Ozark Society Bulletin

WINTER - CADRON CREEK —PHOTO: LIL JUNAS

WINTER 1974-75

OZARK SOCIETY BULLETIN

Winter 1974-75 **Volume VIII No. 4**

Published by The Ozark Society
Joe Marsh Clark and Maxine B. Clark, Editors
Ph 501-442-2404

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WELCOME TO A NEW CHAPTER

A group in Lafayette, Louisiana, has formed a new chapter of The Ozark Society and has taken the name "Cajun". Cajun Chapter and its officers will be found listed with the other chapters of the Society. Lafayette is about 25 miles from the Gulf, about as far south and a little over 100 miles west of New Orleans.

Being in Cajun country, the place names have a new and interesting sound, as do the French surnames of some of the members. The week-end trips of the chapter are into areas foreign to us but which sound inviting; let's hope that some of us can participate in them. The chapter is interested in saving the bayous of Louisiana, particularly Atchafalaya.

NATURAL AREAS BILL PASSES

We owe Governor Pryor and the Legislature our thanks for the passage of the Natural Areas Bill. Governor Pryor signed the administration's bill on February 20 providing $1.5 million for a new but renamed and scaled down version of a natural area aquisition program for Arkansas. To the $1.5 million will be added $1 million from the Federal Bureau of Outdoor Recreation which will give the opportunity of preserving significant bits of the state's natural heritage.

In addition, the Environmental Preservation Commission, which was authorized by the 1973 General Assembly but never funded, now becomes the Natural Heritage Commission with funds to support a staff.

HB 690 WITHDRAWN

House Bill 690, which would have prohibited the Arkansas Pollution Control and Ecology Department from writing any air and water pollution control regulations more stringent than the minimum federal requirements, has been withdrawn. In the control of air pollution, Arkansas has regulations more stringent than those of the U.S. government. The public's mounting opposition to the bill along with that of Governor Pryor had its effect.

Effect of Big Creek Project on White River Refuge

RAYMOND McMASTER, REFUGE MANAGER
White River National Wildlife Refuge

Raymond McMaster graduated in 1950 from the School of Agriculture, Mississippi State University having majored in Forestry. He began his career with the U.S. Fish and Wildlife Service in January 1952 as Forester on the Noxbee National Wildlife Refuge, Mississippi. In 1956, he became Refuge Manager of the Yazoo National Wildlife Refuge, Mississippi. In 1960, he was promoted to Refuge Manager of the White River Refuge, Arkansas.

Mr. McMaster writes, "The past 15 years I have become devotedly attached to the White River bottomlands. The changes have come fast and of a long lasting nature in these few years, particularly upstream water management projects and loss of timberlands adjacent to the Refuge."

This article is reprinted from the November 1974 Arkansas Out-of-Doors, official publication of the Arkansas Wildlife Federation. Because of its account of the destructive effects which will result from the channelization of Big Creek, and which may be expected on similar projects, we think that it is worth while to reprint the article, taking the chance that there will not be too great an overlap of readers belonging to both the Ozark Society and the Arkansas Wildlife Federation.

What will be the effects of the Big Creek Projects on the White River National Wildlife Refuge?

The Big Creek Basin is located in east central Arkansas in Lee, Monroe, Phillips and St. Francis Counties. The proposed plan of channelization includes enlargement and realignment on approximately 112 miles of the channels of Big Creek and its tributaries. Big Creek serves as the drainage outlet for 678,000 acres of which 555,000 acres lies above the limits of overflow. So the 20 million dollar drainage project is designed to prevent or reduce flooding on 123,000 acres. Of this amount, approximately 20,000 acres is in the flood plain of the White River and another 27,000 acres in woodlands along the Big Creek Channel. 5,200 acres will be required for channel right-of-way so the project for 20 million dollars is for increased protection to 71,000 acres.

The direct and immediate effect of this project on the White River National Wildlife Refuge will be a 200 foot right-of-way for 6 miles or 150 acres given up to construction right-of-way.

The downstream effect of the channelization project on Big Creek are related to water velocity and water quality. These two changes will result in increased soil erosion, increased siltation, warmer water temperatures, vegetation type changes, changes in quantity and species of fish, decreases in certain forms of animal life, chemical changes in the water and as an end result, will change man's recreational and economic pursuits.

How will the increase of water velocity effect downstream changes?

Channelization will increase the speed of water runoff from the Big Creek Basin into the White River Basin. This increase in water velocity will cause suspended soil particles to be carried further downstream to be deposited. Within two years after the project is completed, dredging will have to be done in White River. This will require a spoil area to pump the silt onto. The only area available would be on lands of the Refuge. An estimated 100 acres will be required indefinitely for spoil placement. The 3,600 acres of Refuge land within the Big Creek Basin will be slowly silted in by fine soil particles.

The increased water runoff from open land and increased flow rates will cause tons of silt to be displaced to some downstream point. As these waters spill into the White River Basin, the velocity will decrease and silt will be deposited or settled out on the land. The coarse material settles out first and if in enough volume settles around the base of trees and small plants and causes immediate death. The finer particles settle out further downstream. The fine material is really small clay particles and is what really concerns us on a large portion of the Refuge downstream from Big Creek. This clay or silt is often referred to as "muck" or "Blue mud" and fits together in tight layers almost impervious to water and plant germination.

What will this extra influx of silt cause?

Silt deposits on the lands of the White River Refuge will eventually cause the natural "Oxbow Lakes" to fill up enough to allow woody plants such as water elm, water locust, button bush and swamp privet to establish itself. This vegetation slowly encroaches on a lake during the drier periods until at last the lake is grown over completely. In established timber areas, silt is readily deposited during overflow periods because the trees slow water movement and when water speed slows down the silt settles out.

These silt deposits eventually cause most elms, oaks and associated species to die from "root compaction" and depletion of oxygen supply. When these species die they are replaced by less desirable wildlife species such as water elm, water locust, bitter pecan, willow and sometimes cottonwood.

What effect does silt have on annual plants and grasses that grow in the forest understory?

They will definitely be affected. The large seeding plants such as cocklebur and morning glory have little difficulty germinating and pushing their way through the tight soil. Small seeded plants, very desirable for waterfowl food such as smartweed, panicum grass, sprangletop and pond weeds do not germinate readily in layers of tight or heavy soil. As silting increases the amount of native foods are reduced for waterfowl, big game and upland game. Small animal life of insects that we call bugs and worms do not live readily in areas covered with silt. Dead limbs and leaves that these insects and grubs must have for places to live are covered under annually and do not provide habitat for these small insects. This breaks the food chain that eventually provides for food for turkey, squirrels, raccoons, bear and other insect eaters.

How will this project affect fish in the White River and the lakes within the Refuge?

Fish populations are directly affected by water turbidity and water quality. Faster run off will increase the amounts of potent or active insecticides into the River and also the lakes when overflows are present. These insecticides kill millions of small water animals that we never notice that provide the initial food for bait size fish. If these small fish mostly of the minnow families are killed off it upsets the food chain for more desirable fish such as catfish, crappie, bass, and bream. The loss of insect life mentioned above and decaying vegetation provides much of the food for many species of commercial fish and crayfish. Species important to this area that will be primarily affected are buffalo and drum. I'd like to add that turbid or muddy water causes changes in the species of fish in the water. Many studies have shown that fish populations have been reduced by 75 percent in total pounds per surface acre when streams were channelized. Slow flowing streams with deep pools under overhanging tree branches have warm water near the surface and cooler water near the bottom. Fast moving straight streams with bank vegetation removed has the same

(Continued on page 11)

Lizards of Arkansas

STAN TRAUTH, M.S.

The state of Arkansas with its diverse terrain ranging from the rugged, well forested Ozark and Ouachita Mountains to the broad, floodplain habitat of the Coastal Plain is the home of the reptilian fauna known as lizards. These glamorous creatures catch the eye and curiosity of vacationers and outdoorsmen as the lizards go about their daily activities, such as basking on rocks or logs to warm their cold-blooded bodies, foraging for insects in brush piles and grassy roadsides, or defending their territories from unwanted intruders. As a herpetologist (one who studies amphibians and reptiles) my fervor for these animals has brought me many hours of pleasure and has made me a devoted student of their study.

Many authors have published on the occurrence of lizard species within the state's boundaries, but, notably, Conant (1) describes the following four families and eleven species:

FAMILY IGUANIDAE

(1)	**Sceloporus undulatus**	fence lizard
(2)	**Crotaphytus collaris**	collared lizard
(3)	**Anolis carolinensis**	green anole
(4)	**Phrynosoma cornutum**	Texas horned lizard

FAMILY TEIIDAE

(5)	**Cnemidophorus sexlineatus**	six-lined racerunner

FAMILY SCINCIDAE

(6)	**Scincella laterale**	ground skink
(7)	**Eumeces fasciatus**	five-lined skink
(8)	**Emueces anthracinus**	coal skink
(9)	**Eumeces laticeps**	broad-headed skink
(10)	**Eumeces inexpectatus**	southeastern five-lined skink

FAMILY ANGUIDAE

(11)	**Ophisaurus attenuatus**	slender glass lizard

Of the eleven species, five (1, 5, 6, 7, 9) are especially abundant throughout the state. The glass lizard also occurs ubiquitously, but it is rarely encountered due to its secretive behavior. The coal skink and collared lizard are found primarily within the mountainous Interior Highlands. The green anole, often called the American chameleon since it can change color rapidly, dwells almost entirely in the southern half of the state. Two species just fringe Arkansas—the Texas horned lizard along the northwestern border and the southeastern five-lined skink in the southeastern corner.

