



Heard it through the Pipevine



March /
April
2007

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

Catalina Estrada tells us about the impact of mimicry on species recognition, Brush Freeman tells us about attracting insects with bananas, and Dan Hardy tells us what to watch for in early spring. Also check out the trip to Mexico that Mike Quinn is arranging for August.

Club Meeting

Monday March 26, 7:00 pm

Zilker Botanical Garden Center

Phil Schappert will introduce his upcoming butterfly and plant field guides for "East and South Central Texas." The butterfly guide covers ~175 species. It will include photos of last stage caterpillars and selected larval host plants for all species, family/species comparison pages with all regional taxa together on fold-out pages, and the use of masks to highlight field ID marks. The plants guide will have distribution maps for all species. He'll discuss his proposals, species lists, and some planned field trips.

This will be followed by 30 minute film by John Banks shot at Cristalino Natural Heritage Reserve in Brazil, which introduces the butterflies of the Amazon Rainforest.



Zebra Longwings (C. Estrada)

The Secret Life of Butterflies

by Catalina Estrada

While working in tropical forests of Central and South America, I have always been fascinated by how small animals find and recognize other individuals of their own species from the complexity of structures and organisms surrounding them. The challenge must be even greater for animals that have evolved to look like individuals of other species, a defense strategy for deceiving enemies known as **mimicry**. This strategy works because many animals enjoy relative safety from predators due to chemical compounds that render them unpalatable. Such animals also advertise their unpalatability by wearing or displaying warning signals such as bright colors or nasty odors, which predators learn to avoid. By mimicking such signals, other animals, even non-toxic, gain an advantage as

TIME TO PAY YOUR DUES

You owe dues if the date on your address label is highlighted in yellow.

Membership is now paid on a calendar year basis. The cost is \$20 per household, and we will no longer prorate as we did last year. Everyone's dues (with very few exceptions) expired December 31. You can pay at the March meeting or better yet send your dues to Doris Hill. Her address and the membership form are on the back of the newsletter.

well. Just recall the last time you ran away from a yellow and black insect; it could well have been a harmless hoverfly.

Ever since I was an undergraduate in Colombia, I have been fascinated by *Heliconius* butterflies. They exhibit an amazing diversity of wing color patterns and are often involved in mimicry. The similarities are so amazing, than unless you were told what to look for, you would never know who is who. There are around 42 species and more than 200 different wing color patterns distributed from the southern United States to Argentina. These butterflies are excellent for studying the challenges of finding and recognizing mates that animals face as a consequence of color pattern similarities between species. Male and female butterflies recognize mates using differences in wing coloration and pattern, which prevents them from making mistakes. At the same time, such color-patterns are also used as anti-predatory warning signals. With Chris Jiggins, a biologist at the University of Cambridge, I explored the extent of signal confusion among mimic *Heliconius* species while working in the Smithsonian Tropical Research Institute in Panama. Just as we expected, our captive males frequently approached, courted and even tried to mate with females of the 'wrong' species. This suggested that living together with a mimic species is good to trick predators but bad when looking for a partner!

Here at UT, Austin, Larry Gilbert has set of greenhouses with an amazing collection of *Heliconius* butterflies and host plants. There we study the secret languages and mating strategies that these butterflies use to avoid mating mistakes. Such strategies and signals are just as fascinating as their colorful appearance. For example, males use visual cues and odors from the host plants and caterpillars to find females that are ready to eclose from their pupae. Around half of the *Heliconius* species exhibit this unique mating system known as pupal mating. In such species, males find pupae, and visit them regularly until the pupae are ready to eclose. Thereafter, they sit, insert their abdomen under the pupal skin and mate with females as they eclose!

This decreases the number of receptive adult females, as mated females generally carry antiaphrodisiac odors to repel harassing males. How they got this nasty odor is another chapter in the book of the secrets of these fantastic butterflies.



