

National Shellfisheries Association Quarterly Newsletter



Est. 1908

2013 (3)

President's Message

As this summer winds down, I hope you have had an enjoyable and productive time whether it be sampling clams out on the mud flats, fine-tuning that lab experiment, writing up a manuscript, or simply enjoying some R&R out on the beach. Regardless, NSA staff and committee member volunteers have been busy this summer planning the next annual meeting, improving the website, editing our *Journal*, and generally keeping the NSA moving forward. With this issue of the Newsletter, editorial responsibilities have passed from Paul Rawson to LeRoy Creswell and Joth Davis. Thank you Paul for five years of hard work bringing the news of the Association to our membership. Thanks are due to LeRoy and Joth for taking on this important role. With this change in Editors comes a new masthead for this newsletter and we hope you'll like it.



George Abbe's unexpected illness and passing this summer has indeed brought sadness to all who knew him including

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Think Spring in Jacksonville!

Although colder weather lies ahead for most of us, that doesn't mean you can't start thinking about spring in Jacksonville! Make plans now to attend the 106th Annual Meeting of the



National Shellfisheries Association at the Hyatt Regency Riverfront Hotel in beautiful Jacksonville, Florida. The "River City by the Sea" boasts over 20 miles of wide, un-crowded beaches and is home to the largest urban park system in the U.S. - 80,000 acres of lush greenery. Authentic cuisine and a cosmopolitan nightlife stretching from beautiful beaches to historic neighborhoods make Jacksonville a unique conference venue. More information on the conference hotel and registration can be found at www.shellfish.org.

National Shellfisheries Association at the Hyatt Regency Riverfront Hotel in beautiful Jacksonville, Florida. The "River City by the Sea" boasts over 20 miles of wide, un-crowded

Missing George

There is no Audit-Budget-Finance Report in this issue of the Newsletter. That's the tangible recognition that George Abbe is no longer with us. It's the intangibles that count and the most difficult to capture. George was first and foremost my friend. Sometimes a big brother, other times a level-headed and thoughtful colleague and source of sound advice on matters NSA and not.

George's contributions to the NSA span 40 years and left the organization and its members much better off for it! For about 25 of those years, George and I shared much, not the least of which was the NSA annual meeting - sitting at the EXCOM together and side by side at the Business Luncheon for so many of those years. It was a small tradition, but it was ours, and we enjoyed seeing how



*George R. Abbe
1943-2013*

smoothly those meetings went, often knowing of the turmoil leading to them. Much of that ensuing calm was thanks to George. Quiet and unassuming, contemplative, thoughtful, and reserved - endearing traits, but they made it easy to take George for granted. It also meant for a long time that he

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In this issue:

- ***Jacksonville meeting information***
- ***Lobsters and razor clams***
- ***Behind the scenes at the NSA***

Recruits' Corner



Hello Recruits!

Preparations for 106th Annual Meeting in Jacksonville are underway, and the newly released tentative program promises a very productive meeting. Visit the NSA website and see some of the early highlights of this meeting, including the great plenary speakers. As you

all know, student volunteers are a big part of the meeting's success and in the coming months we will be counting on your help to make this meeting happen.

Jacksonville promises to be a great host city, and we are in the process of planning some activities, including the return of the scavenger hunt and our student mixer, for the Recruits to experience all that the city has to offer. If you have any ideas for activities, or saw something at a previous meeting and would like us to bring back, please feel free to e-mail us. We are currently looking for topics for a student panel, so if there were any items you would like us to cover or explore, just shoot us a line. Any and all suggestions are always welcome.

We hope the NSA Recruits continue to make their presence felt and participate fully in this coming meeting. Abstracts are due January 1, 2014 (www.shellfish.org), and don't forget to apply for SEF travel awards (also due January 1)! (Information can be found at: <http://www.shellfish.org/sef-student-presentation-and-travel-awards>). Remember, you can apply for an SEF Travel Award every year, even if you have previously won, to help defer the costs to attend the next conference in Jacksonville!

In addition to travel assistance, there are currently three scholarships offered by the National Shellfish Association geared toward student research; the Carriker, Castagna and recently announced George R. Abbe Grant. They are worth \$1,250 to cover any research costs, and applications are due November 30, 2013. We encourage you to take advantage of these grants and apply! Information can be found online (<http://www.shellfish.org/student-members>).

Keep an eye out for the new NSA website and revamped Facebook page to be launching soon—we will be communicating with the Recruits on these pages, and can answer any questions you may have between now and next year's meeting. If you are interested in getting involved in future meetings, the Student Recruit Chairs are looking for a new student to help us with meetings and assisting fellow Recruits. If you are interested, please email Allison & Maria and we can give you more details.

