New species named for Sassafras Mountain

Granddaddy longlegs cousin found on slopes of South Carolina's highest point turns out to be a distinct species

By Dennis Chastain

Sassafras Mountain continues to build an impressive resume. After eons of relative obscurity, the prominent Pickens County peak has lately risen to new heights, so to speak. Now, in addition to serving as the Palmetto State’s increasingly popular highest point, the site of the state border with the “other” Carolina, and the apex of the Eastern Continental Divide in South Carolina, you can add the fact that a new species of an exceedingly rare animal has been named Metasiro sassafrasensis.

The new specific designation is a reference to the fact that a miniature cousin of the well-known Granddaddy Longlegs’ cousin (although taxonomically not a spider at all), first located on Sassafras by a Harvard University scientist way back in 1968, has now been shown to be a separate species from its other nearly identical kin in North America and around the world.

Regular readers of Jocassee Journal will recall a story in the Fall/Winter 2010 issue detailing the story of how Harvard graduate students, Ron Clouse and Prashant Sharma, travelled to Sassafras Mountain in search of specimens of the Mite Harvestman (Metsiro americanus). The Harvard researchers were excited to discover that the tiny Mite Harvestman, which only lives in a very narrowly defined habitat (largely undisturbed forest with a heavy layer of leaf litter or “duff”) was still there.

At a site near Chimneytop Gap, they collected a total of 16 specimens, enough for genetic studies of this population.

They were interested in this particular animal because their mentor at Harvard, Professor Gonzolo Giribet, had determined that by tracking the distribution of this and other Continued on page 2
similar species around the world they could gain insights into the larger subject of the so-called Tree-of-Life, the progressive timeline and family tree of how animals populated the earth after the break-up of the mega-continent, Pangea, hundreds of millions of years ago.

With that lofty goal in mind, Clouse and Sharma left Sassafras and headed for other known locations for Metasiro americanus in Jasper County, South Carolina, and the panhandle of Florida. All three populations were thought at the time to be identical to yet another population known to exist in West Africa, an amazing fact when you think about it—two identical, living, breathing creatures that have been around since the Pleistocene, found both on Sassafras Mountain and in West Africa! Those expeditions also proved fruitful and years of meticulous gene sequencing and microscopic examination of the collective samples followed.

The two grad students have since earned their doctorates and Ron Clouse, along with another colleague, recently published a journal article making the case that, among other things, the Sassafras population is in fact a new species. Clouse said recently, “On one hand, I cannot find any morphological differences among these three species. On the other hand, they have ample genetic differences to be called different species.”

When apprised of last summer’s intensive wildfire that raged near Chimneytop Gap, perilously close to the sampling site, Clouse said, “Without a doubt it has burned in that spot before, and I think that down in the wet duff layer they are pretty protected, but if that duff does catch fire and wipes out Metasiro sassfrasensis there, it will be a long time before they come back!”

Meanwhile all is well, and Sassafras Mountain, at least for the present, is now known to be the only known location in the world for a creature named in its honor.

(Dennis Chastain is a Pickens County naturalist and outdoors writer who has been hunting, hiking and fishing in Jocassee Gorges for more than 30 years.)

New harvestman species named for Sassafras

Continued from page 1
Bald eagle nest discovered on Lake Jocassee

Long suspected, nest for nation's symbol found on lake's Toxaway arm

By Kevin Evans

Have you ever had that feeling of knowing something to be true but could not prove it?

Well, that is the way the rangers at Devils Fork State Park have felt for almost the past decade. The rangers at Devils Fork State Park, in cooperation with the S.C. Department of Natural Resources (DNR), annually participate in a winter survey of the Southern bald eagle (Haliaeetus leucocephalus) in the Jocassee Gorges during the month of January.

Year after year we would see adult bald eagles and juvenile bald eagles in different areas of the lake, but we could never find a nest. We knew that there had to be one because of the increase in the numbers of juvenile eagles that we would record seeing each year.

