

National Shellfisheries Association

QUARTERLY NEWSLETTER



Fall/Ballot 1989

Lewes, Delaware

Final Call for Papers, '90-91 Ballot and Williamsburg Program Update

Carter Newell, Vice-President and Program Chairman for the NSA's 82nd annual meeting in Williamsburg, Virginia has announced a final call for papers and reminds everyone that the deadline for submitting abstracts is **December 5, 1989**. Carter also provided an update on the special sessions that are being organized for the Williamsburg meeting in the following subject areas:

Anthropogenic effects on growth and survival of molluscan shellfish

Biology and management of Artica islandica
Production modelling of shellfish
Bivalve settlement and recruitment
Shell disease in crustaceans
Vibrio vulnificus bacteria in shellfish
Toxic algae and shellfish
Reproductive biology of molluscs
Feeding by bivalve molluscs
Introductions and transfers of shellfish

If you have considered giving a paper in the above subject areas and have not been contacted by chairmen of those sessions, please note your interest when you send the abstract and he will make an effort to include you in that session. SINA is coordinating a very interesting program, with sessions including reports by FDA, the ISSC, NMFS research, Sea Grant, and the National Blue Crab Industry Association (NBCIA). Final details on hotel arrangements, meeting registration, etc. will be included in the next issue of the NSA Newsletter in early January, 1990.

In Memoriam

With deep regret we report the passing of longtime National Shellfisheries Association member Mr. Ronald E. Westley on July 19, 1989 from pancreatic cancer.

Ron was Assistant Director of the Shellfish Program for the Washington Department of Fisheries until his retirement last year. He 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 also hold the positions of Shellfish Management Chief and Director of the

1990-91 NSA Officers Nominated

The Nominations Committee, chaired by Roger Mann, has submitted the names of the following NSA members who have agreed to stand for election as 1990-91 NSA officers:

President-Elect	Sandra Shumway Carter Newell
Vice-President	Arnold Eversole
Secretary/Treasurer	Thomas M. Soniat
1990-1992 Member-at-Large	Bruce J. Barber Peter Lawton

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 Victor Kennedy as addressed on the back of the ballot.

Point Whitney Shellfish Laboratory. Ron was widely recognized for his role in advancing the development of molluscan fisheries in the Pacific northwest. During his long career he compiled an extensive list of professional activities and publications, including many contributions to the Proceedings of the NSA. Ron was 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. He recently received the National Shellfisheries Association's Honored Life Member Award at the 80th annual NSA meeting in New Orleans, Louisiana.

1990-91 National Shellfisheries Association Executive Committee (EXCOM) Nominees

Information About The Candidates

President-Elect:

Sandra Shumway, Research Scientist, Department of Marine Resources, West Boothbay Harbor, Maine 04575. Also hold adjunct appointments at Bigelow Laboratory for Ocean Sciences and the University of Maine Graduate School; B.S. Southampton College, Long Island University (1974) (Summa Cum Laude); Marshall Scholar (1974-1977); Ph.D. (1976) University College of North Wales; Postdoctoral fellow: Marine Science Laboratories, Menai Bridge, North Wales, University of Otago, Dunedin, New Zealand and Dept. of Ecology and Evolution, State University of New York Stony Brook; Researcher, Skidaway Institute of Oceanography and Universidad de Sao Paulo, Brasil; published over 70 peer-reviewed papers; currently editing 2 books on scallop biology; NSA member since 1979; Editor, *Journal of Shellfish Research*; Research interests: physiological ecology, bioenergetics, effects of toxic algal blooms on shellfish, phytoplankton-bivalve interactions, shellfish biology.

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.

Vice President:

Arnold G. Eversole, Professor, Department of Aquaculture, Fisheries and Wildlife, Clemson University, Clemson, SC 29634-0362. B.S. (1963) Penn State University; M.S. (1969) Syracuse University; (1970-81) Marine Biological Laboratory, Woods Hole; Ph.D. (1974) Syracuse University. NSA member since 1976. Thurlow C. Nelson Award Committee (1986); Member-at-Large (1988-Present). Research interests: shellfish aquaculture; shellfish reproduction and early life history; and bioenergetics.

