

QUARTERLY NEWSLETTER

ORONO, ME

June 2012

Presidents' Message

Start with a diverse mix of very good science, showcase it in a great venue in beautiful Seattle, and throw in the traditional Ken Chew Chinese dinner; it just doesn't get any better. I hope you enjoyed the 104th Annual Meeting of the National Shellfisheries Association as much as I did. From the comments we have received, you felt the conference was



informative as well as entertaining. There are so many people to thank for their contributions to the meeting's success, from session organizers to seafood and auction item donors, but in particular I'd like to acknowledge Sandy Shumway, Joth Davis, Steve Allen, Sarah Kingston, and Karolyn Mueller Hansen for their tireless efforts and attention to detail.

The program was well organized and high quality, addressed a broad range of topics, and, from my perspective, quite interactive. The plenary speakers were a great asset to the meeting. Their presentations each morning were interesting and inspiring, and set the tone for the technical sessions to follow. Responses to the post-conference survey strongly supported continuing this relatively new component of the meeting program.

With every annual meeting we have transition within the NSA Executive Committee. It is my pleasure to speak for all NSA members in acknowledging and thanking those who have completed their terms of office, including outgoing Secretary, Marta Gomez-Chiarri, Vice-President, Gef Flimlin, and Member-at-Large, Steve Allen. At the same time, we welcome and congratulate our newly elected members, Vice-President, Bill Walton, Secretary, Steve Allen, and Member-at-Large, Nature McGinn. We appreciate all of your dedicated work on our behalf.

The change in officer positions makes for a great segue into my next topic, the Student Recruits. You see, at one time both Steve and Nature were Chairs of the Recruits and now serve on the NSA Executive Committee. NSA is dedicated to encouraging and supporting students because becoming an actively engaged member of our society often begins when we are students. I'd like to sincerely thank our recently graduated Co-Chairs of the Student Recruits, Stephanie Reiner and Maxine Cheney, for the great job they did over the past two years. At the same time, I would like to welcome Maria Rosa and Allison Mass, who stepped in and tackled the challenge of arranging student activities in Seattle. Student participation at the 104th NSA was inspiring; over 80 students attended and nearly 70 gave presentations of their research. Special thanks to Maria, Allison, and their fellow

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Susan Ford (left), Professor Emeritus and John Kraeuter (right), Associate Director of the Haskin Shellfish Research Laboratory of Rutgers University each were recognized as the Honored Life Members of NSA at the 104th Annual Meeting in Seattle. Presenting the award to Drs. Ford and Kraeuter is NSA President LeRoy Creswell (center). More on the awards can be found on page 3 of this Newsletter and in an upcoming issue of the Journal of Shellfish Research.

In this issue:

- Bridging the Gap
- Membership Report
- Student Presentation Awards

Recruits' Corner



Hello Recruits!

We are back from a very fun and successful 104th Annual Meeting of the NSA in Seattle, WA. Seattle was a great host city and the students had the opportunity to enjoy many of sights and attractions the city had to offer, especially during the oyster

tasting, pub crawl and scavenger hunt activities. Our many thanks to Lisa Crosson from the Pacific Coast Chapter of NSA for her initiative and help in coordinating the oyster tasting and pub crawl. The crawl was made possible through the generous support of Taylor Shellfish Farms who deserve an extra big thanks for opening their store to the students for the mixer as well as sponsoring the event. The scavenger hunt was also a rousing success, with several teams finding most of the items in the list. Congratulations to the first place winners Malwenn Lassudrie, Stephan Classen, and Jacob Goodwin (see photo at right).

Much of the success of the 104th Meeting was due to the participation of the Recruits. Many students volunteered to supervise the A/V during sessions, helped sell items at our sales booth, and assisted at the registration table. It was so wonderful to meet the Recruits who made it to the meeting and hear about their research and ideas! The Recruits were very well represented at this meeting. There were 84 student registrants, many of whom presented in one form or another, including 70 oral papers and 34 posters.

The plenary talks and four concurrent sessions at the meeting provided students with plenty of learning opportunities while the breakfast, socials and other events providing ample time for networking. The recruits would like to extend a special thank you to Sandy Shumway for taking the time to present the special session titled "So you want to publish a manuscript". She provided relevant and useful insight into the publishing process from an editor's perspective and was on hand afterwards to answer student questions.

For those of you who couldn't attend the Seattle meeting or participate in some of the activities - don't worry! Next year in Nashville we plan on repeating our successful bar crawl, scavenger hunt, and more. Come meet not only other NSA recruits, but students from the World Aquaculture Society and the Fish Culture Section of the American Fisheries Society. The 105th Annual Meeting promises to be a great event and we look forward to seeing you there!

Maria Rosa and Allison Mass Recruits Co-Chairs



Congratulations to Malwenn Lassudrie and Stephan Classen, two of the three winners of the scavenger hunt at the 104th Annual Meeting in Seattle. They took a moment during the meeting to display their winnings. Be sure to attend the 105th NSA in Nashville for your chance to gain fame and treasure in the next scavenger hunt.



FUTURE NSA MEETINGS

AQUACULTURE 2013

Nashville, TN February 21 – 25, 2013

NSA 106th Annual Meeting Jacksonville, FL March 29 – April 2, 2014

NSA 107th Annual Meeting TBA

AQUACULTURE 2016 Las Vegas, NV February 22 – 26, 2016

Newest Honored Life Members Exchange Accolades

At the 104th Annual Meeting in Seattle our current Publication Committee Co-Chairs Drs. Susan E. Ford and John N. Kraeuter were inducted as Honored Life Members of the National Shellfisheries Association. John and Susan are long-time friends and colleagues and we thought it would be fitting for them to present each other with their respective awards without knowing the other was to do the same. John was invited up to the stage, first, where he presented Susan with her award while recapping many of Susan's scientific achievements and service to NSA. Susan accepted her award with grace and style, though she was clearly surprised by the standing ovation from the audience. After she caught her breath and concluded her acceptance remarks, Susan told John not to sit down so fast and began to read through a litany of achievements and service that brought John the same honor and recognition. It was a poignant moment that was enjoyed by all in attendance.

