

National Shellfisheries Association

QUARTERLY NEWSLETTER

MAY 2002 - SPRING ISSUE



WALDOBORO, MAINE

President's Inaugural Message

I am grateful and honored for the opportunity to serve as President of NSA during the coming year. NSA was the first professional society I joined, and it has always been a very special group to me. Even though I've been involved with the Association for 17 years, I still feel like a relative newcomer. Our history is deep and filled with interesting twists and turns, as will be evident in Mel Carriker's forthcoming historical account. The strength of NSA is partly rooted in this long history and our distinguished list of past members and leaders. Another strength that sets us apart from most professional societies today is the diverse nature of our membership, with representatives from industry, agencies and scientific institutions. This mix promotes a healthy cross-fertilization of ideas. Finally, NSA is an inviting and fun group that welcomes all perspectives and is deeply committed to supporting the next generation of scientists. For all of these reasons, I look forward to the future of NSA with excitement and optimism as we approach our 95th year.

Jay Parsons, our now Past-President, is to be commended for his fine job overseeing NSA for the past year. Most of you know of Jay's extensive record of service to our group. He was a founding member of the Student Recruits, and has been a central participant in many important functions of the society since then. In particular, he was an active member of the Publications Committee for many years where he served as Editor of this Newsletter, and most recently Jay served as Vice President, President-Elect and President. Jay also contributed extensively to most of our annual meetings over the past eight years or so, serving as coordinator of numerous special sessions and chairing Local Arrangements and Program Committees. Jay was presented with the Meritorious Service Award at the recent Business Meeting in Mystic, and he also received a gift of a bronze door-knocker in the shape of a scallop. On behalf of all of NSA, thank you Jay for your past (and future) service.

I would also like to acknowledge those who served on the Executive Committee during the past year; Carolyn Friedman (Vice-President), Evan Ward (Past-President), David Bushek (Treasurer), Karolyn Mueller Hansen (Secretary), and Aswani Voley, Mark Luckenbach and



The ceremonial "passing of the oyster" from Past-President Jay Parsons to President Dan Kreeger at the 94th Annual Meeting held in Mystic CT.

Loren Coen (Members-at-Large). Thanks also to the many who contributed by serving as members or chairpersons of our various committees. Finally, a hearty thank you goes to Evan Ward who ran a smooth, profitable, and very stimulating annual meeting in Mystic, CT. If you weren't there you missed a stellar program, super entertainment, and splendid weather. Please see other articles about the meeting and a

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In this issue:

- ***Student Awards - Mystic 2002***
- ***NSA Proclamations***
- ***ECSGA Takes Off***
- ***Vista Nieve Review***
- ***Recruits Corner***
- ***A-B-F Update***
and much more...

Student Awards NSA 2002, Mystic

A total of 39 students applied for NSA Student Endowment Awards to attend the 2002 Annual Meeting in Mystic, Connecticut. Seven applications arrived past the submission deadline and after applications were sent out to reviewers, and two applications did not arrive until middle of February. Thus, only thirty applications were eligible and evaluated for awards. These applications were evaluated by 11 reviewers. Judging criteria included the strength of the advisor's letter, financial need and distance travelled, the style/clarity of the abstract as well as the innovativeness of the science, and relevance to NSA. The overall quality of the students abstracts and research was very good. It was certainly not easy to distinguish among abstracts due to the subject diversity of the submitted abstracts. Based on their average ranking by the reviewers, sixteen students (Christie-Sue Decker, Gwenaelle Choquet, Susan Little, Maryse Delaporte, Rashel V. Grindberg, Helen Woods, Todd Gedamke, Daniel Spooner, Shawn M. Stickler, Aman Luthra, Jr., Vincent Encomio, Jay R. Leverone, Ann Mountz, Lisa Mike, Marie-Claude Archambault, and Steven Allen) were selected to receive either a free room or registration waiver. The student travel award winners and a couple of students from University of Connecticut assisted AV operation and manned the NSA sales booth during the NSA 2002 meeting in Mystic. Thank you, students, for donating your time during such a busy meeting!

The CT Seafood Council (Executive Director Barbara Gordon) donated \$800.00 toward the Student Endowment Funds for travel awards. We acknowledge and thank the CT Seafood Council for their generous donation.