Looking forward to seeing you all in Jacksonville!

Maria Rosa and Allison Fitzgerald - Recruits Co-chairs

The 106th Annual Meeting is Just Around the Corner!

Plans are already well underway for the 106th Annual Meeting in Jacksonville, Florida, March 29-April 2, 2014 (note the dates, and yes, the meeting begins on Saturday evening!).

Back by popular demand is an opening lecture each morning. Brian Bayne, Nicki Holmyard, João Ferreira, and Eddie Allison are all on confirmed, and the rest of the program is shaping up to be a strong one. There are over 20 special sessions (see page 11) and of course plenty of room for contributed papers. As always, posters will be highlighted during a separate session (with Happy Hour) and available throughout the entire meeting, and will be the venue for all breaks. All of the usual activities are also on the agenda: the President's reception, auction, business luncheon, student breakfast, and closing happy hour.

There will be regular updates on the NSA web page with regard to sessions, activities, 'things to do in Jacksonville' and other information. The link to the Hyatt Regency Riverfront Hotel is already live at the NSA web page. It's a great facility, convenient location, and there are limited rooms available at the government rate. Single, double, triple and quads are available and we expect it to fill fast - book your rooms early! And please DO book at the conference hotel, not only is it the most convenient and has



offered us great rates, it guarantees that NSA has access to all the facilities needed for a successful conference.

Watch the Web page (www.shellfish.org) for updates and start making your plans to be in Jacksonville in the spring... and plan to spend an extra day or two seeing the local sites, visiting some extraordinary beaches, or take a short drive to the Fountain of Youth in St. Augustine.

If you have any questions or suggestions, contact the Conference Manager, Sandy Shumway (sandra.shumway@uconn.edu).

SEE YOU IN JACKSONVILLE!

Sandy Shumway

George Abbe... continued from page 1

was not all that well known to the membership at large because he did all of his work behind the scenes. Watching over the financials and long-term stability of the society isn't all that exciting or newsworthy! Anybody remember how many times George was on the ballot for President-Elect? (Answer is 'many') and Why? Because those responsible for selecting highly qualified individuals to lead NSA knew they had a strong and dedicated candidate in George. But in the early days, George lacked the 'name recognition' necessary to capture the votes needed for election. George didn't mind and continued to be an invaluable resource and leader within NSA. It was finally decided that he was simply too important a talent to miss and he was run unopposed. That was a great decision for NSA and George served as a dedicated, involved, yet still quiet and humble leader.

The National Shellfisheries Association was an integral part of George's life - but make no mistake, George was a cherished and beloved asset to the National Shellfisheries Association! George saw NSA through financial hardship, worked closely with several Treasurers, advised on long-term plans, and watched with his usual unassuming manor as all of his efforts slowly but surely put NSA on the path to financial stability and prosperity. Surely it is due in large part to George's diligence, foresight and vision that the association currently enjoys such financial stability. He was so genuinely happy when he was finally able to announce that we were in great financial shape, yet never fully seemed to realize how much his efforts shaped that path.

What a lot of folks perhaps didn't see was the dedication George had to students. George was patient and generous to a fault and a big fan of students - he offered his time and wisdom to all. High school science fair projects, graduate field projects, colleagues in need of advice - George was there for them all. He spent countless hours with his own interns, judging papers and posters, travel applications, and research grant applications for NSA, helping to rewrite student papers to make them acceptable for publication, and he always wanted 'more' for students. If you were lucky enough over the years to secure one of his hand-carved birds or feathers, cherish them. He could regularly be found at the meetings surrounded not by the old guard, but by students, and always with a big smile.

His election as an Honored Life Member was one of the easiest decisions the EXCOM ever made (see *JSR* 27: 249-250, 2008). Discussions were already underway to recognize George's dedication to student advancement with a research award, and it was to be a surprise during the upcoming meeting in Jacksonville. Sadly, those plans were toppled, and the award was established earlier than planned. A special thanks to George's best friend, J Hixson, who presented the award and Resolution on our behalf to George at home, so George

was told one more time how very much he and his efforts meant to his friends and colleagues.

The George R. Abbe Student Research Grant (\$1,250) will be awarded to support a research project in the areas of crustacean biology and fisheries management (check the web page for details) and the first award will be made in Jacksonville.

