

# Ozark Society Bulletin



Summer 1968

BOWL, FACING UPSTREAM, SCOURED IN SOLID ROCK BY HIGH WATER  
CARRYING PEBBLES AND BOULDERS - COSSATOT.

JOE CLARK

# OZARK SOCIETY BULLETIN

Summer 1968

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The Bulletin is grateful to Mrs. Douglas James for a \$50. contribution from proceeds of the Audubon Wildlife Film Series of 1967-1968. A like contribution was made last year.

## Buffalo River 1968 Cleanup Float

The CLEANUP FLOAT is on the Buffalo River from Gilbert to the State Park on August 24 - 25. Because of the lateness of the Bulletin, a special announcement was sent out.

Prizes generously contributed and donors are:

Aluminum canoe — Mr. T. V. Sharp, Ouachita Marine Corporation., Arkadelphia.

Scuba diver's wrist watch — Stanley Kahn, Kahn's Jewelry, Pine Bluff.

Sleeping bag — Pfeifers of Arkansas.

Yacht chair — Art's Continental Warehouse, North Little Rock

Arkansas Gazette July 23, 1968

## Early Action Is Promised On Buffalo River Measure

Senator J. William Fulbright has been promised action during the next session of Congress on a bill to make the Buffalo River a part of the National Parks system.

The senator released copies of correspondence between Fulbright and Senator Henry M. Jackson (Dem., Wash.), chairman of the Senate Interior and Insular Affairs Committee, in which Fulbright asked for Committee consideration of the bill this session.

The bill to keep the Buffalo in its natural state was introduced by Senator Fulbright and Senator John L. McClellan.

Senator Jackson said that he would "make every effort early in the next session of Congress to see that this legislation is expeditiously considered by my Committee."

## Developing Conservation Education In Arkansas

Two representatives of the Ozark Society attended a conference and consultation, more like a seminar, on the subject in Little Rock on July 12, 1968. The meeting was called by the Arkansas Advisory Council on Conservation Education at the suggestion of Governor Rockefeller. About 400 persons attended, mostly school teachers and administrators, along with a sizeable group of representatives of conservation organizations active in Arkansas.

Theme of the meeting, according to the majority of speakers, appeared to be lack of teachers qualified to teach conservation in the public schools at the present time, and the selection of a proper curriculum for each grade level in the public schools. It was suggested by several speakers that a series of summer workshops be initiated to familiarize teachers with the subject, and that the subject be made mandatory for those majoring in education at the college level. It was stated that these two measures would assure qualified teachers within a period of two to three years. The President C. M. Strack, Arkansas Advisory Council on Conservation Education indicated that his organization could have recommended curricula within such a period. The overall spirit exhibited at the meeting indicates that the subject of conservation will be taught from kindergarten through college in Arkansas within the near future.

Dick Murray

# Notes On The Cossatot Float, June 8-9

Ken Smith

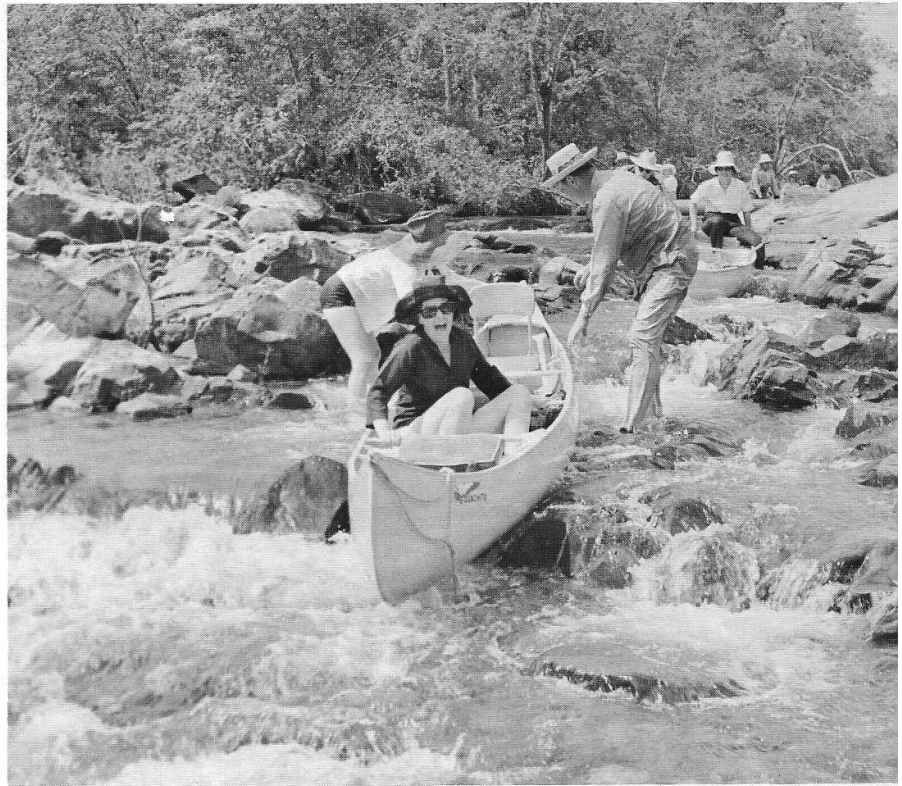
Thirteen people set out to float the Cossatot on Saturday, June 8. To that unlucky number they might attribute their troubles. All that day the river remained full of rocks.

One fish—only one fish—got caught by those thirteen on the Cossatot on that Saturday. But that, however, was remarkably good luck. The fish jumped into Glen and Helen Parker's canoe in a rapids. (Glen took pictures of Helen triumphantly holding the 10-inch smallmouth and then she released it.)

For any reader who dares to follow the unlucky thirteen, Saturday's float was a long, slow 11.6 miles from the Ark. 4 bridge east of Wickes (on Hwy. 71 south of Mena) to the site of the now-being-constructed Gillham Dam. That reach of the river is a scenic foothills stream, with no development along its banks, with hardly any sign at all of human presence. The biggest disturbance in a long time on the Cossatot was a great flood three weeks before the float. Many trees along the bank had been uprooted, and debris hung in limbs more than 20 feet above the canoeists' heads.

Saturday's floaters found the river cutting through solid bedrock, layers of hard sandstone tilted so that knobby ridges usually crossed the stream at right angles. Even in the still, deep pools there were submerged pinnacles, just high enough to catch canoe bottoms, waiting in the line of procession. At the end of each pool (and the pools were invariably short) the river went cascading in shallow channels for many yards down over the ledges, usually to one last sharp drop into the next pool. One of these cascades was nearly a hundred feet long, and ended in a three-foot fall.

The pools were deep and often with fish. Bass up to 16 inches swam beneath the canoes. Any reader who likes to fish might put up with the rocks to enjoy some above-average bass fishing. Not many more river fishermen will have the opportunity to fish this stretch of the Cossatot, however. Gillham Reservoir will flood this



THE TRIMBLE FAMILY ON THE ROCKS.

KEN SMITH

portion in a couple of years. Already the damsite construction area is closed to the public and soon the dam will block passage down the river.

The canoeists camped Saturday night below the damsite and on Sunday floated to Lad Bridge where Ark. 380 crosses the river southeast of Gillham. Sunday's float was only 5.4 miles, and, because the river was by then moving out of the hill country, the rapids were much fewer and easier to navigate. Finally floaters drifted down a lovely tree-arched channel, down the last half mile to the old iron bridge and the place for taking out.