A record number of students (a total of 57 students; 45 Oral presentations and 12 poster presentations) participated in the NSA annual meeting in Mystic. As usual, students consistently delivered high quality work in their presentations. There were many best talks and posters. This year Tarquin Dorrington, University of Rhode Island, and Todd Gedamke, Virginia Institute of Marine Science (VIMS), College of William and Mary won the Turlow C. Nelson Award for their presentations. Tarquin Dorrington gave a talk on "Evaluation of antimicrobial peptides for recombinant feed-based delivery in shellfish aquaculture". Todd Gedamke presented a paper entitled, "Integrating vessel tracking, catch data, and depletion models to estimate commercial scallop dredge efficiency". The Nelson Award carries five years of membership to NSA for the above two winners. The judges were also extremely impressed by Rachel E. Sackett's (University of North Carolina at Wilmington) talk, "Evaluating the contribution of commercial oyster aquaculture to recruitment" and Donald C. Behringer's (Old Dominion University) presenta-

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Post-Meeting Note

I would like to take this opportunity to thank all of our members for supporting NSA 2002 and making the meeting such a success. We had 315 people register for the meeting, 59 of those were student members - way to go! Once again I would like to thank all of the volunteers who helped to organize the meeting; thanks for your time and efforts in making it run so smoothly. In addition, I would like to acknowledge the sponsors of the meeting, including: CT Sea Grant; University of Connecticut, Department of Marine Sciences; CT Seafood Council; Mystic Aquarium; and NY Sea Grant. I would also like to thank the shellfish companies that donated sea food for various events, including: Aeros Seafood; Great Eastern Mussel Farm; Jessie D, Inc.; and Norm Bloom & Son. I hope that everyone who attended the meeting had a productive and fun time. See you in New Orleans next year.

Evan Ward
Chair, NSA 2002 Local Arrangements Committee



Look out for this megachowder-sized quahog (a.k.a. Sandy Shumway). She will stop at nothing to raise money for the NSA Student Endowment Fund. Thank you Sandy for raising over \$1,700 at the auction in Mystic.

Proclamations of the 94th Meeting of the National Shellfisheries Association

Whereas, the National Shellfisheries Association, Inc. (NSA) is a Not-for-Profit Corporation, and **Whereas**, members serve as officers and committee members on a voluntary basis, **Be It Resolved** that on April 17, 2002, the National Shellfisheries Association formally recognizes and thanks: **Evan Ward**, Local Arrangements Chair; **Joyce-Wood Martin**, Registration and Organization; **Bridget Holohan**, Audio-Visual and Registration; and **Carolyn Friedman**, Program Chair for their outstanding contributions to the organization and success of the 94th Annual Meeting of the National Shellfisheries Association.

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Member-at-Large; and our Bookkeeper, **Nancy Lewis** for their outstanding contributions to the prosperity and well-being of the National Shellfisheries Association during the last year.

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Request for Ideas/Input for NSA 2003 Meeting

With the conclusion of the NSA 2002 annual meeting in Mystic Connecticut, comes the need to begin planning the program for the NSA 2003 annual meeting in New Orleans. A successful program is always dependent upon insightful input and active participation of the NSA membership. During the next few weeks, I ask members to take some time to contact me about special sessions and related activities that they would like to see as part of the program at the next meeting in New Orleans. In addition, your ideas and suggestions about how the overall program might be enhanced/improved (i.e. call for papers, abstract format, publication of program and abstracts,

etc.) are welcomed. In particular, I would like to hear about ideas for special sessions that are timely and/or appropriate to the southeastern United States. If you are interested in serving as an organizer and chair of a special session, please send me your proposed topic so that plans for possible implementation can be discussed. Contact me by E-mail at Ldabramo@cfr.msstate.edu or call me at 662-325-7492. Be a part of New Orleans 2003 program!

Lou D'Abramo, Chairman
Program Committee, New Orleans 2003

President's Message continued from page 1.

list of student presentation award recipients elsewhere in this issue. Also, start making your plans now for New Orleans (April 13-17, 2003), which is shaping up to be equally exciting.

I look forward to working with our new slate of officers and committee members. Congratulations to Sandy Shumway who is now President-Elect; Lou D'Abramo, Vice President; David Bushek, Treasurer; Karolyn Mueller Hansen, Secretary; and Aswani Voley, Loren Coen and Gary Wikfors, Members-at-Large. The Elections, President's and Awards Committees will be chaired by Jay Parsons; Audit-Budget-Finance by George Abbe; Program for New Orleans by Lou D'Abramo; Arrangements for New Orleans by Tom Soniat and for Hawaii by Sandy Shumway; Site Selection by Sandy Shumway, Student Recruits by Steve Allen, Maille Lyons, and Nature McGinn; Industry Committee by Joth Davis and Rick Karney; Student Endowment and Awards by Fu-Lin Chu and Gary Wikfors; Resolutions by Gary Wikfors; Publications by Lou D'Abramo and Vic Kennedy; Web site by Karolyn Mueller Hansen; Membership by Aswani Voley and Ami Wilbur; Software Management (ad hoc) by Mark Luckenbach and Roger Newell; Revenue and Investment by Gef Flimlin; and (whew) By-Laws Review by Evan Ward. All of these folks are to be commended on their willingness to serve NSA, and I expect it to be a great year. Please, if you have any interest in helping on any of these committees contact the committee chairperson(s) at the addresses listed on the back of this newsletter.

