

Heard it through the Pipevine



Jan-Mar
2010

Newsletter of the Austin Butterfly Forum * www.austinbutterflies.org

General Meeting

Monday March 22, 2010 @ 7:00pm

Rainbow Soil: the complexity beneath our feet!

Dr. Pat Richardson will speak on soil mesofauna — macroscopic invertebrates such as nematodes and arthropods play an essential role in cycling nutrients and dispersing bacteria and fungi in soil and plants.

Join Dr. Patricia Richardson for a discussion of nature's incredible biological complexity beneath our feet. Learn how to manage toward that biodiversity and perhaps even create land that will inspire a rainbow!

Meet at the [Zilker Botanical Garden Center](#).
Light refreshments provided.

New Digital Format for Newsletter!

What has happened to the club's newsletter lately? We have gone through a bad patch where the newsletter competed with many other affairs of our board members. We hope the new PDF format will make it easier to publish. This will allow for color photos and will save money for the club!

Members are encouraged to submit articles, book reviews, and/or photos to Mike Quinn. Thanks!



**Congratulations
Val Bugh and
Robert Corbin!**

-- See their stories on page 2 --

Val Bugh published a local butterfly identification guide

“The Butterflies of Central Texas” was recently published by Quick Reference Publishing and ABF member Val Bugh provided the photos and text. It is plastic bound and stiff. The commonest species Austin and the surrounding Hill Country are shown with photos of the adult and the caterpillar. The associated text has the size, caterpillar’s food plant, and flight season. (See images and text at right for the Variegated Fritillary.)

The guide is tall, but has with the width of a pocket. It is laminated and hinged for durability and usability. You can purchase a copy at our meetings from the adjacent gift shop. Barnes & Noble stocks it in their Texana section.

This publisher has also released a guide in identical format for the Butterflies of South Texas including the Lower Rio Grande Valley by Ro Wauer and Jim Brock, both of whom have spoken to the forum in past years.



The images and text above are an example of a species’ treatment inside Val’s brochure. The brochure cover is shown on this newsletter’s front page.

ABF Member Discovers Local New Plant for Science

Amateur naturalist Robert Corbin amazed biologists and friends alike when he recently discovered a new six foot tall plant species in the Asteraceae family along the Colorado River just east of town! His discovery was covered in the Austin-American Statesman, the Austin Chronicle and on KUT. Robert first found the plant in a difficult-to-access marshy island just east of Austin near the Montopolis bridge. The first population could not be relocated, but fortunately a second, larger colony was later found further downstream near Hornsby Bend. The new plant was formally described as “*Iva corbinii*” by Billie Turner, emeritus professor at UT.

Robert is an intrepid explorer of local habitats. As he says: “Once you don’t worry about getting wet or getting scratched, you’re free to go anywhere”. Corbin is a board member of the environmental group Save Our Springs Alliance.



The 2009 ABF Garden Tour was a tremendous success!

Winnie Spitz (above left) shows off her yard in South Austin to Mary Holland and Debbie Russell. Jerry and Marie Mayfield (below) show off their yard in southwest Austin.
Thanks for letting us tour your beautiful yards!



Assassin Bugs by George Winkler

On Jan. 25th I presented a two part program on Assassin Bugs to the Butterfly Forum. Assassin bugs are members of the family Reduviidae which is in the order Hemiptera also known as the true bugs. They are predaceous, feeding on mostly insects, but also occasionally the blood of mammals.

The first part dealt with my experience of having been bitten twice by an African Assassin Bug which I was raising at the St. Louis Zoo. I was sensitized from the venom the first time and went into serious anaphylactic shock the second time. On the verge of death, some of my coworkers did CPR on me until the paramedics arrived and took me to the hospital where I eventually recovered.

After recovering I realized that, due to my brain being deprived of oxygen for several minutes, my short term memory and ability to process information quickly suffered. Since I have no personal recollection of the day I was bitten, the knowledge of what happened is based on what my coworkers told me. I was told that I was feeding the bugs when one of them bit me. My reaction to the bite was not a typical one with this particular insect.

The second part of my two part program concerns the disease called Chagas' disease which at one time was mostly confined to South and Central America and Mexico. The disease was discovered by a Brazilian physician, Dr. Carlos Chagas. The disease is caused by a protozoan parasite called *Trypanosoma cruzi* which is similar in appearance to the trypanosomes which cause African Sleeping Sickness and lives in the body of certain assassin bugs. People as well as other mammals are the reservoirs of this parasite and the assassin bugs are the normal vectors which transmit the trypanosomes. The bugs which transmit it are often called Kissing Bugs because of their tendency to bite around the lips, cheeks and other parts of the face. The trypanosomes are found in the hindgut and when the bugs defecate around the bite wound, people often scratch and cause the feces to enter the wound with the trypanosomes. Transmission can also occur through blood transfusion, congenital transmission, organ transplant and eating raw meat with the trypanosomes.

