

Alabama Wildflower Society BLANCHE DEAN CHAPTER

AWS/APS Combined Meeting:

Ecology and Paleontology of the Black Belt at Harrell Station

Presenters: Dr. Dana Ehret and
Dr. John Hall

Meeting will be on September 9th and held at the
Birmingham Zoo Auditorium - 7:00 P. M.

2013 Events

Sept 9 Blanche
Dean Chapter
Meeting at the
Birmingham ZOO
7pm

Sept 28
Sim's Ecoscape
Pollinator Sale

Oct 5 Field Trip to
Moss Rock.

Oct. 12 AWS Trip
Bon Secur and Gulf
State Park

Nov 1 CSNPC

We're excited to announce that the Alabama Paleo Society together with the Alabama Wildflower Society would like to invite you to a **special joint meeting** on Monday evening Sep 9th **at the B'ham Zoo auditorium.** The meeting will be just beside the main entrance turnstile at 7 pm. The program will be dedicated to the ecology and paleontology of the Black Belt site at Harrell Station. As you may remember, the Alabama Museum of Natural History at UA acquired part of the large and historically important fossil exposures there back in the 1990's, which also include remnant prairie flora, and we have discussed the possibility of mounting a campaign to acquire the remainder of the outcrops.

Also joining us will be Steve Northcutt & Chris Oberholster of TNC, we hope to engage in a preservation dialog regarding an area that in 1969 some important finds were discovered by Prescott Atkinson from UAB. He collected a good part of a *toxychelid* turtle carapace and some limb material: an indication of the remarkable Cretaceous fossils that have come out of this area over the years including the only intact dinosaur egg from the eastern U.S. and several dinosaurs not to mention birds, mosasaurs, turtles, some pterosaur material, and fish.

Since this area also contains remnant prairie flora - the chalk gullies have made farming it impossible - the landowner may take it into his head to try to reclaim it or maybe turn it into catfish ponds.

NOTICE:::
Next meet-
ing at the
B'ham
ZOO!
9/9/13

Dr. Dana Ehret, is Curator of Paleontology at the Alabama Museum of Natural History, the University of Alabama; and is with the Geological Survey of Alabama. Dr. Ehret received his doctorate from the University of Florida in 2010; his research experiences as a vertebrate paleontologist working primarily on fossil sharks and turtles is to be admired. He specifically works on fossil sharks, turtles, and tortoises; his fossil work has focused on taxonomy and skeletochronology (the study of incremental growth marks as a way to age individual organisms)

Dr. John Hall is coauthor with photographer Beth Maynor Young on two books, a new book on the long leaf pine "Longleaf" and the award-winning book titled "Headwaters, A Journey on Alabama Rivers." Hall's most theatrical claim to fame is when he takes the stage as William Bartram, an explorer who journeyed through Alabama in 1775 and wrote a scientific travelogue that inspired romantic poets and captured the imagination of Europe. Hall is the founding curator of the Black Belt Regional Museum at the University of West Alabama. The University of West Alabama's Director Dr. John C. Hall has been named Forest Conservationist of the Year by the board of directors of the Alabama Wildlife Federation (AWF). He was associated for many years with the University of Alabama Museum of Natural History as research associate, director of interpretation and assistant director for natural history, and holds three degrees from the University of Alabama.

SIM'S ECOSCAPE

POLLINATOR BRUNCH & PLANT SALE!

COME JOIN THE BLANCHE DEAN CHAPTER OF THE ALABAMA WILDFLOWER SOCIETY.

Sims Ecoscape - Sept 28th 9-2

906 Highland road Bham AL 35209

Contact Arnie Rutkis @ 205-901-8600 for details or visit www.stoneshovel.com

Sale will include:

- Native Plants (perennials, trees, shrubs, grasses)
- Hands on pollinator “house” building demo.

Create a place for pollinators (Bees, butterflies hummingbirds, and larval hosts) to habitate!

Sims Ecoscape is managed by
BSC's Southern Environmental Center
205-226-7740



Field Trip to Moss Rock Preserve, Hoover, Al. on Saturday, October 5th at 9AM

We'll take a short walk through house-sized sandstone boulders and through a remnant longleaf pine forest to get to the sloping glade where oddities and rarities and grow. We should catch the season's last blooms of Nutall's rayless goldenrod (*Bigelovia nutallii*), small-headed blazing star (*Liatris microcephala*), and Menge's fameflower (*Talinum mengesii*) among other purple and yellow fall-blooming flowers. Explore the boulder fields and the glade, and after the glade walk, stick around for a longer hike along the stream to the most recently acquired land in Moss Rock Preserve.

