



Atlantic International Chapter

NEWSLETTER

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President's Message

Dear Valued AIC Members:

Bonjour, Salut, and Hello! I trust that everyone is well and off to a great start in this 2006 New Year. For a week or so now, I've been mulling over in my head what I thought I'd write in my first President's Message. I wasn't quite sure what I was supposed to say, or what I wanted to say. And so procrastination was the order of the day. But then this morning I realized that my reluctance to begin writing was similar to the reluctance I felt when I first got nominated as Vice-President. This was something new. Unknown. Intimidating. I thought, "I won't know what to do. I don't want to do something wrong...or stupid. What will my colleagues think if I mess up? What if they don't like my ideas?". These were all the things running through my head as I contemplated writing this address. I know – I tend to over-think things. But then I realized that these were the same fears that ran through my mind as I hesitantly accepted the Vice-President nomination.

I have to admit – that day sitting in the conference hall of the Lake Morey Resort in Vermont, I didn't exactly jump up and down and wave my arms around furiously to be nominated. I was like the rest of the crowd that day – slumped and cowering in my chair, trying not to draw attention or make eye contact with anyone. I couldn't dare take on something like that! I don't have the time! I don't know anything about being Vice-President of the AIC! However, my nomination was resolutely forwarded by a retired colleague from the Vermont Fish & Wildlife Department. I won't mention any names, but he also had a significant hand in forming the AIC as a Chapter more than 30 years ago (hint hint). However, now more than a year into my involvement, my animosity towards that person has waned somewhat (just kidding Angie). To be honest, my experiences have been very rewarding. My original fears and hesitations were obviously unfounded. So, what I really want to say at the beginning of this address is thank you Angie, and to you all for the nominations and the votes that first made me Vice-President, and now President.

Believe it or not, in a roundabout way the previous rambling was actually leading somewhere – my principal goal for the Chapter membership. Greg Mackey, our Past-President finished his February 2005 address by reminding us

that the participation of our members is what makes our Chapter successful and rewarding. I agree with Greg, and I'd like to continue building on that theme. I realize that we're all busy. Funding in natural resource management certainly isn't increasing, and yet we always seem to be asked to accomplish more, but with less time and fewer resources. It reminds me of a sign I saw this past summer hanging behind the counter of a diner in the Yukon Territory which read "We the unwilling, led by the unqualified, have been doing the unbelievable for so long with so little, that we now attempt the impossible with nothing".

Despite being in that difficult position we often find ourselves in, making the time to involve yourself professionally in an organization like the AFS can be very rewarding. I've been pleasantly surprised at how much I have enjoyed participating in AIC and AFS activities – beginning with serving as the Local Arrangements Chair in 2004 in Vermont to being the Program Director and Vice-President for the 2005 meeting in Maine, and now as President working towards the 2006 meeting, and becoming involved with the Northeastern Division of AFS. I've made plenty of new professional contacts and gained a better understanding and appreciation for the work my peers and colleagues do in our region. This can only help to further enrich my professional career.

Participation can take a variety of forms, each with their own challenges and level of commitment, and I'll just make a few brief suggestions to get things rolling...

1) People always ask when a newsletter will be coming out. Well folks, we can't put one together without submissions, which always seem to be less than forthcoming. Help keep our members informed and up-to-date on what's going on in your province or state by writing something for the newsletter!

2) While I'll be the first to admit that our Chapter's website hasn't been as active as it could be (I'm the webmaster), I can only do so much on my own. Similar to the newsletter, having volunteers send in photographs or write summaries and reports on meetings etc. helps make my job of maintaining it that much easier!

3) Get involved with the Local Arrangements Committee next time the AIC is held in your state or province! There is a lot of work I now realize is required to successfully organize such an event. Despite the work, the outcome is always a lot of fun, and appreciated by all who attend.

4) Raise your hand (gasp!) and volunteer to run for the AIC Ex-Comm. I said before I avoided it as much as anyone else, but now realize there was no reason to. Consider it "professional development"!!

