



AMERICAN FISHERIES SOCIETY

Education Section

Newsletter, Volume 29(1)

\*newsletter formatting may change among email programs.

AFS Education Section Website: <http://www.fisheries.org/units/education/>

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## PRESIDENT'S LINE

**Tom Kwak**, North Carolina Cooperative Fish and Wildlife Research Unit,  
[tkwak@ncsu.edu](mailto:tkwak@ncsu.edu)

### *Hey, What's the Big Idea?*



The past year has been a successful one for the Education Section, thanks to the time and talent of many of our members. We've enhanced the Skinner Memorial Endowment to support more student travel awards, selected recipients of the Excellence in Fisheries Education Award, supported the Hutton Junior Scholar Program and Equal Opportunity Section Travel Awards, completely revised and continue to refine the process for selecting Best Student Papers and Posters, passed a resolution on the teaching of alternatives to evolution and published an associated background document, supported publication of the new Analysis and Interpretation of Freshwater Fisheries Data book and support other book projects, and we respond to many other opportunities to meet our mission of fisheries education.

While a number of Section members have worked diligently to accomplish these and other successes, I believe that we have even more talented and willing individuals in our membership, and we could initiate and pursue new initiatives if they became a priority. The evolution resolution is a great example of a new initiative that resulted in a significant accomplishment for our Section. This effort was initiated by a chapter and division, was referred to our Section, and **Randy Jackson** ran with it until the finish line, including a background article published in Fisheries. While this initiative originated in other AFS units, I believe that we could just as well conceive such project concepts within our membership.

Thus, I'm asking you to provide *the next Big Idea!* Please attend our annual business meeting in Ottawa at the AFS Parent Society meeting and share your big idea. Our business meeting will be held 5-7 PM, Sunday, August 17, in the Renaissance Room at the Fairmont Chateau Laurier — refreshments will be served. Please bring an idea for a new initiative, or e-mail me that idea if you can't attend in person. Then we'll form a committee to compile and prioritize these initiative ideas and begin the process of pursuing them. What a great opportunity to make something happen in the AFS — just provide the idea, and others will do all the work — of course, the brain behind a great idea would also probably be among the best individuals to get involved, and we welcome all the energy that you have to offer. I look forward to seeing you in Ottawa and hearing your *Big Idea!*

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## STUDENT SUBSECTION

**Melissa Wuellner**, South Dakota State University, [Melissa.Wuellner@sdstate.edu](mailto:Melissa.Wuellner@sdstate.edu)  
**Steven Ranney**, Montana State University, [Steven.Ranney@montana.edu](mailto:Steven.Ranney@montana.edu)

The Student Subsection annual business meeting will be held on Sunday, August 17 from 3 – 5pm, immediately prior to the Education Section business meeting. A draft of the Procedural Manual of the Student Subsection will be presented to the membership for comments and approval. If you would like a draft copy of the manual for review, please visit [www.fisheries.org/units/edustu/bylaws.htm](http://www.fisheries.org/units/edustu/bylaws.htm).

Thanks to **Jeff Jolley** ([Jeffrey.Jolley@sdstate.edu](mailto:Jeffrey.Jolley@sdstate.edu)), the Subsection has also made available to AFS journal editors a database of student reviewers. If you are a student and you would like to be included in the database, please visit the “Announcements” page of the Student Subsection website ([www.fisheries.org/units/edustu/announcements.htm](http://www.fisheries.org/units/edustu/announcements.htm)). An updated list of reviewers and their areas of expertise can be found on the “Links” page of our website ([www.fisheries.org/units/edustu/links.htm](http://www.fisheries.org/units/edustu/links.htm)). The Subsection will be updating this list at least once a year.

The Subsection has been working to solicit more Students' Angle columns. We have had five published since September 2007, and two more have been approved for publication before September 2008. We are always looking for more submissions! Any student with an idea for a Students' Angle column should contact **Melissa Wuellner** ([Melissa.Wuellner@sdstate.edu](mailto:Melissa.Wuellner@sdstate.edu)). We also encourage educators to let their students know about this opportunity. The following are our recent titles:

Hasler, C. T., M. R. Donaldson, A. J. Gingerich, and K. C. Hanson. 2007. Looking beyond the border: advantages and challenges of moving between Canada and the United States for graduate studies in fisheries science. *Fisheries* 32(10):502-503.

Waco, K. 2008. Study abroad: fisheries in a global environment. *Fisheries* 33(1):38-39.

