The Coastal Society

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National Ocean Policy Roundtable Summary

By Kristen Fletcher

On Thursday, October 28, 2010, The Coastal Society, Restore America's Estuaries, Coastal States Organization, and Coastal Management journal presented a National Ocean Policy Roundtable at the Hall of States, Washington, DC. The three panelists below provided their insights to the audience after which a question and answer discussion ensued, followed by opportunities for additional conversations during lunch.

Andy Lipsky, Ocean Policy Advisor, National Ocean Council, Andrew_A._Lipsky@ceq.eop.gov
Mr. Lipsky provided updates regarding the National Ocean Council (NOC), Governance Coordinating Committee (GCC) and Coastal and Marine Spatial Planning (CMSP). Mr. Lipsky shared background on the September 24 NOC Deputies meeting which included discussion of action items, workgroups and schedules for the NOC. The NOC is currently seeking a Director and Deputy Director. Mr. Lipsky noted that letters were sent to Governors, Tribal and Local government leaders for nominations for the GCC which is planned to be set up and operating by early winter. Priorities for the GCC include providing input to the CMSP workshops, assisting in the development of a dispute resolution mechanism for Regional Planning Bodies, and providing advice to the NOC on research priorities. Mr. Lipsky also discussed the planning effort for the National CMSP workshop which will likely take place in DC in February or March. This workshop will be for federal agencies, states and tribes, will likely include a simulation exercise and will focus on building on the existing expertise of

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Progress in Marine Debris Research and Prevention: Part 2

By Sherry Lippiatt, Carey Morishige, Courtney Arthur, and Kris McElwee

Considering the formidable environmental issues that the world faces today --greenhouse gas emissions, ocean acidification, toxic pollution, biodiversity loss, etc.--one would think that reducing the amount of man-made material that inadvertently enters the marine environment would be a relatively straightforward task. Marine debris is a solvable problem, but any significant effort will require international collaboration, carefully crafted management strategies, technological innovations, support from the general public, governments, and industry, and a change in the behavior of individuals around the world. Understanding the sources, fates, and impacts of marine debris through research and assessment is essential to developing solutions, as outlined in our first article, published in volume 33(3) of the Bulletin (Lippiatt et al., 2010). With increasing momentum, on-the-ground activities and policies are preventing the impacts of debris. This article will chronicle a few of the past, current, and potential future strategies for reducing the impacts of marine debris, with a focus on fishing gear, industry initiatives, and behavior change.

In addition to harming marine animals and habitat, derelict fishing gear (DFG) creates an economic burden (McIlgorm et al., 2008). In Puget Sound, Washington the lifetime impact of a derelict net to the commercial fishery has been estimated at nearly $20,000 of Dungeness crab (Gilardi et al., 2010). The cost associated with DFG has garnered attention from fishermen and policy makers. Adequate port disposal facilities and

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INSIDE

It's been a great ride…

Dear TCS Friends and Colleagues:

It's hard to believe this is my last letter as President of TCS…the past two years have flown by. I guess that's what happens when you are doing something that is so personally rewarding. It has been a great honor to serve as a temporary steward of TCS, but now it's time to turn the helm over to our incoming President, Lisa Schiavinato; I look forward to continuing working with her over the next several years.

Being TCS President has also been an extremely inspiring experience – particularly when I think about how much has been accomplished over the past two years by so many dedicated TCS volunteers. Through the efforts of our members, we have a brand new website with a professional look and fresh content. This past summer we hosted the hugely successful TCS22 International Conference in Wilmington, NC which required the help of dozens of TCS members to plan and assist with on-site logistics. And we now have seven TCS Chapters that are largely organized and run by TCS student member volunteers.

