



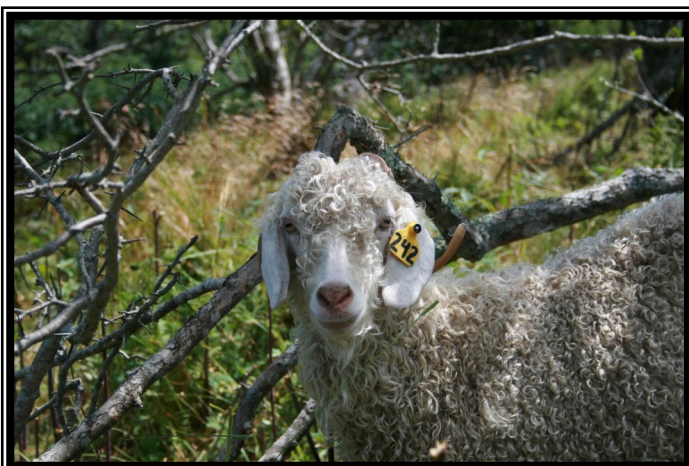
Baatany 2011 Summer Update:

— Jamey Donaldson

The 4th Annual Herding of the Goats Onto the Balds took place Wednesday, June 22. As usual, we express our thanks to the many volunteers who helped with special mention to the Chargers/Rechargers Hiking Club who made our herding days part of their normal schedule.

Thirty-six goats and two dogs made the trek across the balds, but only 34 goats made it to the paddock. Once again, #902 Walkabout Goat hung a left on Round Bald and went into the Rhododendron thicket and my buddy G-man got caught up in the confusion. There were a few reports of a goat or two seen along the Appalachian Trail (AT) near Carvers Gap during the first several days but no reports since then. Last year #902 did the same thing and showed up 20 days later wanting to be let into the paddock with the other goats. So who knows, maybe they will slip back into the herd on the way off the mountain and G-man might have some interesting tales of adventure with his rather wild and crazy aunt.

We started out close to the AT-Grassy Ridge Trail fork and made the climb up the NC side where we put in the first new paddock since 2009 on the southwest side of the Grassy Ridge Trail, and have since crossed the AT and turned back toward Jane Bald and the descent into what I call Sisters Saddle. At this point in the project, with the baseline data and 3 years of goat browse data, I think we are about to start browsing the control transects. All the rare Green Alders are within the control plots with zero in the browse plots.



#242 Baarbara, the breast cancer survivors' goat - adopted by breast cancer survivors 4 years running. She gets to keep her name. She's a "grunter" and the ambassador of the Virginia goat as well.
[Photo courtesy of Baatany Goat Project]



Goat #230 with her twins from 2010, #210 boy on right and #310 girl on left. #230 is a top performing goat, good hair, strong constitution, sturdily built, twins 2 years in a row. She doesn't seem to get tired of eating and simply moans with the pleasure of it!

[Photo courtesy of Baatany Goat Project]

The Green Alder on Roan is itself an enigma, and is probably the best Pleistocene relict example on the mountain. Roan has the only Green Alder south of Pennsylvania and the terminal moraine (the southern limit of the last continental glaciers) but even the Pennsylvania plants are disjunct from its main range which matches the Canadian Shield very well including the southern edge of Greenland where it lives next door to glaciers. So what is it doing on Roan, 300 miles from the closest plants and 500 miles from its main range? Why did it disappear everywhere else this far south? Even more odd, perhaps, is that when there is a bunch of Green Alder in one spot on Roan it forms the unique Southern Appalachian Alder Bald which is strictly endemic to Roan Mountain. The Post-Pleistocene Megaherbivore Theory seems to apply to the Green Alder and Alder Bald as well as it does for the Grassy Balds... expect to hear more about this in the future.

The 4th Annual Herding of the Goats Off the Balds is set for Wednesday, September 14, meeting at Carvers Gap around 8:00 a.m. (We need to move the goats before the heat sets in). Check our blog for updates: <http://baatanygoatproject.blogspot.com/>.

