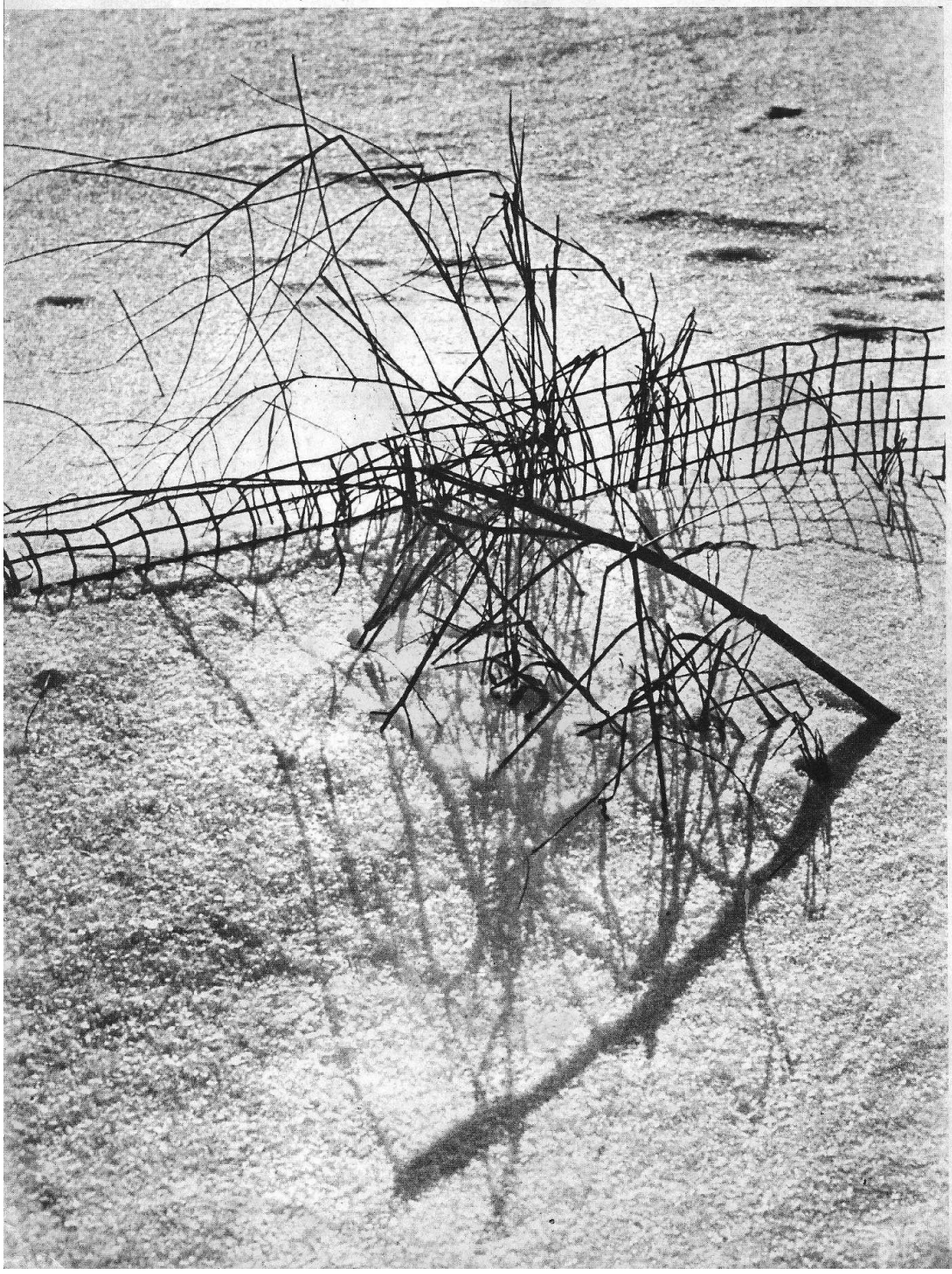
Ozark Society



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

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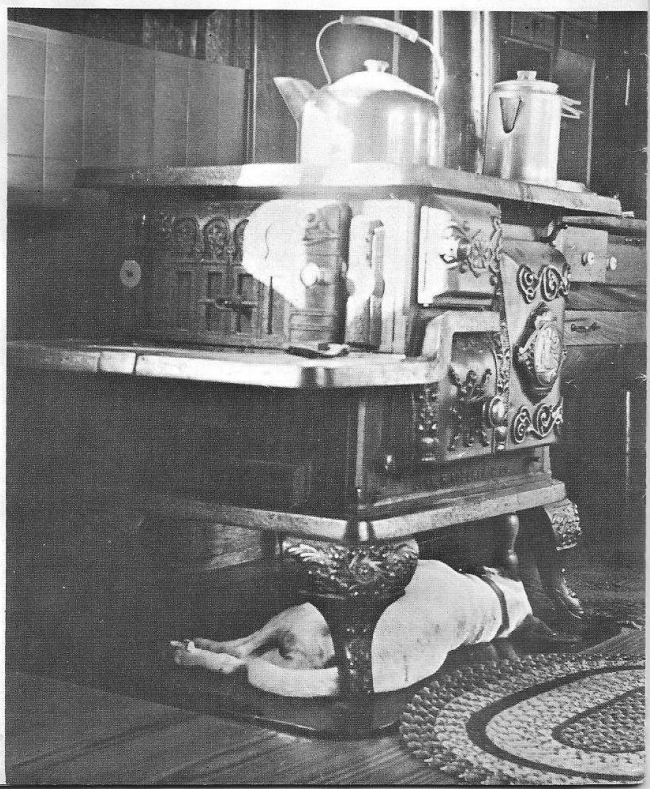
VOLUME XI, NUMBER 3

The Winter 1977-1978 issue of the Bulletin normally would be NUMBER 4. It is NUMBER 3 this year because illness of the senior editor prevented the issuing of the usual four.

THE OZARK SOCIETY SPRING MEETING

The Spring Meeting is to be April 7, 8, 9 at Ouachita Baptist University in Arkadelphia. The main theme of the program will be WILDERNESS PRESERVATION with the new President of the Wilderness Society, Celia Hunter of Anchorage, Alaska, presenting a program on the Alaska Wilderness proposals. Further information will be mailed in March.



Why Save Swamps?

by Dr. Charles H. Wharton
Professor of Biology
Georgia State University

"WHY SAVE SWAMPS?" originally appeared in the May 1976 issue of *FLORIDA WILDLIFE*. It was reprinted in *THE NATURE CONSERVANCY NEWS*, Summer 1977, with a few very minor changes. Thanks are given Maurice H. Naggiar, Editor of *Florida Wildlife*, and to Sue E. Dodge, Editor of *The Nature Conservancy News* for allowing us to reprint the article.

Twelve thousand years ago, great shaggy mammoths and mastodons moved in the swamps of many of our southern rivers. Perhaps these huge beasts were drawn there by the lush vegetation, or driven there by a ring of fire surging through the pine and scrub oak lands, to be mired and killed by the ancient hunters. All we know for sure is that they were there, for their algae-covered bones yet carpet the bottoms of many spring-fed rivers, where, if you can brave the cold water, you can dive and bring them up, for the spring runs carried no sand or silt to cover them. Drawn there by the water and the last of the great faunal assemblage of the Pleistocene, the South's first men encountered a wetland—the river swamp—that would in the future both nourish and mystify them.

As sea levels rose, great cypress forests invaded the flood plains of our rivers. Two hundred years ago, William Bartram said, "We are struck with a kind of awe . . . the trees so lofty . . . having flat tops, and all of equal height, seemed to be a green plain, lifted up and supported upon columns in the air . . . ." Deep in the river swamps of the Suwannee and St. Johns in Florida, Bartram was overwhelmed with the diversity and abundance of life. Flocks of "Spanish curlew" wheeled overhead, green clouds of parakeets chattered as they devoured the cypress seeds, and the toy-trumpet call of the ivory-billed woodpecker resounded through the bottomlands of sweet gum and overcup oak. In a camp on a St. Johns bluff, amid the bellowing of alligators and the splashing of huge schools of migrating fish, Bartram pondered the legions of red men who had camped there before him to feast on the mussels, fish, reptiles, and fowl that filled one of nature's richest larders.

A hundred years later, a Hart Line steamer, cruising by night, carried Sidney Lanier up the dark current of the Oklawaha River through one of Florida's most magnificent river swamps. The forest walls on either side were illuminated by fat-wood fires in iron baskets slung from the forecastle. Inspired, Lanier called it "the sweetest water-lane in the world . . . as if God had turned into water and trees."

