

# The Kentucky Lepidopterist Society Newsletter

March, 1997

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## President's Message

Dear Fellow KYLEPS:

Our new editor asked that I write a letter to you for the first newsletter of 1997. I suppose I should write something lepidopterological, but I want to motivate you to do something for our Society rather than entertain you.

I was re-shelving several reference books preparatory to beginning this note when I was struck by the fact that I know the authors on a first name basis. The first was Charlie Covell's Eastern Moths, the second Ron Hodges' Checklist, and the last The Owlet Moths of Ohio which sports Eric Metzler's name as co-author. Jim Tuttle, Paul Opler, John Heppner, Tom Emmel, Jackie Miller, Dave Winter, Marc Minno, and Boyce Drummond are all on my reference shelves - I even have a book on scientific illustration by Ron's wife, Elaine Hodges.

Further, in those cases where I don't know the author or the expert directly, I know someone who does. For example, Charlie Covell knows Dr. Franclemont and Bryant Mather knew Lucien Harris (Butterflies of Georgia).

My experience is not unique: most of you could say the same thing about the people you know in butterflies and moths. The point here is that we lepidopterists are a tight and very small group. Join any LEPSOC and you are sure to be welcomed aboard by someone who has a world-wide reputation in the field. This is good in that you get to rub elbows with folks who know what they are doing. However, the small size of the herd makes for a degree of intellectual inbreeding.

I think the unwillingness of many members to speak out - orally or in writing - is readily explained. We are an organization of professionals and amateurs. The professional is not bashful about writing and speaking in his chosen field. The amateur, however, feels a degree of trepidation about voicing an opinion or writing up an observation. We end up listening to the professionals and the material we hear is bound to get stale after a bit. The result approaches incest.

Now we come to the part where I spur you on to do something for your Society; and this is a plea to the amateurs. We need more genes in the pool. Each of you has observed something none of the rest of us has. Don't be embarrassed because you think you know less than the professional about the subject - you may be the only one in the world who has seen what you saw.

I ask each of you to not be selfish with you observations, ideas, and questions. While Carolyn would welcome articles - no matter how short, the real beneficiaries of your contributions are ourselves, including those with PhD's in Biology.

C'mon, folks. SHARE!

Jim Taylor, President

# PROFILE

This is the first in a series of profiles of our officers and members.

## **TIM TAYLOR - President**

Tim Taylor was re-elected president in November for a one year term of office.

The following is Taylor in his own words:

"Although I have lived in Georgia for 34 years, am really a repotted Kentuckian. I was born in Western Kentucky, moved to Louisville in the early 1940s, and am a University of Louisville graduate (BS and MBA).

Harry Truman, in a letter which began, 'Greeting!', asked me to go to Alaska and shoot down the Russians when they came to comb Elmendorf AFB. I stayed for two years, but they never came so I went home.

"I worked 10 years at L&NRRCo in accounting and statistics. In 1963 Savannah Foods, now one of the biggest sugar companies in the U.S., offered me employment in a gentler climate, and I retired from that firm in 1992 as Senior VP.

'Pauline (my wife of nearly 40 years) and I have two children and four grandchildren. We play a lotta golf.

"I don't remember how my interest in insects arose; I do remember in the first grade having a cigar box in which I pinned anything with more legs than my dog. I lost a collection to dermestids while I was in the Army, and I didn't collect again until the 1980s.

"When I was a few years from retirement, Pauline insisted I take up a hobby other than golf, asking, 'What are you going to do when it rains?' I jokingly responded that I could take up insect collecting again. She went outside, yanked a *Phoebis sennae* from a hibiscus, and said, 'Here. Get started.' I did.

"I have never had a biology class, so I am enthusiastic rather than knowledgeable. My interest is in moths rather than butterflies or skippers, and I find I am developing a curiosity toward micros - although they are delicate to handle and a bear to identify.

"December 1, 1996"

## **Editor's note:**

Your articles, comments, events, etc. are greatly appreciated by the Editor and members - please share, as Tim said.