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.

1990-92 Member-at-Large:

Bruce J. Barber, Marine Scientist, Virginia Institute of Marine Science, College of William and Mary, Gloucester Point, Virginia, 1988-present. B.S. (1973) Ohio State University; Ph.D. (1984) University of South Florida; Postdoctoral Researcher, Rutgers University, 1985-86; Research Assistant Professor, Rutgers University, 1986-88. NSA member since 1984. Thurlow C. Nelson Award, 1984; Membership Committee, 1987-88; Local Arrangements Committee for 1990 Meeting. Research Interests: Reproductive energetics, physiopathology, fisheries science and aquaculture.

Peter Lawton, Crustacean Ecologist, Invertebrate Fisheries Section, Aquaculture and Invertebrate Fisheries Division, Department of Fisheries and Oceans, St. Andrews Biological Station, New Brunswick. B.S. (1978) University of Bradford, England; Ph.D. (1983) University of Wales, Bangor, Wales. Postdoctoral Fellow, Department of Fisheries and Oceans, St. Andrews, New Brunswick (1983-85). Postdoctoral Research Associate (Living Marine Resources Institute, 1985-86), Sea Grant Postdoctoral Fellow (1986-87), and Assistant Research Professor (1987-88) at the Marine Sciences Research Center, SUNY at Stony Brook, New York. NSA member since 1983. Research interests: invertebrate fisheries biology; recruitment; bivalve mariculture; predator - prey dynamics; behavioral ecology.

FINAL CALL FOR PAPERS

The 1990 Joint Annual Meeting of the NATIONAL SHELLFISHERIES ASSOCIATION and the SHELLFISH INSTITUTE OF NORTH AMERICA, April 1 - 5, 1990, Williamsburg, Virginia

INSTRUCTIONS FOR ABSTRACT FORMS

ABSTRACTS FOR PAPERS MUST REACH THE PROGRAM CHAIRMAN BY DECEMBER 5, 1989

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 he or she desires; however no more than two abstracts from any author or coauthor will be accepted for presentation. Submission of the same subject for a paper for oral or poster presentation is permitted, however only one of the two will be accepted. For poster sessions, tackboards will be provided but no electrical outlets, projection equipment, or tables will be available.

Abstracts will be selected for inclusion in the program on the basis of significance in fields 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 \$12.50 must be submitted with each abstract. This payment will be returned only if the abstract is not accepted. An additional \$10 charge will be assessed if an accepted abstract has to be retyped because of errors, etc.

PREPARING THE ABSTRACT

All accepted abstracts will be retyped and included in the Journal of Shellfish Research. Therefore, it is not necessary as in previous years to have abstracts in camera ready form. However, it is important that the abstracts comply with the instructions below.

Type the title (all capitals) and name(s) of the author(s) (all capitals for last names), indenting lines and 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 not be indented, although paragraphs other than the first should begin three (3) spaces in from the margin.

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-SPACED WITH A STANDARD ELITE TYPEFACE. When using abbreviations, spell out

in full at first use, followed by the abbreviation in parentheses. Any symbols, such as Greek letters, not in your typing element may be drawn in by hand in black ink. Please proofread 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 first author is a student or recent graduate and is therefore eligible for the Thurlow C. Nelson 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 a paper or poster, please fill out the form attached to the abstract.

Prepare one original (form) and send it with two (2) copies and your personal or institutional check for \$12.50 US (checks must be drawn on a US bank and made out to NSA) to the Program Chairman at the address below. Additional abstract forms may be obtained from the Program Chairman. Abstracts must reach the program chairman NO LATER THAN 5 P.M., DECEMBER 5, 1989. If you desire an acknowledgement of the receipt of your abstract, please enclose a self-addressed, stamped envelope.

