



Update

Electronic Newsletter for AquaNet Members
December 15, 2001

Important Dates

January 7, 2002

Application Deadline for submission of new proposals

January 15, 2002

Progress Reports due from all current projects

February 15 & 16, 2002

Research Management Committee Meeting to review all applications

March 8, 2002

Board of Directors Meeting to review RMC recommendations

Announcements

Administrative Centre

Welcome to the latest issue of **Update**. This newsletter is the main internal communications avenue for AquaNet members. The deadline for submissions is the 15th of each month with **Update** distributed 3-4 days later. Submissions / questions can be sent to aquanet@mun.ca

The Administrative Centre will be **officially closed from noon December 24, 2001 until 9:00 am January 3, 2002**. However, W. Driedzic, J. Atkinson, G. Deveau and M. Riehl will be monitoring their voice and email during the holidays.

Message from the Scientific Director

I am very pleased that AquaNet is now moving into the next phase of activity. At this point research teams are beginning to assemble data collected at

various sites in preparation for progress reports. As of Jan. 15, 2002 the Research Management Committee should have a very clear picture of what I trust is a successful first leg of activity especially from those projects that were funded as of September 2000. One area in which we are not performing very well is keeping our partners apprised of our research activities. I ask that once you have progress reports complete that these be forwarded to your partners. WRD

Board of Directors

The following five individuals were appointed on October 1 to the AquaNet Board of Directors:

Mr. Sam Bowman
President, Pearl Seaproducts Inc.
Sechelt, BC

Dr. Chris Goddard
CEO, Great Lakes Fishery Commission
Ann Arbor, MI

Mr. Gary Hoskins
Miawpukek Mi'kamaway Mawi'omi,
Conne River Micmac First Nation
Conne River, NF

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Dr. Tim Ogilvie
Dean Veterinary Medicine, AVC / UPEI
Charlottetown, PEI

Mr. Bill Robertson
Director of Aquaculture Operations,
Connors Bros, Limited
Blacks Harbour, NB

Theme Leaders

Congratulations are extended to Dr. Scott McKinley for his recent award of a Tier I Canada Research Chair in Aquaculture and the Environment.

Dr. McKinley and his team are addressing key objectives for research, training and industry application in three areas: environmental interactions, monitoring and operational technologies, and coastal planning and management. They hope to diminish the impact of culture facility management and operations on the environment, create novel environmental and biological "early-warning" monitoring technologies for those facilities, and integrate aquaculture policies and procedures with environmental constraints within the societal boundaries of coastal communities.

Network Investigators

For the information of those Network Investigators (NIs) not present at AquaNet I, Dr. Tillman Benfey was elected by his fellow NIs to serve as their representative on the Board of Directors until AquaNet II. Dr. Benfey is a Professor of Zoology and Director of Graduate Studies at the University of New Brunswick in Fredericton. You may contact him at benfey@unb.ca

**See you at AquaNet II in
Moncton, New Brunswick
September 14 - 17, 2002**

**Nous espérons que vous serez des
nôtres pour AquaNet II, qui se tiendra
du 14 au 17 septembre 2002,
à Moncton, au Nouveau-Brunswick.**

Education Committee News

Travel Scholarships

Non-AquaNet Sponsored Workshops

Cynthia White, The University of British Columbia, has been approved to attend the Canadian Institute of Fisheries Technology 21st Annual Short Course: Seafood Technology in Halifax, Nova Scotia.

Glenn Wagner, The University of British Columbia, has been approved to attend a Fish Surgery Techniques Workshop in Tromso, Norway.

AquaNet Sponsored Workshops

The Marine Institute of Memorial University, in collaboration with Université du Québec à Rimouski and the Norwegian College of Fishery Science will deliver a **Wolffish Culture workshop**. This workshop is tentatively scheduled to take place during February 2002 in Rimouski. Please visit the link below for further information as well as a specific time and location, which will be posted once confirmed.

www.aquanet.mun.ca/education/upcomingwork.html

Directory of AquaNet Aquaculture Researchers

The Education Committee is preparing to create an on-line directory of aquaculture researchers. The objective of this initiative is to provide general public, existing and potential graduate students, other researchers and industry access to AquaNet researchers. AquaNet is a resource of aquaculture researchers from across Canada, and is well positioned to facilitate access to this wide range of aquaculture expertise. The directory is limited to AquaNet researchers and will only list researchers who agree to participate. For further information, please contact Melissa Struthers: tel: 709-737-8093; e-mail: mstruthers@mun.ca

The Education Committee strongly encourages the participation of Network Investigators in this initiative!

