SIERRA CLUB / BROWARD COUNTY

P.O. Box 550561 Davie, FL 33355

Broward Sierra

Vol. XXXVI No. 6 Dec 2014 / Jan 2015

Special EXCOM **Election Issue Ballot on Page 2**



We hope you enjoy our newsletter. Why not join us right now? Come along on an outing. Get involved, learn about local environmental issues and how they affect you and your community. Just use the form on the back page, or go to our website at http://florida.sierraclub.org/broward, and click on the "Become a member" link.

LIGHT POLLUTION – By Eric Vandernoot, Astronomy & Physics Lab Coordinator, Florida Atlantic University; V.P. South Florida Chapter International Dark Sky Association (www.idasouthflorida.org)



Satellite photo of Florida at night

Half of all animal life starts its daily activities at sundown, comprised of 30% vertebrates and 60% invertebrates. They are active then because it is to their evolutionary advantage to do so. Artificial lights at night compromise the advantage that nocturnal and crepuscular life, such as insects, migratory birds, mammals and plants, have in many ways.

In general, artificial lights act as a powerful attractant that directly harms the animal (such as moths hitting a hot streetlight), causes an animal to stare at the light in a mind numbing stupor, preventing its normal behaviors, interferes with the timing of an animal's natural biological activities, and exposes animals trying to hide from predators.

Insects have suffered incredibly due to the impacts of artificial lights. In 2006, Gerald Eisenbeis, Mainz University, Germany, documented insect declines from lights at night. He found that in 1950, Robinson and Robinson captured over 50,000 insects using a single light trap in a single night. In 1979, Worth and Miller caught 50,000 insects using a single trap, but it took them all summer long to do. While in 2000, he and Hassel caught only 6,205 moths using 19 traps all summer long. Using drop cloth counts around streetlights

insects are slaughtered each summer in Germany alone. This suggests a wholesale worldwide extermination of insects, the one class of animal that is the base of the food pyramid that feed so many other species, including people.

Over 25 years ago, local environmental agencies started protecting sea turtles by combatting lights on beaches and only now have begun to see the benefits of their work. But for all their success at keeping lights off of the beaches, the turtles' new threat is from lights miles inland, growing at 6% per year. These interior lights generate so much skyglow, especially during overcast conditions, that hatchlings

Continued on page 4

Thursday, December 4th, starting at 7:00 pm: Our annual Holiday Potluck Dinner and Raffle. Everyone's invited!

Members, friends, family... Fun, food and support for our local Sierra Club. Bring a dish to share and enjoy the sumptuous specialties brought by others! (Donation \$5 if you bring a dish to share, \$10 without a dish). If you have

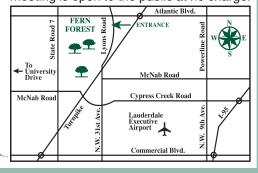
in Germany, Eisenbeis projected that 60 to 130 billion

any items to donate to the raffle, please bring them. Raffle tickets available for \$2 each or \$5 for 3 tickets. For more info contact Ina at 954-722-9944 or irtopper2000@cs.com.

Thursday, January 15th: We will be having a joint meeting with the Florida Audubon Society at the Long Key Natural Area and Nature Center, 3501 SW. 130th Ave. Davie, from 7:30 pm to 9:00 pm. The Speaker will be Paddy Cunningham, Coordinator of the Everglades Birding Festival and Owner of Birding Adventures. Her topic will be: The Everglades, Unique and Precious.

Broward Sierra Club's General Meetings are held at 7:30 pm at the Fern Forest Nature Center. Each month we have an educational program on conservation or ecological issues.

DIRECTIONS: The Fern Forest Nature Center, 201 Lyons Road South, Coconut Creek, just south of Atlantic Blvd. on the west side of the street. (From the south, NW 31 Ave. becomes NW 46 Ave., and then Lyons Rd. as you pass under the turnpike.) Committee reports begin at 7:30, and the program begins at 8:00. The meeting is open to the public at no charge.



Broward Sierra Executive Committee Election Ballot

MUST BE POSTMARKED BY DECEMBER 20, 2014.
Please VOTE for UP TO 3 CANDIDATES.