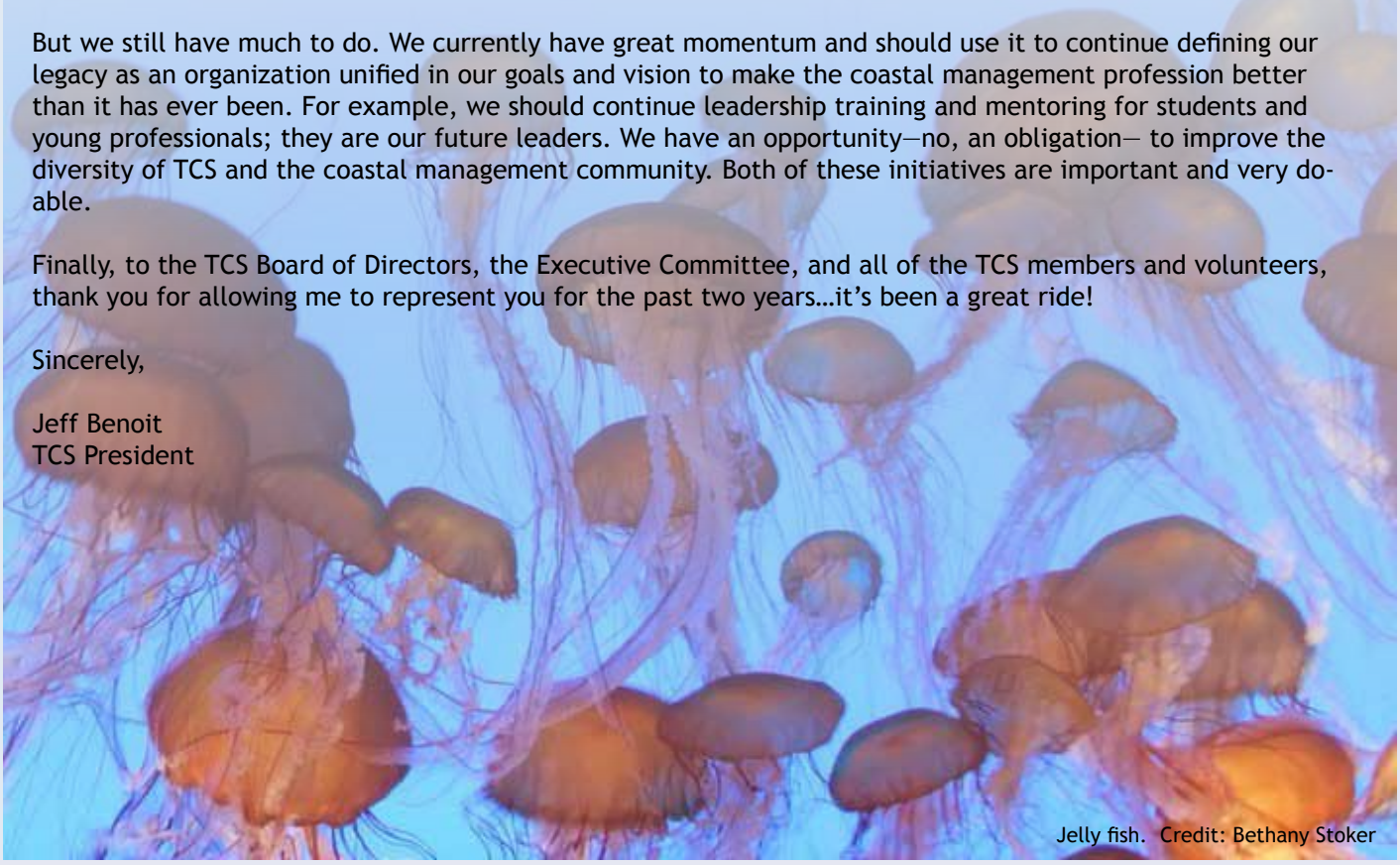
We also enjoyed several important achievements that will shape the future of TCS as it continues to move forward. Last year, the TCS membership ratified the first changes to our bylaws in many years. The changes will help TCS operate more effectively and maintain as much organizational efficiency as possible. We continue our close relationship with Taylor & Francis Publishers who help us provide the Coastal Management Journal as part of TCS member benefits. They are also a valued sponsor of the TCS conference and co-host of regional coastal management symposia every year.

But we still have much to do. We currently have great momentum and should use it to continue defining our legacy as an organization unified in our goals and vision to make the coastal management profession better than it has ever been. For example, we should continue leadership training and mentoring for students and young professionals; they are our future leaders. We have an opportunity—no, an obligation— to improve the diversity of TCS and the coastal management community. Both of these initiatives are important and very doable.

Finally, to the TCS Board of Directors, the Executive Committee, and all of the TCS members and volunteers, thank you for allowing me to represent you for the past two years…it's been a great ride!

Sincerely,

Jeff Benoit
TCS President



Jelly fish. Credit: Bethany Stoker

From the Editor's Desk

"How inappropriate to call this planet Earth, when it's quite clearly Ocean."
--Arthur C. Clarke

Not a quote that many members of The Coastal Society would likely dispute! And so at last, in 2010, the United States has a National Ocean Policy (NOP), a statement that acknowledges at a policy level just how important the oceans are to all of us. President Obama's seven page, July 19, 2010 Executive Order enacting the NOP is a game-changer. Courtesy of past-president Kristen Fletcher, we have a front page summary of a roundtable that TCS helped co-sponsor, exploring the NOP. Our other front page piece, a collaborative effort by several authors, is part 2 (part 1 appeared in the last issue of the Bulletin) of an update on progress in addressing marine debris. We've also got a review of a fascinating new book written by long-time TCS member Don Davis. And please be sure to check out what some of our student chapters have been doing.

With warmest wishes for a Happy Hanukkah, Merry Christmas, Happy Kwanzaa, Joyous Solstice, Merry Festivus and/or a Happy New Year!

