

# National Shellfisheries Association

## QUARTERLY NEWSLETTER



CALL FOR PAPERS - LATE SUMMER '96

SOUTHAMPTON, NEW YORK

### Annual SHOUT for Papers

Program Chair Jay Parsons is announcing the annual "SHOUT" for papers for the exotic 89th NSA meeting in Fort Walton Beach, Florida. This is the one and only call for papers. The NSA meeting will be held from Sunday April 20th through Thursday April 24th, 1997 at the Holiday Inn. Inside this newsletter are the guidelines for submitting abstracts and the application form for student travel awards. Abstracts must be mailed so that they arrive by November 22, 1996. Fax transmittals will be accepted provided a follow up copy is mailed and post-marked by that date. Student 'recruits' are encouraged to apply for the Student Endowment Fund travel awards to help defray part of their meeting costs. Student members are expected to assist operating the AV equipment during the meeting. Detailed application instructions are included within.

Next years' meeting is stacking up to be a very interesting and diverse program. In addition to the general sessions of contributed papers, there has been a tremendous response for the special sessions. I am particularly pleased to be building on last year's initiatives by industry and the freshwater bivalves groups. Joth Davis (Chair, Industry Committee) is spearheading two industry sessions and Catherine Gateby (Dept. of Biology, Virginia Tech) has taken on the task of organizing a session on reproductive biology and physiology of freshwater bivalves. These sessions promise to be a valuable contribution to our annual meeting.

The complete list of proposed special sessions and their organizers is listed below:

- GIS and Shellfish Management (Bill Arnold)
- Particle Processing in Bivalves: Capture, Transport, Selection (Peter Beninger)
- Toxic Effects and Shellfish (Fu-Lin Chu, Esther Peters, & Aswani Volety)
- Advances in Shellfish Aquaculture Techniques in the Southeast and Gulf of Mexico (Joth Davis)
- Genetics in Shellfish Aquaculture - An Industry Perspective (Joth Davis & Stan Allen)
- Reproductive Biology and Physiology of Freshwater Bivalves (Catherine Gateby)
- Impacts of Aquaculture on Native Invertebrate Fisheries and Habitats (Fred Kern)

*continued on page 2*

### President's Message

Plans for the 89th Annual NSA Meeting, to be held in Fort Walton Beach, Florida between April 20-24, 1997, are progressing well. Our busy Past President Bill Fisher, who is head of the local Arrangements Committee, is hard at work planning the meeting logistics with the staff at the Fort Walton Beach Holiday Inn. Program Chair Jay Parsons is assembling an exciting agenda for the meeting, with a diverse array of contributed and special sessions that should delight bivalve, gastropod, and crustacean types alike (see accompanying article). Please note that the **CALL FOR PAPERS** which is included in this issue of the newsletter is the only one which will be issued.

Aaron Rosenfield is organizing a workshop, tentatively titled "Spatial Data and Remote Sensing in Invertebrate Fisheries: Habitat, Research and Management", which is scheduled to take place on the Saturday and Sunday (April 19-20) prior to the start of the NSA meeting. This type of scheduling worked very well for the Blue Crab Workshop (also organized by Aaron), which was held in conjunction with the 1996 NSA meeting in Baltimore, because it afforded a great opportunity for further interaction between representatives from industry and researchers. Look for additional details about the planned workshop in the next NSA newsletter.

**STUDENTS!** Please note the **Application for Student Endowments and Awards for the 1997 NSA Meeting** which is included in this newsletter. These awards, which are granted on a competitive basis, are given to offset the costs of meeting registration, accommodations and/or travel. The accompanying announcement is the only which will be issued.

Speaking of free meeting registration, as of this date no one has claimed the prize for being the first one to recruit 8 new NSA members. Go for it! I'm sure this prize will not remain unclaimed for long.

Steve Tettelbach

#### *In this issue -*

- *Call for papers*
- *Abstract submission form*
- *Student Endowment Award application*
- *and much more!*



continued from page 1

- Pollution Abatement for Shellfish Restoration (Dot Leonard)
- Scallops: Problems and Solutions (Dan Marelli)
- Crustacean Health (Gretchen Messick, & Carl Sindermann)
- Crabs (Harriet Perry)
- Oyster Disease Research Program (Bill Rickards)
- Crayfish (David Rouse)
- Gulf of Mexico Oyster Culture (Tom Soniat)
- Current Issues and Solutions for Shellfish Sanitation Programs (Mark Tamplin)

NSA members wishing to organize additional special sessions for the 89th meeting, please contact the Program Chair Jay Parsons (Tel.: 709-778-0307 or email: [jparsons@gill.ifmt.nf.ca](mailto:jparsons@gill.ifmt.nf.ca)) to discuss your ideas — there is still time!

For NSA members interested in remote setting applications for shellfish biology there is GOOD NEWS. There will be a two day workshop on Saturday April 19 to Sunday April 20 prior to the NSA meeting. Gary Smith (Cooperative Oxford Laboratory) and Aaron Rosenfield will be organizing a special workshop-conference entitled "Spatial Data and Remote Sensing in Invertebrate Fisheries: Habitat, Research and Management" Please see the accompanying article within this newsletter.

Dr. Bill Fisher, chair of local arrangements for the 1997 NSA annual meeting, will be providing information on hotel rates, travel arrangements, and social events being planned for the meeting. Please see future contributions from Bill for these details.

Registration form and meeting details will be included in the next NSA Newsletter. Remember to check out the NSA website (<http://www.shellfish.org>) for additional information.

Jay Parsons

## **Industry Column**

### **The Season of My Discontent**

I was asked to provide a brief synopsis of the developments of the past year in my continuing battle to establish an aquaculture industry in Rhode Island. For background, you should know that RI trails all 50 states in aquaculture production, despite the Ocean State's strategic location and excellent environmental potential. The reasons for the failure of aquaculture in RI are many, but chief among them are the memories of the collapse of the once thriving oyster industry at the turn of the century. The 300 wild-harvest shellfishermen pass on a rich oral history (via VHF radio) describing the admittedly indefensible situation that prevailed in the 1930s.

After three consecutive years of poor sets, the oyster industry in the '30s was on the ropes. Leaseholders retained control over 20,000 acres (one third of Narragansett Bay), but instead of returning un-farmed grounds to the free-and-common fishery, leaseholders charged diggers fees to work the

wild clams that proliferated on their grounds. There were gun battles and finally a revolt that essentially turned the state against aquaculture. We have never recovered. Today there are but six small shellfish growers in RI who try to work in an atmosphere of threats, mistrust and ill will. Last year, politicians looking at the success of neighboring Connecticut (\$60 million in oysters) and Maine (\$55 million in salmon) thought perhaps aquaculture might be a source of jobs and economic development to help the state's ailing economy. An Aquaculture Commission was formed and a multitude of feel-good speakers was invited. Aquaculture was going to save the world!

A small clique drafted sweeping pro-aquaculture legislation and the fireworks began. While the bill had several nifty goodies for growers, it also contained some political hot potatoes and enough anti-commercial fishing language to incense every fisherman in the state. Power transfers from the executive branch to the legislative branch drew the ire of the governor, Common Cause, Save the Bay and the Department of Environmental Management. Hundreds of hours of meetings and several revisions later we arrived at a version that allayed the fears of all the groups except the clam fishermen. The stripped down bill still had most of the goodies for growers, but none of the baggage.

This was not good enough. The diggers retained a lawyer and went after what remained with renewed vigor. Professor emeritus Perry Jeffries came out against any marine aquaculture, citing environmental degradation by third world shrimp farmers and Spanish mussel farmers, and evoking images of giant pseudofecal mucus balls washing ashore and despoiling our "pristine" beaches. Election year legislators were intimidated by shellfishermen; the tiny pro-aquaculture lobby (me) was drowned out. The end result was an eviscerated bill that does not mention marine aquaculture and has little impact on growers at all. I alone spent over a thousand hours working on the bill, and the combined effort by legislators, regulators, fishermen and citizens was many times that. Although we did raise the visibility of aquaculture and hammered home the irony of the fact that the Ocean State is dead last in growing fish, we also deepened the rift between growers and fishermen and increased my own level of cynicism (if that is possible). Legislators vow to renew the battle after the elections, although I wonder how much enthusiasm can remain. The phrase "beating a dead horse" comes to mind. Enthusiasm for land-based aquaculture abounds, but marine leasing is still a challenge to be undertaken only by those with determination and chutzpah. All of which leaves shellfish aquaculture in Rhode Island not impossible, but nearly so.

The moral of the story is; if you have leasehold abusers (people tying up bottom in the name of aquaculture) get rid of them. They give the industry a black eye!

Robert Rheault  
Ocean State Aquaculture Association  
Moonstone Oysters

*Please note: This column provides a forum for issues of interest to industry members. The opinions expressed are not necessarily those of the NSA.*



# **FIRST CALL FOR PAPERS**

## **Spatial Data and Remote Sensing in Invertebrate Fisheries Habitat, Research and Management**

### **A Workshop**

Saturday & Sunday, April 19-20, 1997  
Holiday Inn, Fort Walton Beach, Florida 32568  
Phone (904) 243-9181 or (800) 732-4853  
Fax (904) 664-7652

A broadly-conceived workshop, now in its planning stages, will be held April 19-20, 1997 in conjunction with the 89th Annual Meeting of the National Shellfisheries Association. The purpose of the workshop is to explore both the developing potential and existing applications of remote sensing, geographical information systems, global positioning systems and other spatial data technologies for invertebrate fisheries. In addition to a few invited papers, generous amounts of time will be scheduled for contributed papers, discussion, and synthesis.

