



President's Message

Jeremiah Haas

First of all, I would like to thank everyone for participating in a very productive annual state meeting in 2011. With over 100 registrants from ILAFS, this was one of the largest meetings we have had in many years. The raffle netted around \$2000, of which the chapter will receive half of the proceeds. A special thanks to ILMA as well for taking the lead on arrangements and for putting together a good venue for the state meeting.

I would like to congratulate Scott Stuewe and Karen Rivera for taking on the roles of ExCom officers-at-large. I would also like to thank Gwen White, NCD President-elect, for giving the presentation on the activities currently occurring in the NCD.

I want to take a moment to encourage all members to help in the fund raising activities for the 50 @ 50 meeting, to be held next spring as part of the 50th anniversary. If you have any questions, please contact Jeremy Tiemann or myself and we would be happy to assist you in any way possible. Please check out the 50@50 section of the newsletter. Just as important, take the opportunity to invite former members to attend the meeting. One of the principle reasons for having this type of

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meeting is to get retirees input on the historical perspective and goals of the chapter. It is also to give students the opportunity to ask questions and “pick the brain” of someone who has been in the field a long, long, long time (the third long only applies to a few of our folks!)

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I hope everyone is shedding off the cabin fever as field season is beginning and I hope to run into you on the river soon.

- Jeremiah Haas



ILAFS 50 @ 50

In 2012, the Illinois Chapter of the American Fisheries Society (ILAFS) will be celebrating its 50th anniversary. We are asking you for your help. As with several professions in America, natural resource agencies are expecting a large turnover within the next 5 years due to the retirement of “baby boomers.” Our goal is to bring together as many of retired or retiring members and have them interact with the next generation of biologists to share experiences and offer advice. We are striving to have registration costs low enough to entice all to come. Preliminary estimates indicate registrations costs will be \$95. With \$5,000 of sponsorships, we can lower the registration to \$50 for regular members and half that for students and retirees. We are hoping to distribute the bulk of the sponsorships equally among the universities, state agencies, and other organizations that employ fisheries biologists. Within the next couple of months, we will be asking the organizations below for a one-time sponsorship. Contributions will be acknowledged not only in the program, but also in the newsletter for a year (3 issues) and on the ILAFS webpage. If you are interested in seeking sponsors with us, please let one of us know. With everyone’s help, we can make this milestone memorable for all.

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Corporate Sustainer (\$500 level)

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 Illinois Natural History Survey
 University of Illinois
 Southern Illinois University
 Eastern Illinois University
 Western Illinois University
 U.S. Fish and Wildlife Service
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Affiliate (\$100) / Sponsor (\$250) – Shedd Aquarium, Field Museum of Natural History, Illinois State Museum, consultants (e.g., HDR, Huff & Huff, Exelon), Illinois Environmental Protection Agency, US Forest Service, sporting good stores (e.g., Bass Pro, Cabela’s, Gander Mountain), and corporation based in Illinois (e.g., Caterpillar, John Deere)

Jim Herkert -- Opening session of
 2011 Annual Meeting



Impacts of angling-induced selection on largemouth bass

David Sutter and Cory Suski

University of Illinois, Department of Natural Resources and Environmental Sciences

In recent years, the topic of fisheries-induced evolution has been discussed extensively in a number of publications, particularly in the context of marine (capture) fisheries. Non-commercial fisheries and freshwater environments have received little attention in this area, despite the fact that previous work has shown that angling can cause genetic alterations to populations of largemouth bass. The aim of the present study was to fill this knowledge gap by examining the consequences of angling-induced selection in freshwater environments using the largemouth bass.

The present experiment was carried out from April to September, 2009, at the Aquatic Research Facility of the Illinois Natural History Survey in Champaign. The foundation for this study was laid in 1976 with a series of selection experiments performed by Bill Childers & Dave Philipp in Ridge Lake (see TAFS 2009, 138:189-199 for details). This early work artificially selected for largemouth bass that were either highly vulnerable to angling (HVF) or that had a low vulnerability to angling (LVF). These two lines were selectively bred for 3 subsequent generations prior to the start of this experiment. Along with a decrease in angling vulnerability, the nest guarding activities of LVF males had been previously been shown to be low relative to HVF (lower fanning rates and higher absence rate from nests), and HVF also showed higher metabolic rates. Based on these findings, the hypothesis for the present study was that the reproductive output (i.e. offspring production) of largemouth bass would be influenced by behavioral and physiological characteristics that had been altered by angling-induced selection.

