

# in the drift

The SFS Newsletter



## SFS, what's that??

"S-F-S", just say the letters. That's what we are now. It stands for "Society for Freshwater Science". (As for what we call ourselves as individuals, we are still not sure, but it seems we might retain the unofficial label of 'NABSters' for a time—see back page!)

An official name-change for a large society is not as simple as you might expect. Dave Strayer is head of an ad-hoc committee to lead us safely through the change. Thus far (in addition to lots of more boring legal stuff), we've got a new url for the website (see bottom left), a new logo (see top right), a new name for the bulletin (you'll have to find that yourself), among other visible

changes. Still unchanged at this point are the journal title (which will be *Freshwater Science* starting with the first issue of 2012!), journal-associated stuff in the newsletter (e.g. Pam's *JNABS* corner), and the Facebook page. But the transition should be complete by the next issue of *in the drift*.

Indeed, we passed all 5 motions that were on the slate in Providence (see our Spring 2011 issue, p. 4 for details). This means we've also got a new governance structure (mainly: a developing board of directors), a new Publications Committee, and updated by-laws. Change is all around us, NABSters! It is a bit exhausting but very exciting. Stay tuned...

—*Deb Finn, Teresa Tibbets & Julie Zimmerman*

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Summer 2011

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## Did you know...? (if you didn't, check the Summer Bulletin!)

- Bill Hilsenhoff passed away in June 2011. Bill was the recipient of the 2010 Awards of Excellence and Environmental Stewardship. Read his obituary at <http://tinyurl.com/44pwydc>, and find more in the Bulletin.
- "It's time to walk the talk," says Joe Holomuzki in his *President's Environment* column. Next year's meeting in Louisville will emphasize communicating our science to influence policy and management.
- Todd Folsom is giving away some classic books (e.g. Merritt & Cummins, 1978) free if you pay for shipping! (see p. 17)
- Have you noticed the many updates made to the website this year?

Check them out at the new url: <https://www.freshwater-science.org>, and thank webmaster Patina Mendez for all her hard work (she's got a new baby boy too!).

- We have become part of the Consortium of Aquatic Science Societies.
- Lucinda Johnson is now in charge of our society's archives (transferred from Rosemary Mackay).
- SFS makes money every time someone looks at a *JNABS* (or *Freshwater Science*) article accessed through BioOne or JSTOR, so please do this, get your students to do this, and pass the word to your colleagues!
- 2014 will be another joint meeting (with ASLO, SWS and Phycological Society of America) - in Portland, OR
- SFS members come from 43 different countries!

### Heads-up for Louisville 2012!

Got ideas for a special session? Get them in by 17 October! (see: <http://tinyurl.com/5r83ec2>)

Are you handy with a camera? We'd like this year's posting of the Awards presentation(s) (see Pat Mulholland's at <http://tinyurl.com/3ha9xvl>) to start a new trend. Please let us know if you'd be interested in helping to film and post 2012's SFS awards talks! Email us: [news@benthos.org](mailto:news@benthos.org)

[freshwater-science.org](http://freshwater-science.org)

## JNABS article spotlight:

### The tale (no, not tail) of an invasive, endangered crayfish.

Filipová, Lieb, Grandjean, and Petrusek *JNABS* 30(4): 871-881.

Plague. Overseas transport. Genetic bottleneck. Foreign invasion. Endangered in native waters. Spiny cheeks. No, these are not descriptors for the next science-fiction movie release, but they do sum up the equally dramatic true story of the Spiny-cheek crayfish (*Orconectes limosus*).

Native populations of European crayfish were decimated in the 19th century after a crayfish pathogen was accidentally introduced. Many crayfish species from North America have since been introduced to Europe, and that is where the colonization history of *O. limosus* in Europe gets interesting. Lenka Filipová, the lead author of the *JNABS* article, explains: “the literature mentioned that only 90 individuals were brought to Europe from North America, but the variation in allozyme markers was relatively high. Its success in colonization of various types of localities across a large part of Europe seemed surprising given the low number of founder specimens. We then decided to have a look at the genetic variation of the species in a larger scale and to compare variation in European and North American populations.”



**Spiny-cheek crayfish *Orconectes limosus*.**

**Photo by Petr Jan Juračka.**

Filipová began studying crayfish in 2004 as an undergraduate researcher with Adam Petrusek at the Charles University in Prague, Czech Republic. They soon began their collaboration with Frédéric Grandjean from the University of Poitiers in France, after meeting him at a CRAYNET conference in Italy. This collaboration led Filipová to pursue a joint Ph.D. degree from both French and Czech universities with Petrusek and Grandjean as her co-advisors.