Donaldson, M. R., and M. R. Wuellner. 2008. Education, networking, and fun: a preview of student activities at the 2008 AFS Annual meeting in Ottawa. *Fisheries* 33(2):90-92.

Holecek, D., J. Nielson, and D. Trottier. 2008. The Palouse Unit AFS – past, present, and future. *Fisheries* 33(3):142-143.

Ranney, S. H. 2008. Student peer reviewer: benefits for both the profession and the student. *Fisheries* 33(5): 246-247.

The Subsection is working closely with the Parent Society's Membership Committee on endeavors to recruit and retain students and young professionals into the Society. In July, we will be sending out a survey to officers and faculty advisors of AFS student units in an effort to assess student needs. During the annual meeting in Ottawa, Subsection leadership will be meeting with the Membership Committee to discuss the results of this survey and brainstorm ways in which the Parent Society as a whole can meet student needs. If you are a faculty advisor to an AFS student unit, please complete the survey and encourage your student officers to do the same.

A full day of events planned for students will take place during the annual meeting in Ottawa. Beginning with the Student-Mentor lunch, students and mentors will be able to share their experiences and discuss the challenges and opportunities they have encountered in fisheries science. After lunch, the Subsection will be sponsoring the annual student colloquium. This year, the colloquium is titled "Employment Opportunities in Canada and the U.S." A panel of experts representing academia (**Steve Cooke** and **Donna Parrish**), governmental agencies (**Robert Curry** and **Karen Smokorowski**), and the private sector (**Leanne Roulson** and **Jack Imhoff**) will be on hand to discuss the job forecast and answer questions on how to find employment within a student's sector of choice. Five student attendees will win a free copy of *The AFS Guide to Fisheries Employment, Second Edition* edited by **Dave Hewitt**, **William Pine**, and **Al Zale**. Everyone is invited to attend, even if you are not a student! "Student Day" at the Ottawa meeting will be capped off by the student social at the Byward Market. A nightclub and band has been booked for the student social. The Student Subsection looks forward to another successful "Student Day" at this year's annual meeting.

#### **Student Subsection Current Leadership:**

President: **Melissa Wuellner**

President-Elect: **Kristal Schneider**

Past President: **Justin Davis**

Secretary-Treasurer: **Steven Ranney**

North Central Division Representative: **Quinton Phelps**

Southern Division Representative: **Jon Niles**

Western Division Representative: **W. Carl Saunders**

Northeastern Division Representative: **Benjamin Gahagan**

Canadian Division Representative: **Caleb Hasler**

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# COMMITTEE REPORTS

## SKINNER MEMORIAL AWARD

**Craig Paukert**, Kansas Cooperative Fish and Wildlife Research Unit, [cpaukert@ksu.edu](mailto:cpaukert@ksu.edu)

The 2008 Skinner Memorial Award Committee reviewed 45 applicants and awarded 10 Skinner Awards and 5 Honorable Mentions. Each Award winner will be reimbursed up to US \$800.00 for their travel to the 2008 American Fisheries Society Annual Meeting August 17-21, 2008 in Ottawa. Honorable Mentions receive reimbursement for their registration at the Annual Meeting in Ottawa. All winners (including honorable mentions) receive a one-year student membership to the AFS. The Award winners and Honorable Mentions will be expected to come to the Education Section and Society business meetings as well as the AFS awards luncheon. Please congratulate these students if you see them at the meeting. The Skinner Award is really one of the highest honors our Society can give to students.

The Committee made some changes to the application process this year. The entire application was electronic and was split into two sections: applicants submit one section and the faculty advisor submits the other. The electronic submission was well received and it cut down on time for committee review and substantial amounts of paper (previous applicants needed to submit 8 hard copies). The Committee will evaluate the split application in the upcoming year and decide if this format should be continued in the future.

### **2008 Skinner Committee:**

**Craig Paukert** (KS), Chair

**Dan Dauwalter** (WY)

**Carl Reutz III** (MI)

**Maureen Walsh** (NY)

**Patrick Braaten** (MT)

**Joe Hightower** (NC)

**Jason Vokoun** (CT)

**Melissa Wuellner** (SD)

### **2008 Skinner Memorial Award Winners:**

<b>Cindy Chu</b>	Trent University
<b>Robin DeBruyne</b>	Cornell University
<b>Troy Farmer</b>	Auburn University
<b>Scott Favrot</b>	North Carolina State University
<b>Ben Neely</b>	University of Nebraska
<b>John Niles</b>	West Virginia University
<b>Stephen Ranney</b>	South Dakota State University
<b>Jamie Roberts</b>	Virginia Tech
<b>Joshua Schloesser</b>	Kansas State University
<b>Ryan Woodland</b>	University of Maryland-College Park

