conducted to evaluate success of the stocking. We determined initial (2h) mortality to be 5.2%. We attempted to hold 100 freeze-branded and 100 control fish for 2 wk to evaluate long-term mortality. Fish were held in separate circular tanks and fed walleye starter diet. On day 8 we started experiencing large scale mortalities in both tanks. Neither one week nor two week mortalities differed

between treatments (chi square = 0.98; df = 1; P = 0.32 and chi square = 0.0.49; df = 1; P = 0.48, respectively). Eight inch walleye fingerlings will be differentiated with a unique freeze-brand and stocked this fall.

During spring 2010 195 walleye were collected and tagged with Carlin dangler tags to evaluate exploitation within Big Creek. Nearly all tags that were returned came from the shallow upper end of Big Creek during summer months. Emigration was evident with two tagged fish caught below Big Creek in the Des Moines River. We attempted to conduct a windshield surrogate postcard survey to determine tag return rates, but only 7% of postcards were returned. We estimated 2010 exploitation to be 32% after compensating for a 25% non-reporting rate and 9% tag loss (Quist et al. 2010).

Quist, M. C., J. L. Stephen, S. T. Lynott, C. S. Guy, J. M. Goeckler, and R. D. Schultz. 2010. Exploitation of walleyes in a Great Plains reservoir: harvest patterns and management scenarios. *Fisheries Management and Ecology* 17:522 – 531.

Rathbun Lake outmigration study.

We are working with Michael Weber (SDSU) to utilize MARK to evaluate walleye emigration in an effort to convince the USACE to assist with a non-physical barrier placement at Rathbun Lake to retain Iowa broodfish walleye. Much attention has been given to the restoration of the walleye population at Rathbun Lake, Iowa. Large-scale declines in the 80's was met with a concerted research effort to improve and sustain this population and by the late 90's the biomass had effectively been tripled and restoration goals were met. However, recent high levels of out-migration have placed the sustainability of this population in jeopardy. Since the spring of 2008 more than 11,000 walleyes, totally more than 17,000 lbs have been collected post-passage in the Rathbun Lake tailrace, VI-tagged, and returned to Rathbun Lake. Spring 2011 estimates of the Rathbun Lake walleye population are 8,270 broodstock (i.e. ≥ 17 in) and 27,269 adult walleyes (i.e. ≥ 12 in). Total biomass is estimated at 6.4 lbs / ac for Rathbun Lake. Multiple estimates suggest that a minimal estimate of adult walleye loss in 2010 and 2011 likely exceeds 10% and 17%, respectively. This is especially troubling in that this was during a period of the year in which walleyes are generally believed to be their least vulnerable to passage and flows were only moderate. Minimal estimates of broodstock loss from 2010 to 2011 during record floodwater discharge approaches 40%. The associated valuation of fish loss as evidenced by recapture efforts in the tailrace exceeds \$600,000 since spring of 2009. We therefore suggest that the construction and operation of a nonphysical barrier is critical to the sustainability of this important walleye fishery and the cost effectiveness of such a structure is obvious.

Preliminary modeling results indicate:

1. Smaller fish are more likely to leave reservoir
2. The greater the distance from the dam that walleye are returned to the lake (furthest distance up-lake) the less likely fish are to be found again in the tailrace
3. Greater discharge = greater movement

Although these results are not “rocket-science”, they do provide firm data to justify placement of a non-physical barrier in Rathbun Lake.

Iowa presentations at 72nd Midwest:

Low-dose rotenone applications to eradicate gizzard shad in Iowa lakes	Sobotka	M	2:00
Walleye culture techniques and research in Phases I and II at Rathbun Fish Hatchery	Esser	T	8:40
Walleye culture techniques and research in phase III growout at Rathbun Fish Hatchery.	Clouse	T	9:00
Current Techniques and Diets for Walleye Larviculture	Johnson	T	11:40
Walleye Fishery Assessment for the Turkey and Wapsipinicon Rivers of Iowa	Kirby	M	2:00
Causes and Impacts of Walleye Emigration at Rathbun Lake, Iowa	Flammang	M	1:20

Respectfully submitted,
Randall Schultz, Iowa WTC representative

Nebraska: Jason DeBoer reported the following:

Due to abundant winter snowpack and summer rains, water levels in many reservoirs across Nebraska are on the rise in the last year, and biologists predict good things are to come for walleye anglers in coming years.