Races of *Heliconius erato* (top) and *H. melpomene* (bottom) from South America (C. Jiggins)



Male *H. sara* mating with recently eclosed female (C. Estrada)

Zilker Garden Festival VOLUNTEERS NEEDED

March 31 - April 1, 10am - 5pm
Zilker Botanical Garden Center

This year's Zilker Garden Festival will be Saturday March 31 and Sunday April 1. The Austin Butterfly Forum annually participates in this fun-filled event (which is a fund raiser for the city to run Zilker). We still need a few volunteers to run our popular tent (in two hour blocks) to answer questions about butterflies, gardening, and our club. We will have books, plants and caterpillars for show as well as handouts. All Austin Area Garden Council clubs are all asked to sell two tickets for each of their members, in our case this is 170 tickets. Please ask friends, family and/or co-workers if they would like to attend. You can purchase an advanced sale price ticket (\$3) at the next ABF general meeting (Mar 26) just prior to the festival. Please contact SOMEBODY? for ABF info. For general Zilker info, call 477-8672 ext. 13 or email info@zilker garden.org.



Eight-Spotted Forester (E. Isley)

What to Watch for this Early Spring

by Dan Hardy

Early spring will come in with blooming Redbuds and Mountain Laurel, the Live Oaks dropping their leaves and a distinct group of early leps, such as Falcate Orangetips, Henry's Elfin, Cecropia Moths, Grapevine Epimenis, and Eight spotted Foresters, all welcome after the winter drought of butterflies. Several of these leps have one flight per year, i.e. they are univoltine. So, by late April you are out of luck. The rest of the year they hide as pupae or eggs. Here are some things to watch for during the next two months.

Falcate Orangetips use crucifer plants (mustard family), especially Rock Cress (*Arabis petiolaris*). This plant is hard to spot. If you see a female orangetip (they don't have orange) flying slowly and carefully examining plants, she may lead you to the plant. I have found the plant this way at Pedernales State Park and at Enchanted Rock. A single small plant at Pedernales was peppered with about ten eggs. Orangetips may use other crucifers. I have seen them lay eggs on the ubiquitous, introduced Bastard mustard, but I don't know if the caterpillars develop on it.

Henry's Elfins pop out from the leaf litter after overwintering as obscure brown pupae. I see them use Redbud and Mexican Buckeye for hostplants. In fact, I have a lot of fun searching Redbuds flowers for the caterpillars of Henry's Elfin. They can be as red as the flower. Go to the Lady Bird Johnson Wildflower Center or Zilker Botanical garden in late March and April and search for these caterpillars on the flowers and leaves of the redbuds and Mexican

Buckeye. They are probably the easiest of all the hairstreak caterpillar to find. But you only got that one month window to find them.

The Grapevine Epimenis is a dandy day-flying moth. It is black with a white spot on the forewing and a red spot on the hindwing. You'll find them around blooming Elbow Bush and Agarita, along with the elfins. I have learned from Wagner's [Caterpillars of Eastern North America](#) that they are univoltine, too. The caterpillars feed on grape leaves and have their body ringed with black and white lines like a zebra. There is orange at the front end and at the back end. They should be easy to find. The scientific name of this moth is worth knowing: *Psychomorpha epimenis*.

Eight-spotted Foresters are closely related to the Grapevine Epimenis, They have two pale yellow spots on the forewing and two white spots on the hindwing. Joe Lapp and I watched a pair of male foresters one time at Balcones Canyonlands. They would buzz each other then go through extremely fast rocket-like flight that would go way overhead. We were astonished to see this fluttery, bumbling moth execute such a maneuver. Wagner says they have multiple broods, with the spring brood predominant. They also use grape, along with amelopsis and virginia creeper. Their caterpillars are similar to the epimenis, but have multiple orange bands all along the zebra-striped body.

Late spring has another suite of univoltines: Oak, Banded, and Soapberry Hairstreaks. They overwinter as eggs somewhere on the hostplant bark. In late March and early April the eggs hatch and the caterpillars go to work on the new oaks (the first two) and soapberry trees. They time their feeding frenzy perfectly. Find a patch of soapberry trees in early April go and check the leaves for damaged areas and you may find a Soapberry caterpillar.

Butterfly Workshop

Saturday May 5, 10 am - 4 pm

"How To Know and Grow Austin Butterflies"
Austin Butterfly Forum is conducting a workshop on Saturday, May 5 at the Zilker Botanical Garden, 2220 Barton Springs Rd, 10 am - 4 pm.

The cost of \$35.00 includes a light lunch. For more information, and to register, please call Jeff Taylor at 255-0368 or kscjtaylor@prodigy.com

Tips will be given on butterfly identification, rearing butterfly caterpillars, and creating a garden to attract butterfly larva and adults. There will also be a butterfly walk.



