

Atlantic I nternational Chapter

NEWSLETTER

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President's Message

At the national meeting in Lake Placid, I ran into a lot colleagues that I only see at national meetings. This seems to happen at every national meeting I attend. I was struck by the fact that some of them are AIC Chapter members, yet they usually don't come to the Chapter meetings. Although I don't see them at Chapter meetings, these people are very active in the AFS...they are officers in Sections, active at the division level, or they frequently present papers at national meetings.

Since I was about to start my penance—I mean my chance—as president, this got me thinking about why we belong to AFS and what we get out the organization. Why do we belong to AFS anyway? What does the organization do for you, both the Parent Society and the Chapter? Why do you give your time and money to support AFS? Why does your employer support your membership? (I hope they do!) What do you want from AFS and how can the parent Society and the Chapter serve you better?

It seems like we don't discuss these big picture issues very often. However, they are very important from the standpoint of recruiting new members that will sustain the organization. If you are a student or a young professional who has just joined the fisheries/aquatic profession, you may not think about AFS. I know when I first started in the field in Washington, we had our own state organization and nobody ever mentioned AFS.

If I achieve one thing in my term as president, I'd like to reinforce the importance of new membership. After all, AFS is the preeminent fisheries professional society. We benefit tremendously from the networking among colleagues and the information we share through journals, newsletters and meetings.

We are very fortunate that University of Maine students have established a student chapter that has become involved at every level of AFS,

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Chapter, Division and National. We have the opportunity to established more student chapters, wherever there may be enough interest. We have discussed the chances of starting a UNB chapter. That is part of the reason we moved the meeting to NB and we are working to involve UNB students from both the St. John and Fredericton campuses. And it doesn't hurt that our VP is from NB as well! So if you have some connection with the colleges in our chapter, or there are some young professionals in your organization, please reach out to them and start a dialogue. And get them to a chapter meeting! Because let's face it...one of the most important reasons we belong to AFS is to have a good time every third week of September!

Steve Shepard, President - Atlantic International Chapter of the American Fisheries Society

AIC 2007 Annual Meeting to Take Place in New Brunswick

Our meeting will be held on Sept. 23-25 at the Holiday Inn, Hotel and Resort, just outside of Fredericton, New Brunswick. Details will follow in a separate email to all members and will also be posted on the new AIC website (see below).

Additionally, up to five stipends of \$100 each will be given to AIC students to attend the AIC meeting. Please contact John Magee at (603) 271-2744 or john.a.magee@wildlife.nh.gov for more information.



New AIC website!!!

The AFS Parent Society has recently made some rather significant changes to their servers and they way they host Chapter websites, and consequently, the address to the AIC website has changed. Please visit the new Atlantic International Chapter website at: http://www.fisheries.org/units/aic/

We are looking for submissions to our photo gallery, as well as exciting new research and publications. In the coming months, we will be updating the site to include on-line abstract submission, registration and reservation booking for the annual AIC conference in September 2007.

Please take a moment to view the current member list and notify me with your revised contact information.

I hope you enjoy the new site, and check back often for updates!

Alison Johnson AIC Vice President and Webmaster Alison.johnson@amec.com

North Eastern Division newsletter

The North Eastern Division Spring newsletter is now available. Please visit http://www.fisheries.org/afs/news/nednewsletter.pdf to see the newsletter.

2007 Anadromous/Catadromous Meeting in Halifax

The ANACAT II meeting in Halifax. The theme "Challenges for Diadromous Fishes in a Dynamic Global Environment" is shaping up to be an excellent symposium. The meeting will take place from June 18-21, 2007. I hope AIC members will make an effort to attend, present or even volunteer! See http://www.anacat.ca/ for further information on this event including invited speakers and sessions.

Additionally, up to five stipends of \$100 each be given to AIC students to attend the ANACAT meeting. Please contact John Magee at (603) 271-2744 or john.a.magee@wildlife.nh.gov for more information.