3 people will be elected to the three available EXCOM seats for 2-year terms. We have 3 candidates on the ballot this year.

If you have a joint membership, both members should select candidates by using the "First Member" and "Second Member" boxes.

When you have completed your ballot, clip out along the dotted line and mail to:

Broward Sierra Club, PO Box 550561, Davie, FL 33355

All valid ballots must have either a printed newsletter mailing label on the reverse side or your membership

number entered nere:	
Please vote for	
up to 3 candidate	25

First Member Second Member (if applicable)

Susan Caruso Jessie DeBlois

Max Goldstein

For your reading pleasure and the purposes of our yearly EXCOM elections, Broward Sierra has postal mailed this printed copy of the Broward Sierra News to all Broward Sierra Club members. During the year, our bi-monthly newsletters are readily available on our website www.florida.sierraclub.org/broward. We email a direct link to members when new issues are published. Please provide a good email address here:

If you're attending our HOLIDAY PARTY on Thursday, December 4th, you may submit your completed ballot at the party.

SEE YOU ALL THERE!!

DONATE TO PROTECT FLORIDA'S WILDLIFE HABITATS BEFORE THE TAX YEAR ENDS



You can help protect the Florida Panther and other native flora and fauna through litigation and education. This fund, The Sierra Club Foundation was created by your Broward Group. Your tax-deductible gift will support our conservation work and lawsuits challenging the National Park

Service and other agencies that seek to reduce or cause harm to Florida's natural resources.

Please make your check payable to:

The Sierra Club Foundation

In the notes, write "Broward Sierra Group" Mail your donation to:

Broward Sierra, P.O. Box 550561, Davie, FL 33355

Or include your check with your filled out ballot!

THE CANDIDATES

Susan Caruso

Sue has served on the Broward Sierra Excom for the past two years. "I believe in the importance of the work we do. Any contribution I can make to our organization, no matter how large or small, gives me a great feeling of purpose. Our tabling events serve to educate about environmental issues, our general meetings disseminate knowledge from some of the most prominent experts in our area, and our outings bring us closer to nature and a more peaceful existence. I would be honored to be reelected to the executive committee to help continue the legacy of the Sierra Club."

Jessica DeBlois

Jessica moved to South Florida to work as a Citizen Outreach Director with the Fund for the Public Interest, running effective membership-building and fundraising campaigns Environment Florida. She also worked as the South Florida Field Organizer for Florida's Water and Land Legacy, overseeing all volunteer efforts in Monroe, Miami-Dade, Broward and Palm Beach counties, and was recently elected to the South Florida Audubon Society Board. Jessica has a particular passion for issues of climate change, sustainability and marine conservation, and hopes to engage and mobilize more youth who care about environmental issues.

Max Goldstein

Most of you know Max from many past outings and events. He has been a member of the Broward County Sierra Club for 13 years, and has served on the Executive Committee as treasurer for the last ten of those years.

The Water and Land Legacy Amendment 1

was approved by Florida voters by a 75-25 margin. Port St. Lucie, Palm Beach and Broward Counties led the state with a 80 to 85% approval rate.

Thanks to all the Sierrans that helped with this campaign. We have all left a legacy of clean water and conservation to the future Florida generations. This is indeed a milestone!





The Broward Sierra Club Leaders

Executive Committee Chair Ina Oost Topper 954-722-9944 irtopper2000@cs.com

Vice Chair

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Max Goldstein 954-296-3411 maxgold@yahoo.com

Secretary

Sue Cáruso 954-684-6747 susan.caruso@att.net

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Transportation and CWA Liaison Barbara Ruge 954-328-2165 b-realtor@att.net

ExCom Member at Large Darryl Rutz 954-892-1740 dmrtz2@msn.com

Executive Committee Meetings are held on the first Monday of each month. Contact Ina Topper at 954-722-9944 or irtopper2000@cs.com for time and location.