Aquaculture Career and Training Directory

To highlight aquaculture as a viable career option, and to provide the most current and efficient resource base to facilitate the personal and industrial growth of aquaculturalists nationwide, AquaNet and the Canadian Aquaculture Industry Alliance are working together to develop a comprehensive, current directory of educational-based training opportunities directly and indirectly related to aquaculture technology, development and research, businesses and business management within Canada.

The Aquaculture Career and Training Directory will promote awareness of education, training and career opportunities in the field of aquaculture and will also assist education and training institutions in adapting to the changing needs of this dynamic industry. The use of electronic searchable media, in particular the Internet, will enable wide and rapid distribution to world-wide audiences, and will allow Canada to establish a strong, internationally renowned educational presence in the field of aquaculture. The expected date of completion for the training directory is March 31, 2002.

Conference Announcements

Aquaculture Europe 2002

The European Aquaculture Society has the pleasure to officially announce its Aquaculture Europe 2002 international aquaculture meeting, which **will be held in the Italian city of Trieste** (and not Verona, as previously communicated) from October 16-19, 2002.

Visit our website at www.easonline.org for programme details, registration costs, as well as general information related to Trieste and its region.

Many of the announcements and news articles are provided courtesy of:

**Dave Conley, MSc
D.C. Conley & Associates
Aquaculture Communication Consultants**

dave.conley@sympatico.ca

ASLO 2002

A special session on aquaculture will be included in the June 10-14, 2002 - American Society of Limnology and Oceanography (ASLO) Summer Meeting being held in Victoria, BC.

The main theme for the ASLO conference is *Inter-disciplinary Linkages in Aquatic Sciences and Beyond*.

The deadline for abstracts is January 20th, 2002.

For contact and submission information, please see the ASLO website at <http://aslo.org/victoria2002/index.html>

Major Aquaculture Theme at ICES 100th Anniversary Meeting

The International Council for the Exploration of the Sea (ICES) will hold its Centenary Meeting, including its Annual Science Conference, in Copenhagen, Denmark, during the first week of October, 2002. One of the four major themes of the Science Conference will be "Aquaculture: New Trends and Developments" in recognition of the important work being done in the North Atlantic region. This major theme will in turn be subdivided into four separate theme sessions emphasizing some of the important issues in aquaculture today:

1. "Immunomodulators and Probiotics: Alternatives to Chemotherapeutics?" [Convenors: Ian Bricknell (UK) and Joel Gatesoupe (France)]
2. "Juvenile Fish Cultivation: Improvements in Quality" [Convenors: David Bengtson (USA), Karin Pittman (Norway), Patrick Sorgeloos (Belgium)]
3. "Salmon Aquaculture, Enhancement and Ranching: Are they a Threat to Wild Salmon Stocks?" [Convenors: Jacqueline Doyle (Ireland), Arni Isaksson (Iceland), and Terje Svaasand (Norway)]

4. "New Developments and Applications of Genetics in Fisheries Management and Aquaculture" [Convenors: Michael Hansen (Denmark), Einar Nielsen (Denmark), and Sheila Stiles (USA)].

The convenors of the sessions will be recruiting speakers and ICES will also issue a general call for papers and posters in early 2002. If you are interested in participating, please contact the convenors by e-mail:

1. I.R.Bricknell@marlab.ac.uk
Joel.Gatesoupe@ifremer.fr
2. Bengtson@uri.edu
Karin.pittman@ifm.uib.no
Patrick.sorgeloos@rug.ac.be
3. jacqueline.doyle@marine.ie
arni@veidimalastjori.is
terje.svaasand@imr.no
4. mmh@dfu.min.dk
een@dfu.min.dk
Sheila.Stiles@noaa.gov

Please mark your calendar and plan to attend this gala celebration and important scientific meeting.

Further information can be found on the ICES website at <http://www.ices.dk>

AquaNet Members in the News

National Finalists Announced for First Annual Herb Dhaliwal Sustainable Aquaculture Award

November 23, 2001 -- The Canadian Aquaculture Industry Alliance (CAIA) is pleased to announce six nominees chosen as finalists for the first annual Herb Dhaliwal Sustainable Aquaculture Award. Finalists, both individuals and organizations, represent a variety of aquaculture industries and reflect the diversity and innovation of Canada's important agrifood sector.