5) Finally, as AIC members and fisheries professionals, try to foster future student participation. We now have one officially recognized Student Subunit in the AIC – at the University of Maine at Orono. They did an excellent job putting their subunit together and developing bylaws to become official. Their efforts should be applauded, but it's only a start. We have excellent educational institutions in all of our states and provinces which offer outstanding fisheries programs. Let's try to get more students involved in our Chapter and the AFS.

So now, on to other business and news. Our 2005 annual meeting was a great success. I believe the final count for attendance was well over 70 people, which is one of the highest we've had in a long time. The Rangeley Inn provided a fantastic setting and everyone enjoyed themselves. We had an outstanding collection of presentations as well, to the point where we actually expanded the sessions just to fit them all in. Thanks to all the speakers for the great presentations. We had a number of student presentations as well, and we continued the tradition started in 2004 of honouring the best student papers with an AFS membership. This year the judges arrived at a tie and Nathan Wilke from the University of Maine (Heritable Adaptive Trait Variation in Maine's Endangered Atlantic Salmon (*Salmo salar*): When's it Time to

Mix it Up?) and Xinhai Li from the University of New Brunswick (Overwintering Habitat Use of Shortnose Sturgeon in the Upper Kennebecasis River, New Brunswick, Canada) were the winners. Congratulations guys.

Congratulations also to Adria Elskus, Joan Trial and everyone else who had a hand in organizing the event and making it such a success. A special thanks to Christopher Holbrook, Nathan Wilke, Dmitry Gorsky and all the other University of Maine students for arranging the most coveted item of the meeting – the beer!

This year, we've witnessed a changing of the guard within the Chapter's Ex-Comm. After a long tenure as Secretary-Treasurer, Steve Shephard reluctantly (!!) gave up that post. Steve was nominated and voted in as our new Vice-President at the 2005 Maine meeting. Filling in behind Steve is our new Secretary-Treasurer John Magee. John's pulling double-duty now as he continues to be our newsletter editor. Finally, Christopher Holbrook is the President of the student subunit at the University of Maine at Orono. Rounding out their Ex-Comm is Dmitry Gorsky as V.P., Casey Jackson as Secretary, and Jennifer Kurth as Treasurer. Thanks are in order to all these folks for their active participation in our Chapter.

The last thing I want to mention is that our 32nd annual AIC meeting will be held in conjunction with the AFS National meeting in Lake Placid, NY September 10-14. My plan is to have a short business meeting followed by a social event, potentially teaming up with the NY AFS Chapter. See the accompanying article in this newsletter for more information.

Once again, thanks to everyone for giving me the opportunity to be part of the AIC. I am enjoying it immensely.

The 1st-century Roman philosopher Seneca once said, "It is not because things are difficult that we do not dare, it is because we do not dare that they are difficult". If we all dare to actively participate in our Chapter, it won't seem like such a chore, and it can only become better. Just do it. TMNike Corporation. Is it in you? TMGatorade Company.

Shawn P. Good, President
Atlantic International Chapter – American Fisheries Society

AIC 2006 Annual Meeting to Take Place in Lake Placid, New York

Shawn P. Good, AIC President
Vermont Fish & Wildlife Department

After some lengthy discussions amongst our Chapter's Ex-Comm, including consultation with the NED, an AIC Ex-Comm vote was held regarding the location of our next annual meeting. The Ex-Comm voted unanimously to forego our typical meeting rotation which would have put us in Nova Scotia for 2006, and instead combine our meeting with the Parent Society's meeting in Lake Placid, NY, September 10-14.

Here's the reasoning:

1. The Parent Society meeting is in Lake Placid, NY on September 10-14, 2006. While the location isn't in our Chapter region, it is very close. I've received numerous e-mails recently commenting that the timing of the Parent Society meeting is very close, and for most people, too close to our typical Chapter meeting date of the third weekend in September to attend both. Many people might elect to go to the Parent Society meeting, since it is a relatively easy drive for most in the Northeast and eastern Canada, and that opportunity doesn't come along often.

2. We have already agreed to join forces in 2007 with the ANACAT II meeting in Halifax, resulting in no September AIC meeting in 2007. 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 17-24, 2007. I hope AIC members will make an effort to attend, or even present! See <http://www.anacat.ca/> for further information on this event.

