NSA ANNUAL MEETING IN HALIFAX

Final arrangements are nearly complete for the 79th annual meeting of the National Shellfisheries Association to be held from August 9-13 at the Chateau Halifax in Halifax, Nova Scotia, Canada. Appropriate forms and/or information for hotel and airline reservations, meeting registration and other activities in and around Halifax are included with this issue of the Newsletter. Although we will not be having a joint NSA/SINA meeting this year, SINA members are invited to register for the meeting at NSA member rates. Everyone is encouraged to take the time now to pre-register and make reservations for hotel accommodations and transportation and to avoid problems later — you’ll be glad you did.

The NSA Convention Coordinating Committee in Halifax (Brian Muise, Chairman, Gary Newkirk, Cyr Couturier, Robert Elner, Joan Keen-Howie, Paul Budreski and Rene Lavoie) has really gone all out to make the necessary local arrangements to insure that this annual meeting will be both an interesting and enjoyable one. Here is some additional information from the Committee in Halifax about planned activities:

AIR FARES — Air Canada, one of Canada’s two largest Airlines, is offering special reduced fares for conference attendees. Details on obtaining special conference rates are provided in the brochure included with this Newsletter.

TOURS — The Committee has arranged for an afternoon tour of several aquaculture sites within a short distance of the city of Halifax. The bus tour will leave the city shortly after lunch on Wednesday, August 12, and travel along the Province’s eastern shore — an area of intense development for blue mussel cultivation. Plans include stops at North America’s largest longline culture mussel farm; Pleasant Point Pond, an area used by industry for the collection of seed mussels as well as the location of the provincial shellfish hatchery; and finally, a stop at Willey Krauch’s Smokehouse to view the production of one of the province’s most famous products, Nova Scotia smoked salmon (Lox).
The city of Halifax is also an excellent starting point for many commercially run day and overnight tours of the province. Information for such tours can be obtained at the convention registration desk or, for immediate information on vacation packets and provincial tourist facilities, the following toll-free numbers may be used:

Maine residents only 1-800-492-0643

Other U.S. residents 1-800-341-6096

Or write directly to the Nova Scotia Department of Tourism, P.O. Box 130, Halifax, Nova Scotia, B3J 2M7.

The Department of Tourism also provides a reservation service (through use of the toll free phone numbers) for persons and families planning to include a vacation stay during their visit to Nova Scotia.

SPouses Program – The Committee has arranged a "Canadian Fur Fashion Show" for interested persons. Your registration form includes a section to indicate a preference of times for this event. This has proven to be a highly popular event among visitors to Halifax and will provide an excellent introduction to such subjects as fur quality standards, choosing a fur and proper care of fur garments.

AN EVENING OF SEAFOOD – and Nova Scotia hospitality, two aspects for which we have become best known! The Committee has planned a seafood buffet, Nova Scotia Style, for the evening of Wednesday, August 12. This will be held at the World Trade and Convention Center located near Chateau Halifax and will feature such provincial specialties as steamed blue mussels and clams, smoked salmon and trout, stuffed halibut, lobsters, crabs, oysters, littlenecks and much more. Don’t miss this event! Guaranteed to leave you with a lowered cholesterol level and higher I.Q.!

STUDENT ACCOMODATIONS – The Committee has negotiated a special rate at the Chateau Halifax for students ($90.00 Canadian, quadruple occupancy). We would hope that students will take advantage of this offer for both the convenience and to help insure our room quota. This is somewhat of a concern as SINA members will not be meeting with us this year. Those students seeking less expensive accomodations should contact: Dr. Catherine Enright, Ketch Harbour, Halifax County, Nova Scotia, Canada, B0J 1X0.

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NSA PROGRAM SET FOR HALIFAX

Roger Mann, NSA Program Chairman, has prepared a schedule of the technical sessions for the upcoming annual meeting. Due to the large number of abstracts submitted (108), concurrent technical sessions will be held all day Monday and Tuesday, Wednesday morning and Thursday morning. The following three special sessions will be held: Genetic Selection and Breeding for Bivalve Aquaculture, Toxic Algal Blooms: Hazards to Shellfish and Industry and The Biology of Busycon species. The preliminary schedule for the Halifax meeting is:

Sunday August 9th
a.m./p.m. Arrival
p.m. President's Reception

Monday August 10
8:10-12:00 a.m. Technical Session A: GENETICS
 Technical Session B: TOXIC BLOOMS
9:00-12:00 a.m. Poster Presentations
1:30-5:00 p.m. Technical Session A: GENETICS (cont.)
 Technical Session B: WHELKS
5:20-6:00 p.m. Panel Discussion

Tuesday August 11
8:15-9:40 a.m. Technical Session A: BIVALVE CULTURE I
 Technical Session B: MUSSEL CULTURE
10:00-12:00 a.m. Technical Session A: PARASITES & PATHOLOGY
 Technical Session B: CRUSTACEA
1:30-3:50 p.m. Technical Session A: BIVALVE CULTURE II
 Technical Session B: CRUSTACEA (cont.)
2:50-3:50 p.m. Poster presentations
4:10-5:10 p.m. Technical Session A: SHELL MORPHOLOGY
 Technical Session B: PRED.-PREY INTERACTIONS

Wednesday August 12
8:00-9:20 a.m. NSA Business Meeting
9:20-12:20 a.m. Technical Session A: BIVALVE PHYSIOLOGY
 Technical Session B: HARD CLAMS
Wednesday p.m. TOURS

Thursday August 13
8:10-10:40 a.m. Technical Session A: PLACOPECTIN
 Technical Session B: BIOCHEMISTRY
10:55-12:00 a.m. Technical Session A: PLACOPECTIN (cont.)
 Technical Session B: GAMETOGENESIS
12:00 a.m. Joint Session
 Closing Remarks Thurlow T. Nelson Award

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JOURNAL OF SHELLFISH RESEARCH

Here is the latest JSR update: Issue 5(1) was mailed in April to all current members. It takes a bit more time to mail out issues to foreign members and institutional subscribers but it's on the way. Issue 5(2) is about to be printed and should be mailed within the next six weeks. Issue 6(1) is due to be released in early June; and 6(2) is scheduled for a December 1987 release. 1987 will see us caught up with our publication schedule at last.

A lot of members are seeking to replace back issues of JSR which they never received. Regretfully, these requests must be temporarily put on hold until an inventory of back issues has been completed. Please bear with us until we can get this problem straightened out. Those members who have not received certain back issues and are still waiting as well as members interested in purchasing any remaining back issues will be provided with instructions via the Newsletter at a later date.

Due to an oversight at the printers, no reprints were prepared for 4(1), the queen conch symposium issue. These are being printed now and authors should have their orders filled soon.

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NEWS FROM THE SECRETARY-TREASURER

Secretary-Treasurer Scott Siddall has just completed an inventory of the membership and has dropped 138 individuals from the membership roles for non payment of dues. If you've been wondering why the rest of your colleagues at your workplace have been receiving the NSA Newsletter and you haven't, this could be the reason. The solution is simple - send Scott $18.00 ($15.00 for students) and all will be forgiven.

COMPUTER NETWORK USERS

Scott Siddall is compiling a list of NSA members who have access to computer networks such as BITNET, ARPANET, CSNET, EDUNET, etc. As long as you know users' names on their local systems, you can communicate instantly, worldwide, usually at no cost through these networks. Most of the networks are academic or governmental in nature; many NSA members may have access to such facilities already. If the size of the list warrants, the list of user names and network addresses will be published in a later issue of the Newsletter. If you have access to such a network, please forward your full name, system user name, network address and network name to:

SSIDDALL@SBCMAIL.BITNET

Scott Siddall
Marine Sciences Research Center
State University of New York
Stony Brook, NY 11794-5000

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EMPLOYMENT OPPORTUNITIES

HATCHERY ASSISTANT — to assist in all phases of operation of the Rutgers shellfish hatchery located in Cape May Court House, NJ. Present funding is for the production of disease resistant oysters. Salary ($15,477) with benefits for a minimum of one year beginning May 1, 1987. Minimum qualifications include a B.S. degree in biological science, work experience in a hatchery or aquaculture facility, and an ability to communicate with the shellfish industry. To apply send a resume to R.H. Watson, Rutgers Shellfish Laboratory, P.O. Box 687, Port Norris, NJ 08349, (609) 886 6131 or 785 0074.

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SUMMER EMPLOYMENT — Rutgers Shellfish Research Laboratory seeks applications from interested undergraduate and graduate students for summer employment (June 1 to August 30, 1987) at our Delaware Bay Laboratories at Bivalve and Cape May, NJ. Work is field oriented, involves laboratory analyses and includes participation in a variety of marine and estuarine research projects. Boat experience is preferred but not necessary. Salaries begin at $145.00 per week. Dormitory facilities are available. For more information please contact Eric Wagner at Rutgers Shellfish Laboratory, P.O. Box 687, Port Norris, NJ 08349, (609) 785 0075.