**First author Lenka Filipová in the laboratory in Poitiers, France. Photo by Lola Bouet.**

The successful colonization of *O. limosus* into > 20 countries throughout Europe has led to its designation as an invasive species. Its current status in the northeastern U.S., however, is a different story. “Actually, at some places in its native range, this species, a successful invader in Europe, is endangered or even completely extirpated. In many places where it is still found it is not very abundant and is difficult to collect”, explains Filipová. The challenge of getting samples of *O. limosus* from its original range led Filipová to David Lieb, who recently defended his Ph.D. and was advised by Robert

Carline at Penn State. “David provided many samples from Pennsylvania and Maryland and contributed a lot to the manuscript. When we learned that David’s grandparents come from former Czechoslovakia and he loves Central European food and beer, David became an inseparable member of our team.”

Contrary to the results using allozyme markers, the authors found low levels of mitochondrial DNA variation in European populations of *O. limosus*, providing support for the story that the spiny-cheek crayfish was introduced to Europe just once. “The genetic variation found in North America permitted us to also discuss the spread of *O. limosus* in its native range and to uncover genetically interesting populations,” says Filipová, who is planning on finishing her Ph.D. soon. “More detailed study based on microsatellite markers of *O. limosus* from the native range in Pennsylvania and Maryland could provide interesting information on these endangered populations – we hope to find students interested in this task as material is available.”



**Adam Petrusek measuring crayfish in the field.**

**Photo by Petr Jan Juračka.**



## Pam's JNABS corner



*In this issue, Pam tells us everything we need to know about the JNABS name change: Why did it happen, what changes will be made to journal content and scope, and information on submissions. Now, we need to figure out a new name for Pam's JNABS corner... any suggestions??*

Titles convey information about content and branding. Our journal title, *J-NABS*, was a clear announcement that benthic science could be found between its covers. However, over the last 30 years, the focus in *J-NABS* has shifted from benthology to a broader base that includes nearly every kind of aquatic science that affects benthological organisms and

### ***J-NABS becomes Freshwater Science soon!!***

processes. In some cases, the interpretation is so broad that seeing the "benth" in the science is a challenge. So (following the vote by society membership at Providence 2011), *J-NABS* is changing its title to *Freshwater Science*. This new title reflects both the mission of the society and the actual content of the journal and is easier for a nonbenthologist to understand. So now you might ask what makes a paper appropriate for publication in *Freshwater Science*? The Editorial Board has spent considerable effort on clarifying the content and scope of the journal. Here's the up-to-date version:

*Freshwater Science* (*FWS*) publishes articles that advance understanding and environmental stewardship of all types of inland aquatic ecosystems (lakes, rivers, streams, reservoirs, subterranean, and estuaries) and ecosystems at the interface between aquatic and terrestrial habitats (wetlands, riparian areas, and floodplains). Papers on aspects of estuarine and marine science that address ecological processes and properties that complement or add perspective to the understanding of freshwater ecosystems are appropriate. The editors welcome a wide range of topics, including:

- Physical, chemical, and biological properties of lentic and lotic habitats
- Ecosystem processes
- Structure and dynamics of populations, communities, and ecosystems
- Ecology, systematics, and genetics of freshwater organisms, from bacteria to vertebrates
- Linkages between freshwater and other ecosystems and between freshwater ecology and other aquatic sciences
- Bioassessment, conservation, and restoration
- Environmental management
- New or novel methods for basic or applied research



## ***In memory of Björn Malmqvist (1946-2010)***

Many of us NABSters know Björn Malmqvist's papers. He was, in colleague Peter Adler's words "a driving force in freshwater ecology", having contributed substantially to myriad subfields including community ecology, predator/prey relationships, parasitism, cross-system subsidies, detrital food webs, biodiversity/ecosystem functioning, and more.

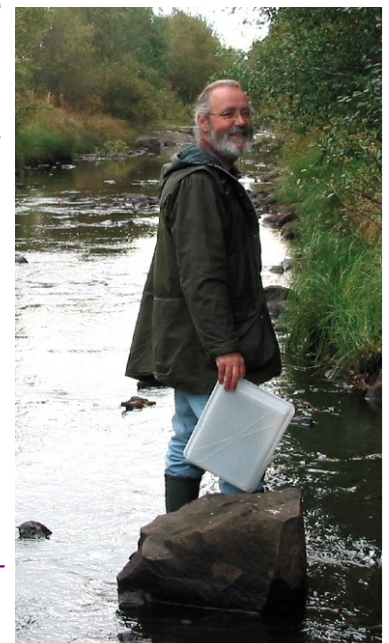
Björn completed his doctorate at Lund University in the south of Sweden, then ultimately (in 1989) arrived in Umeå in the north, where he attained a full professorship in 2000. With strong roots in both ecology and natural history, Björn had no difficulty in linking interesting traits of single organisms to ecosystem-level processes. He could move readily across such scales, and he believed that any true understanding of an ecosystem should incorporate an understanding of what its component species are doing. His love of the natural environment (streams in particular, although he also had a fondness for birds and birdwatching) led to an interest in conservation and restoration ecology. Indeed, his most cited paper to date is "Threats to the running water ecosystems of the world", published in *Environmental Conservation* in 2002.