While the tortured cry of the panther may still be heard in a few last redoubts of wild swampland, the parakeets and ivorybills have vanished from the river swamps. An enduring stump here and there, flanked by a regrowth of ash and gum, are all that remain of the cathedral forest that awed William Bartram.

Quite oddly, it seems to me, the great swamps, and the floodplains that give our rivers life, have been strangely ignored in the descriptive literature of the past 200 years.

Yet these rivers and their protective swamps were the very lifeblood of the early South; watery roads that carried the essentials of life to settlers upstream and then floated out the wealth of America: logs from the seemingly endless forest of virgin longleaf pine, and produce from the fields of cotton and corn. Successive eras of pole-boating, log-rafting, and steamboating—real sagas of Americana—went unheralded in the history books.

And yet, the river swamps remain one of the richest, most exciting, and most natural systems of all our southern environments. They come in three types, basically: alkaline, clear water, from underground rivers; red water, clay-rich and muddy, from

Biology Students
on Grassy Lake, Arkansas, Maxine Clark

Water Lily · Neil Compton

the uplands of Alabama and Georgia; and acid black water, heavy with organic compounds steeped from leaves and twigs in endless back swamps and feeder streams.

The river swamps are productive for both man and wildlife. Veneer factories feed from the gum logs. Otters and raccoons feast on the abundant crayfish, and little piles of empty shells tell of the presence of the limpkin, or "crying bird," which garners the rich snail crop. Countless other birds and squirrels eat the fruits of black gum, tupelo, and ogeechee lime; and tupelo honey attests the treasure store of nectar in the forest flowers. The huge acorn crop feeds the deer, the raccoons, and the black and mallard ducks which winter by thousands in river swamps.

The floodplain floor, with its cycle of alternating wetness and dryness, is the remarkable machinery that drives great pulses of life. Fish, their breeding cycles timed to the first high water that escapes the channel, spread out over the floodplain and feed among the roots of oaks and hickories. Fattened and spent of eggs, they congregate back into sloughs and channels where the fisherman reaps a rich harvest.

In the larger red rivers each spring, striped bass, sturgeon, and three species of shad surge upstream, choosing select sections of the river in which to spawn, and their fry use yet other sections as nurseries. And the debris, coupled with the silt brought in with high water, always supported an incredible abundance of aquatic life—insect larvae and crayfish—that feeds the river fauna with a steady supply of drifting food. Indeed, the high productivity of crabs, shrimp, and oysters of some coastal estuaries and bays depends, in large part, on the delivery of nutrients by our large river systems.

Though rich in iron and alumina from ground water, black water streams subsist largely on their own organic debris, flushing their swamps regularly of organically rich acid water. In the alluvial red water streams, the river and the floodplain trees team up in a partnership. Billions of tiny rootlets and their fungal extensions clutch the precious sediment to prevent its downstream movement, receiving as a reward a gentle blanket of nutritious silt at the time of high water. Vital to both systems is the annual rise and fall of water that inundates the floodplain and then flows off again, for the chemistry of the water and fallen leaves is inexorably linked to this eons-old fluctuation. And because of this unique cyclic intimacy between river and floodplain, between high ground and low, man benefits and has benefited for many years.

It was the Apalachee Indians who first denuded the red hills where Tallahassee, Florida, stands. Their corn helped feed the Spanish missions as far away as St. Augustine. Later, the cotton farmers on the hills of Alabama and Georgia sent 50,000 years of topsoil into the river swamps. But the swamps survived man's upland indiscretions, for they were adapted to catastrophy, and man was simply augmenting their natural function. It was our first indication that the river swamps could do things for us that we might well treasure as life support functions. And so we are led, in these energy-poor times, to take a closer look at the free energy of this natural system.

Not only do the swamps serve as giant sponges to hold water back from gravity's eternal pull, but they may be vital filters to clean our rivers of the wastes of an industrial and urbanized world. It has been shown that a relatively few hundred acres of river and floodplain can purify the wastes of a town of respectable size. With the rising costs of tertiary treatment, such potential cannot be ignored.

I once asked a farmer where an obviously polluted creek went. "Oh," he said, "just into that ol' swamp down there." Science is now taking note of those "ol' swamps." It is likely that river swamps have been saving southern communities millions of dollars by treating their secondary and tertiary wastes. Tons of toxic nitrates and pesticides from farmlands, poisonous heavy metals from industry, and even, in some cases, radioactive wastes, all have been processed by the river swamps, either bound to sediments and deposited out on the floodplains to be broken down or immobilized, or locked into harmless form by organic molecules and carried downriver into the estuary.

Such abilities have inspired an intensive study by the University of Florida's Center for Wetlands to examine the potential of other swamps, such as cypress ponds, which are acting as inexpensive waste disposal units and, at the same time, growing trees faster.

Another little-known relationship concerns the fact that black water surface streams are inseparably linked to the dark caverns of underground rivers on which coastal zones depend for their water. Full with black, acid water in rainy periods, these streams pour underground to recharge the vital aquifer. In dry

times, the role is switched, and the aquifers repay the debt and keep the rivers flowing.

As we attempt now to power-down society to some stable survival level, recognition of their life support role must go to natural systems. But how far can we push them? Perhaps there is a point at which we can overload the machinery of the river swamps.

In the past, moving water was supposed to carry the refuse of civilization, like a beer or bait can thrown off a river bridge, away from our life and memory. While the swamps are now devoid of the greatest trees ever grown in eastern America, and have often reeled with sweeping pulses of toxic wastes and eroded soil, they are still viable, productive systems. Can we keep it that way? Are there other threats? Yes, but we shall have to act, acknowledge natural function, verify its limits with science, and then protect it. Unhappily, there are sweeping changes possible that threaten these vital natural systems, mostly brought about by the combined power of large industry and government. These are not malicious attempts to destroy the shad fishery, or the acorn crop that feed the deer, or the machinery that keeps the water flowing and pure. It is just that we are slow in recognizing the value of our river swamps. The next time your car hurtles along a river swamp bridge, reflect for a moment on the realm of muck and moss below. It has much to tell us about our past—and our future.

It is impressive to fly over the southern coastal plain. Through the endless tree farms of pine, the river swamps run like green corridors of life. They are the final refuges for deer, bear, and raccoon, where man and dog must pause. They are also the pathways of migration. Where raccoons were exterminated by rabies or the fur coat craze of the twenties, they could move northward up the river corridors and again populate their wetland heritage. Clams, destroyed by a toxic pulse of industrial chemistry, are repopulated by the drifting larvae from upstream.

But all is not well in our river greenbelts. Having known only an occasional opening in the dense green canopy, from a storm blow-down, bottomland hardwood forests are beginning to be completely denuded in patches of many acres. The clear cut, a sensible means of managing pine forests, is now being applied by large industry to the hardwood forests of the river swamps. Sometimes the trees are even wind-rowed, and pines planted and maintained, by a heavy input of expensive mechanical and chemical energy, against the encroachment of the more wetland-adapted hardwoods such as sweet gum. In some areas, cottonwoods and sycamores are being planted for their high yield of pulp.

Barge canals that provide tax-suppored free transportation for shippers can quite clearly turn entire river swamps into shallow, over-rich biological nightmares. Heavy with roe, the shad, sturgeon, and striped bass visit the lower most dam for a few years and then, their life span exhausted, come no more.

To encourage a few more pines, canals and vast channelization projects attempt to lower the water table along the upland tributaries that formerly

Raccoon - Lil Junas

hosted migrant fish which found in them a spawning and nursery ground safe from the predation in the large river. Bottomland hardwoods, deprived of a high water table, lessen their growth rate or succumb to disease.

Sometimes man, not understanding that river swamps must be allowed to rise and flood each year, attempts to improve on nature. This happened on the Chipola in Florida, where a series of highly productive old oxbows were impounded in the early 1960's. The unnaturally high water killed many trees, and the lack of natural draw-down and the disruption of yearly flushing led to a serious water weed and eutrophication problem that was finally solved by new construction, at taxpayer's expense, that will imitate nature's original plan.

That water must get off a floodplain as easily as it got on has not been long recognized; nor, apparently, has the fact that landfills across flooded plains cause excessive silt deposition and flooding upstream. A ride down almost any southern highway will verify this. On one side is a healthy forest; on the other side, the spindly, sick, and dying trees tell their own story. To preserve a viable floodplain community, one crosses a floodplain on cement columns which do not interfere with the water flow.