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FACULTY POSITION — assistant professor of shellfish biology with a strong interest in molluscan or crustacean fisheries. This is a tenure track position with an initial three year appointment at a starting salary of $27,000 – $30,000 for the academic year. This may be supplemented by up to 28% of the academic year salary for summer salary through the individual’s own contracts and grants. This position will be available September 1, 1987. Candidates for this position should hold a Ph.D. in fisheries biology or a closely related field and should have experience in addressing problems of marine invertebrate fisheries in one of the following areas: management, ecology, physiology and population dynamics. Applicants should send a complete resume and three letters of reference by June 30, 1987 to: Chairman, Shellfisheries Search, Marine Sciences Research Center, SUNY at Stony Brook, Stony Brook, NY 11794-5000.

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POSTDOCTORAL FELLOWSHIP at the Harbor Branch Oceanographic Institution to evaluate the nutritional value of newly isolated marine algae as foods for bivalve molluscs. Annual salary of $22,000. Position available immediately. Contact Dr. John Ryther or Dr. David Vaughan, Harbor Branch Oceanographic Institution, RR 1 Box 196, Fort Pierce, FL 33450, (305) 465 2400.

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RESEARCH ASSISTANT to maintain mass cultures of unicellular algae in support of shellfish hatchery operations at the Harbor Branch Oceanographic Institution. Annual salary is commensurate with qualifications and experience. Position available immediately. Contact Dr. John Ryther or Dr. David Vaughan, Harbor Branch Oceanographic Institution, RR 1 Box 196, Fort Pierce, FL 33450, (305) 465 2400.

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MEETINGS, COURSES, ETC.

WATER QUALITY AND WETLANDS MANAGEMENT CONFERENCE September 24-25, 1987, University Center, University of New Orleans, New Orleans, LA. For program information please contact: Bud Brodtmann, Conference Chairman, EPL, 4813 West Napoleon Drive, Metairie, LA 70001, (504) 456 9032.

SECOND NATIONAL SYMPOSIUM ON THE SOFT-SHELLED BLUE CRAB FISHERY November 4th, 1987, Virginia Institute of Marine Science, Gloucester Point, VA. The symposium will present a variety of research and industry oriented activities devoted to furthering understanding of the soft-shelled crab and the fishery. Participants will receive information on the latest developments in the soft-shelled crab industry. Areas of interest will include: production system designs — including recent advances in closed system design, filter design and water quality, biological aspects of molting — including calcification and the use of hormones to induce molting, quality control and marketing. For more information, contact: Mike Osterling, Virginia Sea Grant Marine Advisory Services, Virginia Institute of Marine Science, Gloucester Point, VA 23062, (804) 642 7165

WORLD AQUACULTURE SOCIETY HAWAII ‘88 CALL FOR PAPERS The 1988 meeting of the World Aquaculture Society will be held January 4-8, 1988 in Honolulu, Hawaii. The theme of the meeting is "EAST MEETS WEST". In addition to regular technical sessions, the program will include a symposium and special sessions on nutrition, product quality and marketing. Interested parties are invited to submit titles for inclusion in technical and poster sessions. Deadlines for submission of titles and abstracts for the 1988 meeting are:

TITLES: JUNE 15, 1988
ABSTRACTS: SEPTEMBER 15, 1988

Send your titles to the program chairmen by June 15, 1987. Upon receipt of titles, you will receive a complete abstract package. Mail your titles to: Nancy Hadley and John Manzi, Marine Resources Research Institute, P.O. Box 12559, Charleston, South Carolina 29412, (803) 795 6350.

THE 3RD INTERNATIONAL SHRIMP MARKETING CONFERENCE will be held in Cancun, Mexico, November 8-12, 1987. For more information contact: Shrimp World, Inc., 417 Eliza Street, New Orleans, LA 70114, (504) 368 1571
TECHNOLOGICAL ADVANCES IN AQUACULTURE ENGINEERING will be held in Baltimore, Maryland, June 28-July 1, 1987. For more information contact: John Collier, Program Chairman, Aquacultural Engineering Committee, College of Agricultural Sciences, Department of Agricultural Engineering, McAdams Hall, Clemson University, Clemson, SC 29634-0357.


