

# National Shellfisheries Association

QUARTERLY NEWSLETTER

MARCH 2008

GROTON, CT



## President's Message

100 Years! A Century of Shellfish! What an exciting milestone for NSA! It's a time to look back and reflect on the accomplishments of those that came before us, things that we have achieved, and then, perhaps most importantly, challenges that lie ahead. One hundred years ago, problems in the



oyster industry of North America united oystermen and public resource managers to seek assistance from scientists to help resolve problems facing their industry. Spurred on by such pioneering scientists as Ernest Ingersole, William Brooks, Julius Nelson and many others, the Oyster Growers and Dealers Association (OGDA) and the National Association of Shellfish Commissioners (NASC) began encouraging research to address industry and management concerns. To speed the effort, international experts were invited to assess the problems, share their knowledge, and offer advice and instruction. Many problems were resolved, but others developed in what sometimes seems like a perpetual struggle. Along the way, applied problems have led to many fundamental discoveries as basic scientific research was often needed to find solutions – a situation that continues today and has many of our members pushing the boundaries of shellfish knowledge.

The OGDA and the NASC eventually merged into one organization that we now know as the National Shellfisheries Association. Many changes have occurred during the past century which have affected shellfisheries in numerous ways. Wars increased demand and reduced labor. Shellfish harvesting shifted from sail to engine power, dramatically increasing rates of harvest. Expanding human populations have altered habitats and often led to declining water quality. NSA and its predecessors have served as communication portals to exchange information among industry, managers and scientists, initially through the format of annual meetings, then through *The Proceedings of the National Shellfisheries Association*,

now known as the *Journal of Shellfish Research*. Today, scientific findings published in *JSR* are available to NSA members online. Shellfish research increased rapidly as communications among scientists and industry members increased. Species of interest expanded from oysters to other molluscs, crustaceans and even urchins. Shellfish sanitation protocols were improved and standardized, larval life cycles were described, and hatchery technologies were developed. As new problems confronted the shellfish industry (new diseases, introduced predators, HABs, and others), NSA scientists quickly rose to meet the challenges, communicating their progress on solutions at annual meetings and through the publications of NSA. In this way

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Plan to attend the centennial meeting of NSA, Providence, RI, April 6-10, 2008. For more information about this exciting meeting, see pages 2-3.

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solutions to various problems spread from one fishery or one region to another. Comparative studies soon began to reveal patterns that would ultimately increase our fundamental understanding of shellfish, while opening doors to new investigations, new management strategies and new opportunities.

At some point along the way, NSA began attracting members beyond North America. Today's membership represents over 30 countries and *JSR* is distributed internationally to some 200 libraries extending the published works well beyond the Association's



membership. Of course the fascinating details of our history are told elegantly in *The Taming of the Oyster: A History of Evolving Shellfisheries and the National Shellfisheries Association* written by Melbourne R. Carriker (2004). I encourage each of you to buy a copy and read how we have come to reach this significant centennial milestone.

And so that brings me to our present and future. The world is constantly changing and each year it seems that change occurs a little faster. Human population growth is rapidly increasing demand and stress on natural resources. Increased global transport has effectively eliminated many barriers to the dispersal of shellfish along with pests and pathogens. Intentional and unintentional introductions have created triumphant successes as well as tragic catastrophes. Climate change and sea level rise pose ever-increasing risks of uncertain magnitude, but science and technology are also changing at an ever increasing pace. Shellfisheries that still rely upon natural production by wild populations are in decline in many areas and some shellfishing industries are threatened with extinction; however, aquaculture and restoration efforts are on the rise. Genomics, proteomics, microarrays, remote sensing, *in situ* continuous monitors, flow cytometry and other technologies are providing new insight towards new solutions. Community-based efforts are increasing public attention and support, and governments are paying

attention. Increased demand for healthy foods has resulted in shellfish being listed by many “watchdog” organizations as a healthy choice for nutrition and the environment. Interestingly, in his description of the beginnings of the Association, Carriker<sup>1</sup> notes that the primary objective of the OGDA when formed in 1908 was to “educate the public on the wholesomeness of oysters” as a food product.

So, the Centennial meeting marks a time of both reflection and excitement about what lies ahead. World population growth, climate change and other forces hold new challenges for shellfish and shellfisheries and our professional Association. At the Centennial meeting we will reflect upon our past, discuss current issues, and look forward to the future. As you will read in this Newsletter, there will be an array of special events to facilitate this process. Breaking with recent tradition, each day will begin with an opening lecture from speakers who have graciously accepted the invitations of Sandy Shumway, Editor of *JSR* for 22 years. The meeting will contain presentations of gloom, presentations of hope, presentations documenting failures, presentations documenting successes, and of course presentations documenting important research efforts and discoveries on a diverse array of shellfish topics. As always, our job as researchers, resource managers and members of industry is to work together to identify a path forward, learning from failures and successes alike, developing and adopting new strategies to advance the field. We must continuously refocus our efforts, individually and together, for the betterment of all shellfisheries and NSA.

