



## Beyond Birding: A look at the Life History of Local Songbirds

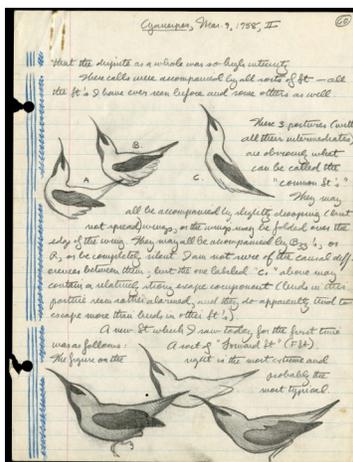
— Dr. Steven Hopp

Birdwatching has become a major sport in our country, with nearly 50 million Americans identifying themselves as birders. Typically, we think of birding as finding, identifying and perhaps listing the birds we encounter, either during one outing, or for many birders, keeping a life-list of all the birds they've ever seen. For dedicated birders, adding to the life list becomes an ongoing motive. But for many birders, even accomplished birders who can identify most regional birds at a glance, the lives of the birds go largely unnoticed. Once a bird is identified on a given day, the birder often ignores other members of that species for the rest of the day, having already twitched it for their daily list.

Imagine that instead of trying to maximize the number of species on the list we spend a morning trying to maximize the time spent not in the field, but with an individual bird. Suppose that instead of identifying, listing and moving on we found a target bird, let's say an indigo bunting, then spent the entire morning following and watching this one individual bird with the goal of seeing what a day of activities for this bird looks like. Imagine further that we begin asking questions about how the life of this little bird is organized. Does it live here permanently or is it just passing through? How far does it move during the course of a day? Does it have a partner or mate? Where does it

sleep? Does it spend the night in a nest? If it's migrating, where does it go, and how does it know where to go? Once you begin asking such questions, you move one step beyond birding, and more in the direction of the field of ornithology. Questions such as these fit into what ornithologists call life history strategies, or how birds manage to successfully make it through not only each day, but to adulthood, and ultimately parenthood.

The challenges for individuals and even for species is a fascinating area of research, and the way different birds solve their life problems remains one of the ongoing research topics in ornithology. You can easily recognize that the strategies would be quite different for different species, let's say a red-tailed hawk and a gnatcatcher, or even for similar sized birds one of which migrates and the other which doesn't. Why is that?



[Martin H. Moynihan's field notes on Cyanerpes, 1957-1963](#)  
[Smithsonian Institute Archives](#)

Please join me for a lecture titled "Beyond Birding: A look at the Life History of Local Songbirds", where I will discuss research in ornithology and animal behavior that focuses on the life history of small songbirds and how they have evolved to be successful as the remarkable inhabitants of our world. I will compare the general life histories of small migratory songbirds to that of small nonmigratory or resident songbirds.

Dr. Stephen Hopp, currently teaches courses in wildlife management and sustainable agriculture in the Environmental Studies program at Emory and Henry College. Dr. Hopp has studied the life history of vireos for over 25 years. He is co-author of the national best-selling book, [Animal, Vegetable, Miracle](#), with his wife, Barbara Kingsolver. Dr. Hopp's presentation will take place on Saturday, Sept. 10th at 7:30 at the Roan Mountain State Park Conference Center.

# The Study of Moths

— Larry McDaniel



Comstock's Sallow Moth

The study of moths by non-professionals is rapidly becoming more and more popular. Much of this is because of new technologies that makes it much easier. It used to be if you wanted to identify moths you would have to catch them, photograph them with film cameras or try to memorize what you saw. To catch large numbers of moths usually meant setting up a trap and killing them. The traps could be light traps or baited traps. Some kind of poison was used so the moths would die quickly after entering the trap. This was important to keep the moths from messing themselves up by banging into the inside of the trap or other insects that are in the trap. Photographing moths with film cameras is both difficult and expensive. Trying to identify moths from memory is also very difficult.

Once you had a specimen, a photograph or a memory of a moth you had to try to identify it by using a book. The best book for doing this was Peterson's [A Field Guide to the Moths of Eastern North America](#) by Charles V. Covell, Jr. It is an excellent field guide, but it is very difficult or even impossible to identify many moths with it. One problem is that there are so many species of moths. There are about 800 species of birds and about 700 species of butterflies in North America. There are over 12,000 species of moths — way too many to put into a field guide. Another problem is that the guide uses photographs of pinned specimens. This is fine if you are trying to identify pinned specimens but is tough to use for identifying live moths or photographs of live moths. The guide also has many plates in black and white adding to the difficulty of identifying your moths.