As if the modification to the floodplains imposed by large industry and government construction were not enough, we must also acknowledge the threat of development. Rows of second homes on bluffs, and houseboats anchored indiscriminately, may deprive the public of access points to the rivers, as well as blight the most scenic and historical places. Almost every river bluff along the larger streams was an Indian encampment or village, or mission, or trading post.

Man does not, of course, remember the mastodons and ground sloths. I doubt that he will mourn

Cypress Swamp - Maxine Clark

the passing of the swamp-loving Bachman's warbler, or the loss of the parakeet and the ivorybill. His spirit will be a little less, however, if the swallow-tailed kite, the limpkin, and the great sturgeon pass from memory. There are modifications of the river swamps, however, that, I think, will impoverish his life very much. These are life support things that would affect the quantity and quality of his water supply.

And then there are less tangible—but no less vital—uses of the river swamps, as outdoor laboratories for school systems, and as extremely valuable river parks and scenic rivers for recreation. I see each year new fleets of canoes bringing the young, old, and disabled quietly and economically through some of the last wilderness most of us will ever know.

On a good day, almost every sandbar will support a tent, and the renewable sands in front of it form a glorious, wild athletic field where the tracks of youth will be erased by the high water of tomorrow, to be ready for a new crop of voyageurs. And back beyond the jungle wall of the swamp forest, the endless rows of pine trees seem not to matter quite so much. What does matter is that, on the eve of discovering one of nature's last wild places, we find ourselves on the verge of losing it.

I suggest that we reaffirm our partnership with nature, and that we especially acknowledge our bond with the river swamps. This environment not only cradles our most precious resource, water, but offers us perhaps the last place where we can feel a part of nature—isolated, wild, and free.

Recognition of such a relationship acknowledges the heritage of an environment that was shared by the southern red wolf and the red Americans when Bartram viewed it 200 years ago. Such recognition is not penitence for our exploitation of the river swamp: it is reverence for the qualities which this green world can bring to our lives.

BOTANICAL NOTES

Maxine Clark

The following is a reprint from Ozark Society Bulletin, Winter 1969. We hope it will be of interest to those who became members in more recent years. The pen drawing is by Kathrine Winckler.

You may question the wisdom of scheduling an Ozark Society outing to explore Boen Gulf and "Terripin" Branch of the upper Buffalo on December 14th and 15th. Isn't this a bit risky at this season of the year? Luck was with us: each day dawned bright and clear, and although the temperatures at sunrise were 17 and 9, we were never uncomfortable, being warmly dressed and protected from the wind as we descended deep into the narrow gorges.

Our leaders, Harold Hedges and Dick Murray, directed us from the wooded upland where we followed a seemingly insignificant ravine which progressively became unbelievingly spectacular. The stream plunged down 1000 feet in a distance of two miles. Series of waterfalls cascaded over solid rock into the bluest of pools. We picked our way carefully around the huge rounded boulders and under the over-hangs, avoiding going under the line of icicles which could come crashing down. Never have we seen more beautiful ice formations. Water seeping from the crevices of the bluffs formed cascades of ice: icicles that started as stalactites met the ground to form an ice column. Small riffles were bordered with pendulous ice beads that resembled segments of a crystal necklace.

Although this is a description of a frigid scene, actually we were walking through a beautiful rock garden of mosses and lichens. Mosses lend an elegant touch to the winter landscape, covering the rock surfaces and bare soil with a greenness that is intensified by its contrast to the somber grays and browns. Because of their minuteness we walk casually over these green carpets unaware of their infinite variety and beauty. To really examine them closely a 10x or 14x magnification hand lens is essential.

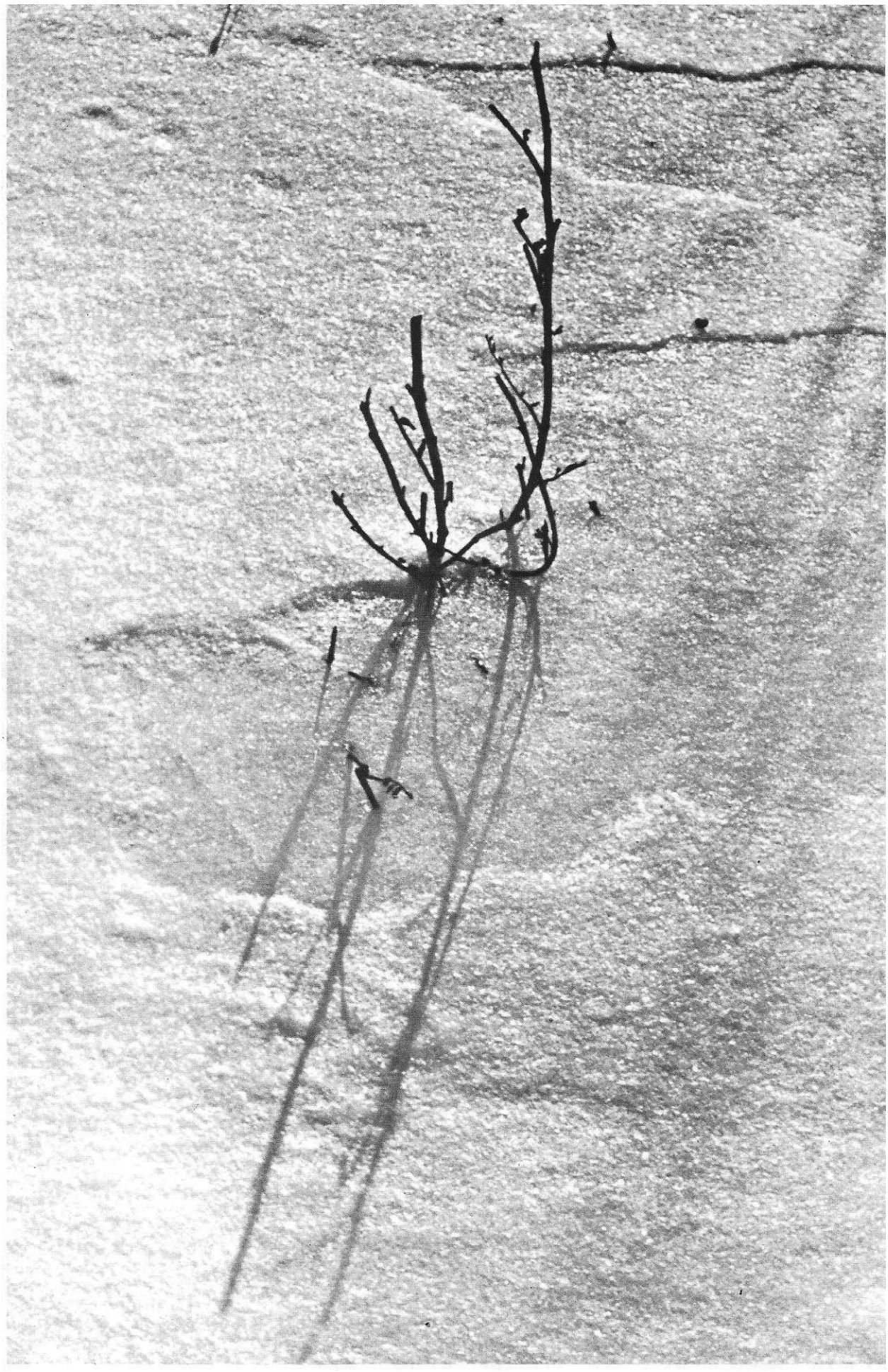
Mosses belong to a group of plants, *Atracheata*, lacking specialized water conducting cells, tracheids, which ferns and larger land plants possess. They are anchored to the substrate by rootlike filaments and have a stemlike axis to which the leaflike structures are spirally attached. A new plant starts with the germination of a spore, a one celled reproductive structure. At first the plant resembles an alga, but it soon grows into the plant we recognize. The mature plant produces male and-or female germ cells. The fertilized egg cell does not grow into a leafy moss plant, but into a spore capsule on a stalk. The capsule carries with it a delicate membranous cover or cap, called the calyptra, which conceals the capsule until it is ripe. A large number of spores is produced. Remove this and you will see a delicate fringe, called peristome teeth, arranged in a single or double row bordering the mouth of the capsule. The number of teeth in each row may be four, sixteen or sixty-four, always a multiple of four. They respond to slight moisture changes in the air and have the function of regulating and assisting the escape of the spores. Collect several mossess that appear different and spend an exciting hour examining the intricate structure and variety of form of the peristome teeth. Some mosses can only be identified to species by the help of their spore capsules. I recommend: A Book of Mosses by Paul Richards. The King Penguin Books, 57, and for further study, The Mosses and Liverworts by H.S. Conard. Picture Key Nature Series.