I am happy to reaffirm that you, the members, have elected a diverse group of officers representing industry, management and academia. All are hard working volunteers conducting the business of the Association, some literally on a daily basis. We may not all agree on issues that confront us, but every board member is sincerely interested in the continued success of the Association. In the coming year, I will continue to work with our Executive and appointed committees to develop a strategic plan that will effectively sustain our mission and reinvigorate our membership to meet challenges and capitalize on opportunities. I look forward to continuing to work with you and for you at the helm of the Association. Together, with your support and assistance, I see the beginning of another century of shellfish such that one day, a President in the year 2108 will be writing an enthusiastic column about NSA's Bicentennial Celebration.

**Dave Bushek**  
**President**

<sup>1</sup>Carriker, M.R. 2004. *Taming of the Oyster: A History of Evolving Shellfisheries and the National Shellfisheries Association*. National Shellfisheries Association. 264 pp.

# 100th Annual Meeting Program Update

The NSA 100<sup>th</sup> Annual Meeting is almost here! The Program Committee was overwhelmed with the number of abstracts submitted (over 300 – a record amount) and we have filled the schedule with over 220 oral presentations and 80+ poster presentations. We truly have something for everyone with sessions ranging from Abalone to the World Wildlife Fund-sponsored Molluscan Dialogue. It's not too late to register – and you will receive entrance to all scientific sessions, continental breakfast each day, poster session (with special treats and drinks), auction with food and drink, a program and other amenities. Be sure to peruse the Program Overview in this issue of the *Quarterly Newsletter* and then download the entire Program from our website so you can start planning your daily meeting schedule.



Since this is our 100<sup>th</sup> Annual Meeting we have several special activities on the schedule. The festivities begin on Sunday evening with our shellfish-laden President's Reception. On each day of the Technical Program (Monday through Thursday) we will have an Opening Lecture given by a distinguished member of the scientific community. The Northeast Shellfish Sanitation Association (NESSA) joins us in Providence on Tuesday and Wednesday as they hold their annual meeting at the Westin Hotel. On Tuesday, a WWF Molluscan Dialogue will be held after the industry-focused 'Down on the Farm' special session. Our Annual Student Auction is Tuesday evening and we can guarantee that the food will be tasty, the company will be entertaining, and the bidding will be lively. The Technical Program on Wednesday will be capped with the Centennial Roundtable, a discussion of shellfish research and issues by some of our most distinguished members. The NSA meeting concludes on Thursday with NSA/Benthic Ecology Meeting joint technical sessions. But don't leave town just yet – we have a special screening on Thursday evening of the

IMAX film *Volcanoes of the Deep* with an introduction by NSA's own Rich Lutz, science director for the film (tickets will be available at the NSA Registration Desk – be sure to get yours early). All meeting details are at our website ([www.shellfish.org](http://www.shellfish.org)) including the program, hotel reservations, meeting registration, presentation requirements, local arrangements, and airport shuttle details. It promises to be an exciting meeting – please join us at the Westin Hotel in Providence from April 6-10 as we celebrate *A Century of Shellfish*. We look forward to seeing you there!

**Sandy Shumway, Local Arrangements Chair**  
**Karolyn Hansen, Vice-President & Program Chair**

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## Student Travel & Presentation Awards

Student members of NSA will give twenty-seven oral presentations and thirteen posters at the annual meeting in Providence, RI. Thirty-eight students competed for Student-Endowment-Fund travel awards and the winners of the lodging and registration awards will be announced soon. We thank judges Bassem Allam, Stan Allen, Troy Alphin, Bill Arnold, Sarah Culloty, Chris Dungan, Anu Frank-Lawale, Pat Gaffney, Marta Gomez-Chiarri, Sean McDonald, Paul Rawson, Dan Rittschoff, John Scarpa, Gail Scott, Missy Southworth and Nancy Stokes for all of their hard work in evaluating the students' applications. Once again, all oral presentations by students will be in the running for the Thurlow C. Nelson Award, and all poster presentations by students will be eligible for the Gordon Gunter Award. To evaluate these presentations, the Student Awards Committee needs your help! If you are attending the annual meeting this year and are willing to participate in judging the oral and/or poster presentations, please contact Ami Wilbur ([wilbura@uncw.edu](mailto:wilbura@uncw.edu)) or Ryan Carnegie ([carnegie@vims.edu](mailto:carnegie@vims.edu)). We will organize judging assignments as the meeting program is finalized. Thanks in advance for your help!