Of special note for the coming year, the Software Management Committee will be challenged with selecting a new societal database program, which will help us better manage our affairs and possibly provide important new services to members. The Student Recruits are planning several exciting new projects to foster greater communication and interaction among students at annual meetings as well as throughout the year. The Membership Committee will launch a targeted campaign to enlist the cross-participation of specific groups, as well as continuing with existing initiatives already in motion. Maintaining and expanding our membership is the most important key to the continued intellectual and financial fitness of our group. We have not yet reached our goal of 1000 members; however, we are getting close, and I repeat the challenge posed by Evan Ward early last year that each of you identify and recruit one new member during 2002. Many other new initiatives are being launched by these and other NSA committees, and you'll be hearing about them in future issues of this newsletter. Please do not hesitate to contact me if you have any additional ideas, recommendations or comments about how we can make NSA work more for you!

With warm regards,
Dan Kreeger

Awards continued from page 2.

tion entitled "Ecological ramifications of disease in the Caribbean spiny lobster, *Panulirus argus*". These two students earned Honorable Mention Awards and one year of free membership in NSA for their achievements. The Gordon Gunter Best Student Poster Award was presented to Coren A. Milbury, University of Delaware for "Genetic monitoring of oyster stock enhancement in the Choptank River, Chesapeake Bay". The poster award carries one year of free membership to the society.

One of the most thankless jobs at NSA is sacrificing a significant bit of time and freedom during the conference by agreeing to judge student presentations. Every year, however, we manage to find an enthusiastic and dedicated group of NSA members who are willing to commit their time to this critical task, and hopefully they are rewarded by the opportunity to see a number of excellent presentations and by getting to know the newest members of NSA. Thank you to the following judges of oral, poster, and Endowment travel awards: William S. Fisher, Dan Kreeger, Eric Lund, Phillippe Soudant, Tom Soniat, Sandra Shumway, Aswani Voley, Jim Moore, Jeffrey Shields, Kimberly S. Reece, Richard DeVoe, Louis R. D'Abramo, Susan E. Ford, Gene Burreson, Ken Paytner, Ami Wilbur, Catherine Gatenby, Julie Gauthier, Loren Coen, Maureen Krause, Steve Kaattari, Jean-Francois Samain, Christine Paillard, and Jay Parsons. This year, due to the extensive number of judges who evaluated oral and poster awards, we may have missed acknowledging some by name. Our sincere apologies if we missed anyone.

NSA members and advisors: Please remember to encourage your students to apply for next year's Student Endowment and Presentation Awards! Also, they need to take the application deadline seriously in the future and send their applications in on time, otherwise their applications will not receive consideration. It is understood that after the September 11th tragedy, mail could be delayed, particularly for applications sent from foreign countries. Therefore for future applications, we advise students to inform the Committee co-chairs by e-mails or fax, at the date of sending their applications so that they know their applications are in mail.

Finally, NSA "senior" members: if you are interested in helping judge any or all student awards for the 2003 New Orleans, Louisiana, meeting, please contact the Student Awards Committee Co-chairs, Fu-Lin Chu and Gary Wikfors.

Fu-Lin Chu
Maureen Krause
Aswani Voley

Industry Update

ECSGA is off and running...

"Heaven help you, if you don't"

Ken Chew offered these words of wisdom to a group of over 70 persons from industry, state extension agencies, academia, and state and federal agencies who gathered to discuss the formation of an East Coast Shellfish Growers' Association (ECSGA) at a special industry session at the recent Annual Meeting of the National Shellfisheries Association in Mystic, CT.

Chew, Associate Dean of the College of Ocean and Fisheries Sciences of the University of Washington, spoke from his years of experience as an advocate and organizer of the shellfish industry on the West Coast. Indeed the success and accomplishments of the Pacific Coast Shellfish Growers Association (PCSGA) has served as the inspiration for the creation of an east coast association.

During a productive 3 hour meeting, representatives from almost all of the coastal states from Maine to Florida explained the nature of the shellfish industries in their states and identified regional and national issues of importance. They debated the need for an east coast association and speculated on support from the individual growers who will be key to the success of the organization. In the end, there was a general consensus to push forward with the formation of a steering committee of industry representatives from all the east coast states.

The afternoon association "brainstorming" session followed a morning industry session organized by Gef Flimlin, the Marine Extension Agent with Rutgers Cooperative Extension. Despite a poorer than expected turnout of industry members, many of whom were unable to attend because they were already busy with spring production activities, the industry session was well attended. The conference room was full throughout the morning sessions which included presentations including the potential for *Crassostrea ariakensis* in the Chesapeake Bay, surf clam culture in New Jersey, public stock enhancement in Massachusetts, soft shell clam management in Maine, upweller nursery designs, and aquaculture BMP's (best management practices).