Send abstracts to: Carter Newell, Great Eastern Mussel Farms, Inc., P.O. Box 141, Tenants Harbor, Maine 04860.

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 and winter) 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 4.2 (5.0 accepted) and Ventura Publisher 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
FAX: 645-4028

The deadline for submitting material for the next (pre-meeting) issue of the newsletter is December 10, 1989.

NATIONAL SHELLFISHERIES ASSOCIATION STUDENT ENDOWMENT FUND

OBJECTIVE: to maintain and expand student participation in the Association

APPROACH: Establish an endowment fund by soliciting charitable contributions from members and non-members. Appoint or elect a committee to administer the endowment fund and recommend disbursements. Disburse funds as necessary and when available to meet the above objectives.

Student Endowment funds can be used to defray costs incurred by students presenting papers at the Association's Annual Meeting. Examples of costs include travel, lodging, drafting and slide preparation, etc.

The NSA Executive Committee will appoint an endowment subcommittee to examine all student abstracts and applications submitted. The subcommittee will consult with the Secretary-Treasurer on availability of funds and make

recommendations to the Executive Committee for the awards. The Secretary-Treasurer will disburse award checks directly to successful applicants as soon as possible prior to the meeting. If a recipient cannot use the funds as intended, the check or funds must be returned immediately. All receipts must be kept to document the use of the funds for the specified uses as accepted by the endowment subcommittee.

To be considered for an SEF award, fill out a copy of the application blank below or provide the information requested on a separate sheet of paper. Mail your application plus a copy of your abstract to NSA Program Chair Carter Newell, Great Eastern Mussel Farms, Inc., P.O. Box 141, Tenants Harbor, Maine 04860.

NATIONAL SHELLFISHERIES ASSOCIATION STUDENT ENDOWMENT FUND

Student Name:
Address:
Institution:
Telephone number:

Costs for which support is sought (travel, lodging, drafting and slide preparation, etc.):

Title of enclosed abstract:

Relevant academic accomplishments (publications, thesis title, etc.):

Student signature:

Advisor's signature:

Meetings, Courses, Etc.

Shrimp World IV - will be held from November 5-9, 1989 at the Omni Royal Orleans Hotel, New Orleans, LA. Contact: Shrimp World IV Travel Planners Inc., Suite 150, GPM Bldg., San Antonio, TX 78216-5674. (512) 341-8131.

An International Conference on Shellfish Depuration - will be held from November 5-8, 1989 at the Grosvenor (Walt Disney Village) Resort, Orlando, FL USA. Contact: Dr. Steven Otwell, Food Science Bldg., University of Florida, Gainesville, FL 32611.

The First International Symposium on Abalone Biology, Fisheries and Culture - will be held from November 21-25, 1989 in La Paz, Mexico. Contact: S A Shepherd, Department of Fisheries, 135 Pirie Street, Adelaide, South Australia 5000.

The University of Alaska Sea Grant College Program will host an **International Symposium on King Crab** - to be held in Anchorage, Alaska, November 28-30, 1989. Contact: Brenda Melteff, Symposium Coordinator, University of Alaska Sea Grant College Program, 138 Irving II, Fairbanks, AK 99775-5040.

Fish Farming Expo III - will be held at the New Orleans Marriott and The Rivergate Exhibition Center, December 8 - 12, 1989, New Orleans, Louisiana. Contact: Carroll Trosclair, Aquaculture Productions, Inc., P.O. Box 5038, Brandon, MS 39047-5038 (504) 482-9500.

The National Aquaculture Association's first annual meeting will be held on December 11, 1989 in conjunction with **Fish Farming Expo III** in New Orleans, Louisiana. Contact: Joe McCraren, Harper's Ferry, WV (304) 876-6666.

Sea Fare International 1990 will be held on February 7-9, 1990 at the Long Beach Convention Center, Long Beach, California. Contact: Sea Fare Expositions, 454 N. 34th St. Seattle, WA 98103 (206) 547-6030.