Björn's colleagues will miss many aspects of his personality that were unknown to those of us just reading his publications. He would pursue black flies along rivers in the north of Sweden with a handcrafted trap mounted to the top of his car. An avid traveler (often for birdwatching trips), he also often left Sweden and loved to immerse himself in local culture no matter in what distant port he landed, coercing travel companions to "shabby harbour pubs, secluded jazz venues, and

dusty second-hand bookshops" (according to a recent tribute by Brendan McKie, Fabio Lepori, Roger Wotton and Jan Hermann). His international outlook led to fruitful scientific collaborations with researchers in many countries, and he was also a greatly admired mentor to students at all levels, fondly remembered for encouraging curiosity, creativity and personal initiative. All who worked closely with Björn were affected by his warmth and humanity.

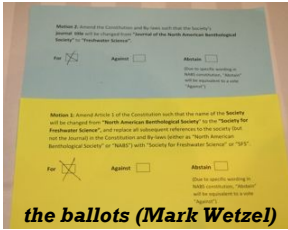
Björn passed away in October 2010. His legacy of creativity, openness and inclusiveness in freshwater ecology and life in general will certainly continue well into the future.

*A more extensive (albeit simuliid-focused) tribute is freely available in this British Simuliid Group bulletin: <http://tinyurl.com/3uznakj>. Thanks to R. Wotton, B. McKie, F. Lepori and J. Hermann for graciously contributing information and memories of Björn.*



# 2011: a Providential NABS meeting (recap)

Yes, we changed our name! At an overcrowded business lunch in a conference center room that nearly burst its temporary folding walls, NABS members voted in Providence to change our society's name to 'Society for Freshwater Science' and our journal's name to *Freshwater Science*. It was not a complete consensus (78% and 81% 'for' votes, respectively), but the transition has been quite peaceful thus far...



the ballots (Mark Wetzel)

Monday night name-change discussion. In order to accommodate the unusually large amount of business that needed addressing, the business meeting started 2 days early. First on the agenda was a name-change discussion, which was well-attended by all cohorts of NABS members and during which several members made short statements. One item (of many) agreed upon: we love being "NABSters", submitting "NABStracts", etc. We still intend to be/do those things no matter the outcome of the vote.

Pat Mulholland, Awardee of Excellence. Claiming he has been simply "riding the coat-tails of others" all these years, Pat presented a fantastic pre-recorded acceptance speech that resulted in a lengthy standing ovation. We NABSters are certainly glad he gave up on engineering to pursue the "big money" in stream ecology!

Other awards. Fred Benfield got the Service Award, claiming he chose NABS because "they didn't wear ties"; Susan Davies got the Environmental Stewardship Award; and Deb Finn got the Hynes Award (and gave an interesting presentation in a cold-medicine-induced delirium). *Note: The award plaques were made, as usual, in Tuscaloosa and saved from this year's tornadoes by a stroke of luck.*

The Great Debate. The issue at stake: "Benthic science has little to contribute to the water crisis debate." In support: 'benthoholics' Carol Couch, Margaret Palmer, and Jay



Benthoholic winners of the Great Debate? (photo: Mark Wetzel)



**Winner of the photo contest for the 2nd year in a row was Dave Funk, for this photo "Flock of Ameletus". Dave's original description included much more detail; e.g. this species is undescribed and is obligately parthenogenetic!**



**Pat Mulholland received the Award of Excellence (photo: Mark Wetzel). Pat's acceptance presentation is posted online: <http://tinyurl.com/3ha9xvl>**

O'Keefe. Opposed: Gene Likens, Jen Tank, and Walter Dodds. Who won? Ask moderator Mike Paul about this "lighthearted event on a reasonably serious topic"...

Sparkling list of plenary speakers. Plenary sessions this year took place on Mon and Tues mornings. The fantastic lineup included Charles Vörösmarty, Gene Likens, Curt Spalding, Carol Couch and Jay O'Keefe.

First president of the Society for Freshwater Science (SFS): Joe Holomuzki, with Tom Arsuffi as his assistant (formerly known as "ExComm chair").

Beer at stake. On accepting the job of this year's president-elect, Dave Penrose wondered if he owes Stuart Bunn (who ran against Dave in a very tight race) a beer, or vice-versa. We hope they've worked it out.

High-stakes auction items. The endowment auction was successful as usual. Nancy Grimm spent a fortune on a nitrogen-cycling quilt (only a NABSters would do that, eh?), and Mike Barbour got a coveted Bruce Wallace photo. The Benthic Balladeers provided tunes, including guest vocals by Mike Paul.

See you in Louisville next year! Meeting chair Jan Stevenson says there will be \$35/night housing there (a bit different from Providence!). But please first check with Jan for instruction on proper pronunciation of 'Louisville'.



**Our intrepid photographer Mark Wetzel (photo from Sue Norton)**