In general appearance skinks are smooth, shiny lizards possessing blue tails in early life, with the exception of the ground skink which is brown throughout its life. The fence lizard has keeled, overlapping dorsal scales on a brownish background, and a smooth belly with blue patches characteristic of males. Three species—the green anole, six-lined racerunner, and collared lizard—characteristically possess small, granular scales. Horny spines on the head and body and leglessness identify the Texas horned lizard and the glass lizard, respectively.

For the last five years intensive field activities have led me to become personally involved in researching the life histories of the collared lizard and the six-lined racerunner. The collared lizard, a large-headed, gangling species, often displays dinosaur-like behavior by running entirely on its hind legs for long distances. Sexual dimorphism is evident; the males are larger and more brightly colored than the females. Upon capture this lizard can be very unruly and inflict a painful bite. I have found the collared lizard from the spectacular terraced bluffs of the lower Buffalo River Valley of southern Marion County to the flat cedar glade areas along the White River in Izard County. During the summer breeding season the male exhibits intensified territorial and courtship behavior. Once while investigating an abandoned rock quarry, I wandered into the territory of a breeding male. In an attempt to discourage my entry, he leaped from rock to rock positioning his body in a defensive posture (see photo). This type of behavior is characteristic of most species of the family Iguanidae.

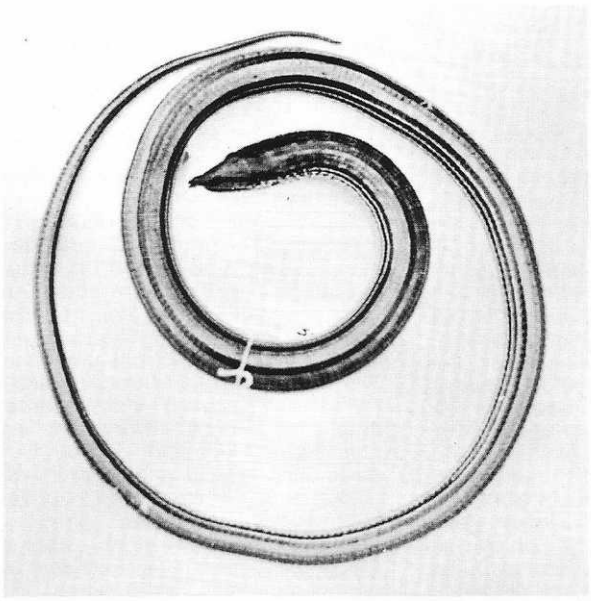
The six-lined racerunner, by comparison, is a smaller, more streamlined lizard and has the ability to streak along the ground at speeds up to 20 mph. During periods of inactivity racerunners reside in dens burrowed into sandy or clay soils in ravines and sloping banks alongside gravel roads and highways. In these banks each female lays 1 to 7 eggs during the summer reproductive season. The young appear in late summer and early fall as miniature replicas of the adults. Of particular interest to me is the hibernation of this species. By unearthing ground typical of their nesting dens, I have been able to find large colonies of as many as 20 lizards hibernating in a very small plot. Upon removal from these burrows, the racerunner is able to move awkwardly and may even try to bite.

One afternoon last October my boss, Dr. Joe F. Nix, presented me with a glass caricature of a lizard which he had designed in a glass blowing laboratory at Ouachita Baptist University. I accepted the fragile object which possessed four legs, a rotund body, and a slender tail. The obvious irony of the situation expressed itself by a high coincidental event which occurred later that very afternoon as I collected a highway killed lizard in southern Clark County. Due to its serpentine body form, this legless, longtailed lizard is often mistaken for a snake, although it is totally harmless.

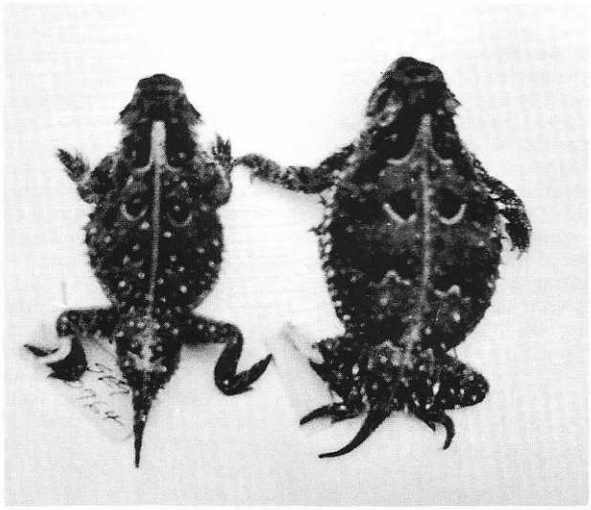
With the recent public awareness in conservation and preservation of endangered species, Arkansas has fallen behind most southern states in the field of herpetology. Six southern states, excluding Arkansas, have conservation departments involved in population estimates or other ecological studies of amphibians and reptiles. Arkansas has neither a state herpetologist, as four other southern state departments do, nor plans to utilize the existing staff or hire additional personnel with backgrounds in herpetology to study the reptiles and amphibians of the state. (2) At the present time the Arkansas Game and Fish Commission does regulate the taking of frogs and turtles and protects the American alligator. However, there are many species of snakes as well as lizards which deserve recognition and respect. A concerted effort by both the herpetologically minded and the state Department of Conservation would benefit all and save our natural herp populations from alteration by man.

(1) Conant, R. 1958. A field guide to reptiles and amphibians Houghton Mifflin Co. Boston. 366 pp.

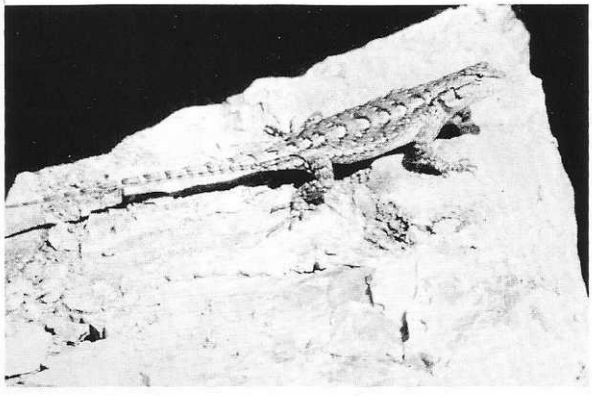
(2) HISS News- Journal. Vol. 1, No. 5. September 1973.



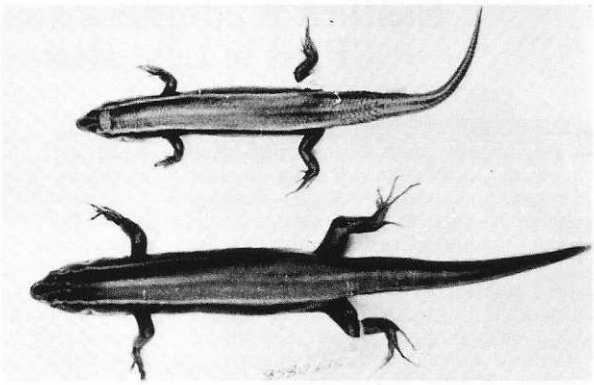
SLENDER GLASS LIZARD



TEXAS HORNED LIZARDS



FENCE LIZARD —PHOTO: DOUG REAGAN



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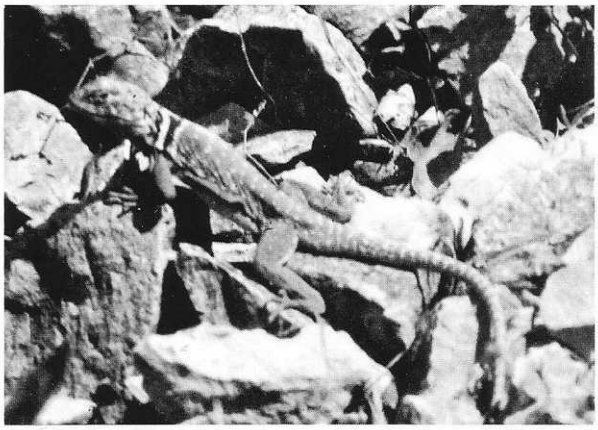
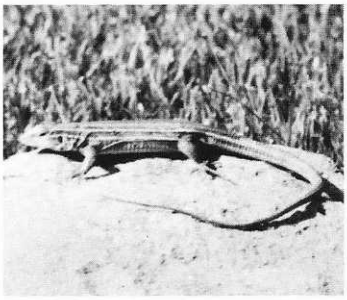


COLLARED LIZARD

COLLARED LIZARD POSTURING



SIX-LINED RACERUNNER

GREEN ANOLE

Eastern Wilderness and Omnibus Wilderness Bills Pass in Last Hours of the 93rd Congress

(Abridged communique from The Wilderness Society)

How easily both bills could have been lost in those last frantic days as Congress rushed to recess. Suspension of the rules or unanimous consent were the only procedures possible for their passage in the House. Both bills were passed by unanimous consent and went immediately to the Senate for concurrence. When Congress wants to act expeditiously, it can!

With these two bills and the Okefenokee and Farallon bills passed earlier, the 93rd Congress added over 1.27 million acres to the National Wilderness Preservation System, making 1974 the biggest year for wilderness since the 1964 passage of the Wilderness Act. So, Hallelujah! It's a great citizen victory! (Both Bills were signed by President Ford on January 3, 1975.)