The 10th Annual Shellfish Biology Seminar - will be held on February 27, 1990 at the Howard Johnson's Motor Lodge, 1052 Boston Post Road, Milford, Connecticut. For more information, contact: Dr. Walter Blogoslawski, NOAA, NMFS, NEFC, Milford Laboratory, 212 Rogers Avenue, Milford, Connecticut 06460.

The Eighth Symposium of Astacology - is scheduled for mid-April 1990 in Baton Rouge, Louisiana. The Symposium will be hosted by the Louisiana State University Agricultural Center. For additional information, contact: L.W. de la Bretonne, Louisiana Cooperative Extension Service, Knapp Hall, Louisiana State University, Baton Rouge, LA 70803 (504) 388-4141, or Robert Romaine, School of Forestry, Wildlife and Fisheries, Louisiana State University, Baton Rouge, LA 70803 (504) 388-4208.

The 56th annual meeting of the American Malacological Union (AMU) - will be held from 3-7 June 1990 at the Marine Biological Laboratory (MBL), Woods Hole, Mas-

sachusetts. Contact: Dr. Alan Kuzirian, MBL, Woods Hole, MA 02543 (508) 548-3705, FAX (508) 540-6902.

An International Workshop on Lobster Ecology and Fisheries - will be held June 12-16, 1990 at the International Conference Center, Havana, Cuba. Contact: Mrs. Georgine Luis, Conference Organizer, International Conference Center, Apartado 16046, Havana, Cuba. Telex: 511609 Fax: 22-8382.

Shellfish Life Histories and Shellfishery Models - Description and modeling of life cycles for survey and management of Invertebrate Stocks will be held on the Campus of the "Universite de Moncton" in Moncton, New Brunswick, Canada, June 25-29, 1990. Contact: Dr. G. Y. Conan, Department of Fisheries and Oceans, Gulf Fisheries Centre, P.O. Box 5030, 343 Archibald Street, Moncton, NB, CANADA E1C9B6, FAX Number: (506) 857-7732, Telex Number: 014-2607, Phone Number: (506) 857-6208.

An International Crustacean Conference - is scheduled for Brisbane, Australia, 2-7 July 1990. Tentative subject areas are: aquaculture and fisheries; biogeography, paleontology and evolution; economics; ecophysiology and behavior; fauna of special habitats; feeding and physiology; parasites and commensals; recruitment; reproduction, embryology, and larval development; taxonomy, systematic and phylogeny; and ultrastructure. Contact: Crustacean Conference Secretariat, UniQuest Limited; University of Queensland; St. Lucia, Queensland, 4067 Australia.

Publications of Interest

Scallops

Biology, Ecology and Aquaculture

Edited by S.E. Shumway, Department of Marine Resources, and Bigelow Laboratory for Ocean Sciences, McKown Point, West Boothbay Harbor, ME, U.S.A.

Scallops are among the better known shellfishes and are widely distributed throughout the world. They are of worldwide economic importance and support both commercial fisheries and mariculture efforts. The rapid growth, early maturity and high economic value of many scallop species offer special inducement to mariculturists. Scallops are already cultured successfully in a number of geographic locations and emphasis is increasing globally. Further, scallops play an important role in the structure and function of the communities of which they are a characteristic and important component.

Not since the publication of "Marine Mussels" (Bayne, 1975: IBP Handbook) has the current knowledge of a particular group of molluscs received a comprehensive coverage. His effort was a welcome addition to the scientific literature and provided an opportunity to synthesize a wealth

continued on next page

of information. For successful culture and management, a good knowledge of the biology of a species is necessary. While scallops have been the subject of a considerable amount of research, to date no integrated account exists of their biology.