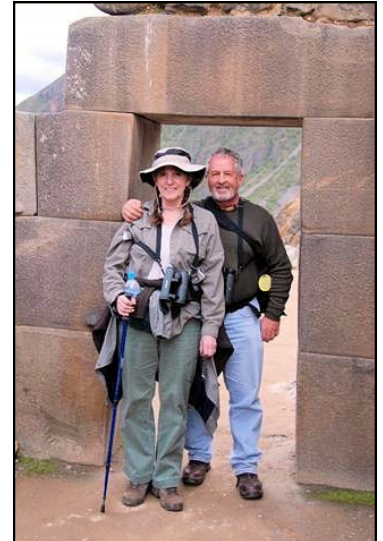
BIRD MAN /TRAIN GUY



Friends of Roan Mountain is pleased to welcome Dr. Fred Alsop as Friday evening's presenter at our 2011 Fall Naturalists' Rally. Dr. Alsop, professor of biological sciences and natural history at East Tennessee State University, has over 45 years of experience as an ornithologist. He is a popular lecturer and leader of international natural history tours as well as an accomplished wildlife photographer. His many credits include several Smithsonian Handbooks and more than 100 articles. He is currently working on *Birds of Tennessee* which will be the definitive state bird book. Dr. Alsop was recently honored by the Tennessee Wildlife Federation with the 2011 Z. Cartter Patton Award as a leading advocate for the conservation of birds and bird habitat in Tennessee.

Many attendees of the Roan Mountain Naturalists' Rallies are quite familiar with Fred and have first hand experience of his skills as a field biologist and naturalist. But not everyone knows that, around the campus of ETSU, you might also hear Fred referred to as "the train guy" as he is also Director of the George L. Carter Railroad Museum there.

Almost 200 species of birds have been identified and recorded by birders and naturalists on Roan Mountain. Dr. Alsop's illustrated program, ***Feathered Jewels of Roan Mountain***, will cover many of these species ranging from permanent residents, to neotropical migratory breeding birds, to winter visitors and the transients that one may find on the mountain during spring and/or fall migrations. Massive Roan Mountain ranges more than 4,000 feet from its base to its summit at more than 6,200 feet and hosts large stands of diverse habitat that provide the necessary requirements for a rich avian fauna. Dr. Alsop's program will look at these "feathered jewels" of Roan Mountain -- their ecology, their habitats, their behavior, their identification, and their plumages and reveal the wonder that many people find in their passion for birds and birding. Join us on Sept. 9th at 7:30 p.m. at the Roan Mountain State Park Convention Center.



Fred, with his wife Jo Ann, while traveling in Peru in 2010.



THANKS SO MUCH to all the Kids Rally volunteers! Your participation and assistance with the Xtreme Roan Adventures was essential to making it a success!!! Over a hundred happy kids and parents got a sample of many new outdoor experiences!

One mom commented that her little girl came to the Xtreme Roan Adventures with "bug-phobia". And, after a session with Kris Light and learning about insects, she was catching bugs and carrying them around to show!

Every attendee that I talked with was very pleased about the day and wanted information about the other nature rallies. So chalk the day up as a positive impact on getting more kids outside and exploring and learning about nature!

You may not be aware, but there were some new activities offered this year. On Friday evening a notable number of kids attended Kris Light's Night Moth Program and several camped at the group campground. These were a success! The plan is to offer evening activities and group camping on site again next year! And, it was a treat to include something new to Saturday's program list this year (Skins and Skulls, Plaster Casting, etc.)!

If you have any suggestions on what can be done to improve any component of the rally, please send them to Ken and Nora. Don't hesitate; your feedback is very helpful for enhancing this annual nature experience for these kids.

Thank you again for to everyone who helped make the Xtreme Roan Adventures a success! We are looking forward to next year's rally!

—Ken Turner and Nora Schubert

Geologic History of the Roan Mountain Area

— Mick Whitelaw



The Roan Mountain area preserves a spectacular series of igneous, sedimentary and metamorphic rocks that provide a window into almost 2 billion years of Earth history. The oldest rocks on Roan Mountain are found in the Carver's Gap Gneiss and are about 1815 million years old.

These rocks are metamorphic in nature and record an event that submitted older igneous rocks to high pressures and temperatures. Over the millennia Roan Mountain and the surrounding area has experienced multiple tectonic events that preserve at least two complete Wilson Cycles. A Wilson Cycle is initiated by the collapse of a major ocean basin that produces an orogeny or mountain building event. If the process continues continents eventually collide to form a supercontinent. After some time the supercontinent rifts apart and a new ocean forms only to collapse and repeat the whole cycle.