Research Updates

University of Nebraska-Kearney

Chris Uphoff (M.S.), with Dr. Casey Schoenebeck

My project is focusing on variability of growth and seasonal food habits of age-0 walleye in Harlan County Reservoir. There is a lot of intrapopulation variation in growth both within and among years. A good example is juvenile walleyes this fall in Harlan ranged from 5 to 10 in. We are looking at different factors that may be affecting these differences in growth, including the use stable isotope and gut content analysis to track seasonal changes in juvenile walleye food habits. Both field seasons have been completed and samples are being processed and sent in for stable isotope analysis. We found intrapopulation variability in the timing of seasonal diet shifts among age-0 walleyes, with the larger age-0 walleyes switching to piscivory sooner than the smaller walleyes. For more preliminary results, I will be presenting this research during the Percid Session, Monday afternoon.

Seth Lundgren (M.S.), with Dr. Casey Scheonebeck

OTC-marked yellow perch were released in September into eight I-80 lakes (each had varying bass densities, surface areas, depths, and vegetation features) in order to try and find suitable lakes to establish a yellow perch fishery. Stocking mortality and water quality parameters were assessed to determine if anything other than largemouth bass predation contributed to mortality. We found no stocking mortality and no water quality parameters that would indicate mortality. Largemouth bass were then electrofished after dark and lavaged to determine yellow perch mortality due to predation. Results forthcoming.

University of Nebraska-Lincoln

Jason DeBoer (Ph.D.), with Dr. Kevin Pope

We are trying to identify recruitment bottlenecks for walleye (and white bass) in irrigation reservoirs of SW Nebraska. We have completed 5 years of sampling on this project (3 with me at the helm). We are still processing zooplankton, larval fish, and juvenile fish samples, with the intent of determining hatch dates, growth rates, and diet for walleye (and white bass). Descriptive modeling from Nebraska Game & Parks gillnet data shows age-1 walleye abundance is negatively correlated with several factors during their first year of life, primarily those factors associated with increased reservoir discharge.

DeBoer, J.A., K.L. Pope and K.D. Koupal. *In preparation*. Factors regulating recruitment of early- and late-spawning fish. Target: *Environmental Biology of Fish*.

Peter Spirk (M.S.), with Dr. Kevin Pope

We are exploring whether different harvest regulation may have an effect on population dynamics of sexually-size dimorphic fishes (e.g., walleye, white bass, white crappie). To evaluate differences in population dynamics, we estimated size, gender, and age from angler-harvested walleye at two Nebraska reservoirs that have different harvest regulations. Additionally, we used Leslie matrix models to evaluate how population dynamics of sexually-size dimorphic fishes would differ using various length limit. Through modeling, subtle changes in length limits produced a highly skewed sex ratio of fish harvested for walleye, the species with greatest sexual-size dimorphism.

Kansas: Jason Goeckler reported the following:

We are still working with triploid saugeye. In 2012 we will begin a 3 year project to evaluate survival of fry stocked diploids/triploids.

We had good production of triploids in 2011 as this was the first year utilizing a TRC pressure chamber. Induction rates have been within acceptable ranges.

Weston Fleming is a graduate student at Fort Hays State University and reports the following:
I am studying walleye at Cedar Bluff Reservoir, Kansas.

My research involves a comparison of age determinations among hard structures used to age walleye and young-of-the-year catch rates in two sizes of gill-nets. Additionally, I evaluated recruitment with the recruitment variation index (RVI) and determined that historical catch rates of young-of-the-year walleye in the one inch gill-net are a good predictor of year-class strength.

South Dakota: (submitted by Matt Ward):

A new heat exchange unit is being installed at Blue Dog Hatchery. The old unit had operated for thirty years and replacement parts for that machine were not available. The primary function of this new machine will be to increase water temps when walleye eggs get close to hatching.

-A study examining potential causes of low over winter survival of large fall year classes of age-0 walleye in SD lakes is going to begin in the near future. Dr. Melissa Wuellner of South Dakota State University will be the lead investigator.

The walleye population in Lake Oahe will be monitored closely to determine the effects of the 2011 flood on the predator-prey relationship in the reservoir. Hydroacoustic and larval trawl sampling indicated that high numbers of rainbow smelt were entrained from Oahe (66% loss estimated with hydroacoustic) during the water releases in 2011. However, estimated density of smelt remaining in the Reservoir is higher than 2009 estimates and if conditions are favorable spring of 2012, the smelt population will rebound quickly. Missouri River staff will continue to monitor both the smelt and walleye populations closely to determine the full effects of the flood and decide if any management actions are necessary.