Ellen Gordon
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Credit: Bethany Stoker

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economic incentives can make it more convenient and potentially even profitable for fishers to properly dispose of old fishing gear. For example, the Republic of Korea has been reimbursing fishers for collecting and properly disposing of DFG since 2003 (Cho, 2009). Such programs are currently not feasible in the United States, where the recovery of DFG by fishers for pay is inhibited by certifications required for transporting DFG or any other waste. In addition, some state laws prohibit tampering with abandoned gear (NRC, 2008). Other proposals for reducing loss or abandonment of fishing gear include expanding and enforcing requirements for port reception facilities, vessel waste management plans and record books, gear loss reporting, and gear marking and identification (NRC, 2008).

The impacts of DFG can also be reduced through innovations that minimize both the loss of active gear and the effectiveness of gear once it becomes derelict. The need for innovations in gear technology has been discussed for decades (e.g., Cottingham, 1988), but progress has been slow. Gear modifications such as rot cords and degradable panels on traps may allow for free movement into and out of derelict traps and thus lessen the mortality of target and non-target species (Havens et al., 2009), but even gear outfitted with "new" technologies can continue to fish for a significant amount of time after becoming derelict (Barnard et al., 2008; Havens et al., 2008).

Most modern fishing gear and much of the debris found in the marine environment is made of plastic (Derraik, 2002). Changes in consumer product design to reduce the amount of persistent material used could ultimately reduce the amount and impact of marine debris. As an example, innovations to reduce packaging may decrease costs for producers while reducing unnecessary waste and a major source of debris. Furthermore, there has been a recent increase in the research, development, and use of bioplastics: plastics that are bio-based (made from renewable materials, e.g., corn-, starch-, algae-based), biodegradable (can be degraded through the action of naturally occurring microorganisms such as bacteria, fungi, and algae), or both. Though developing new materials is a step in the right direction, important questions remain regarding the actual environmental benefit, performance, cost-effectiveness, and degradation of bioplastics (Narayan, 2009). Additional waste management infrastructure, including controlled recovery and widely available industrial composting, is required to take advantage of the biodegradability of these innovative materials (Song et al., 2009). Widespread conversion from traditional materials to those that do not persist in the marine environment may be an ambitious goal, but consumer demand can create additional incentives for industries to reduce waste regardless of material type. By reporting life cycle assessment results for alternative products and packaging, industries can give consumers the option to choose lower-waste products.

Challenges in Preventing Marine Debris

Marine debris ranges from sub-millimeter-sized microplastics to multi-ton derelict vessels, originates anywhere humans are present, and can be found on shorelines, inland waters, and thousands of miles offshore. Because debris can travel great distances and is weathered over time, it is often difficult to determine the source of marine debris and subsequently target specific groups of polluters. Regulations that aim to prevent sea-based marine debris, such as MARPOL Annex V, are difficult to enforce. The effective enforcement of existing litter laws was put forth as a recommendation of the Interagency Task Force on Persistent Debris over twenty years ago (Cottingham, 1988). Challenges arise due to the required international cooperation, time, money, and infrastructure for effective enforcement. Furthermore, without a reliable assessment of the baseline of debris in the marine environment it is difficult to measure management success. There is no cure-all method to prevent marine debris. The issue must be addressed through a variety of mechanisms, each targeting a marine debris type, source, or impact.

The most effective way to reduce the environmental impacts of marine debris is to prevent it from getting there in the first place. Implementing bans, fees, and other disincentives on common or especially harmful ma-

Volunteers at the 2009 International Coastal Cleanup collect debris along the Anacostia River. Credit: Susan Baker

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rine debris items is an additional management strategy to prevent marine debris. For example, the United Nations moratorium on high seas driftnets in the early 1990s (resolutions 44/225 and 46/215) targets a type of fishing gear known to be particularly destructive when lost (Carr et al., 1985). Bans on everyday consumer products have the potential to affect a large portion of the population and attract widespread public debate. There has been a recent increase in single-use plastic bag bans and fees in the U.S. and abroad, with the intention of minimizing waste and especially litter. In Washington, DC, plastic bag use dropped 82% over the first 6 months that a five-cent fee was imposed (based on fees collected; Simon, 2010). Although it is difficult to measure the effectiveness of bag fees in reducing the amount of marine debris, decreases in consumption are a sign that consumers are learning to adapt to small inconveniences like bringing a reusable bag to the store, despite whether they consider the potential environmental benefit of their decisions.