National Wilderness Preservation System Acreages by Agencies: U.S. Forest Service, 85 areas, 11,873,932 acres; Fish & Wildlife Service 36 areas, 562,931 acres; National Park Service 4 areas, 200,945 acres. Total acres 12,637,808.

Total Wilderness Now in System: National Wilderness Preservation System prior to 93rd Congress, 11,366,273; Okefenokee, Ga., signed 10-1-74, 343,850; Farallon, Cal., signed 12-26-74, 141; Eastern Wilderness, signed 1-3-75, 206,988; Omnibus Wilderness, signed 1-3-75, 720,556; Total 12,637,808; Increase by 93rd Congress, 1,271,535.

From PADDLE TRAILS, Newsletter, Pulaski Chapter, January 1975:

WE WIN A ROUND — Congress passed the Eastern Wilderness Areas Act, the House on Dec. 18, the Senate the next day, and the official bill number is now S. 3433. It was quite a Christmas present. Arkansas got everything it asked for, although some states weren't so fortunate. It shows what the Ozark Society, working with the Ecology Center and other state conservation organizations, can do with concentrated effort.

Of the 16 "instant" wilderness areas created by the legislation, Arkansas has the 14,433-acre **Caney Creek Wilderness** south of Mena and west of Bard Springs in the Ouachita National Forest, and the 10,590 acre **Upper Buffalo Wilderness** in the Ozark National Forest upstream from the Buffalo National River boundary. Of the 17 "study" areas in the act, Arkansas has the 2,100-acre **Richland Creek** in the Ozarks, located east of Lurton and north of Ben Hur, and 5,700-acre **Belle Starr Cave** and 5,500-acre **Dry Creek**, both located south of Booneville in the rugged Ouachita National Forest. All are outstanding areas worthy of preservation. There is much more to the Richland Creek area — home of the famous Richland Falls and Twin Falls of the Devils Fork — than is included in this 2,100-acre study area. But we've been given time to study possible expansions. The Delta Chapter at Pine Bluff has been especially interested in this area and Tom and Jane Parsons have done a lot of research into potential boundaries for an expanded wilderness along the Richland.

Special thanks are due to David J. Saylor, Washington Coordinator for the "Citizens For Eastern Wilderness, 815 Connecticut Avenue, N.W., Washington, D.C. for his timely newsletters keeping us well informed on the progress of the legislation. Also, the Wilderness Society, which has long championed "wilderness in the East, where the people are". A letter, and a check for what you can afford, would be appreciated by Saylor and is certainly money well spent.

It is regrettable that several proposed areas in other states failed to get set aside; we especially sympathize with our Missouri and Louisiana neighbors for their complete loss. Chairman Melcher of the Subcommittee on Public Lands of the House Interior Committee held a hearing September 24, 1974, primarily to enable certain members of the House of Representatives having proposed areas in their Congressional districts to go on record in favor of the bill. Congressman Melcher's list of Wilderness and Study Areas omitted Missouri's proposed areas from the immediate wilderness designation. Also the proposed Louisiana study areas were left out.

Some hope and advice is expressed in the Memorandum of Citizens for Eastern Wilderness, David J. Saylor, Washington Coordinator, December 23, 1974:

Legislation in the 94th Congress

Many of you, no doubt, are disappointed that many wilderness and study area proposals were not included in the bill just passed. Don't give up, yet. Start planning your grassroots campaigns for 1975. We expect that one or more Eastern Wilderness area bills will be introduced early in the next Congress. But before an area is introduced in an omnibus bill, there ought to be as much assurance as possible that the local Congressman is in favor or, at least, will not actively oppose the proposal. There is strength in numbers; but, by the same token, we wouldn't want a few controversial areas to hold back the others. You may also want to redraw some boundaries so as to diminish local opposition.

The enactment of this bill is a great precedent. This whole legislation process has educated a lot of us, including quite a few Congressmen and Senators. Let's build on the great work of the 93rd Congress and on what we all have learned from this effort. Try to expand your local organizations and beef up your contacts among the friendly media people. And please be sure to publicly commend those Congressmen and Senators who helped us (or, at least, didn't actively hurt us) this time around.

Keep in mind that we still want all the management provisions that we did not get in the 93rd Congress. For example, we want to reintroduce the prohibitions against mining and water power projects on wilderness areas and study areas.

Study Area Teams

For those of you fortunate to have a study area designated in your region, you have a lot of work ahead. Try to organize a team of activists who will 1) watch every move of Federal agencies to prevent incursions on "wilderness character," 2) study and develop final boundaries, 3) propose detailed studies for your own and the Forest Service's use, and 4) educate the public, the media, and your Congressman to the merits of wilderness status. The Forest Service, under the new law, has only five years in which to make a recommendation on each of the 17 Study Areas.

S. 3022 - **WILD AND SCENIC RIVERS, STUDY.** Provides for feasibility studies of certain proposed additions to the Wild and Scenic Rivers System. Segments of 29 rivers including the **Illinois in Oklahoma.** This bill was signed by President Ford 1/3/75.

BOOMING TOURIST INDUSTRY TAKES ITS TOLL ON ENVIRONMENT

"The more tourism succeeds, the more it cannibalizes the very basis of its existence—the wilderness, the unspoiled landscapes, the quaint villages, the unique cultures that drew visitors in the first place," says Ann Crittendon in the March-April issue of the magazine, published by the National Wildlife Federation.

Floating Little River

HONUBBE TO PINE CREEK RESERVOIR

BY JOHN W. JONES

One morning in April 1973, Little River was running three or four feet above normal at the Honubbe bridge. John Jones put in his canoe, and in two days—15 hours' paddling—he surveyed nearly 55 miles of river to Pine Creek Reservoir.

John's solo trip testifies to his paddling skills gained from floating the rivers of southeastern Oklahoma. BULLETIN readers will recall that he surveyed the upper Mountain Fork for the Summer 1974 issue.

John also used his Little River data for credit in a recreation course at East Texas State University. He received a masters degree there two summers ago.

—Editor

LITTLE RIVER heads up in the Kiamichi Mountains of southeastern Oklahoma. . .flowing west, then south, then east to join the Red River near Fulton, Arkansas.

Little River's main tributaries—Glover River, Mountain Fork, Rolling Fork, Cossatot River—are well known to those who canoe in the Ouachitas. The main stream's two reservoirs, Millwood in Arkansas and Pine Creek near Wright City, Oklahoma, show plainly on state and regional maps.

Not so well known is the stretch of upper Little River flowing through the hills above Pine Creek Reservoir. Beginning in LeFlore County near the little village of Honubbe, canoeists can float down long pools and race over rock shoals, traveling into Pushmataha County and finally into the Pine Creek backwaters.

This upper section is relatively free of pollution, maintains good flow (though portions are difficult to float during dry summer months), and has long stretches bordered by Weyerhaeuser Company land on which camping is permitted. Also, fishing can be good, with the most sought-after prize being the smallmouth bass.

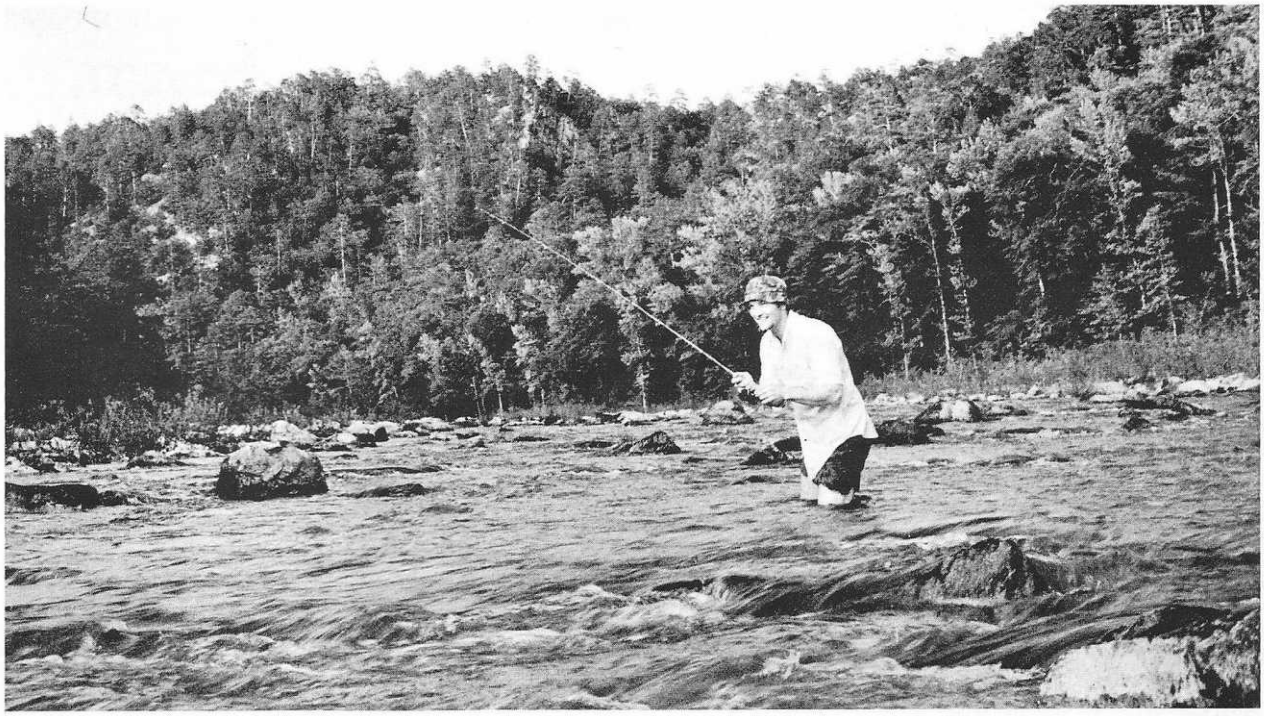
Most of upper Little River is a series of pools separated by rock ledge, gravel and boulder shoals or riffles. Usually the banks are heavily forested, rocky and rough. There is some flat ranch land along the valley between Honubbe and Nashoba, where cleared fields can be detected between the trees, and here and there a recreation cabin can be seen. Cabins can also be seen below Nashoba, but most of the land belongs to Weyerhaeuser.