George also brought us Linda, his wife and, as he told me often, his best long-term investment ever. A regular participant at NSA meetings, overly generous supporter of the student auction, and friend to many of us, Linda became an integral part of the NSA family. For all of this, George's greatest contribution was his friendship. His warm and engaging personality lit up the room, and many a time his was the voice of calm and reason that restored order and progress to the scene, or regaled the assembled with an entertaining yarn. George had a big smile and a bigger heart. The NSA has lost a stalwart of dedication and wisdom, and so many intangibles. I have lost a great friend. Randy Travis perhaps said it best, "it's not what you take when you leave this world behind you, it's what you leave behind you when you go."

THANK YOU, George, for all you left behind.

Sandy Shumway

(Note: a more extended '*In Memoriam*' will appear in the *JSR* at a later date)

Online Registration for the 106th Annual Meeting in Jacksonville Opens

OCTOBER 1, 2013

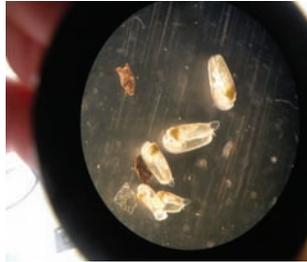
To register, visit:

www.shellfish.org

Early-bird rates expire
January 1, 2014

Industry Perspective Razor Clam Culture

Shellfish aquaculture in the Northeast is heavily dependent on two species, eastern oysters (*Crassostrea virginica*) and northern quahogs (*Mercenaria mercenaria*). Recent disease outbreaks, however, have highlighted how over-reliance on one or two species leaves the industry vulnerable to epizootics. In addition, growers are faced with diverse biological and environmental conditions that influence bivalve growth and production; not all locations are ideally suited to quahog and oyster culture which further limits industry growth. For example, in southern New England the presence of oyster diseases, such as Dermo and MSX, coupled with a paucity of appropriate culture sites, render many areas unsuitable



for oyster culture. At the same time, the presence of the quahog disease QPX has resulted in mortalities as high as 90%, leaving some shellfish growers with few options. While genetic selection programs for both hard clams and oysters have sought to mitigate the impact of disease on farm production, farms still face significant risk depending upon the particulars of disease outbreaks and availability of disease resistant seed. Diversification of the industry



through the culture of new species can help provide protection against economic collapse should disease or other problems cause large-scale failures and significant crop losses for oysters and quahogs.

Recently, with funding from the Northeast Regional Aquaculture Center (NRAC), Woods Hole Sea Grant and Cape Cod Cooperative Extension program, we have initiated projects investigating the potential for culture of the razor or Atlantic jackknife clam, *Ensis directus*, to contribute to industry diversification. This species is highly popular in the market and has even been featured in cooking shows on the Food Network. Razor clams are not currently cultured in the U.S. but there is heightened interest in the culture of *E. directus* in the U.S. and the related species *E. arcuatus* and *Solen marginatus* in Europe. Although research on the distribution and habitats of razor clams spans over 100 years, only recently has there been a concerted effort to establish hatchery and grow-out protocols for this species. William Burt and colleagues at the Aquacultural Research Corporation in Massachusetts found that ripe, field-collected adult razors were easily spawned in

the lab and that larviculture was relatively straightforward, essentially following standard hatchery practice for oysters and clams. We have found that razor clams can also be conditioned to spawn out of season in the hatchery. Early efforts in Europe and in our hatcheries have shown that the major obstacle to the consistent production of razor clam seed was post-set nursery culture. Development occurs more rapidly than in oysters and there are no major landmarks (e.g., eyespot) that larvae are competent; only with due vigilance one can be ready for set. Even so, Burt and colleagues observed that when early post-set razor clams were reared in standard nursery systems (e.g., downwellers) they were highly sensitive to microbial infestations. We recently set approximately 800,000 razor clam larvae on a series of sediments, including natural sediments and sand. Survival and early juvenile growth were particularly encouraging in the sand sediments.



Some of the challenges that remain are to incorporate the use of settling substrates into typical hatchery systems, develop methods for processing and distribution of seed and test improved methods for grow-out, including an analysis



of habitat preference and density effects. We plan to address these in an upcoming NRAC-sponsored project. As part of this upcoming project, we will be continuing our Razor Clam Roundtables. These workshops bring together interested hatchery operators,

project participants and other interested shellfish growers, and review results from previous and current projects and encourage participants to join in efforts to design refinements to both hatchery phase nursery culture and grow-out culture of razor clams. Details on past Roundtables as well as additional information on razor clams can be found at the Maine Sea Grant Shellfish Aquaculture webpage (www.seagrants.umaine.edu/resources-for-shellfish-growers/species/razor-clam).

