

PACK & PADDLE



Winter
December 2016

"The challenge goes on. There are other lands and rivers, other wilderness areas, to save and to share with all.

I challenge you to step forward to protect and care for the wild places you love best." — Dr. Neil Compton

In Memory of Bob Ritchie By Alice Andrews

The article below is the text of Alice's eulogy for Ozark Society Treasurer Bob Ritchie, who died on October 24.

Hey there Bob! Where are we going this weekend? My backpack is fully loaded, the canoe tied down...I'm ready, rain or shine but the weather guru says it will rain.

Did you say...John is leading us to Belle Star Cave over by Mena, where Belle's gang of bandits hid out? Well, rain it did, but that never stopped a determined bunch of Ozark Society adventurers. I'll come back to this tale.

I met Bob and Dana around 1974 at an Ozark Society Pulaski Chapter meeting, never imagining that Bob would become one of my best friends and a colleague for 40 years. Striving to protect and preserve our rivers, forests, wilderness and natural areas in Arkansas and surrounding states through the Ozark Society programs in conservation, education and recreation - 54 years of a proud history.

As most of you know, the Ozark Society was founded to prevent two planned dams from being built on the buffalo river. It was a tough 10 year battle, finally won and resulted in the Buffalo being designated the nation's first national river.

In 1974 through 2016, Bob served the Ozark Society as vice-president and president of the Pulaski Chapter; vice-president and outing chairman for the Ozark Society, leading and/or participating in many river clean-ups, canoe trips and hikes. He was elected the 6" President of the Society in 1984, serving in that position four years. Bob then took on the big task of being treasurer for more than 29 years, a record of unsurpassed, cheerful service to the Ozark Society.

Bob's love and total dedication to the society set an example for all of us. His integrity, loyalty, dependability and wisdom were extraordinary, as was Bob.

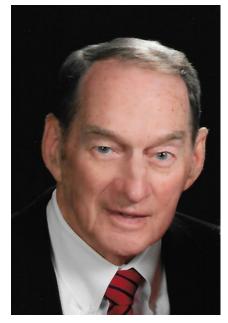
Back to the Belle Starr story...

40 years ago, 15 hardy souls arrived west of Mena in a drizzling rain and hiked in to the Belle Star Cave area in the Ouachitas We had a wonderful day exploring the cave areas, identifying plants and examining rocks in the rain. Somehow, we found enough dry wood to make a cheery and welcome campfire.

The only level ground for camping was an old forest service road with deep ruts and a small torrent running down the road. Tents were pitched in wet mayhem.

Bob's tent was a tarp stretched over a rope tied between two trees with the four corners fastened to stakes. Dinner was cooked under a large tarp before the wet, weary but happy hikers trudged off to our tents to sleep.

What a scene when daylight arrived, Bob sitting on a rock he had pulled into his shelter. His camp stove blazing away, placed on a rock table, heating water for his hot chocolate. There was a significant stream



running through his tent between his legs and the rocks. He said, "Top of the morning! The trail is waiting, let's get going!" All the usually dry creeks were running bank full and every rock ledge had beautiful waterfalls because of the rain - so much rain that we could not return to our cars, left on the other side of a flooded creek. We had to walk off the topo-map to get to a highway where we had left two other cars. Two or three days later, we returned to rescue our unharmed but lonely cars - one of many grand outings.

Meet the unflappable, unsinkable Bob Ritchie! With one exception... Bob was not fond of eating anything green. Aha - a pathway to friendly mischief!

(Continued on Page 3)



Membership Renewal Form for 2017!

Dues are for one calendar year and include a subscription to the Society's newsletter, *Pack & Paddle*, and conservation bulletins. Please note: the Family rate will go up to \$20 beginning January 1, 2017; however if you renew now, you can still get the 2016 family rate. Remit to: The Ozark Society, Inc., P.O. Box 2914, Little Rock, AR 72203 using the form below, or you can renew online at: www.ozarksociety.net - click on the "About Us/Membership" link.

