

# National Shellfisheries Association

## QUARTERLY NEWSLETTER



Fall/Ballot 1988

Lewes, Delaware

### NSA Holds 80th Annual Meeting In New Orleans, Louisiana

One hundred and eighty persons were registered for the 80th annual meeting of the National Shellfisheries Association held at the Meridian Hotel in New Orleans, Louisiana from June 26-30, 1988. The technical program, arranged by Scott Siddall (SUNY, Stony Brook, NY), consisted of 76 oral and 12 poster presentations. Special topics covered this year included: "The Louisiana Oyster Industry" (Moderator: Ron Dugas, Louisiana Department of Wildlife and Fisheries, New Orleans, LA); "Crawfish" (Moderator: Robert Romaine, School of Forestry, Wildlife and Fisheries, LSU, Baton Rouge, LA); and "Quality of Shellfish Growing Waters" (Moderators: Dorothy L. Leonard and Marlene A. Broutman, Strategic Assessment Branch, NOAA, Rockville, MD).

The recipient of this year's Thurlow C. Nelson Award for the best student paper was Mary Lee (Department of Animal and Veterinary Sciences, University of Maine) for her presentation entitled "Abnormal Gametogenesis in Triploid American Oysters, *Crassostrea virginica*." An honorable mention was awarded to Jonathan Davis (School of Fisheries, University of Washington) for his paper "Growth Rate of Sibling Diploid and Triploid Oysters, *Crassostrea gigas*." Carolyn Friedman (Department of Medicine, School of Veterinary Medicine, University of California, Davis) received the award for her poster "Nocardiosis of Adult Pacific Oysters, *Crassostrea gigas*." Congratulations to Mary, Jonathan and Carolyn for their interesting research and outstanding presentations.

This year's selection of the Nelson Award winners was made by a committee headed by Mary Gibbons and included Mike Castagna, Fu-Lin Chu, Bruce Barber, Sandy Libby MacFarlane, Hal Haskin and Randy Walker. Papers were judged on the basis of scientific content, presentation, quality of visual aids and handling of questions. Thanks to Mary and the Award Committee for evaluating all of the 22 student papers presented this year.



Winners of the Thurlow C. Nelson Award for the best student presentations are, from left to right, Carolyn Friedman (best poster), Jonathan Davis (best paper, honorable mention) and Mary Lee (best paper). Joining them is Mary Gibbons, Chairperson of the 1988 Nelson Award Committee.

### President's Message

*From Roger Mann, 1988-89 NSA President*

A successful meeting in New Orleans is now behind us while Aquaculture '89 is fast approaching. Mine will be the shortest Presidency in the history of NSA; however, rather than decrease my aspirations, I am hoping that I can encourage all of you to work with me to achieve substantial progress on a number of issues before the February meeting in Los Angeles.

Over the past ten years NSA has continued a steady growth and establishment of identity. In 1987 for the first time, we organized our own, very successful, meeting independent of our industry colleagues in the Shellfish Institute of America (SINA). Despite our growth, the membership has remained predominantly interested in research and development with only a small component of our membership coming from industry. The shellfish industry nationwide is in a state of rapid change. On the East and Gulf Coasts declining harvests associated with disease losses, environmental degradation and periodic red or brown tides are causing change at all levels of the seafood industry.

Yet, within this framework, aquaculture enterprises are beginning to blossom: mussel culture in Maine and clam culture in the Middle Atlantic states are two such examples.

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the West Coast the oyster industry in particular appears more stable but here, too, concerns about disease and environment are present. In this time of change, the need for communication between industry, regulators and researchers is more critical than ever. Aquaculture '89 will provide the opportunity for the general NSA membership to meet with the members of SINA and the Pacific Coast Oyster Growers Association (PCOGA). I encourage interaction for it is one of my goals to encourage closer relationships between NSA, SINA and PCOGA. Hopefully, SINA members will again consider joining us at our Williamsburg meeting in 1990.

The growth of NSA over previous years presents both good and bad aspects with respect to attaining a second goal: a sustained increase in student participation in NSA, especially the annual meetings. The membership attendance at annual meetings is now such that we have essentially limited our venues to hotel facilities designed for conferences. We can no longer function in the breakfast room at the local motel. Good conference facilities cost money, despite considerable efforts to negotiate conference price reductions by our site committees. Supporting student attendance at our annual meeting is expensive; however, it must be realized that we are still a small community nationwide. Presentation of graduate work at academic meetings is an essential component of graduate education, and there is no better forum for facilitating interaction of potential employer with potential employee. In recent years we have acknowledged the high standard of student contribution through the Nelson Award. At New Orleans the EXCOM, for the first time, hosted a small informal reception strictly for student attendees. Many positive comments were received afterwards. I hope this informal tradition will continue for the students, because they are truly the future of the Association.

A final goal, one in which all of you can help, for the coming year is the continued expansion of readership of the Journal of Shellfish Research. Publication of this journal is a subject in which I have a very personal interest. For several years I was Editor of the Journal. Those were some of the most frustrating years of my professional career. Publication was continually delayed by the incompetence and uncooperativeness of the former managing editor. Much of the membership shared this frustration, although I must compliment all of you on your patience as several EXCOM's worked through the tedious task of transferring operations to a full service printer, Sheridan Press. Sandy Shumway, working with the Journal editorial board and supported by Sheridan, is now editing a first-class journal. Our subscription cost, even at the increased 1989 dues rate, remains far below that of many competing journals. Our subscriptions and distribution exceed that of some "international" journals, while the quality of printing and interval from submission to appearance on the library shelf is competitive with any professional, peer review journal in marine science. As a member, you can enjoy your individual copy, but if the Journal is not on your institution library shelf, demand that they subscribe. Encourage others to read and consider submitting your own original work for publication in the Journal.

