NEERS News

Winter 2013

A publication of the New England Estuarine Research Society Sara P. Grady, editor



Fall 2012 Meeting

"Thinking Beyond Boundaries: Broader Perspectives in Coastal Ecology"



Nixon symposium speakers (l. to r. Scott McWilliams, Judith Swift, Chris Kincaid, Fred Short, and Anne Giblin



Nixon lab members



Fred Short receives the NEERS Lifetime Achievement Award from (now) Past-President Stephen Hale

The Fall 2012 meeting brought NEERS to Block Island, a place that has grown to be a perennial favorite (maybe it's the ferry ride.) We were hosted by the skilled team of Veronica Berounsky, Walter Berry, Charley Roman, MJ James-Pirri, and Autumn Oczkowski.

The meeting kicked off with a fantastic symposium in tribute to Scott Nixon. It was intended to be a session that Scott would enjoy, with a focus on "thinking outside the box", and everyone who attended seemed to agree that we pulled it off. Speakers and topics included the history of sea grass science by Fred Short, new nitrogen processes by Anne Giblin, circulation and flushing in Narragansett Bay by Chris Kincaid, and birds and offshore wind by Scott McWilliams, concluding with a talk by URI Coastal Institute Director and Theater and Communications Studies professor **Judith Swift** entitled "Coastal Ecology: A Mixing Zone of the Nixonian Mind". The tribute and sharing of memories was continued later that evening in the Nixon Lab guest house.

On Friday, talks focused on nutrient budgets and biogeochemical cycling, primary production and higher trophic levels, and physical environments. The **Fulweiler** Lab contributed quite actively to the sessions, which led to good-natured ribbing and anti-nitrogen protests later that evening during the post-banquet entertainment. It has become a NEERS tradition for **Walter Berry** to host a game show on Friday evening, and this year we were challenged with NEERS "Survivor".

The following students won awards at the banquet:

- Warren Prize (Best Undergraduate Poster) - **Ryann Rossi**, Univ. of RI, "Leaf litter decomposition and processing in a Caribbean mangrove forest and its implications for carbon sequestration"
- Rankin Prize (Best Undergraduate Talk) **Mary Katherine Rogener**, Boston Univ., Metals, mud, and the nitrogen cycle the impact of Mn and Fe on sediment N₂ fluxes in a temperate marine ecosystem"
- Dean Prize (Best Graduate Poster) Sarah S. Corman, Brown Univ., "Spartina alterniflora in a changing climate: impacts of rising temperatures on salt marsh elevation"
- Ketchum Prize (Best Graduate Talk) **Joanna C. Carey**, Boston Univ. "Watershed land use a major control on silica export to marine waters"

Travel awards were also given out three NEERS Niering travel awards to Elise Heiss, Janis Hall, and Andraya Ehrlich, and two WHOI SEA Grant travel awards to Melissa Palmisciano and Mary Kate Rogener.

In addition to the usual NEERS awards, the NEERS Lifetime Achievement Award was given to **Fred Short**, who made the trip back from Washington to accept his award. Despite our protests, he decided to go back again.

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NEW ENGLAND ESTUARINE RESEARCH SOCIETY

http://www.neers.org

NEERS is an affiliate society of the Coastal and Estuarine Research Federation (CERF)

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Fall 2012 Meeting (cont.)

This year was an election year, so Friday was also marked by the election of **John Brawley** to President and **Jamie Vaudrey** to President Elect, with **Stephen Hale** becoming Past President. Secretary **Sara Grady** and Treasurer **Cindy Delpapa** agreed to keep their positions for another two years.

There were a few potential options for Friday night's entertainment, with dancing inside and an acoustic coffeehouse outside. In the end, the acoustic coffeehouse, led by **Jonathan Garber** and **Chris Deacutis**, moved inside and most of the dancers moved down the hill to the infamous Yellow Kittens Tavern. The Stickleback Award was not given out and is still in the possession of **Marshall Pregnall**.

The meeting concluded with sessions on shellfish and estuarine ecosystems, including an "Ignite" session where six speakers presented 20 slides each, with 15 seconds per slide. Afterwards, there was an opportunity to visit the Nature Conservancy's raptor banding station.

Thank you to our hosts from URI GSO for another great meeting. NEERS heads to Portland, ME this spring, then CERF in San Diego in Fall 2013.

Greetings from CERF Argentina!

Marianne McNamara from Stony Brook University was able to attend CERF International in Mar de Plata, Argentina, with generous support from both NEERS and CERF. To thank us, she sent photos of herself holding the NEERS logo while exploring Argentina. Thanks for representing us, Marianne!















Tales of Winter Fieldwork







Well, I thought, tromping across the ice in my surplus U.S. Army white bunny boots, at least there are no bears or mosquitoes this time of year. Bunny boots, with two thick layers of wool and an insulating air pocket surrounded by layers of rubber, are rated warm to -65° F. The air temperature was only -15° F now so I was grateful for toasty toes. The January cold and short daylight hours (in mid-January here at 62° N, the sun rises a little after 10:00 am and sets a little after 4:00 pm) reminded me I wasn't in a New England estuary any more.