Flimlin segued from the formal session to a general discussion of the formation of the east coast association with a presentation of his results of a questionnaire of issues affecting the east coast shellfish aquaculture industry. In his inimitable way, Flimlin distilled the litany of responses which included the need to improve political and legislative influence and a need to direct the research community to focus on issues which would support industry production and position into

the phrase "the right to freakin' farm!"

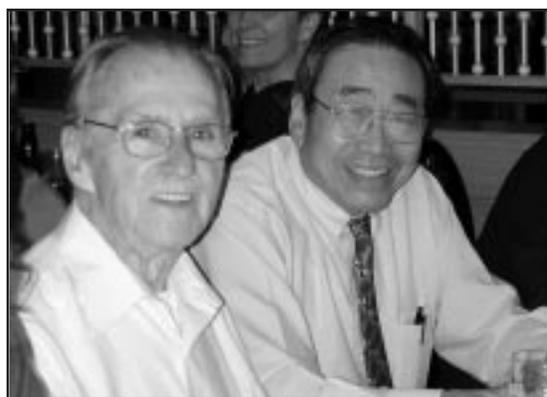
The general discussion began with audience introductions at which time key individuals were asked to characterize the shellfish industry and major issues in their respective states. The make up for most of the east coast states was similar to that reported by George Mathis, of MAME, for New Jersey which has 60 small growers and 2 corporate growers. The size of the industry ran the gamut from a few growers making "great progress" in Rhode Island to the \$ 20 million clam industry in Virginia where over 135 million little necks are harvested annually. Echoing Flimlin's poll, a major issue in most of the states involved restrictive regulatory policies due in part to poor public perception of the shellfish aquaculture industry.

Next, Joth Davis of Taylor Resources, Inc. gave a presentation about the success story of the Pacific Coast Shellfish Growers Association to emphasize the potential for a similar effort on the east coast. With the audience primed, Karen Rivara, of Aeros Cultured Oyster Co., Southold, NY, Bob "Skid" Rheault, of Moonstone Oysters, Wakefield, RI, Rick Karney, of the Martha's Vineyard Shellfish Group, Oak Bluffs, MA, and Flimlin solicited the support of those present to form the association. The general consensus was to move forward and a potential steering committee was formed to work on the following :

- Goals
- Organizational Structure (By Laws, Mission Statement, Dues/Funding Process)
- Website/Newsletter
- Interstate Seed Sales Position Paper
- Benefits of Shellfish Aquaculture Document

In the weeks following the NSA meeting, there has been a groundswell of support from industry folks from up and down the east coast. If you are interested in participating in the progress of the ECSGA, get connected to the list serve by e-mailing Skid Rheault at oysters@ids.net.

Rick Karney, Co-Chair, Industry Committee



Mel Carriker and Ken Chew were clearly enjoying themselves at the Annual Meeting in Mystic, CT.

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Steve Allen mans the NSA sales table at the Annual Meeting in Mystic, CT. Obviously, the diverse collection of shellfish curios are of considerable interest to meeting attendees.

Book Reviews

Vista Nieve ~ The Remarkable, True Adventures of an Early Twentieth-Century Naturalist and his Family in Colombia, South America

National Shellfisheries Association members know Mel Carriker as a courteous and debonair colleague, reflective and soft-spoken, and always ready with helpful, supportive comments on one's research. They are aware of his published contributions to shellfish and ecological research, including his comprehensive reviews of the literature. They would nod agreeably when informed that he was an Eagle Scout. Most, however, would be surprised to learn that he spent the first 12 years of his life on an isolated coffee plantation, Vista Nieve, with its view of the snow (thus its name) on the distant Sierra Nevada de Santa Marta in the highlands of Colombia, South America. There, far distant from a public school education, organized sports, radios, and newspapers, Mel had a tutor and spent tutor-free time running barefoot around the plantation and in the surrounding tropical forest with his four siblings, playing like any youngster, yet observing nature in its fullest. Shoes to Mel were unwelcome impediments to climbing the nearest coconut palm to retrieve a green coconut for a refreshing drink.

