

National Shellfisheries Association

QUARTERLY NEWSLETTER



SUMMER 1995-CALL FOR PAPERS

SOUTHAMPTON, NEW YORK

President's Message

We're beginning to crank up for the '96 Baltimore meeting. Program Chair Roger Newell is getting pretty excited about the arrangements and the special sessions being organized (see accompanying article). I am particularly pleased with the sessions organized by Susan Waddy (Lobster Fisheries Management) and Gretchen Messick (Crustacean Health Problems) - decapod research has not been prominent in our NSA programs over the last few years. If there are other crustaceanados out there whose interests don't fit into these two areas, call Roger or me to get up another group (or to ensure a contributed session).

If you've never been involved in organizing an NSA meeting you may not know that Roger and others have been working on this meeting for over a year now. The selected hotel usually needs a commitment two years in advance and there is much to consider among the many hotel sites, opportunities and costs. No doubt many lessons have been learned over the years, but, for most of us not trained in hotel and convention management, this is inescapably trial and error. The more I see of the complex process, the more my appreciation grows for those who have coordinated past meetings. For the upcoming meeting, a grateful thanks to Roger and all who have helped him. And thanks to Jill Adams and Jim Harvey, my colleagues here who are already pounding out the details of the '97 meeting on the Emerald Coast.

Kudos are also due to those NSA committee chairs who have agreed to serve another year and to those who are stepping down. Dave Bushek will replace Carolyn Friedman as Membership Chair and Dan Kreeger will replace Evan Ward as Endowment/Student Awards Chair. Thank you Carolyn and Evan for your valuable efforts. If anyone is interested in serving on a committee, please contact the committee chair. We can always use your talents, insights and energy.

Maureen Krause is trying to keep us all informed of related meetings and symposia. If you know of any, try to remember to drop her a note for the newsletter. Job opportunities and personal notes (birth, death, remarkable accomplishments) likewise. But don't write to Maureen until *after* you get your abstract in for Baltimore '96.

Bill Fisher

A SHOUT for Papers

Program Chair Roger Newell is announcing a "SHOUT" for papers because he says a "call" for papers is too gentle an expression for the exciting 88th NSA meeting now being planned. The meeting will be held from Sunday April 14 through Thursday April 18, 1996, at the Holiday Inn in downtown Baltimore. Inside the newsletter are guidelines for submitting abstracts. Abstracts must be mailed so that they arrive by November 17, 1995. Fax transmittals will be accepted provided a follow-up copy is mailed and postmarked by that date (PS: No getting the date turned back on the office franking machine!). Student members are encouraged to apply for competitively awarded Student Endowment Fund travel awards to help defray part of their meeting costs, including registration, hotel and travel costs. Students receiving these awards will be expected to help run AV equipment for not more than two sessions during the meeting. Detailed application instructions are included within.

So what's so hot? In addition to the general sessions of contributed papers, a number of special sessions with invited speakers are being organized by the following individuals. They include sessions on the following general topics:

- Crustacean Health Problems: Fisheries and Aquaculture (Gretchen Messick)
- Lobster Fisheries Management (Susan Waddy)
- Applications of Biotechnology to Shellfish Research (Evan Ward and Ken Paynter)
- There ARE bivalves other than oysters! Clam Biology and Fisheries (Gef Flimlin and Jeff Kassner)
- Advances in Oyster Disease Research: all you wanted to know about oyster disease and were afraid to ask (Bill Rickards)
- Nutrition of Larval and Adult Shellfish (Chris Langdon and Dan Kreeger)
- Physiological Studies of Molluscs under Ambient Conditions (Bruce MacDonald)
- Neoplasia in Shellfish: Research Issues and Implications for Industry (Esther Peters and Bruce Barber)
- Genetics of Marine Organisms (Pat Gaffney)
- Water Quality and Government Regulations (Dot Leonard)

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For those NSA members interested in crustacean research there is good news. In addition to the two crustacean sessions above that will be scheduled for April 17, there will be a follow-up meeting at the same hotel. Aaron Rosenfield is organizing a special symposium titled "The Blue Crab Fisheries of North America: Biology, Stock Assessment and Management." This will commence on Thursday morning and conclude on Friday at noon. Further details on this special meeting will be provided in the next NSA newsletter. In addition, Bill Fisher and John Kraeuter are discussing with Roy Martin, Executive Director of the National Molluscan Institute (formerly SINA), the formal participation by the shellfish industry at the Baltimore meeting. More details about this will also be available for the next newsletter.