Like a lot of you, my family and I enjoy going out on Lake Jocassee for a late afternoon cruise, supper and watching the sun set majestically over the mountains. On one evening this past summer, we were on our way up the Toxaway arm of the lake, when we noticed an adult bald eagle coming up from the lake with a fish firmly in its grasp. As it flew towards the trees, we slowed the boat to watch. I often get reminded on these trips, that I am supposed to be off work, but some things you just can’t help. My thought was “Where is it going? Follow it. It may be going to its nest!”

In a large pine on the edge of the lake there it was. What had alluded us for all these years, was now confirmed. We could see another adult bald eagle in the nest, and movement inside the nest. Finally, proof! (Kevin Evans is park manager of Devils Fork State Park.)

This photo of a juvenile bald eagle was taken Sept. 18, 2014, near Bootleg Ramp on Lake Jocassee. (Photo by Doug Young)
Bear harvest returns to 'normal' in 2014

Record mast crop in mountains meant bears didn't have to move to find food

After an all-time record high harvest of 127 bears in 2013, the 2014 black bear harvest leveled out to 63 bears during the two-week season in October 2014.

"Last year was an abnormal year, because there was an almost total mast failure in the mountains," said Tammy Wactor, wildlife biologist with the S.C. Department of Natural Resources (DNR) stationed in Clemson. "Corn was also on the ground because it was the first year that corn was allowed for deer on private land, so the bears dropped down low where they were concentrated for hunters."

This year, with a record mast crop in mountains, "It was more of a normal year," Wactor said. "There was lots of food on the ground, so bears were scattered and they did not have to move to feed."

The mountain bear season is divided into two week-long sessions. The first week allows still hunters who have purchased a bear tag to harvest one bear. During the second week, registered groups of hunters using dogs are allowed to hunt, and there is a limit of five bears per party.

This season, in the three Upstate mountain counties of Oconee, Pickens and Greenville, still hunters took 24 black bears (11 male, 12 female and one unknown). The following week, dog hunters took 39 black bears (12 males and 27 females).

Pickens County led the bear harvest with 32 bears, following by Oconee County with 22 and Greenville County with nine.

Annual bear hunts are a coordinated part of managing a growing population of black bears by DNR. During the late spring and early summer, black bears frequently make the news as they move south out of the mountains in search of food before the acorn crops mature. While bears are considered omnivorous, eating whatever they can find of both plant and animal origin, the mainstay of an Appalachian black bear's diet is acorns.

For more information on black bears in South Carolina, visit: http://www.dnr.sc.gov/wildlife/species/bear.html.
My first bear

Pickens County hunter realizes dream of harvesting bear in South Carolina

By Keith Batson

To put it simply, I love to hunt. I would rather hunt than eat when I’m hungry, and I love to eat!

I live from season to season; when it’s not deer or turkey season, I’m chasing hogs, coyotes, groundhogs and other vertebrates.

There is nowhere I would rather hunt than in my home state of South Carolina. From the Lowcountry to the Mountains, it is a hunter’s paradise. My favorite place to hunt would have to be in the mountains of Pickens County. There is something about tramping up, through or around those mountains that I can’t get enough of.

The best thing about the mountains are the bears! Getting a bear has been on my bucket list for as long as I’ve been hunting. I could’ve gone anywhere in the United States or Canada to kill a bear, but I wanted to take one in my home state of South Carolina. Anyone can pay to kill a bear—I just wanted to do it on my own in the state where I grew up hunting. So for the last 11 years I have chased bears with no success. Everyone I talked to said my best chance to get a bear would be to hunt with dogs, but I love just sitting in the woods watching nature around me, and I wasn’t going to give up.

Last season, I found a spot with good bear sign so I hung a tree stand and waited for opening day. While I’m sure other hunter’s first bears were more exciting than mine, I wouldn’t change anything about my first. I got to my stand that afternoon and was in the stand maybe 20 minutes when I catch movement to my left, and lo and behold, it’s a bear! I didn’t wait for an invitation—I shot and the Lord called that bear home right then and there!

