



The Lunz e-Letter



Berkeley, Charleston, Colleton & Dorchester
Counties - South Carolina



<http://www.sierraclub.org/south-carolina/robert-lunz>





Lime and the Coconuts Will Be Playing at the Annual Lunz Oyster Roast on February 28, 2-5, Bowens Island. Photograph courtesy of Laura Moses.

March 2016

Dear Lunz Group Members,

Acclaimed *Post and Courier* reporter Bo Peterson published an article this Feb 24 about the impact of sea rise on the Lowcountry. Coincidentally, the journal *Science* published an article reporting that the rate of sea level rise is at the highest rate in over a century (pub date Feb. 22, 2016). We have seen images of colorful gondolas plying the main canals of Venice, that most aquatic of the European cities. Sadly, flooding of the main plaza of Venice is becoming more frequent. Those idyllic Pacific island chains are recognizing that subsidence plus the rising sea level are combining to erase the islands at an alarming rate.

These are real-world, real-time examples of how climate change is happening before our eyes. Yet a number of presidential candidates are on record as being skeptical about the scientific consensus on climate change. In spite of this, these candidates are getting support from the public.

In the face of the challenges of climate change in general and sea level in particular, it is bizarre to imagine people offering themselves to lead our country who at the same time deny the very existence of a very clear and present danger. So in this election year we need to become political animals and at the very least make certain that we know where our local, state, and national leaders stand on climate change. Citizens may choose climate deniers but we must make it clear what such choices might mean. What to do? Well you might consider volunteering to aide our Political committee in evaluating candidates for office and organizing a forum for local candidates. Contact Julia Hall at Julia-Hall@att.net if this sounds like fun to you.

We would also appreciate your help organizing some activities suitable for youngsters. Contact Angela Jones at aktjones@gmail.com with your ideas.

On Sunday, Feb. 28 from 2-5, join us for our annual oyster roast and FUNdraiser at Bowen's Island Restaurant on James Island.

We will hike the Laurel Hill County Park on March 20 and we will take a 30-mile bicycle ride on the Moultrie Passage of the Palmetto Trail on March 26. Get in shape for the biking outing by riding early and often throughout March!

Starr Hazard

Chair, Robert Lunz Group

Membership Meetings
First Thursday
of the Month (public
welcome)
Baruch Auditorium
284 Calhoun Street
MUSC Campus
Charleston

Sierra Club calendars
are available for sale.
Wall calendars are \$5
and engagement
calendars are \$6. See
Pat Luck at the
membership meeting.

Sun., Feb. 28

Annual Lunz Group
Oyster Roast
Bowen's Island
Restaurant
James Island

Thurs., March 3
284 Calhoun

Street Marine Plastic
Debris
Talk by John Weinstein

Biology Professor at the
Citadel

Sun., March 20

Hike Laurel Hill County
Park
Call Marcus Sizemore
at 803-367-6222 for
details.

Sat., March 26

Bike the Moultrie
Passage of the Palmetto
Trail

Contact Starr Hazard for
details
hazardes@bellsouth.net

Sat., April 16

Oyster Restoration
Part II
Contact Jennifer Wilder
wilderjenn@gmail.com

Here's a link to all our
outings
[EUN](#)

Thanks to our 2016
Oyster Roast Donors!



Dr. John Weinstein
Head of the Department of Biology at The Citadel
Marine Plastic Debris in the Charleston Harbor
Thurs., March 3, 2016, 7 pm
Baruch Auditorium
284 Calhoun Street

Dr. John Weinstein is a professor of physiology and head of the department of biology at The Citadel.

He is focused on a project entitled Marine Plastic Debris: Assessing the Hazards in Charleston Harbor. One of the most pervasive pollution problems along the world's coastlines is plastic debris, and Charleston Harbor is no exception. For the past year, cadets and graduate students working in Weinstein's laboratory in the biology department have been characterizing plastic pollution in the harbor, including both the macroplastic debris (such as water bottles and Styrofoam cups) and microplastic fragments. As plastic material degrades in the environment, it breaks apart into tiny microscopic fragments, which then have the potential to be ingested by invertebrates and cause problems such as decreased feeding and growth.

So far, the results have been very revealing. Last September, students in Weinstein's laboratory participated in the S.C. Sea Grant-sponsored beach sweep, where they sorted, counted and weighed all macroplastic debris items collected by local volunteers at 8 locations around Charleston Harbor. A total of 3,646 plastic items were counted weighing nearly 200 lbs. The two most common types of plastic were polypropylene (plastic food storage containers and bottle caps) and polystyrene (styrofoam cups and plates). Based on what they found at

Angela Jones

these eight sites, they estimated that there are 460,900 plastic debris items weighing 15,260 lbs. along the entire shoreline in Charleston Harbor. Just to put this in perspective, this equates to finding one plastic item for every two steps along the entire shoreline of the harbor.