John Cooksey is in the process of arranging a small trade show for the Baltimore meeting. If any NSA member has leads on companies, either aquaculture or research-related, that may be interested in participating please contact Roger Newell ASAP.

Although the meeting time is now only 8 months away there is still time to organize further special sessions. Therefore, if you have always thought "wouldn't it be nice if we had less talks on . . . at NSA and more on . . ." this is your opportunity to do something to rectify the situation. Why not organize a special technical session on the current hot topics in your field to bring your colleagues up to date? Please contact the program chair, Roger Newell, to discuss your ideas (voice: (410) 221-8410 or email: newell@hpel.umd.edu).

Due to the accessibility of Baltimore to many NSA members we anticipate a high attendance at this meeting. Remember that the President's Reception will be held on Sunday at the nearby National Aquarium at Baltimore, which has very generously provided access to all aquarium exhibits in the building for the evening. The AGM and awards presentation will follow a Wednesday evening dinner at the hotel. We plan to have live music to dance to courtesy of Carter Newell and other NSA members. There are also many other attractions close to the downtown hotel where we will be meeting. We are about 3 blocks from the inner harbor and one block from the cricket pitch at Camden Yards, home to the Oreo's (heh, that's what you get from letting a foreigner organize a meeting).

Registration details and forms will be in the Fall 1995 newsletter. We have made arrangements to get group discount fares through "Flights to Sites", which deals with ALL major carriers. These tickets are not subject to special restrictions and so generally no penalties apply to cancellation or schedule changes. Savings are about 10 to 12% below the lowest published rates. To check the rate and make reservations call 800 609-0439 from 9:00 am to 5:30 pm EST Monday through Friday and identify yourself as an attendee of the National Shellfisheries Association Meeting.

Roger Newell

Aquaculture '98 Update

Aquaculture '98 will be held at Bally's Casino Hotel in Las Vegas, Nevada, from February 14 - 19th, 1998. The Steering Committee is made up of co-chairs Betsy Sheehan and Leroy Creswell (WAS), Joe Tomasso (AFS-FCS) and yours truly. Jim Tidwell will be the Program Chairman and I'll be organizing the special sessions. It may seem like a long time into the future, but it really isn't. Plans are already well underway and the program is being assembled. Las Vegas is a great place to bring the family: lots of golf courses, hot-air balloon rides, theme parks, and of course the one-armed bandits. And, for all those terrestrially-frustrated biologists among you, the desert is only a short drive from the city.

This is your meeting and we want to be sure that there is something for everybody. During Aquaculture '95 there was at least one full session of shellfish papers each day of the conference. This seemed to work well for our members and the same is planned for Aquaculture '98. ANYBODY WHO IS INTERESTED IN ORGANIZING A SPECIAL SESSION (half- or full-day) ON ANY ASPECT OF SHELLFISH BIOLOGY, AQUACULTURE or MANAGEMENT SHOULD CONTACT ME AS SOON AS POSSIBLE to reserve their place. As an organizer you will be expected to recruit speakers (there is no \$\$\$), assemble the session, arrange for a moderator, and see that everybody submits their abstract on time (a daunting task!). So, here's your chance to assemble a full session of papers dealing with your own special interest. Don't let the opportunity pass you by -- write or call now and receive, absolutely free, the undying gratitude of the Association!!!

The triennial meetings are a great opportunity to interact with scientists from other fields, attend the largest trade show in the business and support the NSA at the same time. These meetings are a financial boon to the NSA and your support is needed to assure their continued success. Mark your calendars and start making plans to visit Las Vegas in '98.

Sandy Shumway

Recent Metamorphoses

Word has it that wedding bells are in the air for NSA member Carolyn Friedman and Rob Armstrong, former executive director of Canada's Salmon Health Consortium. The couple will reside in Bodega Bay, CA. Congratulations!

