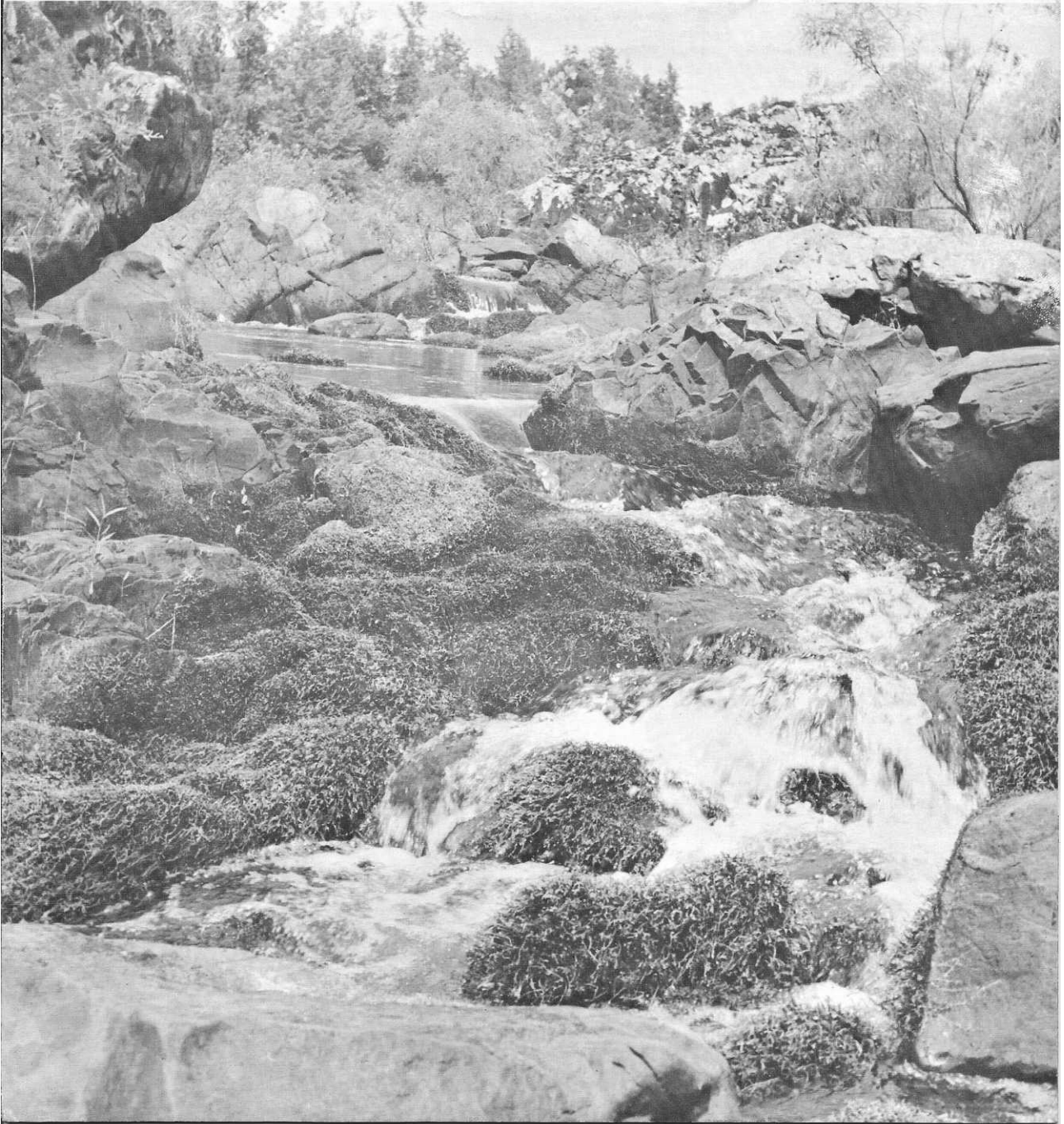


Ozark Society Bulletin

PARKERS FALLS, CADDO RIVER

Spring 1968



OZARK SOCIETY BULLETIN

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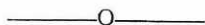
P. O. Box 38, Fayetteville, Ark. 72701

Joe Marsh Clark, Editor

1724 Rockwood Trail, Fayetteville, Ark. 72701

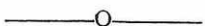
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Pen drawing by David Plank.



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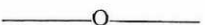
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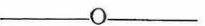
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At a recent board meeting Colonel Jack Diggs was appointed First Vice-President in charge of organization; Richard D. Murray was appointed Second Vice-President in charge of outdoor activities. These appointments are temporary until confirmed by the membership at the Spring Meeting.

The Ozark Society Spring Meeting

"Problems In Conservation"

MATHER LODGE PETIT JEAN STATE PARK

APRIL 6 - 7

Saturday, April 6

- 9:00 a.m. Registration
- 10:30 a.m. Opening Remarks: DR. NEIL COMPTON, President
- 10:45 a.m. ROBERT E. APPLE, President, Arkansas Wildlife Federation.
Conservation in relation to the Game and Fish Commission; the revitalization of the Arkansas Wildlife Federation
- 1:00 p.m. DR. HOWARD K. SUZUKI, University of Arkansas Medical Center.
The disappearance of Arkansas' bottom land hardwoods
- 2:15 p.m. COLONEL CHARLES STEEL, district engineer, U. S. Army Corps of Engineers, Little Rock
The Engineer's role in conservation as evolving in present outdoor recreational trends
- 3:30 p.m. JAMES R. TUDOR, editor Marshall Mountain Wave, Marshall, Arkansas. The disadvantages of Buffalo National River as they appear to the Buffalo River Improvement Association
- 4:30 p.m. CLAYTON N. LITTLE, Chairman, Stream Preservation Committee.
The case for a Buffalo National River.
- 7:00 p.m. BOB KIRKWOOD, Arkansas State, Conway. The need for conservation education in the schools
- 8:00 p.m. MR. AND MRS. JOE MARSH CLARK, Fayetteville. Botanical studies in the Ozarks
- 8:30 p.m. DR. NEIL COMPTON, President, The Ozark Society Slides showing how technology and private enterprise threatens to wreck the Buffalo River area.
- 9:00 p.m. HARRY PEARSON, Pine Bluff, National Council on the Arts grant winner.
Slides of the Buffalo and Caddo Rivers

SUNDAY, APRIL 7

9:30 a.m. President's Address

9:45 a.m. Business Meeting

(Members of the Delta Chapter of the Ozark Society will be on hand to serve as hosts and hostesses at the meeting, to answer your questions about accommodations, to arrange a dawn hike on Sunday morning up Petit Jean Canyon and to welcome our guests).