I have already mentioned the increased 1989 membership dues. A word of explanation is appropriate. For several years the Association has been deficit spending. The costs of meetings and publications has exceeded income from dues and page charges. During the coming year a single issue of the Journal of Shellfish Research will cost approximately \$12 per member after cost reductions due to page charges. Newsletters cost approximately \$1 per issue per member. Two journal issues plus four newsletters annually cost about \$28. Essentially all of your \$30 individual dues is returned to you in product -- even the Institutional dues are very reasonable at \$50 -- and your administration (the EXCOM) works for free. Increasing costs are a fact of life. Rest assured, we are doing our best to contain them.

Over the years I have enjoyed NSA and meeting with its membership. I view my tenure as President as a chance to give something back to the Association for those years. I look forward to working with all of you and meeting you for Aquaculture '89 in Los Angeles in February.

### **Summary of the 1988 Executive Committee (EXCOM) Meeting**

The EXCOM meeting was held on Sunday June 26, 1988. Secretary-Treasurer Ed Rhodes presented the financial report with a summary of accounts of the new cost centers: Administrative, Publications and Annual Meeting. Ed explained the present status of the National Shellfisheries Association finances. Our current fund balance is healthy, but we are deficit spending and will incur a substantial loss this fiscal year, and more the next. The major expenses are our journal and the newsletter. Each issue of the Journal of Shellfish Research now costs us about \$9,000 to produce, and we do that twice per year. Four newsletters and postage to mail them costs about \$4,000 per year. The costs for the Journal of Shellfish Research and the newsletter spread over our 850 active members cost us \$25 per member. On top of that, it costs us a bit to mail out dues notices, give awards, and send out meeting announcements. Assuming the annual meeting to be a break-even proposition, we need to increase our dues. In response to Ed's report, the Executive Committee considered a motion to increase annual dues for 1989 to \$30 for regular members and \$20 for students. This recommendation was actively discussed and put on the agenda for a vote by the membership at the business meeting.

The Executive Committee also voted to increase institutional subscription rates for the Journal of Shellfish Research to \$50 per year and to have the National Shellfisheries Association sponsor publication of the proceedings of the Pectinid Workshop that Sandy Shumway will be hosting in Maine.

Site and Registration Committee Chairman Roger Mann recommended Williamsburg, Virginia as the site for the 1990 annual meeting. The Executive Committee wholeheartedly endorsed Williamsburg as a meeting site. Roger indicated that two hotels in the Williamsburg area were seriously competing for NSA's business and that the eventual cost of hotel facilities should be quite reasonable.

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Membership Chairman Jeff Kassner reported that 17 former NSA members, dropped from the rolls for non-payment of dues renewed their memberships in response to his questionnaire. Currently, 78.3% of the NSA membership reside in the U.S., 14.8% Canada and the remainder, 6.9%, overseas. Secretary-Treasurer Ed Rhodes reviewed current membership figures and reported a total of 794 active members (94 students). Another 215 members have not paid their dues for 1988 and 356 members have been dropped for non-payment of dues. Ed pointed out that dues will start being collected on a calendar year basis starting January 1, 1989. Anyone joining NSA or renewing their membership prior to that date can pay \$18 and receive both issues of the 1988 JSR.

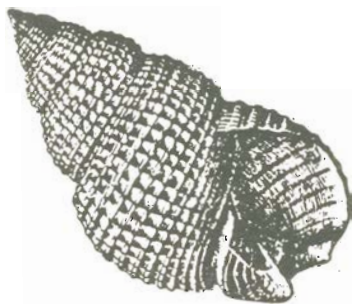
President-Elect (1987) Roger Mann reported that 161 ballots were cast in the election for the 1988-89 Executive Committee Officers and the proposed revisions to the NSA Constitution and Bylaws. The results of the ballot were:

#### President-Elect

Scott E. Siddall  
Marine Science Research Center  
State University of New York  
Stony Brook, NY 11794  
(516) 632-8668

#### Vice-President

Victor S. Kennedy  
Horn Point Environmental  
Laboratories  
University of Maryland  
Cambridge, Maryland. 21613  
(301) 228-8200



#### Secretary-Treasurer

Edwin Rhodes  
National Marine Fisheries Service  
212 Rogers Ave.  
Milford, CT 06460  
(203) 783-4226

#### Member-at-Large (1988-1991)

Arnold Eversole  
Department of Aquaculture,  
Fisheries and Wildlife  
Clemson University  
Clemson, SC 29631  
(803) 656-3117

The proposed revisions to the NSA Constitution and Bylaws were also passed. However, some minor inconsistencies in the revised Bylaws published in the Winter/Ballot issue were brought to the attention of the EXCOM by a few of the members casting ballots. John Manzi is looking into the matter and an update will be included in the next issue of the newsletter.

#### From the Editor

This issue of the newsletter is serving both as a "post-meeting" report of our recent annual get-together in New Orleans and a "ballot issue" containing information on the candidates running for election to the 1989-90 NSA Executive Committee. Because our next annual meeting will be held in conjunction with Aquaculture '89 in Los Angeles, next year's ballot (and call for papers) have to be announced earlier than usual to compensate for the shortened year that lies ahead. Even though the newly installed EXCOM will serve for nine months and the 1989-90 EXCOM for about fourteen (until April 1990), the newsletter will still be published four times a year. I will adjust its content accordingly to keep you informed and up-to-date on NSA business matters and events. The next issue, scheduled for mailing in December 1988, will contain information on Aquaculture '89 and our next annual meeting, including the technical program.

