



the Tarpaper

The Tarflower Chapter of the Florida Native Plant Society



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FEBRUARY 3 PROGRAM: TRACKING CLIMATE CHANGE WITH PLANTS BY GEORGE KISH

George Kish is a Hydrologist with the US Geological Survey in Tampa. He coordinates the Southeastern Phenology Network for the USA National Phenology Network- a network designed to observe the life cycle events in plants and animals and relate the timing of these events to global climate change. George will present a talk about the importance of phenology with respect to predictions for future global warming.

George is the past president of the Suncoast (Hillsborough County) chapter of the FNPS and a past state Board member. He has a bachelors degree in Biology from Drexel University, a masters degree in Environmental Science from Rutgers, and is currently pursuing his PhD in Geography, Environmental Science and Policy at the University of South Florida.

UPCOMING EVENTS *Pete Dunkelberg*

We will participate as usual in several fun spring events. We set up our tent and information table, tell people about native plants and this group, and sometimes sell plants, books and T shirts. First up, and coming this very next Saturday, is the Orlando Wetlands Park 10th Annual Festival **Saturday, February 7, 2009** from 9:00 a.m. to 3:00 p.m. For more information check the website

<http://www.nbbd.com/festivals/OrlandoWetlands/>

The events will originate at the Fort Christmas Historical Park. Event co-sponsor, the Orange Audubon Society, will lead guided birdwatching excursions and expert-guided nature photo shoots. The Florida Native Plant Society will lead native plant identification hikes and wilderness hikes will also be available by the Florida Trail Association. Expert wildlife photographers Vinny Colucci of North Carolina and Milton Heiberg of Orlando will be leading photo
See "Events" page 2.

PLANT LOVERS WANTED FOR VALENTINE'S DAY FIELD TRIP

John Cento

Spring lovers too as the Tarflower Chapter will be visiting Seminole State Forest on February 14th for a spring walk courtesy of biologist Ralph Risch, who informed and entertained us about his scrub jay studies not too many programs ago. We will meet at 9:00 am by the pond a short distance in from the forest's south entrance off SR 46. We will caravan in vehicles along the forest roads from spring to spring until about 1:00 pm with short walks to the spring locations. The estimated cumulative walking distance is about two miles. The walks are not expected to be difficult, but be warned, they may be muddy at times.

Springs we hope to visit include Shark Tooth Spring, Moccasin Spring, and Helen Spring. Being the Renaissance Man that he is, Risch was quick to mention flora we can study during our walk. One spring has notable liverworts nearby; Moccasin Springs may have common pennyroyal *Piloblephis rigida* in bloom, in another spot, tulip poplars *Liriodendron tulipifera* stand guard. I note that the Audubon Society's Field Guide to Eastern Trees has color plates to identify deciduous species by bark. In addition, there may be an opportunity to analyze how plant communities have recovered from prolonged inundation from tropical storm Faye. And as a bonus, Mr. Risch will take us on a short visit with the resident scrub jays. In return for this outstanding field trip, Mr. Risch would like our chapter's help in identifying a mysterious giant fern.

At the end of the walk, members so inclined will have a picnic by the entrance pond sharing memories of the day's botanizing.

For further information, please email John Cento at jcentocpa@hotmail.com or call (407) 913-2417.

FUTURE PROGRAMS

March 3 *Habitat Restoration* by Nancy Bissett

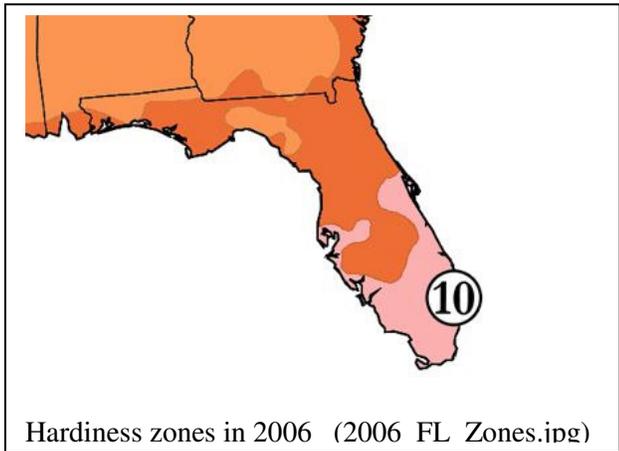
April 7 *Healthy? Wetlands* by Catherine Read