In addition to economic incentives, marine debris can be prevented through changes in the behavior of individuals. Raising awareness and creating a sense of environmental responsibility through education and outreach can facilitate a change in behavior, particularly for young people. The Ocean Conservancy recently held its 25th annual International Coastal Cleanup, one example of an impressive grassroots cleanup event that not only removes debris from the environment (almost 500,000 volunteers in 108 countries and locations removed 7.4 million pounds of debris in 2009; Ocean Conservancy, 2010), but also gives participants first-hand experience of the impact that improper trash disposal can have on the marine environment. Similarly, outreach and education geared towards youth can inform the next generation about the impacts of marine debris and promote practice of the three Rs (reduce, reuse, recycle). Social media have provided new ways to bridge borders, engage the public, and provide real-time updates to those who are interested in marine debris events in their communities. Effective outreach, designed for a specific audience, using appropriate media, and with measurable results, is an invaluable tool in reducing negligence in waste disposal and increasing public practice of the three Rs as well as building public support for marine debris reduction strategies.

Building a global strategy for marine debris reduction through partnerships and collaborations that cross disciplines and borders is a focus of the upcoming Fifth International Marine Debris Conference. By measuring the results of our strategies and taking an adaptive management approach, we can take advantage of advances in research and the development of new tools for the prevention of marine debris. Despite the challenges to progress in preventing marine debris (see call-out box), its variety and pervasiveness provide many avenues from which we can approach and address the problem. Preventing marine debris, with its variety of sources and impacts and its mobility across borders, is going to require management actions at all levels—global, country, and local–as well as individual commitments (Alford, 1989).

Plastic debris in the Capitol Reflecting Pool, Washington, DC. Credit: NOAA

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Carey Morishige is the outreach coordinator for the NOAA Marine Debris Division. She holds a B.A. in Zoology and M.S. in Animal Science from the University of Hawaii.
Courtney Arthur is the research specialist for the NOAA Marine Debris Division. She holds a B.S. in Biology from the College of William & Mary and an M.S. in Marine Biology from the College of Charleston, and currently resides in Washington, DC.
Kris McElwee is Pacific Islands coordinator for the NOAA Marine Debris Division, stationed in Honolulu. She received a B.A. in Geology from Case Western Reserve University and an M.S. in Marine Resource Management from Oregon State University.

NOAA Enforces Right Whale Ship Strike Reductions
On November 16th, the National Oceanic and Atmospheric Administration (NOAA) announced that it was issuing notices of violations proposing civil administrative penalties against seven vessels for allegedly violating seasonal speed limits designed to protect one of the most endangered whales in the world. These civil administrative penalties are the first assessed since the Right Whale Ship Strike Reduction Rule was enacted on Dec. 9, 2008. Because there are as few as 350 North Atlantic right whales still in existence, the whales are protected under the U.S. Endangered Species Act of 1973 and the Marine Mammal Protection Act of 1972. The Right Whale Ship Strike Reduction Rule restricts vessels of 65 feet or greater to speeds of 10 knots or less in seasonal management areas along the East Coast. The speed restrictions are based on the migration pattern of right whales and are in effect through April 30 each year. The notices issued focus on vessels that allegedly traveled multiple times through the seasonal management areas for right whales at speeds well in excess of the 10 knots allowed under the regulations. The penalty assessments range from $16,500 to $49,500, depending on the frequency of the violations. Excerpted from http://www.noaanews.noaa.gov/stories2010/20101116_rightwhale.html


Right whale calf. Credit: NOAA

U.S. Oil Spill Panel Urges Increased Safety Steps
In early December, the White House oil spill commission challenged offshore drillers to boost safety standards, detailing proposals for the creation of an independent, self-regulating industry group and reformed government oversight. Created in the aftermath of the BP drilling accident in the Gulf of Mexico, the commission said the entire offshore oil industry needed to increase its focus on safety and such an industry group could hold firms accountable. Commission co-chair Bill Reilly said a lack of resources had plagued the government's offshore drilling regulator for years, which he said justified the Obama administration's decision to delay expansion of offshore drilling to areas off the Atlantic coast and in the eastern Gulf. At a meeting last month, the panel's investigative team blamed bad decisions by BP and its contractors, Halliburton and Transocean, for the massive Gulf spill. Excerpted from Planet Ark, http://planetark.org/wen/60443

Thousands Pledge to Boycott Restaurants Serving Bluefin Tuna
So far over 14,000 people have pledged to boycott eating bluefin tuna or visiting any restaurant that serves the imperiled species. The boycott, begun by the US-based Center for Biological Diversity is striving to raise awareness about a species that many scientists say is being fished to the brink of extinction. Given its stark population declines, the fish is currently listed as Critically Endangered by the IUCN Red List. Despite this, the Atlantic bluefin tuna (Thunnus thynnus) continues to face setbacks to its survival. In the spring, the species missed being listed for protection under the Convention on International Trade in Endangered Species (CITES) after heavy lobbying by Japan, while last month the species' regulatory group, the International Commission for the Conservation of Atlantic Tuna (ICCAT), decided on a fishing quota that was only slightly lower than the previous year, despite continuing concerns that the species could become functionally extinct. Three-quarters of the lucrative Atlantic bluefin tuna catch goes to one country, Japan, where it is mostly consumed as sushi. However, restaurants in the US and Europe have also served the endangered species. Excerpted from Mongabay.com, http://news.mongabay.com/2010/1201-hance_bluefin_boycott.html