Susan Ford's recognition by the Association dates back to 1971 when she won the Thurlow C. Nelson Award for her presentation "MSX" - 10 Years in the Lower Delaware Bay'. The published record indicates that she was the fifth recipient of this award. Though Carriker (2004) notes the record may be incomplete, it is likely that she was in fact the first woman to receive this particular honor. Susan's contributions to the field are well recognized by her peers where she enjoys the highest level of respect. She has been appointed to the editorial board of several journals, including the Journal of Shellfish Research, Diseases of Aquatic Organisms, and Journal of Invertebrate Pathology, during her career. Susan is routinely requested to serve as an expert on national and international review panels, and currently serves as the only U.S. representative on the ICES 'Working Group on Pathology and Diseases of Marine Organisms'. Susan has always preferred to work behind the scenes in NSA; she has served in a variety of appointments and volunteer posts including Newsletter Editor, Awards Committee Chair, Student Presentation Judge, session organizer, local site conference committee, NSA Historian, and Co-Chair of the Publications Committee. As Historian, Susan organized and moderated the Centennial Roundtable, which is available on our website as a transcript or as a CD recording. Her most recent accomplishment was negotiating the agreement to place JSR online with BioOne. Susan obtained free access to JSR for members along with royalties from BioOne that, to date, have increased revenue to support the production of the Journal. This was no small feat. If done poorly, many EXCOM members feared an online presence would result in lost revenue desperately needed to support the Journal. Susan found a way to provide online access to JSR without risk. In fact, our online presence has increased revenues and JSR's citation index. BioOne was so impressed that they asked Susan to be a member of their Board of

Directors.

John Kraeuter is also well-respected for his work on shellfish. His enthusiasm for and expertise in estuaries, sedimentary fauna, and hard clams, in particular, is best embodied in the book Biology of the Hard Clam he coedited with Mike Castagna. His research has always bent towards the applied side, often directly supporting fisheries and aquaculture. He has served on countless committees locally, regionally and nationally; on which he is particularly known for his reliability - if he says he'll do it, you will rarely have to remind him - and, his penchant to play the devil's advocate or to point out the obvious - "I mean come on folks..." - when academics stray from dealing with the problem at hand. We're not sure when John joined NSA, but he has certainly been an active force since at least 1990 when he was appointed Chair of the Constitution Committee and updated the Constitution and By-Laws, a task long overdue at the time. The following year he served as Vice-President and Program Chair for the annual meeting, the same meeting where he was elected to serve as President. As President, John recognized the need to put the organization on sound fiscal footing and developed the plan, followed to this day, to maintain one year's operating funds in reserve to ensure the organization can persist through economic troubles. John has served in various capacities since, either through the Past-Presidents Committee or simply at the request of the EXCOM. He was instrumental, behind the scenes again, in collecting and collating materials for Mel Carriker's Taming of the Oyster which chronicled the history of NSA. John has been working tirelessly with Susan Ford on the Publications Committee providing advice and oversight to the Journal, the Quarterly Newsletter and the website.

John and Susan were nominated for the Honored Life Member Award because of their years of dedicated service to NSA, as well as their vast contributions to the fields of shellfish biology, ecology, physiology, pathology, aquaculture, and fisheries. They exemplify the kind of professionals that all NSA members should seek to become. Both are recipients of the Wallace Award, which recognizes their efforts to facilitate cooperation between industry, academia and government. Although each of them stands out based on their individual records, they were nominated together because they have worked as a team for many years, not only in their research where they have often been co-PIs on projects, but also in support of the Association. Though they ask no recognition, it is abundantly clear that their service, accomplishments, mentoring, and leadership in the Association have earned them the well-deserved recognition as Honored Life Members of the National Shellfisheries Association.

Congratulations to Susan and John!

David Bushek, Ryan Carnegie, and Gef Flimlin

Note: Comprehensive biographies will appear in the *Journal* of Shellfish Research.

104th Annual Meeting Huge Success

With over 400 registrants, more than 300 talks and 70 posters, the 104th annual meeting in Seattle is history. Again, the plenary speakers were a major success and very popular. A special thanks to Bruce Menge, Dennis Hedgecock, Ray Hilborn, and Aad Smaal for starting each day with interesting and thoughtful presentations. The program was strong and that is due entirely to the folks who organized sessions and those who traveled to Seattle to present their work. Thanks to all!

So many people helped to make the meeting a success that it is difficult to know where to begin with the thank-you's. So, in no particular order, let's begin with The Organizing Committee who spent many hours doing a lot more than organizing and their efforts were obvious. Joth Davis was our "man on the ground" and took care of a lot of menial but important tasks on the local scene. He was also responsible for gathering the shellfish for the reception and his company made a sizeable contribution to the sponsorship of the conference. Thanks, Joth! Leroy Creswell, Steve Allen, and Nature McGinn all worked tirelessly, and a huge thanks to Karolyn Hansen for working far and above the call of duty on the program and other needs. Chris Davis diligently kept track of the money, and Denny Miller (Sheridan Press) was, as always, indispensible and made sure that the program was ready and printed on time. Sarah Kingston again took charge of the registration table and things ran flawlessly - this could be a second career for her! A big cheer for all of the students, kept to schedule by Maria Rosa and Allison Fitzgerald. They ably handled the loading of talks, helped at registration, organized the student sales table, delivered items at the auction and generally helped out willingly whenever asked.

For an outstanding President's Reception, thanks to the seafood donors who provided the amazing shellfish for the opening reception: Brenner Oyster Co., Bay Center Farms, Hama Hama Co., Chelsea Farms, Pemaquid Oyster Company, Baywater Shellfish Farms and Taylor Shellfish Company. And while we are recognizing Taylor Shellfish, let's also thank them for what was, by all accounts, the best student outing ever. Taylor Shellfish Company generously hosted the student reception complete with shellfish and liquid refreshments at the Taylor Shellfish Melrose Market – see photo of a lot of happy students at right – and the culinary team at the Renaissance who turned it into a seafood extravaganza.

The staff at the Renaissance were amazing, beginning with our event manager, Karen Tanaka, and a long list of accommodating and pleasant staff, and the meeting ran seamlessly. THANKS to Karen and all of the following members of the Renaissance Team: Ernie Timog, Richard Frame, and Mark Talbert and their staff, David Acevedo, Carter MacDonald, Armando Trejo, Shane Butch, Allen Severino, David Lambert, Mofeed Awad, Biak Cin, Efren Gorospe, Frian Matro, Rina Sluys, Ron Ong, Rick Duque, Rolando Quiba, Maria Austin, Gina Lustina, Buba Jabang, Cynthia Woolery, Merlyn Schumacker, Solomon Tedla, Rex Sarmiento, and Timothy Loken. Kristofer Forrest and his staff from Swank AV, Saul Contreras, Patrick Buxton and Kellen Mills made sure that the projectors and those pesky cables functioned almost flawlessly.