BLUE WATER

J. Nix and W. W. Everett

Department of Chemistry

Ouachita Baptist University, Arkadelphia, Arkansas

"It is now, I believe, generally admitted that the light which we receive from the clear sky is due, in one way, or another, to small suspended particles which divert the light from its regular course." Such was the beginning of Lord Rayleigh's (1) classic explanation of the blue sky. Further investigation of this phenomenon has led to the development of a very useful scientific tool as well as to furnish an adequate explanation for the color of many natural phenomena such as the blue color of some natural waters. The science which developed is referred to as light scattering.

When light is scattered by very small particles suspended in a medium, certain colors are diverted from the original direction to a greater amount than others. Light of a short wavelength (blue light) is scattered more than light of a longer wavelength (red light). This selective scattering of blue light in media containing small suspended particles causes the suspension to appear blue even though no blue pigment is present. This effect is generally referred to as the Tyndall effect and the color produced as Tyndall blue (2). A few relatively common examples of Tyndall blue are the blue of cigarette smoke, skimmed milk, blue eyes, and the blue of some bird feathers. (3)

In order to observe the Tyndall effect, the observer must view the scattering material from the same sides that the light enters. If the suspension is viewed from the back side, thus looking through the material toward the light, a reddish color can be produced. The red color can be seen since the blue light has been selectively scattered out and does not pass through the suspension. Thus a suspension of small particles dispersed in some medium appears blue if observed from the side of the incident light but if viewed from the side opposite the incident light the material can appear red.

The extent of the Tyndall effect is dependent on the size of the particles and the number of particles present in the media. Small particles cause a greater degree of color selection and hence produce a more intense blue. As the size of the particles increase the suspension begins to take on a grey to white color indi-

cating very little or no selective scattering. Particles approximately the same size as the wavelength of blue light ($5/100,000$ cm) are generally accredited with the phenomenon. (3). An increase in the number of particles present also enhances the blue color. (3)

Some of the streams in the Ozark and Ouachita Mountain regions of Arkansas have been noted to possess a pale blue color during certain times of the year. There is little doubt that this coloration results from the Tyndall effect produced by very small particles suspended in the water medium. In this case the observer is viewing the stream from the same side as the light source. The effect would appear more pronounced if no light were originating from behind the suspension. Thus the blue color should be more intense if the stream is dark and does not reflect light from the bottom of the stream. If light is reflected from the bottom of the stream bed, the combination of light coming from both directions would tend to cancel out the Tyndall effect and the suspensions would appear milky and white.

Almost all natural waters contain some suspended matter. The water chemist measures the amounts of suspended matter in terms of turbidity of a water sample. The particulate matter present may have a variety of origins ranging from the erosion of soils to actual in situ formation of the particles from dissolved species in the water. The particles may be composed of silica, calcium carbonate, iron oxides, clay, organic matter, or simply rock which has been ground up by stream action and weathering processes. The time of year when the

blue coloration is most evident in mountain streams strongly suggests that the origin of the particular matter is the winter influx of surface runoff water. In areas where shale (and other aluminum silicate type rocks) are currently weathering, clay minerals can be formed and transported by runoff water. The size of the clay particles formed in the weathering process is generally no larger than 0.0005 cm and ranges down to colloidal sizes. (4)

During periods of extended runoff clay particles are washed into the streams and are kept in suspension by the agitation of the moving water. In many cases the particles are small enough to produce the Tyndall effect and the stream takes on a blue coloration. If the clay particles are larger, there is no color selection and the stream appears milky white or grey. Some natural waters contain dissolved organic matter which imparts a yellow color to the water. If the blue due to light scattering by suspended particles is combined with this yellow pigment, it is possible that a green coloration of the stream could result. (3) This combination is known to be the cause of the non-iridescent green bird feathers.

Thus the phenomenon of light scattering contributes a great deal to the variety and aesthetics of a natural stream.

LITERATURE CITED

1. Rayleigh, Lord, *Phil. Mag.*, 41, 447 (1871).
2. Stacey, K. A., *Light Scattering in Physical Chemistry*, Academic Press Inc., New York (1956).
3. Mason, Clyde W., *J. Phys. Chem.* 27, 201 (1923).
4. Mason, Brian, *Principles of Geochemistry*, John Wiley and Sons, Inc., New York (1962).

DICK AND LORRAINE EWING ON THE CADDO



RICHLAND AND THE DEVILS FORKS

In late October, immediately following the Ozark Society's float with the OWWC on the upper part of the Buffalo River, a group of six hiking enthusiasts from Kansas City took off for the Forest Service camp ground on Richland Creek. The day was typical of October, warm and sunny, with the trees putting forth their last effort at a color splurge.

The camp ground at Richland Creek was as beautiful and as deserted as we had remembered it, even though it had suffered some slight "improvement" by the Forest Service.

Fortunately we arrived early in the afternoon; organizing our back packing equipment took much longer than we anticipated. To say that we were eager would be an understatement, for we had talked and planned for this trip many months. Ken Smith's book, *Buffalo River Country* had whetted our appetites, not only to see Richland Falls and the Twin Falls of the Devils Fork, but for what might lie upstream from these points as yet unrecorded by any who had wandered so far.

By a previous plan carefully laid out on the living room floor we were to move by car on Monday morning to the first crossing of Richland Creek above the Forest Service camp north of Ben Hur. There we would park our cars and work our way down stream, investigating as much of the forks of Richland as time and energy would permit.

We were all up long before daylight, made our breakfast and packed our gear by the light of the moon. Skies that promised us a perfect day at dawn soon began to cloud over and by the time we reached our starting point it was overcast and cool. At 8:45 a.m. we started down the old logging road that borders Richland Creek. Within yards we came to the first shallow crossing of Richland, removed our packs and then our hiking boots and waded into the icy water, picking our way gingerly on the slippery rocks.

We soon came upon a conspicuous no trespassing sign and wondered if perhaps our hike was already over. However, we soon found the farmer who had posted his land. He was friendly enough and was quick to tell us the signs were the result of losing livestock

to foolish guns. He had lost a stud horse and a cow and wasn't taking any more chances. After we assured him we carried no weapons he not only granted permission to continue our hike but tried to describe the spot where we should turn off the road to reach the falls.