To compare reproductive characteristics, males of both lines were allowed to reproduce in direct competition to each other in six replicate ponds, each containing four HVF males and LVF males. Additionally, every pond was stocked with seven unselected (wild) females. All adults were individually tagged prior to being placed in the ponds, and fin clips from all fish were preserved in ethanol for later genetic parentage assignments of offspring. Once bass started nesting, a male's brood defense was quantified by casting three different hookless fishing lures (popper, twister, worm) into the nest. The total length of time that males guarded their broods during the spring was also recorded. At the end of the summer, all ponds were drained, offspring were collected & measured, and a sub-sample of offspring were analyzed for parentage analyses, which would identify whether if were sired by an HVF of an LVF male. Results showed that HVF were twice as likely to hit a fishing lure than were LVF males, and HVF also spent more time guarding their broods than LVF. The duration of parental care differed by male size and selection history, with large HVF providing longer parental care than LVF males. Finally, parentage assignment of 1200 fall recruits revealed that large HVF males contributed most of the offspring in a pond.

These findings show a higher investment by HVF into parental care activities. The longer duration of parental care provided by large HVF males was likely a result of higher energy storage of these fish, allowing for higher energetic expenditures. Results also indicated potential adverse effects of angling-induced selection for largemouth bass, as this could reduce the fitness of the most aggressive and largest males in a population, individuals potentially contributing the largest numbers of offspring. Instead, it may favor recruitment of fish expressing lower levels of aggression, especially in environments with high levels of nest predation. A further detrimental effect could be overall decreases in angling vulnerability of fished bass populations.

Fishing down the Asian carp in the Illinois River: An overview and update

Wesley Bouska, David Glover, Jim Garvey, Silvia Secchi, Brian Small,
Jesse Trushenski, Greg Whitley
Southern Illinois University, Carbondale, IL

Greg Sass, Jeff Levenson,
Illinois Natural History Survey, University of Illinois at Urbana-Champaign, Urbana, IL

and Brian Roth
Michigan State University, East Lansing, MI

The invasive bighead (*Hypophthalmichthys nobilis*) and silver carp (*H. molitrix*) (collectively, Asian carp) have been soliciting concern from biologists, ecologists, commercial fishermen, recreational anglers, and many other groups, since escaping from aquaculture ponds in Arkansas in the 1970's. Naturally reproducing populations of Asian carp are now found in much of the Mississippi River and its major tributaries, including the Illinois, Missouri, Ohio, and Wabash rivers. Illinois has become "ground zero" in the fight against the Asian carp invasion, where these fishes have adapted so successfully that the greatest wild densities of bighead and silver carp in the world are now found in the lower three reaches of the Illinois River (Peoria, La Grange, and Alton) from La-Salle to Grafton, IL.

Because of their feeding behavior, life history characteristics, and reproductive ecology, Asian carp could be considered a near perfect invader. Asian carp are planktivorous, and capable of filtering prey items more efficiently from the water column than native planktivores such as gizzard shad, bigmouth buffalo, and paddlefish. Asian carp are also very fecund (i.e. produce millions of eggs during each spawning event) and grow rapidly. Rapid growth rates (up to 12 inches in the first summer of growth) make them invulnerable to predation from native piscivores quickly. In concert, these life history characteristics can lead to rapid population growth when habitat conditions are favorable, as evidenced by the exponential population growth of Asian carp in the La Grange reach of the Illinois River since 2000.

Due to their feeding ecology and high abundances, Asian carp have been shown to affect water quality, zooplankton community and size distributions, and native fish populations. Having already adversely affected the aquatic ecosystems within the Mississippi River basin, Asian carp are now poised to invade the Laurentian Great Lakes from the Illinois River via the Chicago Sanitary and Ship Canal. The potential environmental and economic implications from such an invasion could be devastating.