This month I was able to go on the web with a local access carrier. It is a slow process learning everything, but have found some lepidoptera things and even figured out how to send and receive e-mail. I would like to hear from you:

**e-mail:** gardener@sunsix.infi.net

# For the Beginner

Studying butterflies is more than knowing every detail of the body and wings, but must include knowledge of what they feed on. How else do you know where to find them?

We all have to start at the beginning. The following is part one of a four part series on attracting butterflies and moths to the backyard.

The habitat components needed by butterflies include food, cover, and water. The more kinds of components available in the backyard habitat, the more species of butterflies you are likely to attract. The most successful butterfly habitat contains plants that meet the needs of butterflies during all four stages of the life cycle: egg, caterpillar, chrysalis, and adult.

## **Butterfly Biology**

After mating, female butterflies search for a specific kind of "host" plant on which to lay their eggs, usually the preferred food plant of the caterpillar.

Eggs are laid in a protected location and in a matter of days, the caterpillars emerge and begin to feed on the stems, leaves, and even the flower petals of the host plant.

When fully grown, they shed their skin and spin a chrysalis and after a period of days or weeks, the adult butterfly emerges.

Butterflies prefer feeding in sunny areas protected from wind. Being cold-blooded, they must first raise their body temperatures before they are able to fly and remain active. Flat rocks that warm up quickly in sunny locations are commonly used as basking perches.

## **Nectar Plants**

Adults do not seem to be too particular about the nectar plants they choose, instead feeding on any flowers that offer an abundance of nectar.

Coneflowers are a favorite, partly because the butterfly can perch easily on the large cones while feeding, thus conserving energy. Azaleas and rhododendrons, buckeye, button-bush, mountain laurel, New Jersey tea, pepperbush, spicebush, spirea, viburnum, wildcherry and willow are some excellent trees and shrubs. Favorite perennials are asters, blazing stars, black-eyed susans, milkweeds, mints, phlox and sunflowers. Annuals include lantana, zinnia and scarlet sage.

Food plants should be planted in clusters of a species. The solid masses of color makes the flowers easier to locate, and each butterfly has to expend less energy flying from one location to another to acquire the fuel it needs to remain active and grow.

## Backyard Wildlife

Butterflies can be found, with great difficulty sometimes, anywhere in the world. It is not always feasible to hunt the butterfly, nor does rarity make it any more special than our 'common' species. All are worth protecting, studying and enjoying. By creating your own Backyard Habitat to attract butterflies you are protecting them while at the same time providing you a chance to study and enjoy them.

The Kentucky Department of Fish and Wildlife has instituted Backyard Wildlife, A Habitat Improvement Program to stem the loss of natural habitat, "the single most serious problem facing Kentucky wildlife today."

"In order to conserve the full diversity of Kentucky life - its biodiversity - it is clear that each and every one of us needs to make a place for wildlife - in our backyards, our school yards, and our hearts. But you have only a small yard? Even a small yard can provide habitat - the food, cover and water...No site is too small or unimportant.

It's easy to participate in Backyard Wildlife. Everything you need to know to help you make a place for wildlife is contained in the Backyard Wildlife Habitat, simply (send your name and address) with a check or money order for \$8 (to) Backyard Wildlife, Kentucky Department of Fish and Wildlife Resources, #1 Game Farm Road, Frankfort, KY 40601."

Among the materials that you will receive: How to develop a plant; food and cover plants for butterflies, and humming birds; landscape plans, etc. Outstanding examples of backyard habitats are featured at the Salato Wildlife Education Center, Frankfort.

The design on the opposite page is just part of the extensive kit that you will receive. Most states have such programs. If yours does not and you live in hardiness zones 6 or 7, take advantage of the Kentucky program and information.

## Trip to Brazil

June 16-27, 1997, member Suzette Slocomb along with George T. Austin, will lead the second Annual Tropical Rain Forest Workshop for Teachers and Nature Studies Advocates.

Experience the ultimate in learning vacations at the Fazenda Rancho Grande on the FAUTRON Rain Forest Reserve in the Amazonian state of Rondonia, Brazil.