Paul Rawson, University of Maine
Dale Leavitt, Roger Williams University
Diane Murphy, Woods Hole Sea Grant
Dana Morse, Maine Sea Grant

Student Endowment Fund Travel Awards

Attention students! Looking for travel assistance to help you attend the 2014 meeting in Jacksonville? Interested in a free NSA membership?

The NSA Student Endowment Fund awards registration waivers and/or free lodging (shared rooms) to students presenting their research at NSA meetings. ***The deadline for Travel Award applications is January 1st 2014.*** Awards are very competitive, and late or incomplete applications will not be considered, so don't wait until the last minute to pull something together!

The Student Endowment and Awards Committee also coordinates evaluations of student presentations for the Thurlow C. Nelson (oral) and Gordon Gunter (poster) Awards. Both awards include free membership for at least one year and are a great addition to your CV. To be eligible, students must be NSA members presenting their original research. Recent graduates may also apply if they present research performed while they were a student, and received their degree during the 12 months preceding the meeting.

You must apply for both travel and presentation awards. For more information on how to do so, please visit <http://www.shellfish.org/sef-student-presentation-and-travel-awards>.

Lisa Milke & Stan Allen

Co-Chairs, Endowment / Student Awards Committee

FUTURE NSA MEETINGS

NSA 106th Annual Meeting

Jacksonville, FL

March 29 – April 2, 2014

NSA 107th Annual Meeting

Monterey, CA

March 21 – 26, 2015

AQUACULTURE 2016

Las Vegas, NV

February 22 – 26, 2016

From the Editor's Desk

LeRoy Creswell and Joth Davis are sharing the responsibilities of editing and producing the *NSA Quarterly Newsletter*, beginning with this issue. Paul Rawson has dutifully served as QNL Editor since 2008 and is turning the reins over to LeRoy and Joth. We wish to acknowledge and sincerely thank Paul for his tireless efforts these last five years and plan to bring both print and electronic versions of the QNL membership on a quarterly basis. In that regard, we depend on membership to bring items of interest and regular reporting to the effort and encourage members to submit articles for consideration. We also especially encourage members to work with Committee Chairs (listed on the back page) to ensure that articles and items of general interest to membership are regularly contributed. We look forward to serving the NSA with timely information and news in the years ahead so please contact us if you have news and information you wish to have considered for wider circulation.

Joth Davis and LeRoy Creswell

Nominations Sought for Honored Life Member and David H. Wallace Awards

The National Shellfisheries Association offers two major awards. The Honored Life Member Award is given to individuals who, by their exemplary service to the Association or to the profession, deserve recognition. The David H. Wallace Award is given to individuals whose activities in shellfisheries, aquaculture and conservation have promoted understanding, knowledge, and cooperation among industry members, the academic community, and government, as exemplified by Mr. David H. Wallace during his lifetime. Recipients of both awards receive a plaque and lifetime membership in the Association.

Nominations for either award should be carefully considered by those making the nomination. Both awards are intended for truly deserving individuals, are prestigious to the individual receiving the award, and important to NSA and our long history. Initial nominations are reviewed prior to forwarding to a Committee of Past-Presidents for consideration. Nominations may then be forwarded to the NSA Executive Committee for final consideration. Nominations of individuals for either award should be forwarded to LeRoy Creswell, Chair of the NSA Awards Committee by November 15, 2013.

27 Years of Culturing Juvenile American Lobsters with Dr. Brian Beal

The Downeast Institute (DEI) is the easternmost marine research facility in the United States, located in Black Duck Cove on Great Wass Island, in the town of Beals, Maine. The view from DEI onto Western Bay makes you feel like the ruler of the North Atlantic.

This picturesque institute is home to a number of aquaculture projects, but one particularly epic tale is that of Dr. Brian Beal and his near 30-year venture in developing a working method for raising, growing and tagging juvenile American lobsters (*Homarus americanus*).



Lobsters from the “container size” experiment....those on the right coming from the larger sized containers and those on the left from the smallest.

Brian’s story starts in 1986, “Lobster landings had fallen flat and lobstermen were looking for ways to put more lobsters back into the system,” Beal says, “The problem was that there were conservation measures put into the system already – v-notching egg bearing females that started in the 1940s, legal size limits, and escape vents on traps since the mid-1970s. Fishermen saw that these were all indirect methods for increasing the number of lobsters in the Gulf of Maine, but they wanted to try a direct method of increasing their lobster numbers by raising and releasing baby lobsters.”