Electrical barriers are currently in place to prevent adult Asian carp from migrating into Lake Michigan from downstream tributaries. However, it is unlikely that a single engineering solution will eliminate the risk of Asian carp entering the Great Lakes. If the Asian carp population in the Illinois River could be significantly reduced through commercial fishing and other methods, it would decrease the probability of a founder population reaching Lake Michigan during the inevitable downtimes of the electrical barrier (e.g. when maintenance is conducted or power outages occur). With this in mind, a collaboration of researchers and partners from the US Fish and Wildlife Service, Illinois Department of Commerce and Economic Opportunity, Illinois Department of Natural Resources, Southern Illinois University, the Illinois Natural History Survey, Michigan State University and the Illinois-Indiana Sea Grant are currently investigating the efficacy of large-scale removal of Asian carp from the Illinois River. (Continued on p. 6)

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In 2010, the State of Illinois and the Big Rivers Fish Company signed an agreement to ship 50 million pounds of flash frozen Asian carp annually back to their native China for human consumption. This harvest effort brings with it many opportunities. Hopefully commercial fishing will help local economies, provide a high quality food product, and improve the aquatic ecosystem of the Illinois River.

The research opportunities of the removal effort are broad, and include contaminant analyses of Asian carp, nutritional analyses (i.e. protein, lipid, and fatty-acid profiles), quantifying demographic characteristics of the harvested fish and the amount of biomass removed from the Illinois River, fish and zooplankton community and water quality responses, immigration/emigration responses to harvest, and predictive modeling to forecast responses of the Asian carp population to harvest. Each of these research opportunities are in various stages of investigation.

Contaminant testing will be conducted by researchers at the Illinois Natural History Survey. Determining contaminant levels in Asian carp flesh will be necessary to show the harvested product can meet minimum contaminant thresholds for human consumption in various markets. Southern Illinois University is currently testing the nutritional value of whole-body Asian carp flesh, which will be necessary to successfully market Asian carp abroad and domestically. Initial findings from the La Grange reach have indicated that silver carp have approximately 2x greater lipid content than bighead carp, despite being roughly half the size. Asian carp also appear to be good sources of EPA and DH, nutritionally valuable omega-3 fatty acids, which may make carp meal a useful specialty ingredient for fish and livestock feeds. Developing alternative markets for silver carp is extremely important to increase demand for these fish, given that bighead carp are more desired for consumption. This research will continue to investigate the spatial and temporal variations in lipid and protein content and quality in Asian carp. Furthermore, SIU is currently in the process of purchasing one million pounds of Asian carp through a competitive-bid process to further investigate the merits of using fish meal derived from these invaders in aquaculture feeding trials. Additional marketing outlets for these fish are also being pursued, and quality control efforts throughout the fishing and transport process are being conducted by researchers at SIU.

Determining the standing stock of Asian carp in the Illinois River prior to commercial fishing is a critical initial step in determining the efficacy of controlling these populations with commercial harvest, as well as to determine the potential to meet demands from various markets. To estimate the density, size distribution, and biomass of Asian carp among the five lower reaches of the Illinois River, SIU is conducting hydroacoustic surveys and have completed 130 out of approximately 272 total river miles. Acoustic-derived biomass estimates will be incorporated into GIS to interpolate total biomass and the distribution of Asian carp will be overlaid onto depth contours and substrate classifications. These data will not only aid in the construction of population models to forecast exploitation effects, but will also help to identify both large-scale and microhabitat hotspots for focusing commercial fishing efforts.

To quantify the demographic characteristics of harvested Asian carp, researchers will be visiting the processing facilities this summer to determine the proportion of each species harvested, and to determine the length, weight, age, gonado-somatic index (i.e. ratio of gonad weight to total weight of the fish as an indicator of reproductive status), as well as location of harvested individuals. Over time, this data will allow us to determine whether the Asian carp populations are showing indicative signs of reductions in their abundances. To further assess Asian carp biomass before, during, and after commercial fishing efforts in the Illinois River, a combination of gears including trammel nets and electrofishing will be used on a seasonal basis within the three most heavily fished reaches (i.e., Alton, La Grange, and Peoria) and demographics stated above will be collected. (Continued on p. 7)

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Ecosystem-level responses to Asian carp reductions, led by the Illinois Natural History Survey, will also be quantified, including native fishes (growth, condition, and reproductive success), zooplankton, water quality, and algal biomass (as measured by chlorophyll *a*). Ecosystem responses, with the exception of native fish characteristics, will be measured on a much smaller time scale, occurring every other week.