A special thanks to our sponsors: NOAA Aquaculture, the Oyster Recovery Partnership, Taylor Shellfish Farms, South Carolina Sea Grant, Oregon Sea Grant, Washington Sea Grant, Florida Sea Grant, California Sea Grant, Pacific Coast Shellfish Growers Association, East Coast Shellfish Growers Association, The School of Aquatic and Fishery Sciences at the University of Washington, the Puget Sound Restoration Fund, Baywater, Wiley-Blackwell Science Publishers, Elsevier, and The Sheridan Press. In addition, we had several enthusiastic exhibitors, and we truly appreciate their support. The Ocean Observing Systems: NANOOS, SCCOOS, AOOS, CeNCOOS, AquaTechnics, YSI, BioVantage, and Reed Mariculture all added immeasurably to the poster and display portion of the program.

In response to post-meeting comments last year, we got larger screens, better laser pointers and free internet, so those comments didn't show up this year. But, as with any conference, there were a few things that people didn't like and suggested as changes for future meetings. Some found it annoying that there were meetings on the third floor, others wanted more distance between poster boards. Other notes from the surveys included: videos embedded in talks did not always work well (rarely do, many meetings ban them), requests for more free time, several asked for cookies at the breaks, elevators were slow, more affordable registration fees, longer lunch breaks, student breakfast every day (!), a map in the meeting book, more breakfast options, auction went too quickly (aghhh!), one person didn't like the name badge holder, several wanted more drink tickets, a request for an author index in program, snacks at the closing reception, and affiliations printed on name tags. The overwhelming 'complaint' was the number of moderators who did not keep



to time, some allowing speakers to continue well into the following presentation.

Now, what to do about these comments? Some can be easily addressed, others not. Some decisions are dictated by costs, others by space limitations and arrangements. We can certainly increase the length of the breaks and lunches; but remember, that means eliminating time available for talks, and that will mean people complaining that their requests for oral slots were not met. Snacks, more drink tickets and other amenities are also possible, but would mean an increase in registration fees. Contrary to what some think, our registration fees are fairly low compared to many other groups and we offer many more amenities than those more expensive meetings. We have maintained the same registration rate (and hotel rates) for several years in spite of rising costs for everything we offer. We will strive to keep those costs as low as possible for as long as possible, but it's a balancing act. In short, more drinks and cookies will mean higher registration fees!

Next year we will join the Triennial, Aquaculture 2013, in Nashville, Tennessee. In 2014 we will be in Jacksonville, Florida. The latter is an outstanding venue with easily accessible restaurants, pubs, food court and other amenities within a block of the hotel. If anybody has any suggestions for either of those meetings, let us know!

See you in Nashville!



Presidents Message... continued from page 1

students for all of their behind-the-scenes efforts loading presentations, and manning the registration and sales tables.

I had the special opportunity as NSA President to greet the students at their annual breakfast, encourage them to get to know us "old-timers", and learn some NSA history. I'd like to give special mention to the student contingent from Medgar Evers College in Brooklyn, New York, a campus of City University of New York. Although it's a fairly small school with an enrollment around 7,000, over 1,000 are biology majors! Seven of their finest students attended the meeting. No doubt you saw their posters at the reception. Their advisors, Drs. Margaret Carroll and Edward Catapane, first brought students to the 2008 NSA Centennial Celebration in Providence and they have brought students to each meeting since! In Dr. Catapane's words, "The students are always eager to attend the NSA conferences and feel that it is one of the most rewarding and enjoyable conferences to attend".

The Auction Evening is always a special favorite of the students, and this year's giant Geoduck "Mistress of

Ceremonies" continued the tradition of having a fun time. Yes, our inimitable auctioneer for the Student Endowment Fund Auction never fails to please and produce. The SEF Auction in Seattle successfully generated \$3,000 for the fund.

Please join me in congratulating Drs. John Kraeuter and Susan Ford, recipients of the NSA Honored Life Member Award. For the Honored Life Member Award the National Shellfisheries Association selects individuals who have made substantial contributions to shellfisheries science, education, the industry, and/or the National Shellfisheries Association. John and Susan have made contributions to them all. A tribute to their outstanding accomplishments is on page 3 of this *Newsletter*.

The 105th NSA conference next year in Nashville will be a Triennial in collaboration with the World Aquaculture Society and the Fish Culture Section of the American Fisheries Society. I always enjoy the triennial meetings, in part, because they have an impressive trade exhibition, and I have a chance to learn about the latest "tools of the trade" in shellfish culture. We are currently soliciting ideas for special invited session topics for the NSA technical program in Nashville. If you are interested in volunteering to organise a special session, or if you have any ideas for topics, please contact Dr. Sandy Shumway (Chair AQUACULTURE 2013 Program Committee), Steve Allen (NSA Program Committee Representative), or me.

Spring is transition time of the year. The academic year is coming to a close for faculty and students. Summer projects, field trips and activities are just beginning, and if you live in Florida (as I do), it's time to plan for the hurricane season. I hope you have a productive and enjoyable (and meteorologically uneventful) summer, and I look forward to seeing you in Nashville for the 105th NSA.

LeRoy Creswell President



Drs. Catapane and Carroll have been bringing groups of talented undergraduates from Medgar Evans College to the annual meeting since 2008. Pictured from left are Christopher Welch, Dr. Edward Catapane, Dr. Margaret Carroll, Keron Matthew, Tierra Cochran, Zeekanapi Bandaogo, and Cherryle Brown.

Student Awards Presented at NSA Seattle 2012

With the Seattle NSA meeting in the rear-view mirror, our members are likely anticipating the pleasure that late spring days bring and the field season ahead. A significant role of our Association is to acknowledge the success and advancement of our student members. Thus, as Chair of the Awards Committee, I have the distinct pleasure to acknowledge the recipients of NSA merit-based student awards.