The trip will include a walk in the rainforest observing and noting the diversity of plants and animals, gather data, participate in exercise showing practical examples of how to use butterflies and other insects, visit a school which

emphasizes environmental lessons, visit the town of Ariquemes, boat along the Pardo River.

Contact: Expedition Travel, Inc. 1717 NW 45th Ave., Gainesville, FL 32605, 352-392-5894, FAX 352-392-0479.

## MicroCosmos

We in Paducah are very fortunate to have a dedicated group called The Paducah Film Society which presents remarkable movies, in this case - MicroCosmos.

The 1996 French film directed by Claude Nuridany and Marie Perennou, "opens with a God's-eye view of majestic golden-tinted clouds pummeling upward through the stratosphere. The camera, however, soon begins to descend, below the clouds, above the treetops and down, immersing us finally deep in meadow grass. A bulbous green caterpillar munches on a leaf, seems to notice us for a moment, then continues.

"The film takes place in a field in France, over the course of 24 hours. Scale, temporality, everything is off-which makes it all the more surprising to see these creatures conducting their business with an almost humdrum humanity. MicroCosmos introduces you to the universe within a universe right under our feet - the Jurassic Park in your own back yard.

It is a must see movie.

## Book Reviews

### **The Wild Silk Moths of North America - A Natural History of the Saturniidae of the United States and Canada** by

Paul M. Tuskes, James P. Tuttle, and Michael M. Collins. ISBN 0-8014-3130-1, \$75.00

The Saturniidae are among the largest and showiest moths in North America. This book covers the life history and taxonomy of 100 species and subspecies.

The book includes population biology, life history strategies, disease and parasitoids, and the importance of silk moths to human culture. The authors emphasize genetic differences among populations and the process of speciation and present new information on experimental hybridization and life histories.

Thirty color plates of adults and larvae and line drawings of cocoons, distribution maps, and photographs of behavior are included.

**The Tent Caterpillars** by Terrence D. Fitzgerald, ISBN 0-8014-2456-2, \$37.95.

Synthesizing some 150 years of research, this is the only book to cover the biology and behavioral ecology of tent caterpillars. Fitzgerald discusses the systematics, distribution, and host range. He also considers the anatomy and physiology of egg, larva, pupa, and adult; predators, parasitoids, and pathogens; and control strategies.

These books are the first in a series on arthropod biology from Cornell University Press, PO Box 6525 750 Cascadilla Street, Ithaca, NY 14851-6525.

Also from Cornell:

**Insects that Feed on Trees and Shrubs** by Warren T. Johnson and Howard H. Lyon, ISBN 0-8014-26022-2, \$57.50.

This book gives the essential IPM facts about more than 950 species of insects, mites, and other animals that injure woody ornamental plants in the US and Canada.

**A Monograph to  
The North American Heliothentinae**

by David F. Hardwick

The Heliothentinae are a group of colorful little moths that constitute a subfamily of the lepidopterous family Noctuidae.

The included species are characterized by the habits of the larvae feeding on the blossoms and seeds of their food plants. The adults often rest on the flowering heads of their food plants and are frequently protectively colored in this situation, resembling the blossoms. Many of the moths are diurnally active. The subfamily includes such economically important species as the corn earworm (*Helicoverpa zea*), the tobacco budworm (*Heliothis virescens*) and the flax bollworm (*Heliothis ononis*).

Included in the monograph is treatment of the heliothentine fauna of Canada, the US and Mexico. The taxonomic status, period of flight and distribution of the 147 included species are considered. Over half the species have been reared from the egg stage by the author.

The food plants and adaptation to food plants of individual species are discussed, and the immature stages described. The adults of all species and the ultimate-stadium larvae or more than half the species are illustrated in color. Emphasis is placed on distinguishing similar species.

The monograph is 7" x 10", 279 pages with 316 photographs composed into 25 full-page color plates. Available from Julia Hardwick, 535 Highland Avenue, Ottawa, Ontario K2A 2J8. \$60 perfect binding, \$80 hardcover, postage included.