Membership Corrections -

To expedite any membership change (new addresses, etc.) or problems with your membership records, please send your name, member number, old and new address or problem to: **Member Services**, 85 Second Street, San Francisco, CA 94105-3441. Phone 415-977-5653 or e-mail: <address.changes@sierraclub.org> or <membership.services@sierraclub.org>

Local Sierra Club Outings & Events To preserve a place, you must believe in it. To believe in it, you must see it.

To believe in it, you must see it.



Nov. 22, Sat. BIG CYPRESS HIKE ON THE FLORIDA TRAIL. Hike in the splendor of Big Cypress National Preserve, from Oasis Visitor Center north on Tamiami Trail and back; 6 miles roundtrip with a leisurely lunch halfway. Hiking through sawgrass prairies with beautiful stretches of saw palmettos and pinelands trails that may be under water amidst cypress forests. Expect to see reptiles, birds, butterflies and wildflowers. Panther, bobcats and deer encounter are possible. Rating: moderate to strenuous. Pack a lunch and bring lots of water. Limit: 8. Suggested Donation: \$10. Contact the outing leader for meeting times and location, for more information, or if you would like to carpool or can take someone in your vehicle. Leader: Kaatje Bernabei 305-223-6551 <kaatjebernabei@bellsouth.net>, Assist. Leader: Alan Nowell <mrhitnmiss@aol.com>.



Nov. 29, Sat. Urban Bicycling in Boca Raton. Leisurely bicycling on sidewalks, bike paths or quiet streets through Boca's parks, commercial district and neighborhoods. Bicycle helmets are REQUIRED on all Sierra Club bicycle outings. Moderate. Limit 20. \$3 members, \$5 non-members. Leader: Ron Haines 561-315-0528 <RonaldHaines@bellsouth.net>.



DEC. 4, THURSDAY. BROWARD SIERRA HOLIDAY POT LUCK DINNER PARTY AND RAFFLE at the Fern Forest Nature Center, starting at 7:00pm. Everyone's invited! Members, friends, family... Fun, food and support for our local Sierra Club. Bring a dish to share and enjoy the sumptuous specialties brought by others! (Donation \$5 if you bring a dish to share, \$10 without a dish). If you have any items to donate to the raffle, please bring them. Raffle tickets will be available for \$2 each or \$5 for 3 tickets. For more info please contact Ina at 954-722-9944 <irtopper2000@cs.com>.



DEC. 6, SAT. EVERGLADES ECOLOGY 101. Join us and discover one of the National Parks in your own backyard! Explore the Anhinga and Gumbo Limbo trails and more. Lots of wildlife including birds and alligators while learning about Everglades ecology, and the things that make it unique. Pack a lunch and bring lots of water. Rating: leisure - great for beginners or veterans, families with kids welcome. Limit: 12. Suggested Donation: \$10, park entrance: \$10/vehicle. Contact the leader if you would like to carpool or can take someone in your vehicle and for details. Leader: Kaatje Bernabei 305-223-6551 <kaatjebernabei@bellsouth.net>, Assist: Alan Nowell <mrhitnmiss@aol.com>.



DEC. 7, SUN. DAY KAYAK TRIP IN THE 10,000 ISLANDS OF EVERGLADES NATIONAL PARK. Starting in Chokoloskee, south of Everglades City, we'll paddle thru some open water between mangrove islands and ultimately thru a beautiful, secluded mangrove tunnel. Come learn about Everglades ecology! Afterwards we'll have dinner (not included) at the quaint Camilla Street Grill on the Baron River. Rating: moderate to strenuous. \$10.00 donation to the club. Kayak rentals single \$60, double \$65. Leader: Manuel Montiero 954-815-6230 < Manuel_Montiero@yahoo.com>, Asst. Leader: Judy Kuchta 305-308-8913 < judykuchta@yahoo.com>.