People with Chagas' disease go through an initial acute stage which lasts from several weeks or months and may or may not show symptoms such as pain and swelling at the site of the bite as well as damage to internal (especially digestive) organs. This will be followed by the chronic stage during which time a person may show no symptoms for decades or may develop cardiac, neural or digestive damage and may eventually die from these. There are antiparasitic drugs which are reasonably effective during the acute stage. During the chronic stage, the best treatment involves treating the symptoms.

The disease was rarely found in southern Texas in the late 1900s, but in the early 2000s it has become more prevalent not only in other parts of the U.S. but also in other parts of the world due to migration of people with the disease.

Mayhem in Michoacan by Mike Quinn

A record rainstorm struck a large swath of Mexico during the first week of February 2010, with the most severe effects being felt in eastern Michoacan where the monarchs overwinter. The town of Angangueo, in the heart of the Monarch Butterfly Biosphere Reserve (MBBR), was declared a disaster area with 80% of the homes uninhabitable after floods and landslides carrying mud, trees and boulders poured down the mountain ravine where the town is situated. Some 700 km of rural roads were also damaged in the region along with six bridges being washed out.

With the human tragedy and massive destruction to the infrastructure rightfully taking a priority in the rescue efforts, the amount of damage to the monarch population is not clear but it appears to have been relatively low. Observations from two of this year's three largest monarch colonies peg the mortality at 10%.

The worst-case scenario for the tropical butterfly is to be soaked in a downpour then to be subjected to freezing temperatures or as Lincoln Brower recently posted to the Monarch Watch listserve, "The killing combo is wet butterflies and temperatures below negative 3 Centigrade."

It's not clear how low the temperatures fell when the skies cleared after four straight days of rain, but the reports of 10% mortality suggest that those monarch colonies didn't experience a hard freeze. It hailed the day before the rains started, but hail is produced by freezing rain high in the atmosphere and doesn't necessarily mean freezing temperatures at ground level. (See "hailman" photo shot at El Rosario, courtesy of Eleanor Jensen)

The two most recent monarch die-offs in Mexico occurred in Jan-Feb of 2002 and 2004. Fortunately, those pre-storm populations were the highest of the last decade. This year, unfortunately, the estimated pre-storm population was the lowest in 15 years. Chip Taylor, the director of Monarch Watch, summed up the annual Mexican monarch census this way: "Only 7 colonies were found and the total area occupied by monarchs at the overwintering sites in December [2009] was 1.92 hectares (ha). ... The totals for both hectares and numbers of colonies are at an all-time low."

The current estimate for the number of monarchs per hectare of occupied forest is 50 million. So 1.92 hectares roughly represents 100 million butterflies. Chip did offer some encouraging words. He put the critical number of surviving monarchs at 50 million which we should still be north of. Chip also noted that if conditions are favorable for the returning monarchs in the spring and summer, the monarchs could rebound in one breeding season.

All the rains Texas received this winter and spring bode well for a healthy crop of wildflowers for the returning monarchs to enjoy, however temperature has the greatest effect on monarch populations. Let's hope for pleasant spring weather to aid the wondering monarchs and to boost our spirits as well.

[PS: As this was going to press, a heavy snowfall is being reported for Angangueo]



Calendar

Feb 22 - Club Meeting: Phyllis Dolich, "Beauty is in the Eye of the Beholder - attitudes about landscaping that are detrimental to our butterflies (and other wildlife)" Zilker Botanical Garden Center, 7:00 pm.

Mar 6 - Austin Nature and Science Center / Zilker Preserve Biodiversity Survey, please contact Melissa Macdougall (melissa.jane.mac@gmail.com or 422-6270) for info on this monthly survey. All are welcome.

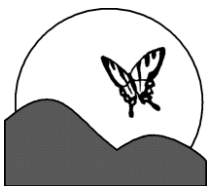
Mar 22 - Club Meeting: UT Prof. Pat Richardson will speak on Soil Organisms.

Mar 27-28 - Zilker Garden Festival, Zilker Botanical Garden. ABF will have a table at this event and we need volunteers to help with our outreach message. Plants, books and photos also needed.

Apr 10-11 - Lady Bird Johnson Wildflower Center, Spring Plant Sale. This plant sale boasts the largest selection of native plants in Central Texas with some 300 species and 23,000 plants from which to choose.

Apr 26 - Club Meeting: "Photographing Butterflies" Various club members will talk about what cameras to buy, tricks they use, and how to take care of digital images.

May 1 - ABF Butterfly Workshop, Zilker Botanical Garden Center, details to be announced.



Austin Butterfly Forum Membership Form

Become a member or renew your membership.

Your membership helps support our club activities, but members also receive bimonthly **newsletters** with upcoming events and informative articles, **butterfly plants** that we often give away, and **discounts** on books, T-shirts and more.

Name:	Daytime phone:		
Address:	Evening phone:		
City:	State:	Zip:	Email:

Membership is \$20 annually per household, payable to the Austin Butterfly Forum and sent to:
ABF c/o Doris Hill, 1605 Broadmoor Drive, Austin, TX 78723