### **2008 Honorable Mentions:**

**Wes Bouska** Kansas State University

**David Caroffino**      University of Alaska-Fairbanks  
**Stephen Midway**      North Carolina State University  
**Travis Neebling**      Iowa State University  
**Ryan Utz**              University of Maryland

## **SKINNER MEMORIAL AWARD CHALLENGE**

**Michael Quist**, Iowa State University, [mcquist@iastate.edu](mailto:mcquist@iastate.edu)

During the Education Section's business meeting at the 2007 Annual Meeting in San Francisco, the membership voted to provide funds for the Skinner Memorial Award with the hopes that additional funds would increase the number of awards each year. The membership agreed on two mechanisms for increasing the Skinner fund. First, the Section immediately transferred \$25,000 from its account to the Skinner fund. Second, the Section challenged the various units and membership of AFS to contribute to the Skinner fund with the benefit that all donations would be matched by the Section (not to exceed \$25,000 total). To date, six Sections, one Division, one Chapter, one private company, and two individuals have contributed funds totaling \$5,100. The Section matched these funds resulting in a total contribution of \$35,200 (\$25K+\$5.1K+\$5.1K) to the Skinner fund. We thank all of the units and individuals who contributed to this important effort; however, we still have \$19,900 of funds available for match. If you would like to contribute to this initiative, please make checks payable to the Education Section (please write "Skinner Challenge" on the memo line) and send to:

Mike Quist  
339 Science II  
Dept. of Natural Resource Ecology & Mng't  
Iowa State University  
Ames, Iowa 50011

## **INLAND FISHERIES MANAGEMENT IN NORTH AMERICA, 3<sup>RD</sup> EDITION**

**Michael Quist**, Iowa State University, [mcquist@iastate.edu](mailto:mcquist@iastate.edu)  
**Wayne Hubert**, Wyoming Cooperative Fish and Wildlife Research Unit,  
[whubert@uwyo.edu](mailto:whubert@uwyo.edu)

*Inland Fisheries Management in North America* is one of the most important and most popular textbooks in our profession. Although the text remains a staple for fisheries management courses across North America, the book is due for a revision. The second edition was published in 1999. In September 2006, Wayne Hubert and Michael Quist were approved by the Education and Fish Management sections to serve as co-editors of the third edition of the book. Since that time, substantial progress has been made.

An online survey of AFS members was conducted during January-May 2007 to provide guidance on the content and structure of the third edition. Respondents were asked to provide responses to questions regarding the structure and quality of the second edition and what they hoped to see in the third edition. Over 200 members of the society responded to the survey. In addition to the survey, a steering committee was established that has equal representation from the Fisheries Management and Education sections. The committee assisted the co-editors in determining the structure of the third edition and identifying lead authors for individual chapters. The steering committee and co-editors utilized the results of the survey and their own experiences to develop a general outline for the third edition. The result is a book with 21 chapters that differs substantially from the first two editions. Following the development of a general outline, the co-editors contacted potential lead authors soliciting their participation in the book project and a cadre of lead authors was identified. Lead authors were charged with the responsibility of identifying collaborating authors that would bring additional expertise and diversity to the effort.

The first draft of chapters was due on January 1, 2008. Although we received a large proportion of the chapters, we are still waiting on the submission of a few chapters. The co-editors have been reviewing the first drafts as they arrive. Currently, chapters are either being revised by the authors in preparation for peer-review or they have been distributed to fisheries professionals for peer review. We anticipate having the chapters reviewed and assimilated into a complete manuscript of the book by May 2009.

## **PROGRAM COMMITTEE and EVALUATION COMMITTEE**

**Steve Chipps**, South Dakota Cooperative Fish and Wildlife Research Unit,  
[Steven.Chipps@sdstate.edu](mailto:Steven.Chipps@sdstate.edu) (Program Committee)

**Cari-Ann Hayer**, South Dakota State University, [Cari-Ann.Hayer@sdstate.edu](mailto:Cari-Ann.Hayer@sdstate.edu) (Chair,  
Evaluation Committee)

As most of you are aware, new protocols for student judging (papers & posters) were initiated last year at the annual AFS meeting in San Francisco. Because of the success of the student paper and poster competition, similar judging guidelines will be followed at the Ottawa meeting. For students not participating in the best paper/poster competition, we've had to develop a new process to provide constructive feedback on their presentations and posters. Thanks to the efforts of the Student Sub-Section, an ad-hoc committee led by **Cari Ann Hayer**, **Melissa Wuellner** and **Steven Ranney** has developed a new process for providing feedback to students on their presentations. An announcement (below) will be included in the Program that outlines the evaluation process. We encourage Education Section members to participate and help get the word out. We'd also appreciate any feedback from evaluators and students regarding the new process -- so please feel free to contact us ([Cari-Ann.Hayer@sdstate.edu](mailto:Cari-Ann.Hayer@sdstate.edu); [Steven.Chipps@sdstate.edu](mailto:Steven.Chipps@sdstate.edu)).