AFS Parent Society Meeting in San Francisco September 2-6, 2007

The 137th AFS Annual Meeting will be at the Marriott Hotel in downtown San Francisco September 2-6, 2007. The theme of the meeting is "Thinking Downstream and Downcurrent: Addressing Uncertainty and Unintended Consequences in Fish and Fisheries." For more information including planned symposia and more, see http://www.fisheries.org/sf/

From Around the AIC...

Rock Snot in Quebec Kathryn Collet Fish Habitat Biologist New Brunswick DNR Fish & Wildlife Branch

In summer 2006, *Didymosphenia geminata* (*Didymo*), a freshwater diatom affectionately referred to as "rock snot," was found in Québec at various locations throughout the Matapedia River. The Matapedia River is a tributary to the Restigouche River, a border river between New Brunswick and Québec that is home to a world-renowned Atlantic salmon angling fishery.

Didymo sticks to rocks, plants and other materials on the bottom of streams and lake shores. It can form large brown mats that blanket the entire stream bed, negatively affecting plant, invertebrate, and fish communities. The presence of the algae is not linked to the deterioration of the water quality of the river. It is usually found in pristine streams with low nutrient levels. Didymo is not noxious, pathogenic nor does it have any taste or odor compounds. While aesthetically unappealing, it does not appear to pose a human health risk.

Didymo in New Zealand



Although *Didymo* is endemic throughout the northern hemisphere, it has never before been observed in "bloom" form in Eastern North America. Invasive

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proliferations of *Didymo* have been reported on Vancouver Island, where blooms of the algae have gradually spread over two thirds of the island's waterways since the 1980s. Discovered for the first time ever in the southern hemisphere in New Zealand in 2004, *Didymo* had invaded 22 rivers by the following year. Based on the speed at which the algae spread in New Zealand, there is cause for concern.

Didymo spreads when pieces break off and drift downstream to a point where it is able to re-attach itself. It only takes one Didymo cell, not even visible to the naked eye, to colonize a new area. Didymo also spreads when it is picked up inadvertently by humans and other animals when they move from one body of water to another. It often clings to boots (especially felt-soled waders), clothes, boats, fishing gear, and other objects that have been in the water in an infected area.



Didymo in Québec

Among the rivers affected by *Didymo* on Vancouver Island, some are now experiencing only intermittent blooms. This indicates that there are natural control mechanisms that can come into play. New Zealand reacted very quickly with stringent biosecurity protocols. Anyone caught contaminating a watercourse - with their boots, fishing equipment, boat or anything else – is liable to a fine of \$100,000 or five years imprisonment. The best thing NZ did was a massive public information campaign, which slowed the spread of the infection. This may buy the time needed for natural control mechanisms to kick in

Didymo is susceptible to extreme cold and will die if it freezes. It also has a preference for pH greater than 7. These factors may help control the spread in some Atlantic Canadian waters. Also of interest is that *Didymo* can live in 50% sea water for 30 days!

No method is currently known to remove *Didymo* from a body of water once it has established itself. Quick and preventative action, including public information and education, is the most effective and responsible response to controlling its spread. The New Brunswick and Québec governments are taking proactive measures to inform anglers and field staff of the *Didymo* issue and how to avoid spreading it. The simple message is "CHECK, CLEAN, DRY." Cleaning options include hot water (40°C) for 10 minutes, a 2% bleach solution or 5% solution of salt, antiseptic hand cleaner or dishwashing detergent.

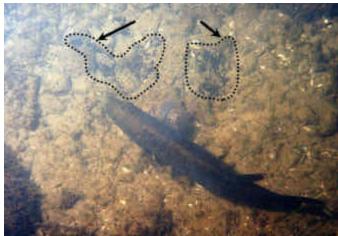
In rivers on Vancouver Island, *Didymo* blooms did not correlate with significant decreases in return rates from the sea of anadromous salmonids (Steelhead trout), although the algae does seem to depress resident trout populations (especially browns) in other places it has invaded. In terms of Atlantic salmon, impacts remain to be seen. In Iceland, *Didymo* blooms were first noted in the early 1990's. As of 2006, there is no clear evidence of harm by *Didymo* to Icelandic fish populations. However, there has also not been a targeted study on the subject.