How did this happen? The details are spelled out in a readable story that begins when Mel's maternal grandparents Orlando and Eva Flye emigrated from Ohio to Columbia, South America. Here Flye established electrical and telephone service in different parts of the country in the early 1890s. He recognized opportunities in the burgeoning international coffee market and remained in Colombia to build a thriving coffee-growing enterprise that survived a number of unsuccessful plantation sites and the Colombian Civil War. Part One of the story describes the efforts of this vigorous and determined engineer to clear land; haul electricity-generating and coffee bean-processing machinery from the coastal city of Santa Marta to the highland plantation by mule train over 21 miles of dirt track; build a sawmill, a bean-processing mill, storage buildings, and residences for plantation workers and the Flye family; roast coffee beans; and transport beans to the coast for export. Eva Flye was no less accomplished. She reared eight children (birthing was preceded by a 7-hour mule ride to the Santa Marta hospital), managed the domestic affairs of the plantation (including providing medicines where needed), oversaw clearing the forest for vegetable and flower gardens, and entertained guests (who stayed days if not weeks). One of the Flye's children was Carme, Mel's mother, who met Melbourne A. Carriker (Meb), Mel's father, when Meb used the Flye plantation as a base for an ornithological expedition.

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A Guide to the Protozoa of Marine Aquaculture Ponds

Patterson, D.J. and M.A. Burford. 2001. A Guide to the Protozoa of Marine Aquaculture Ponds. CSIRO Publishing, Collingwood, Australia. 54 pp., AU \$29.95.

This glossy guide introduces the reader to the fascinating microscopic world of some of the single-celled organisms found in aquaculture ponds. In only a few pages, there is a wealth of information, including the kinds of organisms present, their lives in the ponds, methods to study them, a glossary of specialized terms, a bibliography, line drawings, and superb photomicrographs of representative cells.

The guide begins with a brief discussion of the microbial world, the ecology of the ponds, the effects protozoans may have on the ponds, and ways to sample and study the cells. Then the four major groups of protozoans, i.e., ciliates, flagellates, amoebae, and heliozoans, are subdivided and described in some detail. The ciliates are divided into three large groups based on the kind of food they consume, e.g., large, inactive particles such as detritus and some microalgae; moving food that is hunted such as some microalgae and other protozoa; and suspended particles, including bacteria, that are filtered by the cilia. The food groups are further separated based on their feeding strategies, cell shape, arrangement of the nuclei, habitat, movement, and the number and kinds of membranelles present. One group, the peritrichs, have a stalk that attaches the cells to a substrate, while the hypotrichs have some cilia in tight clusters that are used as legs, enabling the cells to walk across a substrate. The tintinnids, with a zone of cilia around the top of the cells, live in cone-shaped loricas; oligotrichs are similar, but without the lorica.

The flagellates are small, usually less than 10 mm in size, and include a wide variety of kinds of cells. These, too, have been divided into groups depending on their food and include cells that feed on bacteria in the water column (stramenopiles and choanoflagellates), graze on bacteria attached to a substrate (bodonids), eat pieces of detritus (euglenids), or graze on other algae and protozoa (kathabelpharids). These larger groups are also separated into smaller ones depending on the number and kinds of flagella; presence or absence of loricas, stalks, arms, cell walls, and chloroplasts; habitat including parasites; kind of motion; and attachment to the substrate.

The glossary consists of terms frequently used when referring to protozoans (and some algae). The bibliography is short, but lists the books most useful for identifying proto-

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Vista Nieve Continued from page 7

Part Two of the narrative focuses on Meb, an Illinois native, who, as an undergraduate majoring in languages and the sciences at the University of Nebraska, used his photographic and ornithological skills in a number of faculty-led field trips at the turn of the 20th Century. After just 5 semesters at Nebraska, Meb's desire to become a professional naturalist and collector for museums led him to leave the university (he never did earn a university degree) and to undertake several bird-collecting expeditions to Costa Rica, Venezuela and Colombia, one of which brought him to the Flye plantation where Carme was successfully courted.

Parts Three and Four of the story describe Meb and Carme's efforts to establish their own coffee plantation in the tropical forest, further up the mountainside from the Flye plantation. It is a record of hard work and dogged persistence that resulted in a successful enterprise that gradually declined after the Carrikers sold the plantation in 1927 to return to the US and as the international drug market subsequently undermined civilization in Colombia.

As Meb and Carme developed Vista Nieve, Meb continued his expeditions. He was a skilled taxidermist whose carefully preserved bird skins were in demand by U.S. museums, especially the Carnegie Museum and the Academy of Natural Sciences in Philadelphia. Carme, a capable bird skinner, assisted him, and the accounts of their expeditions with an accompanying infant boggle the mind – a 7-month trip included 17-month-old Mel and later a 9-month trip included his 7-month-old sister Myrtle (Carme did have one or two maids on the trips).

From 1902 to 1962, Meb collected about 80,000 specimens, mostly birds. He became an expert on Mallophaga (bird lice), describing over 900 genera and species. The book describes the challenges of exploring disease-ridden, insect-infested, sweltering habitats. In one instance, Meb had to dose a convulsing Myrtle with juice derived from pounded plant leaves to expel ascarid nematodes from her stomach. In another, he injected a dilute solution of bichloride of mercury and muriate of ammonia into his colon with a syringe to overcome a serious attack of amoebic dysentery while 10 days from the nearest doctor (this also worked for Carme on the 9-month expedition).