Chile: Hundred-fold Increase in Nation's MPA Coverage
In October, the Chilean government designated a 150,000-km2 no-take marine reserve around Sala y Gómez Island in the Pacific Ocean. The new Sala y Gómez Marine Park expands Chile's total marine protected area (MPA) by

more than 100 times, from the previous 0.03% to 4.41% of the nation's waters. Located 3200 km west of the Chilean mainland, Sala y Gómez Island is tiny and uninhabited, consisting of two rocks measuring just 15 hectares (0.15 km2) in area. The island is part of a chain of seamounts, several of which are included in the new MPA. Conservation organizations Oceana and National Geographic conducted a scientific expedition to the island last March and found abundant populations of vulnerable species such as sharks and lobsters in the surrounding waters, as well as high biodiversity in deeper waters. They advocated protection of the entire EEZ around the island, which would have comprised nearly 412,000 km2. (On the other side of South America, the Argentine government also announced new protection for its waters in October, designating three MPAs totaling 4000 km2. The three new marine parks - in Patagonia, Makenke, and Penguin Island - bring the nation's total MPA coverage to 1.18% of its waters, according to officials.) Excerpted from MPA News, http://depts.washington.edu/mpanews/MPA117.htm#large

Shell Disease and Lobster Die-off

Hans Laufer, research professor in the Department of Molecular and Cellular Biology at the University of Connecticut has been researching the causes of "shell disease" in lobsters. The late 1990s were the beginning of a massive die-off in Long Island Sound which has been attributed to warming temperatures and the spraying of mosquito insecticides in shore areas. In the past 10 years landings have fallen to one sixth of their levels in the late 1990's. Laufer's research is adding another component to this mystery. He has found that waterborne chemicals leached from plastics, detergents and paints, specifically alkyphenols, are interfering with the lobsters' molting process, making them vulnerable to the disease. Excerpted from Atlantic Coastwatch Newsletter, http://www.atlantic-coastwatch.org/Newsletter.htm

NASA/USGS Images Reveal Disappearing Mangroves Worldwide

Recently, NASA and the US Geological Survey released the first-ever satellite analysis of the world's mangrove ecosystems. What they found was dire: mangroves covered 12.3% less area than previously estimated. Currently covering a total of 137,760 square kilometers, this number keeps shrinking: mangroves are vanishing rapidly due to rising sea levels, deforestation for coastal developments, agriculture and aquaculture. In addition to serving as vital marine nurseries, and buffering against marine erosion, mangrove forests store massive amounts of carbon. During the devastating 2004 tsunami in Southeast Asia, regions with mangroves suffered less damage than those without. In all it has been estimated that mangroves provide at least $1.6 billion in ecosystem services annually. Yet despite their importance, less than 7% of the world's mangroves are under legal protection. Excerpted from Mongabay.com, http://news.mongabay.com/2010/1201-hance_nasa_mangroves.html

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Teresa Christopher, Senior Policy Advisor, Office of the Undersecretary, NOAA, Teresa.Christopher@noaa.gov

Ms. Christopher provided the NOAA perspective and in particular noted that NOAA's priorities in its Strategic Action Plan are well-coordinated with the priorities in the National Ocean Policy. Ms. Christopher noted that NOAA has a seat on both the Principals level (Dr. Lubchenco) and the Deputies level (Dr. Larry Robinson) of the NOC. In addition, she noted that Jen Lukens is the Director of the CMSP Program which is within NOAA's National Ocean Service. Ms. Christopher encouraged stakeholders to communicate with NOAA and the other federal partners on the NOC, especially regarding Ocean Research and Resources Advisory Panel membership which is currently being reviewed.

Roberta Elias, Senior Program Officer, Marine & Fisheries Policy, World Wildlife Fund, Roberta.Elias@wwfus.org

Ms. Elias presented the perspective of the Environmental Nongovernmental Organization (ENGO) community including areas of priority focus. Ms. Elias noted that the priorities include resiliency in ecosystems, regionally smart approaches to protection and restoration, water quality issues, environmental stewardship needs in the Arctic Ocean and using CMSP to balance existing uses with foreseeable future uses. She encouraged the broader community to commit to participating in the National Ocean Policy dialogue and to work together to secure funding for ocean and coastal issues.

Discussion

The following key themes emerged during the discussion: (1) the need for education and outreach regarding CMSP; (2) the need for a coordinated approach for financial support in FY '12 and beyond; (3) the community taking advantage of stakeholder engagement with all federal agencies represented on the NOC and its staff.

