



# Newsletter

Volume 7 Number 2

May 1994

## London Embraces Subwatershed Planning

London was founded 200 years ago at the forks of the Thames River. The city recently tripled its size when it annexed surrounding, primarily rural, land pursuant to Bill 75, the London-Middlesex Act of 1992. One of the crowning events of the annexation will be the adoption of a new City Official Plan by 1996. John Brandt wrote in his Greater London Area Arbitrator's Report that "one of the key reasons the annexed area was so extensive was to provide the city with the opportunity to create a plan that includes full environmental and social planning. London has a special opportunity and responsibility to preserve the natural environment. As a part of its new plan, it must seek out those environmentally sensitive areas within its new boundaries and provide for their protection". To this end, planning is proceeding across many fronts under the banner of 'Vision '96'.

Of particular interest to MNR Area

Biologist (Ayimer) and SOC member, Harald Schraeder, is the suite of subwatershed studies being undertaken to complement the O.P. process. "The city bought into subwatershed planning before the release of the province's trilogy on the subject", stated Schraeder, who, with Planner, Sally Colman, represent MNR on a number of Technical Advisory Committees (TAC's). "They were pleased to find that their approach should result in products that exceed the provincial interest. In my opinion, the 'theme' of these plans builds on the city's sincere desire to direct future development to provide a mechanism for achieving net environmental gain".

The subwatersheds being studied are tributaries of the Thames and North Thames and vary in drainage area from the 7.1 km<sup>2</sup> Crumlin Drain to the 208 km<sup>2</sup> Medway River. A five phase approach has been adopted: Background Information Review, Detailed

## Reminder:

**Stream Analysis and Fish Habitat Design: A Field Manual by R. Newbury and M. Gaboury**

is available through the AFS SOC on a special arrangement with the authors. The cost is \$60 CAN including GST and postage, and it may be purchased by contacting Gerry Leering at 705-743-5780.

**Chapters include: Design and construction; evaluation of stream behaviour and geometry; planning stream habitat projects; and field exploration.**

**A recommended book!**

Studies, Development of Alternative Subwatershed Management Strategies, Recommended Strategy, and Implementation and Monitoring. Nine subwatersheds and associated Thames River main stem reaches have been grouped into five subsets for purposes of economy and similarity. Detailed Studies are currently under way for these. In addition, the City initiated the Dingman Creek (160 km<sup>2</sup>) subwatershed plan in the fall of 1992, prior to the start up of the other London subwatershed plans during the summer of 1993.

"My involvement on the various TAC's continues to be quite exciting", admits Schraeder. "There's a lot of human dynamics at play but in an atmosphere of professional respect for individual views and opinions. We're all struggling with actually trying to practice ecosystem management". Schraeder believes that the biggest challenge lays ahead: resolving the planning repercussions that will arise as the participants in the subwatershed planning process attempt to satisfy their commitment to manage for sustainability. "These subwatersheds have poor water quality, base flows which reflect degraded systems and less than 15% forest cover with even that being disconnected or marking steep slopes".

"Most people would agree that the condition of many of our streams and rivers reflects our legacy of failing to manage sustainability at the landscape scale", says Schraeder. He feels that further entrenchment of the so called 'realities' of existing land use practices under the auspices of subwatershed planning to maintain the status quo would be a travesty. "The public has entrusted its lands

and water managers to make sure that opportunities for reversing our losses aren't squandered as development unfolds".

"The development community must be a strong partner. It's obvious that the rate of development will dictate the rate of implementation of subwatershed plan strategies. We stand to achieve our greatest ecological gains through the land use conversion process", believes Schraeder. "The 64 million dollar questions are: Are we prepared to pay the cost, in terms of limited development, of ensuring sustainability at the landscape level? How much of our land base needs to be secured to allow the re-establishment of healthy ecosystems? Is the public prepared to pay and will they get the goods?" Hal would like to hear from people who think they have the answers.



## News

### Walleye Synthesis

Since last year, the OMNR has had seven working groups gathering all available information on percid communities across Ontario. The synthesis will produce information sources, tools and techniques, and recommendations to improve percid community management.

The key issues identified include:

- assessment standards;
- diagnostic tools;
- harvest/angling quality;
- habitat changes;
- stocking;
- community manipulations;
- life history tactics.