3. If we were to hold the AIC meeting in Nova Scotia in September 2006 and then again in Nova Scotia with the ANACAT meeting in June 2007, we may lose attendees in Sept 2006 to the Parent Society, and others may choose not to go to the AIC in September 2006 and wait for June 2007 instead because it would be difficult to get travel authorization just 9 months later for Nova Scotia again.

4. I think it's just too much, having Nova Scotia in Sept 2006 and then again in June 2007, in light of the Parent Society's date and location in 2006. At first I was considering suggesting we not hold a meeting at all in 2006 because of the conflict with the Lake Placid meeting, and just have our AIC meeting early in 2007. However, the AIC Bylaws state that we must hold at least one meeting per year. The meeting simply has to be the business meeting, and doesn't have to involve presentations etc.

So my suggestion I put up to vote with our Ex-Comm was this: Skip the typical AIC meeting in 2006 and have an AIC business meeting at the Parent Society meeting in Lake Placid, NY, at least to take care of Chapter business. The NY AFS Chapter has expressed an interest in hosting a joint social event the evening following the AIC business meeting.

In June 2007 we would join up with the ANACAT II meeting in Halifax. A large portion of our presentations typically involve topics that would fit with the Diadromous theme anyways, so AIC members that might otherwise present at our AIC might be able to submit papers for this symposium.

I think this suggestion takes some of the pressure off people to get travel authorization for multiple meetings, and it addresses the conflicts that have been coming up with the change in the Parent Society's dates recently. For 2007, 2008, and 2009, the Parent Society meeting moves back to August, or is far away (San Francisco Sept 2-6, 2007) and so less likely to conflict with the AIC.

We should be back on track with AIC meetings by 2008 when the AFS is in Ottawa August 16-20, and in Nashville August 30-Sept 3 2009. The conflicts that have arisen recently won't be as much of an issue.

UMaine Subunit Update

C. Holbrook and W. Michaud

Thanks to the hard work of students, faculty, AIC members and others, the University of Maine Fisheries Club is now officially recognized as an AFS Student Subunit. The club was formed in 2003 in an effort to connect students among different departments who share a common interest in aquatic sciences. While initial meetings were primarily for social purposes, the club has since hosted a number of educational seminars. Such seminars have covered topics such as the Penobscot River Restoration Project, the recent introduction of northern pike into the Penobscot Drainage, and brook trout and Atlantic salmon assessments in Maine. Monthly meetings have also served as a platform for graduate student presentations. This year, the subunit will continue to maintain a "Salmon-in-Schools" tank in the lobby of the Biology building at UMaine, as well as editing the "Northeast Fish Rapper," the newsletter of the Northeast Division of AFS. In addition to monthly meetings, activities for the spring 2006 semester include an ice fishing trip and seminars on lake trout and sturgeon. This summer, the subunit will also begin a project to monitor the fish community in Pushaw Stream, where northern pike were recently introduced. A schedule of activities will be distributed via email to all AIC members.

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 2006 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 greg.mackey@maine.gov.

Yours truly in past presidency, Greg Mackey.

From Around the AIC...

The proposed pollution of a lake in central Newfoundland.

John Gibson

A copper – zinc mine is being developed in central Newfoundland (The Aur Resources' Duck Pond copper-zinc project near Buchans). The major concern is that a lake in the area, Trout Pond, is planned to be eliminated as a viable ecosystem, by using Trout Pond as the "Tailings Management Area", starting in the summer of 2006. The Trout Pond drainage area is 2.2 km², and is part of the Harpoon Brook drainage basin, a major tributary of the Exploits River. Trout Pond is 1.3 km in length, has a maximum width of 400 m, and maximum depth of 2.5 m, and area of 0.5 km². It is a headwater lake, with no inlets. Presently the lake has a healthy population of resident Atlantic salmon, and possibly anadromous forms, and brook trout. Salmon in the lake were sampled of fork length ranging from 140 mm to 410 mm, and brook trout ranging from 120 mm to 300 mm. The outlet stream is productive, and at an electrofishing station in 2000 there was estimated 242 g/100m² of salmon and 149 g/100 m² of brook trout. Trout Pond also provides habitat for waterfowl, such as osprey, mergansers and loons, and several species of ducks, and the furbearers, beaver, otter, mink and muskrat.