With all their accomplishments, Meb and Carme had their setbacks and human failings, as Mel indicates. He briefly traces his own career and provides vignettes of his parents' and siblings' lives after their return to the U.S. (Part Five - Epilogue).

This most interesting and unusual combination biography/autobiography explores an area and an historic time period unfamiliar to the general public. It is a unique

contribution because it goes beyond a simple private retelling of "family-stories-for-the-grandchildren" to offer a lively and vivid picture of life on a Columbian coffee plantation. It describes routines, traditions, and family festivities in such a way that the reader is brought into the daily life and interactions of the family and plantation workers. The book's form of short discussions of the lives of Mel's grandparents, parents, and siblings interspersed with detailed discussions of Meb's birding expeditions is an effective way of presenting the material. All this is set in a thoroughly researched and colorful background of Columbian urban and plantation development in the early 1900s. The book's bibliography is a plus for those who wish to explore this subject more thoroughly. In sum, this book is a valuable contribution not only as a warm tribute to a remarkable and hardworking family but also as an exploration of a period in Columbian history that has ended because of radical economic and political changes.

Vic and Deborah Kennedy
Horn Point Laboratory, Cambridge MD

A Spanish Edition of "Vista Nieve" has also been published in Colombia, South America and is available from CENI-CAFE, Chinchina, Caldas, Colombia; FAX (57)68-504723; Cenicafe@cafedecolombia.com; Phone:(57)68506550 Ext. 172. Cost per copy \$30.00 (including shipping and handling). The Spanish Edition is also available in the United States from The Twiggs Company, Mrs. Denise Twiggs, 2843 Samco Road, No. V, Rapid City, South Dakota 57702. Phone: 1-956-748-4350, FAX 605-341-0020. Cost per copy \$30.00 (including shipping and handling).

Protozoa Continued from page 7

zoans in general, not just those that might occur in aquaculture ponds.

The guide, printed on heavy, glossy paper, is relatively small at 9.5 x 6.75 inches and only 54 pages. It is spiral bound and therefore lies flat making it easy to use while looking through a microscope. There are few printing errors. It certainly fulfills its stated objective to "provide a simple means of identifying the main groups of protozoa found in aquaculture ponds" and will be useful in that respect for aquaculture technicians and possibly also for more highly trained professionals. I've already found it useful, but not for a sample from an aquaculture pond. However, users must realize that the guide only touches on the myriad protozoa that may be present in a body of water and more extensive references, such as those in the bibliography, will be needed if cells are to be identified to more specific taxonomic categories.

Rita Horner
School of Oceanography, University of Washington

Happy 10th Birthday Recruits!

A record number of students participated in this year's meeting and we took the opportunity to hold a special lunch meeting to discuss future plans and directions of The Recruits. The main purpose of this meeting was to encourage more student involvement and to discuss ways that The Recruits might assist NSA and ways to increase student participation in NSA activities and conferences. Ideas included an on-line database for jobs, an email listserve, a more formal gathering of The Recruits at the New Orleans meeting (suggestions included a lunch, a pancake breakfast, a reception), organization of a special session for students on Science Communication for New Orleans (April, 2003). Topics that might be covered include preparation of manuscripts for publication, poster presentations, grant applications, resumes, etc. Sandy Shumway has agreed to help us with this.

Student helpers are needed at all NSA meetings and their participation is not limited to audio-visual activities. Assistance is always needed at the sales table (remember: all proceeds here go to The Student Endowment Fund) and registration table, the auction, and with other miscellaneous tasks. It was suggested that students' name badges at the next conference be a different color so that students can identify each other and network. Even if you do not receive a travel award for the conferences, your help is needed and expected!

Aquaculture '04, the triennial meeting of NSA, WAS and the AFS Fish Culture Section is scheduled for March 1-5, 2004. Plans are already underway to make it easy for students to attend (e.g. lots of available rooms, opportunities to earn money at the conference) so start planning now!

The Recruits will only be as useful and active as YOU make it. Please email your ideas, questions, concerns and gripes to any of the student representatives or any members of the EXCOM (see back page of Newsletter for contact information).

The Recruit leaders for 2002-2003 are: Steve Allen (stevenmallen@hotmail.com), Nature McGinn (watch this space.....she's moving to UC Davis!) and Maille (that's Molly.....) Lyons (m.lyons@uconn.edu).

If you are interested in any of the topics above or have other suggestions, PLEASE contact us. We all look forward to hearing from you!!!!