*Butterfly*

by Mark Caldwell  
excerpted from Discover, February 1997

The world's tiniest radar tags are making a Rocky Mountain butterfly-and its ecology-a lot easier to follow.

On first acquaintance, the Apollo butterfly seems improbably ethereal for a harbinger of breakthrough technology. A scant two inches from wing tip to wing tip, it flaunts a bold delicacy of design more Miro than Microsoft, the wings translucent while flocked with glowing circles and confident brushstrokes of crimson, black, and brown. and striking though it is in close-up, Apollo (*Parnassius sminthius*) is an easy creature to overlook outdoors.

For two years University of Alberta ecologist Jens Roland and colleagues have tracked the Apollo across the meadows of Jumpingpound Ridge, Kananaskis Range, Albert's Canadian Rockies.

The Apollo lives in a few meadows reproducing during the summer. Only the pupae and eggs winter over. Buried in the gravelly soil, they replace water with glycerol. Each colony lives in only one meadow feeding on stonecrop. The isolated meadows and quick generational turnover mean separate colonies can start to show genetic divergence with great speed making the Apollo an inviting index species.

(Because its flight is erratic, it is difficult to follow visually. Marking individuals and hoping to follow and capture later proved to not be very practical. Roland, therefore, devised a radio transmitter which proved to be most effective.)

An individual Apollo...weighs about a 100th of an ounce; you might as well outfit it with the pyramid of Cheops as with a conventional collar. But Roland, working with Graham McKinnon and Chris Backhouse, engineers at the Alberta Microelectronic Center in Edmonton, has come up with an ingenious solution: a super-lightweight, nearly invisible radar transmitter that's... a 1,000th the weight. of the butterfly. The tag doesn't interfere with the insect's behavior.

The tag looks like an unusually frail strand of humanhair, with a pinpoint-size diode attached to the middle of the three inch long superfine aluminum wire strand that serves as an antenna. The tags ...assembled from off-the-shelf components - the diode can be purchased from Hewlett-Packard, and the cost of the parts is only about \$8. But the labor ...is highly specialized and finical, so they end up costing \$30.

Roland has found something enables Apollo's to speed efficiently through territory where they can't survive and head efficiently toward the sunlit, stonecrop-rich meadows where they thrive. What enables them to modulate their behavior remains a mystery. But survival of their species ultimately depends on their ability to behave in the right way at a critical juncture.

# *The Butterflies and Moths*

(Lepidoptera) of Kentucky

This work is in the final stages of its preparation in camera-ready copy for publication this summer by the Kentucky State Nature Preserves Commission, Frankfort, KY.

The format will be 8 1/2 X 11 inch pages with all 66 known families of Lepidoptera from Kentucky treated, and 2,370 species for which there are known records. Price and availability will be published in a later issue of this newsletter.

Many people, notable those who have been active in this Society, have contributed to the annotated checklist which is the nature of the book. The survey of Bluegrass butterflies and moths is far from complete with this book; but it will be a point from which further survey work can be initiated. In 1997 a major effort will be made to survey Lepidoptera in power transmission corridors of the Daniel Boone National Forest with the support of a grant from the Eastern Kentucky Power Cooperatives. Further, I have been asked by Bill Martin, Kentucky's Commissioner of Natural Resources, to prepare a plan for the future collection of data on all invertebrates in Kentucky, with the help of other entomologists and invertebrate zoologists in the state, amateur, governmental, and educational. This plan must be completed by the end of July.

A computer program called Access, already chosen by the botanists who are ahead of zoologists in this planning, may prove to be the means selected to record data on Kentucky insects and other invertebrates.

All this means that we must step up our efforts to sample different habitats and new sites in the state, and record the information in a scientific way. I hope you will participate in collecting reliable information on Kentucky Lepidoptera where you are.

Contact me for help and guidance by E-mail at [cvcove01@ulkyvm.louisville.edu](mailto:cvcove01@ulkyvm.louisville.edu).  
Or phone: (502) 852-6771 (University of Louisville Biology Dept.).