A very special thank you is owed to a group of people who have sold over 50 NSA cookbooks in the last year! They are Eleanor Munch, Ann Barrowclough, Tim Shaw, and Alice Kolano of the Marine Resources Permit Office, New York State Department of Environmental Conservation, Stony Brook, New York. These sales benefit the Student Endowment Fund, which has helped to offset the expenses of many NSA student members for attendance at the Annual Meeting over the last several years. Great work, gang!

Soon to be released . . .

SPECIAL ISSUE

Journal of Shellfish Research *Perkinsus marinus* Disease of Oysters

William S. Fisher, Guest editor

This special issue of the *JSR* was initiated at the 1993 NSA meeting in Charleston, South Carolina. A full-day session was presented on *Perkinsus marinus* disease of oysters, and many of those papers are included in this upcoming issue. Due to the importance of this disease to the oyster industry and to oyster populations that have a vital role in the environmental condition of estuarine ecosystems, this issue is sponsored by the National Oceanic Atmospheric Administration, Chesapeake Bay Office and the U.S. Environmental Protection Agency, Center for Marine and Estuarine Disease Research. NSA members will receive one copy of this volume free of charge, and additional copies are available for \$20.00 (U.S.). Please send your order for additional copies to Dr. Sandy Shumway (see address on back page).

JSR

By now you should have received Volume 14(1) of the *Journal*. Submissions continue to increase in number and approximately 75% are accepted. Unfortunately, the level of controversy surrounding some manuscripts has also continued to increase. During the last 5 months I have received at least 8 manuscripts which garnered reviews voicing totally opposite opinions of the paper in question, e.g., "publish without modification" and "surely you aren't going to publish this!"

Each manuscript received is sent to at least two external reviewers. These reviewers are chosen for any number of reasons, not the least of which is my view that they have made substantial contributions to their respective fields. They are also chosen because they are respected by their colleagues and I value their opinions. Many times I know that the paper submitted will generate debate among reviewers and I try to cushion this by sending the paper to more reviewers. When the debate is based on science it's an interesting and fascinating process. Unfortunately, much criticism is borne of political origin and even jealousy. These situations are often very difficult to discern and even more difficult to adjudicate. Furthermore, I believe that scientists should be able to put their personal feelings aside when dealing with the review process and deal with the manuscript in hand in a detached and professional manner. In the final analysis, *the reviews are opinions, not votes*, and I must make the final decision

regarding publication of the manuscript. Whenever possible, I try to let the dissenting reviewers know why a paper was accepted in spite of their criticisms; however, this is not always possible.

Some authors submit the names and addresses of potential reviewers and I do take these into consideration. Some also send names along with reasons why the manuscript should not be sent to particular individuals for review. These comments, too, are taken seriously. If you are interested in contributing to the process, please let me know. I am always looking for new potential reviewers.

Generally speaking, I get little feedback from the membership regarding the *Journal*. I am always interested in hearing your comments (good or bad), so keep those cards and letters coming!

Sandy Shumway

New Newsletter

Calling all Haliopons (people working with abalone)! A new newsletter, *Abalone Focus*, has been spawned with the purpose of building a community among persons working in abalone mariculture and serving as a clearinghouse for abalone-related information. The first issue was produced in the spring of 1995, and the publishers are eager for interaction with and submissions from abalone industry members. For more information, please contact Robin Smoot, editor, by world-wide fax at 510 279-5804 (In the USA use 800 628-9678), or email robin@winklermcmanus.com.

POST-DOCTORAL RESEARCH POSITION

The Pathobiology Laboratory at the Haskin Shellfish Research Laboratory of Rutgers University is seeking a Post-Doctoral Research Associate with background in molecular biology and laboratory experience working with DNA to work on a project using PCR technology to search for a potential intermediate host for the oyster pathogen *Haplosporidium nelsoni* (MSX). Position is grant funded for one year starting January 1, 1995 with potential of an additional 2 years. Starting salary is approximately \$28,500. The Haskin Shellfish Research Lab is located in southern New Jersey on the shore of Delaware Bay. Reply to:

Dr. Susan E. Ford
Haskin Shellfish Research Laboratory
RDI, Box B-8
Port Norris, NJ 08345
(609) 785-0074
email: sford@gandalf.rutgers.edu

Industry Update

I was recently invited to summarize the status and trends of shellfish aquaculture in the northeast region for a presentation at Aquaculture Expo '95 in Washington D.C. This gave me an excuse to contact friends in each state for an update on the industry and predictions of where it was going. In the past decade our region has seen dramatic changes in the shellfish aquaculture industry and now it appears poised for additional growth.