Kristen Fletcher is Executive Director of the Coastal States Organization and a past president of The Coastal Society.

TCS Student Chapters

UNIVERSITY OF DELAWARE
The student chapter of TCS at the College of Earth, Ocean, and Environment, University of Delaware, is officially up and running, recently eliciting participation from five additional students, nearly doubling our initial size! We're looking forward to growing even more, and are meeting in December to plan for 2011, including new initiatives focusing on advances in offshore wind and renewable energy, ports and shipping, international policy, and other strengths of the students at the university. We're also looking to develop a website for the chapter, so people everywhere can tune-in to our developments.

DUKE
This past September, the Duke University student chapter of The Coastal Society held its 10th Annual Neuse Riverkeeper Foundation Sprint Triathlon. There were more than 100 individual and team participants, as well as over 40 volunteers in attendance. This event not only increased local awareness about the Neuse Riverkeeper Foundation and their work to protect, restore and preserve the Neuse River basin, but also raised more than $4,000 for the Foundation.
Additionally, in October, eight TCS members volunteered for a day with the North Carolina Coastal Federation (NCCF). Our efforts helped create 150 oyster shell bags that will be used when NCCF continues its oyster restoration project next season, constructing a series of oyster sills in the White Oak River basin. After assembling the oyster bags, TCS members were treated to a boat tour of the White Oak River and Jones Island to see the ongoing restoration work being done by NCCF. The education director for NCCF accompanied the group, providing information about the White Oak River's water quality, the ecology of the estuary, what's happened with the restoration work so far, and how oyster restoration projects like this one can improve water quality in the future.

Kirby Rootes-Murdy completes an oyster bag. Credit: Mary Clark

Racers about to start the swim portion. Credit: Michael J. Barrett

Finally, our chapter partnered with the Green Wave, a campus greening group, to host a video viewing of the TEDx Great Pacific Garbage Patch Conference held in Los Angeles on November 6th. There were 15 people in attendance to hear and watch the variety of speakers and performers touch upon the environmental issues posed by plastic pollution in our oceans.

STANFORD
The Stanford student chapter of The Coastal Society elected a new slate of officers this fall:
President: Lida Teneva
Vice President: Austin Becker
Secretary: Katie Jewett
Treasurer: Justine Kimball
Campus Environmental Liaison: Stacy Aguilera

The chapter hosted presentations by Rick MacPherson (Conservation Programs Director, The Coral Reef Alliance) and Alissa Takesy (Federated States of Micronesia Protected Areas Network Coordinator). This winter, the chapter has organized its first "for credit" seminar series for grads and undergrads, "Our Coastal Society: An Interdisciplinary Seminar on Ocean/Coastal Themes." The seminar, led by chapter members and Professor Meg Caldwell will explore marine science and policy for the Pacific Coast that informs natural resource as well as conservation decision-making and future challenges. Topics to be covered may include tuna and shark research along the California coast, kelp forest ecosystems, fisheries management, marine spatial planning, legislative advances such as the Marine Life Protection Act (MLPA), climate change threats to our coast, the importance of the US west coast in the context of Pacific Ocean ecosystem health, and others.

National Conference on Science, Policy and the Environment: Our Changing Oceans
January 19-21, 2011, Washington, DC
http://communities.earthportal.org/ncseoceans2011/

New Partners for Smart Growth Conference
February 3-5, 2011, Charlotte, North Carolina
http://www.newpartners.org/index.html

24th Annual National Conference on Beach Preservation Technology
February 9-11, 2011, Jacksonville, FL
http://www.fsbpa.com/techconference.htm

International LIDAR Mapping Forum
February 7-9, 2011, New Orleans, LA
www.lidarmap.org/conference

The Fifth International Marine Debris Conference
March 20-25, 2011, Honolulu, HI
www.5imdc.org

Coastal Geotools 2011
March 21- 24, 2011, Myrtle Beach, SC
http://geotools.csc.noaa.gov

International Conference: 'It's not just about the fish' - Social and Cultural Perspectives of Sustainable Marine Fisheries
April 4th –5th, 2011, Greenwich, London, UK
To bring together researchers and practitioners from across the globe to explore the social and cultural aspects of sustainable marine fisheries management
www.gre.ac.uk/science

SAMPAA 7-The Evolution of Protected Areas: Renewing our Passion and Purpose
April 7-11,2011, Banff National Park, Canada
http://www.sampaa.org/meetings/conference-2011

ICS2011 - 11th International Coastal Symposium
May 9-14, 2011, Szczecin, Poland
http://www.ics2011.pl/

Solutions to Coastal Disasters
June 25-29, 2011, Anchorage, AK
http://content.asce.org/conferences/cd2011.