Charlie Covell

## **Monarch and Host/Nectar Plants**

Compiled by Janice Stiefel

**Host:** Common milkweed, Poke milkweed, Prairie mildweed, Swamp milkweed, Butterfly weed, Spreading dogbane.

**Nectar:** Milkweeds and many other species of wild and domestic flowers.

# *Kentucky Colonel presented to Charlie Covell*

The following is a copy of the citation read at the 1994 fall meeting for the presentation of Charlie Covell's Kentucky Colonelcy.

The Honorable Order of Kentucky Colonels bestows Colonelcy upon those who have made great contributions to the enhancement of Kentucky.

"It is appropriate at the 20th Anniversary of the Society of Kentucky Lepidopterists, to reflect on the contributions of its co-founder and mentor, Dr. Charles V. Covell, Jr.

"He embodies not only the mind, but also the heart and soul of the Society of Kentucky Lepidopterists.

"His contributions to the Science of Lepidoptery in Kentucky are monumental. His leadership of the Survey of Kentucky Lepidoptera reflects unusual vision and stamina. This ongoing work spans more than two decades and involves collectors. He has participated personally in field-collecting in each of Kentucky's 120 counties. As of this day, his thoroughly documented checklists of Kentucky butterflies. He has amassed, nurtured, and curated Kentucky's definitive collection of its lepidoptera, at the University of Louisville.

"Dr. Covell honors Kentucky by his excellence. His service to the science through the international Lepidopterist Society, his numerous published scientific papers, his book - The Peterson Field Guide to the Moths, and his coming book on Kentucky Lepidoptera bring reknown to him, to his university, and to his state. Kentuckians benefit from his ability to recruit the best scientific minds in Lepidoptery to come and share their knowledge at gatherings such as those sponsored by the Society of Kentucky Lepidopterists.

"Known to his associates as "Charlie", he brings together those interested in butterflies and moths of Kentucky. He willingly takes time with anyone who brings him a bug. The special camaraderie of the Society of Kentucky Lepidopterists owes its unique character to Charlie's own inclusive spirit that fellow Kentuckians in the by-lines of his scientific writings and in the acknowledgments of his book. Charlie gives credit to others. He values their work, and lifts it up. He accepts their contributions. This spirit has galvanized creative scientific inquiry in the life of the Society of Kentucky Lepidopterists, and has marked this group as a prototype for other state and regional associations.

"As Charlie Covell rejoices with each of his collectors over new state records, so they rejoice with their Governor, Brerton Jones; as he honors Charles V. Covell, Jr. for the leadership and service he has given to the Commonwealth, by commissioning him a Kentucky Colonel.

# *Attracting Moths*

by Charles V. Covell, Jr.

## **Birds, Butterflies, and Black-eyed Susans: Right in Your Backyard: Environmental Conference**

Lexington, KY, January 21-24

When Charlie came to Kentucky he imagined that he felt like Daniel Boone when he first arrived, because "not an awful lot had been done with the insects".

In 1964, he became entomologist at University of Louisville he has remained and has been involved since in trying to cover the entire territory of entymology for Jefferson County (Louisville).

"Although I do a lot of work with butterflies, I am also working with moths. Moths are really my main interest because there are so many more of them and so much less known about them.

I want to take you into the realm of the different ways to attract and study them. And a little bit about the more interesting ones I have bumped into over the last forty years or so.

(slides)

This is a morpho butterfly from Equador. This is a spot I like to visit quite a bit and shows a typical butterfly form. Bright colors, the ability to perch on some substrait, such as a leaf. And then the characteristic that we use the most for identifying butterflies separating them from moths, and that is the antennae, the feelers. Notice that they are thread-like with slight enlargement at the back.

Here is a birdwing butterfly from New Guinea just emerged from its crysalis. This has a knobbed antenna even though the tip of the knob is not terribly pronounced.

One more butterfly. This is one that seems to be disappearing from eastern states. It is called the regal fritillary and it is one of which we are very concerned here in Kentucky because we don't know if there are any or many, still living in the state. It is found in old fields in late June or July, but I want you to see it because if you have ever seen it in the field, I want to know about it. Notice the knobbed antenna, typical butterfly antenna.