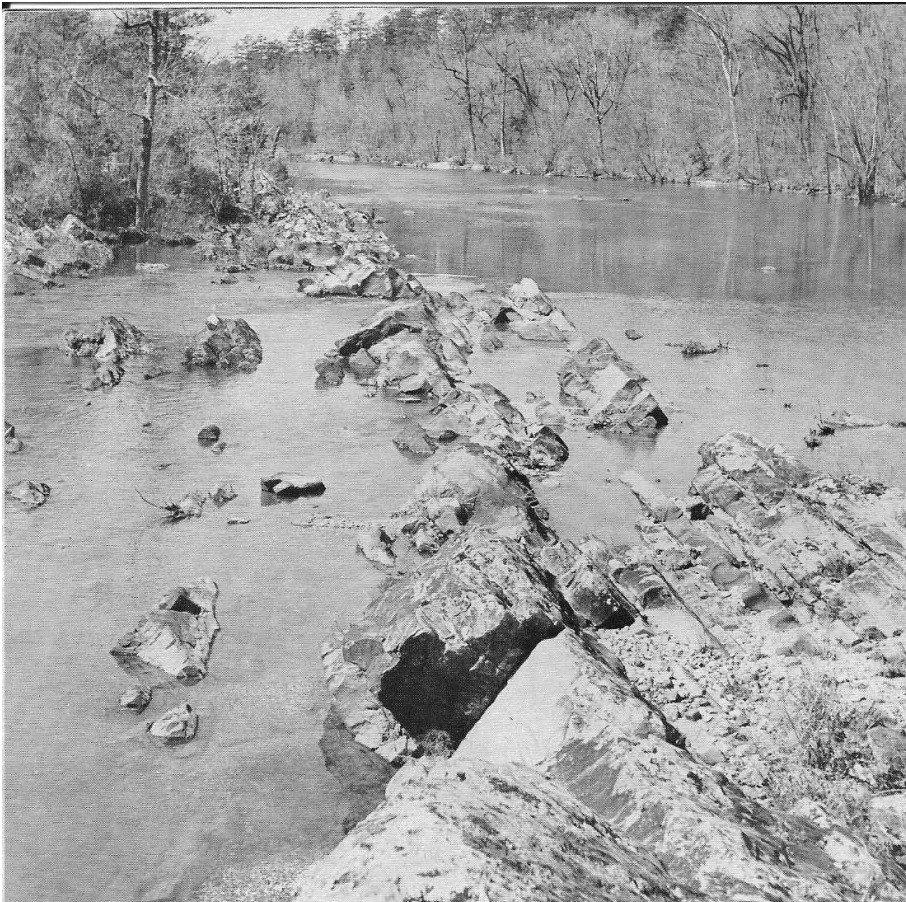
This fall the Ozark Society will again float the Cossatot, in that easier reach of the river from below Gillham Dam to Highway 71 east of DeQueen. Though this portion of the Cossatot will not be as scenic as that above the damsite, it should be a pleasant, unspoiled stretch of river—and most of the rocks will stay upstream.

QUOTING FROM DICK MURRAY, the trip leader, "Having made prior arrangements by means of a bulletin, we made camp at the low-water bridge over Cossatot River adjacent to Highway 4 east of Wickes, Arkansas on Friday the 7th of June. There were 6 canoes and 13 people. None had floated the stream before, and considering its stage, it was decided to take our camping gear by car to the downstream campsite and float with only a lunch and drinking water. This was the wisest decision we made on the trip".

Dick had examined the put-in area and the take-out and had been told that the water was easy to navigate in between. Therefore he was as surprised as the rest of us when "Within 100 yards we encountered the first of what seemed like 1,000 obstacles. Rock strata along the stream has an east-west strike and a near 45 degree dip, and, since the stream runs generally south-

(Continued on Page 4)





A "FENCE" OF DIPPING ROCK STRATA

NEIL COMPTON



LUNCH STOP ON THE COSSATOT

JOE CLARK

## DICK MURRAY

ward, these saw-tooth like 'fences' of rock crossed the stream perpendicularly at fairly close intervals within the first five miles. To navigate them one had to select the widest slot in the 'fence', or the one carrying the most water, and attempt to get through without dragging".



ISSUED TO: \_\_\_\_\_

FOR:

RIVER COSSATOT  
State Highway 4 Low Water  
Bridge to Lad Bridge

ISSUED BY: \_\_\_\_\_

Dick Murray, Trip Leader

"COSSATOT"  
old Indian for "Lots a Rock"

MARGARET TRIMBLE of Little Rock established the Order of the Cossatot and sketched a certificate of membership which Dick presented to those making the float. Those receiving the certificates are Ken Smith of Washington, D. C.; Glen and Helen Parker of Dutton; Walls and Margaret Trimble and daughter, Spencer, Everett and Frances Bowman of Little Rock; Arthur and Lois Fry, Joe and Maxine Clark of Fayetteville.

At the BENTON HEARING, July 12, the Society was ably represented by Col. Jack Diggs of Fayetteville, Alice Dicke of Pine Bluff for the Delta Chapter and Everett Bowman of Little Rock for the Central Chapter.



## Caddo River Floats

The **SPRING FLOAT** which was scheduled for April 20 and 21, had to be cancelled due to high water. The float was rescheduled for May 4 and 5. Seven canoes (14 people) attended the first day of this float. The canoes were put-in at Runyan Bridge and take-out was approximately 13 miles downstream at the Low Water Bridge. All but one of the parties camped at the Low Water Bridge on Saturday night. On Sunday morning we were greeted with a rather steady rain which persisted throughout the day. Four of the remaining six canoes braved the rain and departed from the Low Water Bridge around 10:00 a.m. Surprisingly enough, floating in the rain is very enjoyable. The group canoed through the Parker Falls area with two of the canoes actually going over the falls. The less brave of us took an easier route around. This float ended at Pinnacle Point approximately 7 miles below the put-in.

The **SUMMER FLOAT** on the Caddo River was held on July 20 and 21. Twelve canoes assembled at the Holiday Inn north of Arkadelphia on Saturday morning. The

group drove to the put-in which was about two miles north of Amity, Arkansas. The float consisted of representatives from the Delta Chapter, the Central Arkansas Chapter, several people from Arkadelphia, and one group from Shreveport, La. The first day of the float ended at Runyan Bridge some 10 miles below the put-in. The high water in mid-May completely destroyed the Bridge. The Bridge was the overhead steel type and was of approximately 1900 vintage. The mangled remains of this old landmark now blocks the channel of the river making a portage necessary for canoeists. Rather than portage, we simply took out on the upstream side of the bridge.

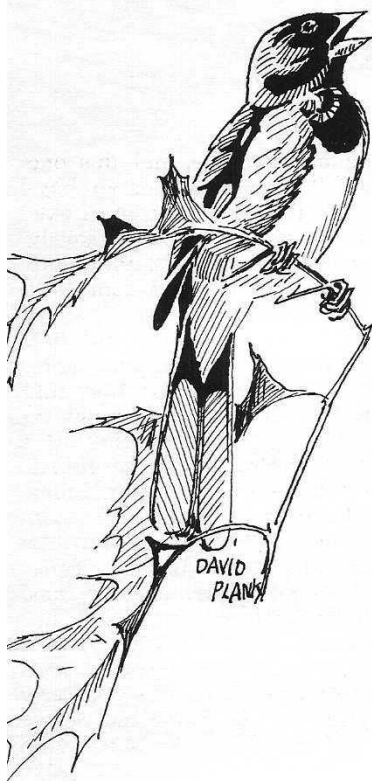
Most of the group drove approximately 8 miles to the Low Water Bridge where they camped. Several decided to head for home. On Sunday morning we were joined by enough canoes to give a total of 13 for the day's float. The group left the Low Water Bridge around 10:30 and floated about 12 miles to a point called Ballards Landing which is less than a mile above the DeGray Dam.