Owl Moth, *Thysania zenobia* (B. Freeman)

Baiting with Bananas

by Brush Freeman

As a naturalist who knows very little about a lot and a lot about very little, there came a time when I discovered that I could attract all sorts of creatures I never knew existed simply by placing some well-aged bananas outdoors. I learned this through the online conversations of others, though I had never before tried it myself. Originally I went with the various beer and banana recipes I had read of, but found I was also attracting wasps and bees in profusion and various middle sized mammals at night. These concoctions were also messy: where I smeared them on trees I now find the bark permanently stained.

So after some time I just decided to use nothing but overripe bananas. I have no regrets. I attract just about as many creatures this way as I did with the various beer and banana potions, though perhaps there are fewer butterflies. Still, there are plenty of butterflies, but I am actually more interested in the moths and other non-lep critters that are attracted to the bananas.

I maintain banana bait stations at my home near Utley in Bastrop County and also at the beach-front home of Ladd and Petra Hockey in Port O'Connor, where I'm fortunate enough to be able to spend time throughout the year. At my home I always have bait out except in the coldest of weather. My success with bananas in the two locations has been beyond anything I could have imagined. In Port O'Connor alone some of the rarest of leps known from the state have made appearances as well as a huge variety of other non-lep species, altogether providing me with

many first-ever encounters and a good deal of entertainment.



Dressing and hanging bananas (B. Freeman)

For those who worry about the mess of using a more liquid bait, old bananas alone will work fine. To prepare the bananas I place them in a brown paper bag. I have heard peaches ripen quicker this way, and though I don't really know whether this also works for bananas, I figure it can't hurt. I age them until they are black or nearly so. To dress them out, I leave the stem on and make a small cut at the stem end about 1/2 inch wide. I then un-zip that one slice, peeling it the length of the fruit. And that's it. Leaving on most of the hide keeps the banana moist longer and allows for a variety of small fruit flies and tiny beetles to work the interior.

The placement of the bananas can affect the visitors you get. I have found that darker locations are better for night visitors. For daytime visitors, a place a bit out of the wind works better than one where a constant breeze blows. I place the bananas in the hanging wire suet holders that one can buy at any store that sells bird seed. These I hang from the eaves of my porch where they are out of the reach of Mr. Raccoon and Opossum Man. On the coast I merely leave several banana in the crotches of limbs of mulberry trees as there are little in the way of mammalian scavengers there to contend with, making them accessible to the many cool insects that come up from the ground to enjoy a snack after dark.

Critters will start coming in almost immediately, especially at night. After the little interior animals have had time to work on the insides, the fruit becomes irresistible, with plenty of fine fermented juices inside to be taken by a wide assortment of interesting animals. Surprisingly, these bananas seldom drip, and when they are used up they dry to a prune-like consistency, which is easily disposed of. When I have a lot of extra over-ripe bananas, I just freeze them for another time. Indeed my freezer has 3-4 pounds of prime bait in it now. These thawed

bananas do have a tendency to drip for a while after being hung up and may discolor concrete briefly.

There is no telling what interesting animals you might see. I have been fortunate to have attracted critters such as the very rare and huge Owl Moth (*Thysania zenobia*), as well droves of Black Witch Moths (*Ascalapha ordorata*) that just can not resist this bait. Surprisingly, even some of the Sphingidae will come in for a sip. Nessus Sphinx (*Amphion floridensis*) is a frequent visitor. A wide variety of beetles are attracted to the baits at all times of the day and night -- too many to mention here. I have even discovered the unworldly huge male, Darth Vader-like, Giant Black Horsefly (*Tabanus species*) nectaring during the day. In Bastrop County I have had the wonderful Mourning Cloak butterfly (*Nymphalis antiopa*) as well as the Eastern Comma (*Polygonia comma*) and many Question Marks (*Polygonia interrogationis*). One day I was so fortunate to even have a rare tropical Blomfield's Beauty (*Smyrna blomfieldia*) make an appearance at a bait station in Port O'Connor -- just too cool.

Folks this is easy, cheap, and mess-free, and I'll wager that even in town you will find creatures that you never knew were in your area, especially just after dark until about 11 PM on warmer evenings.

And, no, I have never had a problem with unwanted houseflies, though at times small wasps will make good work of the bait during the day, especially in the early days of fall. Try it.



