November News

Join us Nov 7 for our next meeting @ BBG

Come for Dr. Tom Diggs' program about the history of Southern plant habitats over the last 10,000 years, and how that history might have affected the spread of the prairie clovers, as well as a description of the techniques he is using to attempt to uncover their evolutionary relationships.

Biography: I was born in Montgomery, Alabama, and spent my childhood camping, canoeing, and hiking all over the state with my father and two brothers, all of whom are outdoorsmen and/or biologists. This instilled in me a love of the flora, fauna, and physical landscape of Alabama from a very early age. I attended college at Auburn University and Auburn University at Montgomery. I earned my Master's degree at the University of Alabama, in geography, with a concentration in biogeography. I am currently attending the University of Alabama at Birmingham, pursuing my PhD in biology. Between bouts of academia, I have also worked for the Alabama Department of Environmental Management, where I did water quality monitoring around the state for four years and public drinking water inspection for two years. I lived in Washington, D.C. for a year, working with the World Wildlife Fund, where I co-authored a book on the freshwater ecoregions of North America. Most recently, I worked for the National Park Service, doing ecological monitoring and species inventories for small parks in the South with significant natural resources, including Russell Cave National Monument and Little River Canyon National Preserve, among others. In particular, I have always been fascinated with biogeographical and evolutionary questions: how did this species get here? Why do these species occur here, and nowhere else? Did they evolve here, or did they migrate? How do we know? Because of the enormous biodiversity and number of habitats in the state of Alabama, I consider it to be one of the greatest natural laboratories left in the country for these types of questions. I consider it my calling to work in Alabama for the study and conservation of our natural ecosystems.

Project Background:

My dissertation project focuses on the biogeography and evolution of highly restricted plants occurring in the Bibb County Glades and the limestone glades of north Alabama, Tennessee, and Georgia. Dalea cahaba, also known as the Cahaba prairie clover, is restricted to the Bibb County Glades. Dalea gattingeri is more widespread, but is still restricted to limestone glade habitats in a few states. Given that most Dalea species occur west of the Mississippi River, the question of the origin and speciation patterns of these Eastern species naturally arises. I am attempting to determine, via use of molecular genetic tools, how closely related these species are to each other, and to other species in the genus. I am also interested in determining how genetically diverse these populations are, and if small population effects such as inbreeding depression are negatively impacting their health. My program will focus on the history of Southern plant habitats over the last 10,000 years, and how that history might have affected the spread of the prairie clovers, as well as a description of the techniques I am using to attempt to uncover their evolutionary relationships.
President Linda Sherk and our Vice President of programs - Marty Schulman shared a few photos from our field trip to Kathy Freeland Bibb County Glades in Sept.

Susan is looking at *Sylphium glaucescens* sticky rosinweed.

Marty is holding *Liatris cylindraceae* Cylindrical Blazing Star.

Jan Midgely kneels and helps Linka Sherk and others identify their find.

What a neat place for a spider to hide!

**Kathy Freeland Bibb County Glades**

Our state office of the Alabama Wildflower Society will meet during the Central South Native Plant Conference at the Birmingham Botanical Gardens the weekend of November 4 & 5, 2011

**Native Plants – The Bigger Picture**

*How Native Plants Complete the Puzzle*

Friends of Birmingham Botanical Gardens greatly appreciates your sponsorship of our Central South Native Plant Conference. As part of your sponsorship, your members get to attend the conference for the discounted rate of $100. For your members to receive this discount they will need to put this code: 0945B on their registration form. For full information on the conference, please go to [http://www.bbgardens.org/central-south.php](http://www.bbgardens.org/central-south.php)
Minutes for September 12, 2011

The meeting met as scheduled at the Birmingham Botanical Gardens. President Linda Sherk called the meeting to order shortly after 7:00 p.m.

Among the pre-presentation announcements was that Dr. Ellen McLaughlin, retired Samford University professor emeritus, will again be teaching nature courses this fall in the SAMFORD AFTER SUNDOWN continuing education program. This season’s offerings are Tree Bark Biota and Identification, Urban Wildflowers, and Insects and their Kin.

Upcoming planned trips are Turkey Creek on 10-8, and Perry Lakes Preserve next year on 3-31. Treasurer Maryalys Griffis reported that there was $1341.88 in the chapter treasury. The final announcement was that the Newsletter, formulated and mailed before each meeting, would now be available via e-mail for all who choose this method. This is likely to decrease postage costs.

The program for tonight was DANDELIONS: AT HOME AND AROUND THE WORLD. The presenter was our own Dr. McLaughlin, as given mention above.

The following is not meant to mimic the technical vernacular of Dr. McLaughlin’s delivery (she’s too good!) but rather to render a brief synopsis of the highlights. The lay shall inherit the Earth.