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	lies & Publications: Mary Gordon, (501) 425-4471, mb2rene@aol.cc	
	Coordinator: Ken Smith, (479) 466-7994, kennethsmith616@yahoo.o	
	DEPOSITORY: Special Collections Division, University of Arkansa	
MEMBERSHIP: D for those over 65.	Dues for membership in the Ozark Society are: Individual \$15; Family	\$20; Contributing: \$25; Sustaining: \$25; Life (one-time fee): \$200 under 65 years, or \$100

Chapter membership adds to the fun of Ozark Society membership, but is not required. However, chapter membership requires membership in the Society. Their dues structure is as follows: Mississippi Valley Chapter of Cape Girardeau, Missouri: \$5; Bayou Chapter of Shreveport, Louisiana: \$10; Highlands Chapter of Northwest Arkansas: \$10; Sugar Creek Chapter of Northwest Arkansas: \$5; Buffalo River Chapter of North-Central Arkansas: \$10, or \$5 for email newsletters only; and Pulaski Chapter of Central Arkansas: \$10; Student



Membership: \$5. Mail one check for both Society and chapter dues to: Ozark Society, P.O. Box 2914, Little Rock, AR 72203.

Bob Ritchie

(Continued from Page 1)

We competed in tricking Bob to taste some dish that had hidden green ingredients like zucchini nut bread (he liked it but wanted to know what those little green flecks were). We planned a potluck supper Friday evening at lost valley before a hike on Saturday. Since everyone arrived after dark, Bob could not see the artichokes in my chickenartichoke casserole. He seemed to be enjoying it until his flashlight found the artichokes. He patiently accepted all the teasing. Bob's own specialties included homemade-spiced peaches, Bob's baked beans and his famous Jezebel sauce.

excellent, always prepared, outing leader. He was the ultimate Boy Scout. When canoeing, if anyone tumped a canoe over, Bob was the first one in the water to help rescue swimmers, their gear and canoe. There are too many long and enhanced stories to relate here. Unforgettable hikes, canoe and rafting adventures in Arkansas and beyond. Western white water rivers, hikes in the Smokies, Big Bend, the Colorado River through the Grand Canyon and annual Ozark Society upper Arkansas river trips organized by Bob, Stewart and Catherine.

While planning Bob's memorial service, Dana asked me what I thought Bob wanted to be buried in.

Bob was Mr. Organization-an My guess was a fine suit, vest and tie ellent, always prepared, outing - because Bob was always the weller. He was the ultimate Boy dressed guy. No, Dana explained, at. When canoeing, if anyone Bob's wish was to be buried in his ped a canoe over, Bob was Ozark Society t-shirt, his khaki shorts first one in the water to help and his Birkenstocks. So be it Bob!

In closing, I want to read from an article Bob wrote in the Ozark Society Journal shortly after he was elected President of the Society.

The title: "A matter of responsibility"; the context of the message was the space age providing the first photos of our shimmering blue planet - allowing us to see ourselves and our planet in a new light; giving us a new way to think about ourselves and our interdependence.

(Continued on next page)

A matter of responsibility

Robert E. (Bob) Ritchie, II, sixth president of the Ozark Society.

ig thoughts seldom come easy. Einstein calculated the relationship between matter and energy in the first years of this century, yet how many of us even today think of hours or miles as anything but absolute measures? It takes a while for such new perspectives to sink in.

Whether we're ready for them or not, great leaps of understanding carry us with them. Einstein's work back in the horse and buggy days opened doors leading into the space age. Next thing we knew we were seeing ourselves, our planet, from an utterly new perspective. For the first time we were gazing at Earth as a whole, without the personal, political or even regional differences that separate us in our normal day-to-day nearsightedness. It was a big and beautiful vision.

Like all realizations of vast importance, that one has not found a ready-made niche in human understanding either. We have enjoyed this extraordinary view of ourselves for nearly two decades now it is as familiar to us as the formula "E=MC2" - but as the experience of Einstein's formula also demonstrates, familiarity has little to do with understanding. Einstein taught us that the old, conventional ways of looking at things are not always right. The whole earth photos gave us a new context in which to think about ourselves and our interdependence. But the ethic that ought to accompany such information has been slow to develop. In everything from the growing of soybeans to water impoundments to tree plantations, too many of us still operate on the theory that bigger is better, and that ain't necessarily so.

If we see anything in the view of ourselves from space, it is that we represent an organic unity, a living, breathing sphere that is neither infinite nor invulnerable. The life of the whole depends on the health of the parts. It sounds simple, this notion of an organic planet, yet it has been almost geologically slow to take hold. Against a backfrop of global deforestation, contamination of the seas and nuclear annihilation, such a modest ethic as caring for the environmental character of one's own backyard tends to be obscured. Yet it is for this humble and supremely important purpose that the Ozark Society exists.