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#### Summary of the 1988 Annual NSA Business Meeting

This year, the business meeting was held on Wednesday, June 29th, as part of the NSA Awards Luncheon. Needless to say, with a captive audience present, a new NSA business meeting attendance record was established. Outgoing President John Manzi thanked those members who had carried out various jobs in the organization during the year. Especially important to the success of the New Orleans meeting were Ron Dugas and Tom Soniat who handled local arrangements and Mike Rayle who organized the trade show. Carol Soniat did a marvelous job hosting the spouse's program. Scott Siddall (program) and Secretary-Treasurer Ed Rhodes, Linda Rivet and Nancy Peacock (meeting registration) were recognized for their collective efforts.

Thanks and appreciation were also extended to the following organizations that helped to make the New Orleans meeting a successful one. Special donations for the program book came from the Fox Oyster Company, Shell Oil, and Steimle Associates. Shellfish for the President's Reception were provided by Great Eastern Mussel Farms, Aquaculture Research Corporation, the South Carolina Wildlife and Marine Resources Department, Pemaquid Oyster Company, the Pacific Coast Oysters Growers' Association, and the Louisiana Oyster Peelers and Growers' Association.

President Manzi reviewed the changes made by the EXCOM during the previous year designed to improve financial management, produce better and more timely publications and improve communication among the membership. The fiscal year was changed from June 1 - May 31 to October 1 - September 30 to better organize and control the Association's finances and to allow sufficient time to reconcile the finances of the annual meeting before the books are closed each year. The Association's budget was organized around three cost centers: Administration, Publications and Annual Meeting to clarify the assignment of revenues and expenses to their appropriate source.

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Several new committees were established: a Presidents Committee (chaired by the most recent past President and composed of all past Presidents) to handle policy issues and sensitive liaison with other organizations; a Nominations Committee (most recent past President, current President and President-Elect) to handle the Association's annual election and a Site Selection Committee (President-Elect as the Chair) to begin preparations for the annual meeting two years ahead.

Secretary-Treasurer Ed Rhodes presented the financial report with a summary of accounts of the new cost centers and explained, along with President Manzi, why it was necessary to consider a dues increase this year. After some discussion, the membership in attendance voted to increase annual dues from \$18 to \$30 (\$15 to \$20 for students).



President-Elect Roger Mann accepts the President's gavel from John Manzi at the annual NSA Awards Luncheon in New Orleans.

Honorary Membership Committee Chairman Bob Malouf announced that Ron Westley (Washington Department of Fisheries) was selected by the NSA Executive Committee to receive an NSA Honored Life Membership Award. Neil Bourne, a friend and colleague, reviewed Ron's numerous career accomplishments as a shellfish biologist and NSA officer and accepted the award (a framed certificate) on his behalf.

Ken Chew, standing in for Vice-President Vic Kennedy, Program Chair for the next NSA annual meeting, announced that a final call for papers with an abstract submission deadline of September 1, 1988 would be sent in July to all NSA members. Ken reported that the overall Aquaculture '89 program is extensive, and he looks forward to a good National Shellfisheries Association turnout. He also announced that his annual Chinese dinner will be an awards luncheon affair in Los Angeles.

President Manzi then passed on the gavel to President-Elect Roger Mann who presented John with an attractive plaque/desklamp with a glass shade in the form of a scallop shell in honor of his service to the Association. President Mann indicated to the membership that he will emphasize closer National Shellfisheries Association-shellfish industry ties in the new year. He will also strive to build our institutional subscription list for the Journal of Shellfish Research stating that this is the best way to get our information into the greatest number of hands. President Mann then appointed the following individuals to serve as committee chairs and members:

Audit-Budget-Finance:	George Abbe
Honorary Membership:	John Manzi
Presidents:	John Manzi
Membership:	Jeff Kassner
Elections:	Scott Siddall
Program:	Victor Kennedy
Publications:	Michael Castagna
members:	Roger Mann
	Sandra Shumway
	Robert Hillman
	Mel Carriker
Resolutions:	Diane Brousseau
Site Selection:	Scott Siddall
Arrangements:	John Manzi
members:	Ed Rhodes
	Ken Chew
NSA Representative to Aquaculture '89 Steering Committee	Ken Chew

NATIONAL SHELLFISHERIES ASSOCIATION  
BUDGET SUMMARIES FOR FISCAL YEAR 1987-88 AND 1988-89  
(Prepared 6/23/88)

	Proposed FY 87-88	Projected FY 87-88	Proposed FY 88-89
<b>Administrative Cost Center:</b>			
Revenues	\$11,400.00	\$12,022.35	\$14,610.00
Expenses	<u>2,250.00</u>	<u>1,450.00</u>	<u>2,300.00</u>
Net	+\$ 9,150.00	+\$10,572.35	+\$12,310.00
<b>Publications Cost Center:</b>			
Revenues	\$17,150.00	\$20,150.00	\$14,350.00
Expenses	<u>21,100.00</u>	<u>25,600.00</u>	<u>32,125.00</u>
Net	-\$ 3,950.00	-\$ 5,450.00	-\$17,775.00
<b>Annual Meeting Cost Center:</b>			
Revenues	\$37,722.00	\$26,052.97	\$22,000.00
Expenses	<u>30,213.41</u>	<u>28,282.50</u>	<u>19,800.00</u>
Net	+\$ 7,509.56	-\$ 2,229.53	+\$ 2,200.00
GRAND TOTAL	+\$12,709.56	+\$ 2,892.82	-\$ 3,265.00



## Audit-Budget-Finance Update

In 1987, we reported that inconsistencies in accounting of funds held in Ocean Springs, Mississippi prevented us from completing our review of the 1986-87 books. During the 1988 meeting in New Orleans, however, NSA President Roger Mann, Secretary-Treasurer Ed Rhodes, and former President Bob Malouf were able to transfer \$4410.67 from Mississippi to Connecticut. Thus, most of the Association's funds are now with the Treasurer. Accounting for and transfer of these funds was the last step necessary for a final review of the 1986-87 books which now is complete. A review is much less rigorous than a formal audit, but even a review of the books by a CPA cost \$300 per year when last done for the 1983 and 1984 fiscal years. This is the reason we are now reviewing the books ourselves. An audit by a CPA is designed so that an opinion regarding the financial statements taken as a whole can be expressed, but it is considerably more expensive than a review. Since the 1983 and 1984 financial statements were not formally audited, no opinion was expressed, yet our costs were \$600. The examination of the 1985, 1986, and 1987 books also resulted in no opinion, but there were no related costs.