The scenery improved and a feeling that we were truly approaching a wilderness came over us all. The constant crossing and re-crossing of the stream took time and we wondered if this was to be the pattern for the entire trip. We took time to examine an abandoned farm, the implements rusting in the fields, the barns collapsing from old age and the hand hewn log house now used only for the storage of hay. This homesite had been well selected for a little spring trickled near the roadway and the delapidated porch looked out across the clearing at a crescent shaped valley rimmed with varicolored bluffs. Peace and serenity permeated the air and we wondered what had lured this farmer from such a place.

Nothing the friendly farmer described to us fit into any pattern but the map showed we couldn't be far from the Long Devils Fork.

Suddenly we sighted an outcropping of pedestal like rocks protruding from the hillside. Leaving the trail for a few minutes we viewed the canyon below us from this vantage point. The gorge carved by Long Devils Fork was very steep and we speculated that we were near the junction of the two forks. (Later we found we were right above the falls but the elusive valley was actually a two hour hike from there.)

From the lookout the road veered downward and below us was Long Devils Fork. We dropped down the steep bank onto the rock shelf that carried these crystal waters to a series of little water falls and were spell bound by the beauty of it all. Here was truly a spot in the wilderness untouched by the hand of man — a spot too perfect to pass. The packs came off in hurried sequence and the lunch supplies soon adorned the rocks. How good it was to quench our thirst in such a stream as this! Lunch was unhurried and as we ate we talked of the trail we had covered and speculated on what lay ahead. We

were very near the falls and by crossing the stream should soon be within earshot.

Most of us had read and re-read Ken Smith's *Buffalo River Country* to the point that we had memorized the chapter entitled Long, Lonely Richland. We knew that Ken had mentioned another falls described to him that was not too far upstream from the double falls of the Devils Fork. It wasn't long until our lead man called out in delight, "Here it is!" Just as Ken found himself fascinated by waterfalls, so we too, fell into this same fascination. Perhaps the remoteness of the falls on Long Devils Fork magnified its beauty, for to us it was superb. It was wide (about 30 feet) and fell 6 or 8 feet into the pool below. We dropped to the level of the pool and found ourselves in the box canyon that Ken had mentioned. Here the going was exceedingly rough. Each man set out on his own determined to find the "easy" route down stream but no matter which way we turned there were boulders to climb and deep crevice like openings to make our way difficult. This would have been considered a tough hike even without packs. Going on all fours as some of us did when the descent was steep and the footing shakey, made the packs seem twice as heavy and the twisting and turning it took to guide the high loads around the big rocks and under the low branches of overhanging trees taxed our patience and our backs. But the reward we received after we scrambled out of the canyon was well worth the energy. Without a warning we found ourselves high above the Devils Fork looking down on the twin falls and the union of the two beautiful streams. Big Fork was to our left and Long Fork to our right.

Seeking to get a closer look and a better spot for pictures we ventured near the edge of the precipice only to find a deep hole about 5 or 6 feet across, partially filled with broken timber and obviously partly rocked in by the hands of man. This must have been a primitive trap used by Indians, for an animal, driven to this point above the falls had to make a suicidal leap over the edge or stumble into this man made trap. As we stared into this hole some 10 or more feet deep we wondered what manner of bones and other remnants of the past we might

discover if we were to bring a rope and descend to the bottom.

With little effort we dropped now to the edge of the Big Devils Fork, standing very close and looking across at Long Devils Fork. From this vantage point it appeared we had truly come to the end of the line, for the bluff dropped abruptly below us and no obvious route to the bottom was in sight. Eventually we made our way down the steep incline, partly by weaving from tree to tree and partly by sliding—being very careful to lean forward to protect our packs. Once at the edge of the pool we dropped our loads and scrambled across the stream for a closer look at the falls. Just as Ken had said, it was an easy trick to walk behind the falls and in a very few minutes we had made the complete circle. We wondered how long this magnificent jewel could be preserved, what destiny awaited the twin falls of the Devils Fork and what we could do to keep this spot inviolate forever.

The beauty of the falls stayed in our minds as we picked our way down stream to the junction with Richland Creek, less than a quarter of a mile away. The crossing, enlarged by the waters of both forks and Richland, was by far the most difficult. The women shed their packs, and, for this last crossing of the day, donned sneakers in order to stand against the swift current and the slippery, uncertain footing. The packs were handed across in bucket brigade fashion and the search for suitable camp sites was begun.

The gravel bar that we had counted on for a camp spot was windswept and rough and unsuitable. Choosing a better spot wasn't easy for posion ivy stalks were everywhere. Some of us needed properly placed trees from which to suspend shelters and others needed open space to spread their poly tarps. In the end, we all chose camp site in the middle of the long abandoned logging road and it wasn't long until our temporary homes were in readiness.

Rain was still threatening when we started our hike the next morning and we hurried along lest we get caught in a storm. Only the crossing presented any problems in getting to the falls. After our boulder scampering of the previous day this trail was easy to follow and in a few minutes we came upon Rich-

land Falls. It was an impressive sight even though it lacked the volume of water pictured in Ken's book. As we made our way back across Richland we wondered how others had made this crossing with higher water, for we waded in above our knees and fought the uneven bottom and the swift current with each step.

It was 9 o'clock as we shouldered our loads and started down river towards the Forest Service Camp, wondering what route we should take. The many crossings necessary to use the valley route discouraged us, and, hopefully, we began to climb. Once committed to the upper route it seemed easier to go higher than to drop down into what we knew to be a very rugged route. For a time we walked under a sheer limestone bluff and looked out across the valley of Falling Water Creek. We knew camp was close

and we knew if we climbed we had to come to the road, but we were weary and the miles went by slowly. There was constant danger of a twisted ankle or a bad fall and we picked our way carefully as we made the final, steepest of climbs to the road.

Hurried by an ever threatening sky, we made good time in that last mile and a half. We clambered into the waiting truck just as the sky let go with its rains. It was good to be in out of the weather, good to rest our aching feet and our backs, but better than all that, it was good to know we had accomplished what we set out to do. We had come into the falls from above, we had seen upper falls, twin falls and Richland falls and we were satisfied beyond any shadow of a doubt that Arkansas is truly wild and wonderful and just waiting to be explored.