The Melbourne R. Carriker Student Research Grant, the Michael Castagna Student Grant for Applied Research, and the award for Best Student Paper Published in the Journal of Shellfish Research in 2010 were presented at the Annual Business Luncheon in Seattle, this past March. There were eight applications for the Melbourne R. Carriker Student Research Grant and four applications for the Michael Castagna Student Grant for Applied Research submitted for consideration in 2011. As Chair of the Awards Committee I received assistance in reviewing the applications from LeRoy Creswell, Dave Bushek, Christopher Davis, Steven Allen, Daniel Cheney, Brent Vadopalas, Brett Dumbauld, Steven Roberts and Dennis Hedgecock. Their assistance is greatly appreciated. Grant applications were carefully evaluated based on three criteria, the importance of the work, the quality of the science, and the quality of the writing. Additional information was provided via letters of recommendation from each student's degree advisor. After careful evaluation of the quality of the proposed research, and whether hypotheses were clearly identified and coupled with a realistic research plan, the winning proposals clearly stood out.

The Melbourne R. Carriker Student Research Grant was awarded to Brian Cheng for his proposal titled "Climate Change and Species Interactions in an Estuarine Community." Brian is a Ph.D. candidate at the Bodega Marine Laboratory. The Michael Castagna Student Grant for Applied Research was awarded to Julie Davis for her proposal titled "Effect of Gear Orientation and Stocking Density on Eastern Oysters, *Crassostrea virginica*, in an Adjustable Long Line System." Julie is a M.S. student at Auburn University. Julie was presented with a check at the Annual Meeting in Seattle. Because Brian was unable to attend, his award was delivered after the meeting.

I want to encourage students to apply for these two Student Research Awards. The deadline for applications is in late November so there is plenty of time to start putting your proposals together. The prize is significant (\$1,250) and we would like to see more students applying. More details on the application procedure will be posted in the next edition of this *Newsletter* and can be found at any time on the Recruits' page of the website (https://shellfish.org/recruits.htm).

The Best Student Paper Published in the Journal of Shellfish Research in 2010 was also awarded at the 104th Annual Meeting in Seattle. Sandy Shumway identified a total of 33 student authored papers that appeared in the Journal during 2010. Copies of these papers were distributed to a group of reviewers that included me, Sandy Shumway, LeRoy Creswell, Elizabeth von Brand, Neil Bourne, Juliana Harding, Jay Parsons, Islay Marsden and Nature McGinn. I would like to acknowledge and sincerely thank the people who evaluated the papers, as this process requires a significant time commitment to read, evaluate and re-evaluate all the work under consideration. Based on the committee recommendation, the Best Student Paper published in JSR in 2010 was awarded to MacKenzie L. Zippay for the paper she co-authored with Gretchen E. Hofmann titled "Effect of pH on gene expression and thermal tolerance of early life history stages of red abalone (Haliotis rufescens)".

Congratulations to all the awardees. Again, I encourage students to submit applications for the research awards in the months ahead and to submit their well-written manuscripts to *JSR* for publication.

Joth Davis Awards Committee Chair



Three of Association's top student awards were announced during the Business Luncheon at the Association's 104th Annual Meeting in Seattle this past March. Julie Davis (left) was presented with the Michael Castagna Grant for Applied Research, while Brian Cheng (center) was awarded the Melbourne R. Carriker Student Research Grant, and Mackenzie Zippay (right) was honored for the Best Student Paper Published in the Journal of Shellfish Research in 2010.

Call for Session and Technology Transfer Ideas

The Northeast Aquaculture Conference & Exposition, Milford Aquaculture Seminar, and International Conference on Shellfish Restoration will convene a special joint meeting titled "Aquaculture and Restoration: A Partnership". The meeting, which includes a trade show with 40 vendors, will take place December 12-15, 2012 at the Mystic Marriott Hotel and Spa in Groton, CT. The conference organizers are soliciting ideas for special sessions, workshops, or field trips. To suggest a topic, contact Dorothy Leonard (phone: 410-626-7206; email:msmussel@oceanequities.org).

NOAA Makes a Splash!

NOAA had a strong and welcome presence at the 104th Annual Meeting of NSA. We were most honored to have The Honorable Dr. Jane Lubchenco, Undersecretary of Commerce for Oceans and Atmosphere and Administrator of NOAA open the sessions on Thursday morning. She provided encouraging and enlightening comments, specifically regarding the newly launched National Shellfish Initiative, and praised the collective efforts of the shellfish community for bringing shellfish and shellfish aquaculture to the forefront. Dr. Michael Rubino, Director of the Office of Aquaculture, National Marine Fisheries Service, and a regular participant and supporter of NSA activities, was also on hand to continue dialogue promoting shellfish aquaculture research.

Dr. Lubchenco was presented with a Resolution recognizing her vision, and thanking her for promoting shellfish aquaculture as a sustainable, ecologically, and economically sound venture. Dr. Rubino accepted a Resolution on behalf of his entire staff for their continuing support of shellfish aquaculture and related research efforts. This year, they generously supported the participation of one speaker and several students at the conference.

We thank them all for their continued support and look forward to future collaborations!





Proclamation the 104th Meeting of the National Shellfisheries Association

tional St a Not-for Profit Corporation, and es Association, Inc. (NSA) is

Whereas, me mbers serve as officers and con a voluntary basis,

Be it Resolved that on 29 March 2012, the ational Shellfisheries Association formally recognizes and thanks

The Honorable

DR. JANE LUBCHENCO

Undersecretary of Commerce for Oceans and Atmosphere Administrator of NOAA in and dedication to the promotic the No ion's man

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nomically sound venture, and ing the National Shellfish Initiative a reality.

WE THANK YOU AND SALUTE YOU!



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it Resolved that on 28 March 2012, the National Shellfisher

Dr. Michael Rubino Director, Office of Aquaculture,

NOAA Fisheries Service

Dr. Lorenzo Juarez Deputy Director

and staff

David Alves, Kevin Amos, Jess Beck, Chris Botnick, Susan Bunsick, Alan Everson, Brian Fredieu, Laura Hoberecht, Bruce Morehead, Kate Naughten, Mit Olbrier, Christian Back, Mite Bead, Kate Naughten, avid O'Brien, Carole Reb, Mike Ru

For their continued and unflagging efforts to promote aquaculture, in particular shellfish aquaculture, and to promote the role of science as a fundamental tenet in that development WE APPLAUD THEM FOR THEIR EFFORTS





IMAGES FROM THE 104th AN

















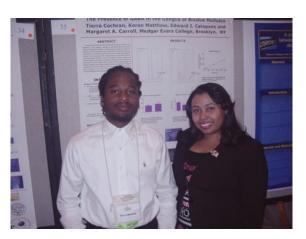


NUAL MEETING IN SEATTLE





















2012 SEF Presentation Awards

With a record breaking 65 student papers vying for the Thurlow C. Nelson Award, the Awards Committee and the gracious volunteer judges had their hands full this year. Ninety percent of the presentations had four or more judges present with an average of 5.8 per talk, although certain sessions were teeming with judges. This year's distinction for the most avid judge goes to Mike Moyer of Concordia University, Texas who scored 31 papers! Mike unseated the former champ, Peter Kingsley-Smith, who himself judged 25 papers. Thanks to these and all the other conscientious volunteers. Special thanks also to Nature McGinn who stepped in for the formerly pregnant Lisa Milke during the meeting.