2nd International Symposium on Integrated Coastal Zone Management
July 3rd – 7th, 2011, Arendal, Norway
www.imr.no/iczm

Coastal Zone 11
Winds of Change: Great Lakes, Great Oceans, Great Communities!!
July 17-21, 2011, Chicago, IL
http://www.doi.gov/initiatives/CZ11/index.htm

EMECS 9: Managing for Results in our Coastal Seas
August 28-31, 2011, Baltimore, MD
Call for abstracts, due January 14, 2011
www.conference.ifas.ufl.edu/emecs9

UNIVERSITY OF RHODE ISLAND
Chapter members participated in a 5k run hosted by Rhode Island Sea Grant. The Coast Run is part of Coastweeks, which was celebrated this year from September 16 to October 13, 2010. Coastweeks is an effort by Rhode Island Sea Grant to foster greater awareness and better management of Rhode Island's coastal resources.

We continued our monthly beach clean ups at the chapter's Adopt-An-Access project in Narragansett. Home Depot's donations last year of garbage bags and gloves are still being used and allow us to be more efficient and safe while picking up trash!

We are planning a career panel in the spring where URI Alumni in the area would come and speak about their careers and how they got there, providing advice and suggestions to new Marine Affairs students on finding jobs in coastal management/marine affairs.

Triathalon: Duke University runner Deirdre Ledford crosses the finish line. Credit: Sarah Clem

Washed Away? The Invisible Peoples of Louisiana's Wetlands by Donald W. Davis

Review by Thomas E. Bigford

Louisiana is well known for its unparalleled natural resources, unprecedented environmental challenges, and deep cultural connections linking its citizens to the coast. Those essentials to life in bayou country have been challenged in recent years by a series of horrendous hurricanes and the unprecedented Deepwater Horizon/BP oil spill. Fortunately, one close observer spent decades living among Louisiana's "marshdwellers," collecting stories, and documenting the struggles that define life on the edge. Donald W. Davis' 578-page treatise on Louisiana's invisible peoples is a well-timed contribution (2010, University of Louisiana at Lafayette Press, www.ulpress.org). His detailed accounts of the populace of Louisiana's cheniere and deltaic plains, coastal wetlands, and freshwater bayous provides vibrant context for the struggles that now consume Louisiana and affect those of us living on higher and distant grounds.

Davis provides the perfect voice for this story. He relocated from California to earn his PhD in geography from Louisiana State University (LSU) and never left his adopted state. Years as a professor at Nicholls State University and then a shift back to LSU enabled Davis to live, work, and play among the peoples who became his academic and professional focus. I first witnessed his passion for Louisiana's inhabitants in 1986 when he hosted a field trip during TCS10 in New Orleans. For me, the book was a long-awaited sequel narrated by a master story teller. We cannot all hope to witness an experienced artisan carving a piroque from a single cypress log, but we can gain priceless insights by reading Davis' first-hand accounts, marveling at the photos from his personal collection, watching the coast change through centuries of detailed etchings and maps, and reliving life through quotes and personal accounts.

This book captured my attention in many ways. As a long-time friend and fellow TCS member, I was intrigued when I heard of the book's publication in mid 2010. My first glance at the inside cover, featuring an early but undated map of Louisiana, drew me into Davis' stories about the people scratching a living in each coastal nook and cranny. Detailed accounts replete with scientific citations and mass media references add a level of credibility not typical of a coffee-table book. This is serious reading with major rewards on every page.

The title befits the content. Scattered throughout the text are vivid descriptions of Louisiana's citizens, the marshdwellers who chose to live in a "forgotten landscape" in too much transition with too many complications for upland land lovers. He describes distinct cultures populating slices of the coast. Ethnic groups intermingled with trappers, fishers, and hunters. Everywhere were the self-sufficient "boat-minded people" living in a multitude of inaccessible places, including such intriguing environs as floating wetlands. Wetland-dependent folk still dot the landscape with a community spirit that harkens back to distant traditions in rural New England or to the independent ways of Amish and Mennonite societies. There's a healthy dose of Americana in Louisiana's coast and its peoples, be they Acadians, Germans, Choctaws, Danes, or others.

Washed Away is organized as you would expect -- by the places, communities, and avocations that define the regional culture. Sections within chapters offer greater depth at the local level. You'll find detailed accounts of life styles centered on oil, sulphur, cattle, shrimp, fur bearers, alligators, ducks, menhaden, and much more. Diverse subjects echo a diverse culture. Societal concerns are also evident in chapters on coastal plains and lowlands that bear the brunt of hurricanes, oil spills, and economic woes. Sad to say, but Louisiana seems to have shouldered more than its fair share of problems and catastrophes. In the same breath, it's enlightening to read about the innate resilience and cultural fortitude that survives as natural, economic, and environmental pressures mount.

