

So, What Are Birds, Anyway?

Jeremy B. Stout

It sounds easy, right? Today, if it has feathers, it's a bird... no questions asked. But, what if you found yourself 160 million years ago in the middle of the Jurassic Period? The answer wouldn't be nearly as simple!

Of course, the idea that birds are derived from reptiles isn't new; in fact, the notion that birds are descended from dinosaurs isn't even new, but new research in paleontology, comparative anatomy, and genetics (along with fresh looks at some of the early naturalists' writings) offers further evidence that a kinship of our feathered friends with creatures like *Tyrannosaurus rex*

is even closer than most can fathom!

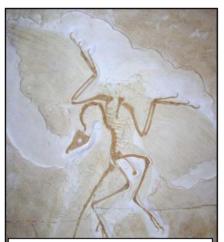
This understanding of bird origins doesn't come without some problems, though. Most notable is

how we classify birds (and their modern relatives) today. The birds have long been lumped into their own taxonomic group (Class Aves), based on the presence of feathers, wings, toothlessness, etc. The problem comes with their closest living relatives, the crocodiles and alligators. Crocodilians are an ancient holdover from the geologic past, a group of "Ruling Reptiles" called the **Archosaurs**. In addition to the crocs and a whole host of extinct creatures, Archosaurs also include the dinosaurs (which are the direct ancestors of birds).

What this means (and this is HARD to swallow!) is that since birds, crocodilians, and dinosaurs are ALL archosaurs, crocodiles are more closely related to birds than they are to turtles and lizards! And yet,

crocodiles are lumped with these other reptiles (Class Reptilia) and not with birds. Science does have ways to deal with this, though, and it all makes surprising sense!

So, what does any of this have to do with birds now? Everything! Behavior, anatomy, and genetics all point to a dinosaurian past. Whether enjoying the Yellowbellied Sapsuckers and Rubythroated hummingbirds at the Dave Miller Farmstead, or watching Secretary Birds while on an African safari, they are ALL living dinosaurs we can enjoy everyday!



Archaeopteryx lithographica was one of the first "birds" to stump scientists. (Notice the clear feather impressions along with a long, bony tail and claws on the hands!)

To find out (a lot!) more, be sure to come to *Birds: A Naturalist's Favorite Reptile* at the upcoming Spring Naturalists' Rally (Saturday night at 7:00). And when you hear that Saw-whet Owl calling to you at Carver's Gap, remember that you're hearing a "raptor" in more ways than one!

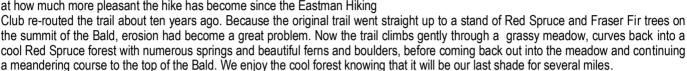
Jeremy Stout, Naturalist for the City of Bristol, TN, Manager of the Steele Creek Nature Center, is a regular contributor to the Tennessee Conservationist magazine.

GOATS SPEND SUMMER ON THE ROAN

Anne Whittemore

Whew! I'm glad to get Carver Gap behind us! That place is crowded with noise and vehicles. As I step through the fence opening, I behold the beauty of a windswept vista: the brilliant fuchsia and delicate pinks of the Catawba rhododendron blossoms, dark green bushes and trees, gray rocks, and golden-pale green grasses and sedges waving in the wind. Makes me want to reach out to embrace it! I hear bird songs, and try to identify the calls.

As we start up the Appalachian Trail toward the top of Round Bald, I marvel at how much more pleasant the hike has become since the Eastman Hiking



Although we'd like to linger on Round Bald, we continue down the other side into Engine Gap, admiring the brilliant orange of the flame azalea off the trail on the North Carolina side. Earlier, we'd met hikers who told us about a herd of goats just the other side of Jane Bald, and we're eager to see them. Ascending up Jane Bald from Engine Gap, we note the dark black dikes of intrusive basaltic material which we follow up to the summit. From the rocky summit of Jane Bald, the view is spectacular! Other mountain ridges surround us in all shades of blue. Looking back the way we'd come, we note that Round Bald is dwarfed by Roan High Knob on the other side of Carver Gap. To the south the highest peak in North Carolina, Mount Mitchell, is barely visible in the cloud cover.