River birch is the most abundant bank-side tree, but there is also sweetgum, black gum, maple, sycamore, oak and holly. On the hills are large pines, especially along the Weyerhaeuser portion of the river.

(Between Mile 39.0 and 40.5 there is a beautiful stand of mature pines that I suppose to be virgin timber. Weyerhaeuser was cutting in that area but had not cut these trees next to the river bank. Let's hope they recognize the beauty and scenic quality they lend to the river and leave them. It would be a grand gesture on their part, but perhaps too much to ask for.)

The many hardwoods along the banks make the river especially attractive in the fall. In spring the garb is several shades of new green, dogwood white and redbud pink. Of course, these seasons can't be matched for beauty by summer with its heavy dark foliage, or winter with its contrasts of evergreen and deciduous. But the appreciative eye of the canoeist will be rewarded on this river no matter what the season.

Wildflowers put on a continual show along the river banks, with highlights in the spring and fall. We natives of the area have our own names for many of the flowers. Probably many of our names are localized and sometimes personalized; to mention them might only confuse the more knowledgeable. However, I will say that I think the most beautiful of the river's wildflowers is the flaming



Fishing below Iron Springs hole, at Mile 40. Photo by— John Jones

arrow, which lends its solitary, haunting beauty at places up and down the river in late summer and early fall. To me each sighting comes as a pleasant, although expected, surprise.

Wildlife is abundant along the entire river, with an occasional surprise such as an osprey or eagle in the spring or fall. Many wood ducks nest along Little River, and gray and fox squirrels frequent the large hardwoods along the banks. Occasionally a deer may be seen, on the more remote sections.

Access to the river is limited because of private land, and lack of good roads in the more remote stretches. Most roads are marked with signs, and local people gladly help with directions. Logging operations and weather may change road conditions.

The map with this article shows all the primary access points. For more detail, see the following quadrangle maps of the U.S. Geological Survey: Honobia; Albion SE; Clebit; Nashoba; Caney Mountain; Sobol; and Alikchi.

Campsites are plentiful along the Weyerhaeuser sections, but most are inimproved and unmaintained. There are many small natural camping spots along the river, and most private landowners do not object to small parties camping overnight. On the upper river are a few commercial camps. Information on their current status is best obtained from people in Nashoba and Honubbe.

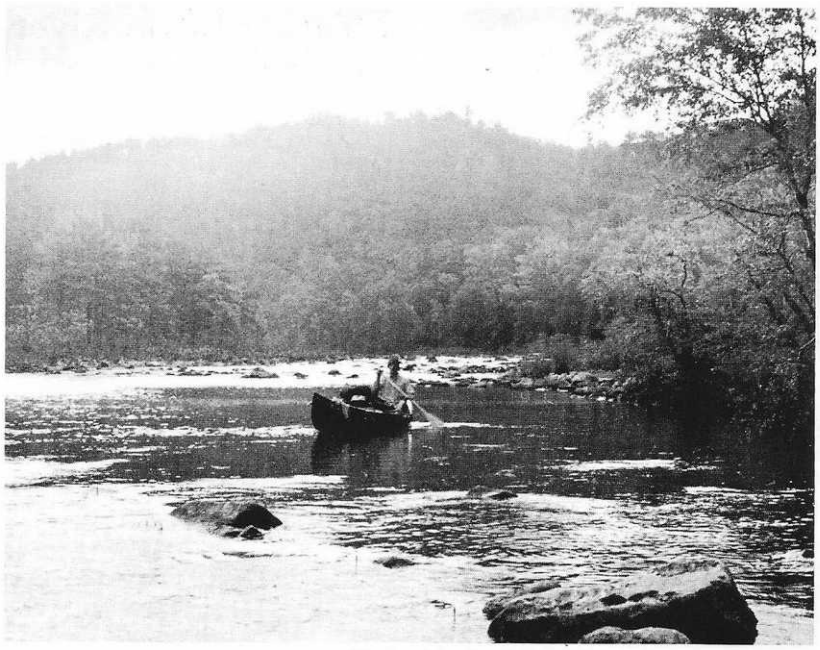
There are no permanent springs along this part of the river. Quality of the river water varies with the weather and season, but it is surely potable with the proper dosage of halazone. Most natives drink from the river or from seepage springs which are abundant in wet weather.

The river is basically peaceful and normally can be floated without danger or problems. On a rise of up to about four feet, it is an exciting stream for the experienced canoeist, an envigorating, enjoyable float, and it is possible with little effort to make 20 to 25 miles in an eight-hour day. It is one of the least dangerous rivers in the Ouachitas, for it lacks the abrupt drop-offs and ill-placed boulders such as are found on its feeder streams.

If the river rises more than about four feet, it becomes too swift, too dangerous to be floated.

Though weather will vary the river levels, one can expect good floating during fall, winter and spring when the river is not too high. In the summer, fair floating is possible to about July 1. After that, the river is usually too low from Honubbe to Nashoba until the fall rains come.

At times the river divides into two channels. Usually one way is about as good as the other.



Morning, below Iron Springs Hole, mile 40 —photo: John Jones

Upper Little River as a whole is an attractive float stream because of its remoteness, relatively unspoiled beauty, ease of floating, and abundance of game fish. Floating downstream, it is possible to stage a temporary mental and physical escape from our modern world...to go back into the era when Little River was a prized possession of the proud people of the Choctaw Nation.

RIVER MILES—DESCRIPTION

0.0—Honubbe bridge on Indian Highway. Access at north end of bridge. Village ½ mi. N. was named for O-no-bi-a, a Choctaw who was alloted land in the area. On newer maps, name is Honobia, but old spelling is Honubbe (pronounced Honubby).

8.1—Highway 144 bridge. Access at west end.

12.3—Bad shoal, at cabin overlooking river. Water swirls into rocks at right when river is up; go around to the left.

16.2—Road runs near river. Access, but no parking space nearby.

17.8—Nolia Road crossing, small concrete slab bridge. Turn-off at Hwy. 144 is marked.

22.9—Nashoba bridge. Access, no parking nearby. Village 2 mi. W. was named for Nashoba County of the Choctaw Nation.

24.2—Mouth of Black Fork. 2.7 mi. of Black Fork can be floated from bridge S. of Nashoba to mouth. Information on private camps at mouth and at 24.5 can be obtained at Nashoba general store. Access possible at both camps.

25.5—Road next to river; access. Camp spot at 25.8, mouth of Watson Creek. From here downstream is primarily Weyerhaeuser land.

30.1—Low bridge with rock pilings. Access, also campsite on left below bridge. Weyerhaeuser logging roads to Nashoba and Cloudy.

31.0-34.0—Private land on left bank; several cabins.

39.4—Iron Springs (dry) on right. Campground, ruins of log cabin.

42.0—Cloudy Creek, floatable for a short distance upstream.

42.1—Cloudy bridge. Access.

47.1—Rapids indicated on Geological Survey map. No cause for alarm. Nice even gradient with no rock ledges.