DEC. 14, SUN. THE WET EVERGLADES OUTING. The highly anticipated outing in the Big Cypress Preserve, mostly under water. At times the water can be waist high. The hike will be about 6 miles. We will be following a flooded logging road and also go into cypress hamlets. Participants will be able to see beautiful air plants, wild flowers and cypress trees. Bring water, suntan lotion, bug spray and your lunch/snack. There will be some high places to eat and rest. It is important that you bring good shoes that can deal with the water and muck. It is recommended that you bring a walking stick to help with your balance. We will meet at a central location in Broward and car pool to the site. Limit: 12. Suggested Donation: \$10. Contact the outing leader for additional information and to reserve a spot. Leader: Darryl Rutz 954-892-1740 dmrtz2@msn.com/.



DEC. 14, SUN. CANOE/KAYAK AT JOHN PRINCE PARK IN LAKE WORTH. Leisurely canoeing and kayaking in the backwaters of John Prince Park. See <www.co.palm-beach.fl.us/parks/locations/johnprince.htm#.Uu-Hiv-PKM8> for park details. Boat rentals available. Limit 20. Rating: Leisure. Suggested donation: \$3 members, \$5 non-members. Leader: Ron Haines 561-315-0528 <ronaldhaines@bellsouth.net>.



DEC. 20, SAT. NINE-MILE POND CANOE. Join us for a day of paddling in Everglades National Park while exploring a side of the Everglades few visitors get to see. Pack a lunch and bring lots of water. Expect to see wading birds and an alligator or two in this vast expanse of mangroves, hammocks, sawgrass and aquatic plants; a wild and quiet place. Rating: Strenuous. Suggested Donation: \$15, park entrance: \$10/vehicle. Use your own kayak/canoe or reserve use of one of our canoes. Contact the outing leader for more information or if you would like to carpool or can take someone in your vehicle. Leader: Kaatje Bernabei 305-223-6551 <kaatjebernabei@bellsouth.net>, Assist: Alan Nowell <mrhitnmiss@aol.com>.



JAN. 1, THURS. NEW YEARS DAY EVERGLADES BIKE RIDE AND MICCOSUKEE INDIAN ANNUAL ARTS AND CRAFTS FESTIVAL. We'll start the day healthy with a leisurely 15 mile bike ride at Shark Valley/ Everglades National Park. Then, we'll head over to the Miccosukee Village for the 40th Anniversary of their Annual Indian Arts and Crafts Festival. They'll also have internationally acclaimed Indian dance performances, a fashion show and native food and more. What a great way to start the New Year. Donation: \$3 members, \$5 non members. Festival admission: \$10. Leader: Judy Kuchta 305-308-8913 <judykuchta@yahoo.com>.



We would like to invite you to come on one of our fun and educational outings! If you have any questions about an outing, please check with the certified Sierra Outing Leader listed for the outing. Some of the outings need no experience; others require some level of proficiency. All participants are required to sign a standard liability waiver. If you would like to read the Liability Waiver before you choose to participate in an outing, contact the leader of the outing or go to http://vault.sierraclub.org/outings/national/participantforms/forms/individual_waiver.pdf. Unless otherwise stated, the costs for each outing represent a best estimate of actual shared expenses, for food and transportation and other

direct expenses. Florida Seller of Travel Ref. No. ST37115

For sign-up, payment and further information, please contact the outing leader.

LOOK FOR UPDATED INFORMATION ON OUR WEBSITE: http://florida.sierraclub.org/broward

VANISHING, DIMINISHING AND INVASIVE SPECIES

Ina (Oost) Topper, Broward Sierra Excom Chair, and Education & Recycling Chair



Although the topic of the massive Burmese python invasion in the Everglades has become familiar to us in South Florida, at our November general meeting at Fern Forest we were treated to

a very interesting, detailed update. It was shocking to hear that over 90% of the animal species who have traditionally called the Everglades their home, have simply vanished in recent years. The expansion of the now infamous Burmese python is entering areas previously untouched. The still diminishing numbers of our Florida panther is a sad story we're made aware of on an almost daily basis. This continued panther reduction is invariably a result of direct or indirect human vs. panther conflict situations, mostly due to either nighttime traffic fatalities or major development even further into the panther's Everglades territory.

The great presentation by Tylan Dean on the Burmese python made us recall some recent, lesser known news items. For instance, besides the gigantic snails being found more and more throughout South Florida, did you know that as far back as the early 60's we were invaded by the Asiatic clam, having accidentally landed here from China?