Although our subject matter is specifically concerned with the biology, ecology and mariculture of scallop species, the book should be of interest and relevance to a number of readers. The proposed account is a general review of the biology, ecology and mariculture potential of scallops and will include suggestions for future research efforts. The volume should prove useful for advanced undergraduate/graduate students, mariculturists and research workers.

Contents: Introduction. Classification (T. Waller). Larval Biology and Ecology (S. Cragg, D.J. Crisp). Anatomy and Function (P. Beninger, M. LePennec). Muscle Physiology (B. Barber, N. Blake). Neurobiology (I. Wilkens). Parasites and Diseases (R. Getchell). Pollution (E.J. Gould, B. Fowler). Ecology (A. Brand). Genetics (A. Beaumont, L. Zouros). Population Dynamics (J.M. Orensanz). Commercial Fisheries and Aquaculture. United Kingdom (A. Ansell). Spain/Portugal (G. Roman). France (J.-C. Dao). Scandinavia/Iceland/Greenland (M. Dadswell). Italy (A. Renzoni). Yugoslavia (D. Margus). Greece (M. Kalathakis, J. Lykakis). Japan (H. Ito). China (Luo Yousheng). Pacific Islands (A.G.C. Del Norte). Australia (D. Gwyther). New Zealand (M. Bull). North America (K.S. Naidu, E. Rhodes, N. Blake, N. Bourne). Argentina (M. Pascual, J.M. Orensanz). Venezuela (P.E. Pencheszadeh). Chile (R.N. Piquimil). Mexico (F. Peco). Russia (V.Z. Kalachnikov).

Available in the USA & Canada from: Elsevier Science Publishing Co. Inc., P.O. Box 882, Madison Square Station, New York, NY 10159.

Triploid Oysters

Now available from the University of Washington Press are a laboratory manual and an instructional videotape that accurately convey the technique for creating triploid Pacific oysters with the chemical cytochalasin B.

Hatchery Manual for Producing Triploid Oysters is written by Standish K. Allen, Jr., Sandra L. Downing, and Kenneth K. Chew, and published by the Washington Sea Grant Program. Bound in an easy-to-use spiral format, it provides a step-by-step approach to triploid production from conditioning the broodstock through methods for verification of the technique's success and costs \$8.00.

Triploid Oyster Production is a video co-produced by the School of Fisheries, Washington Sea Grant, and Instructional Media Services at the University of Washington. Shot in the laboratory and on the shores of Puget Sound, it visually follows the steps in the manual, including an explanation of the significance of the technique and a simple depiction of how cytochalasin B acts on a subcellular level. It is available (with manual) in 1/2" (VHS) or 3/4" (Umatic) format for \$250.00. For credit card orders by phone: 1-800-441-4115.

University of Washington Press, P.O. Box 50096, Seattle, WA 98145-5096.

Aquaculture Digest Publishes Three Reports on Shellfish Farming

For over a decade, from September 1976 to February 1987, the Aquaculture Digest published a monthly report on fish and shellfish farming in the United States. Then, in March 1987, it dropped its coverage of freshwater species (crawfish, trout and catfish) and concentrated on marine species (mollusks, salmon and shrimp). More recently, in May 1989, the monthly report was split into two bimonthly reports, one covering world shrimp farming, the other covering mollusk farming in the United States.

WORLD SHRIMP FARMING

Published since 1976, World Shrimp Farming is a long, bi-monthly (6 times a year) report on shrimp and prawn farming. It focuses on developments in Latin America, the United States and Southeast Asia. Each issue contains four to eight full-length articles and forty to fifty news items. Names, addresses and communication numbers of government, research and business contacts accompany every item. Each issue is loaded with practical "how to" information, concentrating on products, service, hatcheries, growout, scientific research and business developments. Delivered by first class mail in the United States, Canada and Mexico and by airmail overseas, World Shrimp Farming sells for USA\$60 a year.