There are planned dams, of 8m height, at both ends of Trout Pond valley, raising the lake water level from the present 257m to 265m – 270m, possibly leaching methyl mercury into the lake. In order to facilitate placement of the dams Trout Pond is to be pumped down approximately 1m. Highly toxic materials would be pumped into the lake, killing the present ecosystem. The water in Trout Pond would contain dissolved metals, elevated suspended solids, other contaminants and low pH. There will be a tailings production of 2.15 million dry tonnes. Tailings will be pumped to the lake at 53 tonnes/h¹ of solids when operating. All process wastewater from the concentrator (204m³h⁻¹) will be discharged as part of the tailings flow into the tailings pond. Waste water from the underground mine (137m³h⁻¹) will be combined with the tailings flow and discharged to the tailings pond. Drainage water from the open pit will be pumped to the tailings pond and discharged directly into it. Wastewater or "grey water" mixed with the tailings stream will be discharged into the tailings pond. Also runoff from the stockpile of acid releasing rock will be pumped to the tailings pond (50m³h⁻¹), and surplus acid releasing rock will be disposed of in the tailings basin. In addition, the normal volume of precipitation and natural seepage, seen in the present discharge of Trout Brook, would be added to the lake. The average thickness of the tailings deposit in the

basin at closure will be 3 to 4m, with a water cover of 1.5m. There would be seepage of $0.2\text{m}^3\text{h}^{-1}$ to Trout Pond Brook, and $0.1\text{m}^3\text{h}^{-1}$ to Gills Pond Brook, rising at closure to $0.8\text{m}^3\text{h}^{-1}$ to Trout Pond Brook, and $0.7\text{m}^3\text{h}^{-1}$ to Gills Pond Brook. During operation copper and zinc levels were expected to increase due to treated effluent being released into Harpoon Brook. The effects of copper and zinc are additive, with a lethal level (toxic unit) of $48\ \mu\text{g}\text{l}^{-1}$, and it has been shown in laboratory experiments (Sprague et al. 1965) that salmon parr detect and avoid levels much lower (0.02 toxic unit). It is stated (p. 203) in the EIS that, "The biophysical effects assessment concluded that the most serious effects during construction would be due to sedimentation and the removal of Trout Pond from the watershed, which could affect water quality and freshwater fish in the Harpoon and Exploits watersheds, and to a lesser degree in the Tally Pond watershed". At decommissioning the outflow dam of Trout Pond would remain, removing permanently fish access to this lake from the system.

As part of "mitigation" fish will be removed from Trout Pond prior to its use. No reason is given for this. If the fish are transferred to another water with fish of a different genetic makeup or is at carrying capacity the exercise would be detrimental. If the idea is to turn the lake into a fishless lake to help change regulations it is unlikely that all fish could be caught. There would be "compensation" for lost habitat, but it does not say how this would be accomplished. Incredibly, it is stated in the EIS (P.268 and Table 6.6), that, "the residual environmental effects of the project on fish and fish habitat are assessed as minor. The proposed project is therefore not likely to have significant adverse environmental effects on fish and fish habitat." In fact the effects would be major, because a lake ecosystem plus its population of salmon and brook trout would be eliminated, and the downstream reaches from Trout Pond are likely to be seriously contaminated. The Exploits River is a valuable salmon river, and would be negatively affected. It must also be taken into consideration that lakes have positive modifying effects on fish production downstream, and in Newfoundland provide important rearing habitat for anadromous salmon, (Gibson 2002).