In 1987 we began the process of changing our fiscal year from June 1 - May 31 to October 1 - September 30. We felt this change was necessary because often the fiscal year ended just a week or two before the annual meeting, which created all kinds of problems for our treasurer. This change left us with a short fiscal period from June 1 to September 30, 1987. Ed Rhodes reported that during this period NSA had net administrative activity of \$3052.23, net publication expenses of \$7458.60, and net meeting revenues of \$5010.12 for a net overall gain of \$603.75, resulting in a fund balance of \$13222.93 to begin the 1987-88 fiscal year. A review of this financial statement was not required, but it appears to be in good order. Thanks to Ed for his good work.

Our present fiscal year will end September 30, and by then we will have spent much of our reserves to cover publication costs. With four issues of the JSR coming out this year, publication costs will be higher than we have ever seen. By the end of the 1988-89 fiscal year, we will be deficit spending; thus the increase in Association dues was necessary. The important thing is that the JSR is coming out on time now, and therefore better serves the publication needs of Association members.

George Abbe, Chairman  
Audit-Budget-Finance  
Committee

## Journal of Shellfish Research

Sandy Shumway, editor of JSR, reports that all NSA members should have received their copy of Volume 7(1) by now. Not only did this issue contain abstracts of papers presented at the Seattle and Halifax meetings, but for the first time we were able to publish abstracts of the upcoming meeting and have them available for distribution in New Orleans.

This year there will be four issues of JSR, a bonus to our members. These will include two special issues, one covering the symposium on toxic algal blooms, the other covering shellfish management, guest edited by Scott Siddall. These issues will be sent out simultaneously sometime in Mid-October. Volume 7(4) will be ready for mailing in December.

It is our goal to constantly improve the quality of JSR and to encourage our members to consider JSR as their first choice for publication of their research findings. Papers dealing with any aspect of shellfish biology are welcome, especially those dealing with crustaceans and management. This is part of a concerted effort to broaden our spectrum and dispel the rumor that ours is a "bivalve" journal. So, don't forget to recommend the JSR to your students and colleagues. The Journal will only be as good as you make it.

Also, requests have been received from libraries and individuals for back issues of the JSR and its predecessor, the Proceedings of the National Shellfisheries Association. Needed at the moment are JSR Volumes 3(1), 3(2), 4(1), 4(2), 5(1) and 6(2) and Proceedings Volumes 52, 53, 55, 63, 64, and 68. Notify Sandy if you can provide copies of any of these issues.

From the Editor  
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On another subject, I thought the New Orleans technical program, arranged by Scott Siddall, was well done, especially the sessions on the Louisiana Oyster industry, Crawfish and the Quality of Shellfish Growing Waters. The overviews of the oyster and rapidly expanding crawfish industry, organized and moderated by Ron Dugas and Robert Romaine respectively, were quite informative with several representatives from each industry in attendance to ask questions and participate in discussions. The session on water quality and the subsequent panel discussion that followed brought together individuals from industry, government and the academic community to discuss one of the key issues facing shellfish regulators, harvesters, processors and distributors today. Dorothy Leonard and Marlene Broutman did a fine job organizing this session and I hope this topic will continue to be discussed at future NSA meetings. One purpose of our annual meeting is to provide members with an opportunity to exchange ideas and develop a better understanding of the activities of different individuals or groups sharing a common interest in shellfisheries. Improving communication and understanding among industry, government and the academic community with regard to their views on important shellfisheries issues represents, in my opinion, a large part of what NSA is all about. The special sessions in New Orleans accomplished this and made this year's annual meeting that much more enjoyable and productive.



## 1989-90 NSA Officers Nominated

The Nominations Committee, chaired by John Manzi, has submitted the names of the following NSA members who have agreed to stand for election as 1989-90 NSA officers:

<b>President-Elect</b>	Edwin Rhodes Victor S. Kennedy
<b>Vice-President</b>	Carter Newell Ronald J. Dugas
<b>Secretary/Treasurer</b>	Thomas M. Soniat
<b>1990-1992 Member-at-Large</b>	Monica Bricelj Jeffrey Kassner

If the Association is to reflect your concerns and professional interests, it must have your input in this annual voting exercise. Please review the biographical summaries of each candidate included in this issue and **vote now** by marking the enclosed ballot which should be folded, stamped and mailed to President-Elect Scott Siddall as addressed on the back of the ballot.

## Information About The Candidates

### President-Elect:

**Edwin Rhodes**, Research Fisheries Biologist, National Marine Fisheries Service, Milford, Connecticut. B.S. (1965) Rensselaer Polytechnic Institute. NSA member since 1969. Secretary-Treasurer, 1987-89; Nomination Committee, 1981-82; NSA Historian, 1985-present; Nelson Award Committee, 1984-85. Research Interests: benthic recruitment, shellfish aquaculture.