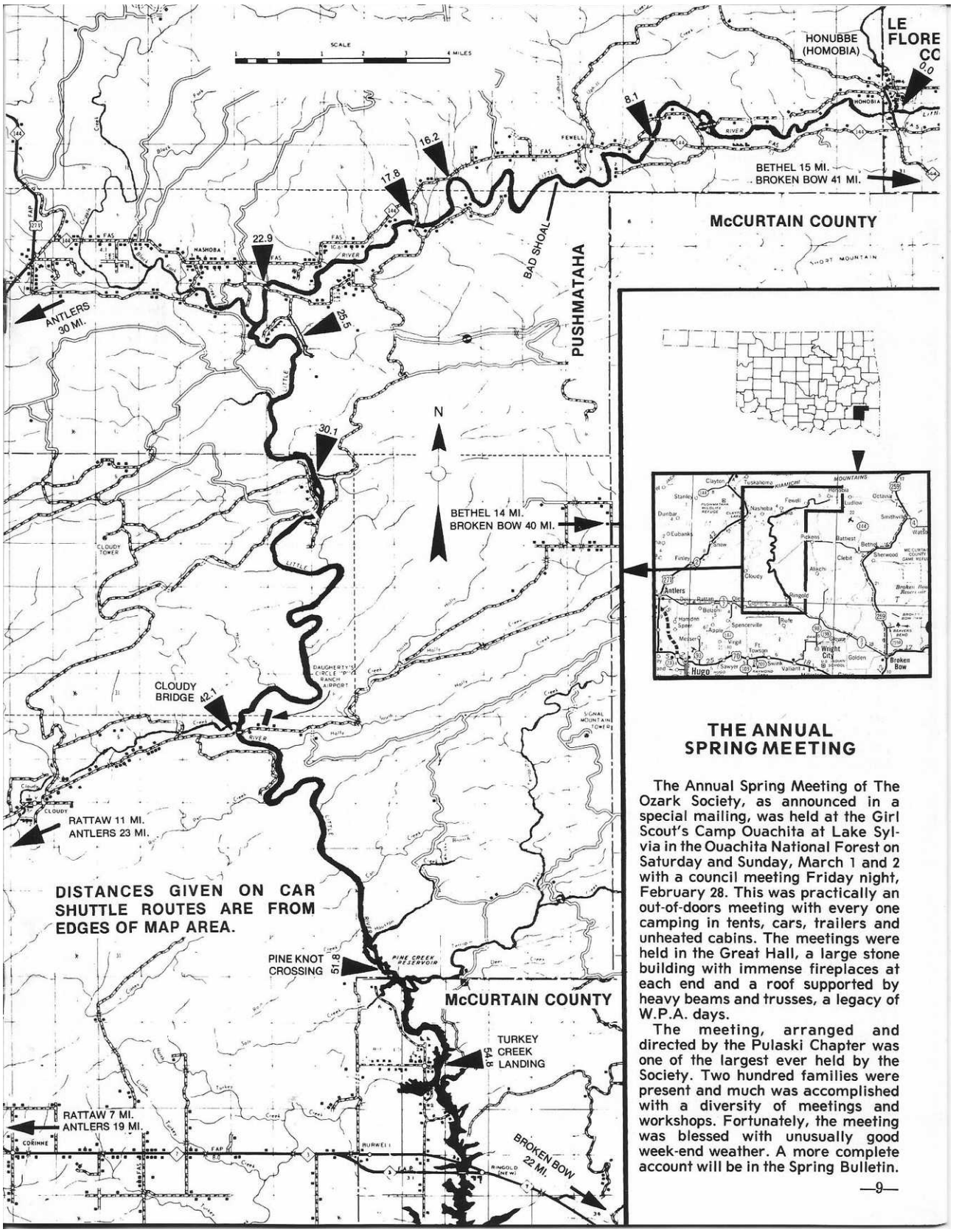
49.0-50.0—Backwaters of Pine Creek Reservoir are usually encountered here. Sometimes farther down, depending on the season.

50.8—Houston Creek, floatable about 1 mi. upstream. Fishing; campsites.

51.3—Pine Knot Crossing, old river crossing reached from W. bank via dirt road from Turkey Creek Landing road. Access, camping.

52.0—Terrapin Creek. Possible to float 2 to 6 miles up creek, depending on reservoir level. Fishing, camping.

54.8—Old Ringold (Turkey Creek Landing). Corps of Engineers access and camping area.



THE ANNUAL SPRING MEETING

The Annual Spring Meeting of The Ozark Society, as announced in a special mailing, was held at the Girl Scout's Camp Ouachita at Lake Sylvia in the Ouachita National Forest on Saturday and Sunday, March 1 and 2 with a council meeting Friday night, February 28. This was practically an out-of-doors meeting with every one camping in tents, cars, trailers and unheated cabins. The meetings were held in the Great Hall, a large stone building with immense fireplaces at each end and a roof supported by heavy beams and trusses, a legacy of W.P.A. days.

The meeting, arranged and directed by the Pulaski Chapter was one of the largest ever held by the Society. Two hundred families were present and much was accomplished with a diversity of meetings and workshops. Fortunately, the meeting was blessed with unusually good week-end weather. A more complete account will be in the Spring Bulletin.

Botanical Notes

MAXINE CLARK

Canoeing in a bayou may lack the excitement and exhilaration of navigating the fast, clear streams of the Ouachitas and Ozarks, but I hope to have such an experience this spring - to paddle quietly by the big buttress bases of bald cypress and water tupelo - have time to study the diversity of plants, observe the waterbirds, and listen to the bird calls from the canopy above.

I well remember a botanical field trip to unique Grassy Lake, a protected, privately owned cypress swamp. It was early spring; the high branches of cypress trees were covered with new green needles. We paddled by the buttress bases of the big trees through lanes marked by old license plates. It was an exciting experience to observe at close range many plants adapted to an aquatic habitat. For the first time I saw Virginia willow, not a true willow, but **Itea virginica,** a shrub of the Saxifrage family; southern wild rice, **Zizaniopsis miliacea**; and the long spiked **Wisteria macrostachya** in bloom, first reported by Thomas Nuttall in **A Journal of Travels into Arkansas Territory,** 1821. He writes of using this vine as a rope to secure his boat.

Late in the afternoon our leader became lost; apparently we were going in circles. It was eerie to hear the booming of the alligators and the haunting cry of a migrating loon. We were all relieved when the caretaker came by motorboat to escort us back to headquarters.

Valuable ecological research of Grassy Lake has recently been completed by Robert Terry Huffman of the University of Arkansas.

The big trees of the Gulf Coastal Plain which grow in swampy and frequently inundated areas are:

Bald Cypress - **Taxodium distichum** Rich
Water Tupelo - **Nyssa aquatica** L.
Swamp Cottonwood - **Populus heterophylla** L.
Water Locust - **Gleditsia aquatica** Marsh
Water Hickory - **Carya aquatica** Nutt.
Pumpkin Ash - **Fraxinus tomentosa** Michx.
Overcup Oak - **Quercus lyrata** Walt.
Willow Oak, (Pin, Swamp, Willow Oak) - **Quercus phellos** L.
Water Oak (Duck, Possum, Pin Oak) - **Quercus nigra** L.

The acorns of Water Oak, and Willow Oak are from ⅓ to ½ inch long, and are valuable as wildfowl food. These trees are not to be confused with the upland pin oak **Quercus palustrus.**

Lesser trees and shrubs are:

Water Elm - **Planera aquatica** Gmelin
Swamp Red Maple - **Acer rubrum** L., var. Drummondi
Virginia Willow - **Itea virginica** L. Also called Sweet Spires - Saxifrage family.
Buttonbush - **Cephalanthus occidentalis** L.

The following is from "Guide to Southern Trees", Harrah and Harrah:

> "Students of fossil plants assert that at one time the Bald cypress Family was very abundant and formed vast forests throughout the world, particularly in the Northern Hemisphere. The modern family, however, numbers 14 species included in 8 genera. These are found distributed in the timbered regions of Tasmania, Formosa, Japan, China, and North America. Two genera, each with two species, are included in the arborescent flora of the United States. One of these Sequoia, embraces the world famous redwoods and big trees of California. The other, Taxodium, includes the equally famous "trees with knees", the bald cypresses of southern river bottoms and coastal swamps.
>
> The bald cypresses were once widely distributed throughout the prehistoric forests of North America and Europe. The modern genus includes but three species. One of them (T. mucronatum Ten.) is a native of Mexico, while the two remaining forms are found along the Atlantic and Gulf Coastal plains of Southeastern United States. The genus, unlike other coniferous groups of the south, is characterized by deciduous foliage."

This interesting tree, **Taxodium distichum** Rich.; attains a height of 100' to 150', develops a buttress base, tapered and often fluted bole and pyramidal crown; with age the bole becomes more cylindrical and the crown flat-topped. The unique root system has numerous deep roots supported by a lateral system of shallow roots. Cone like structures known as "knees" arise from these. Knees do not develop when the tree is growing out of water, suggesting that these pecular structures may serve as a type of breathing organ to transmit air downward into the submerged roots.

The flowers are of two kinds. Male or staminate are at the tip of twigs in long pendulous clusters; the pollen-bearing flowers are purplish-brown with 6-8 stamens. The female cones are on branches of the previous season and consist of several fused overlapping bracts bearing 2 ovules. Mature cones are ¾" to 1" in diameter; seeds are three angled and 3 winged.

The wood of bald cypress is very durable and is used for construction of docks, bridges, boats and ships, shingles, posts, poles and crossties. Many old homes of the South were made of cypress and required no painting.

The pond cypress, **T. ascendens** Bong. is considered by many to be a variety of bald cypress. The scale-like leaves are appressed along the twig and it commonly grows in shallow ponds. It is the cypress of the southeast coastal regions but is also found in Arkansas. Lumbermen consider the wood of the pond cypress inferior to bald cypress.

In 1927-29, renowned Arkansas botanist, Delzie Demaree, did extensive research in the "Sunken Lands" of Arkansas and the region around Reelfoot Lake, Tennessee, which were lowered by the New Madrid Earthquake in 1811-12. To quote from the opening paragraphs of his paper "Submerging Experiments with Taxodium" presented before the Ecological Society of America at New Orleans in December, 1931:

> Plant ecologists in general have been interested in two questions concerning **Taxodium distichum** (L.) Richard. Will seeds sprout under water? Will the trees live when completely submerged? The summers of 1927-29 were spent doing field work in the "Sunken Lands" of Arkansas and the region around Reelfoot Lake, Tennessee. These regions were lowered by the New Madrid Earthquake in 1811-1812. The St. Francis River in Arkansas has changed from a stream to forty to fifty meters wide, flowing in a well defined channel to a much broader stream, in places reaching a width of five miles, flowing in several poorly defined channels. Water over this region varies from a few centimeters in summer to two to four meters in the spring. As the lower parts fill in with sediment, the river widens each year. Reelfoot Lake, however, has better defined boundaries, due to greater submergence. Here, the great forest areas were lowered about six meters, water from the Mississippi rushing in, entirely submerging the smaller trees and causing death to the largest (Nelson, '24).
>
> How long these big trees survived in six or more meters of water can not be determined. Rowing a boat over the tops of smaller trees and over the huge dead bodies of older ones still standing, which before 1811-12, formed a great virgin forest, is an experience which cannot be

(Continued on next page)

FACTS OF BIG CREEK PROJECT ON WHITE RIVER REFUGE

(Continued from page 3)

temperature from top to bottom. Straight fast moving streams develop the same depth throughout their length. This constant flat bottom destroys depressions that fish use to lay their eggs. In summary, the waters of the White River Basin will increase in bull-head catfish, bowfin, carp and gar. Channel catfish, blue catfish, bass and sun fishes will decrease.