A lichen, a most unusual plant, is actually the partnership of two plants, a fungus and an alga. They live together in an intimate association which appears to be beneficial to both partners. The term botanist use for this relationship is symbiosis. The fungus surrounds the alga providing structural support, and is capable of absorption and retention of water. The alga, usually a green or bluegreen alga is capable of the manufacture of food by photosynthesis. This permits the plant to flourish in situations where neither could exist alone. In the laboratory the alga can be reproduced and live alone, but the fungus cannot.

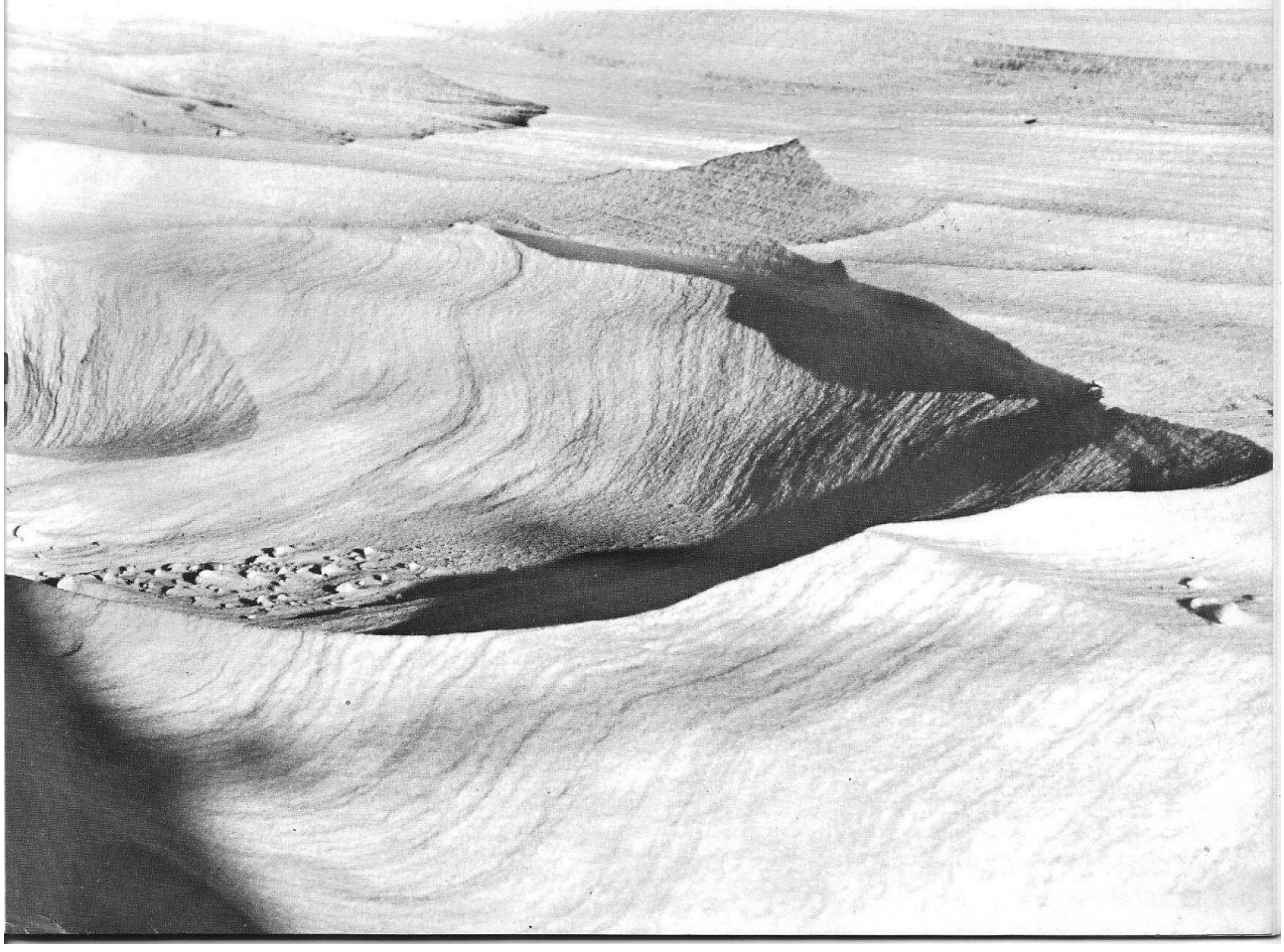
There are three principal forms of lichens (some authorities list five). Crustose lichens form a hard granular crust on rocks or trees. These seem to be painted on the rocks and produce the beautiful mottling of the boulders we skipped across in the stream bed. Colors of gray-white, yellowish-green, brown, or black may be seen on the same rock. Orange and yellow crustose lichens often cover a large surface of a vertical bluff.

Foliose lichens are flattened, often leaflike bodies which are loosely attached to a rock surface and usually easily removed. Generally the color is gray-green.

Fruticose licens (not mispelled, means woody, not fruiting) may have flattened or cylindrical branches and occur as stiff upright forms or may be pendulous from the branches of trees. The latter are quite common on the junipers (commonly called cedars) on the bluffs of the Buffalo. Sometimes these are mistakenly called Spanish moss which is not a moss but a flowering plant belonging to the pineapple family. Reindeer moss is a fruticose lichen and not a moss.



Snow Scenes by Lil Junas



Natural Prairie Recreated at Pea Ridge National Military Park

By Faune Conner, Travel Writer
Department of Parks and Tourism

A new note of authenticity has been added to Pea Ridge National Military Park near Rogers. Visitors can now view a two-acre tract of native American prairie which has been recreated in the park during a three-year experiment.

Development of the natural prairie, which was in existence there during the 1862 Civil War battle, has been a carefully researched project under the direction of Dr. Edward E. Dale, Jr., head of the University of Arkansas Department of Botany and Bacteriology. Dr. Dale has worked with the National Park Service to ensure the historical accuracy of the experiment and feels that he has now duplicated the original prairie vegetation.

Laymen unfamiliar with the finer points of horticulture may believe a prairie is a prairie, but not so according to Dr. Dale. Through lengthy study and research, he developed a special seed mixture for the prairie patch that included four different types of prairie grasses—Indian grass, switch grass, big blue stem or tall turkey foot, and little blue stem. The grass seeds were spread over the plowed land, covered with straw, and then carefully cultivated by University students.

In Northwest Arkansas, as in most sections of Arkansas, prairies are a rarity. The natural virgin state of the land is forest and, in the past, prairies were created only by accident when fires were set by the Indians or by lightning.

Dr. Dale explains that for a prairie to exist in wooded areas, it must be periodically burned, mowed, or heavily grazed to destroy the underbrush, the first stage of a forest. When a prairie is burned, the grasses recover quickly because of their deep root system and because they add new growth from the ground up. Underbrush, on the other hand, adds new growth from the top of the plants and thus takes longer to re-establish after a fire. Without the periodic destruction, the land reverts to its natural forest state.

Dr. Dale has added other native plants to the park prairie section, among them blacked-eyed susan, golden rod, prairie clover and pink gentian. Every aspect of the tract is observed and documented, and aerial photos of the field in both daylight and infrared light are being taken. Dr. Dale passes the prairie data along to the National Park Service for their use in developing similar areas on other park lands.

At the Pea Ridge park, the prairie acreage is located east of the self-guiding tour road in the Leetown Battlefield area. It was here on March 7, 1862, that the first day of the two-day conflict at Pea Ridge took place.

Today, no trace of the little village of Leetown remains, but descendants of its early settlers remember stories of the homes that once stood near where the prairie now grows. Two stores, a blacksmith shop, a tannery, a church, a school, and a Masconic Lodge existed when the battle took place. Two Confederate leaders were slain near the village—Brig. General James M. McIntosh and Brig. General Ben McCulloch, conspicuously dressed in a black velvet suit and a plumed hat.

The inhabitants of Leetown had fled the village before the battle, and, when they returned, they found nothing left save one home which had been used as a hospital. A long trench had been dug to bury the countless dead. After the war, Leetown was never rebuilt, and all traces of the little community vanished.