By working to preserve wilderness and the last of our free-flowing streams, by introducing new members to the pleasures and intricacies of our immediate environment and by speaking out against practices that threaten this corner of the world, we help to preserve not only our own niche but life everywhere. It is a way of loving and assuming responsibility for the piece of Earth we inhabit. The concept of regional preservation is one of those big, fundamental ideas whose significance is still largely overlooked. It is to our credit that the Ozark Society, one of the first environmental organizations of its kind in the country, has been devoted to this concept for more than twenty years.

PAGE 3

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Pack & Paddle

Ozark Society General Membership Meeting Recap

By Janet Nye

We gathered at Petit Jean State Park October 7-8. The O.S. Board met Friday night at Mather Lodge to discuss the many issues we are concerned about, including the hog factory on Big Creek. This was a great evening of good food, sharing ideas and making decisions.

Saturday we gathered at pavilion A for our general membership meeting. There were 23 of us bearing the wind and chilly temperatures. Alan and I have been to multiple general meetings since we joined the Ozark Society in 1981, but this meeting had a depth I don't ever recall. As our president, Alan Nye, guided us through the agenda, we all shared our ideas and our questions.

It was more of a conversational meeting where those attending were comfortable expressing their ideas and opinions. It felt very comfortable bringing back memories of our first years in the Society with all the amazing founders and leaders making me feel like we were part of the family.



At this meeting, we had some who have been around for years and we had some new folks. We united over our founding principal of conservation.

Prior to our traditional potluck, we heard the early history of Petit Jean State Park and Mather Lodge told to us by a very talented storyteller and interpreter at the park. He had us in the palm of his hands giving us the details of how the park was created, and who the key players were. We sat in the breezeway of the CCC built Mather Lodge soaking up the stories and he left us wanting to know more. Most importantly, he made us very proud of those who saw the vision for the park and saved those forests and hillsides from the Ft. Smith Lumber Company.

Before we indulged in an amazing potluck, we voted on Ozark Society officers for 2017-2018 (see article on page 8). After the potluck, we had a wonderful laughter filled and insightful story telling time. We heard tales from the Colorado trip, the early days of the society, Buffalo River trips, hikes, etc. Some tales were beyond belief and some were believable because of the person telling the tale. It was a true Ozark Society family evening, which I look forward to being a part of for years to come.

Bob Ritchie-Continued

"We see a living, breathing sphere that is neither infinite nor invulnerable. The life of the whole depends on the health of the parts. With global deforestation, pollution of our oceans and nuclear annihilation, such a modest ethic as caring for the environment of one's own backyard tends to be obscured. Yet it is for this humble and supremely important purpose that the Ozark Society exists.

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and wilderness, by introducing new members to the pleasures and intricacies of our immediate environment and by speaking out against practices that threaten this corner of the world, we help to preserve not only our own niche, but life everywhere.

"It is a way of loving and assuming responsibility for the piece of earth we inhabit."

These inspiring and heartfelt words are the Bob we all knew and loved. Oh, how we'll miss him and wonder if he is leading a "clean-up"

somewhere in space.

To all of you remembering Bob today, he would want me to remind you to find a way to get your children and grandchildren involved in caring for our precious Planet.

If you would like to make a memorial donation in Bob's honor, please make out a check to "Ozark Society" and write "Bob Ritchie memorial" in the memo line. Checks should be mailed to: Alan Nye, 12 Platte Drive, Maumelle AR, 72213.



Ozark Chinquapin Along the Buffalo River

By Fred Paillet, Education Chair

The Ozark chinquapin was once a tree that loomed large in Ozark Mountain folklore. This tree, a variety of chestnut, produced an abundant and reliable crop of delicious nuts for man and beast alike. On top of that, all varieties of chestnut wood are naturally rotresistant and so chinquapin wood was the ideal material for fence posts and utility poles. Unfortunately, an alien pathogen was found to be killing chestnut trees around New York City in 1904. All efforts to control chestnut blight failed and the disease spread across all of eastern North America, arriving in east Texas as late as 1970. My personal interest in chestnut started with studies in New England and then spread to both chestnut and chinquapin in Virginia. When I decided to create a retirement academic position here in Arkansas, I naturally expressed an interest in learning more about the Ozark chinquapin. Contacts at the Buffalo River office in Harrison subsequently invited me to study that tree where it occurred in their park. Along the way, I (with the help of a series of intrepid, heat and chigger resistant graduate students) discovered a lot about our local chinquapin. Here's a short synopsis of what we found out.