His laboratory has also been looking at the microplastic particles within the sediments of the harbor and assessing their toxicity. They have found that most microplastics are deposited along the high tide line, where their numbers can be as high as 460 particles per square meter. To determine if the presence of microplastic particles are toxic to common inhabitants of Charleston Harbor, grass shrimp in the lab were fed a diet of zooplankton mixed with a series of five different sizes of microscopic plastic beads. Within 3 hours, plastic beads for all of the size fractions could be found in both the guts of the grass shrimp and their gills. Shrimp surviving for at least four days were able to get rid of the plastics from their gills and gut; whereas the dead shrimp could not. In fact, they found that grass shrimp exposed to one of the tested size fractions had the lowest success in getting rid of the beads, and as a consequence, the highest mortality. This research is being funded by the S.C. Sea Grant Consortium.

<http://www.citadel.edu/root/news-for-2014-2015>

Dr. Weinstein's talk is free and open to the public.

Audubon Center at Francis Beidler Forest

Ben & Jerry's

Bowen's Island Restaurant

Charleston Battery

Charleston Coffee Roasters

Charleston County PRC

Charleston Jin Shin Jyutsu

Coastal Expeditions

College of Charleston Sailing

East Bay True Value Hardware Fast & French

Jeff Kopish

Lime and the Coconuts

Mary Edna Fraser

Money with a Mission

Nature Adventures Outfitters

Palmetto Pottery

Pamela Corwin

PURE Theatre

SC Dept. of Parks, Recreation & Tourism

SC Environmental Law Project

SC Stingrays

SRO (Standing Room Only)

Therapeutic Massage

Tideline Tours Saltmarsh Adventures





February 28, 2016
Annual Lunz Oyster Roast/ Silent Auction
Bowen's Island Restaurant
James Island

Please join us for our annual Sierra Club Oyster Roast and Auction! \$25 for adults, \$15 for student with ID, \$5 for children (6-12), free for children under 6.

Ticket price includes oysters, veggie and meat chili, hot and veggie dogs, and Ben & Jerry's ice cream. Draft beer available with donation. Music by Lime and the Coconuts! Open to the public. Purchase tickets at the gate.

Bid on great auction items! Bring cash, check, or credit card.

Auction items include: Restaurant gift certificates, sailing classes, kayak tours, gift baskets, books, theater tickets, hot-stone massage and more!

To volunteer or bring chili, please contact Angela Jones at aktioness@gmail.com or 843-834-0005. To donate auction items, please contact Laura Moser or 843-364-1976.

Eco tip: Bring your own reusable cup, plate, or bowl. (Do not bring disposable plastic or Styrofoam!)



Candidates Forum
September Membership Meeting
Call for Volunteers

This election year the Lunz group will host a Candidates Forum at our September membership meeting. Environmental issues, such as solar power and off-shore drilling, are seldom the focus of campaign advertisements or news, but the decisions of our local elected representatives have an enormous impact on the environment. The purpose of the forum, then, is to give a platform to candidates to address these issues. We need people to help arrange the event; contact candidates; coordinate with other conservation organizations; write news releases; research conservation issues and draft questions; and compile and evaluate the results. If you would be interested in working on this project, please contact group secretary Julia-Hall@att.net.

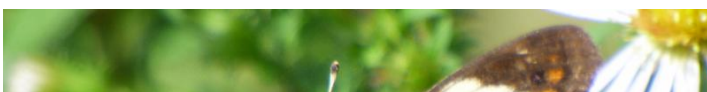


Roxbury Park is a Lowcountry treasure, and a naturalist's dream. Situated on just 157 acres, it boasts eight totally unique eco-systems, which supports an amazing diversity of wildlife. There is a primary figure-eight trail that takes you through or alongside a mixed hardwood forest, a salt marsh, a slightly brackish pond, a freshwater pond, a tidal creek, a pine forest, a wildflower meadow, and a freshwater swamp marsh.

Next to the creek, there is a cottage that can be rented by the day, weekend, or for an entire week. It sleeps up to ten and has a fully equipped kitchen, two and a half baths, and laundry facilities. Rental information is available on the Town of Meggett website. Primitive camping is also available on a limited basis and can be arranged by contacting the park caretaker/naturalist Ken Carman through the Roxbury Park website (www.roxburypark.org). It is on this website that you will find albums of much of the wildlife that has been seen over the past four years. You can also like us on Facebook where you will see wildlife photos of what is being seen in the park each week.