While environmentalists in Utah are currently looking for a way to eradicate invasive trees along some of the state's rivers, here in Florida we are only too aware of the Melaleuca which, naively, was brought here to "soak up the Everglades" in order to create land for (profitable) development. However, the early land speculators never considered the fact that one blooming Melaleuca tree creates some 20 million(!) seeds.

And traveling through the Southeastern states, you can see the enormous 'waves' of Kudzu hanging from (and eventually killing)

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Three adventurers, Freeman, Terry and Darryl biked around Conversation Area # 3 on November 9th. This was a 27.4 mile bike ride on the dike, where they got to see how bad nutrients are filtered before it seeps to our aquifer. They really got to bond with nature as it rained for most of the ride. All covered with sand and mud they did manage to smile at the end.

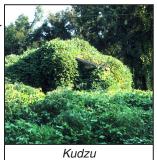
Light Pollution, continued from page 1

can completely miss their native ocean and die from exhaustion or predation inland.

Mammals are also affected by artificial lights. In Costa Rica, researchers observed that when large swaths of rainforest are cleared and converted to farm land, roads with streetlights are built to connect these farms to cities. The nutritionally poor jungle soil is abandoned after a few years, but the streetlights remain. Fruit eating birds reseed the jungle, but avoid open lands due to predators. Fruit eating bats would do so at night, but are repelled by the bright lights. Thus, one of the planet's largest CO₂ sinks, the jungle rainforest, is not being regenerated because of streetlights. Estimates from the U.S. 2012 lighting inventories by the Dept. of Energy calculates that we consumed 35.4 billion kilowatt-hours or 3.5 billion dollars of electrical energy, in outdoor light sources

just about every tree lining the highways. Also; Hydrilla has choked numerous bodies of water in our state.

But to end on an upbeat note: earlier this year the Nature Conservancy magazine published the happy news that birds are once again flourishing



in Alaska's Aleutian archipelago. Most bird species there had all but vanished since the late 1700's, due to a shipwreck

releasing a multitude of rats on one of the islands. (Their consumption of all nest eggs was simply too devastating for future bird generations.) And there's the lesser known story of the blue poison frog on the rebound. And apparently the Florida native green anole seems to be holding its own, even though the invasive brown curly tailed anole seemed to initially threaten its existence.

And last but not least, the Bald Eagle! A wonderful success story to end with!

Me Me Me Me Me Me Me

CONGRATULATIONS, PAUL BARATH!



Art Institute of Ft. Lauderdale student, Paul Barath, was the recipient of Broward Sierra's ecology poster contest. He received a \$50 cash prize for his captivating work of art. The contest, sponsored by the SE Florida Sierra Marine & Water Quality Team and the members of the Tri-County Sierra Clubs, was open to students of the Art Institute in an effort to build awareness of the growing damage to

our oceans and Florida waterways, and promote attendance to Sierra Club's Seminar: Protecting Southeast Florida's Oceans & Coastal Heritage, which was held on September 20th at the Hallandale Beach Cultural Community Center. This free seminar featured a host of outstanding scientific speakers. Ten talented students submitted extraordinary works of art depicting our theme with strong supportive messaging. All posters were on display for viewing and voting. By the close of the day, Paul's winning poster received the majority of votes cast from conference attendees. Best wishes to all and thank you for participating in this important Sierra Club event.

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that point upwards to the sky. This wasted energy is equivalent to 986 million gallons of gasoline needlessly launched to outer space in one year, leaving behind all the other pollutants, such as CO₂, created during its generation.

Coal and nuclear power plants have no off switch. Once coal ignites, or the radioactive fuel is concentrated to become hot, they do not stop. As such, power companies using these sources need us to consume their power, if for no other reason than to just be rid of it. Thus, we are made to be convinced of the need for streetlights. However, we have learned of the damaging effect lights at night pose to the natural world. So instead of arguing about whether coal or nuclear is better for the environment, perhaps a more effective solution is to eliminate the need for either power source by ending our need for yet another pollutant in the first place: artificial lights at night.