**Ami Wilbur & Ryan Carnegie**  
**Endowment/Student Awards Committee**



## Recruits' Corner

Hello Recruits! Welcome to Providence and the NSA Centennial Meeting. I hope that many of you contributed to the nearly 300 abstracts submitted for the April meeting. You know how Dane and I (not to mention all the NSA Officers) like to see a large and diverse student turnout at the annual meetings. If you are joining us in Rhode Island, you'll find all kinds of exciting information about the meeting in this column. If you can't make it this time around, we'll see you next year!



We are planning another uber-useful, wildly popular special student session for Providence. **GETTING HIRED** (the third installment in the Getting ... series) will feature tools and tips from tried-and-true resources and real, live experts for landing a job in the shellfish sciences. We are gathering information on

CVs and resumes, cover letters, statements of teaching and research interests, and interviewing strategies. We will also have recent hires, employers, and search committee members on hand to share their experiences and answer your questions. So, come prepared to learn how to get hired!

When you go online to register for the meeting (register before March 15 for the reduced student rate), you'll notice that we are bringing back the Student Orientation Breakfast for this meeting. Join us Monday morning to get all the latest meeting info and tips for making the most of your time in Providence, grab some morning sustenance and say "hi" to your friendly (and maybe sleepy) Recruits co-chairs and other fellow Recruits. Of course, you may have already met some fellow Recruits on Sunday if you are trying to save a bit of money by sharing a hotel room. We have an excellent rate for the Westin in downtown Providence – you can squeeze up to 4 friends in one room for \$159 a night! If you need roommates for the meeting, please head over to the Shellfish Forum on the NSA website (<https://shellfish.org/forum>) and post a request for roommates.

We are very much looking forward to seeing old friends and shiny new faces in Providence. It is a great city to visit with plenty to see and do (and in my opinion some fantastic food – e-mail or ask Nature for recommendations). If you can, stick around after the NSA meeting for the Benthic Ecology Meeting that starts on Thursday and finishes up on Sunday after a fun-filled beach party banquet on Saturday night. Remember to get your tickets early for the special IMAX

showing of **Volcanoes of the Deep** on Thursday night. And, as always, if you have some spare time during the meeting, drop by and volunteer at the NSA Sales Booth – remember that all the proceeds go to the Student Endowment Fund that helps all of us with meeting costs. Be there or be square!

**Dane Frank & Nature McGinn**  
**Student Recruits**

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## Membership Report

Membership got off to a strong start this year with just over 500 members paying their 2008 dues before the end of January, a record for NSA! That's a wonderful starting point but we have a long way to go to keep our association healthy as we strive to break 800 paid memberships. We need your help to retain and recruit



members! Please urge your colleagues to join NSA or renew their membership today ([www.shellfish.org/join.htm](http://www.shellfish.org/join.htm)).

This winter members gained a new benefit. The online membership directory, accessible in the menu below your name once you log in, is now searchable by member's research interest as well as alphabetically by last name. This allows paid members to look for colleagues with shared interests making it a more useful tool for connecting with fellow members. The directory can be searched by area, taxon or a combination of the two. So go and find your fellow members that share your interest in, for example, octopus aquaculture! You might be pleased to discover that you are not alone. And if you need to change or add to your interests simply select 'my account' and then the edit tab and make whatever changes are necessary.

Members are encouraged to take full advantage of the website. In addition to conveniently paying dues, registering for meetings and paying Journal charges online, members can now access the *Journal of Shellfish Research* online via BioOne with their paid membership account. The site also has a community 'forum' where members can exchange ideas, look for someone to share a hotel room with and so on. It's worth checking out!

Finally, the Membership Committee welcomes any feedback on your membership experience as well as suggestions for ways to increase membership. Please feel free to contact me with your comments ([wwalton@whoi.edu](mailto:wwalton@whoi.edu)).

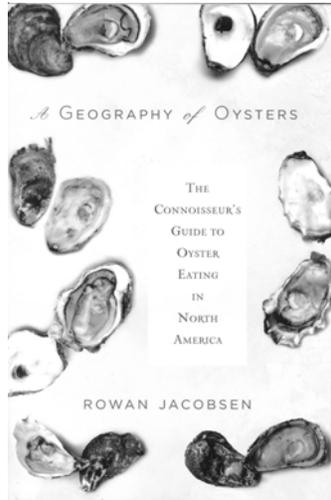
**Bill Walton**  
**Membership Committee**

## Book Reviews

### Two pearls of literature for the oyster lovers

*A Geography of Oysters: The Connoisseur's Guide to Oyster Eating in North America* by Rowan Jacobsen. Hardcover, 304 pp. Bloomsbury, USA \$24.95. (2007)

Rowan Jacobsen, a staff writer for *The Art of Eating*, has taken dining on oysters to new heights in his new book. I had the pleasure of hearing him provide a reading during the recent PCSGA meeting in Oregon and it was sheer poetry - it was not only the content, but the presentation - much like the oysters he described! He begins by saying that 'this book is designed to make you a more savvy and satisfied eater of oysters.' It does.