Tourists traveling U.S. Highway 62 will want to stop at the Pea Ridge National Military Park visitor center which offers an interesting museum of Civil War memorabilia. A slide program in the center explains the events that led to the Battle of Pea Ridge, and park rangers distribute literature for the self-guiding tour of the battlefield.

The tour along the Old Telegraph Road is approximately seven miles long and passes all major highlights of the park, including the Leetown Battlefield. As the road circles the park, it crests the top of craggy Pea Ridge where two overlooks provide views of the surrounding countryside. Near the end of the road is reconstructed Elkhorn Tavern, a historic Ozark landmark. The tavern, which served as a trading post and stage stop, was the scene of some of the fiercest fighting at Pea Ridge.

At Elkhorn Tavern, visitors find the self-guiding Headwaters Creek Trail which winds down to a spring and small cave and then to Headwaters Creek. The trail leads back to the tavern and Telegraph Road, and then it is only a short distance to the visitor center.

Pea Ridge National Military Park is maintained by the National Park Service and is open daily from 8 a.m. to 5 p.m. Park hours are extended to 8 p.m. in the summer and to 6 p.m. in the fall. For additional information, contact Superintendent, Pea Ridge National Military Park, Pea Ridge, Ark. 72751.

CANOES AND TRICYCLES

The Editor of Paddle Trails, newsletter of the Pulaski Chapter, writes in the January issue, "Ozark Society pioneered white water river running in Arkansas when most of its current crop of daredevils were on tricycles."

We have a picture in our files of two canoes on a horse drawn hack heading for the Meramec in Missouri before the members of the Pulaski Chapter got their tricycles.

MORE BUFFALO AREA GETS PROTECTION — It's good news that the Arkansas Game & Fish Commission has voted to buy the 7,200-acre "Sutton Unit" as an extension of the Commission's Buffalo River Wildlife Management Area. The purchase will prevent exploitation of this area, adjacent to the Buffalo National River, by hill scrapers and lot salesmen. The more prime land along the Buffalo that is put into public-owned protected areas the better and the Commission is to be congratulated on investing $1.1 million in this Newton-Searcy counties project.

Roadless Areas Identified

(Conservation News NWF)

The U.S. Forest Service has identified about 65 million of the 187 million acres within the national forest system as roadless and undeveloped, following hundreds of hearings throughout the country this summer as part of the Roadless Area Review and Evaluation (RARE II). The second phase of RARE II, evaluation, is to begin immediately, according to the Forest Service Chief John Maguire. Some 1,920 areas will be studied to determine whether they are suitable for wilderness designation. Of the areas identified, 1,615, or 63 million acres, are in the West, including 16 areas in national grasslands. The other 305 areas cover 2.3 million acres in eastern national forests.

Initially, the Forest Service inventoried and mapped all roadless and undeveloped areas according to specific criteria, to eliminate regional differences. This inventory was made available to the public at 227 workshops attended by about 17,000 people.

The goal of the evaluation phase, according to the Forest Service, is to identify gaps in the existing National Wilderness Preservation System and analyze the social and economic impacts of possible wilderness designation. Basically, the four criteria that will be used in the evaluation are the ecosystems and landforms represented, accessibility, distribution, and wildlife habitats in the areas. The mineral, energy, and timber resources certainly will be strong factors in determining the social and economic impacts of wilderness designation.

A draft environmental statement is to be issued in late spring, 1978, on alternative proposals for wilderness and nonwilderness designations. The public will have opportunity to comment during the summer of 1978, followed by issuance of a final environmental impact statement. The Forest Service decisions must be submitted for Congressional approval. The list of roadless areas and criteria for evaluation were published in the November 18, 1977, *Federal Register.* Maps of inventoried areas are available for public inspection at Forest Service regional and supervisor offices. A summary of public comment on the inventory is available from Chief, Forest Service, USDA, Room 0340-S, P.O. Box 2417, Washington, D.C. 20013.

Wilderness Fact Sheet

By Bill Coleman

Below is a brief summation of the situation in Arkansas and Oklahoma regarding the new roadless area review and evaluation (RARE II) effort. This effort is a precursor to wilderness status for **some** lands in the Ozark and Ouachita forests, but we are hoping to provide enough professional quality input to the Forest Service to justify the designation of significant acreages of wilderness within the two National Forests. Field investigations of these areas will occur during the upcoming months, and information gathered in these outdoor sessions will be provided to the Forest Service for use in their own evaluation of these roadless areas, and to the Sierra Club and Wilderness Society for use at the national level should an omnibus wilderness bill be necessary for Congressional consideration. Also, a special wilderness mailing will be distributed late in January to bring all members of the Society up-to-date on specific wilderness-related happenings.

Here is the score-sheet for RARE II lands in the two National Forests:

OUACHITA FOREST

Ozark Society recommendations to Ouachita Forest Supervisor:	139,100 acres
Add existing Wilderness Study Area acreage (Belle Starr, Dry Creek):	12,179 acres
	151,279
Supervisor recommendations to Atlanta Regional Office:	96,579 acres
Atlanta Regional Office recommendations to Congress:	57,879 acres

OZARK FOREST

Ozark Society recommendations to Ozark Forest Supervisor:	76,950 acres
Add existing WSA acreage (Richland Creek):	2,100 acres
	79,050
Supervisors recs to Atlanta:	124,818 acres

Atlanta recs to Congress:	128,427 acres

TOTAL FOREST ACREAGE

Ozark Society recs:	230,329 acres
Forest Supervisor recs:	221,397 acres
Regional recs:	186,306 acres

Forest Service Evaluates Wilderness Areas

Bob Ferris

February Indian Nations Newsletter

In a recent two day session in Hot Springs, Ouachita National Forest personnel prepared their reports grading the wilderness qualities of the roadless areas included in the RARE II inventory.

The four Oklahoma roadless areas included in the inventory - Upper Kiamichi, Beech Creek, Rich Mountain and Black Fork Mountain were evaluated by Bob Laval, District Ranger for the Talihina District, and one of his assistant Rangers. At this time it is not known how the Forest Service rates these areas, nor what the recommendations will be for their future management, but our Ozark Society Wilderness Committee will look at the draft reports this week at the Ouachita National Forest office in Hot Springs.

The Committee plans workshops for mid February and mid May to examine the Forest Service evaluations and prepare for the National Forest Service public meeting in early summer at which we can express our approval or disapproval of each roadless area evaluation. We hope to have one person designated for each of he inventoried roadless areas in Oklahoma and Arkansas to be in charge of compiling all the information we can come up with in regard to these areas.

What can you do? Participate in hikes in these areas. Make notes as to flora, fauna, geology, endangered species, scenic quality. Take pictures. If you feel that any of these areas should be given protection in the National Wilderness System, say so! Call Ollie Crosby, Bob Ferris, Paul Kendall or Bob McCoy and express your interest in helping on the Wilderness Committee.

Those who are interested in protecting some of our remaining wilderness should review the nationwide roadless area inventory printed in the November 18 Federal Register. This is available at the central library in Tulsa and should be in libraries elsewhere.

Forest Service Overlooks Qualified Areas in Mo.

For the Missouri Wilderness Coalition
By Mark Kaiser

The Mark Twain National Forest in Missouri is participating in RARE II and has asked for public involvement. The first step is supposed to be the compilation of a complete list of all potential roadless and primative areas on the Mark Twain National Forest, utilizing new and very specific criteria handed down by the Chief of the Forest Service. This past August the Forest Service held 4 public workshops to provide citizens an opportunity to suggest additions to and deletions from the preliminary Forest Service inventory. That preliminary inventory was not complete and included only the areas already approved by Congress or the Forest Service for wilderness study.

The Missouri Wilderness Coalition studied the Chief's new criteria carefully and polled our participating groups for input. After using our own screening process we prepared a full package for our "phase one" input, consisting of suggestions for addition of 11 areas to the inventory and deletion of a small section of private land within one area. For each suggestion the Coalition submitted maps and background information.

The eleven suggestions for addition were:

1. Swan Creek, 9000 acres in the Ava Unit
2. North Fork or Mary's Hollow, 5200 acres in the Willow Springs Unit
3. Noblett or Spring Creek, 4500 acres in the Willow Springs Unit
4. Tupelo Gum Pond, 10,200 acres in the Fristoe Unit
5. Big Springs Addition, 3800 acres in the Fristoe Unit
6. Cave Hollow, 1840 acres in the Salem - Potosi Unit
7. James Branch, 5100 acres in the Salem - Potosi Unit
8. Van East Mountain, 2400 acres in the Fredericktown Unit
9. Lower Rock Creek, 15,300 acres in the Fredericktown Unit (Since some of the land in this area is privately owned, the Missouri Wilderness Coalition specifically recommended that the **Federal** lands in the area be managed to preserve primitive values.)
10. Mud Creek, 3800 acres in the Poplar Bluff Unit
11. Smith Creek, 1400 acres in the Cedar Creek Purchase Unit.