Margaret Hedges

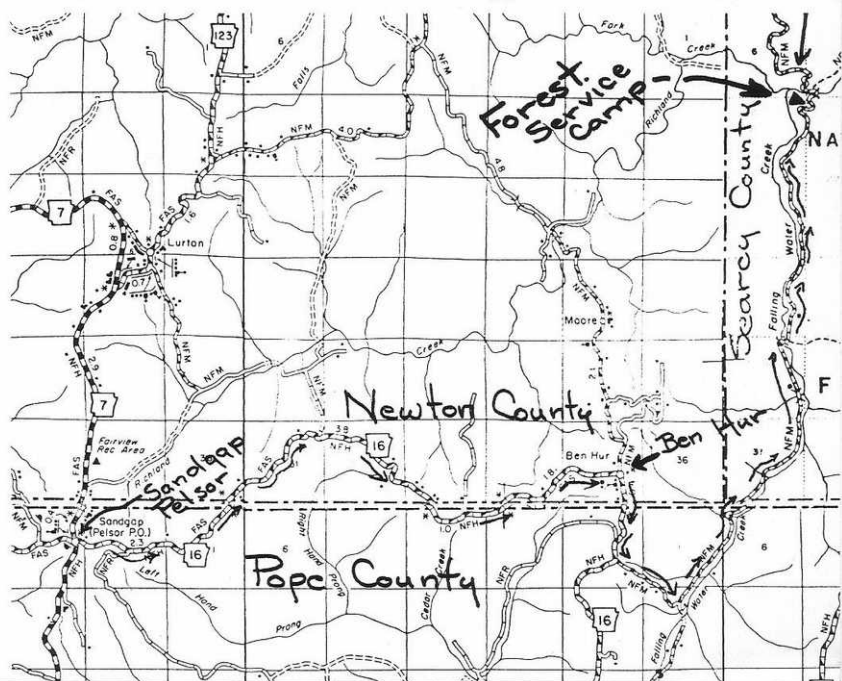
RICHLAND CREEK HIKE

Sunday, April 28 Harold Hedges, Leader

We want to start from base camp by 8 a.m. We prefer that those making the hike arrive on Saturday.

Base camp will be at the Forest Service Camp on the south side of Richland Creek near the junction of Falling Water Creek. The best route is in from Pelsor on Hiway 7. Go east on Hiway 16 to Ben Hur, then south and east about two miles to Falling Water Creek. Proceed north past the falls, and to the camp grounds one quarter mile upstream from the Richland Creek bridge.

The Delta chapter plans to send some of its members to help lead the way in from the north side—a new approach.





WILD AZALEAS

BOTANICAL NOTES

Of the many excursions into Lost Valley the most memorable one was last spring, May 6, when high water caused us to cancel our scheduled float from Ponca to Pruitt and substitute a hike into Lost Valley. At first this didn't sound too exciting as we have visited the area every season of the year and thought we were familiar with its every aspect. We have photographed the flowers starting with bloodroot and hepatica in the spring and finally recorded the beauty of the brilliant cardinal flower in the late fall.

But this early May walk with the rain clinging to the lush vegetation suggested a visit to a luxuriant rain forest. The contrasting greens and grey greens of lichens, mosses and liverworts took on a new brilliance in the subdued light. Droplets of water clung to leaf surfaces and adorned twigs and grasses. In rock crevices the small fronds of resurrection fern, which curl up tight and rigid in dry spells, were unfurled and added another texture among the mosses and lichens. From the cliffs above, streams of water poured over the face of the bluff through pre-carved flumes. Above Cobb Cave, Eden Falls zigzagged wildly down four levels of the bluff.

We were also rewarded by seeing concentrated in this area some of Arkansas' more unusual flowering trees and shrubs which share

the same blooming date. As we followed the old logging road bordering the dry bed of Clark Creek, we suddenly became aware of the sweet, penetrating fragrance of wild azalea, *Rhododendron roseum*. Following our noses, we turned right, crossed Clark Creek, and there on the steep wooded slope above the stream bank, the shrub was growing in great profusion. Common names are election pink, wild honeysuckle, and mountain azalea; it belongs to the heath family, *Ericaceae*. Flowers appear before or with the emerging leaves and bushes vary in color from deep pink to near white (we saw the white form on upper Kings River).

Members of the heath family grow in acid soil. When you consider that Clark Creek cuts through the Boone cherty limestone formation, it is evident that the lime has been leached away, leaving the siliceous chert residue which is acid, as is sandstone. Three common members of this family found in Arkansas oak - hickory and oak-pine woods are the low growing huckleberry or blueberry, *Vaccinium vacillans*, which has sweet juicy fruit much prized for pies and jam; deerberry or squaw huckleberry, *V. stamineum*, which grows much taller and in some areas is called high bush huckleberry. I found the fruit dry, seedy, and lacking in flavor, but the deli-

cate graceful bush with panicles of drooping bell shaped flowers with prominent protruding stamens is lovely to behold. The third member of this genus, farkleberry, sometimes called sparkleberry, *V. arboreum*, which has received much prominence on the Arkansas political scene, is a coarse shrub or small tree with lustrous, thick leathery leaves and dry, hard berries with stone-like seeds. It grows in dry, rocky woodlands and exposed cliffs.

Approaching the natural bridge I scanned the 30 foot ledge to the right to see if the wild gooseberry was still in bloom. It had leafed out but above it was a smoke tree, the name suggested by the brownish grey smokelike appearance of the fruiting sprays. The botanical name is *Cotinus obovatus*; it is a member of the cashew family, *Anacardiaceae*, as are members of the genus *Rhus* which includes sumac and poison ivy. Trees of *Cotinus* are either staminate, male, or pistillate, female. *Cotinus* grows in calcareous areas from Alabama and Tennessee, southwestern Missouri, northwestern Arkansas, eastern Oklahoma to central Texas. Its range extends inland possibly a hundred miles from the old gulf shore line; ecologists suggest that *Cotinus* is an ancient genus. I first saw it growing on the Hogshooter Limestone above the Arkansas River in Tulsa County, Oklahoma. The most venerable specimen I have seen was on a limestone ledge between the two falls of Hemmed in Hollow. I first mistook it for an old gnarled juniper but one remaining live branch with the characteristic obovate leaves of *Cotinus* put me straight.

Yellowwood, *Cladrastis lutea*, is a member of the legume family. Two trees were in bloom in the valley; one grows near the natural bridge and the other is on a high ledge by Eden Falls. The following quotation is from Steyermark: (1963. Flora of Missouri)

"Ranges from Alabama, Georgia, North Carolina, and Kentucky to Tennessee, Indiana, Illinois, and Missouri. Thousands of these handsome and rare trees have been exterminated from their original stations in Missouri by dams created on various sections of the White River in the past ten years."