The organizers welcome contributions related to any of the three themes (habitat, research and management); suggested topics include, but are not limited to: detection of plankton blooms; invertebrate habitats (including reefs) and migrations; physical and chemical habitat dynamics; stock location, abundance and identification; vessel tracking in commercial fisheries, management and analysis of spatial databases, etc. We also encourage submissions addressing, even speculatively, developmental and future uses of spatial and remote technologies in invertebrate fisheries.

The workshop registration fee will be \$50.00, payable with a registration form to be distributed at a later date. A block of rooms is reserved for attendees, with rates the same as for NSA participants (\$80 daily for poolside rooms, \$70 otherwise). For hotel reservations call the Holiday Inn, Fort Walton Beach, Florida at (904) 243-9181. More information and scheduling details will be available in the next newsletter. In the meantime, please call Gary Smith at (410) 226-0078 or Aaron Rosenfield at (410) 226-5193. We anticipate that many NSA meeting participants will want to arrive early for the April 20-24 NSA meeting in order to attend the workshop. For information about the NSA Annual Meeting, see the accompanying articles in this newsletter.

### ***Abstract Information***

A single-page (8½ x 11") abstract of up to 200 words is required for those presenting platform talks or posters. The deadline for abstracts is December 31st, 1996. Please provide the full title of the paper, authors' names, affiliations and complete addresses, and indicate, on the lower right-hand corner of the abstract page: 1) which general theme (habitat,

research or management) best suits your contribution; and 2) your preference for platform or poster presentation. Mail or email (as attached ASCII file) your abstract to:

Cooperative Oxford Laboratory, Attn: Gary Smith  
904 S. Morris St.  
Oxford, MD 21654  
gsmith@hpel.cees.edu

## **Nominations for Honored Life Member and David Wallace Award**

The Award committee is now accepting nominations for NSA Honored Life Member and for the David Wallace Award. Nominations should be 100-200 words, suitable for the basis of a testimonial to be read in the event of the nominee receiving the award, and as the basis of the NSA record.

### ***Awards Criteria***

#### ***Honored Life Member Award***

The NSA bylaws state "... members who by their exemplary service to the Association or to the profession deserve recognition as Honored Life Members of the Association." An additional criterion that has been generally used is that the nominee should be a highly respected senior scientist who has made substantial scientific contributions to shellfisheries biology. Industry members who have made significant contributions to the profession should also be considered.

#### ***David Wallace Award***

The NSA Bylaws state that nominees should be "individuals whose actions most demonstrate the principles and actions concerned with programs in shellfisheries, aquaculture, and conservation as exemplified by Mr. David Wallace during his lifetime in promoting understanding, knowledge, and cooperation among industry members, the academic community, and all levels of government (states, national, and international), and who has had outstanding success in bringing together shellfish scientist and industry official for the benefit of shellfisheries. The award is not linked to NSA membership."

Nominations should be sent to Bill Fisher at the address listed on the back page.

## **Nominations for NSA Officers**

The Nominations Committee will accept recommendations from NSA members for the 1997 slate of officers. If you would like to recommend someone (or yourself!), please contact Bill Fisher at the address given on the back page.



## Local Arrangements

### 89th Annual NSA Meeting

The Fort Walton Beach Holiday Inn is completing repairs from the damage caused by Hurricane Opal. We have been assured that all repairs will be completed prior to our arrival. For those who like to plan early, reservations can be made by calling either 1-800-732-4853 or (904) 243-9181.

Flights to Sites, Inc. will offer discounted airfares to NSA members attending the meeting. Discounts from 5 to 40% are available, depending on flight origin. Interested persons must call 1-800-609-0439 and identify themselves as members of NSA.

Further details regarding accommodations, flights, and Fort Walton Beach area activities will be included in the next newsletter.

Bill Fisher

## Recruits Corner

This summer has been busy for all of us, and I hope fulfilling. I'm sure there will be great contributions to science as a result. There are many ways of sharing your findings with others in your field. One way of getting the information out there is to make a presentation at the 89th annual National Shellfisheries Meeting in Fort Walton Beach, Florida. Travel and registration assistance are available to students through the NSA Student Endowment Fund, but in order to be considered for these awards, or to enter the contests for best student paper or poster, you must submit your abstract and fill out a complete application (details on pages 6 and 7) before the November 22nd deadline.

I hope everybody has had a chance to check out the NSA web site ([www.shellfish.org](http://www.shellfish.org)). Listed on our web page is the Recruit's jobs database, including positions sought and positions available. This database can prove to be an asset if people use it. If you would like to post either a job opening that you know about, or a brief resume, I encourage you to do so. You can post these announcements by sending them via electronic mail to [anderjl@mail.auburn.edu](mailto:anderjl@mail.auburn.edu) or [duxbury@aub.mindspring.com](mailto:duxbury@aub.mindspring.com).

If anyone has any suggestions on how to improve the student organization, or ideas for the meeting in Fort Walton Beach, just drop a note to one of the recruits. The email addresses are as follows: Jeff Springer ([jspring@unity.ncsu.edu](mailto:jspring@unity.ncsu.edu)), Ryan Carnegie ([rcarnegi@apollo.umenf.maine.edu](mailto:rcarnegi@apollo.umenf.maine.edu)), Deb Boswell Lane ([lane@chuma.cas.usf.edu](mailto:lane@chuma.cas.usf.edu)), and Kerri Bentkowskii ([kmb7375@sae.ssu.umd.edu](mailto:kmb7375@sae.ssu.umd.edu)). If you don't have access to email, I can be reached at 334-821-4431 or at the address listed on the back page of the newsletter. Again, I encourage you to throw some ideas our way.

James Anderson

## 25 years ago in the NSA

Volume 61, *Proceedings of the NSA*,

June 1971

The editor of the *Proceedings* was William Shaw from the Oxford NMFS lab. The volume contained numerous abstracts focusing on oyster settlement and disease, such as a parasite and disease survey of Connecticut oysters by Newman that found evidence for "plasmodia similar to *Minchinia nelsoni*" in several individuals, and a report by Susan Ford on MSX, "MSX: 10 years in the Lower Delaware Bay". One interesting paper reflected the times: Mix and Sparks published a manuscript in this volume entitled "The histopathological effects of various doses of ionizing radiation on the gonad of the oyster, *Crassostrea gigas*." (the gonads degenerated). The now classic paper by Castagna and Duggan, "Rearing the Bay Scallop, *Aequipecten irradians*" was also featured that year.

### Joint Subcommittee on Aquaculture National Aquaculture Development Plan

The Joint Subcommittee on Aquaculture (JSA) is composed of representatives from the USDA, The Commerce Department, Interior Department and other federal agencies. The JSA functions as a subcommittee of the National Science and Technology Council to coordinate federal aquaculture research, technology transfer, and assistance programs. The committee is currently rewriting the National Aquaculture Development Plan, originally drafted in 1983, which defines the federal government's role in US aquaculture. Regional meetings to consider comments and suggestions from the aquaculture community and other interested parties regarding the Plan have been held throughout the summer, concluding with a meeting hosted by NRAC scheduled for September 20th, 1996, in Providence, Rhode Island. The information and feedback obtained from these meetings will be considered by the JSA executive committee this fall. Aquaculture industry members who are interested in participating in the revision of the National Aquaculture Development Plan and who have not yet had an opportunity to attend the regional meetings are encouraged to contact the JSA executive secretary, Dr. Gary Jensen at (202) 401-6802, FAX (202) 401-1602, or email [gjensen@reeusda.gov](mailto:gjensen@reeusda.gov).

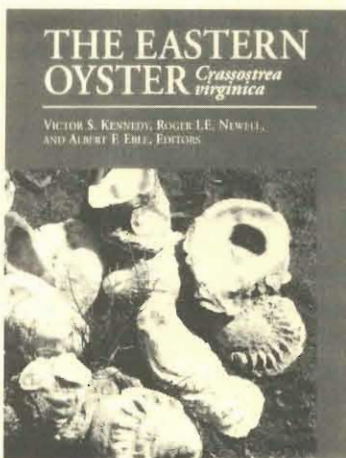
The leadership of the JSA recently changed hands. Dr. Henry (Hank) Parker has joined the Agricultural Research Service (see accompanying story), and Dr. Meryl Broussard has assumed the chairmanship of the JSA as well as the position of coordinator of the aquaculture program for the USDA's Cooperative State Research, Education, and Extension Service (CSREES).



## A Maryland Sea Grant Book

# The Eastern Oyster: *Crassostrea virginica*

Victor S. Kennedy, Roger I.E. Newell, and Albert F. Eble, editors



*The most comprehensive synthesis about Crassostrea virginica since Paul Galtsoff's landmark 1964 work, The American Oyster*

**T**he Eastern Oyster: *Crassostrea virginica*, a new book from Maryland Sea Grant, contains 21 chapters focusing on such topics as anatomy, the shell, larval biology, feeding, reproduction, genetics, predation, diseases and defense mechanisms, aquaculture and management. 734 pages, hard cover, 8-1/2 x 11 format, with 400 photographs, drawings and diagrams. Price, \$95 U.S.

To order *The Eastern Oyster: Crassostrea virginica*, send a check or purchase order to:



Publications Department, Maryland Sea Grant College  
0112 Skinner Hall, University of Maryland  
College Park, Maryland 20742

Name \_\_\_\_\_ Address \_\_\_\_\_ Zip Code \_\_\_\_\_

No. copies \_\_\_\_\_ @ \$95 U.S. each = \_\_\_\_\_

Postage and handling \_\_\_\_\_ + 3.50

Total = \_\_\_\_\_

Make payable to:

University of Maryland

■ For more information and to see sample pages, illustrations and a complete table of contents, visit our special web page on *The Eastern Oyster* at <http://www.mdsg.umd.edu/MDSG/Pubs/Oyster/index.html>.