**Victor S. Kennedy**, Professor, Horn Point Environmental Laboratories, University of Maryland, Cambridge, Maryland. B.S. (1962) Sir George Williams University, Montreal; M.S. (1964) Memorial University of Newfoundland; Ph.D. (1970) University of Rhode Island. Postdoctoral Fellow, University of Canterbury, New Zealand, 1973-74; Postdoctoral Fellow, Environment Canada, Newfoundland Biological Station, 1974-76; St. Francis Xavier University, Nova Scotia, 1983-84 sabbatical. NSA member since 1968. Vice-President, 1988-89; Chairman, Site and Registration Committee, 1980-83; Member-at-Large, 1983-86; Constitution Committee, 1985-86; Thurlow C. Nelson Award, 1968. Research Interests: reproduction and larval behavior, and ecology of bivalves; ecology and dynamics of littoral and sublittoral benthic communities.

### Vice President:

**Carter Newell**, Biologist, Great Eastern Mussel Farms, Tenants Harbor, Maine. B.A. (1977) Colby College; M.S. (1982) University of Maine. Watson Fellow, Marine Ecology, 1978; President, Maine Shellfish Research and Development, 1983; Pemaquid Oyster Company, 1986; NSA member since 1980. Research Interests: mussel, clam and oyster bottom culture, shellfisheries management, physiological energetics, growth lines, recruitment, seafood technology, water quality, red tides, production modeling, site evaluation.

**Ronald J. Dugas**, Oyster Program Manager, Seafood Division, Louisiana Department of Wildlife and Fisheries, New Orleans Louisiana. B.S. (1968), M.S. (1970) University of Southwestern Louisiana. NSA member since 1976. Member, Budget Committee, 1978; Member-at-Large, 1986-89; Co-Chairman Arrangements Committee, 1988 annual meeting. Research Interests: oyster biology.

### Secretary-Treasurer:

**Thomas M. Soniat**, Assistant Professor, University of New Orleans, New Orleans, Louisiana. Cand. Mag. (1975) University of Bergen, Bergen, Norway; Ph.D. (1982) Texas A&M University. NSA member since 1980. Member-at-Large, 1982-85; Co-Chairman, Local Arrangements Committee, 1988 annual meeting. Research Interests: oyster parasitology and ecology, bivalve depuration.

### 1989-92 Member-at-Large:

**Monica Bricelj**, Assistant Professor, Marine Sciences Research Center, State University of New York, Stony Brook. "Licenciatura" in Biological Sciences (1974), Buenos Aires University, Argentina; M.S. (1979), Ph.D. (1984) State University of New York, Stony Brook. Researcher, National Atomic Energy Commission, Argentina, 1975-77; Assistant Professor, Southampton College, Long Island University, 1984-86; Research Assistant Professor, Marine Sciences Research Center, SUNY, Stony Brook, 1986-88. Fullbright Fellowship, 1977-78; Jessie-Smith Noyes Foundation Fellowship, 1978-79; American Association of University Women International Fellowship, 1980-81. NSA member since 1979. Member JSR Editorial Board; Thurlow C. Nelson Award, 1983. Research Interests: physiological ecology, aquaculture of bivalve molluscs, bioenergetics, phytoplankton-bivalve interactions; effects of red tides and other algal blooms on shellfish.

**Jeffrey Kassner**, Waterways Management Supervisor, Town of Brookhaven, Medford, New York, and adjunct faculty, Suffolk County Community College, Selden, New York. B.S. (1972), M.S. (1982) State University of New York at Stony Brook. NSA member since 1980. Chairman, Membership Committee, 1987-present. Research Interests: shellfish management, history of shellfish industries and hard clam population dynamics.





### **Ronald E. Westley Receives NSA's Honored Life Member Award**

Mr. Ronald E. Westley, Assistant Director of the Shellfish Program for the Washington Department of Fisheries was the recipient of the National Shellfisheries Association's Honored Life Member Award at the annual NSA meeting in New Orleans, Louisiana. Ron has spent his entire thirty seven year career with the Washington Department of Fisheries starting out as a Biologist I and rising within the department to hold the positions of Shellfish Management Chief, Director of the Point Whitney Shellfish Laboratory and Assistant Director of the Department of Fisheries Shellfish Program. Over the years, Ron has compiled an extensive list of professional activities and publications, including many contributions to the Proceedings of the NSA. Ron has been an active member of NSA since the 1960's, serving as the Chairman of the Pacific Coast Section of NSA from 1970-71, NSA Vice-President from 1971-72, President-Elect from 1972-73 and President for two years from 1973-75.

Ron has been and continues to be an important influence in the development of molluscan fisheries in the Pacific northwest. He is widely respected by other professionals in the field of molluscan shellfisheries from academia, industry and government. The NSA Executive Committee and all the members of National Shellfisheries Association offer Ron their thanks and appreciation for his dedication and service to the Association and wish him all the best as he begins his retirement from the Washington Department of Fisheries.

### **Pacific Coast Section of NSA**

Ken Cooper, current Vice-Chairman and 1988 Program Chairman of the Pacific Coast Section of NSA, reports that the agenda for their upcoming annual meeting to be held jointly with the Pacific Coast Oyster Growers' Association (PCOGA) from September 22-24, 1988 in Olympia, Washington, will include panel discussions on "Water Quality and Shellfish Protection", "Resource Use and Protection of Intertidal Habitat" and "Human Health and Shellfish." The program will also include presentations on other topics such as polyploidy, genetics, nutrition, disease, bivalve fisheries enhancement, predator control and crab-bivalve interaction. Ken, a research biologist at Coast Oyster Company in Quilcene, Washington, is slated to become the 1989-90 Chairman of the Pacific Coast Section at the close of this year's meeting succeeding current Chairman, Ralph Elston.

### **Missing NSA Members**

The following NSA members can't be located, and we will be forced to drop them from our roles if we can't find them soon. Please let Ed Rhodes know of their whereabouts if you have that information.