Combining the spring float and the summer float, the section of the Caddo River that will be flooded by the DeGray Dam was floated by the Ozark Society. The spring float was a bit more colorful since there were many spring flowers in bloom. The summer float gave the canoeists a chance to see what extremely high water can do to a river bed. Many of the trees along the banks have been uprooted, banks have been washed, and the river has been rechanneled in a couple of places. We were able to get a glimpse of the type of phenomenon which is no doubt responsible for the shape and nature of most of our rivers. By laws of probability most likely another flood of this magnitude should not occur for at least another 50 years, possibly even more. At many points the flood waters appear to have been in excess of thirty feet above the river bed. Even after the high water, the Caddo remains a very beautiful, placid stream with a mood all its own, a mood that a few of the members of the Ozark Society have been privileged to experience this year.

Joe Nix



COSSATOT FALLS  
NEIL COMPTON



RUFOUS - SIDED TOWHEE

## The Breeding Bird Survey

Until recently no adequate method has existed for measuring population changes of non-game birds on a continental basis. Yet widespread changes in land use have caused immense alterations in the distribution and abundance of birds. With expanding human populations we can anticipate even greater alteration of wildlife environments in the future. In order to document these changes and be able to make wise decisions regarding the conservation of wildlife the Fish and Wildlife Service of the United States Department of the Interior is sponsoring a nationwide Breeding Bird Survey. Starting in June of 1967 Arkansans have been participating in this project.

Volunteer observers were assigned random starting points within each degree block of latitude and longitude. Starting one half-hour before local sunrise they watched and listened for exactly three minutes recording all birds on standard forms. Then they proceeded by car for one-half mile along a predeter-

mined route to the next stop. This procedure was continued for approximately four hours until 50 stops were completed. The data were sent to the Migratory Bird Population Station in Laurel, Md., where they were transferred to punch cards for machine data processing. A summary of the results of the 1966 Survey covering the eastern states has been published in a Fish and Wildlife Service Bulletin. Soon this project will be extended to include all the western states. If the routes are run once each year for several years, it will be possible to learn a great deal about the ranges, the relative abundance, and the fluctuations of our native bird populations.

Twenty-nine surveys of this type were conducted in Arkansas last June, of which ten were in the Ozark Region. Earl Hanebrink of Arkansas State University made counts in Lawrence and Randolph Counties. Mary Jane Greene of Searcy made a count in Izard County and I made one in Fulton and Baxter Counties extending around the southern edge of Norfolk Lake. Tom Wilson of Russellville and Virginia Springer of Little Rock made counts in Van Buren and Cleburne Counties respectively. In the western section counts were made in Benton, Boone, Newton and Johnson Counties by Hank Shugart, Irving Beach and Douglas James.

Very fortunately one of the random starting points assigned by the central office was three miles north of Ponca in Newton County and the route extended southward on Highway 43 through a magnificent section of the headwaters of the Buffalo River. I quickly volunteered to run that survey. When we arrived at Ponca the night before the scheduled day we ran into Harry Pearson, who volunteered to help.

The next morning, in spite of some menacing clouds, we began the survey. Then the torrent came and there was no choice but to retrieve the wet tent and try again later in the week.

Our second attempt was more successful. We stayed at the Lost Valley Lodge, a charming place that I recommend to everyone. Doug and Harry made the survey while I looked for arrow heads in Louisa's vegetable garden with the children. When the men returned they were ecstatic. They had seen or heard 61

different kinds of birds, 9 higher than the average of all routes in the state. Here are some of their totals: 30 Bobwhite, 3 Pileated Woodpeckers, 21 Barn Swallows, 12 Carolina Wrens, 9 Wood Thrushes, 14 Eastern Bluebirds, 7 Parula Warblers, 1 Yellow Warbler, 1 Yellow-throated Warbler, 9 Ovenbirds, 4 Kentucky Warblers, 4 Hooded Warblers, 7 American Redstarts, 13 Scarlet Tanagers, 5 Summer Tanagers, 10 Blue Grosbeaks, 41 Indigo Buntings, and so forth. In this area the summer avifauna is probably richer than in any other place in the state.

One of the fringe benefits of this interesting cooperative project is that it adds a tremendous amount of information to our knowledge of birds in Arkansas. From the surveys made in 1967, for instance, it is clear that the birdlife is more diverse in both the Ozark and Ouachita Regions (50-60 species per survey) than in the more agricultural Arkansas and Mississippi River Valleys (30-40 species per survey). Some birds were found on all 29 counts; the Mourning Dove, the Blue Jay, the Carolina Wren, the Cardinal and the Indigo Bunting. Seven more occurred on all but one count: Bobwhite, Yellow-billed Cuckoo, Common Crow, Tufted Titmouse, Mockingbird, House Sparrow and Brown-headed Cowbird. These are the most widespread roadside birds in Arkansas. Are you familiar with all of them?

Another type of valuable information is relative abundance. For instance the Orchard Oriole and the Dickcissel are common birds that are far more abundant in the agricultural areas of the state than in the more mountainous sections. Numbers of these birds are far higher now than they were before the land was plowed because man's modification of the environment has provided an increase in suitable habitat for them.

Lastly the surveys have pointed sharply to some unanswered questions. For example, the Rufous-sided Towhee nests commonly near thickets from coast to coast with the exception of a roughly triangular area extending from the Texas Coast up to the Dakotas. In Arkansas it is a familiar summer bird in the Ozarks but is absent from the Ouachita Mountain area. There are many cases like this one in which the factors limiting bird distribution are unknown.

Frances C. James

## Richland Creek Hike

Thanks to the careful planning by Harold and Margaret Hedges, the Richland Creek hike of April 28 was most successful. They greeted those arriving Saturday evening at the Forest Service Camp at the junction of Falling Water and Richland Creeks.

The campers gathered for the evening under a large tarp stretched by the Hedges. With the sound of a light rain falling, it was a perfect time for visiting and getting better acquainted.

The rain ceased in the night; Sunday morning a dense fog obscured the surrounding hills, but this disappeared as we drove past Round Hill Fire Tower to meet our friends from the Delta Chapter.

The hikers moved in a southerly direction along an abandoned road which generally parallels Big Devils Fork and continues toward the camp. At this elevation the hills were still white with masses of blooming dogwood. Streamside clumps of white shooting stars hung out of rocky ledges tempting the photographers.

At Delta Falls the hikers split into two groups, one being led back to and along the trail by Harold Hedges and then a short distance across country to Twin Falls and then to Richland Creek Falls. Harry Pearson led the others down Big Devils Fork over the rugged stream bed past a rather large falls of ten or twelve feet and on to Twin Falls a quarter of a mile farther downstream.

Twin Falls is just above the confluence of Big Devils Fork and Long Devils Fork. Each stream falls about twenty feet over a limestone ledge. Six beautiful waterfalls were seen on this trip. Descriptions of some with pictures will be found in Ken Smith's book "THE BUFFALO RIVER COUNTRY", in an article by John Heuston in the Summer 1967 Bulletin, and in a story by Margaret Hedges in the Spring 1968 Bulletin.

The following made the hike: Bob Ferris and the Marion Gainays and son of Tulsa; Harold and Margaret Hedges of Ponca, Arkansas; Art and Lois Fry, the Charles Everlys, Dick Murray, Lee Hugon, and Joe and Maxine Clark of Fayetteville;

## The Spring Bus Tours

### FAYETTEVILLE TOUR

Spring in the Ozarks is worth coming miles to see, and this one was particularly green and lush. By April 28 the dogwoods in Fayetteville were well past their finest bloom, but this charming and fickle month gave the thirty passengers from six towns on the bus tour a lovely day, both cloudy and sunny, and the dogwood bloom along the route was at its best. Azaleas, however, did not begin to come into bloom until the following week.

Each of the tours from Fayetteville (this one was the eight) has included as much of the Ozark National Forest as possible, where variety of growth is greatest, where the roads are designed to take full advantage of scenic beauty, and where there is such a feeling of intimacy with nature.