I and three mates from the Alaska Department of Fish and Game were sampling salmon redds in side sloughs of the Susitna River, located in south-central Alaska. Pacific salmon typically lay their eggs in gravel redds where percolating groundwater keeps the eggs free from smothering glacial-silt sedimentation during the summer and freezing cold during the winter. We were tracking the development of eggs and alevins (newly-hatched salmon with big eyes and yolk sac still attached). Shattering the icy-cold stillness with a gasoline-powered ice augur, we bored down through the ice to the redds. Seeing, just an augur-length away from nose-numbing cold, this amazing splash of life with its promise of future salmon fry migrating to the sea and returning as adults to spawn warmed my bones. When we worked here during the previous summer spawning runs, black and grizzly bears competed with us for access to the salmon spawning areas, while mosquitoes competed with us for access to our blood. Rather, we competed with the bears; we were the intruders. But at our summer tent camp, while we were out sampling, black bears brazenly raided our food stored in a cache 20 feet up in a cottonwood tree. That was too much for us, a long river-boat ride from resupply, so we sheathed the tree trunk in sheets of aluminum metal. Later, we smugly noted the failed attempts, as recorded by ferocious-looking claw marks in the metal. In the winter, we packed chemical mitten heating packs for protection from the cold. We also packed "heat" for protection in the summer, but it was in the form of pepper spray and one 12-gauge pump shotgun per crew.

At the end of winter field days, we would start a roaring woodstove fire in our small field cabin and belly up to the stove until things warmed up. Stanzas from Robert Service's *The Cremation of Sam McGee* memorized in high school passed through my head. Occasional sampling "off-season", when rates of many temperature-dependent physiological processes slow down, helps establish ecological baselines, important data to have as global climate change raises the temperature of these sub-Arctic climes. - **Stephen Hale**



Dave Burdick and I were out measuring SETs. Objective 1 was to transfer his "legacy" SETs over to Rachel Carson NWR. Objective 2, Post-Hurricane Sandy assessment - we (in Maine) were on the north end of the storm so don't expect to see much effect. This post-Sandy effort is being coordinated by Don Cahoon and Glenn Guntenspergen at USGS. - Sue Adamowicz

In January 2009 we had a January thaw and the ice broke up on Narrow River so I talked my neighbor - who still had his boat near the water if he would take me out sampling. My boat was winterized and had come out of the water in December but I was really curious about what was going on in the River in winter. The morning we went turned out to be very cold again but there was open water. As we got into Upper Pond, there was skim ice. We kept going with his little aluminum skiff acting as an ice breaker. We were seeing birds that you usually see only in the Arctic (my neighbor is a birder and would know). We got to our sampling site fine - and realized that we did not need to put out an anchor since we weren't drifting at all! The ice was re-forming around us! We were successful at taking a profile with the YSI after making a hole in the ice for the sonde and also took some samples before our hands were too numb to work and then used the boat as in ice breaker to get back home! The profile was worth it - a cool and unusual look at the winter in Narrow River! (no pun intended).

- Veronica Berounsky

Winter Fieldwork (cont.)

Field work in January is far from routine in New England. With temperatures ranging from 1°F on January 24th to 62°F on January 31st and winds gusting most days to 25 knots, it's tough to schedule time on the water. It always seems that the coldest days are the calmest and the warmer days are riddled with fog and wind. The extreme temperature swings, snowstorms, downpours, and 60 knot gusts make January an ideal time to snuggle up to a cup of tea and start planning for spring fieldwork.



Eelgrass in January



Frozen Lanes Cove, Gloucester, MA

But, on January 16th, DMF divers managed to sneak in one day in the field to complete a portion of the quarterly SeagrassNet monitoring. The day started out snowing heavily with zero visibility. The forecast called for the snow to end early and there was no wind, making for calm seas for the short steam from Gloucester Harbor to Salem Sound. Upon arrival to the SeagrassNet site, the snow began to let up as forecasted and the divers were ready to go. The first team in the water managed to complete an entire transect. The 40°F water was a welcome change from the 30°F air even though that still makes for numb fingers that don't function well with a pencil in hand.

The eelgrass at the SeagrassNet site looked healthy. As is typical in the winter, the density had decreased and shoots were small and brilliant green. With an average of 111 shoots / m², a mean percent cover of approximately 20%, and an average shoot height of 37 cm, the meadow is seasonally at a lower density compared to the 75% -90% cover typically found in July. The next quarterly monitoring in April will kick off a busy spring and summer. In the meantime, the DMF eelgrass team will be hard at work the rest of the winter planning for another season of eelgrass restoration, monitoring, and mapping.

- Wesley Dukes, Marine Fisheries Biologist, Massachusetts Division of Marine Fisheries



Ross Kessler is excited for our steam back to the dock in the heated wheelhouse of the R/V Alosa.

The NEERS Newsletter is always accepting submissions. Send (almost) anything to Sara Grady, NEERS Newsletter Editor to sara@nsrwa.org

More NEERS Meeting Photos

Award Winners



President John Brawley with WHOI SEA Grant travel award winners Melissa Palmisciano and Mary Kate Rogener

NEERS At Work





President **John Brawley** with NEERS Niering travel award winners **Andraya Ehrlich**, **Janis Hall**, and **Elise Heiss**



President **John Brawley** with NEERS presentation and poster award winners (l. to r. **Joanna Carey, Sarah Corman, Mary Katherine Rogener**, and **Ryann Rossi**) plus Scott Warren (of the eponymous Warren award)



Left – Program Chair **Hilary Neckles** and her fashionable sling Above – Treasurer **Cindy Delpapa** and Secretary **Sara Grady** handle registration

NEERS Spring Meeting April 11-13, 2013

Portland, ME



Clarion Hotel Portland, Maine

Important Dates

March 6 - student travel award application due

March 11 - last day for conference rate at the hotel

March 24 - online meeting registration due

April 3 - registration payment due to Treasurer

The meeting will begin at 1pm on April 11th with a special symposium in honor of Dr. Michele Dionne.

Check here for more details soon!

http://neers.org/MEETINGS/NEERSmeeting/MeetingOverview.html