ANNUAL REPORT ON WORLD SHRIMP FARMING

The Aquaculture Digest's annual report on world shrimp farming summarizes the status of shrimp farming on a country-by-country basis. Published in December, at the end of each production year, it features statistics, maps, recommended publications and highlights of important events. Delivered by first class mail in the United States, Canada and Mexico and by airmail overseas, it sells for \$25.

MOLLUSK FARMING USA

Published since 1976, Mollusk Farming USA is along, bi-monthly (6 times a year) report on clam, abalone, scallop, mussel and oyster farming in the United States. Each issue contains four to eight full-length articles and forty to fifty news items. Names, address and communication numbers of government, research and business contacts accompany every item. Each issue is loaded with practical "how to" information, concentrating on products, services, hatcheries, growout, scientific research and business developments. Delivered by first class mail in the United States, Canada and Mexico and by airmail overseas, Mollusk Farming USA sells for USA \$60 a full year. Please make all payments in USA funds, drawn on a USA bank. For more information, contact:

The Aquaculture Digest
9434 Kearny Mesa Road, San Diego, CA 92126 USA
Phone 619-171-0133 * Fax 619-566-1230

International Scallop Workshop Held In Maine

The 7th International Pectinid Workshop, sponsored in part by the National Shellfisheries Association, was held in Portland, Maine, from April 20-25, 1989 and was attended by 100 scientists representing 19 countries. The program included 68 oral and 28 poster presentations covering a broad range of topics on scallops including fisheries and cultivation, biochemistry and physiology, genetics and general biology and ecology.

The International Pectinid Workshop is a meeting that has traditionally been held every other year for the past 12 years. It began as a rather informal workshop with about 20 European scientists in attendance and has since developed into a semi-annual symposium where scientists, aquaculturists and fishermen can meet to discuss all aspects of scallop biology. Sandy Shumway, organizer and program chair of the 7th meeting of this group said that the Portland workshop represents the first time the meetings have been held outside of Europe. The decision to convene the 7th workshop in Portland, Maine was based, in part, on the active role that the U.S. is taking in aquaculture efforts and on the importance of scallops to the fishing industry. A Proceedings of the 7th International Workshop, dedicated to Jim Mason of the Aberdeen Marine Laboratory in Scotland, will be edited by Sandy and published as a special issue of the Journal of Shellfish Research. The next or 8th International Pectinid Workshop will be held in France in 1991. For more information about this year's workshop, Proceedings or the 1991 meeting, contact: Dr. Sandra E. Shumway, Department of Marine Resources, McKown Point Road, West Boothbay Harbor, Maine 04575 (207) 633-5572.



10TH Annual Shellfish Biology Seminar Call for Papers Announced

The 10th Annual Shellfish Biology Seminar will be held on February 27, 1990 at the Howard Johnson's Motor Lodge, 1052 Boston Post Road, Milford, Connecticut. Session topics will include:

1. Shellfish recruitment in Long Island Sound (LIS).
2. Use of marinas for aquaculture.
3. Problems of aquaculturists using public waterways.
4. Environmental quality of LIS as related to shellfish.
5. An expansion of any shellfish topic discussed in the nine previous meetings.

Please send a 250 word abstract by December 30, 1989 to:

Dr. Walter Blogoslawski
NOAA, NMFS, NEFC, Milford Laboratory
212 Rogers Avenue
Milford, Connecticut 06460

All abstracts will be pre-printed in a booklet distributed at the meeting. Any questions phone: 203-783-4235.

HOW TO JOIN

— Fill out and mail a copy of the application blank below. The 1989 dues are **ONLY \$30(US)** per year (\$20 for students) and that includes the *Journal* and the *Newsletter*!

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

Name: _____ For the calendar year: _____ Date: _____

Mailing address: _____

Institution affiliation, if any: _____

Shellfishery interests: _____

Regular or student membership: _____

Student members only — advisor's signature **REQUIRED**: _____

Make cheques (**MUST** be drawn on a US bank) or international postal money orders payable to the National Shellfisheries Association and send to Tom Soniat, Dept. of Biological Sciences, Univ. of New Orleans—Lakefront, New Orleans, LA 70148, USA.