A large database has been assembled by an information support team for use by the working groups. Technical reports will be assembled by 1995, and modelling teams will establish electronic tools (diagnostic and simulation models) that integrate the working group findings. Contact Cheryl Lewis at 613-476-3255. -CARS

### Fish Passage Policy and Technology

The published proceedings of the Fish Passage Policy and Technology Symposium sponsored by the Bioengineering Section are now available. The two day symposium was part of the 1993 annual meeting in Portland, Oregon.

Thirty papers presented policy, planning and current technologies of upstream and downstream fish passage. The Policy, Planning and Management Section includes

discussions of special passage considerations for endangered species, history and success of fish passage mitigation, inventory of fish passage policy and ecological affects of fish passage over natural barriers.

**The Upstream Fish Passage Technologies Section** reviews current technologies in many regions of the world, upstream juvenile fish passage and the evaluation fishways.

**The Downstream Fish Passage Technologies Section** discusses understanding and designing for fish behaviour, the impact of developments in new fish screening concepts including the Eicher and MIS screens.

The proceedings of the symposium are available from the Bioengineering Section for \$20 per copy including postage and handling. To order, send your request with a cheque, money order, or purchase order to Greg Kindschi, AFS Bioengineering Section, 4050 Bridger Canyon Rd., Bozeman Mt. 59715. -kt

### Stock Transfer Position Statement

The AFS Genetics Section is working on a position statement on "Protecting genetic resources of aquatic organisms: Elimination of stock transfers". In formulating this statement a point-counterpoint debate will be held at upcoming AFS Division meetings with representatives from the Fisheries Management, Fisheries Administration and Fish Culture Sections. The Midwest Fish and Wildlife Conference in St. Louis in early December will be the venue most appropriate to SOC members. A summary article will be published at the end of the process.

### Excellence in Fisheries Education Award

This AFS award was established in 1988. The award is administered by the Education Section and is presented annually 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.

Nomination deadline is June 1, 1994. Additional information can be obtained from:

Mark Sabo  
Chairman, Excellence in Fisheries Award Committee,  
Louisiana State University  
Baton Rouge, La. 70803  
(504)388-4560

### Keeping You up to Date

This represents some of the recent mail received requesting information from members who may be able to contribute. The FAN survey has been received. If any members are interested in responding please contact Alex Palilonis. All of these topics will likely influence resource management in this Province in future.

The Resource Policy Committee (of the NCD) was asked by the Society's Executive Committee to develop information on the **Effects Agricultural Practices Have on Aquatic Resources**. The North Central Division felt that strong position statements based on peer-reviewed science would be useful for AFS to contribute to the debate surrounding the reauthorization of the Farm Bill in 1995.

The Executive Committee also asked the North Central and Northeastern Divisions to develop positions on a number of issues in the **Great Lakes**. These issues include exotics in the Great Lakes, sea lamprey management, and the Great Lakes Fish and Wildlife Restoration Act.

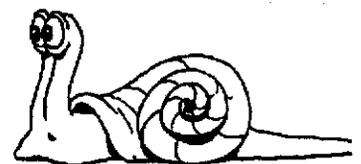
The FAN Development and Implementation Committee will survey the subunits for their information and expertise on the **Effects of Fine Sediment Mainly From Bank Erosion on Aquatic Resources**. The survey, which is currently being reviewed by the FAN Committee, will determine what type of action the Committee will be proposing. -A.P.

### International fish physiology symposium

Entitled, "*High Performance Fish*", this conference is scheduled for UBC on June 16-21, 1994.

The theme of this symposium is to look at the many aspects of a fish's biology that might limit its performance and show what techniques are being applied now and might be applied in the future to reduce those limitations. While a great deal of science will be presented, that science has vital relevance to the management of all groups of wild and cultured fishes and to the health of the environments in which they live.

There is too much information to convey here, so get a brochure by contacting Kevin Trimble or the UBC conference centre at 604-822-1050



# Ontario's Credentialism Policy

The Deputy Minister of Natural Resources has responded to President Hubley's letter of November 18, 1993, addressed to The Right Honourable Bob Rae, Premier of Ontario, regarding the Ontario Public Service Policy on Credentialism and its application to biologists and ecologists working in the Ministry of Natural Resources.