In the past 60 years the diseases Dermo and MSX have essentially wiped out the once dominant oyster industry in the Chesapeake and Delaware Bays. The latitudinal range of these two diseases now determines whether oyster (*Crassostrea virginica*) culture can be viable. Over the last decade, New England oyster growers have suffered heavy losses from Unexplained Juvenile Oyster Mortality (UJOD).

More recently, the closure of the Georges Bank has generated a tremendous amount of interest in aquaculture as a way to employ displaced fishermen. The industry has adapted well to these changes and each state has tried a unique approach to supporting aquaculture development.

Most impressive has been the dramatic rebirth of Connecticut's oyster industry. In 1987 the state authorized a bond to fund the planting of one million dollars of shell each year for five years. The program has paid off well and the industry has rebounded to produce over \$40 million a year, although recent declines in production have been attributed to weak sales, storm losses and Dermo. The program's methods rely on natural set and are virtually unchanged from a century ago, but they have helped Connecticut become the nation's second leading oyster producer behind Louisiana.

Virginia has also enjoyed dramatic growth in production; however, the oyster diseases MSX and Dermo have forced most growers to turn to relatively hardy hardclams (*Mercentaria mercenaria*). Recent expansions in hatchery capacity and growout acreage should increase clam production from \$11 million in 1993 to over \$15 million in 1996. Several growers are also experimenting with methods to bring oysters to market size in two growing seasons, before Dermo can cause significant losses.

New York and Massachusetts both have small but growing aquaculture production from both clams and oysters, worth \$4 to \$5 million to each state. In contrast to Connecticut, these states rely almost exclusively on hatchery seed stock. Unexplained Juvenile Oyster Disease has been hitting oyster growers hard from Long Island to Maine, but hopes are high for development of a resistant strain of oysters.

New Hampshire, Delaware, New Jersey and Maryland have managed to slow or stall shellfish aquaculture development with restrictive lease laws, but should these states ever get it together they could become substantial contributors to the industry.

The predictions for aquaculture from around the region were not too surprising. Everyone seemed to agree that oyster diseases were likely to continue to spread up and down

the coast despite everyone's best attempts at control. To avoid these problems many risk-averse growers have elected to work with clams; however, strong oyster prices in New England are tempting some to test fate.

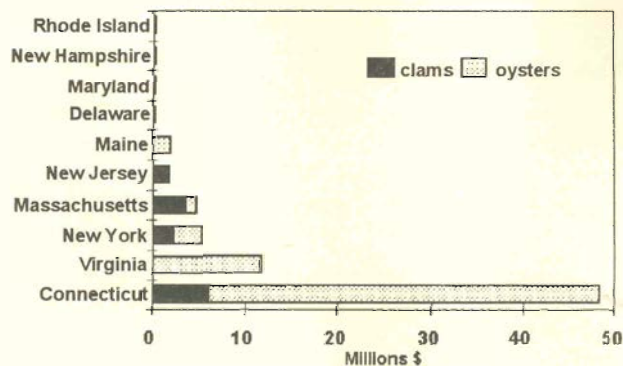
Virtually every state is running a shellfish aquaculture training program and several are offering incentives to new growers, so it is a safe bet that aquaculture production will continue to grow.

Bay scallop culture is also catching on, with a handful of growers in Massachusetts, Rhode Island, and Virginia, but American consumers are slow to accept the whole in-shell scallop and the market is in some ways similar to the blue mussel market fifteen years ago. Meanwhile, Maine's mussel production should grow substantially next year as several new leases were granted.

In the Northeast Region shellfish aquaculture was a \$72 million industry in 1994 that directly employed over 600 people. Industry is confident that increased consumer confidence in cultured shellfish's quality and safety will result in stronger demand in the years to come.