South Dakota State University: Mark Kaemingk (Ph.D.), with Dr. Dave Willis

Overwinter mortality of sympatric juvenile bluegill and yellow perch in mid-temperate Sandhill lakes.

A substantial degree of mortality can occur in juvenile fish populations during their first year of winter, potentially influencing overall recruitment into the adult population. Therefore, relative abundances between fall and spring catches of juvenile bluegill (*Lepomis macrochirus*) and yellow perch (*Perca flavescens*) were compared to determine the magnitude of overwinter mortality in both spatial (five lakes for two years) and temporal (one lake for six years) scales. In addition, we compared quantile-quantile plots based on length-frequency histograms from fall- and spring-caught cohorts from 2004 to 2010 to determine if mortality was size-selective while accounting for overwinter growth. Bluegill relative abundance significantly decreased from fall to spring, but yellow perch relative abundances were similar in five Nebraska Sandhill lakes. No size-selective overwinter mortality was observed for bluegill; however, yellow perch exhibited size-selective overwinter mortality in three instances, occurring in the same year in two different lakes. Growth of both species appeared to be system-specific as no spatial patterns were observed between lakes. Factors thought to influence overwinter mortality likely differ in severity, size-selective effect, and scale (i.e., lake-specific vs. large-scale processes) between these two species in Nebraska Sandhill lakes.

Jolley, J.C., M.A. Kaemingk, D.W. Willis, R.S. Holland. *In revision*. Overwinter mortality of sympatric juvenile bluegill and yellow perch in mid-temperate prairie lakes. *Ecology of Freshwater Fish*.

Priority effects among young-of-the-year fish: reduced growth of bluegill sunfish (*Lepomis macrochirus*) caused by yellow perch (*Perca flavescens*)?

When available, *Daphnia* spp. are often preferred by age-0 yellow perch and bluegill sunfish because of energetic profitability. We hypothesized that predation by age-0 yellow perch could lead to a midsummer decline

(MSD) of *Daphnia* spp. and that priority effects may favour yellow perch because they hatch before bluegill, allowing them to capitalize on *Daphnia* spp. prior to bluegill emergence. Data were collected from 2004-2010 in Pelican Lake, Nebraska, USA. The lake experienced a prolonged MSD in all but one year (2005), generally occurring within the first two weeks of June except in 2008 and 2010 when it occurred at the end of June. MSD timing is not solely related to seasonal patterns of age-0 yellow perch consumption. Nevertheless, when *Daphnia* spp. biomass was low during 2004 and 2006-2010 ($< 4 \text{ mg wet weight L}^{-1}$), predation by age-0 yellow perch seems to have suppressed *Daphnia* spp. biomass (i.e., $< 1.0 \text{ mg wet weight L}^{-1}$). The exception was 2005 when age-0 yellow perch were absent. Growth of age-0 bluegill was significantly faster in 2005, when *Daphnia* spp. were available in greater densities ($> 4 \text{ mg wet weight L}^{-1}$) compared to the other years ($< 0.2 \text{ mg wet weight L}^{-1}$). We conclude that age-0 yellow perch are capable of reducing *Daphnia* biomass prior to the arrival of age-0 bluegill, ultimately slowing bluegill growth. Thus, priority effects favour age-0 yellow perch when competing with age-0 bluegill for *Daphnia*. However, these effects may be minimized if there is a shorter time between hatching of the two species, higher *Daphnia* spp. densities or lower age-0 yellow perch densities.

Kaemingk, M.A., J.C. Jolley, D.W. Willis, and S.R. Chipps. *In revision*. Priority effects among young-of-the-year fish: reduced growth of bluegill sunfish (*Lepomis macrochirus*) caused by yellow perch (*Perca flavescens*)? *Freshwater Biology*.