The Roan Mountain area records the existence of an ancient ocean basin that collapsed about 1100 million years ago during an event called the Grenville Orogeny. During this orogeny Laurentia (North America) collided with continental blocks that now occur in South America, Africa, Australia and Antarctica. The Grenville Orogeny produced an enormous mountain range that would have run roughly parallel to the present day Appalachian Mountain chain and formed a supercontinent called Rodinia.

Approximately 750 million years ago Rodinia rifted apart and a new ocean called the Iapetus formed along the east coast of Laurentia. This rifting event is recorded by the volcanic and sedimentary rocks found on Mount Rogers and in the sedimentary rocks preserved in road cuts near Hampton. Large amounts of sandstone, limestone and shale were deposited in the shallow seas that occupied the Roan Mountain area at this time.

Around 500 million years ago the Iapetus Ocean began to collapse in a series of orogenies that caused Laurentia (North America) to collide with Baltic (Europe), Africa and South America. This activity culminated in the formation of a new supercontinent called Pangea approximately 300 million years ago. The force of the collision pushed large amounts of basement granites and metamorphic rocks and most of the overlying sedimentary rocks to the northwest. These rocks were deformed in a series of huge folds and faults that created the Appalachian Mountains. Many of these folds and faults are all well exposed along 19E from Roan Mountain to Bluff City.

Erosion has dominated the Roan Mountain area since the Appalachians formed and they are now just a shadow of their former glory. Minor earthquakes continue to occur along these old faults as erosion takes the weight off the overlying rock sheets and they readjust to the reduced pressure. Present day erosion is responsible for many of the caves and sinkholes we have in the area and for formation of the Gray Fossil Site.

Dr. Mick Whitelaw serves as Assistant Chair for the Department of Geosciences at ETSU, is a member of the Don Sundquist Center for Excellence in Paleontology and serves as the site geologist for the Gray Fossil Site. Mick's program, *The Geologic History of Roan Mountain*, will be presented on Saturday, Sept. 10th, at 7:30 p.m. at the RMSP Convention Center.



PARK NEWS

— Pat Gagan, Roan Mountain State Park Manager

Roan Mountain State Park is in the process of converting approximately 10 acres of fields into native warm season grasses and wildflowers. We started the process this spring by spraying the fields with a mixture of chemicals designed to kill all species present. We gave the fields a couple weeks to die and once they had turned brown they were burned.

The fields have begun to have some species return and will soon be ready for the next spraying. They will sit dormant until April of next year when we will drill all of our fields. The largest fields in the bottom of the park will be planted with Little Blue Stem, Side Oats Grama, Illinois Bundle Flower, and Partridge Pea. The smaller areas too small for warm season grasses will be planted in

Black-Eyed Susan, and Purple Coneflower. One area at the Miller Farmstead will be planted in Indian grass and Switch grass and a small area in front of the farm house has already been planted with a hummingbird butterfly mix which contains several different species of flowers. Replanting these areas will provide a greater benefit to the wildlife through increased habitat and a richer nutritional yield, not to mention the natural beauty throughout the park.

This year Roan Mountain State Park had it's third annual Jr. Ranger Camp. We had 35 Jr. Ranger's ages 8-12 signed up for camp and averaged 34 in attendance everyday. The first day of the camp, the Jr. Rangers were led on a hike by TN State Parks Naturalist Randy Hedgepath and were then taught first aid, ten essentials, and wilderness safety by park SIR's Michael Walker and Meg Guy. On Tuesday they learned about Eagles, Hawks, Owls, and Falcons by Regional Interpreter David Haggard who brought live specimens of each. They were also visited by Wings Air Rescue who flew into the park to show the Jr. Rangers the helicopter and talk about their important role with EMS. The Jr. Rangers were also taught two or three knots to tie which they later had to demonstrate. Wednesday we took them to the Doe River where Meg led a Water Ecology program teaching the Jr. Rangers about the river and letting them actually try to catch the critters they were learning about. The pool was the next stop where the campers were given the chance to vent and drown the instructors. Thursday the Jr. Rangers learned land navigation, fire building, and rappelling. Each child was given the chance to rappel approximately 30 feet off of a rock near the Doe River.