Amy Edwards, University of Georgia, Athens, GA 30602

Edward K. Bedinger, 148 Twinview Drive, Sequim, WA 98382

Wolf Benson, General Delivery, Petersburg, AK 99833

Cristian Crow, 1661 St. Rose Avenue, Baton Rouge, LA 70808

Graham Johnson, 6060 Willow Street, Halifax, Nova Scotia, Canada

Peter A. Maistrellis, P.O. Box 530, Ipswich, MA 01938

Brenda Morrison, 103 Westridge Cres., Charlottetown, Prince Edward Island, Canada

Tim Richardson, 15093 Marine Drive, White Rock, British Columbia, Canada

### **Contributions to the NSA Quarterly Newsletter**

The purpose of the NSA Quarterly 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, summer, fall, winter/ballot) and prints items relating to NSA business matters, the Journal of Shellfish Research, recent publications, future meetings, job opportunities, activities of other professional societies and miscellaneous items of interest. The newsletter is produced on an IBM PC using WordPerfect software. Whenever possible, your contribution (text) should be accompanied by a 5 1/4 inch diskette as either a WordPerfect or DOS text file. Camera ready text should be typeset or laser printed with 7 1/2 inch margins to insure compatible type size when reduced. All members are encouraged to submit materials by the appropriate deadline to:

**John W. Ewart, Editor  
NSA Quarterly Newsletter  
College of Marine Studies  
University of Delaware  
Lewes, DE 19958  
(302) 645-4060**

The deadline for submitting material for the next (winter) issue of the newsletter is **October 15, 1988.**

### **Meetings, Courses Etc.**

**The Pacific Coast Section of the National Shellfisheries Association** will hold their annual meeting at the Tyee Motor Inn in Olympia, Washington, from September 22-24, 1988. For further information, contact: Ralph Elston at (206) 765-3469, or Chris Langdon at (503) 867-3011.

**The Fifth Water Quality and Wetlands Management Conference** will be held from September 29-30, 1988 in New Orleans, Louisiana. For more information, contact: Bud Brodtmann, 4813 W. Napoleon Avenue, Metairie, LA 70001.

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**The Third International Colloquium on Pathology in Marine Aquaculture (PAMAQ)** will be held in Gloucester Point, Virginia October 2-6, 1988. For more information contact: Frank O. Perkins, Virginia Institute of Marine Science, College of William and Mary, Gloucester Point, VA 23062 (804) 642-7102.

**The Thirteenth Annual Meeting of the Tropical and Subtropical Fisheries Technological Conference** will be held October 16-19, 1988 at the Gulf State Park Resort in Gulf Shores, Alabama. Dr. James I. Jones, Director of the Mississippi/Alabama Sea Grant Consortium, and Alabama Sea Grant Seafood Technologist Brian Perkins will be this year's conference co-chairmen. The meeting is open to technologists, industrial groups, fishermen, processors, dealers, and anyone interested in seafood technology. The agenda will include basic and applied research, and extension activities in seafood safety, quality control, product development, packaging, storage, waste management, and marketing. For more information, call the Mississippi/Alabama Sea Grant Consortium at (813) 856-5477.

**Sea Fare Southeast 1988** will be held at the Expo Center in Orlando, Florida on November 16-17, 1988. More than 300 companies are expected to exhibit this year and over 3,500 seafood buyers will be on hand. Sea Fare and Seafood Leader magazine will conduct a seminar program during the show to deliver practical, up-to-date information to seafood buyers and sellers.

**The Latin-American Malacological Congress** is scheduled to be held sometime during the month of November, 1988 in Cali, Colombia. For more information, contact: Dr. Jaime R. Cantera K., Comité Organizador I Congreso Latinoamericano de Malacología, Universidad del Valle, Departamento de Biología, A.A. No. 25360, Cali, Colombia, S.A..

**Aquaculture'89** will be held February 12-16, 1989 at the Westin Bonaventure Hotel in Los Angeles, California. The **National Shellfisheries Association** is a sponsor of this major event and will hold its annual meeting in conjunction with the **Catfish Farmers of America**, Fish Culture and Bioengineering sections of the **American Fisheries Society**, the **Shellfish Institute of North America**, the **U.S. Trout Farmers Association** and the **World Aquaculture Society**. The meeting will serve to focus on the importance of aquaculture in the United States.

**The Seventh Annual Pectinid Workshop** is scheduled to be held in Maine from April 20-25, 1989. Contributed papers and posters will be solicited from workshop participants. For more information, contact: Sandra Shumway, Department of Marine Resources, West Boothbay, ME 04575 (207) 633-5572.

**The Tenth International Malacological Congress** will be held from August 27-September 2, 1989 in Tubingen, Federal Republic of Germany. For more information, contact: Dr. Claus Meier-Brook, President, Unitas Malacologica, Tropenmed. Inst. d. Univ., Wilhelmstr. 31, D-47000 Tubingen, Federal Republic of Germany.

**The First International Conference on Shellfish Depuration** is being scheduled for Orlando, Florida sometime during the month of October, 1989. This conference will combine all the latest existing international expertise in an informative program of lectures and demonstrations. Equipment displays and tours are planned. A proceedings volume will be published to document and disseminate information on new and advanced technology, regulatory policy, and legal aspects. For more information, contact: Dr. W. Steven Otwell or Dr. Gary E. Rhoderick, Conference Chairmen, Food Science and Human Nutrition Department, University of Florida, Gainesville, FL 32611.

## International Scallop Workshop To Be Held In Maine

The 7th International Pectinid Workshop is scheduled to be held in Portland, Maine, from April 20-25, 1989.

Topics to be covered include:

### 1) Fisheries and Cultivation

Settlement, recruitment, yield, culture methods seeding trials, larval rearing, spat collection, stock assessment.