There is an intermediate group of insects normally classified along with the butterfly called skippers. Skippers are very fast flyers, usually. They sit, as you see, with front wings brought together over the back. And the hind wing is flat-tend out.

The skippers have an antenna that is short and wide apart and the tip of the antenna curves and forms a point. There are more kinds of skippers in Kentucky than any other family of butterflies. So they are a major kind of butterfly.

Now we come to moths.

Elementary books often says butterflies have knobby antennae and moths have feathery antennae. Well that is partly true. This is a luna moth up in Maine, one of the prettiest, and notice that the antennae look like feathers. Scientifically, this is called a bi-pectinate antenna, and it is good example of that sort. Many, many more moths do not have feathery antennae, but they do not have knobbed antennae, either. They are usually a filament like this South American moth - not feathery but also not knobbed.

Now there is always an exception about anything that you say about moths, butterflies, and other insects. This is a moth from South America that has butterfly-like antennae. Notice the knobbed tip. This is a day flying cathneid moth. It is not a family of moths that you find in the United States or even in Mexico unless you get very far down. So this is the exception to the rule and you can't even say that all moths do not have knobbed antennae because cathneid moths do. So this is just a little problem.

Also, this is another family of moths - the hedaliidae with a fan shaped wing, also from Latin America that has been studied by a scientist at the British Natural History Museum and he has come to the conclusion that the hedaliid moths are really butterflies. They can fly both day and night and they have structural and immature features that put them much closer to the rest of the butterflies than to the rest of the moths.

All of these moths and butterflies belong to one insect order which we call the lepidoptera. "Lepido" means scaly and "pter" means wings. So these are the scaly winged insects and really butterflies and moths are, sort of, artificial divisions.

Now, there are some practical things about moths and butterflies that separate them. One is that butterflies make a naked chrysalis. At their pupal stage they do not wrap themselves in a cocoon, or in plant material or make a hole in the ground. There are some exceptions in the tropical world, but generally is the case.

Also, butterflies are diurnal, that is, they fly during the daytime and they are rarely active at night. Some of the owl butterflies are specialized in twilight. As far as full darkness is concerned, that is the time when butterflies roost on the undersides of leaves and spend the night sleeping.

One interesting thing about butterfly roosting, somebody did a study in Latin America and found a congregation of about 20 some all arranged under a leaf and so he carefully marked them in numbered sequence as they sat there. The next day they flew of and did their daily business and that night they came back and they were in the same order.

As far as numbers go, the moths tend to be nocturnal but they are not anywhere near nocturnal only. There are many day flying moths. And the day flying moths tend to be more colorfully marked than the night flying ones. Moths, when they land, tend to bumble into things, whereas,



butterflies are much neater in landing.

Butterflies and moths have been around a very long time. This is a fossil from a fossil bed in Colorado. A lake was filled in with a kind of gray pumice and ash that Mt. St. Helen's was spewing out, about 35 millions years ago. This is a butterfly whose markings you can still see after 35 million years in the rock. It is very similar to the families that we have today. There has been a long time for the diversification for moths and butterflies. Together that are at least 125,000 species in the world.

Sometimes you find moths and butterflies in the same place. This is swamp milkweed, in Jefferson County, and it shows the butterfly - the great spangled fritillary, and we got a bonus, a snowberry clearwing moth with its tongue extended just the way butterfly tongues are extended, feeding on nectar. So we have a moth and a butterfly flying together during the day and nectaring on milkweed.

We heard a lot about butterfly gardening, but we don't hear much about moth gardening so I am here today to push moth gardening and ask you to keep your eye open for certain moths that very often come to the garden.

The first step in telling you how to attract moths is to tell you that the diversity is not as great and very often they are not as obvious. Furthermore, many of them are in your garden at night. If you have ever gone out at night with a flashlight when you are on the way to take out the trash, you might have seen something hovering over your petunias a large hawk moth, they are nectaring.

One of the hawk moths, the tobacco horn worm, is a major pest in Kentucky, but you might as well enjoy the adult while it is flying around.