***In situ* approach to examine potential interactions between age-0 yellow perch (*Perca flavescens*) and bluegill (*Lepomis macrochirus*)**

Studies that focus on species interactions and resource partitioning are important during times of ecological uncertainty (e.g., species introductions, climate change, invasive species, and range expansions). Bluegill (*Lepomis macrochirus*) and yellow perch (*Perca flavescens*) populations are often sympatric in North America; however, very little attention has been given to potential interactions between these species for available resources (i.e., habitat, prey), especially during the early life stages. We sampled four habitat patch types (open water, *Phragmites* spp., *Typha* spp., *Scirpus* spp.) for age-0 bluegill and yellow perch, prey resources, and determined food habits of each species during August, September, and October in Pelican Lake, Nebraska. Relationships between age-0 bluegill and yellow perch growth and relative abundance were also explored across multiple years and lakes in this geographic vicinity. Juvenile bluegill and yellow perch exhibited differential habitat use and generally consumed different primary prey taxa (bluegill consumed both macroinvertebrates and zooplankton while yellow perch consumed more zooplankton), which resulted in low diet overlap between species during most months and habitat patch type comparisons. Habitat overlap was generally moderate to high for all three months sampled. Age-0 yellow perch growth was negatively related to age-0 bluegill relative abundance. The potential for competition or resource partitioning may be highest for prey resources as opposed to habitat resources among these two species. Therefore, future studies should focus on examining the magnitude or mechanisms involved in these potential competitive interactions between these two species for available prey resources.

Kaemingk, M.A and D. W. Willis. *In preparation*. *In situ* approach to examine potential interactions between age-0 yellow perch (*Perca flavescens*) and bluegill (*Lepomis macrochirus*).

Exploring spatial distributions of larval yellow perch *Perca flavescens*, bluegill *Lepomis macrochirus*, and their prey in relation to wind.

Prey densities must match spatial and temporal patterns of larval fishes if those fishes are to grow and survive. A mismatch in either spatial overlap or temporal timing can result in lower survival of larval fishes. The objectives were to determine if spatial differences existed between zooplankton, larval yellow perch *Perca flavescens* and bluegill *Lepomis macrochirus* ($< 13 \text{ mm L}_T$) in Pelican Lake (332 ha), Nebraska, U.S.A. It was hypothesized that wind could act as a transport mechanism for larval fishes in this shallow lake, because strong winds are common at this geographic location. Potential spatial differences were explored, relating to zooplankton densities, size structure and densities of larval *P. flavescens* and *L. macrochirus*. Density differences (east vs. west side of the lake) were detected for small (two occasions), medium (two occasions), and large-sized (one occasion) *L. macrochirus* larvae. No density differences were detected for small *P. flavescens* larvae;

however, densities of medium and large-sized *P. flavescens* were each higher on the west end of the lake on two occasions. There was no evidence that larval *P. flavescens* and *L. macrochirus* distributions were related to wind because they were not associated with large wind events. Likewise, large wind event days did not result in any detectable spatial differences of larval *P. flavescens* and *L. macrochirus* densities. There appeared to be no spatial mismatch between larval densities and associated prey in the years examined. Thus, wind apparently was not an influential mechanism for zooplankton and larval *P. flavescens* and *L. macrochirus* transport within Pelican Lake, and spatial differences in density may instead be related to vegetation/habitat complexities or spawning locations within this shallow lake.

Kaemingk, M.A., J.C. Jolley, D.W. Willis, and B.D.S. Graeb. 2011. Exploring spatial distributions of larval yellow perch *Perca flavescens*, bluegill *Lepomis macrochirus*, and their prey in relation to wind. *Journal of Fish Biology* 78:1132-1151.

Effects of simulated cold fronts on the survival and behavior of yellow perch *Perca flavescens* yolk-sac fry.

Recruitment of yellow perch *Perca flavescens* is often highly variable among systems and years and climatic variables such as water temperature have been suggested to influence larval perch recruitment. Our primary objective was to quantify survivorship of yellow perch yolk-sac fry exposed to two different declines (4 and 8 °C drops) in temperature and compare survivorship to that of perch fry under ambient room temperatures. We also qualitatively assessed behavior of yolk-sac fry yellow perch following the temperature declines. Mean survival in the control, -4, and -8 treatment tanks was 90%, 91% and 97%, respectively and no significant differences in percent survival were observed between the control and the -4 treatment ($t_s = -0.10$; $df = 7$; $p = 0.93$), the control and -8 treatment ($t_s = -1.85$; $df = 7$; $p = 0.11$) or the -4 and -8 treatments ($t_s = -1.33$; $df = 7$; $p = 0.22$). Observations of yellow perch eggs and fry behavior following temperature declines differed among treatments. Any remaining eggs in the control treatment and -4 treatments continued to hatch during the experiment and yellow perch fry were documented swimming throughout the water column in all tanks. However, in the -8 treatment, any eggs that had not hatched remained inactive and all fry within all the -8 treatment tanks ceased swimming activity and settled to the bottom of the tanks once temperature reached 3.9°C. Fry remained at the bottom of the tanks for the entire 48 h simulated cold-front. Fry resumed swimming activity once water temperatures began to increase (by ~ 6 °C). Our results indicated that drops in temperature (i.e. cold fronts) similar to or greater than those found in small impoundments did not cause direct mortality of yellow perch during the yolk-sac fry (post-hatch larvae) stage. Although temperature drops may not be the mechanism of decreased recruitment of yellow perch it may be a sub-lethal stressor leading to increased starvation or predation risk.