Webster's defines credentialism as an undue emphasis on credentials, which are testimonials showing that a person is entitled to credit.

Mr. Mitton states,

*"Credentialism is an employment practice requiring candidates to have formal education or a specific number of years of experience. The Credentialism Policy discourages the use of unjustified or unnecessary credentials when describing a job, advertising positions or hiring candidates. The purpose of this policy is to ensure that all candidates have equal access to positions based on an appropriate combination of experience and training, rather than on specific credentials."*

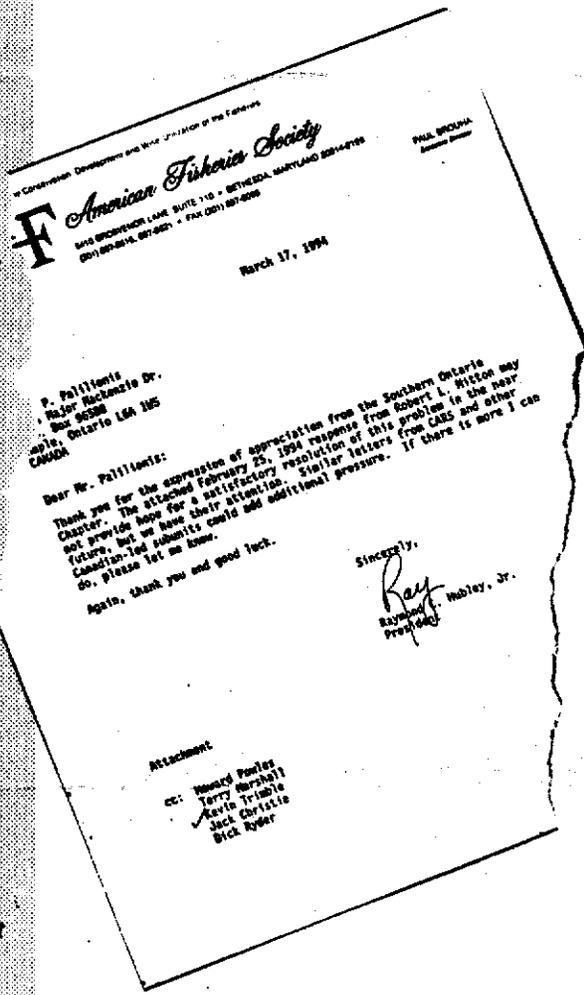
The Province's definitions must be clarified. The above paragraph suggests that the unjustified requirement of formal education and experience should be discouraged, but that training and experience are justifiable means by which the Province should hire biologists and ecologists.

*"As you know, credentials are only allowed when required by statute or where the knowledge of a job can be acquired in no other way. The qualifications of a position must be "reasonable" and "bona fide" in accordance with the Ontario Human Rights Code. The use of unjustified credentials is a systemic barrier which can discourage or prevent Ministry employees or members of the public from competing for Ministry jobs.*

*Over the last few years, the Ministry has used a recruitment and selection process which emphasizes skills, abilities, knowledge and experience rather than focusing on specific credentials. Our interview selection committees are composed of seasoned individuals with appropriate backgrounds who are capable of evaluating candidates using both technical questions and appropriate assessment tools. Consequently, the skills learned by candidates while completing a degree are evaluated on the same basis as those acquired through related work experience or training.*

*The Ministry's process, which considers skills learned from degrees, work experience and training, promotes excellence by ensuring that the best possible matches are made between candidates and job requirements. This ultimately provides a wide range of candidates to choose from, resulting in the selection of highly and most qualified candidates. As a result, the merit principle is applied in a consistent, fair and equitable manner."*

*"Finally, the Ministry continues to respect hard-earned credentials and we are very proud of the contributions of staff possessing them. Nothing in the policy, or in the Ministry's application of it, seeks to downgrade individuals who possess credentials and removing credential requirements for Ministry jobs does not make the position or the employee less professional."*



# President's Message



The 6<sup>th</sup> Annual Meeting of the SOC-AFS went without a hitch on March 2<sup>nd</sup> at the Sheraton Fallsview in Niagara Falls. Approximately 25 members and guests enjoyed an exceptional dinner in the company of Society Past-President Carlos Fetterolf and our guest speaker from Great Britain, Dr. Hey. Special thanks go to President-Elect, Hazel Breton for the excellent arrangements, during both the dinner and business meeting.