When I got down to the bear, I realized it wasn’t a big bear, but that was OK. Even though a couple of game warden buddies of mine gave me some grief because the bear was not huge, that was not a concern. I had finally taken a bear on my own in the state and mountains I love!

And I’ll be back this fall, looking for a bigger one!

(Keith Batson is a plumber who lives in Easley with his wife, Terry, three children—Mary Margaret, Ellison and Joshua—and when he’s not working he is chasing fur and feathers in God’s great outdoors.)

Easley hunter Keith Batson displays the bear that he harvested during the 2013 black bear still-hunting season in Pickens County.

'I got to my stand that afternoon and was in the stand maybe 20 minutes when I catch movement to my left, and lo and behold, it's a bear!'
Author witnesses an unforgettable scene from a deer stand deep in the heart of Jocassee

By Mike Galloway

I suppose all of us have at some time or other found ourselves in a situation where we stop and ask ourselves, “How in the world did I get myself in such a mess?”

That happened to me on a sunny winter afternoon this past December. I was sitting in a homemade deer stand constructed of treated lumber on a favorite ridge somewhere in Jocassee Gorges. (I’m not going to say exactly where because a guy has to protect his special places). It was one of those postcard days that make you glad to be alive and part of God’s wonderful world. There were not a lot of acorns last year, at least in that area, but a few scattered trees escaped the spring frosts and one such tree, a white oak, was not far from my stand. It was apparent that this tree had produced acorns because earlier in the season two young jake turkeys showed up just about every day usually working their way to the area of that tree where they spent a lot of time scratching and pecking among the leaves. It was pretty obvious they had found something they liked.

There’s something else I need to explain. When the season opened and I first went to my stand, something had taken large pieces of wood out of both the supports and the steps. There were splinters everywhere and the damage was such that I was really nervous about climbing it. An engineer would probably say there were serious concerns about its “structural integrity.” The evidence led me to believe that some buck had decided it was a good place to vent his testosterone-induced frustrations and convince himself that he was indeed a mighty force of nature. (Those feelings usually last until the first fight begins). At any rate, I took it as a good sign since it meant he was probably still in the area and having seen several does, it seemed that it was just a matter of time before that testosterone-dazed, stand-destroying buck showed up.

Basking in the warmth of the late afternoon sun, I was peacefully enjoying mental ruminations about the mysteries of life when out of the corner of my eye there was movement. My heart went from about 60 beats per minute to around 160 and my first thought was “that’s a pig.” It had come around the end of the ridge about 150 yards away. The more I watched it, however, the more it didn’t act like a pig, and it was small and really black. Having left my binoculars (and camera) in the truck, I took a good look through my rifle scope and my thoughts went from “It’s a pig” to “OH MAN – IT’S A LITTLE BEAR!” I lowered the rifle and a few moments later a second one showed up and the two started digging around the base of an uprooted tree. All of a sudden, there was (drumbeat) – BIG MAMA! As it turned out, mama wasn’t all that big, maybe 250 pounds, but then how big does a bear have to be to get your attention?

The three of them fed around for about 30 minutes all the while getting closer and closer. They finally fed up to the turkey white oak which was about 40 yards away. While they were enjoying the same buffet as the turkeys I had a really good chance to watch their behavior. One of the things that impressed me was that while feeding, mama would systematically pause, sniff the breeze, and visually scan the surroundings. As soon as she began this process, the two cubs would freeze until she resumed feeding and then they would go back to what they were doing. They were very well trained. None had any idea I was there, and I was really enjoying the show. Suddenly, mama decided she’d had enough acorns and made a bee line straight for my stand. Her pace was not meandering. It was very clear that she had a purpose and knew exactly where she was going.
feet up separate trees. I believe they could have out-climbed a squirrel. I had no idea bear cubs could climb that fast.

Believing her cubs were now safe, she turned her undivided attention back to me. Not good! We stared at one another for what seemed like an hour but was probably only a couple of minutes. Looking into those pig-like eyes and acutely aware of her raised hackles, I tried to figure out what was going on in her brain. The first thing that came to my mind was—“I bet she is thinking ‘I don’t know what that thing is up there but I’m pretty sure it’s not supposed to be here.’” That thought was immediately followed by, “What is she going to do now?”