Maxine Clark

BIRDS AND BIRDWATCHERS

The gentle sport of birdwatching is enjoying unprecedented popularity not only in Arkansas but nationwide. The U. S. Census Bureau has announced that there are more than 11 million birdwatchers in the country and predicts that by 1970 there will be more birdwatchers than hunters! These people come from all walks of life. They are alike only in their enthusiasm for the out-of-doors and their curiosity about the kinds and habits of birds. Most are socially inclined and prefer to take field trips in groups led by those with more experience in the fine techniques of song and field mark recognition. Some specialists can tell types of sandpipers on a mudflat by their silhouettes, or certain sparrows by the slightest "chip" note. There are those like Thase Daniel of El Dorado, Arkansas, who will sit in a canvas blind all day to get a photograph of a new species,—people like Ben Coffey and his wife Lula of Memphis who will drive through the Ozarks all night on a moonlit June night listening for and recording the range of the Whip-poor-will. Some like Charlie Johnston at Little Rock have feeding stations where they band birds with aluminum bands from the U. S. Fish and Wildlife Service and thereby participate in a nationwide research program. Personally I enjoy all these pursuits. But at the same time I feel an increasing feeling of desperation because man's disturbance of the natural world is winning the race over his increasing appreciation of it. Perhaps this is where the birdwatcher's interest overlaps with that of the Ozark Society.

The Ozarks offer the birdwatcher a very diverse avifauna. There are approximately 200 different kinds of birds that are of regular occurrence in the 20 counties that comprise the Arkansas portion of the Ozark Plateau. You can't go out on any one day and expect to see all 200 species. However in late April and early May the probability of finding a large number is higher than at any other time of year. At that time some of the winter residents have not left, most summer birds have arrived, and the migration of transients is at its peak. The Oklahoma Ornitho-

logical Society schedules a field trip to Devil's Den State Park in Washington County each year at this time. I have always thought that this is a great compliment to our region. Early morning walks through any patch of woods at these times offer a kaleidoscope of migrants that changes each day as new birds come in and old ones leave.

The most captivating of the migrants are the many kinds of warblers. They are in full breeding plumage and full song. Even the most jaded cynic could not help but be impressed by their beauty and their tiny size. They migrate at night for several hundred miles without stopping. Then giant waves of them become grounded by adverse weather conditions. After several days of intensive feeding while each builds up several grams of fuel in the form of fat tissue, they continue on their journey. A Palm Warbler that normally weighs 14 grams may weigh as little as 8 grams after a strenuous migratory flight.

Hundreds of thousands of birds migrate overhead unnoticed on clear spring nights. Some like the thrushes call to one another and can be heard. Tall buildings, ceilometers at airports, and tall radio and TV towers are obstructions up there. At certain times dead birds can be found beneath them. Ken Brewer examined one fifth of the area beneath the Little Rock Channel 7 TV tower at Redfield, Arkansas, and found approximately 100 migrants that had been killed on the night of September 6-7, 1967, by flying into the tower. Several species of warblers and vireos were represented.

The mystery of how these birds find their way at night is still unsolved. One fruitful line of research has been the study of the behavior of caged migrants in planetariums where the bird can see the pattern of the stars overhead. My husband has tried this technique on several kinds of birds in the planetarium at the University of Arkansas and has found that White-throated Sparrows are able to use the stars as a compass. They will change their direction of orientation according to how he manipulates the sky in the planetarium.

It is possible to see migrating



MIGRATING SPRING WARBLERS

birds silhouetted across the face of the moon. This can be done with an ordinary pair of binoculars or preferably a 20X telescope. It works better during fall migration than spring because the volume of migration is greater then. On the night of October 2-3, 1952, I spent the entire night sitting in a lawn chair on the levee of the Mississippi River near Baton Rouge, Louisiana, looking through a telescope and I saw more than 1000 birds. When you realize that the diameter of the full moon is only one half of a degree of the 180 degrees of arc from horizon to horizon you begin to get an idea of the magnitude of the migration that must have taken place that night. Several Arkansans participated in a nationwide study of bird migration that same night, notably Iola Rea at Little Rock and Arnold Hoiberg and his boy scout troop at El Dorado.

The phenomenon of bird migration is the result of the interaction between the physiology of the birds and a healthy preserved natural environment not only in the wintering and breeding grounds of each species, but also for the places in between. It will take more and more educational programs and planned cooperation between conservation groups, states, and even federal governments to ensure its preservation.

Frances C. James

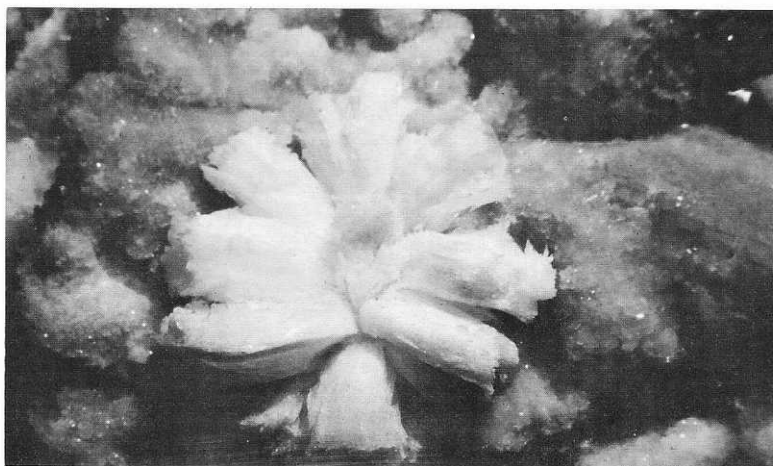
CAVES AND CAVERS OF THE OZARKS

by David Taylor, Editor of the *Arkansas Caver*

In these days of the television set, spectator sports, and even "camping areas" which have more modern conveniences than some of the homes in the Ozarks, all of us who value the privacy, serenity, and primitiveness of the real boondocks are regarded by many as rather weird people who ought to be watched, or perhaps even committed. Even among the would-be "outdoorsmen," however, there are certain types who are looked upon as blithering idiots. I plead guilty; I am one of these people. Some of us, in a feeble attempt to inflate our egos, call us "speleologists," implying that we carry a string of degrees after our names. Others settle for "spelunkers," which implies that we are participants in some sort of occult activities which are probably either illegal or immoral. As is usually the case, the best term for us is the simplest one—"cavers." We crawl around under the ground. We become covered with mud. We splash around in subterranean streams which are at the temperature of a refrigerator. We trust our lives to strange assortments of hardware and rope, and sometimes dangle in mid-air a hundred feet above the floor of a pit while we perform emergency repairs to our equipment. In passages where the water is too deep to wade, we float on old rubber rafts that have been thrown away by the Air Force, or, if those are not available, on old air mattresses (and everyone knows how reliable they are.)