There were a few more in attendance at the business meeting, but we still fell short of establishing a quorum. Business proceeded as usual, but the absence of a quorum prevented us from amending our bylaws and creating the Executive Officer position of Vice-President. We will have to proceed with a mail ballot to complete this exercise. We are currently receiving nominations for this position. The election will be conducted at the same time of the mail ballot, sometime later this spring.

Those who attended the annual meeting received briefing notes that summarized the activities of your EXCOM, the status of committees, financial statements and the like. An update on much of the annual meeting is included in this newsletter issue.

In September, at the AFS Annual meeting in Halifax, your new slate of Executive Officers will take office. I would like to congratulate Doug Clark in becoming President-

Elect. During the past year Doug has contributed a great deal of time and effort to SOC-AFS matters. I'm sure I speak for fellow EXCOM members when I say we look forward to working with him as a fellow Executive Officer.

Our last newsletter carried a proposed resolution re: thanking President Ray Hubley for his support of credentials in this Province. I believe the President of the Society took a major leap of faith towards our cause. I hope some day we can show how professionalism has moved forward in this Province, not only by what President Ray Hubley undertook, but by what we as Chapter members do in the imminent future.

The motion to accept the resolution was passed unanimously by the members. Shortly thereafter, some further discussion lead to an additional resolution being passed, which in essence asks the Parent Society to forward a copy of the President's initial correspondence to OPSEU. Further to this, Shawn Taylor has offered to assist the EXCOM in reaching out to *shareholders*, those parties with a common interest in the management of our fishery resources, to advise them of the implications that "decredentialism" within the Provincial Government will have on the management of our aquatic resources. Our campaign will be in keeping with the resolution passed during the meeting, "to actively approach the issue which Society President Ray

Hubley addressed in his letter to Premier Bob Rae". We are hoping to develop some public opinion, particularly among consultants, user groups and other professional disciplines that have some expectations for proficiency within the Province. There is a need to integrate Shawn's efforts with that of the Ethics Committee which is trying to wrap up its assignment. I hope a little added work will not be too discouraging to these members.

Another new name for the membership to become familiar with is Jan den Dulk, who has also offered to assist the EXCOM. Jan will be taking up the task as chair to the *Student Affairs Committee*, getting this up and running through our Universities. With the lion's share of educational institutions in Southern Ontario I feel the Chapter is obligated to support students and encourage their interest in fisheries management, the Chapter and Society. Jan will be trying to co-ordinate a student network through the University of Guelph's Fisheries Club. Jan, thanks for your support....I am personally committed to the work you will be undertaking. *Promotions* is another area I'm hoping the students can get involved with.

There was one vacancy on the EXCOM, the position of *Membership Steward* that has been filled as I write. Shawn Taylor acknowledged that he felt he was prepared to become more involved in the SOC-AFS, and decided to take on these responsibilities. His

perspective as a consultant, with a wealth of first-hand fisheries experience will provide the EXCOM and Chapter a perspective that will be in high regard. The Membership Steward is a non-voting member of the committee with the responsibility of maintaining a membership roll, acquiring mailing lists from the parent Society Office, undertaking membership campaigns etc. The Steward is expected to attend EXCOM meetings, be involved in discussions, offer discussion topics and even introduce motions on issues under debate. As stated, this is a non-voting position, appointed by the President.

When you have an opportunity to meet Jan or Shawn I hope you will extend a hand shake as a token of respect and gratitude for their involvement in our Chapter.

.....MORE ABOUT THE ANNUAL MEETING.....

After the meeting I was asked by some members to repeal the motion requesting the Society to forward a copy of Mr. Hubley's letter to OPSEU. It was recommended that this be left to the *Natural Resources Association of Biologists* for their action, rather than the SOCAFS'. To a certain point, I agree. The Chapter consists of members who are professional consultants, students, Provincial agency staff, or personnel affiliated with our universities, most of whom, but not all work in a fisheries related field. The issue deals not only with MNR staff (who are a minority in the Chapter) but all disciplines. Why should the private sector expect anything less from Government than well founded management decisions based on science? In this

regard the issue does merit our support, but only in-so-far as meeting the objectives of this Chapter. The issue I was approached about after the meeting should have been raised while the motion was being discussed. Since the motion was accepted without objection, I feel obligated to act accordingly.