Immigration and emigration of Asian carp in the lower Illinois River is not well understood, nor do we understand what affect immigration of fishes to the Illinois River will have on the removal effort. To help address this, researchers from SIU have implanted 150 silver carp and 150 bighead carp with acoustic tags in pool 26 of the Mississippi River and established a fixed-station receiver network along the Mississippi and Illinois rivers to document movement. Fish will also be tracked manually. Additional research at SIU will use otolith microchemistry (strontium to calcium ratios and isotopic signatures) to determine the origin of a subsample of Asian carp. Initial results from the core element signatures of Asian carp suggest that up to 30% of silver carp in the lower reaches of the Illinois River are immigrants from the Mississippi and Missouri Rivers, whereas bighead carp appear to be lifelong residents of the Illinois River. However, bigheads in this preliminary analysis were only from an isolated population in the La Grange reach. Further analyses incorporating a greater spatial distribution of Asian carp along the Illinois River is currently underway. The combination of these approaches will help determine if immigration may be masking any population responses not observed through our study on demographic characteristics of the harvested population.

To help predict the response of Asian carp populations to harvest, researchers from Michigan State University will create an individual-based model incorporating emigration and immigration that predicts future abundances of Asian carp in response to different levels of harvest. Ultimately, this model will be used to predict how much fishing effort would be required to keep Asian carp abundances low in perpetuity.

As you can see there is much work yet to be completed on this collaborative project. As we progress, our findings will be disseminated in the form of reports, peer-reviewed publications, and presentations at local, state, national, and international scientific meetings. Ultimately, we hope that this effort will improve conditions of the Illinois River and prevent range expansions of Asian carp to Lake Michigan and other uninvaded systems.



Southern Illinois University Carbondale



MICHIGAN STATE UNIVERSITY

13th IL Fish & Wildlife Action Team Meeting 2/16/11

John Rogner started the meeting with some bad news, announcing the House proposal to zero-out the FY11 State Wildlife Grant funds. This means a loss of \$2.5 million for Illinois. The North American Waterfowl Conservation Acts funds were also targeted for elimination.

Jim Herkert gave an update on the Important IDNR Sites Initiative, where state-owned sites have been selected as pilot sites to implement the Illinois Wildlife Action Plan. For the Streams Campaign, the Vermilion River was chosen for implementation at the Middle Fork State Fish & Wildlife Area and Kickapoo State Park and the Apple River at Apple River Canyon State Park. Activities will be implemented through the Plan-of-Work process already in place.

Jeff Walk gave an update on The Nature Conservancy's Climate Change Report. This report will be used to update the Illinois Wildlife Action Plan for issues arising from climate change. Climate change vulnerability is being determined for multiple species throughout the state. Mussels and fish ranked among the most vulnerable species, especially coldwater and headwater species due to dispersal limitations for these species.

Jim Renn reported on the Midwest Climate Change Meeting and State Wildlife Action Plan Coordinators Meeting. Discussions at the latter meeting included ways to evaluate effectiveness of State Wildlife Grant-funded projects and implementation of the Wildlife Action Plans.

Anne Mankowski updated the addition of Plant Species In Greatest Need of Conservation to the Illinois Wildlife Action Plan.

Finally, Jim Herkert announced that the IDNR is still waiting on appropriations authority for FY10 State Wildlife Grant funds. At this point, the earliest this could happen is July 1st. These funds must be spent by September 30th.



Emiquon talks by Blodgett and Hilsabeck at the 2011 Annual Meeting

STUDENT JOB OPPORTUNITIES

Research Program Participant

Position: Research Program Participant - Student Hourly

Location: MARION, ILLINOIS - WILLIAMSON COUNTY

Job Description: Assist with field work in lakes and streams, laboratory behavioral experiments, lab maintenance, fish care, and data processing and analysis. Responsibilities include assisting with research projects evaluating lake and stream fish communities, largemouth bass recruitment dynamics, and Asian carp physiology. Work will be conducted in conjunction with faculty, graduate students, and other research assistants.

Qualifications: Working toward BS in fisheries, aquatic ecology, zoology, or closely related field. Preference will be given to those holding a BS in Fisheries or Zoology/Biology. The candidate must be physically able to lift up to 25 pounds, and work outside under adverse field conditions including, but not limited to, biting insects, heat, humidity, and rain. Candidate must have a valid driver's license and be able to swim. Additional experience with marine craft a plus.