## Aquaculture '98

I just returned from a planning meeting in Las Vegas and I can say with confidence that this promises to be our best triennial yet. Special shellfish sessions are already being organized and include disease, *Tridacna*, gastropods, oyster culture, scallop culture, crayfish, environmental impact of shellfish aquaculture, sea urchins, abalone, pearl oyster culture, and microalgal feeds. In addition, you have the opportunity to see what's happening in the world of fish culture and to attend our largest trade show ever. It's not too late to add sessions, all we need are organizers. So..... if there's a subject you'd like to see on the schedule, just give me a call or email NOW (address on back page).

For those of you who think Vegas is only for gamblers, think again! There are entertainment museums, car museums, theme parks for the kids, trips to the desert, fantastic show, bungee jumping on the strip, and lots of golf. That's just the beginning, watch this column for further information.

So, start making your plans now to be in Las Vegas from February 14-19, 1998.

Sandy Shumway

## Membership Contest!

Joedy Gray, Chair of the Membership Committee, has initiated a contest to recruit new members to NSA. The first person who recruits 8 new members will have a choice of receiving a free registration to the 1997 NSA Meeting or 3 years free membership. Anyone recruiting 5 new members will receive a 1 year free membership, and those recruiting at least 2 will be able to select a free NSA cap or walleye (!) pewter pin at the 1997 meeting (OK, maybe we'll let you pick a different pin). The contest is already underway, but no one has claimed the top prize! In order to enter the contest, you must be an active member of NSA in good standing. To enter, simply include your name as the recruiter when you provide someone with a membership form.

Any questions or requests for additional membership forms can be directed to Joedy Gray, Dave Bushek or Steve Tettelbach. Forms are also available from our website: <http://www.shellfish.org> -- Good Luck!



# Call For Papers

**FIRST, LAST AND ONLY CALL FOR PAPERS** for the 1997 Annual Meeting of the National Shellfisheries Association, Sunday April 20th through Thursday April 24th, 1997, Fort Walton Beach, Florida.

## INSTRUCTION FOR ABSTRACT FORMS

ABSTRACTS FOR ALL PRESENTATIONS (ORAL AND POSTER) MUST REACH THE PROGRAM CHAIR BY NOVEMBER 22, 1996.

At its annual meeting, the National Shellfisheries Association will have papers for both oral and poster presentation. Any individual may submit as many abstracts as she or he wishes; however, no more than two (2) abstracts from any author or co-author will be accepted for presentation. Submission of the same subject for oral and poster presentation is permitted; however, only one will be accepted. For poster sessions, tackboards will be provided but no projection equipment or tables will be provided.

Abstracts will be selected for inclusion in the program on the basis of significance in the field of shellfish research, informative nature, and broad interest. Subject matter must not have been previously published. The first author will be notified in writing concerning the acceptance of the abstract for inclusion in the program.

**A PAGE CHARGE OF US \$20 MUST BE SUBMITTED WITH EACH ABSTRACT.** This payment will be returned only if the abstract is not accepted. Please note that the abstracts and abstract fee are to be sent to the program chair (address below). The abstract fee must be paid in order for your abstract to be published in the *Journal of Shellfish Research*.

## PREPARING THE ABSTRACT

All accepted abstracts will be re-typed and included in the *Journal of Shellfish Research*; therefore, it is not necessary to have abstracts in camera-ready form. However, it is essential that abstracts comply with the instructions below.

The abstract form may be reproduced and used in lieu of the original. Type the title (all capitals) and name(s) of author(s) and address(es), punctuating as shown in the accompanying example. An asterisk (\*) should be placed after the last name of the author presenting the paper. **DOUBLE SPACE** all typing on the abstract form. Do not leave more than one space between the title information and the body of the abstract. The body of the abstract should be indented.

The entire abstract must be placed within the rectangular outline of the abstract form. **THE SPACE IS DESIGNED TO ACCOMMODATE AN AVERAGE OF 250 WORDS. TYPED DOUBLE SPACE WITH A STANDARD ELITE TYPEFACE.** When using abbreviations, spell out in full first, followed by the abbreviation in parentheses. **PLEASE PROOF-READ ABSTRACTS BEFORE SUBMISSION.**

The accompanying abstract form can be used for both oral and poster presentations; specify the preferred method of presentation in the space provided on the form. Check the appropriate box if the author is student or recent graduate and is eligible for the Thurlow C. Nelson Award or Poster Award.

In order to maintain and expand student participation in the Association, a Student Endowment Fund has been established. For those students wishing to apply for travel support for presentation of paper or poster, please fill out a Student Endowment Fund application form and submit it with your abstract fee to Jay Parsons as detailed in the accompanying article.

Prepare one original abstract form and send it with two (2) copies, check (personal or institutional) or money order for US \$20 (checks must be drawn on a US bank and made out to the NSA), and your Student Endowment application (if applicable) to Program Chair Jay Parsons at the address below. Abstracts must be mailed before November 22nd, 1996. Fax transmittals will be accepted (709-778-0535) provided a follow-up copy and payment is mailed and postmarked by November 22nd, 1996. If you need acknowledgment of the receipt of your abstract, please send a self-addressed envelope.

Send abstract, US \$20 abstract fee, and student endowment fund application materials to:

Dr. Jay Parsons  
Aquaculture Unit  
Marine Institute of Memorial University  
PO Box 4920  
St. John's, NF Canada A1C 5R3

## NATIONAL SHELLFISHERIES ASSOCIATION STUDENT ENDOWMENT FUND

The National Shellfisheries Association Student Endowment Fund was established in 1989 to maintain and expand the participation of students in the Association. Contributions for the Fund are tax-deductible and are used to defray the costs associated with presenting oral and poster presentations at the Annual Meeting. The funds are administered by an appointed committee which reviews student applications and makes recommendations for disbursement of funds.

## STUDENT ENDOWMENT/AWARDS FORT WALTON BEACH

Students participating in the 1997 meeting in Fort Walton Beach are invited to apply for **travel awards** and **presentation awards**. For consideration for either award, students must present only their original research. Recent graduates will also be considered if they present only research gathered while a student. A short description of these awards and the requirements for consideration follow. Please note that incomplete applications may not receive equal consideration for either type of award.



### PRESENTATION AWARDS

At every annual meeting, the best oral and poster presentations by students are acknowledged.

The **Thurlow C. Nelson Award** is to be given for the outstanding oral presentation of research that represents a distinctive and valuable contribution to shellfisheries science. The award is named after the distinguished shellfish biologist who served as NSA President from 1931 to 1933 and contributed more than 125 papers, many relating to oyster biology. The award includes a certificate of accomplishment and membership for four years in the Association. Oral presentations are judged on the following aspects: a) written abstract, b) scientific content and relevance, c) oral and visual aspects of the presentation, and d) handling of questions.

The **NSA Student Poster Award** is to be given for an outstanding poster presentation of research that represents a distinctive and valuable contribution to shellfisheries science. The award includes a certificate of accomplishment and membership for one year in the Association. Poster presentations are judged on the following aspects: a) written abstract, b) scientific content and relevance, c) quality of figures and text, and d) handling of questions.

### STUDENT TRAVEL AWARDS

To facilitate the active participation by students in the 1997 meeting, travel awards will be granted to cover registration, accommodations and/or travel costs. Recipients of assistance will be selected on a competitive basis. Selection criteria will include financial need (i.e., distance of travel, support level) and abstract quality.

### AWARD REQUIREMENTS

To apply for consideration only for presentation awards, complete steps 1 through 4. For consideration for presentation and travel awards, complete steps 1 through 3 and 5.

- 1) Meet the abstract deadline.
- 2) Include the proper abstract fee.
- 3) Check the appropriate box on the abstract submission form requesting consideration for student presentation awards.
- 4) Enclose a copy of the abstract in a separate envelope addressed to the Student Endowment/Awards Committee.
- 5) Complete an Endowment Fund application and enclose it in a separate envelope addressed to the Student Endowment/Awards Committee. The application should consist of a) the application form on this page, b) a copy of the abstract, and c) a letter of recommendation from a mentor or advisor.

Remember that the original abstract and fee, as well as the envelope containing your student application, should be submitted to the Program Chair, Dr. Jay Parsons, at the address given on page 6. Good Luck!



### STUDENT ENDOWMENTS AND AWARDS

#### APPLICATION FOR THE 89TH ANNUAL MEETING OF THE NATIONAL SHELLFISHERIES ASSOCIATION FORT WALTON BEACH, FLORIDA, APRIL 20 - 24, 1997

NAME: \_\_\_\_\_

INSTITUTION: \_\_\_\_\_

ORAL / POSTER PRESENTATION (Circle one)

PRESENTATION TITLE: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PHONE: \_\_\_\_\_ EMAIL: \_\_\_\_\_

REFERENCE (Advisor / Mentor): \_\_\_\_\_

APPLICANT'S SIGNATURE: \_\_\_\_\_

**DEADLINE FOR RECEIPT OF APPLICATION IS NOVEMBER 22ND!**

Abbreviated title: \_\_\_\_\_  
(seven words or less)

First author's mailing address: \_\_\_\_\_  
(if different from above) \_\_\_\_\_

Telephone: \_\_\_\_\_ Email: \_\_\_\_\_

Preferred Method of presentation: \_\_\_\_\_ Oral \_\_\_\_\_ Poster \_\_\_\_\_ Either

Is this an invited paper for a special session? \_\_\_\_\_ Yes \_\_\_\_\_ No If yes, which? \_\_\_\_\_

IS FIRST AUTHOR A STUDENT OR RECENT GRADUATE? \_\_\_\_\_ Yes \_\_\_\_\_ No  
(all student authors are eligible for the Thurlow C. Nelson Award or Poster Award)



SIZE AND DEPTH DEPENDENT LARVAL MORTALITY: A MODELING STUDY.