The deletion submitted by the Missouri Wilderness Coalition was 120 acres of privately owned land in the Devil's Backbone Proposed Wildernes Study Area.

Each of these proposals was carefully researched and confirmed to fit the criteria outlined for the 1st phase of the RARE II process.

On September 23, the Forest Service announced that it had recommended to the Regional Forester in Milwaukee that only 4 areas be added to the Mark Twain inventory, and part of 1 area be deleted. The deletion conformed to Missouri Wilderness Coalition suggestion.

The additions were:

1. Anderson Mtn. on the Fredericktown Unit
2. Spring Creek on the Willow Springs Unit
3. Swan Creek on the Ava Unit
4. Big Creek on the Ava Unit

Two of these areas, Spring Creek and Swan Creek, were submitted by the Missouri Wilderness Coalition.

The Missouri Wilderness Coalition has not claimed that all of the areas identified by the Chief's phase one criteria should end up as wilderness proposals. On the other hand, the clear intent of phase one of RARE II is to identify all potential areas and then to trim the list down as the process continues. All of the 11 areas submitted by the Missouri Wilderness Coalition qualify under phase one criteria. All have important natural values that demand recognition and protection. The Forest Service has short-circuited the full review process by a premature and unpublic thinning of qualified areas. A proper public review would bring out the best management options for all of these roadless area resources, including those that may not end up in the Wilderness System.

RARE II is a critical opportunity in Missouri to finally secure a realistic review of our National Forest roadless area potential. The process will only work if we all insist on a professional performance from the Forest Service.

A formal challenge of the RARE II inventory is under way on a national level. Here in Missouri, we have taken part in this challenge by submitting material refuting Forest Service reasons for deletion of most of our areas from the inventory. Two areas, Lower Rock Creek and Smith Creek have already gone to Washington, D.C. to be presented to the Chief of the Forest Service there by RARE II coordinators from the Sierra Club and Wilderness Society Challenge material for several other areas on the Mark Twain National Forest (Tupelo Gum Pond, Van East Mtn. and Big Springs Additions) will be submitted soon. Therefore we are no longer requesting letters from Missouri to Forest Supervisor Roederer in Rolla.

Meanwhile, until Chief McGuire makes the final decision on which areas will be on the phase one inventory, the local Forest Supervisors have been instructed to go ahead with phase two for areas already on the inventory. Instructions to the Supervisors from the Chief's Office include three separate parameters: 1) a "National Criteria" process which indicates areas needed to complete representation of ecosystems and landforms in the National Wilderness Preservation System; 2) a "Socio-Economic Tradeoff Analysis" in which information such as timber, minerals and other resource data is compiled and analyzed; 3) a "Wilderness Attributes Rating System" (dubbed WARS) which evaluates the relative wilderness values of each area.

These phase two evaluations made by the Forest Service will be assembled in a Draft EIS for RARE II (to be issued in mid-June). In addition, each geographic area (ie-Region 8, Region 9) will have a more detailed supplement. We need to review information on phase two which is available for review at the Supervisor's Office for each N.F., and be ready to defend our areas.

For additional information, write to the Schoolcraft Chapter of The Ozark Society, P.O. Box 4761, G.S., Springfield, MO 65804 or Missouri Wilderness Coalition, 29 Bearfield Road, Columbia, MO 65201.

Cancellation of Plan to Allow ORVs in Forest

Conservationists won a round in the continuing dispute over use of off-road vehicles (ORVs) on public lands recently when the U.S. Forest Service announced it is withdrawing a plan to allow ORVs on 21,464 designated acres of the 145,744-acre Hoosier National Forest in southern Indiana.

The National Wildlife Federation (NWF) and its state affiliate, the Indiana Conservation Council, were among several conservation groups that joined the Indiana division of the Izaak Walton League of America last year in a federal court suit to curb ORV travel in this woodland, which serves as habitat for wild turkey and ruffed grouse. The suit is still pending.

Opponents of the proposed plan for ORV use in the forest contended that the environmental impact statement prepared by the Forest Service failed to describe adequately the adverse effects that ORV trails would have on the environment of the forest.

The NWF emphasized that it was not opposed to all uses of off-road vehicles on all public lands, but believed their use should be strictly controlled so as to minimize their harm to the environment and to other uses of those lands.

In the case of the Hoosier National Forest, the land proposed for ORV trails had been improved by the state with funds derived from federal excise taxes on sporting arms and ammunition. Some opponents of unlimited ORV use have suggested that separate land for ORV trails might be acquired and maintained by a similar excise tax on ORVs—which include snowmobiles, trail motorcycles, dune buggies, mopeds, and other all-terrain vehicles.

Controversy over ORVs peaked last April in the wake of a rumor that the Carter Administration was considering a ban on the use o ORVs on public land. The rumor, which proved ill-founded, triggered an avalanche of 187,000 letters of protest to the White House and the Interior Department. When the President's Executive Order was issued in May it instructed federal land agencies to close off "particular areas or trails" where use of ORVs "will cause or is causing considerable adverse effects on the soil, vegetation, wildlife, wildlife habitat or cultural or historic resources."

National Environmental Policy Act (NEPA) and the Role of Council on Environmental Quality (CEQ)

Remarks by Gus Speth, Member President's Council on Environmental Quality
to the
National Association of Environmental Professionals, June 30, 1977

(These remarks, given before professionals, have been severely abridged for the readers of the Bulletin. Bold Face type by the reviewer)

Last month, according to a wire story carried by United Press International, three residents of Angola, Louisiana, asked a court to halt construction of a nuclear power plant nearby on the ground that it would damage the environment. Such stories appear with increasing frequency these days; what made this story unusual was that the three petitioners were inmates at the Louisiana State prison.

This humble tale may suggest how widely an environmental consciousness has permeated our common life. The growth of that consciousness is even more remarkable considering the brief period in which it occurred. While a formal conservation movement in this country can be traced back to 1872, when Congress created Yellowstone National Park, the environmental movement in the proper sense of that term is of much more recent vintage. As good a date as any, I suggest, would be Earth Day of 1969; citizens' demonstrations throughout the country proved that a concern for the health of our habitat was not restricted to scientists nor to traditional conservation groups, but cut across virtually every occupational, socio-economic, and age group. And by the end of that year, the United States had a law which translated broad environmental concern into policy: the National Environmental Policy Act.

We have now had six and-a-half years of experience with NEPA, and with its most visible offshoot, the Environmental Impact Statement. Though there's nothing magic about that period of time, the arrival of a new Administration provides an opportune moment for looking back and assessing our experience, as well as for looking ahead: How well has NEPA served the country? Has it been worth the time, trouble, and money we have invested in it? What lessons does it offer for the future?

We might begin by looking at the negative side of the picture. The most common objections to the EIS have been these: it delays projects, it increases project costs, and it stimulates litigation.

Because CEQ is charged with monitoring implementation of NEPA by Federal agencies, and with making the EIS process work smoothly, the Council undertook an intensive, 18-month study in 1975. The results, published last year, are probably known to most of you, so I will simply highlight the most important conclusions.

First, there is no question that in the first year or two after NEPA was passed, project delays did occur. Virtually any new policy entails some delay, as Federal and private project managers adapt traditional procedures to changed rules. But this predictable pause for a shifting of gears was prolonged in the case of NEPA because Congress did not insert a "grandfather clause" in the Act.

This meant that agencies with projects well into the planning or even construction phase had to halt work on any project that would have significant environmental effects, and prepare an EIS on each of them — in a very short time. In 1971 alone, for example, the Department of Transportation filed 1,293 draft environmental impact statements — the great majority on projects undertaken or authorized before NEPA was passed. In 1975, by contrast, DOT filed only 229 draft EIS's — about one-fifth the number of the peak year. In 1971, Federal agencies filed a total of almost 2,000 draft EIS's — twice the number they filed last year. This sudden workload, imposed on agencies that had little opportunity to staff for NEPA, created a backlog that undeniably did lead to delays in project approvals.