So, in 1986, lobstermen and scientists in downeast Maine submitted a grant to Maine’s Department of Marine Resources to support a lobster hatchery in Cutler, Maine. Of all the proposals submitted that year in Maine, the proposal from the Cutler hatchery was the only one funded.



*Dr. Brian Beal
Lobster culturist from “Down East” Maine*

The problem was, no one who had invested in the hatchery knew how to raise a lobster. The techniques developed in 1986 were on the scale of a small university chemistry lab, and only 5-7% of the larvae were surviving – not the kinds of numbers Beal and fishermen wanted to be able to put back into the fishery. Luckily, Sam Chapman, based at the Darling Marine Center at the time, was raising lobsters and was able to give Beal some pointers. In the first year of the funded project, Beal and his team figured out a way to improve the process through proper handling of broodstock, larval care, and aerating juveniles vigorously in tanks. During year two and in subsequent years, the Cutler hatchery produced over



Wooden trays used in the “container size” experiment.

100,000 annually.

While culturing progressed nicely along through 1992, Brian wanted to know, were any of these hatchery-born lobsters surviving into adulthood? Better yet, were they

even surviving to an age when they would be caught by lobstermen?

“You’re asking someone to believe in you [that these lobsters are making it into the fishery],” says Brian, “... so you need to get the animals to a large enough size and tag them before release so that absolutely anybody could tell it was a hatchery-reared lobster.”

A Norwegian-based research paper on *Homarus gammarus*, the European lobster, cousin to the American lobster, gave Brian an idea. The Norwegian researchers had placed lobsters in mesh containers on sandy bottoms. The sand would come up through the bottom of the cage and European lobster juveniles were able to feed on the meiofauna living in the sand alone. Despite their large claws, “the mouth of a lobster, even as an adult, is very, very small, but it still can eat just about anything big or small,” says Brian.

The substrate by DEI is too muddy and the mesh containers would become a death trap instead of a feeding sieve. So, rather than placing cages on the bottom, Beal theorized that he should suspend the cages where the larvae of polychaetes, barnacles, and other invertebrates in the water column or fouling community would settle and grow. Normally the settlers of the fouling community are nuisances for aquaculture gear, but in the case of the lobsters, this could be an extended food supply for juvenile lobsters.

No one had ever tested whether or not juvenile lobsters could live off the fouling community. Beal pitched the idea in Maine in 1999 with no funding results. Fortuitously, Brian received a Fulbright scholarship to investigate the idea at the University of Ireland’s Shellfish Research laboratory in Carna, County Galway, on the west coast of Ireland. At the beginning of his investigations in 2000, Brian visited the South-Wexford Lobster Co-op Hatchery in the southeastern coast of Ireland and saw that the methods used for rearing American lobsters in Cutler were similar to those being used in Ireland. Beal was able to develop the idea of lobsters living off the fouling community using hatchery-reared *H. gammarus* in Galway Bay from August 2000 to June 2001. Essentially, Brian built cages that allowed seawater to enter and exit them, but retain the lobsters. He put one lobster in each container and left them alone for nearly eleven months to test their survival and growth. Lobsters are notorious escape artists, as this author has witnessed first hand, and Brian realized quickly that pre-manufactured containers often kept the juveniles contained better than the hand fabricated ones. The end result was a refined aquaculture technique and juvenile lobsters doubled in size. Lobster survival in some of the flow-through containers was as high as 75% during that time.

Brian returned to Maine armed with his success. He received a 2-3 year grant to develop a similar culturing technique

with American lobsters in eastern Maine. Trying a plethora of experimental containers, Beal found that petri dishes covered with 3-inch openings on the bottom and top, and covered in window screen, resulted in a 92% survival rate. Although he had found a successful method, the size of these baby lobsters after a year, 30 mm, was still too small to tag the way he wanted – with something that anyone could find and identify.

A thought occurred to him. Maybe a lobster grew to the size of their container – like a goldfish. The next year he partitioned wooden trays into different size containers.



After 400 days in the ocean, the enclosures holding the juvenile lobsters are highly fouled, providing shelter and food...

After a year the experiment was almost complete, but a tropical storm suffocated the cove with freshwater and all the lobsters died. In the next trial, Brian attached the trays to cinder blocks so that they hovered three to four feet off the bottom, a refuge from fresh water from surface storms and anoxic mud. A year later, the animals had grown to the size of their containers and were alive. Measuring from the tip of the claw to the tip of the tail, the largest were 5 to 5.5 inches in length – twice the size of those grown in Ireland. The goldfish theory worked.