Evidently a lake can be rescheduled (Schedule 2, in a 2002 review of the Metal Mining Effluent Regulations) as a tailings impoundment area if it has been polluted historically. This may be reasonable, but to reschedule a pristine natural water body as an industrial waste dump is completely contradictory to the Fisheries Act. Nevertheless, the Department of Fisheries and Oceans (DFO) has accepted that "the project is not likely to cause significant environmental effects", and has requested to Environment Canada that Trout Pond be added to Schedule 2, even though a "fish habitat compensation plan" has yet to be finalized. This would set a dangerous precedent for any mining company or organization to pollute a waterway if it were cheaper to do so than otherwise dispose of toxic wastes. The mining company in this case should be asked to construct a separate holding area for treatment of tailings, as was required for the Heath Steele mine in New Brunswick forty five years ago in a similar situation. The Fisheries Act is very clear that deleterious substances not be discharged into fish bearing waters or that fish habitat be destroyed. If DFO allows the Trout Pond ecosystem to be destroyed, it would be a giant step backwards, and in general would weaken public confidence in the ability of Canadian government departments to conserve the national resources.

References

- Gibson, R.J. 2002. The effects of fluvial processes and habitat heterogeneity on distribution, growth and densities of juvenile Atlantic salmon (*Salmo salar* L.), with consequences on abundance of the adult fish. *Ecology of Freshwater Fish* 11: 207-222.
- Sprague, J.B., P.F. Elson, R.L. Saunders 1965. Sublethal copper-zinc pollution in a salmon river – a field and laboratory study. *International Journal of Air and Water Pollution* 9: 531-543.

Vermont's All-time State Muskellunge Record Broken Twice in 2005

**Shawn P. Good, Fisheries Biologist
Vermont Fish & Wildlife Department**

Muskie fishing has never garnered much attention in Vermont. But 2005 is telling a different story. The all-time state muskie record that stood since 1978 was broken twice in a matter of 4 weeks! Stephen Demar of Swanton set the last record in June of 1978 with a $47\frac{1}{2}$ " muskie. He caught this monster 29lb, 8oz muskie while fishing a live minnow in the Missisquoi River, a tributary to northern Lake Champlain. That impressive fish was large enough to stand as a state record for a full 27 years.

However in August of 2005, Bob Lemieux of Vergennes landed a muskie that finally broke the long-standing record. Lemieux's muskie was 48" long, had a 23" girth, and weighed in at 30lbs, 10oz. Bob caught this fish trolling a spoon in Otter Creek, a tributary to central Lake Champlain. Bob's fish was recognized as the new all-time state record muskie, but unfortunately it only held that acclaim for 4 weeks.



Bob Lemieux with his Otter Creek muskie taken on August 5, 2005. The fish was 48" long with a 23" girth and weighed 30.65 lbs.

In early September, Chris Beebe of Swanton was fishing with a live frog in the lower Missisquoi River when he hooked and landed a giant muskellunge that was $52\frac{1}{4}$ " long, had a 23" girth and weighed a whopping 38lbs, 3.5oz.

Not only was having two back-to-back record muskie caught a month apart in 2005 an unusual occurrence in Vermont, hearing of any muskie caught at all was remarkable in itself. While muskellunge are native to Lake Champlain's waters, they were thought to have been mostly extirpated following a major chemical spill in the late 1970's in the Missisquoi River. Sporadic stocking in the 1980's was generally considered unsuccessful.

In addition to the two record muskie reported, a third muskie, though quite smaller at 18lbs, was also caught in Otter Creek by Andrew Talcott of Manchester, VT during the annual Lake Champlain International Derby. There are indeed muskie swimming in Vermont waters!

We're unsure why there's been such a recent flood of reports regarding muskie catches, but it might have something to do with the muskellunge restoration program the Vermont Fish & Wildlife Department has recently begun. A team of biologists, with myself as the Chair, has spent a good deal of effort in the past year conducting public outreach campaigns trying to raise awareness of the status of muskie in the State, as well as attempting to reach out to Vermont's angling public to gather information on any muskies that anglers might encounter. Angler



Chris Beebe with his new all-time state record muskie caught on August 8, 2005 in the Missisquoi River. This muskie was 52 1/4" long with a 23" girth and weighed 38.22 lbs.

reports, and any biological data that might be gathered as a result, is an important part of the Team's restoration efforts.

It's possible that anglers may have been occasionally catching muskies in Lake Champlain for years, but never thought it important enough to notify biologists. However, because of our outreach efforts, the restoration program has been written about in many state newspaper columns and fishing magazines. It even made this month's nationally distributed FLW Outdoors magazine (a bass fishing publication no less!).