Cheers,
Steve Allen

Audit-Budget-Finance Update

Total revenues for the 2000-2001 fiscal year (October 2000 through September 2001) were \$239,573 and expenses were \$171,452 for an increase of \$68,121 to our overall balance, which ended the year at \$119,585 including \$22,149 in Student Endowment Funds.

Administrative revenues and expenses for 2000-2001 were \$46,702 and \$34,783, respectively, for an increase of \$11,919. Expenses include \$23,122 of administrative revenues which were transferred to the Publications Cost Center. Publication revenues were \$160,662 and expenses were \$132,170 for an increase of \$28,491. Revenues from "Aquaculture 2001" in Orlando were \$26,767 while expenses were \$2,619 for an increase of \$24,147.

The proposed budget for the 2002-2003 fiscal year, which begins October 1, 2002 projects a gain of \$14,850 from administrative activities, a decrease of \$11,400 from publications, and a gain of \$9,900 from our annual meeting in New Orleans in April 2003. If these revenues and expenses are realized it would increase the NSA balance by \$13,350. Since the *Journal of Shellfish Research* is our most important product, and because it is expensive to produce with the quality we expect and receive, we must realize that its production will generally exceed publication revenues. These excess costs are subsidized by administrative and meeting revenues.

NSA financial ledgers received extensive review in late 2001, after the close of the 2000-01 fiscal year when the books were transferred from Dan Kreeger to new treasurer Dave Bushek. A review consists of analyzing the financial data presented by the treasurer and is substantially less in scope than an audit, the objective of which is the expression of an opinion regarding the financial statements taken as a whole. Accordingly, no such opinion is expressed. Based on this review, however, there appear to be no material modifications that should be made to the 2000-01 financial statements in order for them to be in conformity with generally accepted accounting principles for nonprofit organizations.

George Abbe
Audit-Budget-Finance Committee

Metamorphosis

Marie-Claude Archambault recently defended her Master's in Oceanography at Dalhousie University in Halifax, Nova Scotia, under the supervision of Drs. Jon Grant and Monica Bricelj. The title of her thesis was "The effects of clay used in the mitigation of harmful algal blooms on the growth rate of juvenile hard clams (*Mercenaria mercenaria*).

AQUACULTURE '04

AQ'04 will be held March 1-5, 2004, in Honolulu, Hawaii. The venue is the spectacular new Conference Center and they promise perfect weather.

As you all know, our profit at this meeting is based exclusively upon member participation. So start planning now. If you are interested in organizing a special session or if you just have suggestions for topics, send them to me (sandra.shumway@uconn.edu) or Evan Ward (evan.ward@uconn.edu). If we don't hear from you, you'll be hearing from us!! Dr. Jane Lubchenco has agreed to give the plenary lecture and that will be followed by a panel discussion.

Rooms have already been secured at several hotels ranging in price from \$77-\$139/night. Special emphasis is being put on aiding student participation. In addition to inexpensive rooms, our usual competition for registration and free room will be held. Further, the suite reserved for the Program Chair is being donated as additional student accommodation. Opportunities for students to earn cash during the conference will be made available by the Conference Managers, e.g. audio visual, stuffing bags, poster organization, etc.

Arrangements are still being made for airline discounts, rental car discounts, post-conference tours and other amenities.

Any and all suggestions welcome,

Aloha!

Sandy Shumway, Program Chair

Student Endowment Fund Fundraising

A fund raising program was initiated in 2001 to increase the revenue within the Student Endowment Fund. A three-fold brochure was developed and mailed out to the entire membership of the Association in September. There were 13 responses totaling \$2,362 with donations that ranged from \$25 to \$1,000. Nancy Lewis, the NSA bookkeeper, indicated that another \$635 was donated in smaller amounts attached in members' annual membership renewal. At the annual meeting, the Student Auction raised \$1,727. This was only attainable through the generous donations of t-shirts, homebrew, wine baskets, funky shellfish jewelry, beautiful antique china, some classic shellfish reports, and some registrations for upcoming meetings. This makes a total of about \$4,725, a great start for the fund drive.

All would probably agree that support for the Student Endowment Fund that helps to fund the travel for students to attend and present their work at the Annual Meetings is a noble concept. It would be wonderful to have a larger participation by more members in this fundraising process to show that support.

The EXCOM, the Revenue and Finance Committee, and the Student Endowment/Awards Committee gratefully thanks those who made auction donations, financial contributions, and in-kind support, and hope that it will continue and increase in the future.

Gef Flimlin



Gary Wikfors and crew provided wonderful entertainment in Mystic.

Upcoming Meetings

American Society of Limnology and Oceanography 2002

Summer Meeting: June 10-14, 2002, Victoria Conference Centre, Victoria, BC, Canada. The theme for the meeting is Inter-disciplinary Linkages in Aquatic Sciences and Beyond. For more information, contact Helen Schneider Lemay at phone 254-399-9635, email: business@aslo.org or visit <http://www.aslo.org/victoria2002>.