USE OF DISPERSION MODELS FOR PREDICTION OF BIVALVE LARVAL RECRUITMENT

SIDDALL,* Scott E., MALOUF, Robert E., Marine Sciences Research Center,
State University of New York, Stony Brook, NY 11794; VIEIRA, Mario E.,
Chesapeake Bay Institute, Johns Hopkins University, Baltimore, MD 21218.

In support of efforts to manage Long Island's economically important fisheries for the hard clam (Mercenaria mercenaria) and the bay scallop (Argopecten irradians), computer models calibrated against hydrographic data have been developed to predict distribution of larvae in the Great South Bay and the Peconic Bays Estuary. The goal of the research in Great South Bay was to evaluate the potential contributions to recruitment from populations of hard clams in uncertified waters and in man-made "spawner sanctuaries." This quantitative evaluation required the simulation of advective and diffusive dispersal of particles whose number was reduced over time to simulate larval survival. Results of the model forecast locations of maximum recruitment from chosen sanctuary sites. Town shellfish management programs have created spawner sanctuaries at sites predicted to result in maximum recruitment in areas favorable for growth and survival.

The goal of the modeling for the Peconic Bays Estuary was to predict sites for spawner sanctuaries of bay scallops which will be created to help rebuild scallop populations following an apparent failure of natural recruitment caused by an extraordinary phytoplankton bloom in 1985. This more qualitative evaluation of recruitment required forecasting the dispersal of larvae from proposed spawner sanctuaries and hindcasting the locations of spawning stocks whose larvae recruit to areas favorable for growth and survival. The utility of this modeling approach in shellfish management is discussed in view of the physical and biological assumptions inherent in the models.

Abbreviated title (seven words or less): Dispersion models of bivalve recruitment

First author's mailing address if different from above:

Same

First author's telephone number:

(516) 632-8668

Preferred method of presentation:

☒ Oral

☐ Poster

☐ Either

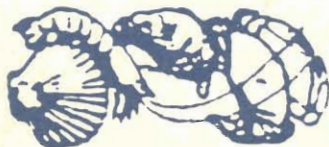
First author is a student or recent graduate?
(eligible for Nelson Award)

☒ No

☐ Yes

Abbreviated title (seven words or less):		
First author's mailing address if different from above:		
First author's telephone number:		
Preferred method of presentation:	<input type="checkbox"/> Oral	<input type="checkbox"/> Poster <input type="checkbox"/> Either
First author is a student or recent graduate? (eligible for Nelson Award)	<input type="checkbox"/> No	<input type="checkbox"/> Yes

John W. Ewart
NSA Quarterly Newsletter
College of Marine Studies
University of Delaware
Lewes, DE 19958



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(301) 228-8200

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Chair, Program Committee**
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(203) 372-6317

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(203) 254-4000 ext. 2739

Dr. Arnold Eversole,
1988-91 Member-at-Large
Department of Aquaculture, Fisheries
and Wildlife
Clemson University
Clemson, SC 29631
(803) 656-3117

Dr. Monica Bricej, **1989-92 Member-at-
Large & Chair, Resolutions Committee**
Marine Science Research Center
State University of New York
Stony Brook, NY 11794
(516) 632-8663

Dr. George Abbe, **Chair, Audit-Budget-
Finance Committee**
Benedict Marine Laboratory
Benedict, MD 20612
(301) 274-3134

Dr. Roger Mann, **Chair, Elections
Committee, President's Committee &
Arrangements Committee**
Virginia Institute of Marine Sciences
College of William and Mary
Gloucester Point, VA 23062
(804) 642-7369

Mr. Jeff Kassner, **Chair, Honorary
Membership Committee**
Division of Environmental Protection
Town of Brookhaven
Medford, NY 11763
(516) 451-6455

Mr. Chris Nelson, **Chair,
Membership Committee**
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