A bear, like all animals, does not have a moral compass. There is no “right” or “wrong” in their world. It is all about survival, and every situation is evaluated on that basis. Her brain was processing the data to determine how much of a danger I was to her and her cubs and if her best option was to fight or flee. A mother bear with two cubs up trees is not going to flee. That leaves fight! Whoa—somebody call time out! I figured I needed to do something to help her decide I’m not a threat and that I sure as heck don’t want to fight. Other than the little hello shuffle, I had not so much as moved a muscle—I believe that’s called scared stiff.

With a little effort and a lot of trepidation, I very slowly leaned over slightly from the waist and shook my head very gently in the motion that says “no.” I don’t know if that was the reason she reacted, but she almost immediately turned and walked stiff-legged and still-bristled to where the cubs were up the trees. She stopped, turned around and stared at me for a couple more minutes, and then she visibly relaxed. I guess she had decided that the weird thing sitting on her dessert bar was not too big a problem. That’s when another interesting thing happened. The moment her body relaxed, those two cubs came down the trees simultaneously. She did not utter a sound or make any overt move as a signal—it was all body language. After the reunion the three ambled over the ridge and out of view. As soon as I started breathing again, I did the same—in the opposite direction.

Of all the things that happened that afternoon, the most fascinating was observing the communications between mother and cubs. The cubs were so attuned to her body language that no audible signals were necessary except in what she believed to be an emergency situation. It was every parent’s dream. Instant obedience with no questions. But on the other hand, who wants to live in the woods and eat acorns?

(Mike Galloway is a life-long resident of Pickens County, a graduate of Furman University, and has spent many days of his 71 years absorbing the magic and mystery of the South Carolina mountains. He lives off Rice Road between Pickens and Easley and is enjoying his recent retirement from Miracle Hill Ministries with his wife of 51 years, Linda Greer Galloway. They have what he says are three remarkable children and six fantastic grandchildren.)
Distinctive signs placed on lands managed with fire

Prescribed fire conservation message now seen in Jocassee Gorges forests

"This property is managed with prescribed fire in order to maintain its ecology and to reduce the risk of wildfire."

So say distinctive new signs placed on S.C. Department of Natural Resources' (DNR) lands statewide that are managed with prescribed fire, including Jocassee Gorges. The sign shows a land manager laying down a string of prescribed fire with a drip torch, and silhouettes of animals that benefit from fire--wild turkey, white-tailed deer and swallow-tailed kite--are an integral part of the picture.

The idea for the signs and basic artwork came from Steve Miller of the St. John’s Water Management District in Florida. South Carolina DNR artist Mark Conrardy altered Florida's signs to fit the Palmetto State.

Willie Simmons, DNR Small Game Project supervisor, said prescribed fire provides many benefits to grassland birds such as bobwhite quail. Prescribed fire is often the most practical way to reduce dangerous accumulation of combustible fuels in a forest. Wildfires that burn in areas where fuels have been reduced by prescribed fire cause less damage and are much easier to control, according to Simmons.

A generic version of the prescribed fire sign, without the DNR logo, is available as a PDF file, and the sign can then be customized for other landowners. To obtain a version of the generic sign PDF file, e-mail StoweJ@dnr.sc.gov.

“The objective of prescribed burns is to maintain the ecological integrity of these lands,” said Mark Hall, DNR wildlife biologist, forester and Jocassee Gorges land manager, “and to provide for human safety by reducing the amount of fuel, thereby reducing the chance of catastrophic wildfire."

“Over eons of time, many native plants, animals and habitats in the Southeastern United States have adapted to the presence of recurring fire,” Hall said. “Many species and ecosystems are now rare because of fire suppression over the last century or so. Those systems actually need fire to ensure their survival. We’ve burned about 5,000 acres since 2004 to help restore natural processes.”

