### QUESTION? What insect does

almost everyone like and want to see around? Most people can easily identify it, to the family level, even from a distance.

Here is another hint: They can be found in habitats as diverse as the hot springs of Montana, New York's Central Park, the jungles of Malaysia, suburban lawns east of the Rockies, mangrove covered sand spits in the Bahamas, high peaks in the Smokies and everywhere in between. These beetles, in various life stages, pupa, larvae or adult, can be evident to the discerning eye every month of the year, if the temperature is warm enough, yet many people have only seen them on warm June nights. Here is your final clue: Their magical blinking is all about sex!

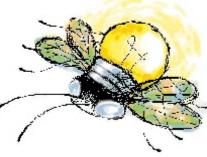
Fireflies, lightning bugs, alowworms are all common names for beetles in the Lampyridae family. Here in the Southeastern United States we are blessed with an abundance of these fascinating creatures both in sheer numbers and species diversity. ~125 different species can be found in the US in almost any habitat that contains some form of relatively clean moisture and vegetation. There are over 1200 firefly species in the Western Hemisphere and as many as 2000-3000 species worldwide. Experts such as Jonathan Copeland, Marc Branham and Jim Lloyd agree that as many as half of all Lampyridae species have yet to be described by science. That is a lot of discovering left to do!

The average person usually sees only male lightning bug flashes. The females are usually much more discreet, flashing less intense responses which differ from the male pattern, from their more protected positions in the grass, leaf litter or hidden amongst the leaves of shrubs. The male to male competition provides us with the twinkling evening displays we all enjoy.

Though the synchronous firefly displays of Elkmont in the Great Smoky Mountains National Park have become quite famous, each species has its own

> particular "Light Show" that can be just as breath taking and mysterious. As you become more familiar with observing fireflies, you will soon understand that the simplest way to identify different species is by noting the different flash patterns and whether the flashers are flying or stationary as they display.

Like wildflowers, each species occupies a relatively distinct habitat in terms of vegetation requirements, time of year and weeks of appearance. Their display behavior is fairly constant in terms of



time of day or night, height from the ground, elevation above sea level, and order of appearance in the cycle of the year. The pattern and light crescendo is species specific. Various genus flashes are more greenish (<u>Photuris</u>), others yellow (<u>Photinus</u>), orange (<u>Pyractomena</u>) and even blue (<u>Phausis</u>).

You will know when you have joined the ranks of true-blue "firefly enthusiasts" by this sign: While attending a lovely outside evening party dressed to the nines and engaged in idle chatter with a friend, you notice, out of the corner of your eye, a flash pattern you have never seen before.

"Excuse me," you hurriedly tell your companion, as your head snaps around in an effort to follow the elusive blink. You dash off into the darkness, hiking up your skirt (if you are female) and sinking into the soft ground with your party shoes, to search for the tiny blinking creature that awakens the child in us all. You grin and marvel, as you duck under a shrub and drop to your hands and knees, at the wonder of it all. I hope you can join us at the Naturalists' Rally to learn more about these fascinating beetles, their lives, loves, habits, and the equally interesting behaviors they inspire in those who are ignited by their magic.

Lynn Frierson Faust 11828 Couch Mill Road, Knoxville, TN 37932 (865)690-2852 TNLFaust@cs.com



Lynn Faust will be the featured speaker on Friday evening at the Spring Naturalists' Rally. Her research has taken her on speaking tours from California to Toronto, in addition to invitations to Japan and Europe, speaking on these intriguing beetles.



Those who contemplate the beauty of the earth find reserves of strength that will endure

as long as life lasts. — Rachel Carson





Visit the Friends of Roan Mountain web site at <u>www.etsu.edu/biology/roan-mtn/</u>. You'll find membership information, a schedule of events for the Naturalists' Rally, a species database, a photo gallery, and an archive of newsletter articles.

### **APPALACHIAN BACKYARD**



Hi, my name is Lana Hamilton and I hope to see you at the 46<sup>th</sup> annual Roan Mountain Naturalist Rally. By profession, I am a professor/administrator, but my true love is roaming the Southern Appalachians and taking advantage of all they have to offer. Whether it is hiking, fishing, biking, camping, taking photos or just relaxing, there is something for everyone right here in these mountains.