The tour joined the one from Little Rock at Haw Creek for lunch. Seeing Haw Creek Falls was a delightful experience. The three buses seemed an incongruous intrusion in the leafy lanes, but they could not diminish the beauty of the site, the sound of the rushing falls, or disturb that stillness which is never actual but rather a peaceful combination of wind, running stream, and bird song. A second stop was made at Alum Cove, with a walk to Natural Bridge.

Dr. Edward Dale, professor of plant ecology at the University, was tour conductor and commented from time to time on the botany and natural features of the area. The kindness of University faculty members has made it possible for the Ozark Society to combine first hand information with a day's outing which seems to please those who take these tours.

Possibly more frequent stops with short walks down inviting side roads would be welcomed. Plans will be made for these on the next bus tour on October 20—a glorious month to get out into the hills.

The bus turned off at Salus for a visit to the fire tower and the panoramic view it provides—with or without climbing the tower.

Evangeline Archer

### CENTRAL CHAPTER TOUR

Everett Bowman, president of the Central Chapter organized the spring bus tour. A total of 67 persons made the trip from Little Rock in two buses. This group met the tour from Fayetteville at Haw Creek Falls at noon.

Dr. Dwight Moore, now establishing an arboretum at El Dorado, conducted a nature hike during the stopover. Dr. Jewel Moore and Professor Ray Kinzer, botanists, both of State College of Arkansas at Conway, also conducted nature hikes.

Ben and Jennie Lenlich, Alice Dicke, Tom Parsons, and Harry Pearson of Pine Bluff; Margaret

Rohan, and Dr. Sturgis Miller and son, Lee of Little Rock; Dick and Lorraine Ewing of Arkadelphia.

DR. DWIGHT MOORE EXPLAINS A CLUMP OF WOOD-BETONY TO GREGG AND DAVID JOHNSTON

JOHN HEUSTON







VERA SHAW, JEAN LEEVER,  
AND LASSIE AT PUT-IN  
NEIL COMPTON

cious gravel bars. It was remarked that this was one of the most enjoyable floats any had experienced.

We were told to expect a return by Sierra Club members next year.

Those taking the float were:

Sierra Club  
William and Sylvia Bendy, St. Louis, Missouri  
Mrs. Jean Leever, Orland Park, Illinois  
Mrs. Vera Shaw, Olney, Illinois  
Mrs. Alice Rodgers, Wheeling, Illinois  
Mrs. Elaine Skiathas, Orinda, California  
Ed and Carol Hurley, Glenview, Illinois

Ozark Society  
Neil and Laurene Compton, Bentonville, Arkansas  
Dick Murray, Fayetteville, Arkansas  
Grover Harris, Fayetteville, Arkansas  
Joe and Maxine Clark, Fayetteville, Arkansas

## Sierra Club Group Floats The Buffalo

Several Ozark Society canoeists acted as hosts and guides to members of the Great Lakes Chapter of the Sierra Club on a three day float down the lower Buffalo.

This group put in at the State Park on the morning of July 4th and floated to Shipps Landing on the White, six miles below the mouth of the Buffalo.

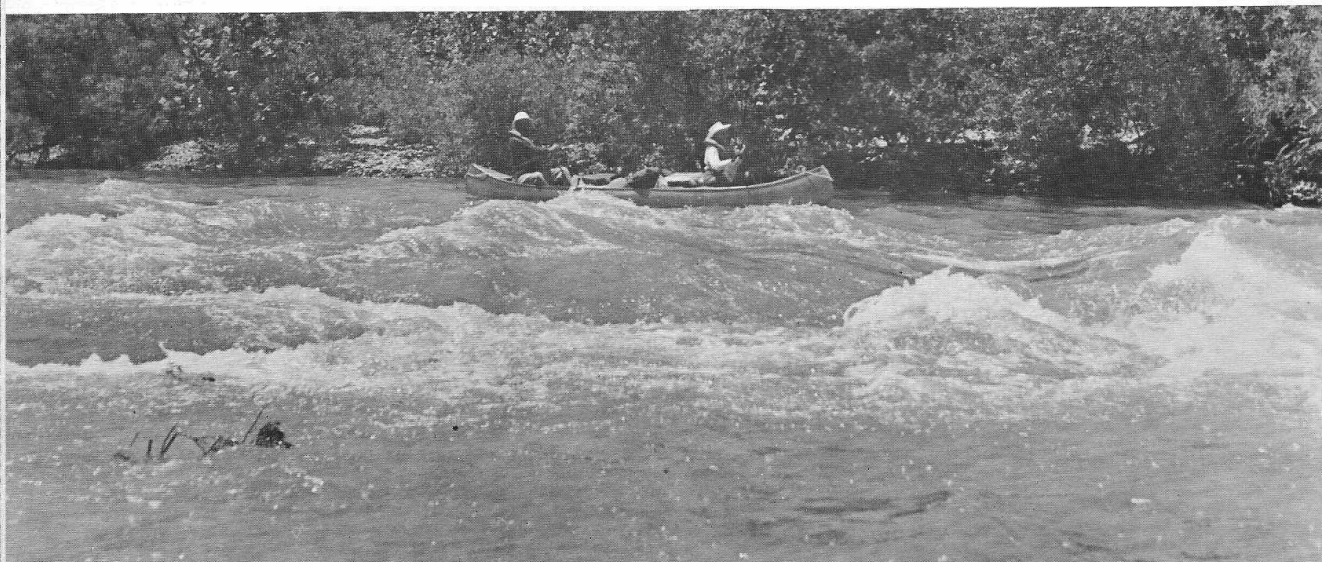
The river was up about two feet after a hard rain earlier in the week and was the muddiest we have ever seen it. This was evidence of much new bulldozing along the river.

Jean Leever, president of the Great Lakes Chapter, had a Max Anderson molded plywood canoe which was made in Sweden. This boat was finished like a piece of furniture and was the object of much admiration. Also giving cause for comment was the Hurley's kayak and the Compton's newly polished canoe sporting a line of geometrically shaped colored decals along its full length.

The Sierra Club group was very enthusiastic about the Buffalo and the beautiful campsites on the spa-

CLABBER CREEK RAPIDS,  
BUFFALO RIVER

NEIL COMPTON



## BOTANICAL NOTES

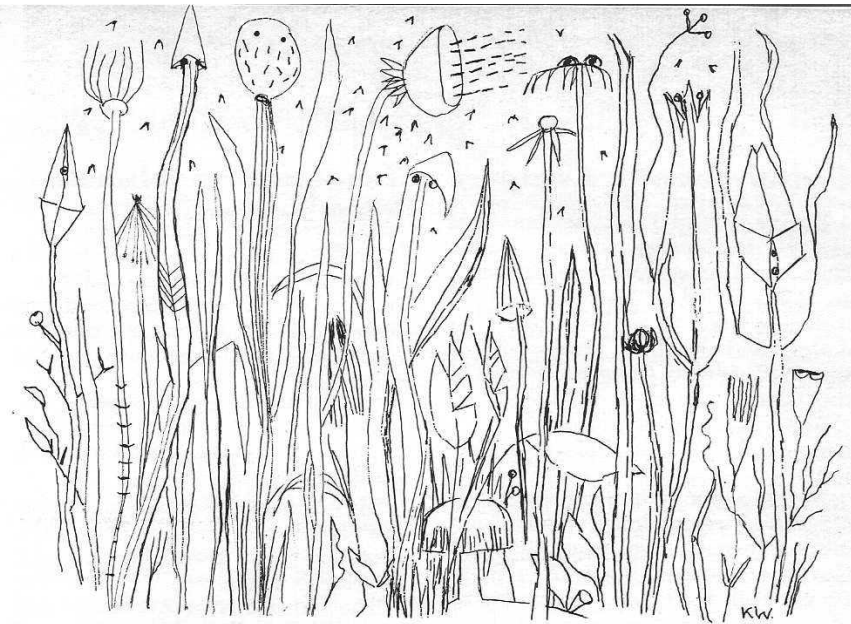
June, July and August are the months to enjoy the many wildflowers that flourish in sunny situations. As their blooming period progresses they make colorful areas along roadsides and open fields, and relieve much of the monotony of highway travel. Wildflowers are an important feature of the natural beauty of Arkansas, and, as any photographer will tell you, a photograph of a distant hill or lake will be improved by their inclusion in the foreground.