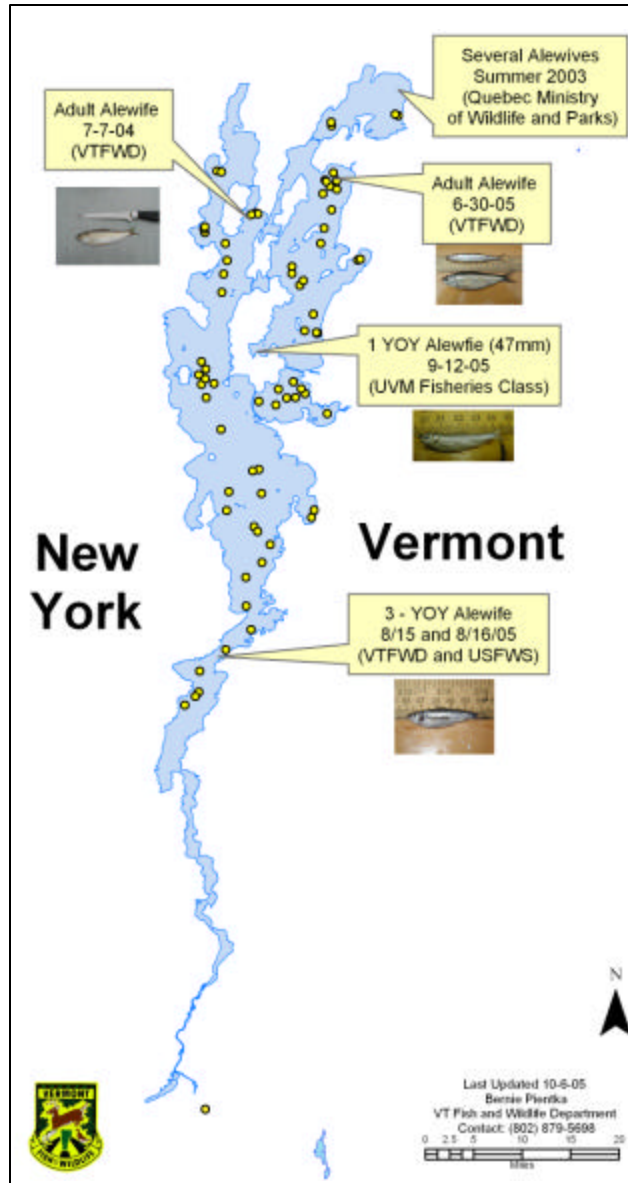
Increasing public awareness of our efforts has undoubtedly led to more talk about muskie fishing and these record catches have excited and energized the angling community. Hopefully our restoration program will succeed in bringing these majestic fish back to Lake Champlain and its tributaries for anglers to enjoy for the future!

Update on Alewife Distribution in Lake Champlain
Shawn P. Good, Fisheries Biologist
Vermont Fish & Wildlife Department

Vermont Fish & Wildlife officials continued monitoring the spread of alewives throughout Lake Champlain in 2005. The accompanying map shows the locations of the most recent occurrences of alewives. Fish collected included several young-of-the-year alewives, which seem to indicate that there is now a reproducing population of alewives in Lake Champlain.

Since the presence of alewives in Lake Champlain was confirmed genetically in 2005, the Vermont Fish & Wildlife Department has begun monitoring the spread of this invasive fish species through mid-water and bottom trawling surveys. The map in the next column shows lake-wide sampling locations and indicates where alewives were captured through the fall of 2005. With the discovery of multiple year-classes of alewives, primarily concentrated in the central and northern parts of the lake, it now appears that these fish are reproducing. Biologists are certainly concerned that a well-established alewife population in Lake Champlain may negatively impact rainbow smelt, native coregonids, yellow perch and other native fish species. Potential reproductive failure of lake trout due to thiaminase issues is also a serious concern.

See map in next column...