Now, 27 years later, Brian can finally focus on his original question – What kind of tag can he attach to 5-inch lobsters so that absolutely anyone can see that they are tagged? His two papers on container type and size can be found on the DEI website: <http://downeastinstitute.org>.

Skylar Bayer, University of Maine

President's Message... continued from page 1

me. Although I have known George on a casual basis for several decades, it wasn't until I worked with him as Treasurer that I got to know him in a meaningful way. Each year, we would develop an annual budget for the NSA and, although this may appear mundane, it was the little stories and snippets of wisdom George passed along that made this an enjoyable process, whether it be a humorous tale about an NSA member or past event, the woes of balancing the NSA books in the eighties, or an upcoming cruise he and Linda were planning to take. George's long-term perspective of the NSA has been invaluable to this Association and his many contributions will be sorely missed. Thanks to the generosity of George's family and friends, the NSA has created and endowed the George R. Abbe Student Research Award to be given annually to a graduate student pursuing research in crustacean biology or fisheries management. The first award will be made in Jacksonville.

Looking ahead, plans for the 106th Annual Meeting in Jacksonville March 29 – April 2, 2013 are well underway with 24 special sessions in the works (see page 11). The "Call for Papers" soliciting your abstracts will go online October 1 so now's the time to be thinking about that presentation you'd like to make in Jacksonville. On-line registration for the meeting also commences October 1 with "early-bird" rates through January 1, 2014. Finally, don't forget to book your room at the Hyatt Regency Jacksonville Riverfront Hotel and be sure to link to the hotel through the NSA website to get the special room rate.

And speaking of deadlines, now is the time for student members to start putting together applications for the three research awards (Carriker, Castgana and Abbe Student Research grants) as well as the student travel awards which help to defray the cost of attending the annual meeting. Details on these applications are found elsewhere in this issue as well as on the NSA website. I encourage all NSA student members to apply!

There has been considerable activity this summer behind the scenes at the NSA including annual meeting planning, improvements to the website, and a new online accounting system. Two of the people behind the scenes include NSA Secretariat, Linda Kallansrude, and JSR and conference assistant, Noreen Blaschik. They each work tremendously hard and are featured in the adjacent article. Linda will be

Call for Papers

for the 106th Annual Meeting of the NSA
March 29-April 2, 2014

Abstract submission for oral and poster presentations at the 106th Annual Meeting will open via the NSA website on October 1, 2013.

ABSTRACTS DUE JANUARY 1, 2014

Abstracts must be submitted electronically through the website (www.shellfish.org). Full instructions for abstract submission can be found on the NSA website after October 1. No abstracts will be accepted via fax transmission. If you are unable to submit an abstract using the NSA website or have any questions about abstract submission, please contact Dr. Sandy Shumway, NSA Conference Manager (sandra.shumway@uconn.edu).

sending out dues renewal notices November 1 and, although you can renew your membership through her via snail mail, you can also use the new web portal – it's just a few clicks and you're done. After five years of keeping membership dues steady, we are now forced to raise regular annual memberships to \$95 and student memberships to \$50 starting with the 2014 dues year. Sustaining memberships will remain at \$200 annually.

Finally, John Kraeuter has agreed to chair the Audit-Budget-Finance Committee long held by George Abbe. George recommended John before he passed away and it was an excellent choice and I am grateful John has agreed to fill this seat around the EXCOM table.

So with best wishes to all, I hope you have a great Autumn!

Chris Davis, President

Stay current with the NSA by visiting:
www.shellfish.org

Behind the Scenes at the NSA

Ever wonder about those mysterious names that keep appearing on your queries regarding membership, *Journal* subscriptions, web page issues, invoices, meeting details, and all other things NSA? Meet the Secretariat and the *JSR*/Conference assistant, Linda Kallansrude and Noreen Blaschik.

As the NSA has continued to grow over the past decades, so have the number of day-to-day tasks and responsibilities, paperwork, and time-sensitive minutia, and continuing to rely upon the good graces and availability of volunteers to keep the business in operation has become less and less tenable. Without the funds to hire a full-time executive director/office manager, the NSA has drawn upon several people over the years to cover various individual tasks (as in our long-time stalwart Bookkeeper, Nancy Lewis of VIMS), but over the last two decades, Linda and Noreen have teamed up to be the tour d'force that keeps things running smoothly and seamlessly.