Judges come into this process with different expectations, apparently, and this shows in the range of scores awarded. For example, one judge awarded a maximum of 71/100 points while another -98/100. However, if all scores are standardized so that the top score for each judge is 100, then the vast majority of papers (61 of 65) scored above an 80. Clearly, this is an advanced class. Congratulations to the students for their stellar efforts.

Many papers stood out but three clearly excelled. The three winners of the Thurlow C. Nelson Award for the 104th Annual Meeting of the National Shellfisheries Association are, in alphabetical order:

Elizabeth Brunner, Oregon State University – "A mechanism for the sensitivity of larval oyster calcification to ambient seawater carbonate chemistry".

Mackenzie Gavery, University of Washington – "Epigenetic mechanisms as a source of phenotypic plasticity in the Pacific oyster *Crassostrea gigas*".

Aude Jouaux, Université de Caen Basse-Normandie – "Summer mortality of *Crassostrea gigas* and the previous winter's climatic conditions".

The Awards Committee and judges would like to recognize Laura Eierman, Elizabeth Falwell, Allison Mass Fitzgerald, Christina Frieder, Beth Fulton, J.D. Goodwin, Jessica Hale, Lynn Chi Lee, David Metzger, and Maria Rosa, who also provided remarkable oral presentations, with Honorable Mentions. All ten of these students' talks were either highly ranked by a number of judges or received consistently high scores.

There were 32 student posters eligible for the Gordon Gunter Award. The winners of the Gordon Gunter Award for best posters are as follows:

Ashley Bulseco – "The effects of acute high pCO_2 exposure on growth and survival of *Crassostrea gigas* larvae".

Melissa Broderick, University of Florida – "Temperature threshold of northern quahog (hard clams) and evaluation of back-crossed F1 hybrids (*Mercenaria mercenaria* x *M. campechiensis*)".

Katherine Thompson, University of Massachusetts Dartmouth – "Identifying spawning events of the sea scallop, *Placopecten magellanicus*, on Georges Bank".

In addition, the Awards Committee and judges recognized Kenneth Hannum, Malwenn Lassudrie, and Maria Rosa with Honorable Mentions for their noteworthy poster presentations.

Stan Allen Lisa Milke (and Nature McGinn) SEF Awards Committee Co-Chairs

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Reclam the Bay - Volunteer Group Makes a Difference!

Community-based shellfish restoration programs continue to make a difference around the United States and the U.S. Environmental Protection Agency is recognizing the efforts of a program started by Gef Flimlin. Barnegat Bay is a well known bar-built estuary along the New Jersey shore. Many seminal shellfish studies were conducted in Barnegat Bay by NSA members such as Mel Carriker and Julius Nelson, but today the Bay is suffering from eutrophication, upland development, and a variety of other problems. Several years ago Gef initiated a program to restore the shellfish populations and told a community group that if they wanted to "reclaim the Bay" then they needed to "re-clam the Bay".

thus was born And the community-based program "ReClam the Bay". Today you can see RCTB bumper stickers as you drive around the state. Giant clams, such as those featured at the 100th anniversary of NSA, stand at prominent locations around the Bay attracting public attention and directing them to information about the Bay and its needs, including shellfish.



As Gef often points out, ReClam the Bay is an education program marketed around shellfish. On April 27, 2012, the U.S. EPA bestowed its Environmental Quality Award on the program and recognized the citizen activists at a ceremony in New York City. Well done Gef; we're proud of you and congrats to ReClam the Bay! For more information visit http://www.reclamthebay.org/.

Bridging the Gap

Diana: In some ways science education is receiving more and more attention, while in others, the gap between K-12 education and higher education in science remains, and too many talented students do not even consider science as a career outside of medicine. Mentoring high school students in science research is one way to bridge this gap, but is a daunting task for many of us. It is hard enough to mentor graduates and undergraduates that the whole notion of bringing high school students into the lab seems overwhelming! One solution I have found is to partner with a talented high school science teacher. In my case, it is Rebecca Grella - who happens to be a PhD candidate in my department while working full time at Brentwood High School here on Long Island.

Rebecca: As a high school teacher and research scientist I find it imperative to connect with those doing real-world science and to encourage my students to pursue career paths in Math and Science. How is this done? Through successful partnerships between a willing teacher and a laboratory like that of Dianna Padilla's. Dianna's lab has been a second home for my students' research questions and my own. Bridging the gap between the university and the high school offers my students the opportunity to explore and pose questions of emerging relevance. The successful team of laboratory PI and High School teacher is a rewarding experience for many, and I highly recommend it. My involvement with the Padilla lab at Stony Brook University is a model for all those looking to mentor a high school teacher. Interactions like this, open doors to new careers for students and new opportunities for educators. I have found that by engaging students in the research of the Padilla lab, my students have



Brentwood High School science teacher Rebecca Grella (left) and Diana Padilla of SUNY Stony Brook (right) have teamed up to help enhance science education in Long Island Schools. They are pictured here with Brentwood High senior Samantha Garvey (center), a semifinalist in the Intel Science Talent Search, who was invited to the White House to present her project on inducible defense in the mussel (Geukensia demissa) when exposed to the invasive Asian shore crab (Hemigrapsus sanguineus). become more focused on pursuing science-minded careers.

A successful high-school-university partnership such as ours fosters all National STEM (Science, Technology, Engineering and Mathematics) initiatives and provides students with limitless opportunities. This year we had several students advance to the final rounds of national competitions. Additionally, one of our students, Samantha Garvey, was invited to present her research findings at the White House Science Fair. As an educator, keeping my foot in the University allows me to stay aware of new methodology and techniques. The sky is the limit when working with a lab like the Padilla Lab - together we are working to encourage the next generation of informed science-minded students.