Wage: \$10 to \$12/hour dependent upon experience.

Benefits: None associated with this position.

Available: On or about May 1, 2011 to October 1, 2011

Application: For full consideration, applications should be received by 4/30/11 but position will remain open until filled. Electronic applications required. To apply, please email cover letter, resume or curriculum vitae to: hroffice@inhs.uiuc.edu - IMPORTANT! You must reference RPP-STEIN in subject line.

For Technical Questions: Please direct technical questions to Jeff Stein at jastein@illinois.edu.



Research Program Participant - Student Hourly

Position: Research Program Participant - Student Hourly

Location: CHAMPAIGN, IL

Job Description: Assist with field work in lakes and streams, laboratory behavioral experiments, lab maintenance, fish care, and data processing and analysis. Responsibilities include assisting with research projects evaluating lake and stream fish communities, largemouth bass recruitment dynamics, and Asian carp physiology. Work will be conducted in conjunction with faculty, graduate students, and other research assistants.

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Student Concerns Committee

Brian Metzke

Thanks and congratulations to all of those who participated in the 49th annual conference of the Illinois Chapter of the AFS held in Peoria a few weeks ago. The meeting was quite a success and the student subunits' participation aided the Society's efforts.

During the business meeting each student subunit gave an update on their membership and activities. It seems with diligent leadership from the subunit presidents, active participation from the members and guidance from the faculty mentors, each subunit has succeeded in encouraging young scientists and engaging their communities.

Each year the Student Concerns Committee grants several awards to recognize achievement by individual students and by subunits. This year, for the first time, IL AFS awarded the Traveling Student Subunit Award to the SIU subunit. This trophy goes to the subunit that acquires the most raffle items or the largest monetary raffle donation and will be kept by the winning subunit until the following annual meeting. Congratulations SIU for your accomplishments. Also recognized during the business meeting were the recipients of last year's presentation awards. Quinton Phelps (SIU) won the 2010 Lewis Osborne Best Student Paper award for his presentation regarding microchemistry of fin rays for determining dispersal of sturgeon. Kurt Smith (SIU) was awarded the 2010 Best Poster Award with his assessment of stable isotope technique for mass-marking fin rays of sturgeon. We also distributed several awards for this year's meeting. Blake Ruebush (U of I), Lindsey Bock (SIU), Neil Rude (SIU), and John West (EIU) each received a \$100 Student Travel Award to attend the 2011 meeting. The 2010-2011 Larimore Student Research Grant was awarded to four students in recognition of their research efforts. This year's recipients were Theresa Kissane (U of I), Molly Spacapan (U of I), Lindsey Bock (SIU), and Max Wolter (U of I). Each of these researchers was awarded up to \$500 in support of their studies.

As we move towards the end of another academic year I am encouraged by the effort that each subunit and each student has expended to advance our society. Congratulations and good luck to those of you who are putting the finishing touches on your education, and I look forward to seeing both familiar and new faces next fall. - *Brian*



2010 Larimore Student Research Grant recipients. Pictured left to right, Theresa Kissane, and Max Wolter. Not pictured, Molly Spacapan



Winners of the 2011 ILAFS Student Travel Award. Pictured left to right, Neil Rude, Blake Ruebush, and John West.

News from Illinois' Subunits: Eastern Illinois University

The current officers of the Eastern Illinois University Fish and Wildlife Ecology Club are Sarah Huck as President, Jason Stuck as Vice President, Manisha Pant as Secretary/Treasurer, and Anthony Porreca as webmaster. Our activities this past fall include several electrofishing workshops, a fish aging workshop, a Lake Charleston Clean-up, three guest speakers (Mike Mounce, Trent Thomas, and Herb Drier) that presented at club meetings, and a booth at the Registered Student Organization "Pantherpalooza" at EIU. Our activities for spring semester will include an owl survey, a camping trip, a spring BBQ/fish fry, a second Lake Charleston Clean up, an Urban Fishing Program for the local schools, and a tent at the Celebration: Festival of the Arts at EIU. - Sara Huck



Asian carp question and answer session (Dr. Greg Whitledge, Vic Santucci, and Kevin Irons) at the 2011 Annual Meeting



National Spotlight:

FIRST-OF-ITS-KIND STATUS OF FISH HABITATS REPORT GIVES “FISH EYE VIEW” OF NATIONAL WATERS

(Washington, DC) – The National Fish Habitat Board today released a first-of-its-kind status of fish habitats in the United States report as envisioned in the National Fish Habitat Action Plan, an effort to protect, restore and enhance our nation’s aquatic habitats. The report titled: *THROUGH A FISH’S EYE: The Status of Fish Habitats In The United States 2010* summarizes the results of an unprecedented, nationwide assessment of the human effects on fish habitat in the rivers and estuaries of the United States.