Moths tend to be much, much smaller on the average than the butterflies although the biggest moths are bigger than the biggest butterfly. The biggest butterfly is a female Alexander birdwing from the Pacific islands and it gets nearly a foot in wingspan. The male doesn't get quite that big.

The biggest moth - it depends on whether you go by wing area or wing spread. In the Pacific area you have the biggest wing area moth.

Many moths live as caterpillars between the surfaces of leaves and we call them leaf miners. A woman (Annette Brown) who lived in Cincinnati and worked with her sister, did a great deal to study the life history of little tiny moths. (You can learn more about the Brown sisters by visiting the Salato Center, Kentucky Fish and Wildlife Center, Frankfort, KY).

Some of the very small moths are very destructive. This is the spruce budworm moth - it divestates great acres of conifers in the west. In our area, in the spring we have the tent caterpillar. It makes tents for the caterpillars to hid in during the day, and at night they venture out to feed on early spring foliage. Later in the year, you have another tent making

caterpillar - this is the fall webworm. Notice that it makes its web over the leaf itself. It can a lot of damage.

Here is another pest, it is the corn earworm. It is the caterpillar you find when you strip the husk of an ear of corn.

Here is one you have to watch out for - the io moth, a green and yellow caterpillar. The spines can give you a nasty sting. The moths, however, are very pretty. Here is another one to beware of. Notice the bright coloring warns us to care not to bump into them. This is the saddleback caterpillar, a larva of a common moth found here in Kentucky.

Some caterpillars just look fierce. This is a dark version caterpillar of the hickory horned devil. Every year, I get two or three phonecalls, people have discovered these. They are the caterpillar of the royal walnut moth. I had one man call one time. He said, "I am 83 years old, and I ain't never seen anything like that." Those of us who work in thinking of things are used to interesting remarks.

If you want to attract moths, then light them. Light in the ultraviolet end of the spectrum is best. White light bulbs work well. If you want to keep moths away, use yellow. Yellow is anti-insect attracting.

This is a light (porch light by back door) still on the morning after, and notice a couple of luna moths, a few sphinx', several other species clustered around the light. This is one way to casually observe moths.

This is a Florida day flying moth in the family Arcadia. This is designed to show you that moths can be beautiful. I like to call it the Bi-centennial moth. My oldest son were down there and saw one in 1976."

Charlie continued by showing various apparatus, mobile and stationary, for attracting and catching moths. He said sometimes the numbers are overwhelming and they will land anywhere including the inside of your glasses.

## *New Members*

G. Elizabeth Schafer  
1242 S. Brook St., Apt. 2  
Louisville, KY 40203

She likes to butterfly garden & collects butterfly objects.

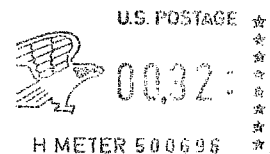
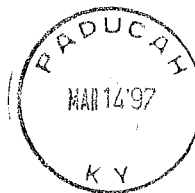
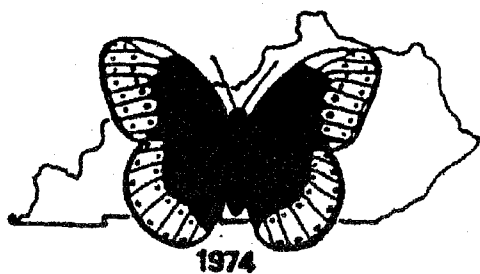
Wendy Weger-Tietjen, Dr. William J. Tietjen, children  
Alexander and Arielle  
3728 Frankfort Road  
Shelbyville, KY 40065

They collect and observe. He is a professor and she part-time instructor in the Dept. of Biology, Bellarmine College.

Neil D. Kodithorwakku  
2825 Lexington road  
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A Sri Lanka native, he is a student at Southern Baptist Theological Seminary.

The Kentucky Lepidopterist Society Newsletter is published quarterly-January, April, July, and October.  
Membership dues are \$10.00 annually, payable at the Annual Meeting in November.  
The organization is open to all interested in Lepidoptera.



*Kentucky Lepidopterist Society Newsletter*  
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