### 2) Biochemistry and Physiology

Seasonal changes in energy storage, reproductive cycles, larval energy reserves, reproductive strategies, food and feeding, metabolic studies.

### 3) Genetics

Induction of triploidy, natural variation in population genetics, selective breeding, the role of genetics in aquaculture.

### 4) General Biology and Ecology

Migration, predation by other species, spatial variation in growth, reproductive potential and condition, pollution, ecological interactions.

### 5) Workshops

In keeping with the workshop nature of the conference, 3 discussion sessions are planned. These sessions are designed to generate discussion on a number of topics relevant to scallop research and provide some recommendations to the research community with regard to future research efforts in scallop biology, i.e. Where are we now and where are we going? A raconteur will be invited to chair each workshop session and to prepare a summary of the proceedings of that workshop for distribution to the research community.

### Topics:

#### A) Fisheries Management

#### B) Cultivation

#### C) Biochemistry, physiology, general biology

For more information, contact: Dr. Sandra E. Shumway, Department of Marine Resources, McKown Point Road, West Boothbay Harbor, Maine 04575 (207) 633-5572.



## Employment Opportunities

**Assistant Professor, Phytoplankton Biology** - The Department of Marine Sciences, University of Connecticut announces a 9 month, tenure-track position in phytoplankton biology, effective September 1, 1989. Applicants should have a Ph.D. in oceanography/marine sciences with a strong emphasis on coastal, process-oriented research. The successful applicant is expected to establish a strong research program, advise and support graduate students (M.S. and Ph.D.) and teach at the graduate and undergraduate level. Salary is commensurate with qualifications and experience. Applicants should send a resume, a statement of research and teaching interests and names of three references to: R.B. Whitlatch, Head, Department of Marine Sciences, University of Connecticut, Groton, CT 06340. Closing date for applications: November 1, 1988.

**Growout Manager** - Caicos Conch Farm has an immediate opportunity for a growout manager. Applicant must have a B.S. in a mariculture related field and 3 years commercial scale field experience with post metamorphosis growout of shellfish. Manager responsible for developing techniques to husband one million *Strombus gigas* Queen Conch from 25 mm to harvest by the end of 1988. Practical engineering, management and diving experience a must. Minimum one year contract. Salary negotiable; interview necessary. Work in clear Caribbean water on Turks & Caicos Islands, BWI. Send resume & references to: Chuck Hesse, Caicos Conch Farm, TWI, Ltd., 7600 SW 87 Avenue, Miami, FL 33173 (809) 946-4330.

**Position Sought** - Biologist (B.S., special honors) with three and one half years of intensive "hands on" experience with semi-continuous microalgal culture, *Brachionus*, *Artemia* and marine tropical fish culture, hatchery management, system design and maintenance. Searching for a challenging position in shellfisheries aquaculture or related support industry. Available immediately. Will re-locate. Please contact, Michael Knowles, 11 Ann Street, Ingersoll, Ontario, N5C 2E9 Canada (519) 485-3496 or 485-0150 (message).

**Graduate Research Assistant** - wanted (starting January 1, 1989) for research leading to M.S. in Wildlife Ecology with emphasis on Fisheries Management. Research concerns the nutritional requirements of freshwater prawns, specifically dietary sterol requirements and metabolism. Requires B.S. in fisheries, biological sciences or related field, 3.00 QPA and a combined GRE score of 1000 for regular admission. Stipend is \$7,800.00 per year (tuition waived). Write to the Office of Admissions, Mississippi State University, Mississippi State, MS 39762 for an application form for admission to graduate school. Send application, transcripts and three letters of recommendation to: Ms. Cindy Wasson, Department of Wildlife and Fisheries, P.O. Drawer LW, Mississippi State, MS 39762. Refer inquiries to Dr. Louis R. D'Abramo (601)325-3507.

### Instructions For Job Placement Section

Employment opportunities in shellfish research, management and industry, including graduate student assistantships and personal summaries for individuals seeking employment in these fields will be listed in the newsletter. Employment openings should be described in no more than 300 words and personal summaries should not exceed 150 words. We cannot guarantee that employment announcements will appear before posted closing dates.

Please forward descriptions of positions available or sought to:

John W. Ewart  
NSA Quarterly Newsletter  
College of Marine Studies  
University of Delaware  
Lewes, DE 19958  
(302) 645-4060



## Other Professional Organizations

The American Malacological Union is an international society of individuals and organizations with interest in the study of mollusks. Professional malacologists, students whose research involves mollusks and people devoted to collecting, photographing and otherwise learning about mollusks belong to AMU. Annual meetings feature international scope symposia, contributed paper sessions, workshops on practical aspects of malacology such as techniques of collecting, preserving, identifying, illustrating and field trips that take advantage of the malacological characteristics of the meeting site. Summer months are chosen for annual meetings. Social events help bring professionals and collectors together informally to share their knowledge. Publications include the *American Malacological Bulletin*, a newsletter and special issues of the *Bulletin*, containing peer-reviewed malacological articles in addition to reviewed articles and abstracts from papers presented at annual meetings. For more information about The American Malacological Union, contact: Constance E. Boone, Recording Secretary, American Malacological Union, Inc., 3706 Rice Boulevard, Houston, TX 77005.

### SINA Studying Potential Of Promotional Council

The Shellfish Institute of North America (SINA) is exploring opportunities for improving consumer confidence and increasing demand for shellfish. SINA is looking into the feasibility of a national promotional council for oysters, clams and mussels.

The National Fish and Seafood Promotional Act of 1986 gives seafood industry product groups the authority to assess their members for the purpose of funding product promotional councils. A council must be approved by a majority of the industry in a nationwide referendum.

Industry officials are concerned about low consumer confidence in shellfish products. SINA planned to start the study this summer by distributing a questionnaire among all members of the U.S. shellfish industry.