With climate change upon us, I expected Davis to address relative sea-level rise. He did not let me down. Chilling descriptions of worse-case scenarios lay bare the simple fact that climate impacts could easily overshadow the worst offerings of well blowouts or oxygen-poor dead zones. A combination of natural subsidence, human-induced erosion, sediment starvation, increased storm surge, and related threats promise to subject Louisiana to among the highest annual and decadal sea-level increases in the United States. Estimates of 1 inch for every 30 months measure out to about 3.2 ft in the coming century. Louisiana could soon find itself serving as a crucible for disaster planning. Davis describes this macabre reality as "globally unparalleled." I sense he is correct.

The Mississippi River is another major "agent of change." Significant and well-deserved coverage is afforded to levees that contain the river in unnatural channels with un-

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anticipated implications. Levees have received increased attention nationally (each state has man-made levees to contain waterways, protect drinking water supplies, support agriculture, or otherwise alter natural hydrology). Again, as we witnessed during Hurricanes Katrina, Rita, Gustav, and Ida, Louisiana could offer important insights on how to deal with climate and environmental threats.

This is a delightful book, balancing Don Davis' serious historical accounts with the reality of life on the edge. Occasionally humorous, always enlightening; I highly recommend this book. In fact, similar scholarly reviews of life on other coasts would be a great asset to Coastal Society members grappling with their own difficult issues. Kudos to Dr. Davis! I now look forward to listening to the oral history of the Louisiana wetlands, his current project funded by Louisiana Sea Grant and teased on the book jacket.

Tom Bigford has been a TCS member since 1976 and has served as Membership Committee chair and member, Secretary, Executive Director, conference chair, and Bulletin Editor during his membership. He has also hosted a series of TCS members as interns in his office at NOAA Fisheries Service. He can be contacted at thomas.bigford@noaa.

Coastal Management Journal

Be Sure to Use Your Members' Link to Read the Latest Articles. Note that the latter 4 articles listed below are part of the continuation of an annual feature introduced into the journal in 1993. Per CMJ Editor-in-Chief Patrick Christie, "This feature appears in the fall issue of each volume of the journal. It includes short articles and is open to graduate students in marine affairs, coastal management, and related programs. The four articles in this issue were selected from submissions from students working in institutions around the world…The Student Editorial Board, shown on the masthead of the journal, is responsible for the peer review and editing functions of this feature."

Understanding Recreational Boater Attitudes to Zoning in a Proposed Marine Protected Area
By Darcy L. Gray; Rosaline R. Canessa; Rick B. Rollins; Philip Dearden; C. Peter Keller

Environmental Protection in Coastal Recreation Sites in Antalya, Turkey
By Meryem Atik

Social Complexity, Ethnography and Coastal Resources Management in the Phillipines
By Michael Fabinyi; Magne Knudsen; Shio Segi

Shoreline Armoring, Risk Management and Coastal Resilience Under Rising Seas
By John N. Kittinger; Adam L. Ayers

Planning for Cruise Ship Resilience: An Approach to Managing Cruise Ship Impacts in Haines, Alaska
By Alex W. Adams

Can Coastal Management Programs Protect and Promote Water-Dependent Uses?
By Tiffany C. Smythe

Effective Policy Evaluation: Refining Design Processes for Coastal Ecosystem Condition Indicators
By Cara Murray

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Congratulations to the New TCS President and Directors!!

President-Elect: **Kate Killerlain Morrison**, The Nature Conservancy, Boston, MA
Treasurer: **Jeff Smith**, NOAA National Marine Fisheries Service, Silver Spring, MD
Director: **Rick DeVoe**, SC Sea Grant Consortium, Charleston, SC
Director: **Rebekah Padgett**, WA Department of Ecology, Seattle, WA

Congratulations to these candidates! We appreciate your willingness to lead TCS and look forward to your service in the coming years. Thank you to all of the candidates on this year's ballot. As noted by many of our members and directors, TCS was fortunate to choose from an incredibly talented group of coastal practitioners for its leadership and are pleased that even those candidates who were not selected for a position are interested in providing their leadership to TCS in other ways.

I'm also pleased to welcome Lisa Schiavinato as she takes over the helm as TCS President. Lisa was elected to the Board in 2008, and has served as President-elect since elected to that position in 2009, and was the TCS22 Conference Chair.

I want to extend my appreciation to Tom Murray (Director) who served on the TCS Board from 2009 – 2010 and on the TCS 21 and TCS 22 Planning Committees.

Finally, a very special thank you goes to Kristen Fletcher, our outgoing Past President. Her leadership and wisdom has helped guide TCS for the past six years and we have all valued her contributions.

Many thanks to the members who cast a vote in this year's election; your vote helped to shape the future of TCS!

Jeff Benoit
President
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Make check payable to The Coastal Society, and mail it with your application to: PO Box 3590, Williamsburg, VA 23185. To pay by credit card, please use the online application at: www.thecoastalsociety.org/membership2.html.