One of the most significant discoveries is that our chinquapin was a real tree. This was in doubt because another variety of chinquapin with leaves and nuts that look a lot like those of the Ozark variety grows as a shrub in the Appalachians. We were able to find the intact remains of Ozark three

feet in diameter. This was no shrub! We found a number of fallen dead chinquapins that were intact enough to measure their structure in detail and then use our measurements to flesh out what the tree would have looked like in life (see figure). The tree was as big or bigger than oaks and hickories growing on the same dry ridgetop sites today. Chinquapin had a single dominant trunk, but also a series of little dwarfed stems arrayed around the base, which must have given the tree a distinct look that was quite different from that of other trees growing with it.

We soon found that our large chinquapin trees died in 1957. How could we do that? The simplest way was to find the remains of a large dead chinquapin. Then find a nearby oak. The first time we did this was along the access road at Turner Bend. This white oak tree was about 8 feet from the base of the chinquapin log. We took a standard increment core from that tree and looked at the growth ring structure. You could easily count backwards from the sampling date (2010) to a set of unusually thick growth rings starting in 1958. This was a clear and unambiguous indication that the sudden death of the big chinquapin had dramatically improved growing conditions for the oak it had once overshadowed. We saw the same results at other locations in northwest Arkansas - the year in which competing trees saw improved growth was always 1958. Thus, the now dead chinquapin trees must have died in 1957.

In spite of the blight, chinquapin is very common on the Buffalo River.

How can that be? It turns out that the blight fungus is inhibited by soil bacteria. So chinquapin roots can re-sprout and grow for a few years until blight finds them and kills them back to the ground. Robert Frost talked of chestnut trees "smoldering at the roots". But he spoke in error. My previous studies showed that the large chestnut trees originally killed by blight did not normally generate new sprouts. They just died. The same appears to be true for Ozark chinquapin. sprouts we see today represent "old seedlings". These are seedlings that represent the ongoing reproduction of the tree in the years before blight arrived. This has important implications for park management in that there is a tendency to treat the tree as endangered and requiring special management plans. such plans are needed because the tree survives as a species in great abundance. It's holding out on its own just fine, thank you. It just cannot get big enough to produce nuts. This is the worst of both worlds - the tree cannot reproduce sexually so as to evolve blight resistance on its own, and blight susceptible trees are not eliminated from the population because their root systems survive so well. The real recovery of our chinquapin will depend on an active breeding program where controlled inoculations with a standardized source of disease allows the winnowing out of the susceptible majority of trees to identify the few trees with the blight-resistance genes we want to keep.

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PAGE 5

Pack & Paddle





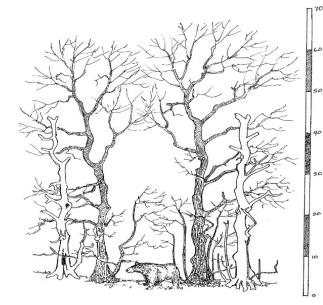
Bob Ritchie where he loved to be - near a river with some of his friends.

Photos by Catherine Tolson

Ozark Chinquapin (Continued)

One other discovery was the observation that hypovirulent blight has arrived. Hypovirulent blight is a form of blight that has been infected with a virus that debilitates it. Trees can survive with blight if hypovirulence has taken hold. The results are not pretty – the trunks of the infected trees are covered with nasty looking swollen sores. But the tree lives and can occasionally even produce nuts. The problem is that both blight and virus are mutating. It is not clear which one will win out. Hypovirulent blight first appeared in Italy, and has since taken hold so well that Italian chestnuts can remain an important agricultural crop for European markets. So there is hope for the Ozark chinquapin, too.

The latest chinquapin work on the Buffalo River was to investigate chinquapin mycorrhizae – the fungal nodules on root tips that most trees require for the proper absorption of the soil nutrients they need. This is a true symbiotic



Reconstruction of blight killed Ozark chinquapins based on measurement of fallen logs and crown shape taken from the largest living chinquapins in northwest Arkansas (scale is in feet).

relation where the fungus and tree work for each other's advantage. Collecting samples is not easy, however. I got to know my shovel really well while helping a colleague collect the samples he needed. You have to start at the base of a tree and follow a root out to its very tip to know what tree you are collecting from. The results to date have allowed us to identify an amazing array of fungal species in chinquapin mycorrhizae. Certainly many more than are typically found on the oaks that grow with the chinquapin. This may have something to do with the fact that the latest DNA studies show Ozark chinquapin has the most ancient genetic lineage among the three North American chestnut species. Meanwhile, the microscope and DNA work continues and we hope to make comparisons with mycorrhizae sampled from other chestnut species.