These Appalachian Mountains span 1500 miles from Central

Alabama to Quebec, Canada boast spectacular landscapes, and are home to an incredible number of plants and animals. In fact, the Great Smoky Mountain National Park is a refuge for one of the richest and most diverse bio-communities in North America. It is no wonder that it is the most visited national park in the United States...and it is right here in our own backyard. This treasure is often taken for granted.

Another jewel in the Appalachian Mountain chain often taken for granted is Roan Mountain. This mountain has long been one of my favorite places to visit. Located in the heart of the Appalachian Mountains, it is a prime example of the diversity that can be found and enjoyed. As we "experience the Southern Appalachian Mountains" on May 8, we will take a look at this region's beauty, its biological diversity, and some of its environmental concerns.

We live in a beautiful place. Nature is so colorful and fascinating. More than anything, we need to EXPERIENCE nature and hopefully APRECIATE our own "Appalachian backyard." I look forward to spending May 7-9 with you at Roan Mountain State Park.

Lana Hamilton, Associate Professor of Biology and Division Chair of the Sciences Division at Northeast State Community College, will be the featured speaker on Saturday evening at the Spring Naturalists' Rally. While her travels have taken her as far as Alaska, Southwest United States, and Central America, her heart and interests lie in the Appalachian Mountains

### **Annual Butterfly Count**

The annual Roan Mountain Butterfly count will be held Saturday, July 17, 2004. We will meet at the Roan Mountain State Park Visitors' Center (the big green waterwheel) at 10 am.

We will cover the Hampton Creek Cove State Natural Area in the morning, eat a picnic lunch at the Rhododendron Gardens, continue counting at the Gardens, and finish at promising

locations in the Park.

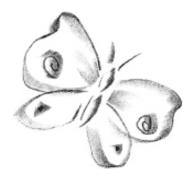
For information contact:

Don Holt

address: 910 Smalling Rd., Johnson City, TN 37601

telephone: (423) 914-5862

e-mail: dnldhlt@aol.com



# 46<sup>th</sup> Annual Roan Mountain Spring Naturalists Rally

We hope you are making plans to attend this year's Spring Rally during the weekend of May 7-9. As usual, we'll have a wide variety of hikes on Saturday and Sunday, interesting guest speakers, plus good food and fellowship.

Featured on Friday evening is Lynn Faust whose topic will be "Nighttime Light Shows: Fireflies, Lightening Bugs, Glowworms and More." Lynn graduated from the University of Tennessee with a degree in Forensic Anthropology and Forestry. She has been a part of a synchronous firefly research team since 1992, has traveled on speaking tours, and has published articles in various scientific journals and popular magazines. Lynn continues her research while she currently heads the effort to save the Elkmont Historic District in the Great Smoky Mountains National Park.

Our Saturday evening speaker is a familiar face to Friends of Roan Mountain. Lana Hamilton, a lifelong resident of East Tennessee, works for Northeast State Community College as Associate Professor and Division Chair of the Sciences Division. As a naturalist she presents seminars, conducts hikes and works with school groups. Lana's topic, "Experience the Southern Appalachians", will overview the area's biological diversity and examine environmental concerns associated with this region.

We'll continue our tradition of holding a raffle on both Friday and Saturday evenings. The proceeds from the raffle go into the Friends of Roan Mountain Research Grant Fund. If you have questions about items to donate or if you need a brochure call Jennifer Bauer at 423-772-4772 or email <u>highlandlady@naxs.net.</u>

#### <u>Please make your meal reservations EARLY!</u> <u>The deadline for dinner and lunch reservations is Wednesday, May 5.</u> <u>Call Anne Whittemore at 423-477-2235.</u>



## Roan Mountain State Park Interpretive Center

Finally! After years of hopeful starts and disappointing delays, the Interpretive Center at Roan Mountain State Park is now complete! Although a formal opening will not take place until later this summer, Park officials anticipate opening the Center to the public in time for our Spring Naturalists' Rally.

Designed by Jon Jager and Kathy Guest of The Designing Eye, and built by Imagen Corporation from Nashville, the multi-faceted exhibit spans the natural and cultural history of the Roan. Beautiful photography, rare artifacts and technical advice provided by many of our members highlight the unique features of our beloved Roan. The Park exhibit expresses special gratitude to Jennifer for her seminal work Roan Mountain: A Passage of Time that served as the basis for the center. The Interpretive Center is located in the Park Visitor Center and Gift Shop. Current Visitor Center hours are Wednesday-Sunday, 8:00 A.M.-4:30 P.M. The following was submitted on behalf of Southern Appalachian Highlands Conservancy by Judy Murray, longtime Friend of Roan Mountain who has worked with SAHC since its inception. You may visit the SAHC website at <u>http://www.appalachian.org/</u>.