The Texas Highway Department has a policy of sowing wildflower seeds, even transplanting cacti to hold soil on precipitous banks. As a result people plan trips when the cacti, paintbrush, bluebonnets and early spring composites are in bloom. We are as blessed as Texas, but many people consider our summer flowers as weeds. Why should Arkansas spend money for artificial highway beautification when all that is necessary is to curb the promiscuous use of herbicides and the complete and extensive mowing of the right of way. True, safety factors must not be sacrificed, but the repeated mowing of rocky ledges and all areas back to the fence line will eventually eliminate many of the showy perennial wildflowers.

Plants of the composite family, **Compositae**, are the most numerous along sunny roadsides. Many of these are maligned as being the cause of hayfever; the real offender in this family is ragweed. The **Compositae** is the largest and most interesting of the plant families. Small individual flowers, each producing one seed, make up a head of flowers. The kind of flowers may vary; some heads are made up entirely of small tubular flowers, called disc flowers, as in ironweed, **Vernonia**, and blazing star, **Liatris**. Others are composed of petal like flowers, called ray or ligulate flowers; examples of this type are dandelion and chicory.

The third type has a central area of small brown or yellow tubular flowers bordered by ray flowers; sunflowers, coreopsis, asters are of this type.

Chicory, **Cichorium intybus**, is very common along most roadsides and many people inquire about the identity of this plant with the beautiful blue flowers. This is natural-



KATHRINE WINCKLER

ized from Eurasia; the long taproot is used as an adulterant or substitute for coffee in southern states. If you are observant you will notice you see it only in the morning as the flowers disappear as the temperature rises. Chicory seems to survive in spite of numerous mowings. The common name, blue sailors, seems quite appropriate.

In early June, in the Arkansas River valley, roadsides are lined with masses of golden yellow **Coreopsis cardiminefolia**. Superficially the flowers of this species resemble **C. tinctoria** as both have brown staining on the area of the ray flowers bordering the disc. Traveling to Little Rock on Hwy. 40 we have enjoyed these flowers, but all had been mowed down when we returned in the afternoon.

Virgin prairies are fast disappearing; a few still remain in Benton County. An attempt was made to save one west of Gentry but there were no funds to buy the acreage and it was plowed. However a stretch of railroad right of way between Gentry and Decatur is well worth the trip in July. You will see compass plant, **Silphium laciniatum**, pink cone flower, **Echinacea pallida**, yellow cone flower, **Rudbeckia hirta**, the very wooly sunflower, **Helianthus mollis**, **Liatris pynostachya**, which I call the bottle brush **Liatris**, royal catchfly, **Silene regia**, fringed poppy mallow, **Callirhoe digitata**, the white spires of Culvers-root, **Veronicastrum virginicum**, rising above the surrounding vegetation, and many others including the big bluestem, heading up. Don't forget to dust with a lit-

tle sulphur as the chiggers love this place too.

Species of the genus **Silphium**, commonly called rosinweed, belong to the sunflower tribe of the **Compositae**, and are among the largest and most dramatic plants of the roadside and prairie. **Silphium laciniatum** is called compass plant; the edges of the upright, slashed basal leaves point north and south. The broad leaf areas thus face the morning and evening sun; this cuts down the intensity of the sun's rays, and decreases the loss of moisture through the leaves.

In driving across northern Arkansas on limestone and dolomite areas, say from Eureka Springs across to Yellville and Cotter, you no doubt have seen some very large coarse leaves growing by the roadside, and have been told this is prairie dock. This is **Silphium terebinthenaceum** (means like turpentine - a terrible name). In August you may see the plant in bloom. The leafless scape surmounted by yellow sunflower like flowers will rise as high as seven feet.

**Silphium perfoliatum**, called cup plant because the opposite leaves meet and surround the stem as a cup, grows in wet ditches and near bridges along the road. A handsome specimen was seen in the vicinity of Morgans Spring near the Eleven Point. Mr. Morgan told us that because of the big perfectly square stem, carpenter's square is the name given the plant in that area. They also cook the tender green shoots with poke greens in the spring.

Maxine Clark



## Conservation News

### Conservationist Award

Eleanor Riddick writes that Mr. B. B. Morgan, owner of the Narrows Aquatic Farm on the Eleven Point River in Missouri was selected by the Sears Roebuck Foundation and Wildlife Federation as the 1967 Water Conservationist of the year in the state of Missouri.

The award was presented at a banquet April 20 at Columbia Missouri.

Mr. Morgan is a member of the Missouri Stream Preservation Committee formed two years ago by Governor Hearnes to draft a State Rivers Bill. He is also on the board of the Missouri Conservation Federation.

The aquatic farm is a large spring from which Mr. Morgan harvests large quantities of aquatic plants; these he ships over the entire United States to dealers in aquarium supplies. By his "farming" method the supply is never depleted.

In August 1966, Mr. Morgan was host to several members of the Ozark Society, furnishing his spring-side cottage and camping facilities the night before the put-in.

The float crossed the Missouri-Arkansas line into Arkansas and continued to Charlie Black's cabin for the second night. There they were guests at a fish fry and buffet supper by members of the Water Valley Association. The float was completed the next day at Dalton, Arkansas.

On August, this year, Mr. Morgan was again host to Ozark Society canoeists at his beautiful campground.

John Pickett, Harold and Helen Bly and daughter Linda visited the group and discussed the Eleven Point situation which is still unsettled due to lack of support from Arkansas politicians. They also made arrangements for transporting the cars to Dalton, the take-out point.

Once again it was a thrill to float the beautiful spring-fed Eleven Point. The clear, cold water flows swiftly and in such quantities that the river usually appears to be "up" a foot or two. The swimming was invigorating to say the least.

Those on the trip were:

Renee and Edra Diaz (Edra is daughter of the Neil Comptons).

### Tennessee Establishes River System

Tennessee has become the first state to establish a comprehensive, scenic rivers system, an action completed only hours before the Tennessee Legislature recently was adjourned.

The bill gives Tennessee a "leg up" on the U. S. Congress, which still is considering a National Wild or Scenic Rivers System.

Three classes of scenic river areas are established: natural river areas, pastoral river areas, and partially developed areas.

The natural river areas are free-flowing, unpolluted streams, with shorelines and scenic vistas unchanged, or essentially unchanged by man. Lands adjacent, not already in public ownership, "should be protected by acquisition of fee title or by conservation easements to the full extent necessary to preserve a true natural environment."

The pastoral river areas are free-flowing streams, the lands adjacent to which are partially or predominantly used for agriculture and other dispersed human activities which do not substantially interfere with public use and enjoyment. Waters would be kept unpolluted, and lands adjacent would remain primarily in the type of use existing at the time of the stream's designation.

The ARKANSAS GAME and FISH COMMISSION is to be complimented on its summer issue of ARKANSAS GAME and FISH.

This excellent little quarterly is profusely illustrated with outstanding photographs, many of them in color. The emphasis in this issue is on fishing as it should be at this season of the year. There are two other informative articles; "Deer Family Life", by Editor George Purvis, and "The Role of Predators" by Dr. Howard Suzuki, Chairman of the Arkansas Conservation Council.