When working with individual students, we see them learn, blossom and grow into budding young scientists ready to take on the world. When working with a teacher, we not only reach those individual students, but all other students they come to work with and mentor - many hundred more than we could reach alone. A partnership like we have developed really is one of those win-win solutions to increasing science education. It is a great way to boost those Broader Impacts while doing something that is enjoyable and really makes a difference. It may sound cliché, but you really can change a student's life - and that feels pretty good!

Dianna Padilla, SUNY Stony Brook



POSTING OF JSR ARTICLES ON WEB PAGES

It is the policy of the *Journal of Shellfish Research* that authors may post PDF files of their *JSR* articles, at any time after publication, on their own or their institution's website, or both.

Membership Report

We are pleased to report that NSA membership rose 3% to a total of 680 members in 2011. Students comprised 21% of our 2011 membership, continuing the tradition of a strong student presence in NSA. The Association currently has members from 28 states and Washington, D.C., with the most members hailing from Washington, Maryland, New York, Massachusetts and Florida. At the same time, 25% of our membership resides outside the U.S. International members are drawn from 29 countries led by Canada, Japan, France and Australia. A vibrant and growing Association benefits us all, and we hope that you will suggest NSA to your colleagues as one of the best professional investments that they can make. New members may join either online or by mail (with instructions at shellfish.org/join.htm), with special low rates for students (\$45/year). As a reminder, benefits of NSA membership include:

- Hard copy delivery of and online access (shellfish. org/pubs/jsr.htm) to the *Journal of Shellfish Research*,
- A discounted member rate for annual meetings,
- Delivery of the *Quarterly Newsletter* (shellfish.org/ pubs/qnl.htm), and
- Interactions with other scientists, management officials and industry members that share your interest in shellfish (shellfish.org/membershipdirectory_ints).

We are also pleased to announce that Dr. Peter Kingsley-Smith has been appointed as a Co-Chair, joining Bruce MacDonald, Philippe Soudant and Kristi Straus on the Committee. Peter currently works as Shellfish Research Section Manager and Associate Marine Scientist at the SCDNR Marine Resources Research Institute in Charleston, South Carolina. With a strong background in molluscan ecology, dating back to his doctoral research at the University of Wales, Bangor, Peter is coming up on the 10-year anniversary of his migration to the United States. Over the course of the past decade, Peter has been a frequent presenter at NSA meetings, was recently appointed to the Editorial Board of the *Journal of Shellfish Research*, and is keen to become more involved with service to the Association. We welcome him aboard!

The Membership Committee will be seeking to improve member retention and add new members in the coming year. We will be focusing on attracting and retaining more students, more members from abroad and more members from industry. Given our current membership, surpassing 700 members is an ambitious but achievable goal. We gladly welcome your suggestions to improve any aspect of the membership experience in NSA!

Bill Walton and Peter Kingsley-Smith Membership Committee Co-Chairs

Audit-Budget-Finance 2012 Update

Total revenues for the 2010-11 fiscal year (October 2010 through September 2011) were \$339,401 and expenses were \$315,434 for an increase of \$23,967. This does not include the Student Endowment Fund (SEF) which increased \$6,484 from a year earlier. Administrative revenues and expenses for 2010-11 were \$54,415 and \$46,607,



respectively, for an increase of \$7,808. Publication revenues and expenses were \$151,056 and \$152,553 for a decrease of \$1,497. Revenues from our Baltimore meeting in March 2011 were \$133,930 and expenses were \$116,274, for a gain of \$17,656.

The proposed budget for the 2012-13 fiscal year, which begins October 1, 2012 projects revenues of \$237,900 and expenses of \$190,350. These revenues and expenses are lower than normal because 2013 is a Triennial year with Aquaculture '13 in Nashville, and most of the conference revenues and expenses are not part of our budget. Realization of these projections could increase NSA assets by another \$47,550, not counting SEF activities. Because the award-winning *Journal of Shellfish Research* is our most important product, and because it is costly to produce with the quality we expect and receive, its production expenses will sometimes exceed its revenues, as they did in 2010-11; however, by limiting the number of pages published and by having Special Issues fully paid for by sponsors, we have a much better chance to fully cover *JSR* production expenses.

Our asset base has improved dramatically during six of the last seven years, making our financial picture more solid and enabling us to provide more services for our members than ever before. I would like to take this opportunity to thank former Treasurer Chris Davis for his diligent and timeconsuming efforts managing the NSA finances during the past 6+ years. It has been a pleasure working with him. I also look forward to working with Treasurer John Scarpa during the next year as we continue to strengthen the finances of the National Shellfisheries Association.

George Abbe Financial Officer, Audit-Budget-Finance



News from the Pacific Coast Section

Warmer weather is here after yet another wet and cool winter and spring in the Pacific Northwest. Yahoo! Daylight low tides, shellfish spawning, gardens to plant and baseball! Once again, I thought I'd get a little more writing and bench work done before the new field season, but meetings and the information age are just too overwhelming.

My post-NSA meeting thanks to those who attended and experienced the Pacific Northwest at its best in Seattle, and especially the PCS members who volunteered to help with activities at the meeting. This includes the heroic efforts by board members Lisa Crosson, Sean McDonald, and Emma Timmins-Schiffman! Congratulations to the Geogonads who took the pub crawl prize and thanks to the restaurants and shellfish growers who participated (Taylor Shellfish in particular). Finally, a shout-out to NOAA for continuing to sponsor student attendees; their support really helps bring our new scientists on-board, improves meeting quality, and bodes well for our future.

The 66th Annual Pacific Coast Shellfish Growers Association/ Pacific Coast Section Conference will be held at the Tulalip Resort and Casino in Tulalip, Washington from September 25 - 27, 2012. This newly constructed resort, located 30 minutes north of Seattle on the Tulalip reservation, has a contemporary Northwest style with a large collection of Salish Tribal artwork. There are six restuarants and a casino on site, but not too far from other shopping and attractions. We are planning on a tribal welcome, barbecue, and flavor throughout. Keynote speakers have yet to be finalized, but we expect to have talks on sustainable shellfish farming from the Natural Capital project, integrated multi-trophic aquaculture, and links between food security and shellfish aquaculture. Additional activities, including the banquet, auction, and perhaps something to do with medieval cream pies, are in the works.