Robert Rheault

N.E. Shellfish Aquaculture Production
1994 Landed Value \$72 Million



Note to industry members: If you would like to provide a similar perspective on the aquaculture industry in your region, or if you have any other submissions for this column, please contact Robert Rheault by phone at (401) 783-3360 or email at skid@gso.uri.edu, or send your articles to Maureen Krause (address on back page).

Missing Members

If anyone knows the current whereabouts of the following NSA members, please send their address to NSA Treasurer, Christine Hodgson (address on back page).

Missing member

Richard Darden
Mark Malachowski
Rafael Sepulveda Fuiz
Niklaus Abbott
Dominique Mille

Last seen in

St. Petersburg, FL
Menlo Park, CA
Santiago, Chile
San Diego, CA
Asserac, France

Upcoming Meetings

Larvi '95: September 3-7, 1995, University of Ghent, Belgium. Fish and shellfish larviculture symposium. (Note new dates!) For further information please contact: Larvi '95 Conference Secretariat, Laboratory of Aquaculture and Artemia Reference Center, University of Ghent, Rozier 44, B-9000 Ghent, Belgium. Phone: 32-9-2643754; FAX: 32-9-2644193, email: magda.vanhooren@rug.ac.be

The 5th International Tasmanian Aquaculture Exchange: October 14-16, 1995, Hobart, Tasmania. The Exchange includes a conference and trade show. The theme of this years meeting is "From Culture to Customer". For details contact Tony Smithies, Exec. Officer, Tasmanian Salmonid Growers Association, GPO Box 1614 C, Hobart, Tasmania, Australia 7000. Phone: +61 02 242521, FAX: +61 02 243006, email: tonys@ozemail.com.au

Estuarine Research Federation: November 12-16, 1995, Corpus Christi, Texas. This year's theme is "Estuaries: Bridges from Watersheds to Coastal Seas." Email for more information: ERF95@utmsi.zo.utexas.edu or call (512)985-9266.

World Aquaculture '96 and Bangkok Seafood Show: January 30 - February 2, 1996, Queen Sirikit National Convention Center, Bangkok, Thailand. Annual meeting of the World Aquaculture Society. For information contact Sea Fare Expositions, Inc., 850 NW 45th St., Seattle, WA 98107. Phone: (206)547-6030, FAX: (206)548-9346.

Aquaculture America '96: February 14-17, 1996, Arlington, Texas. Joint conference of the National Aquaculture Association and the U.S. Chapter of the World Aquaculture Society, hosted by the Texas Aquaculture Association. For details contact Sea Fare Expositions, Inc., 850 NW 45th St., Seattle, WA 98107. Phone: (206)547-6030, FAX: (206)548-9346.

11th International Pectinid Workshop: Tentatively April 10 - April 15, 1997, La Paz, Baja California Sur, Mexico. Plans are already underway for the next gathering of the world's scallop fondlers. Former IPW participants are asked to please send any address changes, corrections or names of other possible participants to: Esteban Fernando Félix-Pico, Dept. of Fisheries and Marine Biology, CICIMAR-IPN, Ap. Postal 592 and 476, 23000 La Paz, B.C.S, Mexico; Phone: 52-112-25344 (Ext. 2428), FAX: 52-112-25322, email: efelix@vmredipn.ipn.mx

If you know of meetings that might be of interest to other NSA members, please drop a note to Maureen Krause (address on back page).



Developing and Sustaining World Fisheries Resources: The State of Science and Management

28 July - 2 August 1996
Brisbane Convention & Exhibition Centre

Register your interest now!

Join your colleagues from around the world to explore world developments in fisheries research and management.

The congress will address the following themes:

- Why do some fisheries survive while others collapse?
- What are the roles of science, economics, sociology and politics in fisheries management?
- How can fisheries resources be allocated? Who owns the fish?
- How can aquaculture help sustain world fisheries?
- What is the scope for development of wild stock fisheries?
- What is needed to manage fisheries successfully?

The congress is currently calling for presentations which address the congress themes. To receive submission guidelines or to add your name to the mailing list, please contact the congress secretariat:

Second World Fisheries Congress
PO Box 1280, MILTON QLD 4064 AUSTRALIA
Tel: (07) 3369 0477 Fax: (07) 3369 1512 e-mail: im@cc.uq.oz.au

Recruits Corner

Summertime is upon us! James Anderson, an NSA recruit, is spending some of his summer keeping the recruits informed about job openings. James maintains a database containing current job openings and job information. He posts this information to the SHELLFISH discussion line on Internet once each month. If you are looking for a job, it is also possible to post your resume through the jobs database. If you would like additional information, contact James at anderj1@ducyax.auburn.edu.