This magazine is available, free of charge to Arkansas sportsmen by writing the Arkansas Game and Fish Commission, No. 2 Capitol Mall, Little Rock, Ark. 72201.

E. L. and Suzanne Keith, Houston, Texas, both formerly of Bentonville.

Richard Ourand and sons Dick and Bill of Fayetteville, Dick Murray, Joe and Maxine Clark.

### Threat Of Dam On Mulberry Removed

On May 20th, the Arkansas State Soil and Water Conservation Committee held a hearing on a proposed site on the Big Mulberry for a dam and reservoir to supply the City of Ozark. The Mulberry was to have a dam near the mouth of Rock Creek which would back water up almost to Turners Bend.

Harold Alexander of the Governor's Stream Preservation Committee, Everett Bowman of the Central Chapter of the Ozark Society, and Dick Murray of the Northwest Arkansas area attended and asked that alternatives to damming the river be considered. Harold had also written the Economic Development Administration Regional Office at Austin, Texas.

These combined protests and a lack of information caused another meeting to be scheduled for July 1. Harold Alexander, Dick Murray, and Joe Clark attended.

Mr. Mickle of Mickle-Bell Associates, engineering firm of Fort Smith presented a proposal for creating a reservoir on the South Fork of White Oak Creek one and three quarter miles north of Ozark. As there were no objections, the soil and geological investigations are to proceed.

Mr. Luce of the Commission, stated that a temporary permit for the dam could be issued but the final permit cannot be issued until the land is either acquired or there is court action pending on it.

This is an example of how early action can save a free flowing stream. It is to be expected that other attempts may be made to dam the Mulberry.

Representatives of the City of Ozark have indicated that they would like to join with those wishing to preserve the Mulberry in establishing a recreation area having economic benefits.

W.W. EVERETT and JOE NIX of the Department of Chemistry, Ouachita Baptist University, were pleasantly surprised when their article, BLUE WATER in the Spring 1968 Bulletin was reprinted in the St. Louis Post Dispatch of April 13 under the heading WHAT MAKES WATER BLUE?



## Ozark Society Spring Meeting

The Ozark Society spring meeting at Petit Jean State Park on April 6 and 7 was attended by 56 members. Saturday's program was arranged by the Delta Chapter, with Harold Franklin as chairman for the day.

Dr. Howard Suzuki, professor of anatomy at the University of Arkansas School of Medicine, has made a special study of the hardwood forests of Arkansas and what is happening to them. These forests, called by the U. S. Fish and Wildlife Service Type 1 Wetlands, are being rapidly depleted. Their wildlife habitat includes that of many game animals and birds. Three factors are mainly responsible for clearing: some lumber companies are planting to pine, farmers are clearing to plant soybeans, and the Corps of Engineers is clearing adjacent to the rivers and constructing ditches for flood control. This irreversible manipulation pro-

duces resource losses for which there are no adequate compensating provisions. Dr. Suzuki pointed out that the owner of hardwood forest land benefits at the same rate on investment as when the forest is cleared for agricultural uses.

Col. Charles L. Steel spoke for the Corps of Engineers on the relationship between the civil works program of the Corps and the conservation of water and related environmental resources. Colonel Steel re-emphasized the complexities of present day conservation problems, the interrelationships of operating agencies, and the need for decision making only after an evaluation of alternatives. He mentioned instances of the Corps' action to preserve and enhance aesthetic values.

Clayton Little, attorney, chairman of the Governor's Stream Preservation Committee, discussed

legislation for Buffalo National River, analyzing provisions and procedures. Mr. Little was influential in the establishment of Pea Ridge National Military Park.

Robert T. Kirkwood, assistant professor of biology at State College, Conway, named Arkansas Teacher of the Year in 1965 for his exceptional competence in the natural science field, spoke on "Education for Conservation", illustrating his talk with a film of students engaged in field work under his direction. Mr. Kirkwood has a forthright approach to conservation education based on years of experience. He believes that this teaching must be founded upon ecological concepts, that teachers must be trained in this field, and that they must use simple and easily understood materials added to first hand experience.

Evangeline Archer

ROCK FORMATION NEAR COSSATOT FALLS

JOE CLARK



## Saline River

### Statement by Dr. Joe F. Nix, Chairman Soil and Water Committee, Arkansas Wildlife Federation, at the Benton Hearing, July 12, 1968.

(This statement is of especial interest as parts of it apply to all impoundments)

The construction of impoundments on many of the rivers of the State of Arkansas has no doubt been a valuable asset to the state in that they have offered needed water supplies, reduction in flooding frequency, some hydroelectric power and a variety of outdoor recreational experiences. With the extent of creation of impoundments that has been experienced in the State of Arkansas, it has become apparent that an extremely close look should be taken at all water resources development projects in an effort to be sure that all possible alternatives have been considered in an effort to see that fish, wildlife, and the general conservation needs of the state are not hindered more than they are enhanced by the project. With this in mind, the Arkansas Wildlife Federation asks that consideration be given to the following remarks.

The Saline River is the last river of appreciable size remaining in the southern portion of Arkansas that is undammed. The construction of the proposed Benton Dam and the channeling of the Saline River would, no doubt, alter the properties of the river to such an extent that the fish and wildlife resources of this area would be damaged. It would appear that in order to have a balanced recreational opportunity in the southern Arkansas region there should be at least one river left in the unaltered state which could provide a variety of outdoor experiences that could not be found on a reservoir or within the steep banks of a channeled river.

From superficial considerations the construction of a dam on a river only causes inundation of a relatively short segment of a river and that portion of the stream below the dam would remain unaltered after the completion of the project. The fact that certain chemical and physical reactions occur in a reservoir can affect the nature of the water released from the impoundment. As is well known, most Arkansas reservoirs which have a maximum depth of at least 50 to 60 feet maintain a thermally stratified condition during the summer and the fall months

and in some of the deeper reservoirs even into the winter. While in this stratified condition the transport of atmospheric oxygen into the lower region of the reservoir ceases. As oxygen depletion continues a point is reached at which heavy metals such as iron and manganese can be dissolved from the muds on the bottom of the reservoir and can migrate throughout the oxygen deficient zone. Oxygen depletion can occur to the extent that hydrogen sulfide can be formed in the lower regions of reservoirs. Most of the reservoirs that have been constructed in the State of Arkansas are cold water release structures which release water from the lower portion of the reservoir. The water released from cold water release impoundments can be expected to be considerably colder than the undammed stream, as well as altered in water quality during the period of severe stratification. Upon re-aeration of the stream below an impoundment some of the chemical constituents which were caused to dissolve in the reservoir are oxidized and reprecipitated on the rocks and vegetation in the river bed below the dam.

The effect of the release of these waters is severalfold. It should be pointed out that the ecology of a river system is highly dependent on the nature of the water. The fact that the release of cold water from the lower region into a stream which is normally warm during the summer and fall can cause a degradation, and in some cases a destruction, of the native fishery. Although successful trout fisheries have been established below some cold water release dams in the state, other situations exist where the conditions below the impoundment are neither satisfactory for trout or bass.

The alteration of the water quality from a reservoir will in all probability cause an alteration of the ecology of the river, particularly in the vicinity of the dam. The oxidation and precipitation of heavy metal oxides can be observed below most impoundments in Arkansas. Such deposits cause the river bed

The Delta Chapter of the Ozark Society was host to a well planned, comprehensive public forum on "Conservation of the Saline River" held at Pine Bluff, June 22. Other sponsors of the forum were: Central Chapter of the Ozark Society, Jefferson Wildlife Association, Jefferson Audubon Society, Quapaw Archeological Society, Citizens Concerned about the Saline, Saline Preservation Society and Arkansas Wildlife Federation.