Source: Water Farming Journal, 6/88.



### Proceedings of the International Symposium on Seafood Quality Determination

D.E. Kramer and J. Liston (editors)

Developments in Food Science, 15, 1987, 690 pages.

Coordinated by the University of Alaska Sea Grant College Program, this 1986 symposium brought researchers and industry representatives together to form an international forum to discuss what constitutes quality in seafood, how quality can be measured, and what standards are available for fishery products. The accent of the meeting was on standards that can be used internationally and the measurements available to make the standards usable. The nutritional aspects of seafood products as well as public health concerns are included. The papers in this proceedings volume are organized under the same nine topic areas used to structure sessions at the meeting. It is hoped that the volume will stimulate further study and bring researchers closer to quality measurements that will be accepted and used in the international trade of seafood products.

Contents: Instrumental Measurements of Seafood Quality. Sensory Evaluation of Seafood Quality. Chemical and Biochemical Indices of Seafoods. Microbiological Evaluation of Seafood Quality. Public Health Hazards Associated with Seafoods. Shelf Life Estimation for Seafood. Nutritional Aspects of Seafood Quality. Consumer Perception of Seafood Quality. Seafood Quality Standards.

For more information, contact: Elsevier Science Publishers, P.O. Box 211, 1000 AE Amsterdam, The Netherlands or P.O. Box 1663, Grand Central Station, New York, NY 10163.

**The Artemia Newsletter**, published quarterly by the Artemia Reference Center in Ghent, Belgium, contains current information on all aspects of the culture and use of Artemia throughout the world. For more information, contact: Dr. Patrick Sorgeloos, Artemia Reference Center, State University of Ghent, Rozier 44, B-9000, Ghent, Belgium.

### Fisheries Research

Editor-in-Chief: A.D. McIntyre, Dept. of Agriculture and Fisheries for Scotland, Aberdeen, UK

This journal provides an international forum for the publication of papers in the areas of fisheries science, fishing technology and fisheries management. The approach of the journal is multidisciplinary: the scope covers salt, brackish and freshwater systems, and fishing as an economic activity but not as a recreational one. Both practical and theoretical papers are eligible for publication. Review articles are also published. The journal will interest fisheries biologists, gear technologists, naval architects, fisheries economists, administrators, policy-makers and legislators.

For more information, contact: Elsevier Science Publishers, P.O. Box 211, 1000 AE Amsterdam, The Netherlands or P.O. Box 1663, Grand Central Station, New York, NY 10163.

The third edition of the **Alaska Oyster Grower's Manual** is available for distribution to a cost of \$10 from the Alaska Department of Commerce and Economic Development. Earlier editions have been considered a "bible" for prospective oyster farmers, and the latest offering appears to have improved the quality of information. The manual includes chapters on biology, culturing methods, fouling, measuring environmental conditions, site selection criteria, genetics, farming potential in the Northern Gulf of Alaska, information sources, permitting, PSP and land use permits. To receive a copy of the Alaska Oyster Grower's Manual, send \$10 to: Bill Paulick, Division of Business Development, Department of Commerce and Economic Development, P.O. Box D, Juneau, AK 99811 (907) 465-2162.



### Shellfish Low In Cholesterol

There is good news for people who have been excluding shellfish from their diets to keep cholesterol levels down. According to recent research studies you can have clams, oysters, scallops, crab, lobster, and some shrimp without worrying much about their cholesterol content.

The studies revealed that many kinds of shellfish contain significantly lower levels of cholesterol than it was once believed. According to new data from the National Marine Fisheries Service, clams, oysters and scallops have between 35 and 50 milligrams of cholesterol per 3-1/2 ounce serving. Those levels compare favorably with cholesterol levels in most fin fish. Cod or flounder contains about 50 milligrams of cholesterol per 3-1/2 ounce serving. Tuna canned in oil contain about 65 milligrams per serving. Shrimp contains from 90 to 180 milligrams of cholesterol per 3-1/2 ounce serving.

Source: Commercial Fisheries Newsline, 7(2).

### Electronic Correspondence With The Artemia Reference Center

It is possible to communicate with the Artemia Reference Center by means of electronic mail. The personal computer at the ARC-secretariat has been connected to the European Academic Research Network (EARN) which is part of the worldwide BITNET computer network.

Our BITNET coordinates are as follows:

Node Nr 0438  
Node Name BGERUG51  
Connection via BEARN  
Username ARTEMIA

In order to fully explore the potential of this electronic mailing system (e.g. for correspondence, literature, references, abstracts, etc...) we ask all computer network users to send us (by electronic or regular mail) their coordinates for computer contact through the BITNET network.

Source: Artemia Newsletter #6



# 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 more than 900 from all parts of the USA, Canada and 20 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 1988 dues are **ONLY** \$18(US) per year (\$15 for students) and that includes the *Journal* and the Newsletter! Regular membership dues in 1989 will be \$30 per year; student membership will be \$20.

---

### 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 payable to the National Shellfisheries Association and send to Edwin Rhodes, National Marine Fisheries Service, 212 Rogers Avenue, Milford, CT 06460 USA.



NATIONAL SHELLFISHERIES ASSOCIATION  
OFFICIAL BALLOT

Check or write in only one choice per office.

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Edwin Rhodes  
Victor S. Kennedy

Write in: \_\_\_\_\_

VICE PRESIDENT:

Carter Newell  
Ronald J. Dugas

Write in: \_\_\_\_\_

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(206) 543-4290

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Department of Marine Resources  
West Boothbay, ME 04575  
(207) 633-5572

Mr. John W. Ewart, **Editor, National Shellfisheries Association Quarterly Newsletter**  
College of Marine Studies  
University of Delaware  
Lewes, DE 19958  
(302) 645-4060