Other projects going on this summer involve the recruits information packet. This packet describes the NSA endowment fund, the Thurlow-Nelson student award, the jobs database and upcoming meeting events. The purpose of this packet is to keep the NSA recruits informed. If you would like additional details on the information packet, please contact Karin Tammi (KTAM1734@uriacc.uri.edu) or Margaret Dekshenieks (deks@ccpo.odu.edu).

Margaret Dekshenieks

Call For Papers

FIRST, LAST AND ONLY CALL FOR PAPERS for the 1996 Annual Meeting of the National Shellfisheries Association, Sunday April 14 through Thursday April 18, 1996, Baltimore, Maryland.

INSTRUCTIONS FOR ABSTRACT FORMS

ABSTRACTS FOR ALL PRESENTATIONS (ORAL AND POSTER) MUST REACH THE PROGRAM CHAIR BY NOVEMBER 17, 1995.

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 desires; 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 or poster presentation is permitted; however, only one of the two will be accepted. For poster sessions, tackboards will be provided but no projection equipment or tables will be available.

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 \$20.00 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.

Type the title (all capitals) and name(s) of 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 first, followed by the abbreviation in parentheses. 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 student or recent graduate and is 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 an Endowment Fund application form and submit it with your abstract fee to Roger Newell as detailed in the accompanying article.

Prepare one original abstract form and send it with two (2) copies, your personal or institutional check for \$20.00 (checks must be drawn on a US bank and made out to NSA), and your Student Endowment Fund application (if applicable) to Program Chair Roger Newell at the address below. Abstracts must be mailed in order to arrive by November 17, 1995. Fax transmittals will be accepted (410 221-8490) provided a follow-up copy is mailed and postmarked by November 17. If you need an acknowledgement of the receipt of your abstract, please enclose a self-addressed, stamped envelope.

Send abstract, \$20 abstract fee, and student endowment fund application materials (enclosed in a separate envelope if applicable) to:

Dr. Roger Newell, NSA Program Chair
Horn Point Environmental Laboratory
P.O. Box 775
Cambridge, MD 21613-0775 USA

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 - BALTIMORE

Students participating in the 1996 meeting in Baltimore 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 1996 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. Roger Newell, at the address given on page 6. Good Luck!



STUDENT ENDOWMENTS AND AWARDS

APPLICATION FOR THE 88TH ANNUAL MEETING OF THE NATIONAL SHELLFISHERIES ASSOCIATION BALTIMORE, MARYLAND, APRIL 14 - 18, 1996

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 17TH!

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)

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

First Author's Mailing address: same
(if different from above)

Telephone: (516) 632-8668 Email: siddall@sunysb.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)

Book Reviews

Seafood Regulations Compliance Manual by Andrew M. Welt. Chapman & Hall. 1995. Paperback, 708 p. Price \$150. Available from Chapman & Hall, 115 Fifth Avenue, New York, NY 10003.

I must confess that I was at first dumbstruck by a paperback book selling for \$150. In addition, I must admit that I have not actually read the entire book. Just as the cover says, the book contains over 3,500 'yes' or 'no' questions referring to compliance standards. It is surprisingly easy to use and makes non-compliance situations easy to identify.

The book is divided into 14 chapters: Introduction to seafood regulatory compliance, Facility and premises; Harvest/raw materials; Process controls; Equipment; Sanitary operations; Sanitary facilities and control; Food storage and distribution; Packaging and identification; Quality control and quality assurance; Recordkeeping; U.S. Standards and International Guidelines for Specific Seafood Commodities; Methods of analysis and sampling. In addition, there are 9 appendices including a glossary, contacts at various state and federal laboratories and agencies, recommended defect tables, EPA effluent guidelines and standards, FDA tolerance and limits of substances in seafoods/aquaculture; HACCP and the Seafood Industry; Referenced forms; References and additional reading, and an index. The manual covers fish and shellfish and is, to the best of my knowledge, the only single-source manual covering the myriad of daunting regulations and bureaucracies inherent in the seafood industry.