But the lack of a "grandfather clause" exempting well-advanced projects from NEPA requirements also created a more subtle problem — that continued to hamper the effective operation of the EIS process. Federal managers who had already invested considerable time and money in a project wrote their EIS's to justify decisions that had already been made. This prevented any genuine questioning from an environmental perspective of the economic and technical assumptions on which a project had been based. Thus the delay occasioned by EIS preparation seemed doubly useless — and the EIS itself acquired a reputation, in those early days, for being an irrelevant exercise in meaningless, expensive paperwork. It has not yet entirely outlived that reputation.

In a properly run agency that takes NEPA seriously, however, the preparation of an EIS need not be an addition to normal planning processes. Rather, environmental analysis proceeds **in tandem with** economic and technical analysis.

This point was brought out well in testimony before Congress by an agency that has had extensive experience with EIS's — the **Army Corps of Engineers. From CEQ's survey, it was learned that the Corps spends an average of nine months preparing a draft EIS, and another ten and-a-half months on review and revision prior to filing a final EIS — a rough total of 20 months. Adding time for review of the final EIS, it can be assumed that the whole process requires 24 months.** This is a substantial period, and if it all represented delay, it would be an extremely costly one.

But the Corps of Engineers witness testified that the average length of time required for a Corps project is 15 to 16 years. Of these, only about five years would go into actual construction; the rest would go into an initial study of the feasibility of a project, followed by a request for project authorization and funding by Congress, and planning and design work prior to construction.

Finally, the Corps spokesman testified, since the passage of NEPA, that agency had learned to place EIS analysis among the matters to be studied first — as part of a feasibility study — rather than leaving it until after the project had met other criteria. "The key lesson," reads a Corps document entered into testimony, "was the necessity for handling the environmental factors as an integral part of the overall planning process. The EIS must not be made an end in and of itself. Environmental data must be provided in a timely manner to the decision-maker so as to be considered to the same depth of understanding and detail as the economic and engineering concepts and information."

First, the law has significantly improved Federal decision-making. While agencies initially focused on the environmental impact statement, the analytical processes necessary for EIS's have produced more than paper; they have produced better thinking about projects. Virtually all parties involved in the Trans-Alaska Oil Pipeline agree that intensive environmental review of this project prompted important design changes and improvements in routing and construction techniques. The Army Corps of Engineers has abandoned work on more than a dozen of its water projects because its NEPA process — **not** litigation — revealed that significant environmental damage would result. Illustrating the broad reach of NEPA's effects, the EIS process has also altered building projects of the General Services Administration.

Second, NEPA has improved the degree of coordination among Federal agencies and of cooperation with local and state governments. The law's requirement of interdisciplinary analysis in decision-making and planning has brought fresh perspectives from other agencies to bear on a single agency's projects. With few exceptions, the 27 state governments responding to CEQ' study reported that the Federal EIS process helped their own planning and decision-making or was, on balance, well worth the costs they incurred in reviewing Federal EIS's.

Perhaps most important of all, NEPA has provided a mechanism for involving the public in government decisions. Public comments on proposed Federal actions, along with those of government agencies, now receive formal consideration through the draft and final EIS processes.

This is particularly the case because the President, in an Executive Order of May 24, has given CEQ an entirely new measure of authority in monitoring NEPA and the EIS process.

The Executive Order embraces, in sum, virtually all the major criticisms of NEPA and the EIS process, and gives the Council the authority to correct deficiencies. That will be a sizeable job, one that will require our best thinking and effort for a long time to come.

As we approach the job, though, we do so in the conviction that NEPA and the EIS process have withstood their most severe test — that of gaining acceptance with the public, with other arms of government, and with the responsible sector of industry.

Ozark Society Activity Schedule

BOB RITCHIE, OUTING CHAIRMAN
1509 OLD FORGE DRIVE, LITTLE ROCK, AR 72207
RES. PH. 501-225-1795

Dates and trips are subject to change. Before you go on an outing, please contact the trip leader to confirm meeting times and places, and to let him know you are coming.

PULASKI CHAPTER

FEB. 25 & 26: Caney Backcountry - Backpack. Leaders: Moriarity, 664-3006; McAlister, 565-6119. E
MAR. 4 & 5: Caney Backcountry - Backpack. Leader: Nedra Bolin, 375-2246. B
MAR. 11 & 12: Twin Falls of Richland Creek - Backpack. Leader: Mike Moriarity, 664-3006. I
MAR. 18: Indian Creek - Day hike. Leader: David Mahan, 376-3752. I
MAR. 19: Hemmed-in Hollow - Day hike. Leader: Jim Conner, 664-7568. B
MAR. 25 & 26: Mansfield Bluff - Day hike. Cadron Creek - Canoe. Leader: Lil Junas, 375-1010. B/I
MAR. 25-APR. 2: Big Bend N.P., Tex. - Desert hiking & backpacking. Leader: George McAlister, 565-6119. B
APR. 1 & 2: Buffalo River Maumee to Rush - Canoe (car camp at Buffalo Pt.) Leader: Barbara Wylie, 664-2133. B
APR. 8 & 9: Middle Fork Little Red River - Canoe (car camp at Arlburg). Leader: Jack Downs, 663-0749. E
APR. 15 & 16: Gee Creek - Backpack. Leader: John Heuston, 664-0844. I
APR. 22 & 23: Buffalo River Ponca to Pruitt - Canoe camp. Leaders: Andrews, 663-3023; Downs, 663-0749. I
APR. 29 & 30: Cadron Creek Clean-up - Details at the April meeting. Leader: Alice Andrews, 663-3023.
MAY 3: To be announced - Outing Planning Committee Meeting. Leader: George McAlister, 565-6119.
MAY 6 & 7: Mulberry River - Canoe (car camp at Redding C.G.). Leader: Bob Ritchie, 225-1795. E
MAY 13: North Fork Illinois Bayou - Canoe. Leader: Mickey McSwain, 666-2497. E
MAY 20 & 21: Big Piney Creek - Canoe (car camp at Long Pool C.G.). Leader: George Toney, 225-8124. I
MAY 27, 28 & 29: Buffalo River Lower Section - Canoe (overnight on the river). Leader: Barbara Wylie, 664-2133. B
JUNE 1-4: North Carolina & Georgia - Canoe & hike. Leader: Alice Andrews, 663-3023. I
JUNE 10 & 11: To be announced - Beginner's canoe clinic. Leader: George Toney, 225-8124. B
JUNE 17: Cadron Creek - Beginner's float. Leader: Ralph Scantlin, 1-922-0490. B
JUNE 24 & 25: Spring River - Canoe (car camp at Many Isles). Leader: Tom Millard, 562-4152. B

Skill Levels:
"B" — Beginner, no previous experience necessary.
"I" — Intermediate, some prior experience.
"E" — Experienced, advanced skills required.

HENRY ROWE SCHOOLCRAFT CHAPTER

FEBRUARY 18-20: Washington's Birthday Base Camp on the Current River at Owl's Bend. Bill and Mary Bates, leaders, 1630 South Madeline, Springfield, MO (883-5199).
MARCH 11-12: Irish Wilderness Backpack Trip. Paul Duckworth, leader (831-3732).
MARCH 17-19: Missouri Whitewater Championships, St. Francis River. Contact Dave Smallwood (314-636-2025 or 314-751-2731) for more information, or write Box 1261, Jefferson City, Missouri 65101.
APRIL 22-23: Bicycle Trip to Stockton Lake. Jim Blanton, leader (881-6414).
MAY 6-7: Canoe Clinic, Jackie Kerr, leader. (866-2422)
AUGUST 12-13: Third Annual Eleven Point River Float with the Arnold Whitewater Association and the Mississippi Valley Chapter of the Ozark Society. Dave Smallwood, leader (314-636-2025 or 314-751-2702).