Linda first started handling tasks associated with *JSR* back in 1992 when she was an Administrative Assistant in the Natural Science Division at Southampton College, then home of the Editorial Office. Invoicing up to that time had been done by the Editor (yuck!) and, while invoices went out on time, there was little follow-up such as chasing overdue payments, not to mention a big drain on the volunteer Editor's time. Linda's talents had not gone unnoticed and when asked if she'd be interested in some part-time extracurricular employment, she enthusiastically said yes and has been with us ever since. Linda was hired on an ad hoc basis to help with these tasks and as time went on, took on many others. Keeping up with dues payments, membership queries, and web page issues was taking its toll on the Treasurer. Linda to the rescue! She was eventually hired on a more permanent basis as the Secretariat and today she is the lady who takes care of payments, dues, invoices, and membership activities



NSA Secretariat Linda Kallansrude



JSR and NSA Conference Assistant Noreen Blaschik

and many miscellaneous tasks that probably go unnoticed to most of us, but keep things running. Thanks to the electronic world (and her retirement), she is able to do all of this from her home with her two helpers, Dante and Romeo, and does it with genuine enthusiasm and a whole heap of talent.

Noreen, a 2004 graduate of UConn, was a research assistant at the University of Connecticut working on a biofouling project with the Editor of *JSR* and noted the amount of 'busy work' involved in maintaining the Editorial Office and asked about helping. She did this out of general interest and generosity for some time, and when it became obvious that her services were an integral part of the process, she too was hired on an ad hoc basis. Over recent years she has also become instrumental in assisting with meeting organization, planning, and packing, in addition to miscellaneous tasks associated with *JSR* paperwork! Noreen will be engaged in the day-to-day updates of the NSA Web page, so if you have any current information that needs posting, send it her way (noreen.blaschik@uconn.edu). With the Recruits co-chair also currently housed at UConn, Noreen has regularly been seen helping to stuff envelopes and unjam the poster printer! She is tirelessly efficient and organized and always smiling, and a real asset.

Linda and Noreen are both loyal and dedicated members of the NSA and are continuing their efforts on behalf of the NSA. They are also volunteering their expertise and services as co-editors of the new NSA Cookbook..

Dr. Sandra E. Shumway

Student Research Grants Application Deadline: November 30th

The deadline for applications for three student research grants offered by the National Shellfisheries Association is fast approaching. The Melbourne R. Carriker Student Research Grant supports promising basic research in the area of shellfish, while the Michael Castagna Student Grant for Applied Research supports applied areas of research in shellfish and aquaculture. The George R. Abbe student grant supports research specific to crustacean biology and fisheries management. All of these competitive grants help cover the costs associated with conducting research in an era of dwindling financial resources. I strongly encourage students to apply for these awards. The process is relatively painless and the potential rewards are great! Students may apply for all three awards, but must submit separate applications that highlight appropriate aspects of their research for each award. An applicant must be a student member in good standing and currently enrolled as a M.S. or Ph.D. student in a recognized, degree-granting institution. Students may not apply for an award they have received previously. The deadline for applications is **November 30th, 2013**.

Recipients of Carriker, Castagna, and Abbe Awards are expected to present the results of their research at an annual meeting of the Association and write a synopsis of their research for the NSA *Quarterly Newsletter*. These awards provide students with \$1,250. The funds are intended for the purchase of supplies and equipment essential to perform their research, and are not intended to enable purchase of general items, such as computers, or to fund travel expenses

associated with attendance at professional meetings. The good news is that students can apply for travel support through the NSA Student Endowment Fund (see page 2).

To apply for the Castagna, Carriker, or Abbe Awards, send the following as a single pdf file to Awards Committee Chair LeRoy Creswell (creswell@ufl.edu);

- Cover sheet with the applicant's name, professional address, phone number, email address, thesis title, degree being sought (M.S. or Ph.D.), date they entered the graduate program, and anticipated graduation date.
- Project description - 2-page limit plus one page for figures (if needed). Note, any literature cited is not included in the two-page limit.
- Budget (1 page) - Briefly itemize how the award will be spent (e.g., \$300 for micropipette supplies, \$200 for histology supplies, etc.).
- Resume (1 page) - List educational background, awards/honors, presentations at meetings, and any publications.
- Letter of endorsement (1 page) - The student's major advisor must provide a succinct letter of support commenting on the student's research and confirming that the funds are necessary. This may be submitted under separate cover directly to LeRoy Creswell.

Applicants will be notified of the status of their application by January 31st, 2014 and awards presented at the Annual Business Luncheon in Jacksonville in late March. Additional details are available online at www.shellfish.org/grants.htm.