May 5 *Florida Geology* by Professor Jack Rogers

CHANGE YOU CAN LIVE WITH

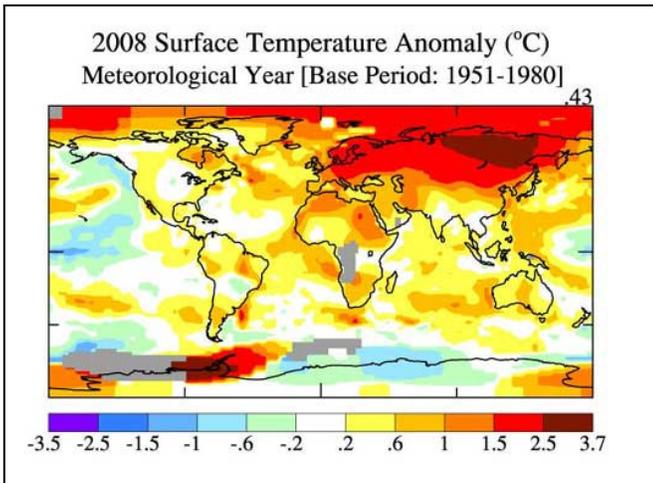
Pete Dunkelberg

Florida (and everywhere else) is divided into plant hardiness zones based on winter temperatures. In

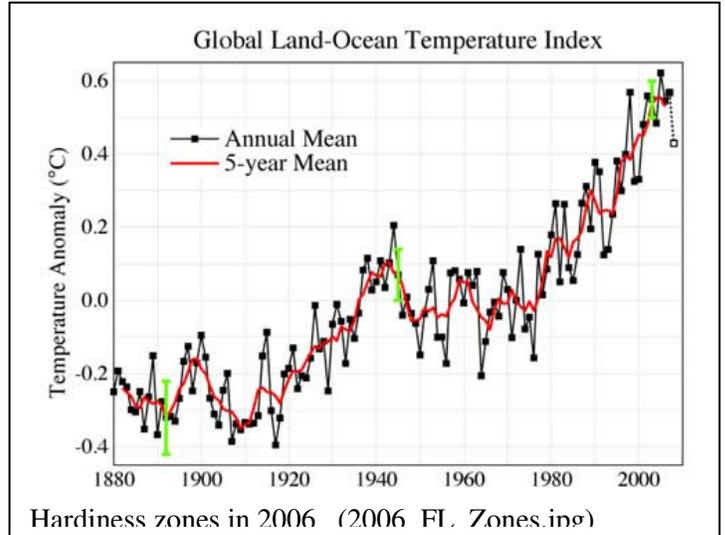


Florida, zone ten is the warmest. Zone ten is expanding.

Florida's government is trying to plan for climate change. The Fish and Wildlife Commission had a big

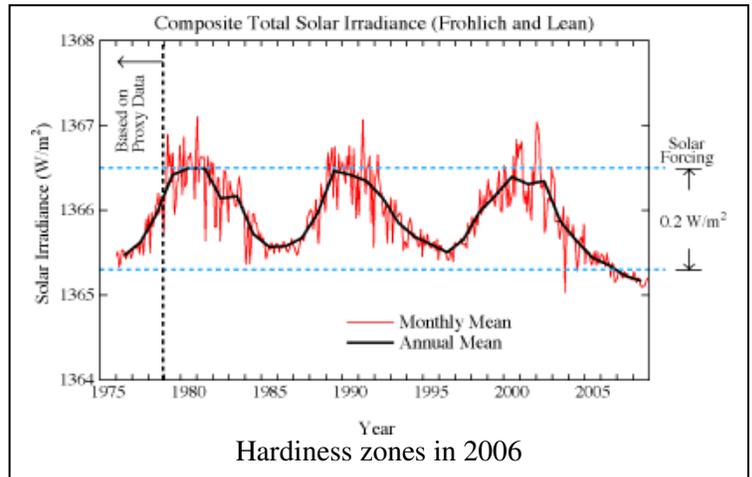


conference on the subject last October. This is part of a global phenomenon. As the graph shows, the average



temperature of the whole earth is increasing. As this temperature map for 2008 shows, there are warmer and cooler regions (redder means hotter, bluer means cooler than the past average).

You may have read (and can see on the graph) that 2008 was slightly cooler than the last few preceding years. The map shows the main reason: there was a mild La Niña, that is, cooling of the surface of the south Pacific ocean – note the bluish region there. Another reason is that the sun has cooled slightly in the last couple years. This is just a normal fluctuation though. In the normal course of events we would expect the sun to warm slightly and there to be a new El Niño in a very few years.