Nesting success of smallmouth bass in Nova Scotia and potential linkages to year class strength. Preliminary results

Jason LeBlanc

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Smallmouth bass in Nova Scotia, and throughout their range, have been documented to show fluctuations in year class strength, attributed primarily to climatic conditions such as cold, late springs, sudden decreases in water temperature, storm events and predation. Environmental conditions also can influence nest success, an important component in the reproductive biology of species that provide parental care for offspring (e.g. many fish, birds, reptiles and amphibians). Reproductive success can influence population dynamics resulting in significant variations in juvenile abundance, affecting year class strength and recruitment to the fishery. During the summer of 2005 a pilot nesting project was initiated designed to test methodologies for nest observations and assess what role nesting success may have on juvenile abundance. If nesting success influences recruitment in Nova Scotia, it could be used in a predictive capacity to determine year class strength in future years, site specific management, or direct tournament angling to or away from lakes anticipated to have strong or weak length cohorts in any given year. A total of 200 nests were monitored in three lakes. The percentage of successful nests ranged from 23.6 to 35.5%. The project was expanded in 2006 to 7 lakes and incorporated data collection by volunteer anglers and smallmouth bass organizations. The lakes chosen tended to have clear water (better visibility), an established bass population, a history of tournament angling and suitable access. The 2006 study lakes included: Shortts Lake, Colchester County (16.7% n=48), Lansdowne Lake, Pictou County (34.9% n=66), West Horseshoe Lake, Shelburne County (60.0% n=30), Minamkeak Lake, Lunenburg County (20.0% n=5), Alyesford Lake, Kings County (35.3% n=17) and Killams Lake, Yarmouth County (16.0% n=25). Landsdowne Lake and West Horseshoe Lake had complete counts of total nests, which were 66 and 299 respectively. Preliminary results suggest that the mean percentage of successful nests in Nova Scotia is approximately 30% but that there is annual variation for both success rates and total nest starts.



Male smallmouth bass guarding fry

The data will be useful to: (1) establish trends in nesting success and achieve a broader understanding of smallmouth bass spawning regionally, (2) gauge the contribution nesting success makes to year class strength and recruitment to the fishery, (3) expand on a positive working relationship with organized bass anglers in Nova Scotia and (4) make better decisions regarding the management of Smallmouth Bass in Nova Scotia.

The project will be expanded in 2007 to include additional lakes that also contain chain pickerel. The predatory influence of chain pickerel on

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smallmouth bass nest position (depth and distance from shore) and possible impact on individual nest success will be assessed.

Fishes of Vermont - New Book!

The Vermont Fish and Wildlife Department announces the first-of-a-kind book for Vermont. Fishes of Vermont was written by three Agency of Natural Resources biologists, Rich Langdon, Mark Ferguson, and Ken Cox. This volume provides an account of the natural history of Vermont's 92 fish species. Included for each species is a color photo, a distribution map, and a brief account of its biology. The illustrated identification key was written with firsthand knowledge of some of the pit falls in identifying Vermont species. Also included is a section on the natural origin of Vermont fishes, current threats to populations, and a brief history of water pollution control and fisheries management in the state. Fishes of Vermont was written for biologists and naturalists as well as for anglers and people who are just interested in Vermont's fish and natural resources.

The paper and soft cover are ruggedly constructed to hold up to the rigors of field use. Proceeds from sales will support the Fish and Wildlife Department's Nongame and Natural Heritage Program activities.

Ordering information: The price is \$26.45 (\$24.95 plus tax) plus shipping. To order, call the toll free number: (800)-515-2475.