Fourth International Conference on Recirculating Aquaculture: July 18-21, 2002, Hotel Roanoke and Conference Center, Roanoke, VA. For more information, phone 540-231-5182 or visit www.conted.vt.edu/aquaculture.htm.

American Malacological Society 68th Annual Meeting: August 3-7, 2002, Lightsey Conference Center, College of Charleston, Charleston, South Carolina. For more information contact Rob Dillon at phone 843-953-8087, email: dillonr@cofc.edu or visit: http://www.cofc.edu/~dillonr/AM_S2002.htm.

Fourth International Symposium on Aquatic Animal Health: September 1-5, 2002, Sheraton New Orleans Hotel, New Orleans, LA. For information, contact ISAAH2002 at Department of Pathobiological Sciences, School of Veterinary Medicine, Louisiana State University, Baton Rouge, LA, 70803, fax 225-578-9701, email: ISAAH2002@vetmed.lsu.edu or visit web site www.vetmed.lsu.edu/isaah2002.htm.

The 6th International Symposium on Aquatic Nutrition: September 3-6, 2002, Cancun, Mexico. Coinciding with AQUAMAR 2002. For more information, visit web site <http://eventos.cicese.mx/VI Symposium> or email: visina@hp.fcencias.unam.mx.

Lobster College 2002: September 12-15, 2002. Organized by the Lobster Institute, University of Maine. For more information, contact Cathy Billings at phone 207-581-2751, email: cathy.billings.umit.maine.edu or visit www.lobsterinstitute.org.

Aquaculture Canada '02: September 17-20, 2002, Delta Prince Edward Hotel, Charlottetown, PEI Canada. The 19th annual meeting of the Aquaculture Association of Canada. For more information contact Cyr Couturier at phone 709-778-0609, fax 709-778-0535, email: cyr@mi.mun.ca or visit www.mi.mun.ca/mi/aac.

International Workshop on Restoration of Benthic Invertebrate Populations: Genetics, Diseases & Ecology: November 9-12, 2002, Coquimbo, Chile. Sponsored by the Universidad Catolica del Norte. For more information, phone (56) 51-209813, email: restoration@ucn.cl or visit <http://herradura.ucn.cl/restoration>.

6th International Conference on Shellfish Restoration: November 20-24, 2002, DoubleTree Guest Suites, Charleston, SC. For more information, contact Elaine Knight at phone 843-727-6406, email: elaine.knight@scseagrant.org or visit www.scseagrant.org.

Aquaculture America 2003: February 18-21, 2003, Kentucky International Conference Center, Louisville, KY. For more information, contact the conference manager at phone 760-432-4270 or email: worldaqua@aol.com.

Sea Urchin 2003: March 25-27, 2003, Puerto Varas, Chile. For more information, visit www.ifop-aquaculture.cl/seaurchin2003/index.html.

Benthic Ecology Meeting 2003: March 28-30, 2003, University of Connecticut, Groton, CT. For more information, visit www.marinesciences.uconn.edu.

National Shellfisheries Association 95th Annual Meeting: April 13-17, 2003, DoubleTree Hotel, New Orleans, LA. NSA Vice-President Lou D'Abramo is the Program Chair; see the back page for his contact information.

National Conference on Coastal and Estuarine Habitat Restoration: April 13-16, 2003, Hyatt Regency Inner Harbor Hotel, Baltimore, MD. For more information, visit <http://www.estuaries.org/> or contact Heather Bradley, Conference Coordinator at Restore America's Estuaries, Phone: 703-524-0248 or email: hbradley@estuaries.org.

14th International Pectinid Workshop: April 23-29, 2003, Hilton Hotel, St. Petersburg, Florida USA. For information visit workshop web site at <http://conference.ifas.ufl.edu/scallops/> or contact Beth Miller-Tipton, Conference Coordinator, Phone: 352-392-5930, fax 352-392-9734 or email: bmiller-tipton@mail.ifas.ufl.edu.

World Aquaculture 2003: May 19-23, 2003, Bahia Convention Center, Salvador, Brazil. For more information, contact the conference manager at phone 760-432-4270 or email: worldaqua@aol.com.

Aquaculture 2004: March 1-5, 2004, Hawaii Conference Center, Honolulu, Hawaii. International Triennial Conference and Exposition of the National Shellfisheries Association, American Fisheries Society Fish Culture Section and the World Aquaculture Society. For more information, contact the conference manager at phone 760-432-4270 or email: worldaqua@aol.com. Also, see page 10.

If you would like to announce any meetings, conferences or workshops that might be of interest to NSA members, please contact Chris Davis (see back page for contact information).

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