Why do we do these things? Some say because we like to look at pretty rocks. Others say that we feel that we are a superior race, because we go places where most people are afraid to go. Some of us are looking for new forms of life, which can sometimes be found in caves. And some simply like the thrill of exploring.

None of these explanations is really sufficient, however. One would have to be a psychoanalyst to determine the real answers. The best explanation that I have ever heard is a paraphrase of the answer to "Why climb mountains?"—To the question "Why go into caves?" the caver's best answer is "Because it isn't there." Meaning simply "As long as there is no rock to stop you, why not?"



GYPSUM FLOWER (CRYSTAL GROWTH) PHOTO BY DAVID TAYLOR

Safe caving is 92¾% common sense, but a beginner should cave with experienced people for a while to develop a specific "cave sense" and to learn a few specialized techniques. Good physical condition is, of course, also a prerequisite.

It seems that a cave's worst enemy is man. Organized caving is still rather new in Arkansas, but all of the more popular caves are beginning to show the ugly stains of human traffic. Even the "good" caver will sometimes slip and break a speleothem. Even he will sooner or later leave some small deposit of trash or spent carbide. And he must sometimes put his grubby hands on a formation. **Any and all** traffic damages caves. Much vandalism, however, is done intentionally by those who do not know better—Boy Scouts who think that it is patriotic to emblazon their troop number on the walls, or perhaps the nervous types who think they will become lost if they do not leave a trail of trash, binder twine, or smoked arrows to mark their path. All of us who are interested in conservation have an interest in the prevention of this sort of waste, just as we do in the protection of the streams and woods above.

The Arkansas Speleological Survey is an organization of people who are interested in that part of the Ozarks which can be seen from the inside. The Survey is an Internal Organization of the National Speleological Society, an affiliate of the AAAS.

The general purpose of the Survey is rather formidable—to locate

and describe the caves of Arkansas, and to supplement this basic information with maps, photographs, and other specific data which may be of value in regard to a specific cave. So far, we have compiled data on around 1000 caves, primarily in the western half of the cave area. Specialized projects include the tracing of underground streams and the (very selective) collection of biological specimens.

The Survey publishes the *Arkansas Caver* (the content of which lies somewhere between that of a scientific journal and that of a comic book) and the *ArkSS Newsletter*, a bulletin of events and other notices. There is also a Miscellaneous Series of publications on special subjects, such as the Bat/Salt-peter Cave project. Associate memberships are available to everyone who is interested in the caves of Arkansas. (Write ArkSS, Box 62, Harrison, Ark. 72601)

In addition to its status as a data-collecting agency and a sort of fraternal order, the Survey operates as an informal cooperative, providing maps and certain items of equipment to its members at wholesale prices.

The Survey maintains informal liason with such agencies as the USGS, Highway Department, and various departments of several colleges and universities. Recently, several Survey members recovered the skeleton of a large black bear from a Newton County pit and presented it to the UA Geology Department. Details of this find are included in the last issue of the *Caver*.

(Continued on Page 10)

Clean Up Float on the Illinois River

(The following announcement was received from Larry Wenger, Assistant Senior Patrol Leader of Troop 222 of John Knox Church, Tulsa. Publication of this announcement meets a requirement for the Conservation of Natural Resources Merit Badge for which Larry is working.)

Our Scout Troop, 222, of John Knox Presbyterian Church, Tulsa, will join the Tulsa Canoe and Camping Club on a clean-up float on the Illinois River May 25th and 26th.

We will put in at Fiddler's Bend on the mouth of Flint Creek, ½ mile South of Highway 33. We plan to camp over-night at Chewey Bridge. Sunday morning, we will float from Chewey Bridge to our take out point at Hanging Rock Camp on Highway 10, 8 miles North of Tahlequah.

Any canoeist interested in joining Tulsa Canoe and Camp Club and Troop 222 on this float trip will be welcome. Mr. Bob Ferris will be the troop leader and would like to have a card or phone call from those who plan to attend. You can reach him at 2811 E. 22nd St., Tulsa 74114 or call him at RI 7-4836.

Mr. Ferris and seven boys from this same troop ran a clean-up float on the Buffalo River last August. We floated from Gilbert to Buffalo City in one week, picking up any trash we saw.

Larry Wenger

Bluff City Canoe Club

We have received a letter from Henry Hall, chairman of the Waterways Committee of the Bluff City Canoe Club of Memphis, Tennessee from which are the following quotes:

"I am sending you here a schedule of our Bluff City Canoe Club floats for the 1968 season. You will observe that we are taking the liberty of joining with your group for the Big Piney float of Sept. 14-15. In as much as we are anxious to learn this stream and have never had any contact with it, we wish to avail ourselves of your company and leadership."

"If any of the members of the Ozark Society wish to join the BCCC on any floats, we would be most happy to have them along."

The BCCC has a heavy schedule of floats up through November.

Dingo in Arkansas?

(From Dr. Compton's personal diary.)

We passed through the small village of Kingston and started up the dirt and gravel road that leads on to the east toward Boxley. We had not traveled more than two or three hundred yards beyond the end of the pavement up this hill when both of us noticed a weird animal leap the fence on the left of the road proceeding across it slowly. This unbelievable beast possessed a scruffy coat of light gray mangy looking fur. It had a large head which it held erect and somewhat tilted forward after the manner of a jackal, a dingo, or possibly a hyena. It had very large pointed ears and a short snout. Its loping pace was that of a wild beast for sure. Looking both ways, it leaped the fence on the right side of the road and proceeded off through the light cover of broom sedge and through a cedar glade that lay on that side of the road. As he disappeared we were afforded a good view of his rear and were astonished to see that he had a thin ropelike tail. We were absolutely at a loss as to what this might have been. That it was a domestic dog was unthinkable. Remembering stories of the red wolf being in this part of the country and, having encountered wolf hunters only a couple of weeks before in the area toward which we were going, we wondered whether or not this creature might be one. Also tales of coyotes being seen in this part of the country are not uncommon nowadays and this it might well have been except for the appearance of its tail. Neither did the scrawny tail agree with the description of the red wolf and had it been either a wolf or a coyote it must have been one that had its tail in a crack and had thus lost most of the fur therefrom. Also there remained the possibility that it did indeed have the mange and that the depilatory effect of this disease could have accounted for the unadorned appearance of this creature's rear end and also perhaps the worried look that we detected on his countenance as it glanced about to see who might be watching.