This small, well-researched, book is dense with information and yet remains very entertaining reading. He covers the '132 most commonly encountered oysters' on the market, focusing on the 'terroir' or microenvironment in which the oysters are grown and from which they acquire their unique flavors. He provides detailed sidebars on several specific operations, e.g. Bob Rheault's Moonstone Oysters, Barb Scully's Glidden Points, and Reg Tutthill's Oysterponds. The book is nicely illustrated with line drawings and photographs.

I was especially pleased that he noted the environmental benefits of oyster farming and the role of oysters as ecosystem engineers, and even I, who does not eat oysters, was ready to dash out and try some. I trust that even the most seasoned oyster guzzlers will find this book an informative and enjoyable read.

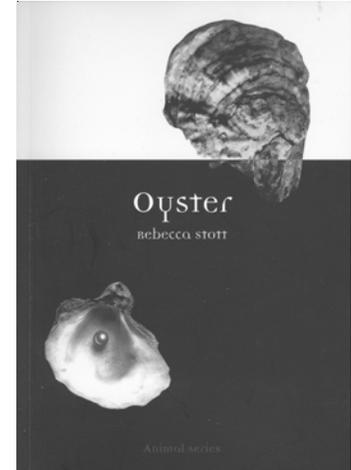
(Note: Rowan will be at the NSA Centennial for a book signing)

**Sandra E. Shumway**  
**University of Connecticut**  
**Department of Marine Sciences**



*Oyster* by Rebecca Stott Softcover, 240pp. Reaktion Books (2004)

This book is part of an animal series (others include crow, tortoise, cockroach, ant and dog - several other titles are forthcoming). Rebecca Stott is a literary historian and radio broadcaster and has assembled a fascinating collection of oyster images, anecdotes, facts and lore. The illustrations are outstanding. There are examples of artwork and numerous antique scientific illustrations are included (sadly, the sources are not, although you may recognize many of them). There are numerous examples of still life paintings, and I particularly liked the reproductions of de Troy's *Le Dejeuner d'huitres* (p. 59) and the Welsh oyster women from *Llangwm* (p. 67), and the drawing and excerpts from Lewis Carroll's *The Walrus and the Carpenter*. The book is beautifully presented, printed on high quality, semi-gloss paper and fits easily in your backpack! This is a fascinating and eclectic overview of the oyster and its role in civilization through the millennia - a fun read and a great source of trivia for any oyster aficionado.



**Sandra E. Shumway**  
**University of Connecticut**  
**Department of Marine Sciences**

### 18<sup>th</sup> ANNUAL SEF AUCTION APPROACHING

Don't forget to start clearing your attics, offices, and basements or take a quick trip to the local tourist venue and collect your shellfish toys and trinkets for the Student-Endowment-Fund Auction. Bring them with you or send them ahead to Sandy Shumway (address on back of Newsletter) - we want this to be the biggest and best Auction ever! See you Tuesday, April 8<sup>th</sup> in Providence (and don't forget your checkbooks!)

**PROGRAM OVERVIEW**  
**NSA 100<sup>TH</sup> ANNUAL MEETING, PROVIDENCE, RHODE ISLAND**

**SUNDAY, APRIL 6, 2008**

7:00 PM **PRESIDENT'S RECEPTION**  
 Waterplace Ballroom

**MONDAY, APRIL 7, 2008**

7:00 AM **STUDENT BREAKFAST**

8:00 – 9:00 AM **OPENING LECTURE: Kevin Eckelbarger**  
 Narragansett C

	<u>NARRAGANSETT B</u>	<u>NARRAGANSETT C</u>	<u>BRISTOL</u>	<u>WATERPLACE II/III</u>
9:00-10:30 AM	<b>Bay Scallops</b>	<b>Disease in Aquaculture and Restoration</b>	<b>Shell Formation</b>	<b>Abalone</b>
10:30-11:00 AM	<b>MORNING BREAK</b>			
11:00-12:30PM	<b>Bay Scallops</b>	<b>General Disease</b>	<b>Habitat and Ecosystem Health</b>	<b>Abalone</b>
12:30 – 1:30 PM	<b>LUNCH BREAK (Past Presidents' Lunch)</b>			
1:30 – 3:00 PM	<b>Bay Scallops</b>	<i>Bonamia</i>	<b>General Contributed</b>	<b>Harmful Algal Blooms</b>
3:00 – 3:30 PM	<b>AFTERNOON BREAK</b>			
3:30 – 5:30 PM	<b>Bay Scallops</b>	<b>Environmental Stressors</b>	<b>General Contributed</b>	<i>Mya arenaria</i>
5:00 PM	<b>Student Job Session</b>			