Through a Fish’s Eye, provides an important picture of the challenges and opportunities facing fish and those engaged in fish habitat conservation efforts. Urbanization, agriculture, dams, culverts, pollution and other human impacts have resulted in specific areas of degraded habitat where restoration is most likely needed to bring back the healthy habitats and fishing opportunities that once existed. Addressing degraded habitat also requires reducing or eliminating the sources of degradation mentioned in this report, through best management practices, land use planning, and engaging landowners, businesses, and local communities in the effort.

The assessment detailed in the report assigns watersheds and estuaries a risk of current habitat degradation ranging from very low to very high. These results allow comparisons of aquatic habitats across the nation and within 14 sub-regions. The results also identify some of the major sources of habitat degradation that plague waterways across the nation.

Overall, 27 percent of the miles of stream in the lower 48 states are at high or very high risk of current habitat degradation and 44 percent are at low or very low risk. Twenty-nine percent of stream miles in the lower 48 states are at moderate risk of current habitat degradation.

Fifty-three percent of estuaries (by area) are at high or very high risk of current habitat degradation, while 23 percent of estuaries are at low or very low risk of current habitat degradation. Marine habitats of the United States tend to be most degraded near the coast, where they are most affected by human activity.

The goal of the national assessment was to estimate disturbance levels to fish habitats in rivers and estuaries from information about human activities occurring in the watersheds and the local areas affecting each aquatic habitat. This approach is supported by a large body of scientific research showing that human disturbances to the land transfer to receiving waters and contribute to disturbance in downstream fish habitats in rivers, estuaries, and the ocean.

While the specific analytical approaches used to assess habitats in the lower-48 states, Alaska, Hawaii and U.S. estuaries differed slightly, the end product of each analysis was similar—an estimate of the risk that discrete habitat units will be degraded due to current human activities on the landscape. “This report identifies areas where those efforts are most needed and points to areas where fish habitat is most likely still intact and should be protected to maintain its value for fish and other...

(Continued on p. 13)

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aquatic organisms. Resources for fish habitat conservation are limited, especially for the next few years,” said Kelly Hepler, Chairman of the National Fish Habitat Board.

“Fish Habitat partnerships ensure coordinated work around specific habitat challenges,” said Eric Schwaab, Assistant Administrator for NOAA Fisheries. “This information will help bring strategic focus to conservation efforts and allow rigorous measurement of results.”

“This report clearly illustrates the need for strategic use of existing resources through partnerships that can identify the most effective use of funds and help the nation as a whole make progress in fish habitat conservation,” said U.S. Fish and Wildlife Service Acting Director Rowan Gould. “There are many major threats to the health of fish habitat and the National Fish Habitat Action plan helps to focus and leverage available funds, pool technical expertise, and enlist new partners to address the challenges to fish habitat.”

Key findings from the “Through a Fish’s Eye: Status of Fish Habitats” report include: Habitats with a very high risk of current habitat degradation include those in or near urban development, livestock grazing, agriculture, point source pollution or areas with high numbers of active mines and dams. Specific locations that stand out as regions at high risk of current habitat degradation include: the urban corridor between Boston and Atlanta; the Central Midwestern states of Iowa, Illinois, Indiana and Ohio; the Mississippi River Basin, including habitats adjacent to the lower Mississippi River in Arkansas, Mississippi and Louisiana; habitats in eastern Texas; and habitats in Central California and along the Columbia River in Oregon and Washington.

Areas that stand out as being at very low risk of current habitat degradation include rural areas in New England and the Great Lakes states; many habitats throughout the Mountain, Southwest and Pacific Coast states; and most of Alaska. It should be noted that not all water and land management issues could be addressed in the assessment, so some of the areas mapped as at low risk of current habitat degradation actually may be at higher risk due to disturbance factors not assessed. For example, most arid regions of the western United States were found to be at low risk of current habitat degradation.