Following the trail over Jane Bald, we find the goats directly below us on either side of the AT. For the summer, they live in movable, light-weight, solar-powered electric paddocks. These angora goats are quite adorable with curly hair and curving homs. They are fiber, rather than meat goats, and are more tolerant of high elevation weather conditions. According to the brochure in the mail box near the paddock, a goat owner in northern Virginia decided to give 19 of the original 34 goats (from 2008) a "retirement plan" rather then sending them off to the "meat market". A nice lady! A Shady Valley, Tennessee, farmer* donated the other 15 goats for the mountain-top experiment. This past winter the farmer kept all the goats on his farm. When the goats came down from the mountain, they were bathed and sheared.

We stop to watch the goats. The goatherd, Jamey, explains that the animals are here as part of a project to save these ancient grassy balds from becoming extinct. Death of the balds has many causes: changes in the soils; climatic change, the lack of large plant eaters; and a continuously-encroaching woody plant invasion, particularly the Canada blackberry. Fortunately, goats LOVE blackberries! We watch them munching delightedly on leaf after leaf. "Water," Jamey remarked, "is a problem up here because it has to be hand-carried." Because we know we'll be filling our water bottles at the spring about a half-mile away, we graciously empty all our water into the goats' trough.

The caretaker urges us all to take a brochure about the goat project, because, he says, we can all help. Wow! That's neat! When we are home again, all we need to do is fill out the form included in the brochure, send \$50 for four months of goat care to the address printed on the form, give "our" goat a name, and voila, we have an adopted goat! How cool is that!? For this small price, participants will receive a letter about the program, certificate of adoption, a picture of their goat, and lock of its hair. Plus, we'll have the satisfaction of knowing we're helping save and protect this unique ecosystem of grassy balds, a legacy of the Ice Ages.

I am so excited about this project! I promised to bring a couple of friends back up one weekend to be a goat sitter, and to help carry water. This is a fantastic opportunity to spend quality time talking to people about one of my favorite places on earth! But, name a goat? What on earth would one name a goat? "Ahhh," says Jamey, "I just happen to have a list of names used during the 2008 season. These will give you some ideas."

I am amazed by the creativity of the adoptive "parents". Four friends pooled their funds and named their goat Jewel, because Roan Mountain is the Jewel of the Appalachians! A class from the UNC School of Architecture at Charlotte named their goat "Goatradamus"! I found Goldilocks and Goatilocks! Cousins, who each adopted a goat weeks apart, chose Right Ear and the other, Left Ear. There were variations of the Baa theme: Baaa, Baarbara, Baailey, and Baabawa Blanchefleur. I noted descriptive names: Goat Butt, Land Scape Goat, Destroyer of Blackberries, Dia-Bleat-a Fuzzybutt, Blessed Summer Reigns, and Lily Half Horn. Other interesting names are Agaliha, Wolfgang Amadeus Ellis, "007", Moonbeam, Tommy-Boy Sweetie Tom-Gibbons, Dame Edna Hillary, Hayden's Goat, Ziggie, Obama, Moosie Murray, Whitt-n-Annie, Tweetsie, Capra Morabane Vorax, Jaamey-Jaaamey-Jaaaaamey, and Heidi N. Seek.



Finally, there are a plethora of "people" names: Lily, Billy, Bo, Asa, Butler, Rufus, Edith Louise, Lorraine, Diane, Liz, Zoe, Shane, Mabel, Will, Mary Alice, Mike, Evan, Marley Nate, Klaus, Sheila Kay, Emmy Lou, Charlotte, Phoebe and Cynthia. A group of young men sent in money to support their goat named "John Goat Mellencamp". I also found Softy, Peanut, Dumpling, Lumpy, Firefly, Bandit, Sherly, Buffy, Nana, Buttercup, Rosie, Posie, Flower, Sunny, Rocky, Hayden's Goat, Max, Moritz, and Curty. If this adoptive parent hadn't supplied the translation, I would not have understood this name: NTUKUTUKU, which means "talks a lot" or "motor mouth" in Tsiluba, a central African language from the Democratic Republic of Congo. Fascinating! My most favorite name on this list is Arnold Fluffaneggar!

So, please, everybody, scrape up \$50 by yourself or with friends, and let's get more goats adopted. This really helps the goatherds with travel expenses, food, postage, office supplies, paddock construction, tubs for water, and more. This is an opportunity to really help protect Roan Mountain and all that we love about it. Tell your friends and family about the project. Check out www.friendsofroanmtn.org, our website, and look for the Baa-tany Goat Project.