UMaine Subunit Update

University of Maine Student Subunit of the American Fisheries Society Subunit Report to the AIC Ex-Com for the period Sept. 2005 – Aug. 2006

Compiled by Chris Holbrook and Michael Bailey; Sept. 20, 2006.

There are currently at least four groups at the University of Maine that are active with fisheries or aquatic based research including: Department of Biological Sciences, Department of Wildlife Ecology, Department of Ecology and Environmental Sciences and The School of Marine Sciences. The University of Maine Student Subunit was formed to provide students and faculty networking opportunity and professional outlets. All activities during the 2005-2006 academic year were focused toward either 1) social, 2) professional, or 3) outreach activities. While most activities serve more than one purpose, they will be only listed under one category for sake of simplicity.

1) Social activities are critical for the establishment of a unified fisheries community on the University of Maine campus.

During the past year, the subunit hosted several well-attended social gatherings. These included fish-themed holiday parties, socials with several seminar speakers and an ice fishing trip to aid in the capture of invasive Northern Pike.

Professional activities are designed to add to development of both undergraduate and graduate students who plan to follow careers in aquatic resources.

Several seminars were cohosted with the Department of Wildlife Ecology including Phaedra Budy (Utah Cooperative Fish and Wildlife Research Unit), Jill Leonard (Northern Michigan University), Deanne Drake (Woods Hole Marine Biological Laboratory), Matt Mesa (Columbia River Research Laboratory), and Steve McCormick (S.E. Conte Anadromous Fish Laboratory). The subunit hosted four seminars; Christine Lipsky (NOAA), Tom Squiers (Maine department of Marine Resources), Richard Dill (Atlantic Salmon Commission) and Dylan Weese (University of Maine, Graduate Student). In addition, the subunit worked with two departments (Biological Sciences and Wildlife

Ecology) within the context of new faculty searches (River Ecologist and Freshwater Fisheries Scientist).

3) Outreach activities provide students with opportunities to aid in conservation and education of aquatic stewardship, while still full time students.

The subunit edited and distributed the newsletter of the Northeast Division of AFS (The Northeast Fish Rapper). We also maintained a fish tank on campus in cooperation with the USFWS "Salmon in Schools" program. The tank and accompanying display provided information about salmon recovery to visitors of Murray Hall (UMaine's Biology building). In addition, we have worked with The Maine Department of Inland Fish and Wildlife on plans to create monitoring stations and investigate the spread of Northern Pike recently released into Atlantic salmon waters.

Call for Nominations: Serve the AIC

The awkward silence hung over the crowd like a heavy, wet, wool blanket. Each member of the aforementioned diverted their eyes from the gaze of their beloved Executive Committee. Some were ashen, while others flushed red. A nervous twitter lighted over the room. The came the fell, dreaded words: Do we have any nominations for the Executive Committee from the floor? Emptiness. Nothing. Silence.

You can change this! We are looking for nominations for the Executive Committee of AIC for the 2007 Annual Meeting. If you have not served on the AIC Executive Committee, please consider serving next year. Our Chapter is only as good as our membership participation. The offices do not require a tremendous amount of work, but they do offer an excellent opportunity to develop your professional network, gain experience running a professional organization and planning a professional meeting, support the AIC, and work with a great bunch of people. Each year your fellow AIC members step forward and take the initiative to join the Executive Committee. Why not make it your year to serve? Please contact me with questions and nominations at

AFS Parent Society News

AFS Moves to New Book Warehouse

AFS has moved our book warehouse operation. You may now order books by contacting our new orders department operated by Books International.

5 ways to order:

1. AFS online bookstore: www.afsbooks.org

2. Phone: 703-661-1570 3. Fax: 703-996-1010

4. E-mail: bimail@presswarehouse.com

 Mail: American Fisheries Society c/o Books International P.O. Box 605 Herndon, VA 20172

As always, there is a wealth of news and other information on the AFS website, www.fisheries.org.

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