The forum preceded the hearing by the Vicksburg District Office of the Army Engineers at Benton, July 12, concerning a proposed dam on the Saline near Benton.

The purpose of the forum was to better inform the residents of South Arkansas concerning the exceptional beauty and recreational value of the Saline, the last remaining free flowing major stream in the Ouachita Mountain Area. Experts in their respective fields discussed the effects of the proposed dam and associated developments on the ecology of the area, with subsequent destruction of fish and wildlife habitats and valuable bottomland hardwood timber.

The Ozark Society, since its incorporation, July 6, 1962, has had as one of its objectives- "to promote the knowledge and enjoyment of the scenic, scientific, ecological, archaeological and aesthetic qualities of the Ozark—Ouachita Region and to secure the preservation of these qualities so that they will be saved for present and future generations".

to appear black and certainly does not add to the aesthetics of the situation.

Recently, warm water release dams which will allow release of water from the upper level of a reservoir have been considered and are being constructed in Arkansas. Such structures apparently offer a considerable improvement in many of the situations mentioned above. However, characteristics of impoundments vary greatly from reservoir to reservoir and it may well be that even though the warm water release structures have been suc-



cessful in some parts of the country, possibly we should reserve judgement of their benefits to Arkansas streams until we have clearly seen what their effects will be.

In addition to water quality alterations caused by impoundment, the channeling of a river has a marked effect on the ecology of a river. The relatively steeply cut banks and cleared areas can allow the influx of considerable silt. The exposed areas can also cause a change in the quality of the water in the river. The fact that the removal of debris from the natural channel of the river destroys the cover necessary for fish and that the degradation of water conditions

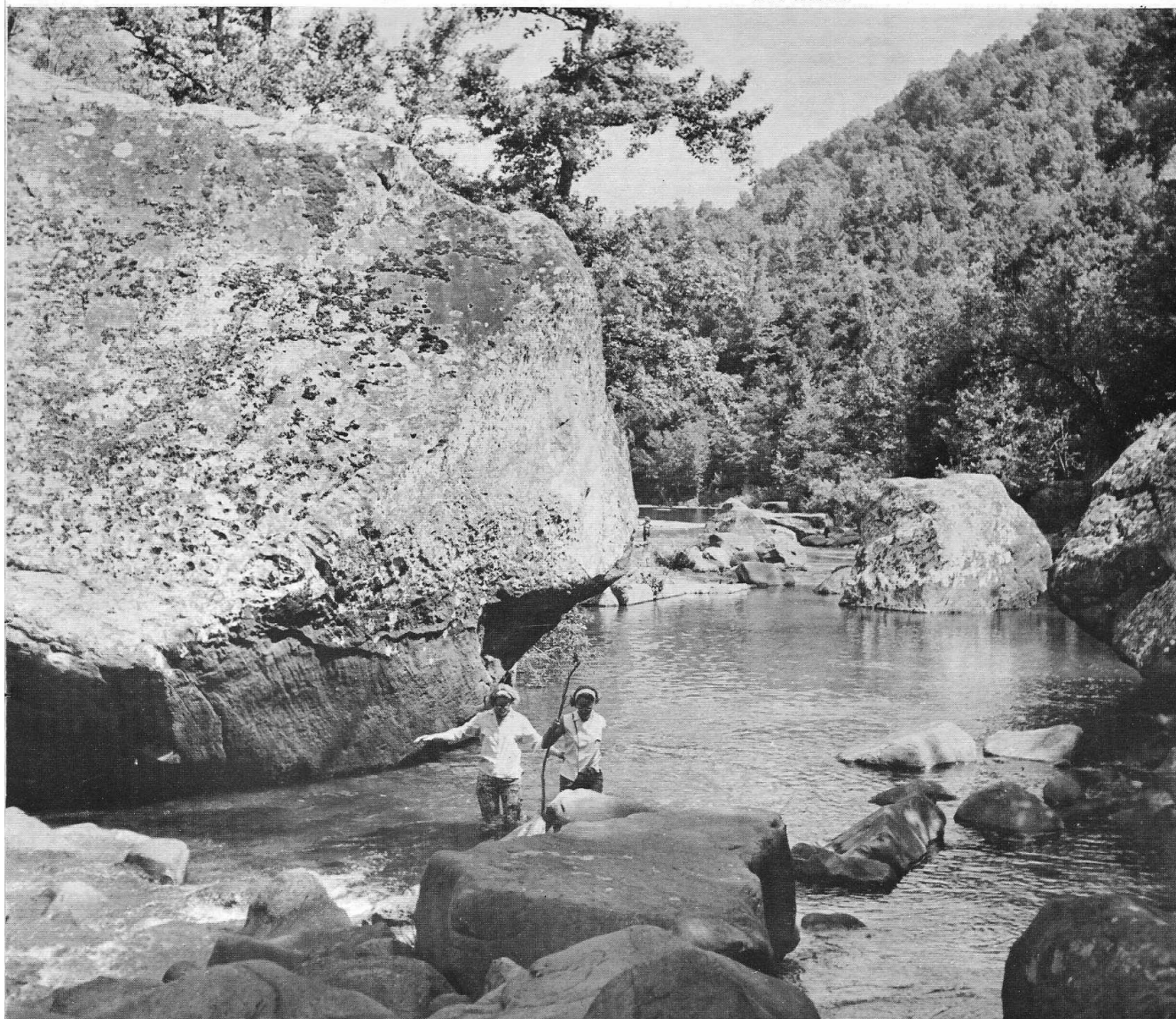
that accompany channeling can destroy the ecology of a river system, endangers the river's very existence as a fishery.

In addition to the fact that impoundment and channeling alters and possibly destroy the ecology of a river, it is my personal view that the evaluation of a water resource development project should consider such things as the aesthetics of the situation as well as the fact that a free flowing stream offers the possibility of a quality outdoor recreational experience which cannot be evaluated economically. It would be highly desirable if we could assign a "dollars and cents" value to these intangible aspects and allow

them to be considered as a portion of the economic evaluation of a project. Of course, this cannot be done. It is truly unfortunate that such arguments cannot compete with the down-to-earth economic considerations that must be used to evaluate this and other large engineering projects which are having a marked effect on the disappearance of the natural heritage of the State of Arkansas. It appears that we have truly become a society more concerned with the production of goods and less concerned with such things as excellence, quality, and the more fundamental aspects of the cultural development of society.

SUMMER ON RICHLAND CREEK

NEIL COMPTON





## Conservation Issues Before Congress

Early in July, William J. Allen, Field Representative of the Wildlife Management Institute, reported to us on conservation issues before the Congress.

Quoting from Mr. Allen on Outdoor Recreation Financing, "The most critical problem facing the future of federal and state outdoor recreation programs is adequate provision for paying for the lands that must be acquired and developed. This is done largely through the Land and Water Conservation Fund, designed to receive monies from several sources, for allocation to federal and state agencies for approved recreation projects.

"The Fund was in a fix; there was not enough income to pay for all the expensive federal park, sea, lake-shore and recreation areas that Congress has authorized. The backlog of unfunded projects mounts. Land costs spiral upwards, and the so-

lution of urgent social problems and the huge costs of an unpopular war make the early completion of these important recreation projects more and more unlikely.

"Congress is seeking to help stabilize the Land and Water Conservation Fund through the enactment of S. 1401—"

The Land and Water Conservation Fund amendments were signed into Public Law 90-401 by the President on July 15. These will add about \$500,000,000 to the Fund over a five year period.

The Redwoods Park S. 2515 will go to conference soon but will not be resolved until after Congress reconvenes in September.