A final note for all you knitters, weavers, and spinners: Wouldn't you like to be able to wear a part of the balds? If so, please let Jamey know if you have an interest in the Roan Mountain mohair. Several folks connected with the Project are considering having the mohair processed into roving and yam. Jamey's at <a href="mailto:top:robuster-top:robuster

*The Shady Valley farmer is Friends member, Todd Eastin.



If you cannot recall the last time you heard a child's laughter and screams of excitement, saw children running and playing outside, or felt relaxed and refreshed adventuring outdoors, you have

experienced what author, Richard Louv, describes as nature-deficit disorder. Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder was initially published in 2005. Since that time, this text has been heralded as the solution for a healthier, greener tomorrow, a drugfree 'nature' cure for modern ills, and has been compared to Rachel Carson's Silent Spring. Outlining societal shifts related to everything from childhood obesity and attention deficit disorder to stranger danger and family debt, Louv

chronicles a number of issues which, over time, have created the current epidemic of children problems. Statistical data and analysis supports each issue addressed and presents a compelling argument for reconnecting children with nature.

In the past two years, the National Wildlife Federation has joined hands with numerous private and public sector organizations, agencies, and groups to initiate a grassroots movement providing education to park professionals, teachers, parents, and health care As an offshoot of the national movement, the Tennessee No Child Left Inside Coalition meets monthly to plan, draft, and implement statewide programs such that all can come together, on common ground, connecting among one another, and connecting Tennessee children and nature. Tennessee State Parks continues to lead the state with regards to environmental education, interpretation, outdoor recreation, and family adventure programs and offerings. Embodying the solution to issues addressed in Louv's book, the Division fulfills its mission through public outreach, education, and resource management. Recently, the first regional Teacher's Guide, describing all park program offerings, was sent to over 400 public and private schools within east Tennessee. This, coupled with a long standing dedication to monthly program offerings, special events such as the Friends of

Roan Mountain Naturalist Rally, and continued personnel training supports Tennessee State Park's mission, objective, and core values.

Without consistency with regards to connecting children with nature and communicating free park offerings to family units, community groups, and professional organizations, all levels of society are not reached. Without the initial passion, artistry, writings, and leadership within the environmental

movement and the continuation works by Ansel Adams, Georgia O'Keeffe, Freedman Tilden, and Teddy Roosevelt, the childhood epidemics of obesity, school violence, behavioral problems, learning disabilities, anxiety and depression, and environmental protection would not be successfully addressed.

An overview of Richard Louv's book, its direct correlation with societal issues, and the direct impact of pioneer environmentalists will be discussed as we track the influence of historical figures, interpretive programming efforts of Tennessee State Parks, and the Tennessee No Child Left Inside Coalition initiatives. This luncheon lecture will be preceded by an outdoor program and nature walk as East TN Regional Interpretive Specialist, April Welch, relays easy ways to reconnect children and nature. Take the leap; learn how interpretation connects you to the resource through a child's eyes!

April Welch will conduct a Saturday lunchtime workshop, *Naturalists Through History and Their Work*, at noon on Saturday at the Spring Rally.





A Family Tradition: How My Mother Loved A Mountain And Shared That Love With Others

—- James Neves

Peace. Wonder. Awe. Joy. Love. My mother, Debby Dyer Neves, felt these emotions on every trip to Roan Mountain. Growing up in Johnson City and living her entire life in the Blue Ridge Mountains, she was able to visit the state park throughout the seasons her entire life. She appreciated the immense value of the natural and the cultural heritage because it is rich and unique but also because it was a part of her own heritage. Her mother was born and raised in nearby Mountain City. After many years of family hikes at Roan Mountain, her mother and father, Bill and Marjorie Dyer, were founding member of the Bird and Wildflower Walks that have become the Naturalist Rallies.