Hall emphasized that since prescribed burning requires careful timing and a thorough knowledge of weather and fire behavior, highly trained fire personnel with the DNR and S.C. Forestry Commission manage and conduct all aspects of the controlled burns.

“Besides the ecological benefits of prescribed fire, it also has the added benefit of reducing fuel on the forest floor and lessening the chances of a catastrophic fire, which can threaten homes and people,” Hall said. “Because fire has been suppressed for so long in some places, you get dangerous buildups of fuel and increase the chances for a wildfire that can destroy property and lives. The wildfires we’ve seen across the United States in the last 15 years, due in large part to past fire suppression, underscore the need for prescribed fire.”

By using a prescribed burn—when wind, temperature and humidity conditions are appropriate to remove some of the forest fuel like leaves, pine needles and twigs—fire managers can greatly reduce the chances of a catastrophic wildfire. After controlled burns are completed, the homes and properties close to Jocassee Gorges will be much less likely to be in the path of a wildfire, because the fuel is reduced or eliminated.
Field trip takes a look at prescribed fire sites in South Carolina mountains

The 2014 South Carolina Prescribed Fire Council annual meeting featured a look at the prescribed burning and research going on in the mountains of Jocassee Gorges.

The first day of the annual meeting started late morning Sept. 24 at Jocassee Gorges in northern Pickens County. Mark Hall, S.C. Department of Natural Resources (DNR) Jocassee land manager, wildlife biologist and forester, led a field trip and discussed the prescribed burning and research being conducted at Jocassee Gorges.

"Applying fire in rugged mountain terrain is vastly different from burning in the flatwoods," said Hall, "and every time we use fire on Jocassee we learn a new lesson! It's always a challenge, but it is very rewarding to see fire-adapted plant communities flourish across the landscape."

"The Jocassee field trip was the highlight of the meeting," said Johnny Stowe, DNR wildlife biologist and forester and past chair of the S.C. Prescribed Fire Council.

"Many folks said it was the best field trip they had ever been on. Mark has the unique talent to weave together conservation science with on-the-ground experience into a captivating story."

The S.C. Prescribed Fire Council annual meeting and workshop is intended for landowners, land managers, consultants, and conservation organization staff who use prescribed fire to achieve resource management goals.

"My heart would skip a beat at this first glimpse of Attakulla Lodge as we approached," writes Debbie Fletcher in her book "Whippoorwill Farewell: Jocassee Remembered." Attakulla Lodge is part of the "Hidden History: The Upcountry's Underwater Treasures" exhibit at the Upcountry History Museum in Greenville through Feb. 22, 2015.

Upcountry History Museum exhibit features Jocassee landmarks

'Hidden History' chronicles Attakulla Lodge, Fort Prince George

A special exhibit, entitled "Hidden History: The Upcountry's Underwater Treasures," features some landmarks that are now underneath Lakes Jocassee and Keowee. The exhibit will be on display at the Upcountry History Museum in Greenville through Feb. 22, 2015.

Lakes Jocassee and Keowee are two jewels of the Upcountry, providing an outdoor paradise for boaters, hikers, and campers. But unbeknownst to many, another world lies underneath these waters. Duke Power created these lakes to provide electricity to thousands of South Carolinians. Water flooded the towns that dotted the mountain valleys, forever drowning houses, churches, and stores. The structures may no longer exist, but the communities’ history remains. Attakulla Lodge, a rustic summer resort now under the waters of Lake Jocassee, and Fort Prince George, a colonial outpost, the site of which is now under the waters of Lake Keowee, are two underwater treasures explored in this exhibit on the hidden history of the Upcountry.

Many of the pictures in the Jocassee exhibit are from Debbie Fletcher's two books, "Whippoorwill Farewell: Jocassee Remembered" and "Lake Jocassee." These books are available in the museum's gift shop, through Amazon.com and through Debbie Fletcher's website, www.jocasseeremembered.com.