Estuaries in the mid-Atlantic have a very high risk of habitat degradation related to polluted run-off and other effects of the intense urbanization and agriculture in this area. The estuaries of southern California also have a high risk of current habitat degradation for similar reasons. Estuaries in the north Pacific and downeast Maine have a low risk of current habitat degradation.

The release of this report is also accompanied with the release of a map viewer, which offers the maps that are in the report in greater detail. The National Fish Habitat Action Plan map and data web tool (www.nbii.gov/far/nfhap) was developed by the U.S. Geological Survey's Biological Informatics Program under guidance of the National Fish Habitat Action Plan Science and Data Committee. This tool not only enables users to see multiple views depicting the condition of stream and coastal habitats across the country, but also means that users can access more detailed information at finer scales, as well as the option to download data files and map services.

To read the report in its entirety or download a PDF, visit www.fishhabitat.org <<http://www.fishhabitat.org>> .

Last chance for 2011 ILMA and ILAFS conference shirts!



**Cost: short sleeve
\$10
(S-XL), \$12 (XXL)
long sleeve \$15 (S-
XL), \$17 XXL**

**These shirts were
so popular at the
annual meeting that
we sold out! One
last order will be
placed on May 16th,**

**so contact Scott Shasteen ASAP if you want one. Scott can be
reached at: scott.shasteen@illinois.gov or (618) 993-7218.**

Illinois Chapter of the American Fisheries Society

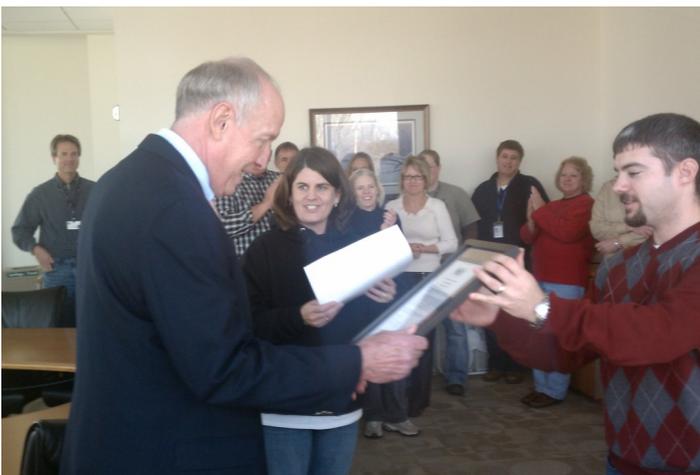
Robert Schanzle

Professional Travel Award

On December 17, 2010, long time ILAFS Chapter member, Bob Schanzle, retired from the Illinois Department of Natural Resources. During his retirement celebration, past Chapter president, Ann Marie Holtrop, and current Student Concerns Chairmen, Brian Metzke, had the honor of announcing to Bob and those in attendance that the Chapter was renaming our professional travel award in Bob's honor. Several ILAFS Chapter members were in attendance, which made the presentation extra special!

Bob has served the Chapter in many ways, including his tenure as President in 2003-2004, and his excellent work as Newsletter Editor and Archival Chair. He has often been consulted for his sound perspective, common sense approach to issues, and knowledge about Chapter history. Bob eagerly contributes to the Chapter without fanfare or the need for personal recognition or praise. The goal of the Professional Travel Award is to compliment student travel awards by financially assisting professional Chapter members in attending our annual meeting, or other scientific conferences. Since Bob's primary goal has always been to advance the mission of our organization, the Chapter leadership saw the naming of this award as a fitting tribute to a very deserving member.

Bob was recognized again for this honor during our annual business meeting in Peoria. Congratulations Bob!



The Illinois Chapter of the
American Fisheries Society

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Set your sights on attending next year's Annual Meeting in the beautiful Pacific Northwest. With its focus on **“New Frontiers in Fisheries Management and Ecology: Leading the Way in a Changing World,”** the conference will provide a wonderful opportunity for fisheries professionals to meet, exchange information, catch up with friends, and find inspiration.

Support AFS and indulge yourself by coming to Seattle next September. We guarantee your experience will be a memorable one.