**TUESDAY, APRIL 8, 2008**

8:00 – 9:00 AM **OPENING LECTURE: Roger Mann**  
 Narragansett C

	<u>NARRAGANSETT B</u>	<u>NARRAGANSETT C</u>	<u>WATERPLACE II/III</u>
9:00 – 10:30 AM	<b>Genetics</b>	<b>Restoration PANEL</b>	<b>Down on the Farm</b>
10:30 - 11:00 AM	<b>MORNING BREAK</b>		
11:00 – 12:30 PM	<b>Genetics</b>	<b>Restoration Technical</b>	<b>Down on the Farm</b>
12:30 – 1:30 PM	<b>LUNCH BREAK</b>		
1:30 – 2:45 PM	<b>Genetics</b>	<b>Restoration Technical</b>	<b>WWF: Molluscan Dialogue</b>
2:45 – 3:45 PM	<b>Economics</b>	<b>Restoration Technical</b>	<b>Molluscan Dialogue</b>
4:00 – 6:00 PM	<b>POSTER SESSION * – 'The Fenway Break'</b> Narragansett A		
7:00 – 11:00 PM	<b>Student Auction</b> Narragansett C		

**NSA 100<sup>TH</sup> ANNUAL MEETING  
PROGRAM OVERVIEW (con't)**

**WEDNESDAY, APRIL 9, 2008**

8:00 – 9:00 AM	<b>OPENING LECTURE: Michael Greenberg</b> Narragansett C			
	<u>NARRAGANSETT B</u>	<u>NARRAGANSETT C</u>	<u>BRISTOL</u>	<u>WATERPLACE II/III</u>
9:00 – 10:30 AM	<b>Climate/Dispersion</b>	<b>Molluscan Physiology</b>		<b>QPX</b>
10:30-11:00 AM	<b>MORNING BREAK</b>			
11:00 – 12:00 PM	<b>Climate/Dispersion</b>	<b>Molluscan Physiology</b>		<b>QPX</b>
12:00 – 2:00 PM	<b>NSA BUSINESS LUNCHEON</b> Providence Ballroom			
2:00 – 3:45 PM	<b>General Contributed</b>	<b>General Contributed</b>		<b>Disease Detection</b>
4:00 – 5:00 PM	<b>CENTENNIAL ROUNDTABLE / Wine and Cheese Reception</b> Narragansett C			

**THURSDAY, APRIL 10, 2008**

8:00 – 9:00 AM	<b>OPENING LECTURE: Richard Lutz</b> Narragansett C			
	<u>NARRAGANSETT B</u>	<u>NARRAGANSETT C</u>	<u>BRISTOL</u>	<u>WATERPLACE II/III</u>
9:00 – 10:00 AM	<b>Habitat Assessment Using GIS</b>	<b>Benthic-Pelagic Coupling</b>	<b>Biofouling</b>	<b>Offshore Marine Shellfisheries</b>
10:00-10:30 AM	<b>MORNING BREAK</b>			
10:30-12:00 PM	<b>Habitat Assessment Using GIS</b>	<b>Benthic-Pelagic Coupling</b>	<b>Introduced Species</b>	<b>Offshore Marine Shellfisheries</b>
7:00 PM	<b><i>Volcanoes of the Deep</i> IMAX Movie</b> <b>(with introduction by Rich Lutz)</b> IMAX Theatre, Providence Place Mall* (Ticket Required)			

\*In addition to the scheduled Poster Session, all posters will be available for viewing in Narragansett A Ballroom from Monday morning through Wednesday afternoon at 2 PM.

\*IMAX Theatre is on the top level of Providence Place Mall which is adjacent to the Westin Hotel. Purchase Ticket at NSA Registration desk.

## **Mollusc Industry Representatives Move Forward with Aquaculture Certification**

More than 40 people, mainly from the Pacific Northwest, gathered for the first Mollusc Aquaculture Dialogue meetings in October, 2007 - with several more meetings to be held throughout the United States over the next few months. The kick-off meeting was held in conjunction with the joint conference of the Pacific Coast Shellfish Growers Association and National Shellfisheries Association-Pacific Coast Section. Additional dialogue meetings have been held in North Carolina and Florida, and another one is coming up in Rhode Island – then overseas – to develop credible, voluntary standards for certifying molluscan aquaculture products by the end of 2008. “Molluscan shellfish aquaculture provides a great target for certification,” said Dr. Sandra Shumway of the University of Connecticut’s Department of Marine Sciences. “It is sustainable, provides healthy food and positive ecosystem services, and enhances local economies. The mollusc dialogue provides a unique opportunity for industry members to work with WWF to identify key, measurable performance-based standards that will maintain and promote that sustainability. I am excited to be part of this progressive effort.”