Margaret M. Dekhenieks,\* Eileen E. Hofmann, and John M. Klinck, Center for Coastal Physical Oceanography, Old Dominion University, Norfolk, VA 23529; Eric N. Powell, Haskin Shellfish Research Laboratory, Rutgers University, Port Norris, NJ 08349.

The rates of mortality for larval stages of most marine organisms are difficult or impossible to measure, and as a consequence are largely unknown. This is problematic since mortality, in particular predation loss, is an important process determining recruitment and the structure of marine communities. Simulation models provide one means of testing the effects of different mortality losses on population structure. Thus, a time and depth-dependent model of the growth and behavior of larvae of the Eastern oyster, *Crassostrea virginica*, was developed to investigate the effects of different predation strategies on the survivorship of this species. Simulations that included a size-dependent mortality showed that the largest number of larvae survive to settlement size if predation loss decreases with larval size. Simulations that included depth-dependent predation loss showed that more larvae survive to settling size when predation is concentrated in surface waters. However, few larvae survive if benthic predation rates are high or if predation rates are constant with depth. Simulation results clearly illustrate the differences in larval survivorship resulting from variable size and depth dependent predation mortality.

Abbreviated title: Size and depth dependent mortality

(seven words or less)

First author's mailing address: same  
(if different from above)

Telephone: 804-683-5550 Email: deks@ccpo.odu.edu

Preferred Method of presentation: ☒ Oral ☐ Poster ☐ Either

Is this an invited paper for a special session? ☐ Yes ☒ No If yes, which? \_\_\_\_\_

IS FIRST AUTHOR A STUDENT OR RECENT GRADUATE? ☒ Yes ☐ No  
(all student authors are eligible for the Thurlow C. Nelson Award or Poster Award)



## **Marine Scientist Joins Research Agency's National Program Staff**

The Agricultural Research Service has named Henry S. (Hank) Parker of Annapolis, MD., to serve as National Program Leader for Aquaculture. Beginning September 1, Parker will lead ARS aquaculture research programs on freshwater and marine species. ARS is the chief research agency of the US Department of Agriculture.

"We are pleased to have a scientist of Dr. Parker's caliber as national program leader," said Floyd P. Horn, ARS administrator. "He comes to ARS from USDA's Cooperative State Research, Education, and Extension Service, where he was coordinator of the aquaculture program. In that position, Hank Parker has provided invaluable leadership for USDA in support of inter agency coordination and development of national aquaculture policy and programs. He has also served as chairman of the National Science and Technology Council's Joint Subcommittee on Aquaculture.

"The ARS aquaculture program has grown approximately tenfold from its beginnings in the early 1980s to a budget of nearly \$9 million in the current fiscal year," said Horn. "This growth clearly reflects the capacity of ARS to develop and manage long-range national research programs and to respond quickly and effectively to the needs of the aquaculture industry."

## ***Attention NSA members***

The deadline for submission of contributions to the next **NSA Quarterly Newsletter** is October 25th. This newsletter will contain registration information for the 89th Annual NSA meeting. Contact Maureen Krause at the address listed on the back page for details.

Members are invited to submit news, views, milestones, research summaries, job and meeting announcements! This is YOUR newsletter, so take advantage of the opportunity to make your voice heard.

### ***How to Join the National Shellfisheries Association***

Fill out and mail a copy of the application blank below. The dues are US \$45.00 per year (\$25.00 for students). Membership entitles you to receive *The Journal of Shellfish Research* and the Quarterly Newsletter!

#### ***NATIONAL SHELLFISHERIES ASSOCIATION - APPLICATION FOR MEMBERSHIP (NEW MEMBERS ONLY)***

Name \_\_\_\_\_ For Calendar Year \_\_\_\_\_ Date \_\_\_\_\_

Mailing Address \_\_\_\_\_

Institutional Affiliation, if any: \_\_\_\_\_

Shellfisheries interests: \_\_\_\_\_

Regular or Student membership? \_\_\_\_\_

Student members only - Advisor's signature REQUIRED \_\_\_\_\_

Recruited by? \_\_\_\_\_

Make checks (MUST be drawn on a US bank) or international postal money order for \$45.00 (\$25.00 for students with advisor's signature) payable to the National Shellfisheries Association and send to Ms. Nancy C. Lewis, NSA Bookkeeper, P.O. Box 350, VIMS Eastern Shore Lab, Wachapreague, VA 23480.



## Upcoming Meetings

**Fourth International Congress on Medical and Applied Malacology:** October 7-11, 1996, Santiago, Chile. The congress will include topics on medical and veterinary malacology, on molluscs in regard to fisheries, aquaculture, agriculture, conservation, and biodiversity, and biology (ecology, taxonomy, distribution, genetics, etc.) of mollusc hosts and pests, mollusc-parasite relationships, parasite faunas of molluscs, control of noxious molluscs, etc. The official language of the Congress will be English; however, posters in Spanish with an English summary will be accepted. For information, please contact Prof. Laura Huaquin, Congress Secretary, Departamento Tecnico de Investigacion, Universidad de Chile, Diagonal Paraguay 265, Office 1603, Santiago, Chile. Phone: (56 2)678 55 49; FAX: (56 2)635 39 51

**Marketing and Shipping Live Aquatic Animals and Plants:** October 13-15, 1996, Port of Seattle Convention Center, Seattle, Washington. This Industry Conference and Exhibition will address the practical considerations of the live seafood industry. Individuals, companies, and agencies involved in the growth, harvesting, processing, regulation, and shipping of live aquatics are invited to participate. For further information contact John B. Peters, Nor'Westerly Food Technology services, 2743 56th Ave. SW, Seattle, WA 98116. Phone: (206)938-0676; FAX: (206)933-7937; email: 103243.675@Compuserve.com or email Brian Paust at ffbcp@acad1.Alaska.edu

**Barneget Bay Ecosystem Workshop:** November 14, 1996, Holiday Inn, Toms River, New Jersey. This workshop is designed to provide a forum for researchers to present their most recent finding on the Barneget Bay/Little Egg Harbor Bay Ecosystem to environmental resource managers, policy makers, environmental groups, the scientific community and interested citizens. For further information and a registration brochure contact the Rutgers Dept. of Continuing Professional Education at 908-932-9271

**Improving the Health of Coastal Ecosystems Through Shellfish Restoration: An International Conference:** November 20-23, 1996, Hilton Head, South Carolina, USA. Conference will provide an opportunity for government officials, resource managers, and industry representatives to discuss approaches to improve the health of coastal ecosystems through shellfish restoration. For meeting details, contact Elaine Knight by email at knightel@musc.edu, voice mail: (803)727-6406, or FAX: (803)727-2080

**EXPOPESCA'96:** November 27-30, 1996, Santiago, Chile. A fishing, aquaculture, and seafood exhibition. For information contact: Emap Highway, 21 John Street, London WC1N 1BP, FAX: +44 171 831 9362 or Feria Internacional de Santiago, PO Box 40-d, Santiago, Chile, FAX: +56 2 533 1667

**Annual Meeting of the Society for Integrative and Comparative Biology (ASZ):** December 26-30, 1996, Albuquerque, New Mexico. See the association Website (<http://SICB.berkeley.edu/SICB/SICB.html>) or contact Corinne O'Brien at the SICB Business Office for more information: Phone: 800-955-1236; email [corinne\\_o'brien@sba.com](mailto:corinne_o'brien@sba.com)

**Fifth International Conference and Workshop on Lobster Biology and Management:** February 9-14, 1997, Queenstown, New Zealand. Sponsored by the New Zealand Fishing Industry and the New Zealand National Institute of Water and Atmospheric Research, this meeting will cover all aspects of all specials of lobsters, including spiny, slipper, clawed, and scampi. For details, contact: The Organizing Committee, Convener John Booth, Fifth International Lobster Meeting, NIWA, PO Box 14-901, Wellington, New Zealand; phone: +64 4 386 0300; FAX: +64 4 386 0574; email: [j.booth@niwa.cri.nz](mailto:j.booth@niwa.cri.nz)

**Acquacoltura:** February 12-16, 1997, Verona, Italy. The 8th International Exhibition of fish products, technologies and equipment for breeders, will take place concurrently with FIERAGRICOLA, the International Exhibition of Agriculture and Zootechnics. For further information, contact the marketing director, Paolo Maccani: phone: (045) 829 8111; FAX: (045) 829 8288

**World Aquaculture '97:** February 20-23, 1997, Washington State Convention Center, Seattle, Washington, USA. The theme of the meeting is "Linking Science to Sustainable Industry Development". The annual international conference & exposition of the World Aquaculture Society will bring together the technical, producer and supplier segments of the aquaculture industry. The meeting offers a full program of technical sessions, special sessions, producer seminars reception, industry tours, one of the largest aquaculture tradeshow in the world, and more! For more information contact: World Aquaculture '97, Conference Manager, 21710 7th Place West, Bothell, WA 98021. Phone: (206)485-6682; FAX: (206)483-6319. Special Note: NSA will be a sponsor a full day session "Molluscan Aquaculture in the 21st Century, What are the Science Priorities to Enable Industry to Achieve Optimum Development."