Lettered Habrosyne Moth



Huckleberry Sphinx Moth

Digital cameras have made things so much easier. Even lightweight, point and shoot digital cameras can yield excellent results. Most digitals have a macro setting which is perfect for the close up shots you need to see the details necessary to identify moths. And the best thing is you can take hundreds of pictures without having to worry about film costs. I guess I delete over 90% of the pictures I take. Another advantage to digital photography is you don't have to wait for the film to be developed. Another way modern technology helps is through the internet. Websites can hold many thousands of good, easily accessed images. The vast majority of moth species recorded in North America can be found on [Moth Photographers Group](#). It, along with [BugGuide](#), are the go-to websites for moth photographers. You can put your moth photo on one side of the screen as you scroll through images on these sites.

I've been doing this for over eight years and have photographed and identified about a thousand species of moths. Most of these are from my porch. Learning about these magnificent creatures has been a wonderful adventure. In my PowerPoint presentation, *Moths of Roan Mountain and Northeast Tennessee*, I will discuss the life histories of moths and talk more about how to get into the hobby of photographing and identifying these gems of the night. Some of the beauty and diversity of moths will be shown as I talk about the different families that can be found in our area.

[Note: All of these photos were taken by Larry at Roan Naturalists Rallies.]



The Hebrew Moth

Larry McDaniel works as a naturalist at Steele Creek Park in Bristol, TN. A long-time friend of the Naturalists Rallies, Larry has led numerous bird and butterfly hikes over the years. He serves on the board of Friends of Roan Mountain and is co-director of Xtreme Roan Adventures, our summer kid's rally. Larry will be the Friday evening presenter at the RMSP Conference Center on September 9th at 7:30 p.m.



## **What's New in the Park?**

### **The Birds are HERE!**

Thank you to the Friends of Roan Mountain for their generous donation in support of the Roan Mountain State Park aviary. After many months of anticipation, we have finally accepted our first 2 captive avian residents into the park. Please welcome Barred Owls "Shiloh" (left) and "Owl Capone" (right) to their new Roan Mountain home.

### **Cabin Upgrades Underway**

If you like to spend your rally weekends relaxing in one of Roan Mountain State Park's 30 cozy cabins, you will probably be noticing some changes as our cabins receive a much needed "face-lift." New furniture, fixtures, and décor are being installed now, and additional upgrades will likely be continuing into the fall. Many new items being added to the cabins are local Tennessee products crafted by artisans here in our own state. Enjoy your stay!



### **The Miller Farmstead, National Historic Site**

Roan Mountain State Park is hoping to utilize a grant from the National Register of Historic Places in order to better preserve our valuable historical and cultural resource, the Miller Farmstead. Grant money would be used to replace the farmhouse foundation as well as repair structural deficiencies of the iconic barn in an effort to ensure that the Miller Farmstead endures for another 100 years to tell its stories of days gone by to future generations of park visitors.

### **Volunteer Opportunities for Trail Maintenance**

Maintaining RMSP's trails is an ongoing, never-ending process. Ranger Staff and volunteers will be working during late summer and autumn while the weather is still amenable to the task, and we can always use an extra pair of hands! If you are interested in volunteering to assist in clearing, repairing, and building our trail system, please contact Park Ranger Keifer Helle at [keifer.helle@tn.gov](mailto:keifer.helle@tn.gov).



### **NO GOATS ON THE ROAN**

We regret to announce that the 9th Annual Baatany Goat Project on the balds has been cancelled. The Pisgah National Forest approved Jamey's research permit, but made clear he will not be allowed to continue beyond 2016 pending outcomes of the new forest plan and NEPA (National Environmental Policy Act). Therefore, he has chosen to devote this final summer's work to vegetation sampling on Roan's western balds (Round Bald to Grassy Ridge), wrapping up the science and summarizing 9 years of research. This 3-month long project is essential to appraising the value of grazing and mechanical control of invasives on the balds. The FORM board of directors has decided to provide partial funding with a grant. If you would like to help fund Jamey's research this summer, go to the Baatany Project's website at <http://www.baatany.org/index.html>, select "How You Can Help" and then "General Donation". The website also has more detailed information on this summer's project and the new forest plan, including how you can participate in the forest plan revision process.