Write S. H. Hall, 2789 Sky Lake Cove, Memphis, Tenn. 38127 or the Ozark Society, Fayetteville for this float schedule.

Conservation Council

The Arkansas Conservation Council was organized February 17 in Russellville. The basic purpose of the Council is to act as a united voice on any matter concerning conservation of natural resources, and to advance the attainment of sound management of natural resources in the public interest.

Dr. Howard Suzuki was elected temporary chairman, and Miss Eva Evans, temporary secretary. Seven organizations concerned with conservation were represented.

The next meeting of the Council will be April 19, at 7 p.m. at McEver Hall, Russellville. Other interested organizations are invited to join.

We suggest to our readers that they submit a list of projects or subjects to be considered by the council. Examples of projects worthy of consideration are: Stream Preservation, Conservation Education, Wildlife and Game Management, Highway Beautification, Anti-litter, Preservation of Bottomland Hardwoods, Bird Refuges, and preservation of such areas as Grassy Lake and Magnet Cove.

Central Arkansas Chapter

Everett Bowman of Little Rock was elected president of the Central Arkansas Chapter of the Ozark Society at a reorganizational meeting of the chapter held March 6, in Little Rock. Bowman succeeds H. Charles Johnston Jr. of Little Rock, founder of the chapter and its president since 1962. Johnston will be a vice-president and member-at-large of the chapter's executive board.

John Heuston was selected first vice president of the chapter, W. A. (Bill) Saunders second vice-president and Mrs. R. S. Abernathy, secretary-treasurer. All are from Little Rock.

"The chapter was so busy fighting the 'Battle of the Buffalo' during its early years there didn't seem to be much time for chapter-oriented activities," Bowman commented. "Now we plan to initiate regular monthly meetings and active outing schedule—in cooperation with the state organization and other Ozark Society chapters—that will offer something of interest to members of all ages."

ELEVEN POINT RIVER CRISIS

The following letter was written on March 22 to Congressman Wayne Aspinall, Chairman of the House Committee on Interior & Insular Affairs and to Congressman Roy Taylor, Subcommittee on National Parks and Recreation; House Committee on Interior and Insular Affairs.

The Ozark Society wishes to submit the following statement to be entered as testimony for the hearings held on Wild Rivers legislation on March 18th and 19th, 1968.

The Ozark Society is a citizens conservation organization which has for the last several years worked diligently for the preservation of the few remaining unaltered high quality Ozark upland streams. We believe that the value of these streams for the purposes of outdoor recreation and the enjoyment of natural beauty far transcends any value that might be obtained from them by their being transformed into reservoirs or other commercial or industrial developments. Such streams as are being seriously considered for such recreational uses will unquestionably be heavily overused within a few years unless a sufficient number of them can be designated for preservation.

The Ozark Society is concerned to learn that the Arkansas section of the Eleven Point River in Northeast Arkansas was withdrawn from the Wild Rivers bill. We would like to request that the Arkansas section of the Eleven Point River be retained for study under the Wild Rivers legislation and that plans for building the Water Valley Dam on the Eleven Point River be abandoned once and for all. This latest development in reference to this stream is but another effort by the promoters of the Water Valley Dam to gain eventual approval for it. Only by obtaining positive legislation for the preservation of the Eleven Point under the Wild Rivers bill will it ever eventually be free of the threat of being dammed by misguided local interests and the determined bureaucracy of the Corps of Army Engineers.

We would respectfully like to point out the fact that with each passing year the tremendously expensive program of big dam building becomes more and more uneconomic and obsolete. As a good example we would like to call attention to the February 1968 issue of Scientific American in which the lead article describes the phenomenal development of atomic power. In this article it is explained that more than fifty percent of all

new installations for the development of energy are now in the form of atomic power plants. This simple fact spells the obsolescence of hydroelectric power from this time on. It has in fact already been rendered obsolete by simple steam generation plants and thus all large multipurpose projects under consideration at the present time by the Corps of Army Engineers need serious re-evaluation by our best economists and by members of Congress before any more money is appropriated for them.

This then leaves only flood control and recreation as the principal purposes for the construction of dams such as the Water Valley Dam on the Eleven Point River.

That reservoir recreation should be considered in this case borders upon the ridiculous when one studies a recent map of this area. The Eleven Point River is surrounded now on all sides by artificial impoundments all within but a few hours drive.

The idea that a dam on the Eleven Point would offer any benefit from flood control is likewise utterly unrealistic. This stream derives more than two thirds of its water from large springs and consequently fluctuates very little throughout the year regardless of rainfall. It is a historical fact that the Eleven Point River has never been the cause of any significant flood and that it does not contribute more than one or two inches to water levels downstream even during the highest flood stages on record.

The Eleven Point River is in fact a clear, swift flowing, unpolluted, upland stream of the highest quality. It should be pointed out that in its one hundred and thirty-five mile course it passes through no town or community of any significant size. For the most part its watershed is forested especially along its upper course. In its lower reaches it flows through some of the most productive agricultural lands in Northern Arkansas. Agricultural practices here consist chiefly of cattle ranching with most of the area being in grass which fact accounts for the very low siltation rate along the lower sections of the stream.

As a final consideration it should be pointed out that the inclusion of the Arkansas section of the Eleven Point in the currently Wild Rivers legislation would represent an expense which would be but a fraction of that which would be necessary for the building of a high dam on this beautiful stream. This in view of the present state of our national economy should be more than adequate logic for its inclusion in the Wild Rivers legislation now being considered.

Respectfully submitted,
Neil Compton, M.D.

President, Ozark Society

It is important for Ozark Society members to write to the congressmen to whom the above letter is addressed, and to our own congressmen asking that the Arkansas portion of the Eleven Point River be included in legislation which creates a national wild and scenic river system.

Congressmen should be addressed at the House Office Building
Washington, D. C. 20518

Delta Chapter Elects Officers

At a meeting held recently at the Little Firehouse Community Art Center in Pine Bluff, the Delta Chapter of the Ozark Society elected officers. These are:

Harry Pearson, Pine Bluff, Chairman, Chalmers Davis, Altheimer, Vice-Chairman; Alice Dicke, Pine Bluff, Secretary-Treasurer; and Harold Franklin, Redfield, Coordinator.

CAVES & CAVERS

Have you ever been given directions to some point of interest based on the location of some well-known community—well known to the locals, that is, but not to you—and you have then found that the community was not located on your maps? Have you ever spent days trying to find where the place was? Despair no more. The Arkansas Speleological Survey has published a list of communities which have been removed from the maps due to depopulation. You may obtain one for 25c, plus 10c postage if ordered by mail. Write to the ArkSS, Box 62, Harrison, Arkansas 72601. (Many other Survey publications are still available.)