**Feed Ingredients Asia '97:** March 18-20, 1997, Singapore International Convention & Exhibition Centre. Exhibitors will display a diverse cross section of products needed to formulate top quality feed. For exhibition booking and other inquiries, contact: Andrew West, Exhibition Sales Manager, Turret Group plc, Turret House, 171 High Street, Rickmansworth, Hertfordshire WD3 1SN, England. Phone



*Upcoming Meetings, continued*

+44 (0) 1923 777000, FAX: +44 (0) 1923 771297.

**11th International Pectinid Workshop:** April 10 - April 15, 1997, La Paz, Baja California Sur, Mexico. This workshop will focus on pectinid biology, fisheries, and aquaculture. This meeting presents a unique opportunity for science and management to compare and contrast experiences with scallop fondlers from around the world. For registration and further information, contact: Esteban Fernando Félix-Pico, Dept. of Fisheries and Marine Biology, CICIMAR-IPN, Playa el Conchalito S/N, APDO Postal 592, 23000 La Paz, B.C.S., Mexico; Phone: 52-112-25344 (Ext. 2428), FAX: 52-112-25322, email: efelix @vmredipn.ipn.mx

**National Shellfisheries Association 89th Annual Meeting:** April 20-24, 1997, Ft. Walton Beach, Florida. See this newsletter for details! For questions concerning local arrangements, contact Dr. William Fisher at phone: 904-934-9394, Fax: 904-934-2402, or e-mail fisher.william @epamail.epa.gov. For program information, please contact Dr. Jay Parsons at phone: 709-778-0307, FAX 709-778-0535, or e-mail jparsons@gill.ifmt.nf.ca

**Aquaculture Canada '97:** June 9-15, 1997, Quebec City, Quebec, Canada. The 14th Annual Meeting of the AAC will be held at the Radisson-Hotel des Gouverneurs. The Theme for the meeting is "From Research to Market". For more information contact: Yves Bastien at phone: 418-368-7656, Fax: 418-356-1275, or e-mail ybastien@quebectel.com.

**American Malacological Union:** June 22-27, Santa Barbara, California. The 1997 meeting will be held jointly with the Western Society of Malacologists and feature two major symposia, "Deep-Sea Mollusca", convened by Jerry Harasewych, and "Traditional vs. Phylogenetic Systematics", convened by Gary Rosenberg. There will also be a special session on Cephalopods of the North Pacific chaired by Eric Hochberg. The meeting will be held at the Radisson Hotel, and field trips to observe Pleistocene exposures and collect late Pleistocene marine invertebrates will be held. For meeting details, contact: Eugene Coan, President, AMU, at 891 San Jude Ave., Palo Alto, CA 94306-2640, phone: 415-493-8242; FAX: 415-977-5799, or email gene.coan@sierraclub.org

**Japanese Society of Fish Pathology, International Symposium on Diseases in Marine Aquaculture:** October 3-5, 1997, Hiroshima, Japan. This meeting will stimulate joint research efforts in the field of fish pathology science, and will result in further progress of marine fish and shellfish aquaculture. The official language of the symposium is English. Sessions will consist of presentations on viral, bacterial, fungal, protozoan, parasitic and non-infectious diseases of fish and shellfish in the marine environment. Deadline for abstract submission is May 30, 1997. Please contact the Chairperson, Dr. K. Muroga, for more information at the Faculty of Applied Biological Science, Hiroshima University, Kagamiyama 1-4-4, Higashihiroshima, 739, Japan; Phone: Japan-824-24-7977 or 7947; FAX: Japan-824-22-7059

**Third International Abalone Symposium:** October 5-11, 1997, Monterey, California. This meeting will feature symposia on abalone aquaculture, biotechnology, ecology, fisheries management, morphometrics, nutrition, life history biology, and more. Registration is required by June, 1997. For further details, contact: Catherine Ashley, California Sea Grant College, 9500 Gilman Drive, La Jolla, CA 92093-0232. FAX: (619) 534-2231, email cashley@ucsd.edu

**III Clama, the 3rd Latin American Malacological Congress:** October 13-17, 1997, Ensenada, Mexico. Sponsored by the Committee for the Latin American Malacological Meetings. For information, contact: M.C. Claudia Farfan, Jefe Departamento de Acuicultura, CICESE, Baja California, Apdo. Postal 2732, Ensenada, BC, Mexico; FAX (in Mexico): (617) 44880; FAX (in US): 011 52617/44880, phone: (617) 44501/06 or 5050/53

**Aquaculture '98:** February 14 - 19, 1998, Las Vegas, Nevada. Triennial joint meeting of the World Aquaculture Society, the National Shellfisheries Association and the American Fisheries Society Fish Culture Section. Mark your calendar now!

**First Announcement**

**Third International Symposium on  
Aquatic Animal Health**

**August 30 - September 3, 1998,  
Baltimore, Maryland, USA.**

The symposium will be the first major international meeting to focus comprehensive presentation and discussion on the health of a diversity of aquatic animals including shellfish, fish, and marine mammals. The symposium will be sponsored by the American Fisheries Society - Fish Health Section, Asian Fisheries Society, European Association of Fish Pathologists, International Association for Aquatic Animal Medicine, Japanese Society of Fish Pathology, and the **National Shellfisheries Association**. The meeting is supported by The Johns Hopkins University and the University of Maryland at Baltimore. For further information please contact: Dr. Sarah L. Poynton, Division of Comparative Medicine, Johns Hopkins University School of Medicine, Ross Research Building 4th Floor, 720 Rutland Avenue, Baltimore, MD 21205, USA.

Phone: 410-955-3273

FAX: 410-550-5068

Email: spoynton@welchlink.welch.jhu.edu



## **David H. Wallace Award**

"For the Wallace Award, the Awards Committee of the National Shellfisheries Association selects individuals whose actions most demonstrate the principles and actions concerned with programs in shellfisheries, aquaculture, and conservation as exemplified by Mr. David H. Wallace during his lifetime in promoting understanding, knowledge, and cooperation among industry member, the academic community, and all levels of government, and who has had outstanding success in bringing together shellfish scientists and industry officials for the benefit of shellfisheries."

Bylaws of the NSA

In this and recent issues of the NSA Quarterly Newsletter, the biographies of Wallace Award recipients from 1991 to the present are being published as they were presented at the time of award receipt.

### **Dr. Melbourne Carriker, 1992 Award**

The David H. Wallace Award is presented to honor a recipient for dedicated service in promoting research, understanding and cooperation among shellfish scientists, culturists, managers, producers and regulators. I can think of no one who has been more successful in fulfilling those ideals and principles than Melbourne R. Carriker. It is indeed my great pleasure to have known Mel for many years and to have worked with him.

Mel's earliest scientific endeavors were in the field of ornithology when he went on a nine-month expedition directed by his father into the eastern Bolivian Andes. This collecting expedition was sponsored by the Philadelphia Academy of Science. His interests then turned to aquatic biology. He has earned degrees from Rutgers University in 1939, his Ph.D. degree from the University of Wisconsin in 1943 and an honorary degree from Beloit College, Wisconsin.

He served in the United States Navy in the North Pacific (1943-1945). He returned to Rutgers University as an assistant professor where he worked closely with Thurlow Nelson. During his years at Rutgers, Mel established research programs in shellfish biology that would grow and span his career. Mel served as associate professor at the University of North Carolina and a program director for the U.S. Bureau of Commercial Fisheries. Following that he directed the highly valued Systematics-Ecology Program at the Marine Biological Laboratory at Woods Hole. Mel served continuously as editor for the marine flora and fauna series manuals produced by the National Marine Fisheries Service. He then became Professor of Marine Studies at the University of Delaware where he continues as Professor Emeritus.

He has mentored more than 30 students who earned their M.S. or Ph.D. degrees and has advised hundreds of others.

He has shown great dedication to his students and associates.

He has published over 150 scientific papers. He has loyally served the National Shellfisheries Association moving through the chairs from 1953 to presidency from 1957 to 1959. He also served as editor of the *Proceedings* from 1953 to 1955. There was seldom a time that he was not serving on a NSA committee.

He has touched and will continue to touch many of our lives and has been an inspiration to us all.

Mike Castagna

### **Dr. George C. Matthiessen, 1994 Award**

Following the award of his Ph.D. degree in marine biology from Harvard University in 1959, Matthiessen has dedicated his scientific endeavors to the study and beneficial utilization of the marine resources of New England. His early professional activities began in 1959 and concerned the regulatory aspects of New England's fisheries during the three years he served as Assistant Director of the Massachusetts Division of Marine Fisheries.

After he completed his tenure with the state, an inherent interest in shellfish guided the direction of his professional activities thereafter. In 1962 he was a principal in establishing on Martha's Vineyard the 'not-for-profit' Marine Research Foundation, Inc. which was chartered under the laws of the Commonwealth and conducted research in shellfish propagation and aquaculture. He directed the activities of the Foundation into the late sixties and the results of this organization's efforts were numerous published reports dealing with shellfish resources in New England.