THE 5TH INTERNATIONAL ARTEMIA TRAINING COURSE will be presented in September, 1987 by the State University of Ghent, Belgium. For more information contact: Patrick Sorgeloos, Artemia Reference Center, State University of Ghent, Rozier 44, B-9000, Ghent, Belgium.

SUMMER COURSE – MARICULTURE OF MOLLUSCS June 22-28, 1987. An intensive 1 week course will be offered on the Mariculture of Molluscs at the Hatfield Marine Science Center, Oregon State University by Dr. Chris Langdon. Current approaches and techniques in molluscan mariculture will be reviewed with emphasis on the practical aspects of production. Lectures, group discussions and laboratory practicals will form the basis of the course. Field trips to both commercial and research facilities will be included.

A series of other intensive courses related to the aquaculture of shellfish and fish will also be offered at the center, including courses on aquacultural engineering, salmon culture and advances in fish disease control.

The cost of taking a course will be $300 per week, inclusive of accommodation but not food. Interested persons should contact: Ms. Pam Rogers, Hatfield Marine Science Center, 2030 South Marine Science Drive, Newport, OR 97365, (503) 867 3011.

SHELLFISHING AND COASTAL RESOURCE MANAGEMENT: A Global Perspective, August 19-21, 1987, Hofstra University, Hempstead, Long Island, NY. For more information contact: Dr. Terry Baker, Associate Dean, School of Education, Hofstra University, Hempstead, NY 11550, (516) 560 5742.

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CONTRIBUTIONS TO THE NSA NEWSLETTER

The purpose of the NSA Newsletter is to develop communication between members of the NSA and to serve as a forum for the distribution of information of interest to the membership. The Newsletter is published four times a year (spring, fall, winter, and ballot – late winter–) and prints items relating to NSA business matters, the Journal of Shellfish Research, recent publications, future meetings, job placement, activities of other professional societies, and miscellaneous items of interest. All members are encouraged to submit materials to:

John W. Ewart, Editor
National Shellfisheries Association Newsletter
College of Marine Studies
University of Delaware
Lewes, DE 19958
302 645 4060
THE NATIONAL SHELLFISHERIES ASSOCIATION
WANTS YOU!!

The National Shellfisheries Association (NSA) is an international organization of scientists, management officials and members of industry that is deeply concerned and dedicated to the formulation of ideas and promotion of knowledge pertinent to the biology, ecology, production, economics and management of shellfish resources. The Association has a membership of nearly 800 from all parts of the USA, Canada and 18 other nations; the Association strongly encourages graduate student's membership and participation.

WHAT DOES IT DO?
- Sponsors an annual scientific conference.
- Publishes the peer-reviewed Journal of Shellfish Research.
- Produces a Quarterly Newsletter.
- Interacts with other associations and industry.

WHAT CAN IT DO FOR YOU?
- You will meet kindred scientists, managers and industry officials at annual meetings.
- You will get peer review through presentation of papers at the annual meeting.
- If you are young, you will benefit from the experience of your elders.
- If you are an elder, you will be rejuvenated by the fresh ideas of youth.
- If you are a student, you will make most useful contacts for your job search.
- If you are a potential employer, you will meet promising young people.
- You will receive a scientific journal containing important research articles.
- You will receive a Quarterly Newsletter providing information on the Association and its activities, a book review section, information on other societies and their meetings, a job placement section, etc.

HOW TO JOIN
- Fill out and mail a copy of the application blank below. The dues are ONLY US $18 per year ($15 for students) and that includes the Journal and the Newsletter!

NATIONAL SHELLFISHERIES ASSOCIATION – APPLICATION FOR MEMBERSHIP
(NEW MEMBERS ONLY)

Name: __________________________ For the calendar year: ____ Date: __________

Mailing address: ____________________________________________________________

Institution affiliation, if any: ________________________________________________

Shellfishery interests: _______________________________________________________

Regular or student membership: __________

Student members only – advisor’s signature REQUIRED: _______________________

Make cheques (MUST be drawn on a US bank) or international postal money orders for $18 ($15 for students with advisor’s signature) payable to the National Shellfisheries Association and send to Scott E. Siddall, Secretary—Treasurer, Marine Sciences Research Center, State University of New York, Stony Brook, NY 11794-5000 USA.
NATIONAL SHELLFISHERIES ASSOCIATION
PRE-REGISTRATION FORM
79th Annual Meeting; Halifax, Nova Scotia — August 9 to 13, 1987

PRE-REGISTRATION FORMS AND PAYMENTS POSTMARKED AFTER JULY 13 WILL BE RETURNED, UNPROCESSED, AT THE REGISTRATION DESK AT WHICH TIME FULL REGISTRATION FEES WILL BE DUE. REGISTRATION RATES AT THE MEETING WILL BE $15 ($22 CANADIAN) HIGHER THAN THESE PRE-REGISTRATION RATES.