During my childhood, I remember many autumn and spring trips to the Rallies. Mom would faithfully plan the cabin rental, buy groceries, and help her parents enjoy the rallies. Sometimes she'd join me on the bird and wildflower walks, but when she was needed back at the cabin, she could trust trip leaders Ed Schell or Gary Wallace to keep an eye on me. Of course, she always told me that I was the eyes and ears for the trip leaders, which gave me the confidence to feel that I was just as much a participant in the walks as the adults. I remember a number of successful, foot-soaked rambles down through the woods at Twin Springs with Ed Schell to find the Rose Twisted-Stalk. Mom and I always laughed when Gary Wallace would describe the song of the Blue-headed Vireo: "Look up. See me? Tree top, dummy!"



There were many other memorable visits to Roan Mountain. In the summer, we would join the crowds to marvel at the famous sea of pink Rhododendron on the top of Roan, and during times of heavy snow, our family would cross-country ski on the mountain. It was at the rallies, though, where her friendly character and grateful spirit was most apparent. She loved learning about all of the wonders that Roan holds, be they common, rare, or unique. Sharing her appreciation of Roan's beauty brought her great joy and fulfillment. During the first year that my wife, Lori, and I were dating, we came to a fall rally with Mom and my grandmother. It was the first time Lori met my grandmother. My wife played her flute on the porch while the rest of us listened through the window and a distant Wood Thrush made it a flute duet. It was a very special moment for all of us.



As Mom fought cancer, she made special effort to continue to learn about the wonders that Roan Mountain and the surrounding areas held. She always thirsted after knowledge. She had known many of the birds and wildflowers since childhood, but she studied trees, edible plants, and especially mushrooms during her last few years, and she loved sharing her knowledge with anyone that would join her on her walks through the woods. She also hoped that new generations would learn appreciation for nature and the mountain that she loved, and during her last months she was overjoyed to learn about the upcoming First Annual Roan Mountain Youth Naturalists' Rally on August 1, 2009.

My mother understood that we can all find peace and rest for our spirit in nature and that places like Roan Mountain help remind us that the earth is ancient and beautiful and has seen more than the likes of man. Like all of the Friends of Roan Mountain, she had great hope and desire that Roan Mountain would remain wild for future generations to enjoy.

I certainly look forward to the day when I have children with whom I can continue the family tradition of sharing the wonders of Roan Mountain. This spring, I look forward to sharing the magic of Roan with you and your family. I am extremely honored to be a walk leader at this rally; I want to thank Ed Schell, Gary Wallace, Rick Knight, and the many other leaders of walks I have participated in over the years for providing such amazing examples. Yet, I cannot help but smile knowing that the greatest credit must be given to my mom for giving me the guidance and confidence to be able to continue this very special family tradition in such a manner.

You can join James at 8:30 on Sunday morning, May 3, for a bird walk at the Spring Rally. To read two articles written by Debby Neves, visit the newsletter archives section of our website: *Growing Up With The Rallies* in Winter 2005 and *The Black-throated Blue Warbler* in Spring 2005.

Upon the death of their wife and mother, Deborah Neves, the family requested memorial gifts be sent to Friends of Roan Mountain (as well as two other non-profit groups) in her honor. The Friends received over \$2000 which is being held in a savings account. These funds are earmarked for funding the Youth Rally this summer, a new event for us.



The Power of Passion and Common Ground

By David A. Ramsey

One September day, in 1996, I was standing in the fly fishing department of Mahoney's in Johnson City when an old friend walked in who I hadn't seen in a long time. I'd just moved back to the area and had no way to know, after we exchanged greetings, that my friend's next words would greatly and permanently impact my life.

The friend was Frank Gentry, Jr., a fellow Unicoi Countian, and as I recall, his words went something like, "Well David, I guess you've heard that Rocky Fork is for sale." I said that I hadn't heard and I listened with disappointment and a sense of fore boding as he informed me that the French owners of that magnificent 10,000-acre mountain reserve were eager to sell, the buyer likely to be a developer with a grand scheme for a private gated resort. I knew if that were allowed to happen, this pristine watershed, located in the beautiful Bald Mountains of Tennessee's Unicoi and Greene Counties, would be irreparably damaged, if not completely ruined.