Student Evaluation Announcement:

**“Attention meeting attendees! Student presentation evaluations needed!**– The AFS Student Subsection of the Education Section is working to help provide students that are not part of the Best Student Presentation symposiums with helpful feedback, but we need your help! Anyone attending a student presentation can provide constructive criticism for student papers and posters on the forms provided throughout the meeting venue. Evaluation forms may be found in bright orange boxes located at the Registration Desk and in the poster display area. Forms will also be provided outside each presentation room in orange folders. Please return completed forms to the bright pink box located at the Registration Desk. Thank you for supporting student presenters and assisting in their professional development!”

Here is what the evaluation form will look like:

**Student Presentation Evaluation Forms  
2008 AFS Annual Meeting, Ottawa**

**Student Name:** \_\_\_\_\_ **Presentation type (circle one):** oral | poster  
**Research Topic or Title:** \_\_\_\_\_

1. **RESEARCH QUESTION/METHODOLOGY:** Evaluate the science presented noting if the research followed a sound protocol and applied appropriate methodology.

**Evaluation (circle one):** Outstanding | Good | Average | Improvement suggested

**Comments:**

2. **RESEARCH SYNTHESIS:** Evaluate the information presented noting if the presenter focused on relevant and appropriate highlights of the research while minimizing aspects difficult to convey (e.g. large data sets) or inappropriate for an oral or poster presentation and excluding unnecessary or extraneous information.

**Evaluation (circle one):** Outstanding | Good | Average | Improvement suggested

**Comments:**

3. **VISUAL AIDS:** Evaluate the effectiveness of the presentation and appropriate use with regard to media (e.g. animation, video; oral presentation only), clarity of information (e.g. font, color, contrast), and quality of materials (e.g. pictures, graphs).

**Evaluation (circle one):** Outstanding | Good | Average | Improvement suggested

**Comments:**

4. **PRESENTATION STYLE (oral presentation only):** Evaluate the style and quality of the presentation including the speaking manner (e.g. voice tone, inflection, clarity), stage presence (e.g. effectively uses eye contact, draws attention to visual materials appropriately, presents information rather than just reads/repeats it, manages question/answer session professionally), and time management.

**Evaluation (circle one):** Outstanding | Good | Average | Improvement suggested

**Comments:**

**Additional comments (use reverse side if necessary):**

**NOMINATING COMMITTEE**

**Donna Parrish**, Vermont Cooperative Fish and Wildlife Research Unit,  
[Donna.Parrish@uvm.edu](mailto:Donna.Parrish@uvm.edu)



In 2008, the terms of the North Central Division and Northeastern Division representative positions are up for election. However, the current representatives **Mark Pegg** and **Randy Jackson** have both agreed to serve another term. We are much appreciative of their willingness to continue serving the section in these positions. In 2009, the elections will include the positions of president-elect, secretary-treasurer, and the representatives of the Southern and Western divisions. If you are interested in being nominated for any of these positions, please contact me by spring 2009. I can be reached at ([Donna.Parrish@uvm.edu](mailto:Donna.Parrish@uvm.edu)).

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## CONTINUING EDUCATION

### AMERICAN FISHERIES SOCIETY MEETING, OTTAWA, 2008

#### **The full story behind AIC and an alternative paradigm for statistical inference**

**David Hewitt**, Virginia Institute of Marine Science, [dhewitt37@gmail.com](mailto:dhewitt37@gmail.com)

Course Title: "Information-Theoretic Approaches to Empirical Science"  
by David R. Anderson

Date: Sunday, August 17th (8 AM - 5 PM), Westin Hotel

Cost: Student \$150; Regular Member \$165, Non-Member \$200

\*Registration fee includes a copy of the new textbook:

"Model Based Inference in the Life Sciences: A Primer on Evidence"

David R. Anderson, 2008, Springer (<http://tinyurl.com/6awv8l>)

Register for the course when you register for the AFS Annual Meeting at <http://www.fisheries.org/>