VanDeHey, J.A., M.A. Kaemingk, A.C. Jansen, B.D.S Graeb, D.J. Dembkowski, and D.W. Willis. *In review*. Effects of simulated cold fronts on the survival and behavior of yellow perch *Perca flavescens* yolk-sac fry. *Journal of Applied Ichthyology*.

South Dakota State University: Justin VanDeHey

1. Statewide yellow perch genetics project to assess diversity levels, obtain baseline stock structure data and assess growth potential of native perch. Drs. Brian Blackwell and Justin VanDeHey working with the Molecular Conservation Genetics Lab at UW-Stevens Point and Dr. Brian Sloss.
2. Completion of dissertation research project in spring of 2011 (Justin VanDeHey; SDSU) on the impacts of stocking gizzard shad into systems with yellow perch and walleye. Adult pre-spawn gizzard shad were collected and transported from Lake Sharpe, SD to two glacial lakes in NE South Dakota. No overwinter survival of shad was documented in either winter (08-09 or 09-10), although shad did successfully reproduce in both years. Adult stocking densities were low (<0.25 fish/acre) and larval densities were lower than Missouri River Reservoir populations. Impacts were neutral to slightly positive on walleye for growth and condition and seemed neutral to negligible on perch as no differences were observed in growth or condition. Future research may try higher densities of gizzard shad to produce more desirable effects with walleye, but will need to assess how the higher shad densities impact perch.

3. Megan Thul along with Drs. Steve Chipps and Brian Blackwell are assessing recruitment bottlenecks, growth and survival of age-0 walleye in South Dakota impoundments using both field and mesocosm data. Megan has completed two years of field collection and one year of mesocosm data.
4. PhD students Mark Kaemingk, Dan Dembkowski and Drs. Brian Graeb, Dave Willis and Justin VanDeHey have been continuing laboratory research on early life history of yellow perch assessing the impacts of both biotic (predation) and abiotic (thermal stressors) on survival of larval yellow perch. Some research is in review and more predation vulnerability research is planned for spring of 2012.
5. Drs. Brian Blackwell and Dave Willis are conducting a gear comparison research project with the new North American Standard Sampling techniques for gill nets and South Dakota's standard methods in the hopes of transitioning to the new North American methods. Gill nets are the primary means of sampling percids in South Dakota.

Indiana: Reported by Tom Bacula

Indiana Department of Natural Resources (IDNR) is currently developing new work plans for the next five years. From the previous plans new walleye fisheries were created and many were enhanced. The plan included a five-year stocking plan to reintroduce sauger to the Tippecanoe River. This river has two main river impoundments blocking sauger spawning migrations. Preliminary fall evaluations collected all age classes of stocked sauger in 2011 with the largest fish collected was 19.1 in. Future evaluations will focus on collection of age-0 fish in the fall to determine if sauger are successfully spawning.

IDNR is also changing and evaluating the use of forage finished advanced fingerling walleyes. Annually, 35,000 fingerlings are purchased from a commercial hatchery to meet stocking needs. In 2011, there was some experimental production in the IDNR hatcheries that resulted in an additional 15,000 advanced fingerling walleyes. The current change at some of the waters that do not meet the minimum success for age-0 fingerling stocking is to try advanced fingerlings at 10/acre. This change is due to the success that was seen using the commercially reared fish.