What effect will the change in fish life have on the animal population?

It will have a chain reaction in the food chain for other animals. Raccoons, mink and otter are three major furbearers and depend for a majority of their food on fish. These species will decline.

What other factors will affect the management of the Refuge as a result of this project?

Loss of waterfowl habitat, timberlands and fishing opportunities that will be lost in the Big Creek Basin will cause increased demand on lands within the Refuge. Displaced squirrel, raccoon, deer and duck hunters will be seeking other areas on which to hunt. The loss of habitat for approximately 100,000 ducks will have to be replaced somewhere in the Mississippi Flyway. The Big Creek Project plus other projects in eastern Arkansas have all had their impact on the hunting and fishing public. Since 1961, demands for deer hunting on the refuge have increased from 6,000 people to 15,000. We can only accomodate 6,000 deer hunters per year and sustain our deer population. Fishing pressure has increased from 40,000 visits per year to 200,000 visits per year.

The change in flooding patterns caused by improved drainage and upstream reservoir releases on White River has increased the amount of time that the Refuge is flooded each year.

We formerly could expect public use to begin in May and go through November. In the last two years, public use was limited to mid-July through October because the bulk of the Refuge was flooded from December 1 thru July 10. So the Refuge has become a sump area for flood waters rather than a Refuge for wildlife.

Maintenance cost of keeping up Refuge roads, water control structures and recreation facilities have been increased by these longer overflows that are compounded by all upstream drainage projects. Water, like everything else, has to be somewhere, it's either on someone's land, in a reservoir, or fed back to the ocean. The case now is that upstream drainage projects are transferring the water problem from upstream to downstream.

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duplicated. The parts under water are well preserved. A pole four inches in diameter, after one hundred and twenty years, is still strong enough to wreck a boat. In the lower St. Francis River, the earthquake overturned most of the large trees. The water in Reelfoot Lake is clear, while that in the St. Francis River is very muddy. Before the era of drainage ditches in Arkansas and Missouri, the two regions had similar vegetation. Today they compare only in their ligneous flora.

We have here a natural made region of known age in the **Taxodium** belt, where, if **Taxodium** seeds will sprout under water and the seedlings live, a great forest should be developing. The only place that we find a forest developing is along the margins of streams, lakes, bayous, or regions flooded for a short time only. Harper (12) believes that **Taxodium** is rarely or never found on the banks of rivers or other bodies of water which have an average seasonal fluctuation of more than ten or twelve feet.

Two sets of experiments, (1) seed submergence and (2) tree submergence, show that seeds to not sprout when submerged and that the trees die when submerged.

Cypress in Grassy Lake, Arkansas —photo: Maxine Clark

Crater Of Diamonds State Park

From ARKANSAS DEPARTMENT OF PARKS AND TOURISM News Releases of December 10, 1974, by Faune Conner, and January 16, 1975, by Tyler Hardeman.

The Crater of Diamonds at Murfreesboro is the only known occurrence of diamonds in their natural matrix in North America.

Editor's note:

The diamonds are found in an intrusive peridotite (a granitoid rock) pipe and volcanic breccia. In association is finer material known as volcanic tuff. The peridotite is weathered and comparable to the kimberlite or "blue ground" in the African mines.

Whether or not a volcano was present is conjectural, but the presence of the breccia (broken material) and tuff indicate an explosion or blowout. Any cinder cone would have been eroded away during the 100 million years following the volcanic activity which took place in late Cretaceous time.

Most of the diamonds occur in the breccia and a few in the peridotite. About 90 per cent of the stones are classified as industrial diamonds and the remainder are of gem quality.

Diamonds are composed of pure carbon as is graphite which is soft and used as a lubricant. The diamond is the hardest of all minerals, but is brittle, so do not test by hitting with a hammer. Great heat and pressure are responsible for the conversion of carbon into the diamond.

The fact that the Murfreesboro plug has not been explored to any considerable depth makes one wonder what might be found at greater depths.

Since its discovery by a farmer named John Wesley Huddleston back in 1906, the Crater has yielded upwards of 60,000 stones. Not all of them would excite you. But there have been some notable finds—like the Uncle Sam, the largest gem diamond ever found in North America at 40.23 carats, the Punch Jones at 34.46 carats and the Arkansas Searcy at 27.23 carats. Over 200 stones are reported every year to the parks personnel, and many others go unrecorded because they are found and carried away without a stop at the Visitors Information Center. You can also purcchase a bag of the kimberlite soil "to go" at the center, and any discoveries contained in them are usually not reported.

Before the State of Arkansas purchased the diamond field in March, 1972, for $750,000, the field had been divided by multi-ownerships and was the site of several mining operations all unsuccessful because of a lack of funds. The deepest shaft was sunk about 150 feet while the African diamond mines are 4,000 to 5,000 feet deep. One mining company did find the Uncle Sam Diamond.

A portion of the diamond field was open as a tourist attraction from 1952 to 1972 under private ownership. Under state ownership the entire field is open to the public with an admission charge of $2 for adults and $1 for youth age 6 to 16.

The Crater of Diamonds comprises 867 acres, of which 78 acres form the volcanic core containing the precious stones. The large field is plowed frequently so that diamond hunters have a continually renewed hunting ground.

Best time for searching is after a rain, when the diamonds are most obvious, cleaned of dirt that adheres to them. Park personnel advise searchers to walk facing the sun, and to be on the lookout for sparkles in the rich, dark kimberlite. You can bring your own equipment for digging, or rent it at the park. When you find a stone that looks like the real thing, bring it to the Visitors Information Center. The park geologist will be happy to test your find. And it's all yours to keep, whether it's worth nothing more than a souvenir—or thousands of dollars!

Since March 14, 1972, when the Arkansas Department of Parks and Tourism began operating the Crater of Diamonds as a state park, 529 diamonds have been found by visitors to the park, according to Park Superintendent Jim Cannon. Seventeen of these stones weighed two carats or more.

The largest—a 3 carat, 90 point silver cape—was discovered by a visitor from Osage, Oklahoma. A 3 carat, 34 point white stone was the treasure turned up by a Ohio visitor. Mr. and Mrs. L.E. Owens of Des Arc, Ark., are all-time champion diamond hunters with over 200 finds to their credit.

The Owen's are not professional diamond prospectors; rather they are an adventuresome farm couple who began diamond hunting as a hobby nine years ago. L.E. and Pauline have a 1,000-acre rice and soybean farm near Des Arc and enjoy taking weekend trips in their motor home to Murfreesboro, some 180 miles away.

Pauline first visited the diamond crater in 1965 with her sister Maple Beggs, a former Carlisle, Ark., resident who has also had incredible luck in finding diamonds there. Maple, now a resident of Las Vegas, Nev., has not found as many stones as Pauline, but she discovered the Chief of Carlisle Diamond in April, 1966, which weighs 13.50 carats and is valued at $6,750.

The Owen's keep no secrets about the way they search for diamonds and say, that over the years, they have tried all methods. They used to dig up the diamond-bearing Kimberlite soil from the park's 78-acre field, sift it with screens, and then wash it to find the tiny stones, but they found this process too time-consuming and tiring. They now choose one spot in the field, sit on cushions, and carefully scrutinize the surface of the ground to spot anything that shines.

The Owens' method of looking, just on the top of the ground, has been successful because of the peculiar properties of diamonds. Diamonds occur as individual crystals, not part of a rock, and their natural oily coating prevents dirt and mud from clinging to them. However, because the diamonds are so smooth and slick, the Owens' use either a teaspoon or a knife blade to scoop them out of the ground and drop them into a small medicine bottle.

The Owens' average about six trips a year to the diamond field and prefer to go after a hard rain when water has softened and washed away the clumps of dirt. They recall that once during a rainstorm they found ten diamonds. Park officials also report that it is not uncommon for as many as 600 people at a time to be out in the field looking for diamonds when it rains.

Although the Owens' do not have a favorite spot in the field, they do advise that if searchers find a diamond they should keep quiet momentarily to prevent crowds from gathering and ruining their looking. The Owens' also suggest that searchers realize that diamonds do not just occur as icy white stones but are tinted yellow, brown, pink, green and black. Another reason for careful discernment is that the diamond field has a bounty of other colored stones such as amethysts, garnets, opals, peridots, agates, quartz and jasper.

The Owens' prize finds at Murfreesboro so far have been a 2.30 carat canary yellow diamond worth $3,000 uncut and a 2.12 carat brown diamond. Their largest diamond, a 7 carat stone, was found in 1969 but is not as valuable because it is flawed by a carbon deposit. The Owens' have never sold any of their diamonds because they would have to pay taxes on them, but keep them locked safely away in the bank.

Approximately 80 of the Owens' stones have been cut by New York jewelers, but they say inflation has now affected this service. The price of cutting diamonds has jumped from $20 to $80 per carat. They have had 40

of their prettier diamonds made into such jewelry pieces as rings, earrings, necklaces and tie pins.