#### Course description:

Akaike's Information Criterion (AIC & AICc) is commonly used for model selection in fisheries and wildlife studies, but the full details of how and why AIC works is often misunderstood and not fully appreciated. This course provides an overview of a relatively new paradigm for statistical inference in the empirical sciences based on model selection and multimodel inference. The course covers fundamental principles of scientific philosophy, such as the method of multiple working hypotheses, and illustrates how information-theoretic (I-T) methods support an objective, confirmatory approach to evaluating hypotheses. I-T methods (and Bayesian methods) are supplanting classical hypothesis testing in the life sciences. Using I-T methods, evidence in favor of competing hypotheses can be quantified and the hypotheses can then be ranked and compared. Methods are presented for making formal inference from all the hypotheses in a candidate set (multimodel inference). The inferential paradigm differs substantially from "classical" methods based on null hypothesis testing and p-values (no more p-values!),

and the focus is returned to the underlying statistical models. The methods are applicable to most problems where model-based inference is desired, from classical ANOVA type analyses to complex capture-recapture models.

For more details on the course, see:  
<http://aicanderson2.home.comcast.net/>

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## MISCELLANEOUS

### EPA AWARDS GOLD MEDAL TO DR. ROBERT T. LACKEY



The U.S. Environmental Protection Agency has presented their highest award to Oregon State University professor **Dr. Robert T. Lackey**, a senior fisheries biologist at EPA's research laboratory in Corvallis. The EPA Gold Medal was presented to Dr. Lackey at a ceremony in Washington D.C., where he was cited for his scientific contribution in organizing the [Salmon 2100 Project](#).

“With limited funding but with remarkable persuasive powers, Dr. Lackey secured the ongoing personal involvement of senior scientists and policy experts from a variety of agencies and organizations,” said Dr. Thomas D. Fontaine, Director of EPA's Western Ecology Division in Corvallis. “Through his personal commitment and scientific expertise, he provided pivotal leadership in the salmon science arena.”

The ground-breaking project brought together 33 senior scientists and salmon policy experts from British Columbia, Washington, Idaho, Oregon, and California. Under the direction of Dr. Lackey and OSU colleagues Dr. Sally Duncan and Dr. Denise Lach, this group of experts conducted a comprehensive alternative futures analysis for salmon recovery in western North America.

In presenting the Gold Medal, EPA Administrator Steven L. Johnson commented that the award was “in recognition of exemplary scientific vision and personal leadership in assessing the future of salmon in western North America”.

The Gold Medal for Exceptional Service is EPA's highest award. It is given on a highly selective basis for distinguished service of major significance to environmental improvement and to public service. Recipients must demonstrate outstanding abilities devising and implementing major Agency programs, or show special skills and achievements in managerial excellence.

“On behalf of my two Oregon State University co-project leaders and 33 other project scientists, policy analysts, and policy advocates from both Canada and the United States, I’m thrilled to see that the important work we’ve done to restore wild salmon runs in North America is being recognized with such a prestigious award,” said Dr. Lackey. “This approach to solving such environmental problems is cutting edge. That the Agency has recognized our research with the Gold Medal shows the willingness of EPA to address significant science and policy challenges.”

The book, “Salmon 2100: the Future of Wild Pacific Salmon” is available through American Fisheries Society.

Dr. Lackey is courtesy professor of fisheries science, and adjunct professor of political science, at Oregon State University. He was a 1999-2000 Fulbright Scholar at the University of Northern British Columbia when the project was conceived and planned. He may be contacted at (541) 754-4607.

For further information about the Salmon 2100 Project, visit:  
<http://oregonstate.edu/dept/fw/lackey/Salmon2100.htm>

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## EDITOR’S NOTE

The newsletter should have arrived in an HTML format if you have that option available in your email program. We hope that the formatting and pictures arrived to your computer the same way we sent them, but there is sometimes no telling what goes on in the inter[net]-galactic space between computers and servers. We have attempted to keep the embedded pictures from becoming attachments while sending the newsletter. However, they sometimes just seem to show up, and there might be new problems as people transition to MS Office 2007. Please let us know if this has happened to you.

We welcome any suggestions to format, content, or any other issues regarding the newsletter. Newsletter submissions are always welcome; just send them to one of us.

Newsletter co-editors,  
**Dan Dauwalter**, [ddauwalt@uwyo.edu](mailto:ddauwalt@uwyo.edu)  
**Rebecca Zeiber**, [rebecca.zeiber@unh.edu](mailto:rebecca.zeiber@unh.edu)