The meeting was long and didn't end until 11:30 pm. I felt we had to cut this meeting a little short, but there was still merit and interest in continuing to discuss this issue. I would like to propose an open forum in the newsletter for our members to express their views about credentialism, professionalism, a Code of Conduct for members and the concept of certification. As peers sharing a common interest, I believe it is time to seek some constructive criticism from within. It is because of who we are and what we do, that each of us is obligated to commit ourselves to such a cause. So if you have some ideas on these issues the Chapter needs to hear them. Write them down and send them in. We will put them into the next newsletter.

Here are a few questions each and every member should consider:

- 1) What is your position on credentialism? Should the Chapter take an active or passive role in protecting the interests of specific professional groups and if so why? What action plan should we undertake to follow through on this position?
- 2) What should the Chapter's position be with regard to seeking professional status in the Province? Who should be qualified to enter such an organization? Are you willing to live and work by a Code of Conduct to uphold principles of fisheries science? Should our management decisions be subject to peer review? Have you read the Society's Code of Practices and Ethics (inside the AFS membership directory).
- 3) What is your interest in seeking certification within the Chapter? Are you prepared to earn this status if it was possible?

Think about it.... and start typing!

American Fisheries Society Fisheries Action Network

**Evolution**  
*The*  
**Aquatic Ecosystem**  
*Defining Unique Units In Population Conservation*

For conference information and registration, contact: *Christine Gan or Cindy Carpanzano*  
 (510) 642-7525  
 Fax (510) 643-5035

This conference will establish a forum where science can be used to facilitate information and develop a public understanding of the concept of aquatic population structure and its application in resource management.

Anyone who is working in conservation programs concerned with aquatic ecosystems including all fisheries professionals, geneticists, systemists, natural resource managers, tribal personnel, and agency personnel should attend.

Doubletree Inn, Monterey, CA      May 23 - 25, 1994

# Legislated Status for Biology as a Profession?

I was advised that the subject of credentialism generated some discussion at the annual meeting in Niagara Falls in early March. Obtaining legislated recognition as a profession may be the extreme of credentialism. There has been at least one attempt, in my memory, to stimulate an interest in obtaining legislated status for the "profession" of biology in Ontario. The effort fizzled after a short time, probably from lack of support. Unlike spotted owls and snail darters such subjects never seemed to generate much enthusiasm amongst biologists in the past. The Ethics and Professionalism Committee of the SOC has done some investigation into the subject. I was asked to share what we had learned. Our charge had been to review the Code of Practices for AFS members and this article is flavoured in that light. However, the content should be pertinent to the credentialism issue. I will also take the opportunity include some personal thoughts on the subject, for whatever they may be worth.

It will be no easy task to generate interest in obtaining legislated status for biology as a profession. "Biology" includes a range of specialities from microbial to ecosystem with a host of sub-sets in between. One small group, eg., fisheries biologists, will not be able to make ground by themselves without the support of a large representation from other areas. There may also be a fraction that does not support the idea. For example, some biologists within OMNR support de-credentialism. Of course, there is always our biggest enemy, apathy.

Several legally recognized

professions are showing an interest in what has been traditionally regarded as biologists' turf. For example, engineers are considering recognizing an "environmental" speciality. From my own small speciality area, I have seen the veterinary profession gradually but surely taking over the work. This is partly because there are now graduate veterinarians with an interest and training in fish health, but also because they are legally able to prescribe medications. Who's fault is it that biologists are losing this small portion of their field? Ours! Mine! We never organized, obtained recognition for ourselves and convinced the powers that be that we are just as equipped to do the job. We have the skills and the expertise. All we lacked was the legislated status. We lacked the license that could be yanked if we did not follow the rules and the professional society behind us to discipline us if we moved outside those rules.