On Friday we had an afternoon commencement at the Miller Farmstead where the Jr. Rangers and Family could enjoy hotdogs, s'mores, and a slideshow of pictures taken during the week. The Jr. Rangers were then given their t-shirts, Jr. Ranger Badges and Certificates, but not before they had to complete a short obstacle course. The Jr. Rangers were lead to the overlook and had to return to the farmhouse on a trail through the woods where they encountered five stations of Rangers asking them questions and having them perform skills they had learned throughout the week. When all had completed the course they received their certificates. An Astronomy program by Ranger Alisha Weber ended the evening. The camp went well and had a great deal of support, noteworthy a grant from the Friends of Roan Mountain. The Jr. Rangers also got several items to take home including water bottles, first aid kits, ten essentials list, rope, wings helicopters and pins, nets, fire starters, compasses, t-shirts, and Jr. Ranger booklets. Jr. Ranger Camp is something we all look forward to and we can't wait until next year.

Thank you, Friends of Roan Mountain!



Friends of Roan Mountain

Our annual meeting of the Friends of Roan Mountain will be held during the Fall Naturalists' Rally on Saturday, September 10th at 5:45 p.m. prior to the evening meal. At the meeting you will receive information regarding the activities, projects and finances of the organization. The election of board members will also take place.

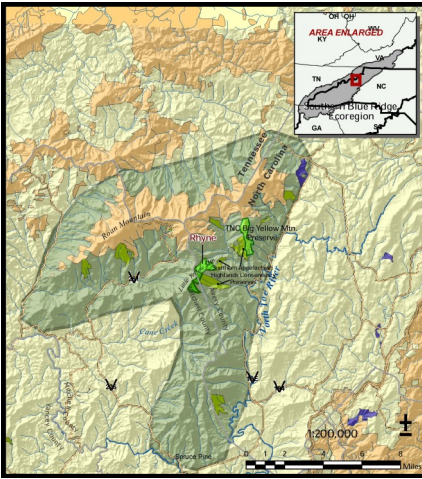
The following slate of names has been nominated by the board for this year's election: *Pam Baldwin, Gary Barrigar, Jerry Greer, Ken Turner, and Anne Whittemore*. Nominations from the floor may be made at the meeting.

Board meetings are scheduled as needed, generally a few weeks prior to the rallies. Any member of FORM is welcome to attend a board meeting or submit an item for the board's consideration by contacting the Friends of Roan Mountain president, Gary Barrigar, 423-543-7576.

The annual meeting also provides an opportunity for the membership to give their input concerning the policies and activities of FORM. Any member wishing to submit an item for the agenda of the annual meeting may do so by contacting Gary Barrigar.

Friends of Roan Mountain Partners Protect Little Yellow Mountain Summit

—Judy Murray



[Link to full map at Open Space Institute](#)

The Southern Appalachian Highlands Conservancy (SAHC) has been a partner of Friends of Roan Mountain for many years. Our many partnership efforts include the ongoing management of the Roan grassy balds. The Highlands of Roan have been a priority area for SAHC's land conservation efforts as well as for habitat stewardship since the organization was incorporated in 1974. Just recently, SAHC partnered with The Nature Conservancy (TNC) to protect another 207 acres in the Greater Highlands of Roan.

This tract, Little Yellow Mountain, located in North Carolina's Mitchell and Avery counties, is an important piece of the nationally significant Roan Mountain Massif Natural Heritage Area, one of the most biologically diverse areas in the Southern Appalachians. Seventy-six rare species of plants and animals are found there. As recently as a few years ago, much of it was slated for development. Protection work on Little Yellow Mountain began in 2007 when SAHC purchased 430 acres. Since then both conservancies have bought tracts on the mountaintop, SAHC and TNC recently closing on Hawk Mountain Farm, a 207-acre portion that rises to the summit from the west side of the mountain. Now the summit of that 5,504-foot peak is totally protected, ensuring that the entire mountain top will forever remain free of development. This most recent land purchase required private fundraising, internal loans and a loan from The Conservation Fund. "No project is truly complete until the loans are paid off," adds Carl

Silverstein, SAHC's Executive Director, "but getting the top of the mountain secured for protection is worthy of a big celebration." Eventually, all of the property will become part of Yellow Mountain State Natural Area, which will allow future generations to enjoy this amazing place.