Meet at the gravel parking area off of the roundabout at the intersection of Village Green Way and Preserve Parkway next to The Preserve development. Bring snacks, plenty of water and wear sturdy shoes. For more details, call Michelle Reynolds at 914-7077 or email at coverings@bham.rr.com

For more information on the Moss Rock Preserve, visit Trek Birmingham:

<http://www.trekbirmingham.com>

<http://trekbirmingham.com/places/moss-rock-preserve/>

ALABAMA WILDFLOWER SOCIETY-BLANCH DEAN CHAPTER

Minutes of June 3, 2013

Before the meeting was called to order, a brief presentation was held whereby awards were given to those who had completed Dr. Ellen McLaughlin's inaugural Samford After Sundown Natural History Program. The four recipients were Marty Schulman, Carol Ogle, Lida Hill, and Charles Gleaton. Five others received progress awards.

The program meeting was called to order at approximately 7:20 p.m. In the medical absence of our treasurer, Maryalys Griffis, program leader Marty Schulman announced that our unit had "873 dollars and some cents" in the treasury.

Announcements were :

1) There will be a field trip to the Guntersville Glades on Saturday, 6-8; 2) On 6-22, Arnold Rutkis will lead us on a tour of several Birmingham-area ecoscapes, all beginning @ 9:00 a.m. at the Eastern Health Center , and 3) On 7-11, @ 7:00 p.m., the First Annual Alabama Wildflower Society Lecture will be held at the BBG, the presenter being Dr. John Hall of the University of West Alabama.

The speaker for tonight was Dr. Karolina Mukhtar , UAB Department of Biology Assistant Professor. Her PhD. was attained in 2005 in Germany and she thereafter did post-doctoral research at Duke University for about five years. Her topic for tonight was "Fighting for their lives: Plants and their pests". In spite of an obvious European accent, Dr. Mukhtar had a beautiful command of English-language modifiers and her usage of analogies was delightfully entertaining. The following few sentences will not do her justice.

Plants, the bottom of the food chain, need sunshine, nutrients, and an energy source in order to survive. Nemeses include arthropods, pathogens, and other plant competitions. On the plus side, there are cooperative symbiotic organisms.

Plant disease is the exception, NOT the rule. About 25% of plant genes respond to pathogen infection. The loss of crops secondary to pathogens and pests is also in the range of 25%.

Some of the primary plant enemies are viruses, bacteria, fungi and oomycetes, and nematodes (large multi-celled soil animals).

If there is a host plant, there are pathogens and pests. It is THE ENVIRONMENT that tips the balance one way or the other. The host is also vulnerable secondary to poor innate health and/or a lack of disease –resistant genes.

For a pathogen to "succeed", there is a necessity for attachment, entry through plant defenses, avoidance of the defense responses, subsequent growth and reproduction, and a viable journey to other plants. Pathogens are categorized as necrotroph, biotroph, or hemibiotroph. There are no known resistance genes that confer resistance to the necrotrophs. The biotrophs can be challenged. The hemibiotrophs are AC-DC'ers in that they can switch from biotroph to necrotroph, or vice-versa.

Heredity plays a big part with plant resistance. Systemic acquired resistance (SAR) involves a mobile signal but it is not known how it works.

Arthropods destroy 10-30% of crops via sucking or chewing or whatever variation. Believe it or not, there are "alliances" between plants and predatory or parasitic arthropods. (This is where the conventional image of a "mindless" plant can be tossed.) Plants can "notify" parasitoids/predators to destroy herbivores. (Geez, never again believe that a plant may not be reading your mind.)

Other innate anti-herbivore plant defenses are alkaloids, stimulants, and narcotics. Defenses can be induced via the aforementioned "alliances". Both plants and their predators can create strategies with combinations of cheating, thievery, and deceit.

Unfortunately, mankind is beginning to create pathogens via migration, monoculture, damaging planting styles, etc. Overpopulation is certainly not irrelevant, as also increased CO₂ , and deforestation.

The impact of genetic alterations, or GMO's, is also controversial and increasingly suggestive of lurking danger. The public needs to be very much aware.

The meeting adjourned at approximately 8: 20 p.m. (No one could swear that plants do not have brains.) We will convene again on September 9.