CAIA President Anne McMullin noted that the six finalists are illustrative of the kind of people and initiatives which have been vital to the successful development of Canada's aquaculture industry. "All of the finalists are exemplary in their belief in environmental stewardship and vision of cooperative problem solving," said McMullin. "They are also united in the goal of ensuring an economically successful and environmentally

sustainable aquaculture industry in Canada".

One of the six finalists is the Huntsman Marine Science Centre's Atlantic Salmon Broodstock Development Program (NB). An ongoing issue for salmon farm organizations in the Atlantic Provinces is that of the possibility of escaped farmed salmon impacting wild Atlantic salmon populations. One of the potential safeguards against this possibility is that of "triploidy" or salmon sterilization. Over the past two years, research staff at the Atlantic Salmon Broodstock Development Program have engaged in advanced broodstock research and development, which has recently resulted in creation of a strain of non-reproductive Atlantic salmon that has been highly successful in freshwater and is now being trialed in seawater.

Huntsman Marine Science Centre
is an AquaNet Industry Affiliate

Dhaliwal announces extended mandate of the Office of the Commissioner for Aquaculture Development

http://www.dfo-mpo.gc.ca/communic/newsrel/2001/hq95_e.htm

OTTAWA -- The Honourable Herb Dhaliwal, Minister of Fisheries and Oceans, today announced that the mandate for the Office of the Commissioner for Aquaculture Development (OCAD), as well as the term for Commissioner Yves Bastien, will be extended to March 31, 2004.

"With the Commissioner's leadership, we have achieved excellent progress in developing policies and programs that reflect the emergence of aquaculture as a significant player in the Canadian fish and seafood industry," said Mr. Dhaliwal. "I know this progress will continue as we work together to ensure the environmentally-sustainable development of the aquaculture industry."

The Commissioner, who was appointed in 1998, and his staff have made a substantial contribution in terms of facilitating sustainable aquaculture development in Canada.

"I believe that OCAD's work during the last three years has been an important driving force behind DFO's action plan and renewed commitment to aquaculture," said Mr. Bastien. "We look forward to continuing our work in

collaboration with DFO, other federal departments, provincial and territorial governments, and industry to help the aquaculture sector reach its full potential."

The comprehensive Legislative and Regulatory Review of Aquaculture in Canada, released by OCAD in March 2001, is a highlight of the Commissioner's work in his first mandate. The review triggered the implementation of a detailed DFO action plan to establish an enabling legal and policy framework for aquaculture.

During the two-year extension of his mandate, the Commissioner will focus on providing a ten-year vision for aquaculture development in Canada and recommendations on all aspects of the federal role in achieving this vision.

Aquaculture is one of the fastest-growing food-producing industries in the world. The latest figures show that the Canadian aquaculture industry produced more than 123,000 tonnes of product in 2000, totalling \$611 million. This represents nearly a quarter of the total value of Canadian fish and seafood production.

OCAD Mandate Extension Backgrounder
[www.dfo-mpo.gc.ca/communic/backgrou/2001/hq95\(182\)_e.htm](http://www.dfo-mpo.gc.ca/communic/backgrou/2001/hq95(182)_e.htm)

**Mr. Yves Bastien is a member of the
*AquaNet Board of Directors and the
Research Management Committee***

New hatchery able to produce two million cod

PUBLICATION The Telegram (St. John's, NF)

DATE Wed 12 Dec 2001

PAGE A4

BAY ROBERTS -- Construction has begun on a \$2.5-million cod hatchery in Bay Roberts that its proponent says will have the capacity to produce two million juvenile cod -- more than any other hatchery in the world.

The hatchery is a project of Newfoundland Aqua Ventures Ltd. and the Newfoundland and Labrador Development Corp., operating under the company name Northern Cod Ventures Ltd. George Parsons, general manager of Newfoundland Aqua Ventures and the chief financial officer of Northern Cod Ventures, said Aqua Ventures has been developing the technology necessary to produce juvenile cod on a commercial basis.

That work, he said, has been successful, as shown by the 75,000 juvenile cod produced at the Ocean Sciences Centre this year. "The time is now right for the establishment of a commercial-scale cod hatchery," he said. "The facility will have the capacity to produce two million juvenile cod," he said.

"Presently, no facility in the world has been able to accomplish this. Norway is close to overcoming the technical challenges, but they are not yet there." The cod will remain at the Bay Roberts hatchery until they reach 10 grams. They will then be released into net pens in an ice-free harbour in the spring.