Although the Owens' take their diamond hunting seriously, they recall that there have been some humorous moments at Murfreesboro. They once jokingly told a group of onlookers that they found their diamonds by prying the rocks loose with a screwdriver. The people then rushed off to town to buy screwdrivers.

The Owens' have also seen a man search the field wearing a helmet equipped with magnifying glasses while another man tied a magnifying glass to the end of his shoe. Past prospectors have also brought with them jewelers eye pieces, binoculars, flashlights, and metal detectors. One old-timer brought along his dog to point out the diamonds, and another used a peach tree limb to "witch" for diamonds the way people witch for water. Perhaps the funniest diamond finder of all was a 14-month-old girl who picked up a 11.92 carat diamond in 1963 and put it in her mouth.

Since it has become a state park, an average of one diamond a day has been found. As a proven lucky lady, Pauline Owens offers this overall tip to people who would really like to find diamonds. She says, "Go to the park often, get in one spot of ground and look hard. Then, pick up everything that shines and take your stones to the park office to be checked!"

The Crater of Diamonds State Park is located 2-½ miles south of Murfreesboro on Arkansas 301. Park facilities include a museum, gift shop and picnic area, and a new restaurant will open in spring, 1975. Development plans call for a campground, but for the present, travelers will find campgrounds at Daisy State Park and Corps of Engineers Public Use areas at nearby Lake Greeson. Motels and a private campground are also available in the area.

A Book Review of "The Stream Conservation Handbook"

BY DAVID R. STRICKLAND

Published as a Sportsman's Classic by Crown Publishers, "The Stream Conservation Handbook" will be of prime interest to anyone who loves and appreciates the special values of a natural river or stream. After a down-to-earth introduction by Nathaniel P. Reed, Assistant Secretary of the Interior for Fish and Wildlife and Parks, the book's clear message unfolds in nine chapters, each one written by an author who is an expert in his particular field. A sample of some of the chapter titles: **The Living Stream, Streamside Surveillance, The Stream Killers, Group Action and Available Support,** and **Legal Action to Save a Treasure.** The 242-page, 7x10 inch hardbound book, edited by J. Michael Migel, is richly illustrated with 85 black and white photographs and over 90 pen-and-ink drawings by Dave Whitlock. While the book's strong and earnest plea is directed primarily toward the serious stream fisherman, the book should not be considered of interest to fishermen only. Far from it, the book is a practical primer in the ecology and conservation of streams and rivers. It is both a call to action and a ready source of information and motivation. While current best sellers may come and go, "The Stream Conservation Handbook" will likely remain as a permanent reference for those seriously interested and concerned about the future of our natural waterways. Page-for-page, it is one of the most interesting and informative conservation books that I have read. Its specialty is free-flowing rivers and streams and how we can keep some of them; it is very readable, even for the non-technical person.
The pictures and drawings alone are worth the price of the book.

"The Stream Conservation Handbook" is available to members of the Ozark Society for $6.95 postpaid (regular bookstore price is $7.95). Order your copy from Steve and Jo Wilson, 7500 Ember Lane, Little Rock, Arkansas 72209.

Abandoned railroad rights-of-way would make good bikeways. Advocates of bicycling as alternative transportation see an unprecedented opportunity for new public cycling trails.

Words & Pictures Contest Opens

Ozark Society members and friends are invited to submit their favorite conservation quotations, and choicest black-and-white photographs for use in an Ozark Society publication which is being planned. The form which this will take has not been decided. **May 1 is the deadline for submitting entries.**

This competition is to select photographs, and appropriate conservation messages to depict the unspoiled Ozark country and to stress the need for saving its natural-historical heritage.

Rules of the contest:

1. Photos (scenics, plant life, rock formations, old buildings or structures, etc.) must show the natural or historic values of the Ozarks (Arkansas, Missouri, Oklahoma). Quotes may come from any source, but must relate to preserving those values. EITHER PHOTOS OR QUOTES, OR BOTH, MAY BE SUBMITTED.
2. Quotes may come from copyrighted material; if used, permission would be obtained from the publisher. Photos previously published in local or state (but not national) publications will be accepted.
3. Submit only black-and-white photos, 8x10 or larger prints preferred. Winners must be able to loan negatives if necessary for further printing. Label the back of each print with subject, location, date and photographer's name.
4. Mail photos flat between cardboards. Enclose another envelope, same size, with postage for returning entries.
5. Mail entries to Ken Smith, The Ozark Society, 2148 Markham Rd., Fayetteville, Ark. 72701. Final deadline for receiving entries is May 1, 1975. Entries not accepted will be returned by June 15; those accepted, probably by August 15.
6. Three disinterested judges will be selected from art and photography professionals. Quotes will be judged by Ken Smith, editor-designer with the aid of other Society members.
7. Photos will be judged on technical and artistic quality and on "Ozarks flavor". Quotes will be selected for the overall message of conserving the Ozarks heritage.
8. For each winning photograph or quotation, one free copy of the publication will be sent to the winner. Each winner will be given credit in the publication.

Ozark Society Activity Schedule

SPRING 1975
CARL GUHMAN, OUTING CHAIRMAN
1315 S. SCOTT ST., LITTLE ROCK, ARKANSAS 72202
PHONES 374-8127 & 371-1941

Please contact the trip leader in advance of any outing you want to participate in. The participants in some areas may have to be limited in number and all outings may be subject to change of plans due to weather or water conditions.

MARCH 1, CAJUN: Whiskey Chitto Creek. White quartz sand bars for camping, gentle current, remote and scenic. Rick Michot 318-233-35709

MARCH 8-9, BAYOU: Day hikes in Bard Springs, Ark. area. Bill Meiers, 865-2982, ofc. 686-7237.

MARCH 8-9, CAJUN: Overnight backpack trip in Kisatchie National Forest. Dave Thibodeaux, 1539 Pinhook Rd., Lafayette 318-232-2018

MARCH 8-9, DELTA: Hike Hurricane Creek to Natural Bridge. Jim Dardenne, #3 Malcomb, Lot 4, Pine Bluff, Ark. 71601. Ph. 501-536-3476.

MARCH 8-9, INDIAN NATIONS: Trail work and hike, Ft. Gibson Reservoir. George Pierson, 918-936-6515 or Bob Ferris, 918-747-4836.

MARCH 9, SCHOOLCRAFT: Float Swan Creek. Basic Canoeing skills required. Richard Summers, 417-862-3366.

MARCH 15-16, BAYOU: Caddo R. float trip, David Ginsburg, 865-7233.

MARCH 15-16, CAJUN: 75 mile canoe trip down the Atchafalaya River from I 10 to Morgan City. Canoe through Louisiana's great Atchafalaya Basin. There will be time for fishing in fresh-water lakes along the way. Contact Harold Schoeffler, 1100 Marilyn Dr., Lafayette, La. 318-984-5456

MARCH 15, HIGHLANDS: Day hike on Hurricane Creek. Dick Murray, 2005 Austin Dr. Fayetteville, Ark. 72701, 501-442-8995.

MARCH 16, FT. SMITH: Canoe Frog Bayou from Mountainburg to Highway 64. Jim Kearney, 5003 Summit, Ft. Smith, Ark. 501-452-0814.

MARCH 15-16, SCHOOLCRAFT: Upper Buffalo R. backpack trip. Bill Bates, 417-883-5199.

MARCH 15-16, PULASKI: Richland Creek backpack. Jack Downs, 501-663-0749.

MARCH 15-16, INDIAN NATIONS: Caney Creek backpack. Bob Ferris, 2811 E. 22nd, Tulsa, Ok. 918-747-4836.

MARCH 22-23, INDIAN NATIONS: Red Bud Valley trail work. June Kendall, 4813 E. 26th, Tulsa, Ok. 74114. Ph 918-939-1839.

MARCH 22-23, BAYOU: Backpack Caney Creek. Frank Hampson, Shreveport. Ph 868-7112. This will be an exploratory hike to locate new campsites - good map readers and makers needed.

MARCH 29-30, BAYOU: Ouachita R. Canoe trip, base camp at Fulton Branch. George Armstrong, Shreveport, ph 865-8302.

MARCH 28-30, CAJUN: Buffalo River, Ponca to Pruitt, Owen Gibbs, Lafayette, La. 70501

MARCH 28-29-30, INDIAN NATIONS: Buffalo River Float, Ponca to Pruitt, camp on River. Paul Kendall, 4813 E. 26th, Tulsa, Ok. 74114.

APRIL 5, OUACHITA: Roaring Branch hike. Charles Cantrell, Ouachita Baptist Univ., ext. 297 of Joe Nix, 246-6534.

APRIL 5, INDIAN NATIONS: Red Bud Valley hike. Glen Ramsay, 1725 S. Yorktown, Tulsa, Ok. 74114, ph 918-936-1546.

APRIL 5-6, BAYOU: Backpack Ouachita Trail above Hot Springs. Frank Hampson, Shreveport, ph 868-7112.

APRIL 12-13, CAJUN: Little River eight mile trip. The river is near Georgetown, Louisiana. Dogwood will be in bloom. Campout and group cooking Saturday night. Jerold Freeman, 304 Live Oak, Lafayette, La.

APRIL 12-13, OUACHITA: Antoine River float, overnight on river. Trip will be limited to 12 canoes, experienced floaters only. Jim Rees, Ouachita Baptist University, ph 246-5497.