Nash Stream Restoration Project
John Magee
Fish Habitat Biologist
New Hampshire Fish and Game Department

In 1969, the Nash Bog Dam failed catastrophically, sending a deluge from a 200+ acre lake down Nash Stream - akin to at least the 500-year flow. Old, mature trees and boulders the size of trucks were moved and/or removed from the stream, meanders, floodplains, you name it, were severely altered and essentially lost from much of the ecosystem. One man rode out the flood perched at the top of large tree. Nash Stream's sediment can now be seen just upstream of the Groveton (NH) paper mill in the Upper Ammonoosuc River, and it formed a large, shallow braided channel with little water deeper than one foot. As is too often the case after a large flood, bulldozers were sent in to "clean up" and "increase the flow capacity of the river". We now know bulldozers have no place in a river...or do they? It's been 37 years since the dam failure. Nash Stream seems to be trying to find its ancient meanders, but berms (some are thousands of feet long) say "No!". Wood and most smaller substrate (i.e., gravels that would be used by brook trout for

spawning) simply ride the water down to the Upper Ammonoosuc and Connecticut Rivers. The 'net' that once captured leaves and wood is gone, as is the biological productivity that depends on them.

It can be brought back, we can rebuild it!...perhaps "rebuild" is too strong a word...how about "give Mother Nature the tools needed to find her way".

Trout Unlimited, the U.S. Forest Service, U.S. Fish and Wildlife Service, NH Dept. of Resources and Economic Development (landowner), NH Fish and Game Department, and USDA Natural Resource Conservation Service have teamed up to work on this restoration project. Funding may come from a variety of federal, state, and other sources.

In 2005, we completed habitat surveys of Nash Stream, fish surveys of the entire watershed, low elevation aerial photography of Nash Stream, water quality investigations, and...culvert surveys. We have been able to use these data to prioritize restoration projects, which will include the removal/retrofitting of culverts to allow fish passage and remove the geomorphic impacts some are causing, re-creation and revegetation of floodplains, and instream work such as large woody debris and boulder placements. Yes, the instream work and even the floodplain re-creations will require big machines, some of which will be in the stream.

This project obviously has the nexus of restoring fish (especially brook trout) habitat in those areas where there is now little of it. However, it may somewhat unique in that the approach has been to focus primarily on the geomorphic problems in the watershed with the idea that fish populations will respond positively to this. Mother Nature needs a little help, that's all. But, in 37 years, the stream has not healed, and will not for many hundreds of years.

In 2006, geomorphic assessments will be conducted along with additional fish surveys and water quality analyses. On-the-ground restoration work will begin in 2007, with the possibility of some work being started in 2006.



Nash Stream in 2005. Pretty, but often one, long shallow riffle bordered by abandoned floodplains with almost no vegetation. Great place to be a slimy sculpin...not great for any larger fish.

Other AIC News

ON the AIC website is an interesting article documenting the history of the AIC. Click on <http://www.fisheries.org/aic/aicabout.shtml>.

AFS Parent Society News

CALL FOR NOMINATIONS

Excellence in Fisheries Education Award Education Section, American Fisheries Society

The American Fisheries Society (AFS) Excellence in Fisheries Education Award was established in 1988. The award is administered by the Education Section and is presented to an individual to recognize excellence in organized teaching and advising in some aspect of fisheries education. Nominees may be involved in extension or continuing education, as well as traditional college and university instruction. Nominees must be AFS members, have been actively engaged in fisheries education within the last five years, and have had at least 10 years of professional employment experience in fisheries education. Two or more people may act as nominators, but at least one nominator must be an AFS member. Letters and supporting material documenting the contributions of the nominee to fisheries education (e.g., awards, descriptions of exemplary service, innovations, students taught and advised, post graduate achievements of former students) should be sent to Michael Quist (mcquist@iastate.edu) and a second copy to Donna Parrish (Donna.Parrish@uvm.edu) in digital form. Please send a hard copy of nomination materials to Michael Quist.

Nomination deadline is May 31, 2006. Additional information can be obtained from:

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Other AFS Parent Society News

As always, there is a wealth of news and other information on the AFS website, www.fisheries.org. Noteworthy is the January 2006 Director's Diary at <http://www.fisheries.org/html/Jan06diary.shtml>.

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