The 13,500-square-foot hatchery will be substantially different than the one proposed when the project was announced nearly two years ago. Originally, the complex was to consist of a number of outdoor tanks, but they will now be located under a single roof. They include brood stock, a nursery, larval and incubation tanks.

Newfoundland Aqua Ventures Ltd.
is an AquaNet Industry Affiliate

The Ocean Sciences Centre
is an AquaNet Core Facility

Positions Sought

AquaNet Internship Position Sought for Summer 2002

I am currently pursuing a Master in Marine Affairs at Dalhousie University in Halifax, NS. My project will concentrate on sustainable aquaculture development. This project will require me to find an internship position in the private or public sector during the summer months. I am currently looking for **an internship position (non-paid)** and am seeking expressions of interest from any private firms or government agencies that would be interested in considering my placement.

Any inquiries concerning my professional and academic experience can be e-mailed to redqueen76@hotmail.com or nshalit@is2.dal.ca.

Thank you,
Naomi Shalit

Dalhousie University, Marine Affairs Program, 1234 Seymour St., Halifax, NS B3H 3J5

Tel (office): (902) 494-1983

Tel (home): (902) 453-3695

AquaNet Post-Doctoral Candidates
(for further information on any of the candidates
contact M. Riehl at aquanet@mun.ca)

K. Sivachandrabose

I am glad to inform you that I am expertised in the field of crustacean aquaculture in common and shrimp farming, broodstock maintenance, biotechnological approach like hormonal stimulation and hatchery in particular.

Lecturer

currently

· Aquaculture Division, Department of Zoology, University of Madras, Tamil Nadu, India

Ph.D.

1998

· Studies on the Reproductive Physiology of the Green Tiger Prawn *Penaeus (Penaeus) semisulcatus* De Haan
· Faculty of Marine Sciences, Cochin University of Science & Technology, Cochin, India

Post Graduate Programme in Mariculture

· Central Marine Fisheries Research Institute, Cochin, India

M.Phil.

1989

· First Class
· Effects of Domestic Sewage on Marine Plankton and Primary Productivity
· Institute of Center of Advanced Study in Marine Biology, Annamalai University, Tamil Nadu, India

M.Sc.

1987

· First Class
· Biototoxicity of Latex of *Excoecaria agallocha* L. on Marine Primary Productivity
· Institute of Center of Advanced Study in Marine Biology, Annamalai University, Tamil Nadu, India

Mustapha Oumouna

My background has provided me with skills that can be applied to study fish parasitology, immunology and specially development of DNA vaccine. My research studies include:

- 1) Study of teleost natural killer cells (nonspecific cytotoxic cells) using flow cytometry, for the purpose of understanding fish immunity and natural killer cell function.
- 2) DNA vaccine using purified bacterial (*Streptococcus iniae*) DNA and oligonucleotides encoding CpG motifs.

Post Doctoral Associate

1999 - present

- fish molecular immunology
- College of Veterinary Medicine, University of Georgia, Athens, GA

Ph.D.

1999

- Biology and Parasitology
- Institute of Zoology, Fish Biology and Fish Diseases, University of Germany

M.S.

1991

- Marine Biology
- Dept. of Natural Sciences, University of Technology and Sciences, Algiers

B.S.

1987

- Marine Biology
 - Dept. of Natural Sciences, University of Technology and Sciences, Algiers
-

Research Positions Sought **(for further information on any of the candidates** **contact M. Riehl at aquanet@mun.ca)**

Krishnan Nair Rajesh. V.

- currently in Kerala, India

I am a post graduate in Fisheries Science with specialization in marine aquaculture and have 3 years of post qualification experience. Presently employed with a multinational aquaculture company headquartered at Thailand in its shrimp feed marketing division in India.

Area Manager (Sales & Marketing)

- major Multi National Company headquartered at Bangkok, Thailand for 3 years
- leading a team of sales executives, dealer networking, customer care service & retention, sales forecasting, organizing group sales meets & sales presentations, implementing marketing strategies and promotional decisions

MBA

currently enrolled

- Indira Gandhi National Open University

Master of Fisheries Science

1995 - 1998

- First class with Distinction
- Central Institute of Fisheries Education, Mumbai, India

B.Sc.

1991-1994

- Zoology
 - Kerala University, Trivandrum, Kerala, India
-