Blomfield's Beauty, *Smyrna blomfieldia* (B. Freeman)

Entomological Calendar

Mike Quinn brings you a more extensive calendar of entomological events, focusing on events of possible interest to us bug-lovin' folks here in central Texas. For an even more complete listing, see the calendar on his web site at www.texasento.net/events.htm.

MARCH '07

Mon 26

Austin Butterfly Forum Meeting – Zilker Botanical Garden Center, 7 - 9pm

Phil Schappert will give us an introduction to the butterfly and plant field guides for "East and South Central Texas" that he is working on. We will also see a 30 minute film shot at Cristalino Natural Heritage Reserve in Brazil introducing the butterflies of the Amazon Rainforest.

**Sat 31 -
Sun 1**

Zilker Garden Festival – Zilker Botanical Garden Center, 10am - 5pm

This annual event has something for every member of the family. ABF will have a table and will sell tickets, \$3 in advance and \$5 at the door. Volunteers needed!!! See box on page 2.

APRIL '07

13 - 15

Spring Plant Sale – LBJ Wildflower Center, 1 - 7pm Fri, 9 - 5pm Sat/Sun

Nearly 280 species of native plants. Artists and authors sign their works in the store both days. Members' Only Preview Sale -- 1 to 7 p.m. Friday, April 13. Public Sale -- 9 a.m. to 5 p.m. Saturday and Sunday, April 14 and 15. <http://www.wildflower.org/?nd=calendars>

Sat 21

Butterfly Walk – Westcave Preserve, 10am - noon

Dan Hardy will be leading a butterfly walk for Westcave Preserve, teaching people about butterflies and their host plants. \$5/adult, \$2/child. www.westcave.org

Mon 23

Austin Butterfly Forum Meeting – Zilker Botanical Garden Center, 7 - 9pm

Ro Wauer will talk about his new book, [Finding Butterflies in Texas](#). Book signing.

27 - 30

Balcones Songbird Festival – Balcones Canyonlands NWR

Comes to the Balcones Canyonlands Nation Wildlife Refuge for a day of birding and other nature activities. The day includes programs on butterfly gardening, aquatic insects, and spiders. Visit www.balconessongbirdfestival.org for more information

MAY '07

Tue 1

Sierra Club Meeting – Zilker Botanical Garden Center, 10 - 4pm

Joe Lapp presents a program titled “**The Spiders You See**,” introducing the wonders of everyday spiders. Join us for an exploration in photos and stories to learn how important and amazingly diverse these strange critters are. We'll bash a few myths, discover a few mysteries, and practice identifying a few families. We'll even have live black widows and brown recluses on hand for your viewing pleasure. (spiderjoe.com)

Sat 5

Austin Butterfly Forum Workshop – Zilker Botanical Garden Center, 10 - 4pm

“How To Know and Grow Austin Butterflies” will be the focus of this year’s workshop. Contact Jeff Taylor at 255-0368 or kscjtaylor@prodigy.com. See box on page 3.

August Trip to Tamaulipas, Mexico

Sunday August 26 - Saturday September 1

Mike Quinn is arranging for a large group trip to see the butterflies of southern Tamaulipas. Butterfly expert **Mike Overton** will be leading the expedition.

- Be in Harlingen for an orientation meeting Sunday night, August 26th.
- Bus from Mexico will take everyone over the border Monday morning, August 27th.
- Will explore multiple different areas in southern Tamaulipas Tuesday-Friday.
- Bus will return everyone to Harlingen on Saturday, Sept 1 around 6 pm.
- Per-person cost for 15 people: \$1050.00.
- Per-person cost for 20 people: \$ 900.00.
- Costs all inclusive save the before and after night's stay in Harlingen (will have a reduced rate at Country Inn and Suites totaling \$120 for both nights), and travel down to and back from Harlingen.

Contact Mike Quinn for further details and updates. entomike@gmail.com - 512-292-353

Austin Butterfly Forum, Inc.
1701 Spyglass Dr. #11
Austin, TX 78746



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:
Street:	Evening phone:
City: State: Zip:	Email:

Membership is \$20 annually per household, due each January and prorated thereafter.

Make check payable to the Austin Butterfly Forum and send to:

ABF c/o Doris Hill, 1605 Broadmoor Drive, Austin, TX 78723