# What if I don't have any kids?

## Can I still come to the Xtreme Roan Adventures?

—Ken Turner

That question does come up. It comes up especially when adults seen the awesome schedule of Adventures. The correct answer is:

***Get some kids! Yes. Go get someone else's kids for a day or an afternoon or a few hours.***

My guess is you are reading this because you have an interest in Roan Mountain and nature study. Somewhere in your past, someone inspired your interest in nature study. They instilled in you a need for lifelong learning about the natural world around you. What are you doing to pass along your interest in preserving Roan Mountain? What are you doing to help insure that someone will continue your efforts when you are no longer able? Are you that person now? Who are you encouraging to take your place to appreciate the natural world?

If you have done this for your own children and they have left the nest, it does not mean the end of your opportunity. More than likely, you know of a single mother who would like to have you share time with her kids and give her a break. Maybe there is a family at church who would enjoy having you take their kids for an afternoon nature walk. I'll bet you don't have to look too far to find some kids ready to jump at the chance to go on an "Adventure". You don't have to do the entire Appalachian Trail to make it an Adventure. It is a lot easier than you imagine. There are all kinds of Adventures. Don't worry about going too far or not far enough. Even an hour at a local park might be enough to begin with. If you have little neighbors, you could invite them to spend half a day with you at the Xtreme Roan Adventures. (You knew that was coming). Or invite them to join you for a Saturday at a Rally. The 2016 Friends of Roan Mountain Fall Rally schedule has ten "kid friendly" hikes and activities during the day on Saturday, Sept. 10. These are easy for you to do. The kids can pick from several interesting hikes. You can go for as long or as little as they would like.

Keep in mind, most trails are new to them. Every outdoor discovery could be new to them. Just invite some kids to come with you. If you live in the Tri-Cities, Roan Mountain is only about an hour travel. But that only helps to make it a special event. (A bribe of ice cream after the hike works really well for everyone.) You remember your first experience on Roan Mountain? The mountain is still there. You could be the one to help make someone's first experience. There is a wonderful world of exploration on the mountain. There many hiking trails for all levels of hikers.

*\*Special note\** Do not be afraid of the generic term "hike". Any outdoor activity might be called a "hike". Some might be only walks or strolls. If in doubt about the hike ask a Park Ranger or one of your friends who has done the hike before. Take a map. And do not worry about the correct answers to the questions the kids might ask. Make it a part of the Adventure to find the answers together. If you don't know what kind of bug they find, just make notes and look it up together when you get home. It can all be part of an Adventure that you share with the next generation. You could be the one to inspire the kid to grow up to appreciate the Roan and nature just like you.

***Get some kids! All you need to do is ask.***



# REMEMBERING FREDDY BEHREND

—John Martin

When any organization forgets its past, its future is at risk. What is lost in forgetting our past is the "why" of the present. A firm grip on our past tells us not only why we are doing what we are currently doing, but also the direction we should take as we plan for the future. When we as the Friends of Roan Mountain think of our past, no one is of more importance than Freddy Behrend. So I thought that I would share some of my personal memories of Freddy and invite any of you to do the same in future issues of this newsletter.

At the center of my memories of Freddy are the Carter County Wildflower Tours and Bird Walks (as the Spring Naturalist Rally was originally called). I was always impressed with his meticulous planning of every detail of the event and also with the quality of speakers he was able to secure to make presentations. Among those I especially remember are Arthur Stupka, who was Head Naturalist of the Great Smokey Mountain National Park; Chandler Robbins of the Patuxent Wildlife Research Center in Maryland, and A. J. Sharp of the University of Tennessee Botany Department. But the person who stands out most vividly for me was Maurice Brooks, professor of forestry at the University for West Virginia.

It was in the early 1970's, and Dr. Brooks was introduced by Freddy. He stood up, and without notes, slides or any other visual aids he simply started talking about the Appalachians. An hour later he finished, and I do not think anyone in the room wanted him to stop. A distinguished-looking, older gentleman he spoke with eloquence of his personal experiences as a naturalist who had spent his life in the Appalachians and was enthralled by their trees, flowers, ferns, amphibians, reptiles and insects. He wove his narrative into a rich fabric of personal reminiscences and technical information that left us all informed and entranced.

Maurice Brook's *The Appalachians*, arguably the best single volume on the Appalachians for the general reader, contains the following quote, which expresses the profound influence of Freddy Behrend among the first-rate naturalists in our region.