Meeting participants discussed the draft goals of the dialogue, which are to develop and implement verifiable environmental and social performance levels that minimize the potential negative effects of mollusc aquaculture, recommend standards that achieve these performance levels while permitting the shellfish farming industry to remain economically viable, and continue to promote the beneficial environmental and social aspects of shellfish cultivation. Issues related to mollusc farming – such as the transfer of diseases to wild caught species and harvesting techniques that harm critical habitat – were also on the agenda. The final list of goals, objectives and issues discussed at this meeting will be presented and amended, based on consensus, at future dialogue meetings. “Shellfish aquaculture operates in complex and sensitive marine ecosystems,” said Heather Deal, marine researcher for the David Suzuki Foundation. Dialogue participant Jonathan Davis, director of research and development at Taylor Resources, Inc., agrees. “Certification of sustainable shellfish aquaculture practices will significantly enhance our ability to move ahead during a period of significant change for the industry. Developing better management practices has been a major industry focus over the last five years and contributing to the mollusc dialogue can certainly help move this process along by certifying practices that contribute to maintaining and improving near-shore marine environments in conjunction with continued production of shellfish and healthy, working waterfronts across the nation.”

The mollusc dialogue is one of five dialogues initiated by World Wildlife Fund (WWF). Dialogues for shrimp, salmon, tilapia and pangasius are underway and a dialogue for trout is expected to begin in early 2008. The first meeting pertaining to molluscs was held in 2004 but the dialogue was postponed until 2007, due to delays in funding. “Mollusc aquaculture is one of the best types of aquaculture in the world, given its low impact on the environment,” said Jose Villalon, director of WWF’s Aquaculture Program. “But there are issues that need to be addressed and we are looking forward to working with our partners to do this.”

Each dialogue group is a network of producers, members of the market chain, researchers, non-governmental organizations, government officials, and investors. They use a transparent, multi-stakeholder process to develop the standards. WWF used a similar process to create standards for forestry, fisheries and agriculture certification programs. For more information about molluscs and the WWF dialogues, go to [www.worldwildlife.org/aquadialogues](http://www.worldwildlife.org/aquadialogues).

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## **Florida Celebrates 120 years of Oyster Cultch Planting**

In 1809, a French inventor won a newspaper prize to create a cheap and effective method to preserve large amounts of food to feed Napoleon’s armies by “canning” cooked foods in glass jars. Within a year a British inventor preserved food in iron cans soon followed by the use of tinned steel. By 1819 New York canners were canning oysters and during the period 1840-49, oyster canning became a huge business in Baltimore supplied by oysters from Chesapeake Bay. By the mid-1880s several oyster canneries started in Apalachicola, Florida.

Within a few years, John Ruge, Ruge Brothers Packing Company, and several other Apalachicola packers were advocating the planting of oyster cultch to replenish exhausted oyster beds. Mr. Ruge became the secretary-treasurer in 1899 for the Fish Commission, the first state agency dedicated to marine conservation; however, the Commission had no appropriation, no employees and no means to collect fees. Nonetheless, they strenuously advocated oyster cultch planting. Wisely, the Commission sought the appointment of the Commissioner of Agriculture as a member and in 1913 the Shell Fish Division was created in the Florida Department of Agriculture. The Division was active for 20 years and planted 1.3 million bushels of cultch, licensed harvesters and packers, leased public water bottoms, patrolled state waters, and managed

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## Florida Cultch... Continued from page 8

the harvest of shellfish (oysters and clams) until the Division was merged into a new State Board of Conservation in 1932.

The value of oyster cultch planting as an employment possibility did not escape the attention of the Roosevelt Administration, and from 1935 to 1938 the Federal Emergency Relief Administration and the Works Projects Administration planted 950,000 bushels in the waters of every Florida coastal county except Monroe (e.g., Florida Keys). It is unclear from state records whether the State Board of Conservation planted cultch until a new Oyster Division was created in 1947 with F.G. Walton Smith and



Ruge Brothers Packing Co., Apalachicola Florida. The Florida Memory Project, State Library and Archives of Florida.

Robert Ingle as Director and Co-Director, respectively. Mr. Ingle did not waste any time, planting scrap metal in 1948 during their first year of operation (a failure), then barging cultch from Bayou La Batre Alabama in 1949. The Oyster Division was active for 22 years and planted 4.2 million bushels.

The State Board of Conservation Cultch became the Florida Department of Natural Resources in 1973, and cultch planting continued within the Division of Marine Resources. Several more state agency realignments occurred until 1999 when cultch planting, submerged lands leasing, shellfish area harvest management, and processing plant inspection returned to the Florida Department of Agriculture and Consumer Services in the form of the Division of Aquaculture. In our estimation, oyster harvest management and cultch planting are the earliest and longest running marine conservation effort in the State of Florida. Other than the federal work relief efforts in the 1930s much of the cultch planting has and continues to occur in Apalachicola and Escambia bays.