### Roan Mountain Rhododendron Gardens Developments: Perspective of the Southern Appalachian Highlands Conservancy

Citing a need to provide for public health and safety due to a 40-year old septic system in the Roan Mountain Rhododendron Gardens, the U. S. Forest Service has issued a Decision to construct a new bathroom/visitor center facility and to pave the Gardens gravel parking lot and the road leading up to it. Under this Decision, the current bathroom in the Gardens, the gray wood-sided information booth and adjacent information board will be demolished, and a new facility constructed at the Gardens trailhead.

Southern Appalachian Highlands The Conservancy (SAHC), longtime partner of the US Forest Service and collaborator in establishing the Highlands of Roan conservation initiative, feels that this level of development is not in keeping with the intent of the Forest Plan for this Special Interest Area, the most ecologically significant area of its size in the southern Appalachians. The crest of Roan Mountain houses the red spruce-Fraser fir forest, the second most endangered ecological community in the United States, with an imbedded rare heath bald. While no new ground will be disturbed, the facility will be situated in the middle of this globally rare assemblage of plants and animals, a relict of the last Ice Age. SAHC contends that this level of development and site hardening from additional paving will not only detract from the mountain's natural scenic qualities, but will also potentially threaten its biological resources through cumulative human impacts that often accompany increases in the level of development.

SAHC has met with the Forest Service on many

occasions to discuss the issue and to present several alternative conceptual plans. SAHC supports the construction of a new restroom facility combined with the visitor information function and has submitted an alternative design to the Forest Service for consideration. In SAHC's view, the building proposed by the Forest Service is larger than necessary and adds new functions and services not suited to this beautiful and fragile ecosystem. Their conceptual plan consists of a 16' x 32' "walk-in" building with a 16' roof and cathedral ceiling and some space allotted to outside services. It includes a 10' x 12' interior public area that would be used as a sales room for clothing and informational materials, and for interpretive exhibits.

SAHC's proposed plan is for a smaller 16'x 24' structure with a "walk-up" window, like the current information station's, and a 12' roof height. It fully meets the Purpose and Need for the facility as stated in the Environmental Analysis—"to provide for public health and safety." It does not include an interior public Both plans feature four individual area. bathrooms and outside information boards. Critical distinctions lie in what SAHC views as inappropriate increases in size, function and scope of development in the Forest Service plan that could forever change the biological and scenic integrity of the entire mountaintop. SAHC's plan delivers the current level of informational and sales service in a compact and cost-saving design, while minimizing environmental and visual impacts.

SAHC actively supports and engages in interpretation of the mountain to visitors but recognizes that an interpretive facility in the midst of an exceedingly rare community can harm the very features it is intended to protect. As an archaeologist once remarked, "You don't build an interpretive center in the middle of Antietam Battlefield." The same could be said for the Roan. For the crest of the Roan, we favor "soft" interpretation, with a minimum of hardened structure, such as guided and self-guided walks that do not alter the natural character of the site. Roan Mountain State Park, a mere 8 miles down the road, has a brand new interpretive center that addresses the ecology of the entire mountain in a comfortable, learning-friendly environment. Three-fourths of Roan-bound traffic passes right by the facility. SAHC is committed to the most sensitive and best management of Roan Mountain that retains the integrity of its rare ecological communities and extraordinary natural beauty.

Roan is unique and beloved among our automobile-accessible high peaks for its low level of obtrusive development. That is about to change. The Forest Service is currently moving forward with its own design plan. Construction i slated to begin this summer following the rhododendron bloom.

If you would like to send comments to the Forest Supervisor, you may send them to Forest Supervisor John Ramey, National Forests in North Carolina, P. O. Box 2750, Asheville, NC 28801 or via e-mail to <u>jramey@fs.fed.us</u>. Please send a copy to SAHC, 34 Wall St., Suite 802, Asheville, NC 8801, or <u>sahc@appalachian.org</u>. If you would like to receive scoping notices for future Forest Service Roan Mountain projects, notify Karen Compton, <u>kcompton@fs.fed.us</u>, in North Carolina and Terry Bowerman, tbowerman@fs.fed.us, in Tennessee.

Judy Murray

Roan Stewardship Director

The Southern Appalachian Highlands Conservancy

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