Not far from Roan Mountain is Elizabethton, Tennessee, among whose assets is an active chapter of the Tennessee Ornithological Society. One of its members, Fred W. Behrend, has made a study of the birds wintering on Roan Mountain peaks and balds. Throughout several winters he has found his way to these summits, despite heavy snow, strong winds, and, often, intense cold. On an early visit he found one, then two snow buntings, the first, perhaps, ever recorded from mountainous Tennessee and North Carolina. As might have been expected, the birds being there at all, they had unerringly sought the balds, where drifting snow uncovered the tops of low vegetation. On a few occasions Behrend was able to photograph the birds as they picked at exposed seeds. His first thought was that these snow buntings were strays, possibly carried southward by a winter storm. During the years that followed, however, he found them

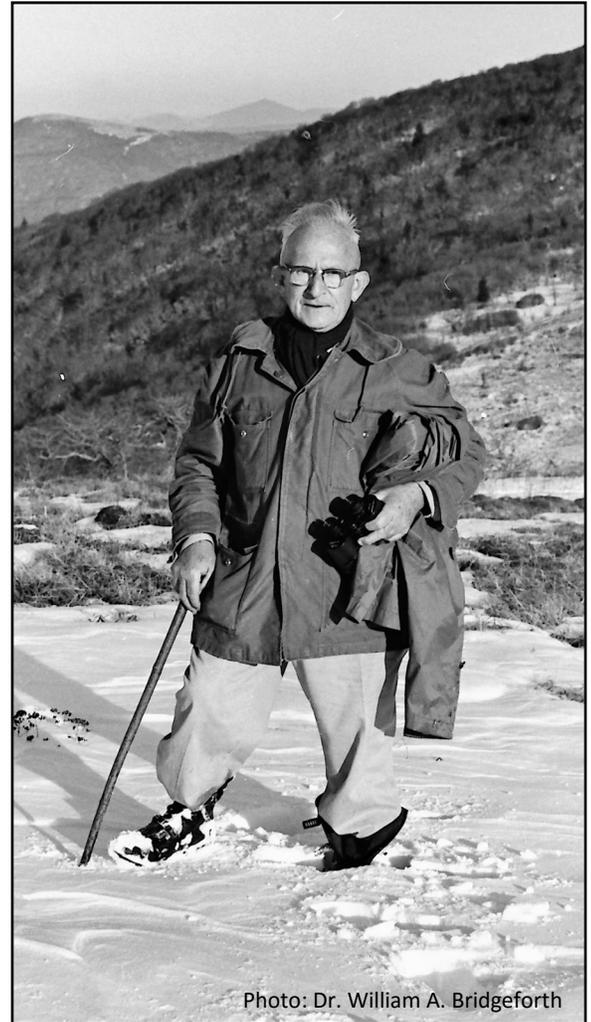


Photo: Dr. William A. Bridgeforth

in succeeding winters, the population at one time building to eleven individuals. When severe winter came, the birds somehow found this tiny southern counterpart of a coastal headland.

Through Behrend's kindness I learned of his observations. I asked that he send me samples of the plants on whose seeds the birds were feeding. Presently the plants came, and I had one of the high moments of my nature experience. The first plant I looked at was a three-toothed cinquefoil, my old friend from the moorlands around Percé village [*at the eastern end of the Gaspé Peninsula*]. To reach Roan Mountain's balds, the snow buntings fly over hundreds of miles of forested land with only here and there an opening suitable to their needs. And in many of these openings, all the way down to Georgia, three-toothed cinquefoil grows, its seed capsules offering winter food when the northern finches arrive.

There are many living things that serve to bind the Appalachians into one mountain system — spruce-fir forests, winter wrens, golden-crowned kinglets, and Canada warblers, to name a few. For me at least, no others emphasize the oneness of the mountains so compellingly as do a white bird and a white flower. (*The Appalachians* (1965); Series: The Naturalist's America, Houghton Mifflin Company, pp. 3-4)

### A Female Snow Bunting

wintering atop Mount [Agamenticus](#) in York, ME



Photo: [Charles J Homler](#)

Snow buntings are hardy ground birds of open fields and tundra, commonly occurring in flocks. The German word, *bunt*, which means mottled or multi-colored, is descriptive of the various seasonal and immature plumages of these birds. Males arrive early in the snow-covered Arctic breeding grounds to stake out territory and may burrow beneath the snow to keep warm during freezing temperatures. The breeding male's striking snow-white and jet-black plumage is achieved when he scrapes off the brown feather tips by rubbing them in the snow. Females build the nests which are placed in protected rock crevices and lined with feathers, fur, lichen, moss and grass. In this cold climate, while the female remains on the nest to keep the eggs warm, the male feeds her. Both parents feed the young which fledge in 10-17 days. Snow buntings are sometimes called *Snowflakes*, owing to their appearance of swirling in the sky as they descend onto winter fields.