Knowing that the largest unprotected mountain tract remaining in the southern Appalachians - arguably the eastern U.S. – was threatened with becoming simply another among scores of private mountain playgrounds for a privileged few was literally sickening. It meant that much, if not all, of this land that had been kept open for generations of sportsmen and outdoor enthusiasts would be closed off forever; its extraordinary habitat for bears, threatened Appalachian brook trout, Peregrine falcons and countless other plant and animal species most likely destroyed. Also, in addition to the environmental, scenic and historical reasons for protecting Rocky Fork, there were personal aspects to our concern. Both Frank's and my roots ran deep there, with my own family going back five generations in the tiny mountain community nearby, also known simply as Rocky Fork.

I remember Frank's parting declaration that day as he left Mahoney's: "David, we've got to get that land up there saved." As simple as his words were, they were infused with a resolute passion that clearly and powerfully conveyed his deep connection to Rocky Fork, to its history, and to a lifetime of gratefully receiving what it had to give. It was that passion that ignited mine, bringing into sharp perspective my own connection to this extraordinary mountain place.

"You're right, Frank, we have to," I replied.

Frank left us a few years before getting to see his beloved Rocky Fork saved, so it is with much pride that I think of the many times since his passing that I've stood shoulder to shoulder with others who shared his feelings for the land – hunters, fishermen, hikers and conservationists – and expressed to those in positions of power, with one voice and equally simple words, our keen desire to save this place so worth saving. Rocky Fork has been our common ground. Our collective passion and determination through the years moved it slowly, surely a little closer to the day it would receive the protection it deserved.

That day finally arrived on December 15th, 2008. And sadly, though Frank Gentry wasn't there to celebrate the achievement he helped bring about, somehow I think he knows that we never gave up. We finally did what he said we *had* to. We got "that land up there saved."

David A. Ramsey is an Appalachian photographer, writer and conservationist residing in the mountains of his native Unicoi County, Tennessee. On Friday, May 1st, David brings his program, "Up On Rocky Fork: A Final Stand for the Vanishing Wild", to the Spring Rally.



Another Way to Extend Your Friendship to Roan Mountain

Check out the merchandise table at the spring rally for a new item — a 24 oz. stainless steel water bottled with a Friends of Roan Mountain logo!

Eco-minded people understand the huge impact that bottled water is having on our environment. Making bottles to meet Americans' demand for bottled water requires more than 1.5 million barrels of oil annually, enough to fuel some 100,000 U.S. cars for a year. Worldwide, some 2.7 million tons of plastic are used to bottle water each year. According to the Container Recycling Institute, 86 percent of plastic water bottles used in the United States aren't recycled. As for health factors, studies have shown that bottled water is no safer than tap water; in many cases tap water is more highly regulated and monitored. Then there is the cost to your wallet. Consumers pay from \$1 to \$8 for a gallon of bottled water! Tap water is approximately .002 cents per gallon. If you are concerned about taste, with home water filtration you can conveniently refill your own bottles with great-tasting, healthy water for pennies per gallon.

When you buy a Friends of Roan Mountain water bottle for \$15.00, you'll support our research grant program and, in the long run, save yourself money and protect the planet!

Tennessee A.T. License Plate

The Tennessee legislature gave the nod for the creation of a specialty license plate for the Appalachian Trail that will allow funds produced from the sale of the plate to be shared with the Appalachian Trail Conservancy (ATC) for the support and management of the A.T., the legendary footpath that runs from Georgia to Maine. Signing up today helps get the A.T. plates into production because 1,000 paid applications are required in order to start production. For each plate that is purchased or renewed the Appalachian Trail Conservancy



(ATC) receives \$15.56. These funds will be used to support the Trail and programs and activities in Tennessee. The remainder of the specialty license plate fee pays for plate production and helps support the arts in the state. The first 1,000 paid applicants will be thanked with a free, one-time annual membership to the ATC. If you are a member already, you may give your free membership as a gift. With your membership, you will receive a decal, the bi-monthly membership magazine A.T. Journeys, and discounts at the Ultimate A.T. Store, a value of \$35. For an online application go to www.appalachiantrail.org/tnlicenseplate.



Make reservations now for your meals at the spring rally. Visit our website for a reservation form and schedule of events.

http://www.friendsofroanmtn.org/

Mark your calendars!

Our 1st Youth Rally: August 1, 2009

The 47th Annual Fall Naturalists' Rally: September 11- 13, 2009 The 3rd Annual Winter Naturalists' Rally: February 13, 2010 The 52nd Annual Spring Naturalists' Rally: May 7 - 9, 2010



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