Perhaps I am paranoid or drawing too big an inference from my speciality to the broader field of biology. However, in tough economic times, it is not unrealistic to expect other professions to look out for their own. How would your life change if only engineers could approve stream rehabilitation work, develop wetland protection plans or review subdivision plans from a fish habitat protection perspective. They have the mechanism to make that happen. We do not. Perhaps that is how we see ourselves - the collectors of biological data that gets passed on to engineers, lawyers, and (gulp) planners while we stand back and let them make the decisions. Is that your vision?

The Alberta society of Professional Biologists and the Association of Professional Biologists of British Columbia both have legal status as professions in their respective province. In B.C., it is under the Society Act of British Columbia and in Alberta, it is under the Societies Act of Alberta. As far as we have been able to determine, Ontario does not have an umbrella act for professional societies. Under the B.C. and Alberta legislation, a professional association may be legally recognized but must comply with certain criteria such as:

- maintenance of by-laws;
- elected Board of Directors that meets regularly;
- code of ethics and a discipline committee to respond to complaints from the public or other professional biologists;
- qualification standards;
- audited financial statements;
- maintenance of an office.

In both provinces, it is not necessary to be a member of the professional society in order to work as a biologist. Members are entitled to use the initials "P. Biol." after their name. There is no requirement to hire a "P. Biol." to perform a particular job. Because of the cost of maintaining the infrastructure of the society that is mandated by legislation, annual memberships are several hundred dollars per year.

In order to practice as a lawyer, doctor, dentist, veterinarian, nurse, or chiropractor, you must be a member of the appropriate society or association and comply with the by-laws and code of ethics of practices of that society. Failure to

comply could result in loss of your ability to practice the profession. Most people are at least partially familiar with some or all of these professions and the complexities of dealing with discipline and ethics and malpractice problems. However, within Ontario, several other professions have been recognized through legislation:

- Ontario Professional Foresters Association Act;
- The Teaching Profession Act;
- The Institute of Professional Agrologists Act.

Membership in the appropriate association is mandatory in order to perform certain functions. The functions can be broad, eg., full time secondary school teacher, or narrow, eg., approval of timber management plans. (Note the latter example is mandated by the Environmental Assessment Act and not by the Professional Foresters Act.)

If biologists wish to pursue a similar approach, considerable work is required to establish legislated status for the profession and to maintain the infrastructure that sustains it. This includes establishing qualifications for membership, be they general or specific, for different specialities, different membership categories or specialities, standards for continuing education, developing a code of practices, developing standards of work, and determining what functions should be done or supervised by a member.

We need to debate why we should exist as a profession. What is unique about our training and area of expertise? What can biologists, and only biologists, contribute to society? That "turf" could be staked out and form the rationale for creating a "Professional Society

of Biologists". Perhaps there are better ways, different models to follow, but we must start the search for those now. What do you think?

The above constitutes my personal opinions and do not reflect the views of the Ethics and Professionalism Committee or the SOC/AFS EXCOM. -A. Sippel



## Treasurer's Report

The current budget and the proposed operating budget for next year is outlined elsewhere in this newsletter. Please note that next year's budget proposes to operate in a deficit. This is the first year the Chapter has brought forward a proposed operating budget for the upcoming year and bear in mind that it is only that: a proposed budget. Should new or presently inactive committees require funding, the EXCOM will review each request individually.

The Chapter needs more active members to assist the EXCOM in making the Chapter more effective to the membership and the diverse number of outside agencies that have been requesting our input.

In an attempt to generate additional revenues, the Chapter has available **Sea Fare**, the Parent Society's cookbook with interesting fish lore liberally interspersed to make this a very worthwhile book to read. The recipes are very good also. The cost is only \$15.00.

The Chapter also has available **The Stream Analysis and Fish Habitat Design** handbook written by Newbury and Gadbury. The book, commonly referred to as the "Newbury Manual" is a very good companion to the Rosgen Fluvial Geomorphological principles, but it is a 100% Canadian publication with five case examples of stream improvements in Manitoba. The Chapter has a limited number of these books, direct from the author - and at the same price of only \$60.00. All orders should be addressed to the Treasurer. Prepayment is required. Prices include shipping and G.S.T.!

One final note, the Treasurer also has available the reference searching software **Absearch**. This software is as advertised in the **Fisheries** magazine and would be helpful to all research projects that need to complete a literature search of A.F.S. publications.

G.M.L.