As a result of Matthiessen's activities in the field of aquatic biology, in 1969 a major New England power company requested that the Foundation undertake ecological impact assessment studies of the biota in the waters adjacent to a large electric generating station in southeastern Massachusetts. However, to be in compliance with tax laws, such work could not be carried out by the 'not-for-profit' Foundation so a 'for profit' corporation, Marine Research, Inc., was founded with Matthiessen as president. During the next ten years he directed the ever-expanding work of MRI which was primarily involved in ecological baseline studies of the biota indigenous to the waters adjacent in the generating stations being studied. In addition to these client-funded studies, his interest in shellfish propagation and culture never waned and MRI carried out a number of company-sponsored studies in its seawater hatchery/laboratory which involved clams, scallops, and lobsters.



In 1978 Matthiessen resigned as president of MRI to devote himself full-time to activities concerned with shellfish aquaculture; co-owner and director of the Cotuit Oyster Company, Cotuit, Massachusetts; and president of Ocean Pond Corporation, Fishers Island, New York, which continues to produce seed oysters for use by Cotuit and others. He has recently served as Director of the Sounds Conservancy, Groton, Connecticut, and as a Visiting Professor in the Department of Marine Sciences, University of Connecticut.

Matthiessen continues to be actively involved in shellfish studies and his dedication and support of aquaculture and man's utilization of sea-grown products has been continually evident during the past three and a half decades.

Dick Toner

### ***US Aquaculture Supply and Demand***

The U.S. aquaculture industry has experienced tremendous growth in recent years, and demand for seafood continues to grow:

- Per-capita consumption of fish and shellfish in the U.S. has climbed from 12.5 pounds in 1980 to more than 15 pounds in 1995. The U.S. Dept. of Commerce has predicted that U.S. demand for seafood will increase by 1.4 million metric tons by the year 2000 because of population growth alone. The World Aquaculture Society reports that aquaculture production will have to expand at least threefold to meet world demand for fisheries' products by the year 2025.

- The U.S. imported \$6.7 billion worth of edible seafood in 1995, making it the world's largest importer of fisheries products after Japan. Although the U.S. exported \$3.1 billion worth of edible seafood in the same year, this still resulted in a trade deficit of \$3.6 billion.

- Nearly 70% of the world's conventional commercial fish species are reported to be fully exploited, depleted or recovering from depletion.

- Source: USDA Agricultural Research Service

**IOC**

## ***Science and Communication Centre on Harmful Algae***

A Centre devoted to the study of harmful algae has been established at the University of Copenhagen by the Intergovernmental Oceanographic Commission (IOC) of the United Nations Educational, Scientific, and Cultural Organization (UNESCO). Sponsored by the IOC, Danish International Development Assistance, the University of Copenhagen, Danish Institute for Fisheries Research, and National Environmental Research Institute, the Centre will focus on providing assistance and training on harmful algal blooms, directed specifically towards developing countries. Algal identification, health risk assessment, and reprints will be available for research institutions in developing countries. Training courses focusing on marine phytoplankton biology will be organized and taught, and Ph.D. supervision in collaboration with the sponsoring institutions will be offered.

The research activities of the Centre will concentrate primarily on applied aspects of the biology and toxicology of harmful algae. Research institutions in the developing countries will be involved both in the planning and implementation of the projects.

For more information, please contact:

IOC  
Science and Communication Centre on Harmful Algae  
University of Copenhagen  
Botanical Institute  
Dept of Mycology and Phycology  
Øster Farimagsgade 2D  
DK-1353 Copenhagen K., Denmark  
Phone: +45 3313 4446  
Fax: +45 3313 4447  
email: [jacobl@bot.ku.dk](mailto:jacobl@bot.ku.dk) or [henrike@bot.ku.dk](mailto:henrike@bot.ku.dk)

**Aquaculture '98 • Bally's, Las Vegas • Feb 16-19**

THE TRIENNIAL MEETING OF  
World Aquaculture Society  
National Shellfisheries Association  
Fish Culture Section - AFS

*Sponsored by: National Aquaculture Association*





**The National Shellfisheries Association Constitution and Bylaws appear on the following pages. Date of most recent Executive Committee approval appears just below the title. The Constitution and Bylaws were last printed in the Late Summer 1994 issue of the National Shellfisheries Association Quarterly Newsletter.**

**CONSTITUTION  
of the  
NATIONAL SHELLFISHERIES ASSOCIATION, INC.  
(A Corporation Not for Profit)  
Approved November 13, 1990**

**ARTICLE I. NAME AND ADDRESS**

The organization shall be known as the National Shellfisheries Association, Inc., hereinafter referred to as the Association or NSA.

The official permanent address of the NSA shall be:

National Shellfisheries Association, Inc.  
National Marine Fisheries Service  
Laboratory  
Oxford, MD 21654 USA

**ARTICLE II. OBJECTIVES AND PURPOSES**

The National Shellfisheries Association is organized as a non-profit society. The objectives and the purposes of the Association shall be:

Section 1. To encourage research on molluscs, crustaceans, and associated organisms with emphasis on species of economic importance known as "shellfish".

Section 2. To gather and disseminate scientific and technical information on shellfish.

Section 3. To promote and advance shellfisheries research and the application of results to the shellfish industry.

Section 4. To hold annual meetings for presentation, exchange, and discussion of information on scientific and professional aspects of shellfish research and management.

**ARTICLE III. MEMBERSHIP**

Section 1. Membership in the NSA shall be open to all individuals who actively support the objectives and purposes of the Association.

**ARTICLE IV. TERMS OF EXISTENCE**

Section 1. This corporation is to exist perpetually.

**ARTICLE V. OFFICERS**

Section 1. The officers of the Association shall be a President, a President-Elect, a Vice President, a Secretary, and a Treasurer, elected to perform to usual duties of their respective offices.

Section 2. The signing officers of the Association are the President, the President-Elect, and the Treasurer or their appointees.

Section 3. All officers shall be elected for one year, or until the next regular annual meeting. The President-Elect shall, upon completion of the term, accede to the Presidency. Therefore, elections shall be for President-Elect, Vice President, Secretary and Treasurer. The President Elect will be installed as President at the opening of New Business of each regular annual business meeting. No officers, except for the Secretary and Treasurer, may succeed themselves.

Section 4. Nomination for office shall be made by an Elections Committee appointed by the President. All persons nominated by this committee shall be members in good standing and eligible to hold office in the Association. The Elections Committee shall present the list of consenting nominees to the Secretary, who shall prepare a mail ballot to be sent to the membership at least sixty (60) calendar days prior to the annual meeting. The ballot shall permit write-in votes for each office. Ballots must be returned to the President Elect fourteen (14) calendar days before the annual meeting, and they shall be audited as the Executive Committee directs.

Section 5. A simple majority of the votes received by the President-Elect fourteen (14) days prior to the annual meeting of the Association shall be necessary for the election of officers and the members of the Executive Committee. Elected officers other than the President-Elect take office at the end of each annual business meeting.

Section 6. In the event that any officer other than the President-Elect resigns or otherwise leaves a position vacant, the Executive Committee shall, by a simple majority vote of committee members present at a properly constituted meeting, at which business may be conducted, appoint a replacement to fill the remainder of the term. Any vacancy in the office of the President-Elect must be filled through membership ballot.

Section 7. No elected officer may receive any compensation for services rendered. Certain travel expenses may be defrayed when authorized by the President with the concurrence of the Treasurer. Clerical and other operational funds may be paid by the Treasurer when so authorized by the President.

**ARTICLE VI. EXECUTIVE COMMITTEE**

Section 1. The Executive Committee shall consist of the elected officers, the immediate past-President, the Chairperson of the Pacific Coast Section, the Editor of the Journal of Shellfish Research (JSR), formerly known as Proceedings, and three (3) persons elected by the Association to serve as Members-at-Large for a term of three (3) years or until their successors are elected. Each Member-at-Large shall not



be eligible for re-election to the same office within a period of three (3) years after their term of office has expired.

Section 2. The Executive Committee shall manage the business and the affairs of the Association, subject to the provisions of the Constitution and By-Laws. A quorum of the Executive Committee consists of a simple majority of its members. A properly constituted meeting of the committee is any meeting in which all of the members have been notified in advance and of which a simple majority of all members have agreed to the meeting. All decisions of the Executive Committee shall be by a simple majority vote of the quorum.

Section 3. At each Executive Committee meeting prior to the annual meeting the President-Elect with coordination of the Treasurer shall submit for Executive Committee approval a proposed budget for the ensuing calendar year.

Section 4. The Executive Committee shall approve budgets, approve appointments, present proposals, and describe other activities that may require discussion and approval by the membership. The Secretary or a duly appointed member of the Association shall keep minutes of Committee meetings and deposit copies with the Secretary. Minutes shall be open to members or sent to them.

#### **ARTICLE VII. BYLAWS**

Section 1. The structure and function of the National Shellfisheries Association within the context of the Constitution shall be described in the Bylaws. The Executive Committee of the Association may provide such Bylaws for the conduct of its business and the carrying out of its purpose as they may deem necessary from time to time. The Bylaws can be amended by a two-thirds (2/3) majority of the Executive Committee.

#### **ARTICLE VIII. AMENDMENTS**

Section 1. The Constitution, after adoption by a 2/3 majority of the voting membership, shall supersede all existing Constitutions and Bylaws, and will take effect immediately.

Section 2. The Constitution may be altered or amended on recommendation of the Executive Committee, by a 2/3 majority of the voting membership, by a mail ballot, provided the membership shall receive written notice of such amendments at least sixty (60) calendar days prior to the deadline for voting. Ballots shall be collected and counted by the Secretary and validated by the President within twenty (20) calendar days after the voting deadline.

#### **ARTICLE IX. ACQUISITIONS**

Section 1. In order to promote the purposes of this corporation, it may acquire property by grant, gift, purchase, devise or bequest, and hold and dispose of such property as the Association shall require for the benefit of its members and not pecuniary profit.