Dr. McLaughlin waxed evangelical as she spoke of the majesty, from her perspective, of the dandelion. Firstly, it is believed to have originated in what is now Western Asia eons ago. It was introduced to the New World only recently, brought ashore by exploring Europeans. It presently occurs practically worldwide, perhaps less so some places, as Africa, than others.

The term “dandelion”, translated to today’s English, means “tooth of the lion”, or something similar. There are variations of this translation. It is a composite flower, meaning that “the flower” is actually dozens of flowers (only rays). It has a very deep tap root. It actually only blooms for one day. It is constantly reproducing. Each floret has a petal, pistil, and stamen.

The life cycle is a bud, flowering for one day, a yellow closure period for five days, a white closure period for five days, then the presence of a puff ball for one day, followed by a one-day seed dispersal. The puff ball, with the fruit/seeds, has 80-100 seeds per head. One dandelion plant processes eight (the norm) to 50+ flowers.

Dandelions are classified according to their arrangement and configuration of chromosomes. In the Americas, they are triploid (or more), but in Europe and Asia they are principally diploid and reproduce sexually. Fertilization is not necessary in the Americas. Why the difference when the American version is a descendant of the European voyager? In spite of our advanced knowledge of botany/biology, no one knows! In general, the European version is now larger than those to the west.

Growth is affected by seasonal temperature and the height of adjoining plants. The higher the grass or whatever that surrounds it, the higher will be the dandelion scape (stalk). The best time for growth is early to mid-spring. Growth will again be evident in about November. The hours of daylight are also apparently a big factor with the time periods of growth. Seeds will germinate for up to ten years.

The dandelion has long been revered for its medicinal uses. It is a powerful diuretic. The leaves make a nutritious salad (maybe a little bitter), with a high content of vitamins A,B,C, and E, and elements/minerals iron, calcium, zinc, potassium, and lecithin.

Yep, there is indeed a dandelion wine. It can also produce a honey, and a tea. There is evidence of its being a remover of warts. It can be useful as a mosquito repellent.

One member of our congregation tonight spoke of witnessing a neighbor digging up dozens of dandelions in their yard with a spoon! Maybe we should instead plant dandelion gardens and there worship!

The meeting adjourned a few minutes after 8:00 p.m. We will again convene on November 7, same time, same place, when Tom Diggs will diligently entertain us with facts about his diatris research.

Respectfully submitted,
Charles E. Gleaton, Recorder
Did you know that a rare wildflower was recently discovered in the Ruffner Mountain Nature Preserve's limestone rock quarry?

Never before documented in Jefferson County Birmingham-Southern College student Kate LeCroy found the first Smooth Blue Aster.

Our Nov speaker will be Dr. Diggs who is one of the authors of Freshwater Ecoregions of North America: A Conservation Assessment which can be purchased at http://www.amazon.com/Freshwater-Ecoregions-North-America-Conservation/dp/155963734X.

Exert from the book:
North America’s freshwater habitats—its lakes, springs, streams, and rivers—support some of the most extraordinary biotic assemblages in the world. North America’s freshwater habitats also have the unfortunate distinction of being among the most threatened.

Our Vice President of field trips, Michelle Reynolds is looking forward to our spring trip on March 31, 2012: “I can’t wait to climb the observation tower (refurbished old fire tower) and see the funky cool bathrooms that Auburn’s Rural Studio built. I’ve been meaning to get down there for a while. My parents go birding there a lot. “

Saturday, March 31 - Field Trip to Perry Lakes – The Blanche Dean Chapter of AWS has been invited by Dr. Thomas Wilson of Judson College to help identify native plants at Perry Lakes this spring. Approximately a 1 ½ hour drive
http://www.perrylakes.org/

In our attempt to save money we are asking if you will agree to receive only our email newsletters instead of paper.

Please send Linda your email address at blt111@bellsouth.net and let her know if you agree to only email. Of course if you prefer paper newsletters just let Linda know.

2012 Calendar for the Blanche Dean Chapter of AWS

1. Monday, March 5 - Pot Luck Dinner at the BBG starting at 6:30PM
2. Saturday, March 31 - Field Trip to Perry Lakes – The Blanche Dean Chapter of AWS has been invited by Dr. Thomas Wilson of Judson College to help identify native plants at Perry Lakes this spring. Bring a picnic lunch.
http://www.perrylakes.org/
3. Schedule spring trip to eastern ecoscape with Arnie Rutkis.
4. Schedule spring trip to Blount County to Sharon Leader’s property and Palisades Park.
5. Monday April 2 – Meeting at the BBG starting at 7:00PM
6. Monday , June 4 – Wendy Jackson from the Freshwater Land Trust will be our speaker for our meeting at the BBG starting at 7:00PM
7. Monday , September 10 – Meeting at the BBG starting at 7:00PM
8. Field Trip to High Falls to be scheduled for the fall (Michelle)
9. Hope to schedule fall trip to the ecoscape at BSC.(Roald)