Along with excellent birding and wildlife photography, you can also fish, kayak, or just relax in one of the Lowcountry's most beautiful natural areas. Although the park is officially open only on the weekends from 8 to 6, you are welcome to come out on Mondays and join the volunteer team that is busy working on a huge wildflower/butterfly garden.

More Images from Roxbury Park:



Ken Carman
Caretaker/Naturalist



**Save
the
Date**



**2016 Sierra Club South Carolina Lobby Day
April 26, 9am-3pm
Columbia**

Please join the SC Sierra Club for our annual Lobby Day at the SC State House. Let our representatives know where we stand on issues!

Details to follow.

Outings

****Watch the events page on the Lunz facebook page and the Lunz meetup site for more trips currently in planning.**





Moultrie Passage, Palmetto Trail

Sunday, March 20

Hike Laurel Hill County Park

Hidden within suburban Mount Pleasant, this 745 acre county park was recently opened to the public in 2015. Come join us as we explore Laurel Hill County Park on a leisurely hike through pine forests, maritime forests, and the ruins of this plantation that was founded around 1694. (according to historic documents) Species we may see include Osprey, egrets, herons, alligators, white-tailed deer, waterfowl and alligators.

We'll find a great place to picnic so please bring your lunch or a snack. There are no facilities at this park. Recent rains may make the trails muddy so waterproof boots/shoes are recommended. Dogs are allowed provided they are kept on a leash.

Recommended items to bring: camera, binoculars, waterproof shoes or boots, bug spray, packable lunch, snacks, water, jacket

Entrance Fee is \$1 per person. Cash only (exact change required)

We will meet near the trail head behind the baseball fields (back corner). Contact the organizer Marcus Sizemore 803-367-6222 with any questions.

Saturday, March 26

Biking the Moultrie Passage of the Palmetto Trail

Our trip will cover 32 miles of the Moultrie Passage of the Palmetto Trail. That is a long ride for early in the season so you will have to prepare yourself and your bike for this trip. Ride early and often! The trip has one

season so you will have to prepare yourself and your bike for this trip. Ride early and often! The trip has one steep bridge, some urban sections, some single track sections, potential mud, standing water, LOTS of 'gators and myriads of spring flowers. You have to wear a helmet for this Sierra Club trip. It's a good idea to bring a spare inner tube and probably some inner tube patch materials. I will have some tools for minor repairs and one tire pump. Bring lunch, water, and a light backpack to carry stuff. Bring rain jacket, sunscreen, and insect repellent. You will need a bicycle with fat tires, helmet, spare inner tube AND transport to and from one of the rendezvous points. We'll meet at 8:30AM at the Wando Crossing WalMart in Mt Pleasant; or at Hwy 52 Canal Recreation area at 10:00am. We'll be riding from around 10-4pm and the distance is about 32 miles. Our route will be from north to south (mile 1 to mile 24) on the map below. We ride 30+ miles because we detour to the Sandy Beach area for lunch by the water. Contact Starr Hazard hazardes@bellsouth.net
For map, visit <http://www.sctrails.net/trails/MAPS/LakeMoultrie%20map.html>

Saturday, April 16

Oyster Restoration Project with the DNR, Part II

We are partnering up with the DNR's South Carolina Oyster Restoration and Enhancement (SCORE) Program again. SCORE is a community-based habitat restoration and monitoring program that works to help restore oyster populations.

For Part I, we helped to bag oyster shells. This time we'll be using the bagged shells to build reefs for recruitment of oyster larvae. Once in place, the reefs will recruit new oysters and attract other critters of the estuary. They are also being used as living classrooms and research platforms.

For this event, be sure to wear closed toed shoes and clothes that can get dirty. We'll meet at the DNR Campus on James Island. The address is 217 Fort Johnson Road, 29412. Once you come through the front gates, follow the road until you see a boat yard on the right side. Volunteers can park anywhere in that general area. We will meet in the field near the boats. The DNR will provide water, gloves, sunscreen and bug spray. They will have cups for water but encourage volunteers to bring eco-friendly, refillable bottles.

Contact Jennifer Wilder at wilderjenn@gmail.com for more details.

URBAN OUTINGS

Contra dancing every first and third Friday nights

Dance to live bands and with wonderful people. Admission \$8 for all dancers. Fees go to Charleston Folk to pay the bands and rent the hall. For all of you new to Contra Dancing, please see our website for information about Contra Dancing and a bit about its history:

<http://charlestonfolk.weebly.com/>

MISSION OF THE SIERRA CLUB:

To explore, enjoy and protect the wild places of the Earth.