Thanks to all who submitted titles in May, but if you didn't submit a full abstract your work is not yet done. Hopefully you will soon be contacted by session chairs to finalize your abstracts. If not, please submit the abstract anyway. Visit our website http://www.nsapcs.org/ or call 360-754-2744 for more information. Once again financial assistance for registration and lodging is available to NSA student members through the Ken Chew Student Endowment. Students requiring assistance should contact Lisa Crosson (lisa418@u.washington.edu, 206-616-6341). Further details on conference registration and hotel rates and registration deadlines will be posted on the PCSGA website as it becomes available. We're also planning some fun activities (think cream pie) so get on-board and have a great summer!

Brett Dumbauld Pacific Coast Section Chair

Sharing Shellfish Restoration Information Through the Web

The importance of oyster reefs to coastal ecology is exemplified by the on-going oyster reef restoration efforts in most coastal U.S. states and many countries around the world. There is no consensus, however, on what constitutes success or failure of such efforts. For example, the presence of "market-sized" (3" shell height) oysters is a fishery metric, but is often used to assess "reef" restoration success even though large numbers of smaller oysters, or other reef inhabitants, may be equally important as metrics of success. In addition, what constitutes a "reef" versus a patch, or a cluster is also currently a focus of debate.

The Oyster Restoration Workgroup was established in 2004 at a workshop held in Myrtle Beach, SC with the support of South Carolina Department of Natural Resources, the SC Sea Grant Consortium, the University of South Carolina (USC), Coastal Carolina University (CCU), NOAA and The Nature Conservancy (TNC). The Workgroup has created a website (http://www.oyster-restoration.org/) to help better disseminate information on oyster reef restoration efforts. Visitors to this website can view findings from a variety of meetings and workshops on shellfish restoration, find details on upcoming events, and obtain contact information for professionals and experts working in the field. The Research and Reports section of the website contains links to the latest literature, where we have even placed information on the biology of and restoration efforts for native west coast oysters (Ostrea). Currently the site also includes section on how to monitor reefs, funding prospects, work from living shoreline efforts that incorporate shellfish species, and past and present work focusing on the U.S. A draft report from the recent Oyster Restoration Success Metrics Workshop (see the March 2012 ONL) will soon be posted to the website, along with criteria to assess specific restoration goals and ecosystem services associated with restoration efforts.

Together with NOAA and the TNC, we are soliciting your input and help in expanding the existing website to meet the needs of the shellfish ecology and restoration community, and to gather your feedback on other relevant issues (e.g., links to your relevant YouTube videos). We will soon implement a clickable "geomap" on the website with links to recent and ongoing restoration projects. We envision that this geomap will have links to websites on your restoration projects. Thus, to be successful, we need you, and others around the globe, to send us the links to your oyster, clam, scallop, and other bivalve ecological restoration and enhancement efforts. The website will have a clickable section to help you submit your information and we hope you will participate. See you soon.

Loren Coen, Keith Walters and David Bushek Oyster Restoration Workgroup

Sammy Ray to be Honored Twice in June

Sammy Ray, Professor Emeritus of Texas A&M University, Galveston, has been honored by the Harte Research Institute for Gulf of Mexico Studies for his long-standing research on oyster biology, oyster aquaculture and the health of estuaries along the Gulf of Mexico. The Harte Institute, promotes Gulf Coast research and education programs, and



fosters responsible public policy initiatives. They have named Sammy a "Harte's Hero" to honor the wisdom, mentoring and leadership he has demonstrated helping to protect and preserve the resources of the Gulf region. A reception and award ceremony was held on June 8, 2012, at the Art Museum of South Texas in Corpus Christi, TX where Sammy and other "Legends of the Gulf", Brad Lomax and the Coastal Conservation Association Texas, were formally honored by the Institute. More on Harte's Heroes can be found at http://www.harteresearchinstitute.org/outreach/ hartes-heroes. Congratulations Sammy!

Sammy is also receiving recognition for work he undertook prior to becoming a shellfish biologist. On June 30, 2012, an exhibit entitled "When Time and Duty Permit" will open on the first floor of the Smithsonian Institution's National Museum of Natural History in Washington, D.C. During World War II, Smithsonian curators recruited soldiers stationed in the Pacific to collect specimens. These soldiers contributed significantly to the Smithsonian's premier collection on the natural history of the Pacific region. When Time and Duty Permit includes the skins of 171 birds Sammy collected from New Caledonia and North China while serving as a medic in the First Marine Division. In fact, the title of the exhibit was penned by Sammy. More information on the exhibit, which runs through mid-March of 2013, can be found at http:// si.edu/Exhibitions/Search/Upcoming/. Be sure to take in this wonderful exhibit if you happen to be in the D.C. area in the coming months.

Not that Sammy is a newcomer to such notable recognition. The 104th NSA in Seattle marked the 20th anniversary of Dr. Ray's designation as an Honored Life Member in the Association. Sammy continues his research efforts as vigorously today as when he joined NSA 61 years ago. His passion for shellfish science was evident at the Seattle conference where Sammy gave two fascinating presentations, including one on the effects of a prolonged drought in 2011 on the "bumper oyster set" in the coastal bays of his home state of Texas. So, despite the accolades, it doesn't appear that Sammy intends to temper his enthusiasm for scientific discovery anytime soon....and we can all be grateful for that.

Upcoming Events

Ninth International Conference on Recirculating Aquaculture: August 24-26, 2012, The Hotel Roanoke and Conference Center, Roanoke, VA, USA. For more information visit www.recircaqua.com/.

Aqua 2012, Global Aquaculture - Securing Our Future: September 1-5, 2012, Prague, Czech Republic. For more information visit www.was.org.

Physiomar 12: September 4-8, 2012, University of Santiago de Compostela, Santiago de Compostela, Galicia, Spain. For more information visit http://www.usc.es/congresos/physiomar12/.

NSA Pacific Coast Section / Pacific Coast Shellfish Growers' Association 66th Annual Shellfish Conference & Tradeshow: September 25-27, 2012, Tulalip Resort Casino, Tulalip, WA, USA. For more information visit http://www.nsapcs.org/.

Aquaculture and Restoration: A partnership - Joint Meeting of the Northeast Aquaculture Conference & Exposition, Milford Aquaculture Seminar and International Conference on Shellfish Restoration: December 12-15, 2012, Mystic Marriott Hotel and Spa, Groton, CT, USA. For more information visit http://www. northeastaquaculture.org/. **2013 Delaware Estuary Science and Environmental Summit:** January 27-30, 2013, Cape May, NJ, USA. For more information visit http://www.delawareestuary.org/ news_pde_science_conference.asp.