The results we have obtained so far show that Ozark chinquapin was a real tree and not some kind of wimpy shrub. Now let's hope that the plant breeders starting to work with chinquapin can attain the kind of results that The American Chestnut Foundation has begun to show for that more widely noted American tree.

Colorado High Adventure Trip — July 16-22, 2017

The 2017 Colorado High Adventure Trip will be held at Cascade Campground from Sunday thru Saturday, July 16 - 22. The campground is located in the Collegiate Peaks area of the San Isabel National Forest on County Road 162 west of Nathrop, Colorado. Please be sure your reservation arrives by May 31 at the latest. The trip is limited to 60 people.

You should plan to <u>arrive at the campground no earlier than 1:00 PM</u> on Sunday July 16. If you prefer motel accommodations to camping, you can make reservations at Mount Princeton Hot Springs Lodge (719-395-2361) or other nearby motels or bed & breakfasts. Meals will be provided for all trip participants, regardless of whether you are camping or staying elsewhere. The meals will begin with dinner on Sunday July 16 and end with dinner on Friday July 21. If you have special dietary needs or preferences, you may need to bring your own food as the menus are planned well in advance of the trip.

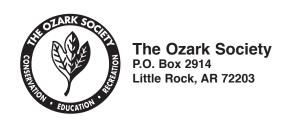
There will be a variety of outings from which to choose: hiking, fishing, mountain biking, horseback riding, sightseeing, and rafting or boating on the Arkansas River. If you plan to canoe or kayak, you should bring your own equipment. There are rafting outfitters nearby for those of you wish to raft. You will need to make your own arrangements with the outfitters.

You must be an Ozark Society member to participate in this trip. If you are not already a member, you may join by sending \$15 annual dues along with trip fee of \$175 for campers and \$125 for non-campers. You will be required to complete the information form below for the trip.

RESERVATIONS WILL BE ACCEPTED BETWEEN JANUARY 1-MAY 31, 2017. Confirm your place on the Colorado outing by sending your information form and a check made out to the Ozark Society for the appropriate amount to: Catherine Tolson, 216 Vinwood Rd, Monroe, LA 71203.

If you have any questions concerning the Colorado trip, contact Catherine Tolson at 318-680-9280 or catherine. tolson@comcast.net

Include check to Ozark Society for trip fees with form. Personal information: Last name First name Mailing address Email Camping: Yes No (Circle) Camping equipment (if applicable): (Circle) OR Tent Trailer Small Length feet Large Other information (camping with, traveling with, etc.):



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Please Note:
If you would like to receive Pack & Paddle ONLY by email, not through US Mail, please contact Mary Gordon at mb2rene@aol.com.

CONSERVATION UPDATE BY ALICE ANDREWS

Following the Electrical Resistivity Imaging (a means of looking below ground surface), at C & H Hog Farm, a

NEW OFFICERS

The new Ozark Society Board of Directors was elected at the fall General Meeting at Petit Jean Mountain. The new officers for 2017-2018 are:

President: David Peterson
Vice President: Lucas Parsch
Financial Chair: Kay Ewart
Recording Secretary: Sandy Roerig
Conservation Chair: Alice Andrews
Education Chair: Fred Paillet
Membership Chair: Chris Kline
Communications Chair: Carolyn Shearman

Arkansas State Directors: Bob Cross and Ed

Vollman

Louisiana State Directors: Roy O'Neal and

Catherine Tolson

Missouri State Directors - POSITION OPEN

fracture in the karst with rapid movement of liquid hog waste was suspected. Confirmation by drilling a "borehole" to collect core samples for testing soil and water, is required. ADEO contracted with Harbor Environmental to do drilling studies September 2016. Test results were presented by Harbor December 1, 2016. No "smoking gun" results however many questions have been raised about the study. C & H would permit only one borehole instead of seven that should have been drilled based on the number of square feet in the two waste storage ponds. This is similar to "hunting a needle in a haystack"). Public is invited to ask questions until December 16th at noon. Google: Arkansas Department of Environmental Quality, then click "Whats New at ADEQ". Click "Final Drilling Study Report"; Next, click "Harbor Drilling Study Presentation." Look for "Harbor C & H Hog Farms Drilling Study Summary."

Send any questions you wish to ask to: drillingstudyquestions@adeq.state.ar.us.

Stay tuned to the website and / or next Pack & Paddle info on ADEQ projects in progress. Merry Holidays!