#### **ARTICLE X. DISTRIBUTION OF ASSETS**

Section 1. In the event of dissolution, any assets of the National Shellfisheries Association shall be distributed to a non-profit fund, foundation or corporate organization operated exclusively for the purpose as specified in Section 501 (C) (3) of the United States Internal Revenue Code. The fund, foundation, or corporate organization to which the National Shellfisheries Association assets will be distributed shall be selected by the National Shellfisheries Association Executive Committee at its last meeting.

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#### **BYLAWS**

of the

**NATIONAL SHELLFISHERIES ASSOCIATION, INC.**

(A Corporation Not for Profit)

June 23, 1991

#### **BYLAW I NAME AND PURPOSE**

Section 1.

The name of the organization shall be the National Shellfisheries Association, as described in the Constitution.

Section 2.

The purpose and activities of this Association shall be as described in the Constitution.

#### **BYLAW II MEMBERSHIP AND DUES**

Section 1.

Any individual or institution that qualifies for membership under the Constitution and Bylaws may become a member in good standing of the Association by having a genuine interest in the purposes of the Association, by paying the appropriate dues, and by adhering to the rules and regulations laid down in the various sections and subsections of the Constitution and Bylaws.

Section 2.

Dues, payable in U.S. dollars on or before January 1 of each calendar year, may be changed as necessary by a vote of the Executive Committee present at the annual meeting.

(a) Any member whose dues are in arrears for a period of more than one (1) year, and after two (2) written notices from the Secretary, shall be dropped from the membership within thirty (30) days after the second notice.

(b) The *Journal of Shellfish Research* shall not be distributed to members who have been dropped for non-payment of dues.

(c) Any person, firm, society, club, or state or federal agency, on approval of the Executive Committee and by payment of a sum to be established annually by the Executive Committee, may become a Patron of the Association. Patrons are entitled to six (6) copies of the *Journal of Shellfish Research*. Corporations, agencies and commercial companies may not use membership in the Association as a substitute for their duties and obligations to the Shellfish Institute of North America.



(d) Libraries and agencies not desiring to become Patrons may subscribe to the *Journal of Shellfish Research* and purchase copies for a subscription cost to be established by the Executive Committee.

(e) Any person, upon the recommendation of the Awards Committee, may be made an Honorary Member with all the privileges of a Member, by a simple majority vote of the Executive Committee contacted by telephone or mail before the Association annual meeting, and shall be exempt from payment of dues.

### BYLAWS III MEETINGS, VOTINGS

#### Section 1.

The annual meeting of the membership shall be held at the time and place set by the Executive Committee. The Secretary shall serve by mail a written notice thereof, not less than sixty (60) calendar days prior to such meeting, to each member at their address as it appears on the records of the Association. The newsletter may serve as the written notice. There is no quorum requirement for the annual meeting.

#### Section 2.

In all matters of business on which the membership is entitled to vote, all members shall be eligible to cast one vote.

#### Section 3.

The annual meetings of the Association shall consist of a program of papers, discussions, symposia, demonstrations and other activities.

#### Section 4.

The business meeting shall include, but not be limited to, the following:

- (a) Report of the President
- (b) Reports of the Secretary and Treasurer
- (c) Reports of Committees (Audit-Budget-Finance, Membership, Resolution, etc.)
- (d) Report of the Editor of the *Journal of Shellfish Research*
- (e) Announcements of changes in editorship, editorial board, page charges, and page or budget limitations with respect to the *Journal of Shellfish Research*
- (f) Old and new business
- (g) Installation of officers
- (h) Appointment of new committees and associate editors

### BYLAW IV DUTIES OF OFFICERS

#### Section 1.

The President is responsible for the conduct of business and the organization of the Association. This individual shall preside over all annual and special meetings, shall make such appointments as are authorized in the Bylaws, and shall exercise such other functions and responsibilities as may be determined from time to time by action of the Association or the Executive Committee of which she or he is chair. The President is authorized to, from time to time, appoint ad hoc committees from the membership of the Association to perform various duties as in the discretion of the President may seem appropriate. The President shall also serve as ex-officio member of all committees.

#### Section 2.

The President-Elect shall, at the end of the term, accede to the Presidency. During this term as President-Elect, he or she shall perform the duties of the President in the absence of the President. The President-Elect shall serve as chair of the Site Selection Committee and appoint the members of the Arrangements Committee for the annual meeting at which she or he will serve as President.

#### Section 3.

The Vice President shall act in the capacity of President-Elect in the former's absence, or, in the absence of both the President and the President-Elect, shall perform the duties of the President until a new President-Elect has been elected. The Vice President shall serve as chair of the Program Committee and shall appoint other committee members.

#### Section 4.

The Secretary shall be responsible for distributing ballots and the minutes of Association meeting and meetings of the Executive Committee, for maintaining an updated record of policy and operational actions decided by both groups, for maintaining contact with institutional subscribers of the journal, and for preparing the annual report for the Executive Committee meeting.

#### Section 5.

The Treasurer shall be responsible for maintaining or overseeing the maintenance of membership and mailing lists. The Treasurer shall ensure that documented accounts of all transactions are maintained, that accepted bookkeeping and accounting practices are followed, and that the Association's financial resources are managed according to procedures adopted by the Executive Committee. The Treasurer shall, at the annual meeting, present a draft budget for the next fiscal year, and shall submit a detailed financial report audited in such a manner as shall be specified by the Executive Committee.

#### Section 6.

No officer of the Association or member of the Executive Committee shall be answerable for any act, receipt, neglect, or default of any other officer or Executive Committee member. No officer or Executive Committee member shall be liable individually or collectively for any judgement or for any act done or step taken or omitted under the advice of counsel, nor for any mistake or fact or law nor for anything which they may do or refrain from doing in good faith.

### BYLAW V PUBLICATIONS

#### Section 1.

The Association shall publish semiannually the *Journal of Shellfish Research* to include scientific and applied papers which satisfy the requirements of the Editorial Board. Papers may be submitted at any time. Accepted manuscripts will be published in the earliest convenient *Journal of Shellfish Research*. Authors shall be notified of the current page charge for publication when a receipt of a manuscript is acknowledged. Rates including Life Membership rates shall be reviewed annually by the Publications Committee and the Editor. The



Executive Committee shall vote to approve or disapprove these rates and the rates shall be published in the Newsletter.

#### Section 2.

The Editor and six (6) or more Associate Editors shall be nominated by the Publications Committee and selected by the Executive Committee for determinate periods to serve on the Editorial Board.

#### Section 3.

Special publications, symposia, and other reports may be issued as determined by vote of the Executive Committee.

### BYLAW VI STANDING COMMITTEES

#### Section 1.

The President, with the approval of the Executive Committee, shall appoint the following committees, of at least two (2) members each, to serve for a term of one (1) year unless otherwise specified, or at the discretion of the Executive Committee.

(a) An Audit-Budget-Finance Committee to manage the financial affairs of the Association and to examine the financial report of the Treasurer before its presentation to the Association for approval.

(b) An Awards Committee to review and nominate members who, by their exemplary service to the Association or to the profession, deserve recognition as Honorary Member of the Association. These nominations are to be presented to the Executive Committee prior to the annual meeting. The Committee shall also review and nominate individuals for the Wallace Award, which will be awarded by simple majority vote of the Executive Committee before the annual meeting.

The Awards Committee is responsible for preparing a nomination package. The nomination package shall consist, at a minimum, of:

1. The identity of the nominee
2. A written biography suitable for publishing in the society journal.

If the Executive Committee agrees to the selection, the Awards Committee shall be:

1. In charge of the presentation ceremony
2. In charge of, with consultation of the Treasurer, obtaining a suitable plaque or award for the awardee
3. In charge of ensuring that the biography is published in the society journal.

For the Wallace Award the Awards Committee should select individuals whose actions most demonstrate the principles and actions concerned with programs in shellfisheries, aquaculture, and conservation as exemplified by Mr. David Wallace during his lifetime in promoting understanding, knowledge, and cooperation among industry members, the academic community, and all levels of government (states, national, and international), an who has had outstanding success in bringing together shellfish scientists and industry officials for the benefit of shellfisheries. The award is not linked to NSA membership.

The Committee is responsible for preparing a nomination package. The nomination package shall consist, at a minimum, of:

1. The identity of the nominee
2. A written statement concerning the general contributions of the individual

If the Executive Committee agrees to the selection, the subcommittee shall be:

1. In charge of the presentation ceremony
2. In charge of, with consultation of the Treasurer, obtaining a suitable plaque or award for the awardee
3. In charge of preparing and submitting the award statement to the society newsletter for publication

(c) A Membership Committee to ensure that all people actively interested in the objectives of the Association are invited to become members.

(d) An Election Committee composed of the immediate Past President, the current President, and the President-Elect, to submit a list of nominees for all offices and members-at-large whose terms are expiring, with a short vitae of each to the Executive Committee six (6) months prior to the annual meeting. Upon selection by the Executive Committee, the candidates will be presented to the membership by special mail ballot within sixty (60) calendar days prior to the annual meeting. The ballots will be returned to the President-Elect who will be responsible for collecting and collating the votes and reporting the results to the Executive Committee. The candidates will be notified of the election results at least one week prior to the annual meeting. The Executive Committee will validate the election at their annual meeting.

(e) A Publications Committee to manage the publishing affairs of the Association. The Treasurer and/or the Journal Business Manager and the Editor of the *Journal of Shellfish Research* shall be a member of the Committee.