It is a remarkably easy reference source to use. The entire book is a listing of questions associated with the seafood industry and compliance with regulations. The chapters and section titles have been taken from the regulations and guidelines themselves. Each question is accompanied by a specific reference to the appropriate regulations or guidelines from which the question originated. For example, under Prohibited areas for Harvest/Raw Materials, question 4.4.7-1 is: "Are all state shellfish-growing waters classified as prohibited in the absence of a current sanitary survey or evaluation to support the classification of approved; conditionally approved; restricted; or conditionally restricted?" The manual refers the reader to NSSP(I)(C)(7)(a) for specific information. Regulations covered include FDA, NFPA, NMFS, APHA, EPA, NSF (National Sanitation Foundation, not National Science Foundation!), OSHA, NBCI, USDA, AOAC, NSSP and Codex. The Codex (international standards) will be of particular interest to those involved in international commerce in seafood.

While this book is not recommended as reading material for the beach, I highly recommend it as a reference text to all laboratories, processors, harvesters, shippers and anyone else involved in the seafood industry. It is well worth the investment.

Sandy Shumway

Abalone of the World Biology Fisheries and Culture Edited by S.A. Shepherd, M.J. Tegner and S.A. Guzman del Proo. Published by Fishing News Books. 1992. Hardcover; 608p. Price £65. Available from Fishing News Books, Blackwell Science Ltd., Osney Mead, Oxford OX2 OEL, United Kingdom.

This book presents the proceedings of the 1st International Symposium on Abalone, held in La Paz, Mexico in November 1989. It is not, however, your typical conference proceedings, i.e., a hodgepodge of contributed papers. The editors have assembled a comprehensive volume covering all aspects of abalone biology and culture. The 46 papers are divided into 9 sections and include: evolution, distribution and genetics; physiology and reproduction; larval ecology and settlement; feeding and growth; diseases; fishery biology; case studies of abalone fisheries; stock enhancement; introductions; culture. All but 4 papers are in English and each paper is accompanied by an abstract in Spanish. Most of the papers are reviews; however, there are a few original contributions also.

I found the book to be very well organized and the editors have done a superb job of compiling and integrating a vast amount of information. The chapters on evolution, genetics, physiology, reproduction, and feeding and growth will be of interest mainly to biologists. I found the inclusion of case studies of abalone fisheries from various countries (Canada, Mexico, Australia, New Zealand, South Africa, Oman, France and the USA) to be a particularly welcome contribution. The information contained in these papers on the management (and 'mismanagement') of abalone fisheries to date should prove useful to managers presently faced with the task of overseeing wild fisheries of abalone.

The section on mariculture and re-seeding is also a strong one and contains a surprising amount of information that has to date been considered confidential by growers. It is comprised of 13 papers covering genetics, feeding and nutrition, artificial foods, and culture techniques. This section also includes information on the culture of abalone in North America, China and New Zealand.

The index is detailed and useable and the binding and text are aesthetically pleasing. The publication date is 1992 and I believe this book will serve as a reference volume to students, researchers and managers for several years to come.

Sandy Shumway

Publications Available

If you would like a copy of the Master's Roundtable, Index of papers published in the Proceedings of the JSR, or abstracts and program from the Charleston (1994) meeting, send \$1 for each publication ordered plus a self-addressed 8.5 x 11 envelope to Sandy Shumway.

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.

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.

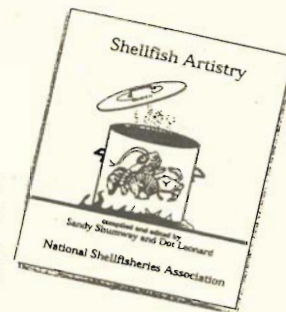
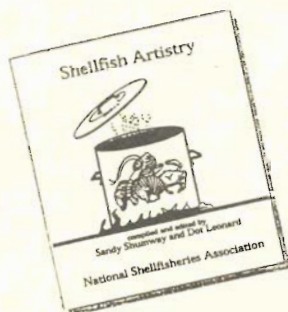
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