The Scenic Rivers Bill S. 119 passed the Senate in August of last year. H. R. 18260 was defeated on the floor of the House under suspension-of-the-rules procedure. This requires a two-thirds majority. The

bill is still alive and a rule may be obtained after Congress reconvenes in September. Supporters of the bill will be more formidable on the floor of the House under a rule, when only a simple majority is needed for passage. Missouri politicians are in accord with state conservationists in their desire to protect the state's remaining free flowing, clear water streams. Unfortunately, this situation does not exist in Arkansas.

The Buffalo River was left out of the Scenic Rivers Bill. Apparently because Senators Fulbright and McClelland wanted the matter treated as a Special National River in the same way in which the Current was treated in Missouri. The Eleven Point in the State of Arkansas was left out. The Eleven Point in the Missouri section is in the Senate bill and in the study category in the House bill.

According to Mr. Allen, "The outlook also is bright for an enactment prohibiting the importation of animals or their parts when they are found to be in an endangered condition in their native lands. The commercialization of rare furs, and other novelties supports destructive poaching in some undeveloped countries, and the ban, as proposed in H.R. 11618, would be the first step by a world power to seek to halt this senseless destruction of wildlife. H.R. 11618, also would strengthen enforcement provisions for the protection of endangered amphibians, reptiles, mollusks, and crustaceans in the U.S. This would help curb the vicious blackmarket in the hides of American alligators."

The Citizens Committee on Natural Resources says, "The Highway Act is a monstrosity. We are urging the President of the United States to veto the Federal Aid Highway Act of 1968." "The 1968 Highway Act amendment, H. R. 17134, reports Mr. Allen, would expose public parks, recreation areas, wildlife and waterfowl refuges, and historic sites to invasion by federally assisted highways. H.R. 17134 would strike the safeguards written into Section 4 (f) of the 1966 Department of Transportation Act. It would put the highway builders back in the driver's seat for their destructive use of recreation, refuge, and other dedicated areas for rights-of-way."

A QUIET POOL ON THE COSSATOT

NEIL COMPTON



# Activity Schedule

Aug.	Sat. 10	Float Eleven Point River	Fri. 9 camp at Morgan's Spring Sat. 10 camp on river	Joe. M. Clark
	Sun. 11	(Alternate: explore vicinity Morgan's Spring)		
Aug.	Sat. 24	Cleanup float, Buffalo River	Fri. 23 camp at Gilbert Sat. 24 camp at Maumee	Clayton Little Dick Murray Chalmers Davis Joe M. Clark
	Sun. 25	(Alternate: camp at Rush and hike mining area)		
Sept.	Sat. 14	Float Ouachita River	Meet at Pencil Bluff on U. S. Hwy. 270, camp on river	Everett Bowman Richard Byrd
	Sun. 15	(Alternate: Hike Ouachita National Forest in vicinity)		
Oct.	Fri. 11	Float Middle Fork Little Red River	Camp on river	John Heuston
	Sat. 12	(Alternate: Hike old M. & A. railroad and bluffs)		
Oct.	Sun. 20	Fall Bus Tour, Fayetteville		Oren Maxfield
Oct.	Sun. 20	Fall Bus Tour, Little Rock		Everett Bowman
Oct.	Sat. 26	Float Cossatot River; Lad Bridge SE Gilham to U. S. Hwy 70	Camp on river	Dick Murray
	Sun. 27	(Alternate: Camp & hike at Falls of Cossatot)		
Nov.	Sat. 16	ANNUAL MEETING, Little Rock	Coachmans Inn	Everett Bowman
	Sun. 17			
Dec.	Sat. 14	Hike upper Buffalo cliffs and gorges	to be announced	Harold Hedges
	Sun. 15			

## 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
Harry Pearson 114½ S. Olive, Pine Bluff	JE 4-3322	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

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:

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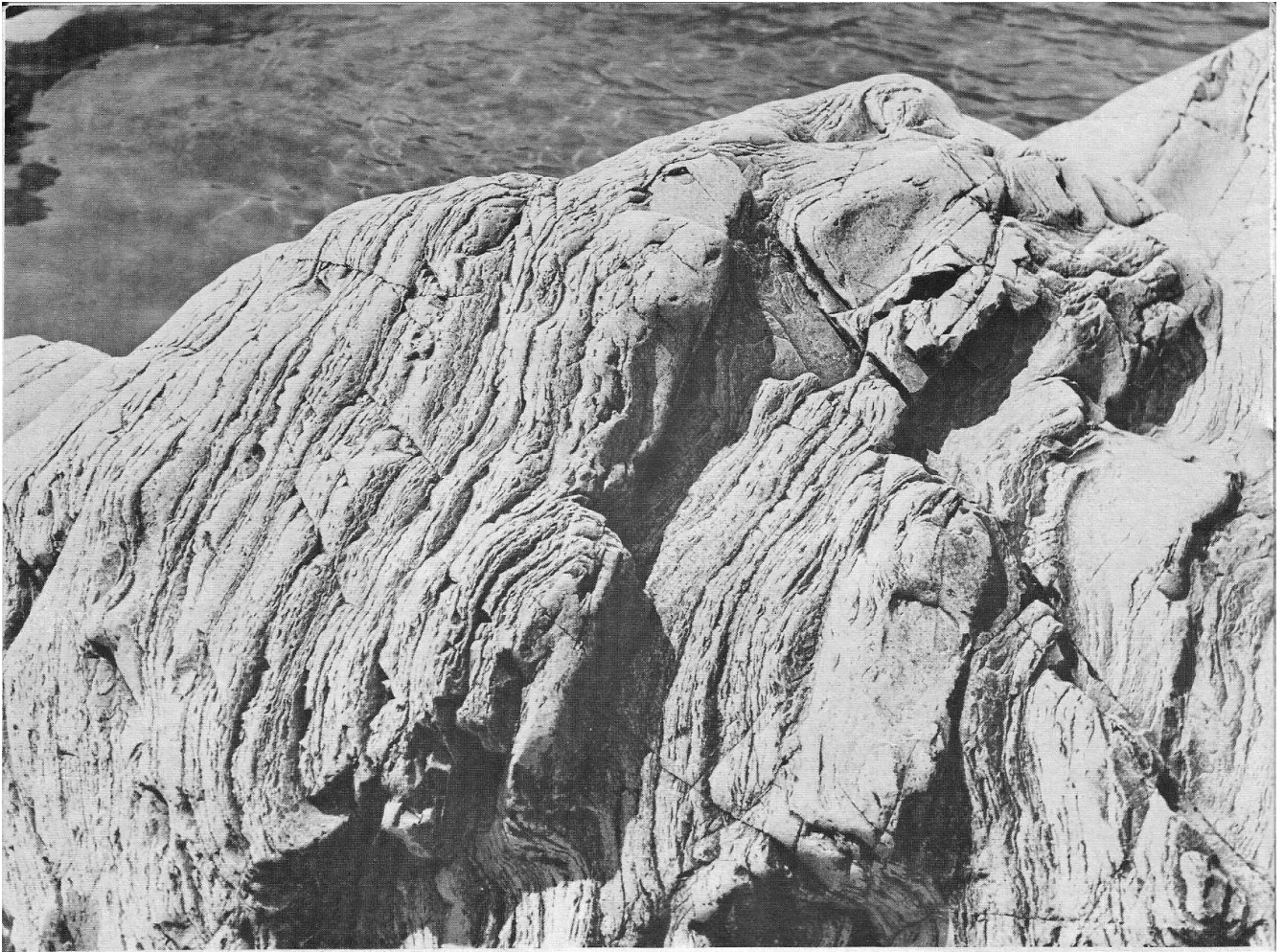
Date \_\_\_\_\_

Name \_\_\_\_\_

(If Mr. and Mrs., please specify)

City \_\_\_\_\_ State \_\_\_\_\_ ZIP No. \_\_\_\_\_





WATER-WORN ROCK ON THE COSSATOT

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