Respectfully submitted, Charles E. Gleaton, Recorder

Central South Native Plant Conference returns to The Birmingham Botanical Gardens November 1 & 2

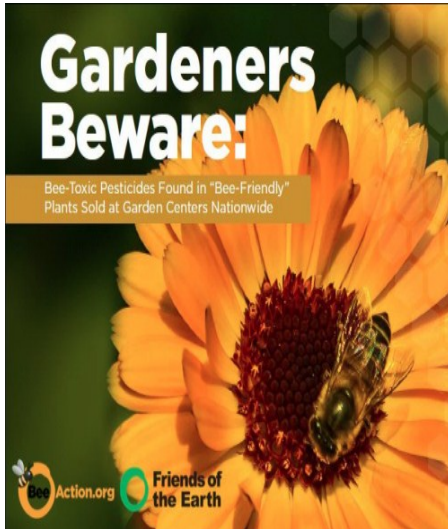
Held every two year's, the South's premier wildflower conference increases awareness, appreciation and usage of plants native to the Southeast. David G. Haskell, Ph.D., author of

The Forest Unseen, will be the keynote speaker for 2013. A professor at The University of the South in Sewanee, Tennessee, Haskell was a finalist for the 2013 Pulitzer Prize in General Nonfiction.

An impressive collection of speakers will join Haskell during the weekend, complementing breakout sessions, field trips and tours. More information will be

visit us on facebook

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Gardeners Beware - Bee-Toxic Pesticides Found in “Bee-Friendly” Plants

Many “bee friendly” home garden plants sold at Home Depot, Lowe’s and other leading garden centers have been pre-treated with pesticides shown to harm and kill bees, according to a new, first-of-its-kind pilot study released today by Friends of the Earth and allies. Learn more and take action in your own backyard to protect bees! ~BeeAction.org

Neurotoxic pesticides known as neonicotinoids have been banned around the world because of the harm that they post to native bees, as well as the non-native honey bees used so widely in agriculture. Yet these chemicals remain for sale in the US and are widely used in agricultural crops.

Now these chemicals are being discovered in many leading garden centers in plants that have been pre-treated with this toxic poison.

You can [find out more about Pre-Treated Toxic Plants at Friends of the Earth.](#)

And make sure you check out [*The Ultimate Guide to Attracting Native Bees*](#), a huge resource of over 65 links to help you attract more native bees to your wildlife garden.

Since these plants are being discovered at the large garden centers like Lowes, Home Depot, Walmart, and others you can avoid inadvertently planting things that are going to poison the very wildlife you are trying to attract by: supporting your local native plant nursery and buying your wildlife garden plants there and joining your local native plant society.

State AWS Field Trip October 12th

As previously indicated in the spring field trip information, our Fall 2013 gathering will be at Bon Secour National Wildlife Refuge [<http://www.fws.gov/bonsecour/>] on Saturday, Oct 12th. While at Bon Secour, we will see wildflowers of the outermost coastal plain along the maritime forest, dunes, and coastal swales. The woody jointweeds are spectacular that time of year!

The official AWS hotel for this trip is the Quality Inn in Foley in which the AWS rate is \$75 dollars a night which includes a nonsmoking, 2 bed room. The stay also includes a full breakfast. We have 12 rooms reserved for the 11th and 12th. We might be provided more if these rooms fill, but I would register early to ensure a room. The number is 251-943-6100 and mention the Alabama Wildflower Society. Of course, you are not required to stay at the hotel to participate in the field excursion.

If you arrive on Friday, find others, get together and visit, go out to eat, and/or shop.

We will meet on Saturday at 9:30 am and have our morning hike on the Jeff Friend Trail. The parking lot for this trail is on the south side of AL Hwy 180, 6 miles west of the junction with AL Hwy 59. This trail is 1 mile long (1.5-2 hours) and is wheel chair accessible. The Jeff Friend Trail is a loop that will take us through the maritime forest and along the Little Lagoon margin. After this hike we will break for a picnic lunch.

After lunch, we will move East on AL Hwy 180 to the Pine Beach Trail and travel on it to Gator Lake Trail and loop back to the road. This event will be a bit more rigorous with sandy terrain and travels for about 2.7 miles.

After the Pine Beach/Gator Lake Excursion, we will drive down to the Bon Secour Beach area and see the outer dune plants. For more information regarding trails at Bon Secour, see here:

<http://www.fws.gov/bonsecour/trails.html>

Hope to see you there, Brian Keener, Vice President If more information is needed feel free to call me at 205-913-8525 or Richard and Nancy Cobb at 205-210-1924.