Today, we celebrate both the protection of the summit of Little Yellow Mountain and the successful completion of the twentieth annual Grassy Ridge Mow-off, a full weekend of camping, good company, good food, and — most importantly — good balds restoration efforts. The Mow-off is a favorite volunteer opportunity for SAHC and FORM members and occurs every July. Activities involve mowing blackberries with steel-bladed weed whackers, cutting shrubs and small trees with long-handled lopping shears and hand-saws, and moving cut shrubs to the balds' edge. Over the years, tremendous strides have been made to return Grassy Ridge to its historic boundary, releasing many Gray's lilies to their open habitat along the way.

Mark your calendars for next year's Mow-off, to be held July 13-15! There are also several other opportunities to volunteer for Roan restoration activities throughout the summer and fall months. For more information on the Grassy Ridge Mow-off or other Roan volunteer opportunities, contact Judy Murray at roanwoman@aol.com.

You can also learn more about goat-powered land management techniques on August 13, when SAHC will lead a guided hike to view the goats of the Baa-tany Project on Roan Mountain. For more details or to register visit our website at <http://www.appalachian.org/news/hikes.html>.

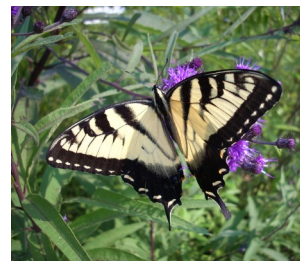
The Roan Mountain Summer 2011 Butterfly Count

We had a nice day, somehow avoiding the scattered showers that were apparently ending just before we arrived at various locations. Butterfly numbers were a little low, but we've seen lower, and the Aphrodite Fritillaries put on a decent show in the Rhododendron Gardens. A word of warning, though...if you go to the Gardens, beware of the rockwork curbs in the grass, they can be sharp-edged enough to blow out an automobile tire! Heartfelt thanks from Dianne and I to Brookie Potter and Charles Moore for assisting with the tire change.

July 23, 2011. Ten observers in 1 party. **Total party-hours 5.5; total party-miles on foot;**
Observers: D. Draper, C. Gutierrez, R. Gutierrez, Don Holt (910 Smalling Rd., Johnson City, TN, 37601; dnldhlt@aol.com), F. Lamberts, C. Moore, B. Potter, J. Potter, N. Schubert, K. Stroud.

Species observed: Pipevine Swallowtail 60, E. Tiger Sw. 12, Spicebush Sw. 1, Cabbage White 20, Clouded Sulphur 3, Orange Su. 15, E. Tailed-Blue 29, 'Summer' Spring Azure 5, Gr. Spangled Fritillary 2, Aphrodite Fr. 178, Meadow Fr. 22, Pearl Crescent 17, E. Comma 1, Red Admiral 1, Com. Buckeye 2, Viceroy 2, Monarch 1, Silver-spotted Skipper 24, Least Sk. 8, Sachem 1. **Total 20 species, 404 individuals**

—Submitted by Don Holt



Eastern Tiger Swallowtail

Between Friends

Deadline for Rally Meal Reservations – All dinner and lunch meals must be prepaid. If you plan to eat the catered dinner or purchase a bag lunch at the rally, you must send your check in advance. The deadline is ***Tuesday, Sept. 6th.*** The reservation form can be found in the brochure or on our website. Mail your check and reservation form to Nancy Barrigar, 708 Allen Avenue, Elizabethton, TN 37643. We greatly appreciate your cooperation in helping us plan accurately!

Parking at the Rally – Remember, the parking location for all field trips will be in the field below the cabins.

Mark Your Calendar !



Roan Mountain Naturalists' Rallies

Spring	First Friday - Sunday in May	May 6-8, 2012
Youth	Last Saturday in July	July 28, 2012
Fall	Friday - Sunday in September after Labor Day	Sept. 9-11, 2011
Winter	Saturday in February nearest Valentine's Day	Feb. 11, 2012

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