How does global warming happen? Both physics and a great deal of research indicate greenhouse gases, especially carbon dioxide (CO₂) as the main cause. Much of the radiation that reaches earth from the Sun, including visible wavelengths, warms the surface and then is re-radiated as infrared radiation. A portion of the energy from the Sun See "Climate" page 5.

FIELD TRIP *continued from page 4.*

was supplied by Chuck. It was a monkey puzzle tree. The limbs are arranged in juxtaposition up the trunk and the needles were short, green and curved upward to the sky. I love the monkey puzzle tree because it stood tall and angular against the sky, like a beautiful sculptural work of art.

We passed leather ferns that were so tall and broad along the wetter areas in the hammock and papyrus was seen in several spots. Red headed turkey vultures were one of the few animals that were visible to us as they lazily circled above. But once in a while a yellow and black zebra long wing butterfly flitted past; in fact it moved faster than we did. Cabbage palms lent me a few dark berries from their store as Pete suggested giving them a taste, much better, these actually tasted like raisins!

As the trail turned sunnier the variety of plants changed too. Dog fennel, sea oxeye daisy and knicker beans began to appear. Pepper grass was right on the trail and we stopped to grab a few stems to see how true the name is. Take my word for it, it is peppery all right. I can see it mixing perfectly in a salad for just a bite of heat. Sea rocket was in bloom and the Spanish bayonet looked particularly sharp on the tips.

The trail left the sun behind and the trees crowded each other to see who could reach the sun first. The ancient oaks had a better idea, they didn't bother to lift their limbs straight to the sun, and instead they chose to make grand gestures towards the ground with limbs that dipped, touched the dirt and rose magically back up to seek the light. Some limbs created archways across the trail that we walked under.

Once in a while the trail would lead us out to openings created by park personnel who graciously provided benches to take in the quiet beauty of the mangrove swamps. The roots of mangrove trees are gray and dangle in mid air until they reach their destination in the brackish water all around their trunks.

The hike actually took a little closer to 3 hours but it was like time stood still as I covered new ground and opened my eyes to unknown beauty everywhere.

We returned to the Barrier Island Center and sat outdoors to have a picnic lunch by the ocean. By then the day was warm and it was so relaxing to watch the breakers and recall the wonderful experience of my first field trip with my fellow native plant enthusiasts.

If you haven't participated on the field trips please consider joining the group on the next outing. It was a great beginning for someone like me who knew next to nothing about native plants at the onset of the trip but now I hope to search and discover all I can in regards to Florida native plants.

LAND MANAGEMENT PARTNERS

Jackie Rolly

The mission of the Land Management Partners (LMP), a subcommittee of the FNPS Conservation Committee, is to provide government agencies (i.e., state, water management districts, county, local), non-government organizations, and the general public with support in managing public and private lands "to promote the preservation, conservation and restoration of native plants and native plant communities of Florida".

The Land Management Partners (LMP) subcommittee is requesting a liaison/contact person from each FNPS chapter to assist in identifying FNPS volunteers interested in assisting with local LMP support activities.

Examples of LMP support activities include providing FNPS volunteers to participate in Florida Department of Environmental Protection land management reviews of public lands, assist with plant surveys on public lands, and assist with monitoring and reporting the results of land management activities on public lands.

The LMP chapter liaison/contact person would let his/her chapter members know about the LMP, identify chapter members interested in participating in LMP activities, and distribute information about upcoming LMP support activities to the chapter membership.

For more information, please contact the LMP subcommittee chair, Anne Cox (ecologinc@bellsouth.net) or the vice chair, Daphne Lambright (dlambrig@biotechnical-services.com).

CLIMATE *continued from page 3.*

is already infrared, but a greater portion of the energy leaving earth is infrared. Some of this departing infrared radiation has just the right wavelength to be absorbed by a CO2 molecule. The molecule will soon re-radiate this energy, but in a random direction. Energy that is headed up may be sent right back down. Thus, more infrared energy is leaving than is arriving, but CO2 impedes its escape from earth. This results in a warming world until, at some higher temperature yet to be reached, just as much energy departs earth as arrives.

HELP WITH REFRESHMENTS NEEDED!

Jackie Sward

We really need more participation with providing refreshments for the monthly meetings. A special thanks to Kathy Andrews, Adele Simons and Susan Ledbetter for bringing refreshments to our meetings. If you would like to bring some refreshments to one of our future meetings, please do. If you can't bring something to our next meeting, please sign up for a future meeting on the sheet at the end of the refreshment table. Thank you for participating in making our meetings more fun and congenial.