The project of advanced walleyes is using two larger lakes than the initially stocked lakes with state produced fish. Lake Maxinkuckee (1,864 acres) and Salamonie Reservoir will be changed to an advanced walleye fingerling stockings biyearly. The idea is to develop two fisheries with good year classes every other year than have one good fishery especially with the limited fish available and high cost of each fish. To further determine if a better fishery has developed at Lake Maxinkuckee a spring walleye trapping and population estimate will be attempted to determine adult walleye population prior to the change in stocking. This evaluation will occur again after there are multiple successful advanced fingerling walleyes produced.

Wisconsin: Paul Christel

Paul reports that there is a project in which walleye will be reared in floating raceways. They have three half-acre ponds in which the floating raceways will be installed. It is hoped that they can double up on production with yellow perch.

4. **Financial Report** (submitted by Donna Muhm):

WTC FINANCIAL REPORT	INCOME	EXPENSES	BALANCE
Beginning Balance, December 1, 2010			\$26,027.08
Sander Award		\$200.00	\$25,827.08
Book Donation	\$1,000.00		\$26,827.08
AFS Books		\$10,700.00	\$16,127.08
Editorial Services		\$5,000.00	\$11,127.08
Summer Meeting 2010	\$1,415.62	\$607.05	\$11,935.65
Book Donation	\$392.05		\$12,327.70
Interest accrued from December through October	\$210.37		\$12,538.07
Ending Balance as of October 1, 2011			\$12,538.07

5. **New Business**

Governing Board update: Randy Schultz gave an update from the governing board as follows:

Gwen White, the new NCD President, wants to strengthen the connection between all NCD units by encouraging NCD officers to attend Chapter meetings, and to establish a Midwest Conference Coordination Committee. She also wants to update the strategic plan for the division. There was good response from the recent survey and in the transition period of her office she wants to find how NCD can better serve its membership. The NCD also wants to increase its involvement with the LCC, and discover how to look at regional similarities and not be limited by state boundaries. There are some open positions in the NCD (Continuing Education Chair, Nominating Committee Chair) if anyone is interested in serving. There will be a webinar regarding the strategic plan in the next few weeks that will explain how to better put the plan into practice.

New Chair and Chair-elect: Andy introduced our new Chair, Paul Christel. As yet there is nobody nominated for Chair-elect. Anyone who has an idea for this is encouraged to contact Paul or Donna.

Summer Meeting: Paul's primary duty as the new Chair is to plan the summer meeting. John Bruner spoke with the Shedd Aquarium and they expressed interest in hosting a conference. John also thought that if the summer meeting was in Chicago we would get some additional attendees from the International Congress on the Biology of Fish held in Madison, WI the third weekend in July. Paul suggested Hayward, Wisconsin as the Freshwater Fishing Hall of Fame is located there and it is free of charge. There may be reduced rate or free meeting space and room rates available. The casinos in the area typically provide gift bags and other perks for meetings. He also asked if there was interest in including some sort of fishing outing or event.

Dates suggested included July 17 through 19 (immediately following the International Congress on the Biology of Fish in Madison, WI July 15 – 19, 2012) or July 24 through 26, with the latter seeming to garner more favor. Paul asked the membership if they would like to continue the association of holding joint meetings with the ETC and the CTC. It was pointed out that since we started doing this, our attendance has dramatically increased and our meetings have actually been profitable. The inclusion of workshops also added to this increase in attendance. Paul asked for suggestions for workshop themes or topics of interest. Dr. Robert Summerfelt suggested the following:

1. Pros and cons of hatchery production and stocking of all female walleye.
2. Cold banking or continuous overwinter growth in a water reuse aquaculture system of fall fingerling walleye for stocking the following spring/summer.

A brief discussion followed in which Justin VanDeHey expressed a strong genetic concern with reducing the number of available genotypes this would create. Dr. Summerfelt agreed that this would make for a good topic of discussion, since the issue is so contentious. Matt Ward suggested the topic of differentially-reared, different-time and different-sized walleye stocking survival analysis. Dr. Summerfelt

encouraged everyone to attend the Walleye Culture Symposium on Tuesday (Dec. 6) as it is rare to have this opportunity at Midwest. No agreement was reached about location and Paul will continue to work on this.

Walleye Synopsis: Justin VanDeHey encouraged everyone to get a copy of the new synopsis as it is very well done! Thanks to Patrick Hanchin for all of his hard work in bringing this to fruition.

6. **Adjournment:** Chair-Elect Christel asks for motion to adjourn. Motion made, seconded, and passed. Meeting adjourned at 5:00pm.

Submitted by Donna Hanen Muhm, WTC Secretary