LeRoy Creswell
Past-President & Chair of NSA Awards Committee

Upcoming Events

ISSC 2013 – Interstate Shellfish Sanitation Biennial Conference. October 26 – November 1, 2013, St. Anthony Riverwalk Wyndham Motel, San Antonio, TX, USA. For more information visit <http://www.issc.org>

CERF 2013 – Towards Resilient Coasts and Estuaries: Science for Sustainable Solutions. 22nd Biennial Conference of the Coastal and Estuarine Research Federation, November 3-7, 2013, Hotel Mission Valley San Diego Town & Country Convention Center, San Diego, CA, USA. For more information visit <http://www.erf.org/cerf2013>.

Asian Pacific Aquaculture 2013 – Positioning for Profit. December 10-13, Ho Chi Minh City, Vietnam. For more information visit <http://www.was.org/>

Aquaculture America 2014 – Taking Aquaculture to New Heights Through Technology, Marketing, Collaboration. United States Aquaculture Society (USAS), February 9-12,

2014, Seattle Convention Center, Seattle, WA, USA. For more information visit <http://www.was.org/>

106th Annual Meeting of the National Shellfisheries Association. March 29 – April 2, 2014, Hyatt Regency Jacksonville Riverfront Hotel, Jacksonville, FL, USA. For more information visit <http://www.shellfish.org>

World Aquaculture Adelaide 2014 – Create/Nurture/Grow. World Aquaculture Society, June 7-11, 2014, Adelaide Convention Centre, Adelaide, South Australia. For more information visit <http://www.was.org/>

If you would like to announce a meeting, conference, workshop or publication that might be of interest to NSA members, please contact the *QNL* Editors, Joth Davis (jothpdavis@mail.com) or LeRoy Creswell (creswell@ufl.edu).

Special Sessions for the 106th Annual Meeting

(Regular general sessions will also be included in the program)

Session	Chair(s)	Contact email
Acidification	George Waldbusser	waldbuss@coas.oregonstate.edu
Challenges and opportunities for oyster aquaculture in the South	Yolanda Brady	bradyyj@auburn.edu
	Bill Walton	billwalton@auburn.edu
	Julie Davis	julie.davis@scseagrant.org
Citizen-based oyster restoration	Carol McCollough	oysters@pwec.org
Crustaceans	Eric Schott	schott@umbi.umd.edu
	Brad Stevens	bgstevens@umes.edu
Disaster Assistance/Risk Assessment	Tessa Getchis	tessa.getchis@uconn.edu
	Matthew Parker	mparke11@umd.edu
Disease and environment	Dave Bushek	bushek@hsrl.rutgers.edu
	Tal Ben-Horin	tbenhorin@bren.ucsb.edu
Down on the Farm	Bill Walton	billwalton@auburn.edu
	Julie Davis	julie.davis@scseagrant.org
Economic dimensions of shellfish culture, management, and marketing: something for everybody!	Chuck Adams	cmadams@ufl.edu
Filter Feeding	Dane Frank	dana.frank@uconn.edu
	Evan Ward	evan.ward@uconn.edu
Gastropods & Caribbean Species	Bruce MacDonald	bmacdon@unbsj.ca
	Cassandra Titley-O'Neal	c.titley-oneal@yahoo.com
	Leroy Creswell	creswell@ufl.edu
Harmful Algal Blooms	Helene Hegaret	helene.hegaret@univ-brest.fr
Invasives/Introductions	Lewis Deaton	led9784@louisiana.edu
	Stephan Bullard	bullard@hartford.edu
Living Shorelines	Kay McGraw	kay.mcgraw@noaa.gov
	Loren Coen	coenl@embargmail.com
Modelling	Jon Grant	jon.grant@dal.ca
Outreach Communication	Dorothy Zimmerman	dozimmer@ufl.edu
Oyster mortality outbreaks	Lionel Degremont	lionel.degremont@ifremer.fr
'Proteomics'	Jerome La Peyre	jlapeyre@agctr.lsu.edu
Reef Assessment/Restoration	Loren Coen	coenl@embargmail.com
Ribbed mussels for estuarine enhancement	John Supan	jsupan@lsu.edu
	Danielle Kreeger	dkreeger@delawareestuary.org
Scallops	Steve Geiger	steve.geiger@myfwc.com
	Michael Crosby	mpcrosby@hawaii.edu
Seston/nutrition; nano- and micro- particles/ plastics	Philippe Soudant	soudant@univ-brest.fr
	Helene Hegaret	helene.hegaret@univ-brest.fr
Shellfish culture and the environment	Sandy Shumway	sandra.shumway@uconn.edu
Student Session TBA	Maria Rosa	maria.rosa@uconn.edu
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Forwarding Service Requested

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