**Paul Zajicek & R. Sherman Wilhelm**  
Division of Aquaculture, Florida Department of  
Agriculture and Consumer Services

## Best Management Practices

The shellfish aquaculture industry has a vested interest in protecting and managing environmental resources. As conscientious environmental stewards, this responsibility lies with each farmer. As the shellfish aquaculture industry expands in area, number of leases and stature, it does so in waters leased almost exclusively in the public domain. Because of competing uses for those waters, the public is scrutinizing the industry closely. Industry leaders recognize the industry's responsibility to conduct its affairs in the most environmentally sound manner while remaining economically viable.

Developing an industry-wide code of practice (COP) and set of best management practices (BMPs) for shellfish growers on the East Coast is a method that can meet both goals of environmental stewardship and economic viability. The USDA Northeastern Regional Aquaculture Center (NRAC) has funded the East Coast Shellfish Growers Association (ECSGA) to conduct a series of sessions where growers, state and local agency representatives, along with environmental advocates and groups can meet together to better understand the aquaculture process, and how it can be conducted in a sustainable manner.

The sessions have been led by ECSGA Executive Director Ed Rhodes, Sandy Macfarlane (Orleans MA), Kathy Rhodes (Administrator for ECSGA), and Gef Flimlin (Rutgers Cooperative Extension of Ocean County). Colin Brannen from the World Wildlife Fund is also participating. During a session participants discuss gear and predator control, environmental concerns, user conflicts and access to farm sites, permitting and lease siting, and maintenance, operational practices and harvesting. Successful sessions have already been held in New York, New Jersey, Maryland/Delaware, and Connecticut/Rhode Island. Maine, New Hampshire and Massachusetts will have sessions very soon. Information collected during the sessions will be used to develop a template of best management practices that can be examined by the various stakeholders to determine if some would be applicable in their particular State. Some States have been working toward their own set of BMPs and the current process is not intended to supercede those efforts, but to help show that what works in some places may or may not work in others.

Currently the group is seeking support from NOAA to continue the process in the States south of Maryland, areas outside of the NRAC region. For more information about these sessions, contact Gef Flimlin (flimlin@aesop.rutgers.edu)

**Gef Flimlin, Joth Davis & Rick Karney**  
Industry Committee

## NSA Fund Raising Campaign Needs Your Help

The Capital Campaign is at a disappointing standstill with just over \$7K donated. This represents the contributions of 35 individuals, 5 of whom are from the Groton Post Office. One individual is responsible for almost 30% of the total, i.e., 30 NSA members have donated a total of approximately \$5K. It is not too late, however, to donate to this worthwhile cause. The students are the future of NSA! Please think about making a donation at the meeting in Providence or send your donation to Chris Davis, NSA Treasurer (contact information on back page).

### Upcoming Events

**National Shellfisheries Association, 100th Annual Meeting:** April 6-10, 2008, Westin Hotel, Providence, RI. For information visit [www.shellfish.org](http://www.shellfish.org).

**Benthic Ecology Meeting:** April 10-13, 2008, Westin Hotel, Providence, RI. Meeting will overlap one day with NSA. For information visit [www.benthicecology2008.uconn.edu](http://www.benthicecology2008.uconn.edu).

**Aquaculture Canada 2008:** May 10-14, 2008, Delta Brunswick, Saint John, New Brunswick, Canada. For information visit [www.aquacultureassociation.ca/ac08](http://www.aquacultureassociation.ca/ac08).

**World Aquaculture 2008:** May 19-23, 2008, Busan Korea. For information visit [www.was.org](http://www.was.org).

**Physiomar 2008, Reproduction, Growth, Bioenergetics, Nutrition and Genetics of Marine Molluscs:** September 1-4, 2008, IUEM, Technopole Brest-Iroise in Plouzané, France. Registration opens April 1, 2008. For more information visit [www.univ-brest.fr/IUEM/PHYSIOMAR](http://www.univ-brest.fr/IUEM/PHYSIOMAR)

**Aquaculture Europe 2008:** September 15-18, 2008, Krakow, Poland. For information visit <http://www.easonline.org>.

### In the News

**Congratulations Neil Bourne** - Former NSA President, Wallace Awardee and Honored Life Member, Neil Bourne, was recently inducted into the British Columbia Shellfish Growers Association Shellfish Aquaculture Pioneer Hall of Fame (say that 10 times fast!!!!). The story in Northern Aquaculture noted that he is "highly acclaimed for his ground-breaking shellfish work at the DFO Pacific Biological Station. Nice going Neil and richly deserved.