Aquaculture 2013 / National Shellfisheries Association, 105th Annual Meeting: February 21-25, 2013, Renaissance Nashville Hotel & Nashville Conference Center, Nashville, TN, USA. For more information visit www.shellfish.org or https://www.was.org/WasMeetings/meetings/Default. aspx?code=AQ2013.

9th International Conference on Shellfish Safety: March 17-22, 2013, Bayview Boulevard Sydney, Syndney, Australia. For more information visit http://www.icmss2013. com/.

19th International Pectinid Workshop: April 10-16, 2013, Florianópolis, Brazil. For more information contact Guilherme Rupp, ipw2013@gmail.com.

If you would like to announce a meeting, conference, workshop or publication that might be of interest to NSA members, please contact the *QNL* Editor, Paul Rawson (prawson@maine.edu).

Officers, Committee Chairs and Staff of the National Shellfisheries Association

Mr. R. LeRoy Creswell **President** University of Florida Sea Grant Program 2199 South Rock Rd. Ft. Pierce, FL 34945-3138 Phone: (772) 834-9062 Email: creswell@ufl.edu

Dr. Chris Davis **President-Elect** Pemaquid Oyster Company P.O. Box 302 Waldoboro, ME 04572 Phone: (207) 832-6812 Email: cdavis@midcoast.com

Dr. William Walton Vice-President; Co-Chair Membership Committee Auburn University Shellfish Laboratory 150 Agassiz St. Dauphin Island, AL 36528 Phone: (251) 861-3018,ext. 2 Email: billwalton@auburn.edu

Dr. Jonathan Davis **Chair, Past-Presidents', Elections & Awards Committees** Taylor Shellfish Farms 15425 Smoland Lane Bainbridge Island, WA 98110 Phone: (360) 765-3566 Email: jdavis@bainbridge.net

Mr. Stephen Allen Secretary Oyster Recovery Partnership 1805A Virginia St. Annapolis, MD 21041 Phone: (410) 990-4970 Email: sallen@oysterrecovery.org

Mr. George Abbe Financial Officer Audit-Budget-Finance Chair Morgan State University St. Leonard, MD 20685 Phone: (410) 586-9709 Email: George.Abbe@morgan.edu

Dr. John Scarpa **Treasurer** Harbor Branch Oceanographic Institute Florida Atlantic University Fort Pierce, FL Phone: (772) 242-2404 Email: jscarpa1@hbio.fau.edu

Dr. Sandra Shumway Editor, Journal of Shellfish Research; Conference Manager University of Connecticut 1080 Shennecossett Road Groton, CT 06340 Phone: (860) 405-9282 Fax: (860) 405-9153 Email: sandra.shumway@uconn.edu Dr. Daniel Cheney 2010-2013 Member-at-Large; Chair Resolutions Committee 120 State Ave. NE #142 Olympia, WA 98501 Phone: (360) 754-2741 Email: cheney@pacshell.org

Dr. Stephen Roberts 20011-2014 Member-at-Large University of Washington 1122 NE Boat St. Seattle, WA 98195 Phone: (206) 600-4495 Email: sr320@uw.edu

Dr. Nature McGinn 2012-2015 Member-at-Large, Bodega Marine Lab P.O. Box 247 Bodega Bay, CA 94923 Phone: (707) 875-2072 Email: namcginn@ucdavis.edu

Dr. Brett Dumbauld **Chair, Pacific Coast Section** USDA-ARS, Hatfield Marine Science Center 2030 SE Marine Science Dr. Newport, OR 97365 Phone: (541) 867-0191 Email: Brett.Dumbauld@ars.usda.gov

Dr. John Supan Chair, Industry Committee 227C Sea Grant Bldg. Louisiana State University Baton Rouge, LA 70803-7507 Phone: (225) 578-6527 Email: jsupan@lsu.edu

Dr. Standish K. Allen, Jr. **Co-Chair, Endowment / Student Awards Committee** Virginia Institute of Marine Science 1375 Greate Road Gloucester Point, Virginia 23062-1346 Phone: (804) 684-7710 Email: ska@vims.edu

Dr. Lisa Milke Co-Chair, Endowment / Student Awards Committee Milford Laboratory 212 Rogers Ave. Milford, CT 06460 Phone: (203) 882-6528 Email: lisa.milke@noaa.gov

Dr. Thomas Soniat Historian University of New Orleans New Orleans, LA 70148 Phone (504) 280-7041 Email: tsoniat@uno.edu Dr. Peter Kingsley-Smith **Co-Chair, Membership Committee** South Carolina Department of Natural Resources P.O. Box 12559 Charleston, SC 29422-2559 Phone: (843) 953-9840 Email: kingsleysmithp@dnr.sc.gov

Dr. John N. Kraeuter Co-Chair, Publications Committee Haskin Shellfish Research Laboratory Port Norris, NJ 08349 Phone: (856) 785 0074 ext. 4331 Email: kraeuter@hsrl.rutgers.edu

Dr. Susan E. Ford **Co-Chair, Publications Committee** Haskin Shellfish Research Laboratory Port Norris, NJ 08349 Phone: (856) 785 0074 ext. 4305 Email: susan@hsrlrutgers.edu

Ms Maria Rosa **Co-Chair, Student Recruits** University of Connecticut 1080 Shennecossett Rd. Groton, CT 06340 Phone: (646) 413-1848 E-mail: maria.rosa@uconn.edu

Ms Allison Mass Fitzgerald **Co-Chair, Student Recruits** College of Staten Island 2800 Victory Blvd. Staten Island, NY 10314 Phone: (718) 982-3876 E-mail: allison.mass@csi.cuny.edu

Dr. Paul Rawson Editor, *Quarterly Newsletter* University of Maine Orono, ME 04469 Phone: (207) 581-4326 Fax: (207) 581-2537 Email: prawson@maine.edu

Dr. Karolyn Mueller Hansen **Webmaster (content)** University of Dayton Research Institute 300 College Park Dayton, OH 45469 Phone: (937) 229-2141 Email:hansenkm@notes.udayton.edu

Dr. Scott E. Siddall Webmaster (technical) Kenyon College Gambier, OH 43022 Phone: (740) 599-6031 Email: siddalls@kenyon.edu Dr. Paul Rawson Editor, NSA *Quarterly Newsletter* 5751 Murray Hall University of Maine Orono, ME 04469-5751

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