Heard it through the Pipevine

March-April-May 2010

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

4th of July Butterfly Count Saturday, June 26

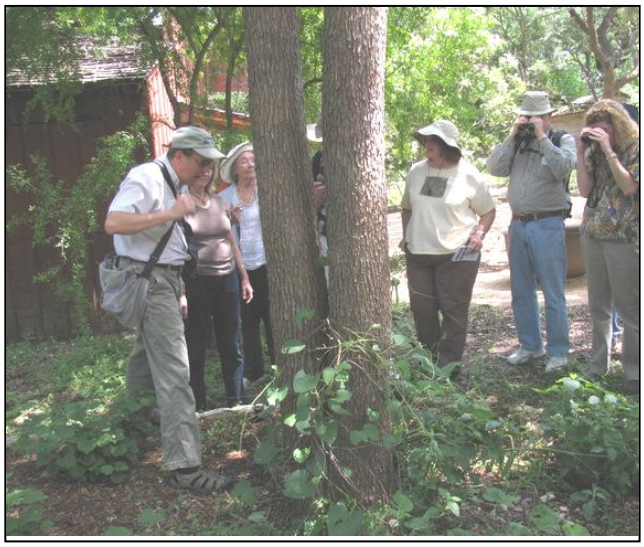
Meet in the Zilker Botanical Garden parking lot at 8:00 am. If it is pouring rain, we will postpone to the next day. Everyone is welcome, including all skill levels. We count butterfly adults and caterpillars within a 15 mile diameter circle centered at Mount Bonnell. In addition to the Botanical Garden, we visit many of the best butterfly spots around town, including the Barton Creek Greenbelt and St. Edward's Park in NW Austin. We usually work as a single group.

This is the butterfly equivalent of the Christmas Bird counts. The results are submitted to NABA (North American Butterfly Association). In 2007 we had a record number of species (63) and observers (25) for Austin.

Be prepared for walking through brush and wet areas. Wear long pants, hat, sunscreen, and insect repellent. Bring water, snacks, close focusing binoculars, and (optional) butterfly nets. The count typically lasts until late afternoon, although you may leave at any time. We have lunch at Triumph Cafe on 3808 Spicewood Springs. For more information contact Dan Hardy,dhh787@yahoo.com.

June 28 meeting
Butterflies as Botanists
Dan Hardy

July 26 meeting
Butterfly Life Cycles
Berry Nall



4th Butterfly Workshop

The Forum's 4th workshop on How To Know and Grow Austin Butterflies took place May 1, and it was received enthusiastically. We had a record turnout (18). The attendees learned how to identify common butterflies, the importance of having host plants in their gardens, how to raise caterpillars and watch their metamorphosis, and strategies for caterpillar survival. There was a light lunch, followed by tips on raising caterpillars by Jeff Taylor, and a walk through the garden with Mike Quinn and Dan Hardy. Each participant was given a variety of host and nectar butterfly plants.

This event not only raises money for the club, but fulfills a request we get from members and outsiders to offer more in-depth teaching. Many thanks for those Forum members who provided plants to give to the attendees or who prepared food items for the lunch: Doris Hill, Liz Canedy, Bob Beneski, Jeffrey Keverline, and Mary Helen Quinn.

Riddle of the Purple Sawfly Larvae

Val Bugh

Austin has some delightful fauna, and some weird mysteries. One that has been unfolding but is not yet solved is the "Riddle of the Purple Sawfly Larvae." These little beasts feed on plants in the mallow family, such as Indian Mallow (Abutilon incanum) and Velvet-leaf Mallow (Wissadula holosericea). They are communal feeders and will always be clustered on the edges of the leaves as they chomp. Very young larva usually go unnoticed because 1) they are small, and 2) they are green like the leaves. Only when they get to their full larval size do they take on the stunning purple color that makes gardeners take notice.

These larvae are in the family Argidae, one of several families of sawflies within the order Hymenoptera, which includes wasps, bees, and ants. Adult sawflies look similar to wasps and many, including those with the purple larvae, sport brilliant black and red coloration. They do not sting and can usually be seen feeding on flowers.

It is easy to mix up caterpillars and sawfly larvae. The latter come in a wide range of forms, as do lepidopteran caterpillars. The purple larvae are easy to recognize for what they are because there are no caterpillars with a color even close to them. There are, however, more sedately colored sawflies that feed on leaves in much the same way as caterpillars. One way to tell some sawflies from their lepidopteran counterparts is by the number of prolegs (the fleshy "extra" legs that are on the abdomen of the larvae). Caterpillars that have prolegs will have from 2 to 5 pairs. Sawfly larvae, especially the ones that most closely resemble caterpillars, have more than 5 pairs. Some sawfly larvae look more like beetle grubs than caterpillars. The way they hold their bodies in a C-shape adds to this semblance. One other clue that a long larvae might be a sawfly instead of a caterpillar is the habit that some sawflies have of curling their back end around the edge of the leaf or the stem. It looks much like a prehensile monkey tail. A few sawflies will, when their group is disturbed, all raise their tails up in a curve.

One other characteristic of many sawflies is that their larvae feed communally (although so do some caterpillars). They can defoliate entire branches when there are a lot of them. Some have brilliant colors and most are fairly limited to their specific host plants.

