

# NEWSLETTER OF THE ESA AQUATIC ECOLOGY SECTION

September 2003

Thanks to everyone for a very successful meeting in Savannah. Here's some great news to catch everyone up on the section, especially the student awards.

1. **Cynthia Kolar** was the 2003 recipient of the Thomas M. Frost Award (details below).
2. **Patrick Crumrine** was the 2003 recipient of the Best Talk Award by a student in the Aquatic Section (details below).
3. **James Vonesh** (from the Aquatic Ecology Section) was the 2003 recipient of the Buell Award (details below).
4. New officers were elected (details below).
5. Membership renewals have just gone out from ESA headquarters. Please remember to donate to the Frost Award (and to renew your membership in the Section) when you renew your ESA membership!

## 1. FROST AWARD

Thomas M. Frost was the director of the University of Wisconsin Trout Lake Station from 1981 until his death in 2000. His colleagues remember him as a dedicated and creative scientist who brought a gentle, caring humanity to our endeavors. To honor Tom's commitments to aquatic ecology and to graduate student education, the Aquatic Section initiated the Thomas M. Frost

Award for Excellence in Graduate Research in 2002. This award recognizes an outstanding paper resulting from research done as a graduate student.

### **Ecological predictions and risk assessment for alien fishes in North America**

Kolar CS, Lodge DM

**SCIENCE** 298: 1233-1236 NOV 8 2002

**Abstract:** Methods of risk assessment for alien species, especially for nonagricultural systems, are largely qualitative. Using a generalizable risk assessment approach and statistical models of fish introductions into the Great Lakes, North America, we developed a quantitative approach to target prevention efforts on species most likely to cause damage. Models correctly categorized established, quickly spreading, and nuisance fishes with 87 to 94% accuracy. We then identified fishes that pose a high risk to the Great Lakes if introduced from unintentional (ballast water) or intentional pathways (sport, pet, bait, and aquaculture industries).

The 2003 recipient of Thomas M. Frost Award was **Cynthia S. Kolar** for her article "Ecological predictions and risk assessment for alien fishes in North America" published with co-author David Lodge in *Science* (Vol. 298, pp. 233-1236). In this article, Kolar and Lodge tackled the complex challenge of forecasting biological invasions by decomposing the problem into manageable components of the process, and demonstrated that only a few variables are necessary in statistical models to explain most of the variation in success of fish invasions in the Great Lakes. Kolar's approach to predicting invasions in the Great Lakes is notable because it is both

quantitative and transferable to many freshwater, marine, and terrestrial habitats and taxonomic groups. Her article has garnered substantial national and international attention from the scientific and management communities, as well as from the media. This paper is one of a series of articles on species invasions resulting from Dr. Kolar's dissertation research done at University of Notre Dame under the direction of David Lodge. She is currently putting her research to the test in her job as the Invasive Species Workgroup Leader for USGS's Upper Midwest Environmental Sciences Center. (*Frost Award Subcommittee: Chris Luecke, Emily Stanley, Craig Williamson*)



Section Chair (Craig Osenberg, the crazy looking one on the left) presents the Frost Award to Cynthia Kolar (the calm one on the right) at the 2003 Aquatic Ecology Section Mixer/Business Meeting.

**2. BEST TALK AWARD.** *Patrick Crumrine* (University of Kentucky) was the 2003 recipient of the Best Talk Award given by the Aquatic Ecology Section. Patrick's talk was entitled "*Examining the role of size structure on intraguild predation in larval odonates*". Congratulations Patrick!

**3. BUELL AWARD.** This year our students really distinguished themselves. In addition to Patrick's recognition from the Section, *James Vonesh* (University of Florida) was the 2003 recipient of the Society's Buell Award. James' talk was entitled "*Multi-predator effects across life-history stages: non-additivity of egg- and larval-stage predation in an African treefrog*". Congratulations James!

**4. NEW OFFICERS.** Our new officers are: *Chris Luecke* (Chair), *Ace Sarnelle* (Vice-Chair), and *Kathy Cottingham* (Secretary). *Chris Swan* will continue as our Communications Officer and *Craig Osenberg* becomes the Past-Chair. We owe a tremendous thanks to *Margaret Palmer* who stepped down as Past-Chair at the Savannah meeting. Margaret guided us for several years and spearheaded the Frost Award and associated endowment. Thanks Margaret!

**5. RENEW YOUR MEMBERSHIP.** When you renew your membership to ESA, please remember to *renew your membership to the Section*, and if possible, *make a donation to the Thomas M. Frost Fund*. Dues and Frost contributions fund student travel awards, the best talk award, the Frost Award, and the mixer!

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Please see the [Section's web page](#) for additional information and past newsletters.

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