Admission to the Upcountry History Museum is $5 for adults, $4 for seniors and college students with ID, and $3 for children ages 4-18. Children 3 and under are free. The Upcountry History Museum is located at 540 Buncombe St. in Greenville. Museum hours are 10 a.m. to 5 p.m. Tuesday through Saturday, 1 to 5 p.m. Sunday. Closed Monday.
Bass stocked in Keowee to celebrate Six Mile man's 100th birthday

Lifetime angler and centenarian helps with smallmouth bass stocking

By Victor Blackwell

I had a wonderful time recently getting to assist in the celebration ceremony for J.D. Hatfield's 100th Birthday at Keowee-Toxaway State Park. He is quite an interesting young man.

To commemorate J.D. Hatfield's 100th birthday, the S.C. Department of Natural Resources (DNR), with the help of J.D., stocked 100 smallmouth bass in Lake Keowee at the Keowee-Toxaway State Park boat landing. The birthday stocking was part of an overall stocking at the landing of 2,006 smallmouth bass, which came from the DNR's Cheraw Fish Hatchery. The 8- to 10-inch fish will grow to a catchable size within about a year. Smallmouth bass statewide must be 12 inches long to be kept by anglers.

DNR issued a certificate to J.D., which reads: "Congratulations from the S.C. Department of Natural Resources, James D. Hatfield. In recognition of the 100th birthday of James D. Hatfield on Oct. 14, 2014, and his lifelong interest in the sport of freshwater fishing, the S.C. Department of Natural Resources will release 100 smallmouth bass in his honor during the Fall 2014 stocking season on Lake Keowee."

J.D. Hatfield was born in White Mills, Kentucky, October 14, 1914, served in World War II, with the rank of sergeant, served in France, Germany and many other areas. He has been fishing since the age of 10 years old, and primarily fished for largemouth bass, spotted bass, catfish and bream while they are on the bed. J.D. worked with A&P grocery stores during his working career. He now lives on Lake Keowee near Six Mile.

J.D.'s very first remembrance of fishing was his mom bending a straight needle into a hook, tying with sewing thread to a cane pole and fishing in a small stream. His most memorable fishing experience was catching a 39-pound catfish in southern Indiana on 10-pound test line.

J.D. Hatfield holds the 39-pound catfish he caught in southern Indiana on 10-pound test line.

It was truly an honor to get to spend some time with J.D. Hatfield and his family.

(Victor Blackwell is a fisheries technician with DNR's Freshwater Fisheries Section.)

Editor's Note: Smallmouth bass were introduced to waters in the northwestern part of the state and the central piedmont. These limited stockings have been successful in establishing this non-native sportfish species. The smallmouth bass both ambushes and prowls for food. It is common for them to feed on food organisms that are dislodged by suckers or turtles as they disturb the stream bottom rooting for food. On a national basis, the smallmouth bass is judged to be a favorite of anglers for its exceptional sport fishing qualities. The state record for smallmouth bass in South Carolina is a 9 pound, 7-ounce fish caught on Lake Jocassee in 2001.
National Guard battalion visits Jocassee Gorges

Trip combines training, relaxation
By Cadet Joseph Lazzara

The Jocassee Gorges has much to offer, such as unique plant, fish, and wildlife populations, some of which may be rare or endangered. Recently however, this beautiful area near Pickens was also essential in the training of soldiers from the South Carolina National Guard's 1050th HHD Transportation Battalion.

The 1050th HHD Transportation Battalion conducted a tactical convoy May 27 from McCrady Training Center in Eastover to Jocassee Gorges in order to train soldiers on future convoy operations. The convoy mission was an opportunity for soldiers to refresh their skills on the ways and means to efficiently conduct a tactical convoy. While training at Jocassee Gorges, the soldiers were presented with many unique training opportunities, which included off-road tactical vehicle training amid the beautiful landscapes of areas such as Jumping-Off Rock Overlook.

This recent training event, along with the opportunities it allowed for soldiers to enjoy nature during off-duty activities, allowed our unit to build team camaraderie and to support the morale and welfare of the soldiers of the 1050th HHD Transportation Battalion.

(Cadet Joseph Lazzara serves with South Carolina National Guard’s 1050th HHD Transportation Battalion, based in Newberry.)