Although we know the family relationship of the purple sawflies, we still have no clue as to their species. Somebody did raise some and posted photos on the internet, but the adults look very much like dozens of other species. In this case, the larvae are probably going to be more diagnostic than the adults. It will just take some more work to sleuth out their identity.

Salt Marsh Caterpillar, *Estigmene acrea*, have been abundant in Austin. They are members of the Arctiidae family of moths, also called Tiger Moths. The caterpillar's colors are highly variable. Watch for the adults in a few weeks. They are white with orange abdomens.

Using a Compact Point-and-shoot Camera for Small Subjects

by Valerie Bugh | larvalbug.com | austinbug.com | larvalbug@att.net

General suggestions about photos:

1. Keep composition simple: be aware of background and lighting; try to make subject stand out.
2. Make the eye the focal point (when applicable).
3. Be ready to change position because an insect won't cooperate even if you ask nicely.
4. Get down on the subject's level.
5. Choose an angle that accomplishes your goal, i.e. identification, dramatic, artistic.
6. Watch lighting, including shadows and reflections.
7. Keep the camera with you whenever possible so you don't miss opportunities.
8. Take LOTS of shots and then pick the best.

Making tiny subjects stand out:

1. Use a zoom (at least 5x) to blur background.
2. Try for color contrast, such as a light subject against a dark background.
3. Get as close as possible.

Low light is a problem. Solutions:

1. Rest camera on something steady.
2. Underexpose to get a faster shutter speed.
3. Move subject into a brighter place.
4. Use flash.

Organizing photos:

1. When saving images, change the file name to something descriptive (such as genus or common name).
2. Use folders (and folders within folders) for different categories.
3. Keep vacation/trip/pet/family photos separate from local insect/plant photos.
4. Back up your images!!!

Camera features that are useful:

1. Dedicated rechargeable lithium battery (keep several extras for all-day shooting).
2. Macro mode for subjects between 6 inches and 2 feet away.
3. Super macro mode for less than 1 inch distance.
4. Built-in flash with adjustable output.
5. Spot focusing option.
6. EV compensation - adjustment that allows for under- or over-exposure.
7. Focus limiter - keeps camera from focusing on distant objects when close subject is small.
8. Camera that can be held AND OPERATED in one hand.
9. Read your manual - there are often more features that you didn't even know you had.

Favorite photo programs:

Microsoft Photo Editor - for adjusting color, cropping, changing file format between jpg and bmp.
Batch Thumbs (free by Harmware) - for quickly reducing images for e-mail or web or changing file format.
Neat Image Demo version - for cleaning up digital noise.
Ulead Photo Express - for adding text.
Photoshop Elements 2 - for doing anything a little more advanced.
MaxView (free by FastStone) - for presenting slideshows.

Calendar

June 26 4th of July Butterfly Count, see front page.

Monday June 28 Meeting: Butterflies as Botanists, **Dan Hardy.**
Zilker Botanical Garden 7 pm.
Most caterpillars are picky-eaters, accepting only a few species or families of plants. Monarchs and milkweeds; Pipevine Swallowtails and Dutchman's pipe; and Black Swallowtails and the carrot family are well-known examples. The adults have to be skilled "botanists" in order to find a suitable plant on which to lay eggs, since placing the egg on the proper plant is the first and last act of parental care. Caterpillars born on the wrong plant will die. From the plant's perspective the caterpillar is as destructive as any herbivore and they erect defenses, such manufacturing chemical repellants. The caterpillar has to be a sort of "chemist" in order to handle these toxins and even turn them to its advantage.

I am fascinated by this link between food plants and caterpillars. Using examples mostly from around Austin and a few from the tropics, the talk will cover caterpillar specialists and generalists, leaf-eaters and flower-eaters, uses of plant toxins, coordination of life cycles with food, the distribution of plants and caterpillars, and the role of the food plant in evolution.

Monday July 26 Meeting: Chronicling the Lives of Starr County Butterflies, Berry Nall.
Starr County, in the upper part of the Rio Grande Valley, has a very diverse lepidoptera population. Approximately 200 species of butterflies have been recorded in the county. Berry Nall is attempting to document the life histories of as many of these butterflies as possible. He particularly enjoys working with very small species that are difficult to locate and raise. Join us as he relates some of his adventures and shares some of the methods he has learned while chronicling the lives of butterflies.

Berry Nall resides in Starr County, Texas, where he pastors a small church and teaches high school science. He is a butterfly enthusiast who enjoys raising as well as photographing butterflies. He is currently working with Dr. David Wagner to gather life history information on south Texas moths.

Many of his photos and life histories may be found on his website http://leps.thenalls.net

Monday August 23 Meeting: Crickets and Kin: The Orthopterans, Val Bugh.
Best known for their song and dance (think "Jiminy Cricket"), the real-life counterparts of the cartoon are actually fascinating creatures. The katydids and crickets are true singing insects and, along with the related grasshoppers, are distinguished by an ability to jump. Sharing a common ancestor with walkingsticks, mantises, earwigs, cockroaches and termites, the orthopterans display a wide variety of dietary adaptations, courting and territorial displays, camouflage and coloration, and, in some cases, parental dedication to their young. This program will explore the many facets of this group of insects through photos, and will cover basic identification, emphasizing our central Texas fauna.