<table>
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<tr>
<th>REGISTRATION:</th>
<th>Members (dues must have been paid)</th>
<th>Non-members (INCLUDES dues)</th>
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<tr>
<td>Regular registration:</td>
<td>$45 ($63)</td>
<td>$65 ($90)</td>
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<td>(includes Sunday Reception coffee breaks, meetings)</td>
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<tr>
<td>Student registration:</td>
<td>$15 ($22)</td>
<td>$30 ($42)</td>
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<td>(meetings only)</td>
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<tr>
<td>Student registration plus Sunday Reception</td>
<td>$30 ($41)</td>
<td>$45 ($63)</td>
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UNPAID DUES FOR CURRENT MEMBERS:

| Regular members: | $18 ($26) | $ |
| Student members: | $15 ($22) | $ |

SPECIAL EVENTS:

| Seafood banquet Wednesday evening | $25 ($38) | X | $ |
| Wednesday afternoon tour of hatchery, mussel cultivation operation & smokehouse | $15 ($22) | X | $ |
| Canadian fur fashion show Tuesday 7:00 PM | $6 ($8) | X | $ |
| Additional tickets for Sunday Reception (one included in regular registration) | $20 ($28) | X | $ |

TOTAL PAYMENT ENCLOSED .................................................. $ (See * below)

NAME: ____________________________________________________________
ADDRESS: _________________________________________________________

FOR NEW MEMBERS ONLY:
Institutional affiliation: ___________________________________________
Shellfisheries interests: ____________________________________________

*FOR THIS MEETING ONLY, payment may be made by checks drawn on US or Canadian banks or international money orders. Checks drawn on banks other than those of the US or Canada will be returned. The Association will not be responsible for cash payments sent through the mails. SEND FORM AND PAYMENT TO: Scott E. Siddall, Secretary—Treasurer, Marine Sciences Research Center — SUNY, Stony Brook, New York 11794—5000 USA.
Chateau Halifax
1990 Barrington Street, Scotia Square
Halifax, Nova Scotia  B3J 1P2
Telephone (902) 429-6700 • Telex 019 22661

PLEASE COMPLETE AND RETURN DIRECTLY TO HOTEL
BEFORE JULY 25, 1987

Chateau Halifax is located at Scotia Square in the heart of downtown Halifax, within close proximity of Historic Properties, water tours, Citadel Hill and many other points of interest. Scotia Square, featuring over 100 shops and services is accessible from our main lobby.

THE NATIONAL SHELLFISHERIES ASSOCIATION
August 8 – 14, 1987

NAME

ADDRESS

CITY

PROVINCE

POSTAL CODE

ARRIVAL DATE: ___________________________ TIME: ______________

Day    Month   Year

DEPARTURE DATE: ___________________________ CHECK OUT TIME IS 1:00 PM

PLEASE RESERVE

SINGLE ROOM  $70.00 ( )
(One Person)

DOUBLE ROOM  $70.00 ( )
(Two Persons)

ADDITIONAL PERSON CHARGE  ~ $10.00

LIMITED SUPPLY OF COTS AVAILABLE ON REQUEST BASIS ONLY  ~ $10.00

RESERVATIONS ARE HELD ONLY UNTIL 6:00 PM
UNLESS GUARANTEED BY ADVANCE DEPOSIT OR CREDIT CARD.

Diners Club/Carte Blanche/Visa/Master Card
Master Charge/American Express/Enroute/JCB Card

ENCLOSED IS A ONE NIGHT’S DEPOSIT TO GUARANTEE RESERVATION.

PLEASE GUARANTEE MY RESERVATION TO MY CREDIT CARD.

Card Name

Card Number

Expiry Date

Signature

Reservations may also be made through Canadian Pacific Hotels Toll Free Number
Canada:  1-800-258-9411
U.S.A.:  1-800-828-7447

THANK YOU!
WE LOOK FORWARD TO WELCOMING YOU TO CHATEAU HALIFAX