### Three-toothed Cinquefoil

*Sibbaldiopsis tridentate*



Source : [Blue Ridge Kitties on Flickr.](#)

Flowering along the Appalachian Trail, the name of this plant refers to its leaves which are divided into three toothed leaflets. The USDA database refers to them as Shrubby Fivefingers. They are primarily a tundra plant found in Canada and Greenland, but southern populations have survived after the last ice age on the high elevations of the Appalachians. They are rare in this area, found on Roan Mountain and the Appalachian Balds, but there they are plentiful and easy to find. You just may have to kneel down to get a closer look since they grow low to the ground. They often grow in the grass mixed in with bluets, common cinquefoil, and wild strawberries. On cursory glance, they may be easy to confuse with the white strawberry flowers and they are in the same family, but the leaves and a closer look at the flowers show quite a few differences. They are considered endangered throughout much of their range in the US.

## GIFTS & MEMORIALS

Friends of Roan Mountain is very thankful for all the charitable donations and memorial gifts contributed over the years. Beginning with this issue of our newsletter, we will publish the names of donors and honorees.

We gratefully acknowledge the following donations made in 2016.

### In Memory of Debbie Neves:

Karen and Justin Hill  
W. Mills Dyer, Jr.

### In Memory of Arthur Smith:

Don Fisher

## Share The Roan

### Consider a gift membership in FoRM

We all love the beauty and the incredible flora and fauna of Roan Mountain. You can help introduce this natural treasure to others with a gift membership in FoRM. Click the Membership tab on our website at [www.friendsofroanmtn.org](http://www.friendsofroanmtn.org) or contact our Membership Secretary at [aabernethy@friendsofroanmtn.org](mailto:aabernethy@friendsofroanmtn.org).

The purpose of **Friends of Roan Mountain, Inc.**, a 501(c)(3) non-profit organization, is to foster greater awareness and understanding of the natural, historical, and cultural significance of Roan Mountain. Members support the organization's interpretive and educational programs and activities which are designed to accommodate a wide range of interests. Membership is open to amateur naturalists, scientists, agency personnel, teachers, students, or anyone who has an interest in and love for the Roan.

## NEW !

### XRA Reusable Water Bottles

Thanks to a generous contribution from the Neves Family Trust, FoRM provided reusable water bottles to all the children who participated in this year's Extreme Roan Adventures. Our message is that we want to do whatever we can to protect the beauty and biodiversity of Roan Mountain !



## ANNUAL MEMBERSHIP MEETING

The 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 be held.

The following slate of names has been nominated for this year's election: Aubrie Abernethy, Nancy Barrigar, Jennifer Bauer, Tracy Campbell, Guy Mauldin, Larry McDaniel, Will Miller and Bob 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, [gbarrigar@friendsofroanmtn.org](mailto:gbarrigar@friendsofroanmtn.org).

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.

# Between Friends

**Deadline for Rally Meal Reservations** – All dinner and lunch meals must be prepaid. If you plan to eat a catered dinner or purchase a bag lunch at the Fall Rally, you must send your check in advance. The deadline is **Tuesday, September 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!



**Door Prizes** -- We gladly accept items donated for door prizes. These will be given away on Friday and Saturday prior to the evening programs. Ideas: nature-related books, photos or art, outdoor gear, plants, homemade goodies . . .



Get the latest updates on FORM events and listen to interviews with Rally presenters and leaders on Roan Mountain Radio with Ken Turner. <http://www.roanmountainradio.com/>

“Instructions  
for living a life.  
Pay attention.  
Be astonished.  
Tell about it.”  
~ Mary Oliver

MARK YOUR CALENDAR			
	Spring Rally	Last Friday - Sunday in April	April 28–30, 2017
	Youth - XRA	Last Friday—Saturday in July	July 29 –30, 2016
	Fall Rally	Friday - Sunday in September after Labor Day	Sept. 9 - 11, 2016
	Winter Rally	Saturday in February nearest Valentine’s Day	Feb. 11, 2017



*Editor*  
Nancy Barrigar  
708 Allen Avenue  
Elizabethton, TN 37643  
(423) 543-7576  
[nbarrigar@friendsofroanmtn.org](mailto:nbarrigar@friendsofroanmtn.org)