**Sammy Ray Interviewed by National Public Radio** - Long-time NSA member and professor emeritus Sammy Ray was interviewed by NPR for an article entitled Kibbe at the Crossroads: A Lebanese Kitchen Story. For the full text of the article visit <http://www.npr.org/templates/story/story.php?storyId=18547399>.

**Shellfish News** - For up-to-date news about shellfish from around the world visit <http://shellfish.org/aggregator>



### Help Wanted - Volunteers Needed

There is always plenty of work to do to keep NSA running, and the Board is always looking for able volunteers to help wherever their talents and skills can be applied. Presently, NSA is seeking individuals interested in volunteering for the following positions:

- \* Newsletter Editor
- \* Webmaster
- \* Recruits webmaster
- \* Recruits local meeting coordinator for NSA 2009 in Savannah, GA.

If you are interested in volunteering for one of these positions, please contact Dave Bushek (contact info on back of newsletter).

### Commemorative Oyster Knives

Those attending the 100<sup>th</sup> Anniversary Meeting in Providence will be treated to a commemorative oyster knife which has been donated by various industry organizations in gratitude to scientists and members of NSA who have devoted their life's work to shellfish, and to the people who live by its harvest and sale. The knife, Dexter Russell Providence style, will have a varnished birch handle with the NSA logo on one side and meeting information on the other. Funds for these knives have been donated by East Coast Shellfish Growers Association, Rutgers Cooperative Extension of Ocean County, Maine Aquaculture Innovation Center, Motivaitit Seafood, NJ Aquaculture Association, North Carolina Shellfish Growers Association, and the Ocean State Aquaculture Association. **Reminder:** be sure to place your knife in checked baggage or mail it home.

## NSA thanks the Aquaculture Association of Canada for sponsoring this issue of the Quarterly Newsletter



**Aquaculture Canada<sup>™</sup> 2008 and AquaFair 2008**  
Canada's national forum for the business, science and technology of aquaculture



**"Growing Quality Seafood through Innovation"**

**Keynote Speaker: Dr. Bruce Holub, University of Guelph, Scientific Director for the DHA/EPA Omega-3 Institute**  
*"Fish/seafood containing DHA/EPA omega-3 fatty acids for human health & the prevention/management of cardiovascular & other diseases"*

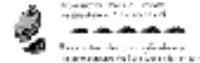
#### Sessions Planned

- \*Integrated Multi-Trophic Aquaculture
- \*Shellfish Marketing
- \*Shellfish Physiology
- \*Advances in Oyster and Mussel Culture
- \*Health Benefits of Shellfish

#### General Information:

Conference Coordinator – Joanne Burry  
Tel: 709-437-7365 Email: [jmurry@nlrogers.com](mailto:jmurry@nlrogers.com)  
[www.aquacultureassociation.ca/ac08](http://www.aquacultureassociation.ca/ac08)

#### Co-hosted by:



## Welcome ECSGA Members

Dear East Coast Shellfish Growers Association Members:

Thank you for examining this copy of the Quarterly Newsletter of the National Shellfisheries Association. If you are not a member of NSA, we invite you to join our Association. NSA is an international organization of scientists, management officials and members of industry that is deeply concerned with, and dedicated to the formulation of ideas and promotion of knowledge pertinent to the biology, ecology, production, economics and management of shellfish resources. The Association has members from all parts of the USA, Canada and 31 other nations. The Association sponsors an annual scientific conference (members receive discount rates on registration), publishes the peer-reviewed *Journal of Shellfish Research* (members receive printed issues as well as online access via BioOne), produces a Quarterly Newsletter packed with information about shellfish, and interacts with other associations and industry groups.

For more information about our 100 year old Association, and to become a member, visit our web site at [www.shellfish.org](http://www.shellfish.org).

## JSR Now On-Line

NSA members can now access the Journal of Shellfish Research online via the NSA website ([www.shellfish.org](http://www.shellfish.org)). Just log in and click on "View the Journal" on the upper left side of the page or "Journal of Shellfish Research" at the top of the page. If you are a paid member, you will see, under the subheading "Table of Contents", a link to "BioOne". This link will take you directly to the JSR page of the BioOne website, which will allow you to download pdf files of all articles starting with Volume 24 (2005).

## Bonus Meeting In Providence

The Northeast Shellfish Sanitation Association (NESSA) will be meeting in conjunction with the NSA meeting. Information regarding NESSA participation can be obtained from Martin Dowgert ([martin.dowgert@fda.hhs.gov](mailto:martin.dowgert@fda.hhs.gov)) or Sandy Shumway. This is an added bonus for our members to hear the latest news regarding shellfish and public health.

## Attention NSA Members

**Ballots for the 2008 election will be mailed soon. Please try to return your ballot soon after you receive it. We are on a short timeline for tallying the votes before the meeting.**

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