(f) A Resolutions Committee to draft and recommend resolutions considered prudent and necessary for the promotion of the objectives and purposes of the Association.

(g) A President's Committee consisting of all Past Presidents of the Association to assist the Executive Committee in broad policy matters and special issues. This committee shall be chaired by the immediate Past President.

#### Section 2.

The President-Elect, with the approval of the Executive Committee, shall appoint the following committees, of at least two (2) members each, to serve for a term of one (1) year unless otherwise specified, or at the discretion of the Executive Committee.

(a) An Arrangements Committee to arrange for programs at the annual meeting for which the President-Elect will serve as President. This committee will be chaired by the President-Elect.

(b) A Site Selection Committee composed of the current President, the President-Elect, the Vice President, and one or more other members selected by the President, if desirable, to select the location of the annual conference for the next conference for which a location has not been chosen. The President-Elect will serve as chair and will appoint an on-site Registration Coordinator to schedule and perform registration duties (in conjunction with the Treasurer) during the annual meeting at which the President-Elect will take office. Normally this committee will secure sites for meetings at least two years in advance.



(c) An Endowment Committee to examine student abstracts and applications for support to present papers at the next Annual Meeting. The committee will include the Treasurer who will report on the availability of funds. The committee will make recommendations to the Executive Committee for the awards. The committee will also be responsible for organizing the review of all qualified student presentations for the Thurlow C. Nelson Award at the annual meeting.

Section 3.

The Vice-President, with the approval of the Executive Committee, shall appoint the following committees, of at least two (2) members each, to serve for a term of one (1) year unless otherwise specified, or at the discretion of the Executive Committee.

(a) A Program Committee to arrange for programs at the upcoming annual meeting. This committee will be chaired by the Vice President.

Section 4.

All Standing Committees will conduct business based on voting by a simple majority of the members present at their meetings.

**BYLAW VII MEMBERSHIP LIST**

Section 1.

The official membership list of the Association shall be distributed to all members as frequently as necessary at the discretion of the Executive Committee.

**BYLAW VIII RESOLUTIONS**

Section 1.

The Association may express opinions and recommendations by resolution(s) or other appropriate action(s), except on specific numbered bills of federal or state legislatures.

**BYLAW IX AMENDMENTS**

Section 1.

These Bylaws may be amended, altered or rescinded by a two-thirds (2/3) majority vote of those members of the Executive Committee present at any scheduled meeting of the Executive Committee for which proper notice has been given. The Secretary shall ensure that all such changes to the Bylaws are communicated to the membership at the earliest opportunity. Changes to the Bylaws may be made by teleconference provided a duly constituted meeting has been called and appropriate notification has been given to all members of the Executive Committee.

Section 2.

A petition for change in the Bylaws can be submitted to the Executive Committee by ten percent (10%) of the membership. The Executive Committee shall review the recommended changes and offer them, with recommendations, to the membership for majority vote.

**BYLAW X REGIONAL SECTIONS OF THE ASSOCIATION**

Section 1.

The Pacific Coast Section (PCS) of the Association is authorized to elect its own officers and hold meetings at times and places selected by its members. Local dues will be assessed. All members of the Association are invited to attend PCS meetings.

Section 2.

The purpose of the Pacific Coast Section shall be to further the aims and interests of the Association on the Pacific Coast. The PCS shall operate under a constitution and bylaws established by its members insofar as they are not inconsistent with the constitution and bylaws of the parent Association.

**BYLAW XI MISCELLANEOUS**

Section 1.

No member, committee chair, Executive Committee member or Office of this Association shall use the seal, logo or name of the Association to endorse, condemn or express an evaluation of any product or service of any firm or individual.

Section 2.

No part of the financial resources of this Association may be used to defray the travel expense of any officer or member where the purpose of such travel is to influence or intervene in the internal legislation of any country.

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**Dr. Maureen K. Krause, Editor**  
**NSA Quarterly Newsletter**  
**Natural Science Division**  
**Southampton College of Long Island University**  
**Southampton, New York 11968 USA**

Sandra Shumway  
Natural Science Division  
Southampton College  
Long Island University  
Southampton

NY 11968



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## Officers, Committee Chairs and Staff of the National Shellfisheries Association

**Dr. Stephen Tettelbach, President**  
Natural Science Division  
Southampton College, LIU  
Southampton, NY 11968  
Phone (516) 287-8418  
FAX (516) 287-8419  
Email stettelb@sunburn.liunet.edu

**Dr. Roger Newell, President-Elect**  
Horn Point Laboratories  
University of Maryland  
Horn Point Road, P.O. Box 775  
Cambridge, MD 21613  
Phone (410) 221-8410  
FAX (410) 281-8490  
Email newell@hpl.umd.edu

**Jay Parsons, Vice President and Program Chair**  
Fisheries and Marine Institute  
Memorial University of Newfoundland  
P.O. Box 4920  
St. John's, Newfoundland A1C 5R3  
Phone (709) 778-0307  
FAX (709) 778-0535  
Email jparsons@gill.ifmt.nf.ca

**Mr. John Ewart, Secretary**  
College of Marine Studies  
University of Delaware  
Lewes, DE 19958  
Phone (302) 645-4060  
FAX (302) 645-4007  
Email john.ewart@mvs.udel.edu

**Dr. Evan Ward, Treasurer**  
Dept. of Biological Sciences  
Henson School of Science and Technology  
Salisbury State University  
Salisbury, MD 21801  
Phone (410) 543-6139  
FAX (410) 548-3318  
Email jeward@sae.ssu.umd.edu

**Ms. Nancy C. Lewis, Bookkeeper**  
P.O. Box 350  
VIMS Eastern Shore Lab  
Wachapreague, VA 23480  
Phone (804) 787-5816  
FAX (804) 787-5831  
Email nlewis@vims.edu

**Dr. Dan Kreeger, Chair, Endowment/Student Awards Committee**  
Environmental Research Division  
Academy of Natural Sciences  
1900 Ben Franklin Parkway  
Philadelphia, PA 19103  
Phone (215) 299-1184  
Fax (215) 299-1079  
Email kreeger@say.acnatsci.org

**Dr. David Bushek, Co-Chair, Membership Committee**  
Baruch Marine Field Laboratory  
P.O. Box 1630  
Georgetown, SC 29442

**Mr. Joedy Gray, Co-Chair, Membership Committee**  
Texas Parks and Wildlife Dept.  
4200 Smith School Rd.  
Austin, TX 78744-3292  
Phone (512) 389-8037  
FAX (512) 389-4388  
Email joedy.gray@tpwd.state.tx.us

**Dr. Standish K. Allen, 1996-1999 Member-at-Large**  
Haskin Shellfish Research Laboratory  
Rutgers University  
Box B-8  
Port Norris, NJ 08349  
Phone (609) 785-0074  
FAX (609) 785-1544  
Email sallen@virtigo.hsrl.rutgers.edu

**Dr. Christopher Langdon, 1995-1998 Member-at-Large**  
Hatfield Marine Science Center  
Oregon State University  
Newport, OR 97365  
Phone (541) 867-0231  
FAX (541) 867-0105  
Email langdon@ccmail.orst.edu

**Dr. Susan Bower, 1994-1997 Member-at-Large**  
Dept. of Fisheries and Oceans  
Pacific Biological Station  
Nanaimo, BC V9R 5K6 Canada  
Phone (604) 756-7077/7026  
Fax (604) 756-7053

**James Anderson, Student Contact, The Recruits**  
Dept. of Fisheries and Allied Aquacultures  
203B Swingle Hall  
Auburn, AL 36849  
Phone (334) 844-4786  
Email andertj1@mail.auburn.edu

**Dr. Anja Robinson, Chair, Pacific Coast Section**  
Hatfield Marine Science Center  
Oregon State University  
Newport, OR 97365  
Phone (541) 867-0263  
FAX (541) 867-0138  
Email robinsan@ccmail.orst.edu

**Dr. Jonathan Davis, Chair, Industry Committee**  
15425 Smoland Lane  
Bainbridge Island, WA 98110  
Phone (206) 842-0894  
email mdavis@wolfenet.com

**Dr. Keith Benson, Historian**  
Dept. of Medical History and Ethics  
School of Medicine SB-20  
University of Washington  
Seattle, WA 98195  
Phone (206) 543-5447

**Dr. William Fisher, Chair, Presidents, Elections, and Awards Committees**  
US EPA/GB ERL  
Gulf Breeze, FL 32561  
Phone (904) 934-9394  
FAX (904) 934-2402  
Email fisher.william@epamail.epa.gov

**Mr. George Abbe, Chair, Audit-Budget-Finance Committee**  
Estuarine Research Center  
Academy of Natural Sciences  
10545 Mackall Road  
St. Leonard, MD 20685  
Phone (410) 586-9709  
FAX (410) 586-9705  
Email: abbe@acnatsci.org

**Mr. Michael Castagna, Chair, Publications Committee**  
Virginia Institute of Marine Science  
Wachapreague, VA 23480  
Phone (804) 787-5816  
FAX (804) 787-5831

**Dr. Sandra Shumway, Editor, Journal of Shellfish Research, Chair, Aquaculture '98**  
Southampton College, LIU  
Southampton, NY 11968  
Phone (516) 287-8407  
FAX (516) 287-8419  
Email: sshumway@sunburn.liunet.edu

**Dr. Maureen Krause, Editor, NSA Quarterly Newsletter**  
Southampton College, LIU  
Southampton, NY 11968  
Phone (516) 287-8397  
FAX (516) 287-8419  
Email: mkrause@sunburn.liunet.edu