Activity Schedule

Apr.	Sat. 6 Sun. 7	OZARK SOCIETY SPRING MEETING	Petit Jean State Park	Delta Chapter
	Fri. 19	Float Caddo River		
Apr.	Sat. 20 Sun. 21	(Note change from previous schedule)		Dr. Joe F. Nix,
Apr.	Sat. 27 Sun. 28	Hike Richland Creek	Richland Creek camp ground	Harold Hedges
Apr.	Sun. 28	Spring Bus Tour, Fayetteville		Mrs. Laird Archer
Apr.	Sun. 28	Spring Bus Tour, Little Rock		Everett Bowman
May	Sat. 18 Sun. 19	Float Big Piney River	Camp, Long Pool	Bill Saunders
June	Sat. 8 Sun. 9	Float Cossatot River	Camp Gillham Spgs. camp ground	Dick Murray
July	Sat. 20 Sun. 21	Float Caddo River	Camp on river	Joe Nix

Activity Leaders

Those wishing to participate in the activities are requested to contact the leaders at least one week in advance. This is necessary as there are often last minute changes in plans.

Mrs. Laird Archer, Box 38, 72701 For Bus Tours out of Fayetteville	HI 2-4497	John Heuston, 5001 W. 65th St., Little Rock 72206	LO 2-3910
Everett Bowman, 24 Sherrill Heights, Little Rock 72202	MO 3-2317	Clayton Little, 307 NW 6th, Bentonville	CR 3-2607 CR 3-2497
Joe M. Clark, 1724 Rockwood Trail, Fayetteville 72701	HI 2-2404	Richard D. (Dick) Murray, 2006 Austin Dr., Fayetteville 72701	HI 2-8995
Dr. Neil Compton, Box 209 Bentonville Res. CH 3-5123 Ofc.	CR 3-5413	Dr. Joe F. Nix, 328 12th St. Arkadelphia 71924	CH 6-6534
Chalmers Davis, Altheimer 72004	PO 6-8301		
Harold Hedges, Ponca, Ark. 72670	446-2210	W. A. (Bill) Saunders, Jr., Little Rock	

The Society thanks those who have so promptly paid their dues, and appreciates the generosity of its many contributing and sustaining members.

THE OZARK SOCIETY
P. O. Box 38 Fayetteville, Arkansas 72701

Dues are for the calendar year. They are: Regular, \$3; Contributing, \$5; Sustaining, \$10 or over.

Please check:

New Member ☐

Renewal ☐

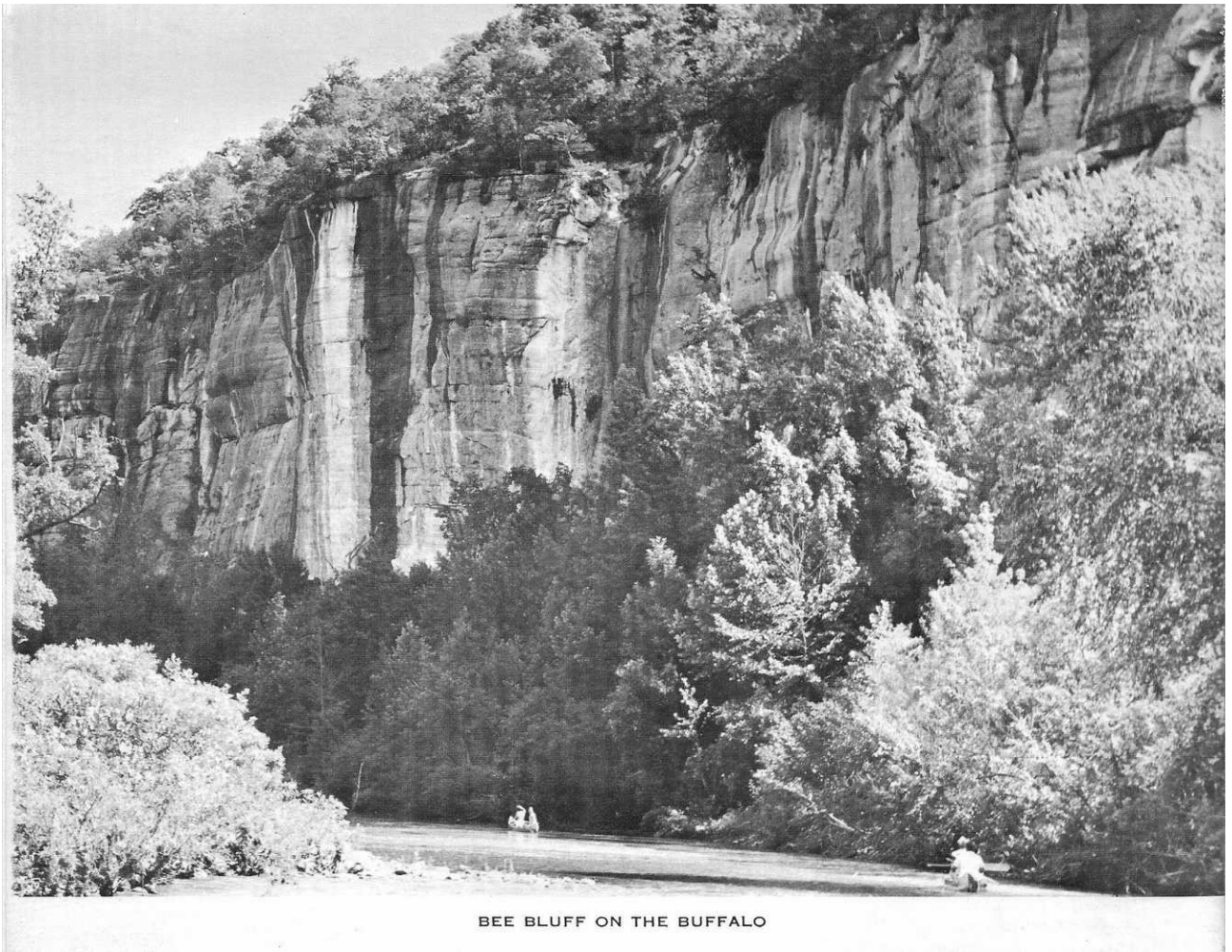
Date.....

Name..... State.....

(If Mr. and Mrs., please specify)

City..... State..... ZIP No.....

1968 DUES ARE NOW PAYABLE



BEE BLUFF ON THE BUFFALO