APRIL 12-13, BAYOU: Float upper Cossatot: day floats on any of the river floatable above the lake. Irene Armstrong, Shreveport, ph 865-8302.

APRIL 12-13, INDIAN NATIONS: Greenleaf Lake backpack. Bob Ferris, Tulsa. 918-747-4836.

APRIL 19-20, ALL CHAPTERS **ANNUAL DOGWOOD FLOAT**: Ponca to Pruitt on the Buffalo River. Meet at Ponca bridge at 8:30 Saturday for car shuttle. Overnight camp on river. Harold Hedges, Ponca, Ark. Ph 501-428-5445. Experienced canoeists only.

APRIL 19-20, BAYOU: Backpacking - Red Dirt - GMA, near Natchitoches, La. Dr. Dwayne Kruse, NSU - P.O. Box 3005, Natchitoches, La. 71457, ph 352-6914.

APRIL 19-20, CAJUN: Backpack trip in the Big Thicket of Texas. Owen Gibbs, Lafayette, La. 70501

APRIL 26-27, CAJUN: Tickfaw River - Southeastern Louisiana (La. Scenic River). Exceptionally scenic, characterized by a cool, clear current and covered by a canopy of tree branches. Richard Hebert, Rt. 3, Box 120 M, Lafayette 318-981-1982

APRIL 26-27, DELTA: Buffalo R. float, Ponca to Pruitt. Jim Dardenne, #3 Malcomb, Pine Bluff, Ark. 71601, ph 501-536-3476.

APRIL 26-27, INDIAN NATIONS: Mulberry R. float trip, with base camp at Turner's Bend. Experienced canoeists only for float, but good hiking available for non-floaters. Mel Smith, 305 NE Morningside, Bartlesville, Ok. 74003, ph 918-333-1072.

APRIL 26-27, BAYOU: Glover River float trip, S.E. Oklahoma, David Ginsburg, Shreveport, ph 865-7233.

APRIL 27, FT. SMITH: Frog Bayou Canoe Race - first edition of an annual event. 10 mile race from Highway 282 bridge to Rudy, Ark. Rules will be mailed to chapters before March 1, 1975. Co-chairmen: Leon Fritschie, 601 N. Columbus, Spiro, Ok. 74959, ph 918-962-3228; Bob Fritschie, 1808 N. 52nd St., Ft. Smith, Ark. 72901, ph 501-783-2439.

MAY 1, INDIAN NATIONS: Family Pot-Luck Supper at La Fortune Park, Tulsa. June Kendall, 918-939-1839.

MAY 4, SCHOOLCRAFT: Day hike in Hercules Wilderness Area. Buzz Darby, 417-862-8803.

MAY 3-4, OUACHITA: Ouachita R. Hike and float - float Sat. and hike Sun., with base camp at Lake Catherine State Park. Connie Meskimen 501-246-5497.

MAY 3, BAYOU: Picnic - Rainbow Plantation, Bossier Parish, La. Thelma Walker 747-1995.

MAY 10, DELTA: Big Piney Creek Float. Jim Dardenne, #3 Malcomb, Pine Bluff, Ark. 71601, ph 501-536-3476.

MAY 10-11, CAJUN: Canoe trip on the Tangipahoa River - Southeastern La., Kentwood to Arcola. Jerold Freeman, 304 Live Oak, Lafayette, La. 318-984-2762

MAY 10-11, PULASKI: Big Piney Float Saturday, Illinois Bayou or another stretch of Piney on Sunday. John Heuston, ph 501-666-2276.

MAY 10, BAYOU: Crawfish Boil at Wallace Lake. Hike to picnic area. Bill Meiers, Shreveport, ph 865-2982.

MAY 18, FT. SMITH: Canoe Mulberry R. Wolfpen to Turner's Bend. Jim Kearney, 5003 Summit, Ft. Smith, Ark. 501-452-0814.

MAY 17, HIGHLANDS: One-day canoe float, Kings River, Marble to Marshall Ford, 6 hours. Meet at Marble ready to shuttle at 9 a.m. Leader, A.T. Shuller, Rt. 2, Berryville, Ark. 72616, Ph. 423-2776

MAY 17-18, SCHOOLCRAFT: Buffalo R. Float - two day trip on the middle part of the river. Jackie Kerr, ph 417-881-7730.

MAY 17-18, BAYOU/LAFAYETTE: Joint outing with new chapter. Irene Armstrong, Shreveport, 865-8302.

MAY 25-26, FT. SMITH: Mulberry R. Canoe Trip, overnight on the river. Jim Kearney, 5003 Summit, Ft. Smith, ph 501-428-0814.

MAY 24-25-26, INDIAN NATIONS: Lake Wedington Campout. Glen Ramsay, 1725 S. Yorktown, Tulsa, Ok. 74114, ph 918-936-1546.

MAY 24-25, DELTA: Mulberry R. float. Chalmers Davis, Altheimer, Ark. 72004. Experienced floaters!

MAY 24-25-26, BAYOU: Mulberry R. Float. Overnight on river. Limited attendance and experienced floaters only. Frank Hampson, 1010 Marshall St., Shreveport, ph 868-7112.

MAY 31-JUNE 1, SCHOOLCRAFT: Gasconade River Float, Jackie Kerr, ph 417-881-7730.

MAY 31-JUNE 1, BAYOU: Camping at Cossatot Falls. Tom and Judy Carson, Shreveport, ph 868-7839.

JUNE 7-8, INDIAN NATIONS: Hawthorn Bluff Camp on Oologah Lake. Family camping, swimming, etc. Visit Will Rogers home. Frank Duncan, ph 918-664-6393.

JUNE 7, BAYOU: Local bicycling trip. Robert Watt, Jr., Shreveport, ph 635-0600.

JUNE 8-13, PULASKI: Colorado River raft trip. Limited to 20 participants. Bob McKinney, Little Rock, AR

JUNE 8-13, PULASKI: Colorado River raft trip. Limited to 20 participants. Bob McKinney, Little Rock, Ark. 664-3655.

JUNE 14, HIGHLANDS: One-day canoe float, Upper White River, Thompson Cut Ford (One-quarter mile east of Washington-Madison County line on Hwy. 16) to Strington Ford (two miles east of Elkins on Hwy. 16), 6 miles. Meet at Thompson Cut Ford ready to shuttle at 9 a.m. Leaders, Glenn and Helen Parker, Dutton, Ark. 72726. ph. 677-2473.

JUNE 14-15, SCHOOLCRAFT: Upper Jack's Fork float trip. Bill Bates, 417-883-5199.

JUNE 14-15, INDIAN NATIONS: Float Barren Fork and Illinois River, with base at Sparrowhawk Camp. Otto Behnfeldt, 2648 E. 2nd St., Tulsa, Ok. 74104, 918-939-1665.

JUNE 14-15, OUACHITA: Two day float on the Caddo R. Joe Nix, 501-246-6539.

JUNE 14-15, BAYOU: Camping and water-skiing on Lake Greeson, Ark. Bill Meier, Shreveport. 865-2982.

JUNE 21, CAJUN: Tangipaho River, (La. Scenic River) - Osaka Miss. to Kentwood, La. Experienced canoeists only. Larry Sides, 100 Chickasaw Rd., Lafayette, La.

JUNE 22-23, FT. SMITH: Buffalo R. Float trip, overnight on river. Jim Kearney, 5003 Summit, Ft. Smith, 501-428-0814.

JUNE 21-22, BAYOU: Moonlight float on Caddo Lake Saturday evening. Bring a flashlight! Tip Davidson, Shreveport, ph 635-0991.

Hikers Needed

At the Spring Meeting, The Ozark Society voted to sponsor the exploration of a Trans-Ozark Trail originally presented to the Society several years ago by Dick Murray.

Chapters or individuals are asked to volunteer to establish the best routes for the trail. A strip or zone to be explored will be assigned to those volunteering. In general, the trail is to stay near the high ridge of the Ozarks. Dick, a civil engineer, has the instruments necessary to check the grades of the trail within the National Forest to see that they comply with National Forest Service regulations. Two thirds of the trail will be on Forest Service land.

This should be an attractive project for our backpacking and hiking members. To get further information or an assignment, call or write Richard D. (Dick) Murray, 2006 Austin Drive, Fayetteville, Arkansas 72701, Ph. 442-2404.

The following items are available for purchase from: The Ozark Society, P.O. Box 2914, Little Rock, Ark. 72203.

Patches embroidered with the Ozark Society emblem (3") $1.00.

Decals with Ozark Society emblem: 2" - 50 cents, 3" car window - $1.00, 7" canoe - $1.50.

Reprints of Articles from the Ozark Society Bulletin on Hiking and Canoeing $1.50.

Buffalo River Canoeing Guide $1.00.

The Mighty Mulberry - a canoeing guide $1.00.

Pioneer Guide to Family Camping (DP&L publication) $1.00.

J. Michael Migel, Editor. The Stream Conservation Handbook. New York, Crown, 1974 $6.95.

The Society has three films available for loan: **A Man and A River, The Flooding River,** and **Downstream.**

Dues Notice

Please fill out the blank below and send it, along with your check to Kriste Rees Box 2914, Little Rock, Ark. 72203.

Dues are for the calendar year. They are regular (and family), $5; contributing, $10; sustaining, $25; life, $100; Student, courtesy membership, $1.00.

Please check: new member; _____ renewal _____ Date _____

Last name _____ first names of husband and wife _____

Address _____ City _____ State _____ Zip _____

Telephone _____ If Student—name of school _____

Winter Canoeing —photo: Joe Clark