MISSISSIPPI VALLEY CHAPTER

FEBRUARY 19: RESCHEDULED afternoon outing in Union County (Southern Illinois) in search of Eagles. This outing will be entirely by car so bring the children, field glasses, camera, and even a bird book. We will meet at 12:00 noon in the Colonial Federal's Parking lot. Rich Borchelt is the trip leader, his number is 334-7395.
MARCH 14: Meeting at 7:00 p.m. in Community Room. Mr. Gordon Griffin, Educational Consultant for the Missouri Conservation Commission will talk on the Missouri Conservation Programs, regular meeting afterwards.
MARCH 18 & 19: Weekend outing to the Missouri Whitewater Championships at Silvermine Campground on the St. Francis River near Fredericktown, Missouri. Slalom events will be run on Saturday and Down River events will be run on Sunday. There are usually a lot of people going to this so we might want to leave on Friday, March 17 (St. Pat's Day).
APRIL 11: Meeting at Community Room, 7:00 p.m., Agenda yet to be announced.
APRIL 15 & 16: Weekend outing and Backpacking trip to the Proposed Irish Wilderness Area. Trip leader needed.
MAY 8: Meeting in Community Room, starting at 7:00 p.m. Dr. Ray Knox, Chairman of the Earth Science Department and Mississippi Valley Chapter member will give a training course on map reading and local Geology, regular meeting afterwards.
MAY 20 & 21: Map reading exercise on Yvonne Ketchum tree farm over by Mingo Wilderness Area. If this combination is successful we might try a simple orienteering outing in the fall.
JUNE 3 & 4: Weekend Canoe trip on the Upper Current River. A trip leader is needed.
JUNE 12: Meeting at Community Room, starting at 7:00 p.m. Agenda yet to be determined.
JULY 15 or 16: A caving trip to Mertz Cave in Perry County.
AUGUST 12 & 13: Eleven Point River Float Trip.

INDIAN NATIONS CHAPTER

FEB. 18 & 19: Indian Nations Trail Backpack - Beavers Bend State Park near Broken Bow, Oklahoma. Leaders: Bob McCoy, 743-7544; Paul Kendall, 939-1839.
MAR. 4 - 12 (One Week): Big Bend National Park, Texas. Hiking, Sightseeing, Camping. Two day canoe trip on the Rio Grande, water permitting. Combined trip with Tulsa Canoe and Camping Club. Leaders: Don & Jean Bowman, 456-8340, Tahlequah, Oklahoma.
MAR. 24, 25 & 26: Easter Buffalo River Canoe Trip - Camp at Steel Creek Campground, (Entrance is off Road #74, old Yarborough Horse Ranch). Check with leaders for plans. Leaders: Paul Kendall, 939-1839; Mel Smith, 333-2072 (Bartlesville)
APRIL 8 & 9: Caney Creek Backpack - Meet at Bard Springs, leave on trail 9:00 A.M. Sat. (Caney Creek is approximately 25 miles southeast of Mena, Arkansas.) Leader: To be announced in our Newsletter.
APRIL 22 & 23: Belle Starr Area, Kiamichi, Backpack. Leader: Bob Ferris, 747-4836.
MAY 13 & 14: Cedar Lake - Camping, Hiking (Close to Talimena Scenic Drive). Leader: Saundra Steinberg, 835-4071.
JUNE 3 & 4: Canoe Barren Fork and Illinois - Camp at Sparrowhawk Campground. Leader: Paul Kendall, 939-1939.
JUNE 24 & 25: Second Annual Ramsay Regatta at Walnut Creek, Lake Keystone. Good sailing, camping, swimming. Leader: Glen Ramsay, 936-1546.
JULY 15 & 23: Backpack Powderhorn Creek, Colorado - South of Gunnison, Colorado. Leaders: Don Haeberle, 838-0168; Wes Crone, 478-2637, Ft. Gibson, Oklahoma.

HIGHLANDS CHAPTER

FEB. 18: One-day hike on Leatherwood Creek near Ponca. Meet at 9 A.M. at the Ponca Bridge on the Buffalo River. Dick Murray, Coordinator, Guide, and Disciplinarian, 2006 Austin Drive, Fayetteville. Call Dick at 442-8995 for details or if the weather is questionable. An excellent family hike.
MAR. 18: One-day hike down Whitely Creek near Boxley. Meet at 9 A.M. at the Newton-Madison County line on Hiway 21 between Kingston and Boxley for the car shuttle. Dick Murray, Coordinator and Indian guide.

BAYOU CHAPTER

FEB. 11, 12: Caddo River Canoeing. Leader: Skip Griffin, 635-4493. Intermediates
FEB. 25: Canoe Clinic I (For Beginners). Leader: Skip Griffin, 635-4493. Duck pond section of Bayou on East Kings Hwy.
FEB. 26: Canoe Clinic II (Sabine River). Leader: John Malches, 687-7225. Canoe the Sabine River near Carthage, Texas.
MARCH 25, 26, 27: Mulberry River Canoeing. Leader: Frank Hampson, 222-4572. Experienced canoeist. Limit of 10 canoes.
APRIL 8-9: Saline Bayou day floats. Leader: Leola Hoffman, 861-1328. Base camp at Cloud Crossing Campground.
APRIL 22, 23: Blaylock Mt. area day hiking. Leader: Bill Meier, 222-0685. Moderately strenuous. Base camp in area.
MAY 6: Bodcau - Red Chute day float. Leader: Tom Carson, 949-0048.
MAY 13: Bicycle outing. Leader: Lou Price, 861-0854. Location to be determined.
MAY 27, 28, 29: Big Piney canoeing. Leader: Frank Hampson, 222-4572. Experienced

CORRECTION

In the last issue of the Bulletin, in describing Justice Douglas's trip down the Buffalo I stated that John Heuston and Jack Atkins came down the mountain around the west end of Big Bluff on the evening of the first night out to interview Justice Douglas. John Heuston had already joined the group at the low water bridge and it was Gus Albright of the Arkansas Game and Fish Commission who accompanied Jack Atkins on the descent in question. Gus was one of the members of the Game and Fish Commission who didn't mind expressing his support for the Buffalo National River and for his views he was made to suffer considerably by the Big Dam enthusiasts. May apologies are offered for the error.

Neil Compton

OUR PIECE OF THE FOREST PIE — The Agriculture Department has reported that Arkansas will receive $2,294,696 as its share of an estimated $185 million in fees collected by the government for the use of national forest "resources" (mostly timber) in 1976-77. These figures are estimates as of July 1976 and may vary slightly. The money represents 25 per cent of USFS revenues from timber, grazing, recreation, etc.

Solar-Heated Lumber Kiln Begins Operating

A first-of-its-kind application of solar energy that promises large fuel savings for commercial lumber kiln operators will be highlighted in Canton, Mississippi, February 2 in dedication ceremonies to be attended by local, state, and federal officials.

Now in operation at the J.A. LaCour Kiln Service facility in Canton, the solar system will tap the sun's energy to provide some 40% of the heating needs for a hardwood lumber kiln of 50,000 board feet capacity.

Funded by the Department of Energy (DOE), the solar dryer was developed by the Huntsville Research and Engineering Center, a branch of the Lockheed Missiles & Space Company of Sunnyvale, California.

Nepal Trip
Ozark Society Foundation Sponsors a Himalayan Trip

The possibility exists for an Ozark Society trek in the Himalayan Kingdom of Nepal. The trip would last approximately one month and would be scheduled after the monsoon season ends in late September. We would return in late November. The time would be Fall, 1978 or Fall, 1979, depending upon commitments from participants.

Participants would fly to New York, then to New Delhi and to Kathmandu. The first two or three days would be spent in seeing the sights in the Kathmandu Valley and getting acclimated. At present, the possibility of two separate treks is being considered. One would involve a flight to Lukla in Eastern Nepal treking to Thangboche Monastery (the highest permanent community in the world) and thence to Everest Base Camp, returning to Lukla for a flight back to Kathmandu. This trip would take approximately one week. The other trek would be in Western Nepal treking up the Khali Gandaki River Valley which runs between Annapurna and Dhaliguri (both over 26,000 feet) at an elevation of 3,200 feet. Yet the two peaks are only 17 miles apart as the crow flies. We would hope to be one of the first groups allowed into the walled City of Mustang, which is on the Tibetan border and has been closed to travelers.

The trip would be led by Tom McRae who lived in Nepal for two years and speaks Nepalese. We hope to keep the cost for all transportation, meals, lodging, etc. at less than $2,000.

Participants would have to be in good condition with endurance more important than speed. Distances to be covered would be between six to ten miles a day depending on the terrain. Part of the loads would be carried by Sherpa guides and bearers. Decisions as to the fitness of any participant would be at the sole discretion of the leader.

A minimum of 15 participants would be required to get preferred travel rates. We would limit participation to no more than 20. Would those of you who are interested please list your name, address and phone number, along with your time preference (Fall, 1978 or Fall, 1979) for taking the trip.

For more information, contact Tom McRae at the Win Rockefeller Foundation, 308 East 8th, Little Rock, AR 72202.

Geese Fly in 'V' To Save Energy

When migratory geese fly in a "V" formation, they do it for a good reason.

When a goose flies, its wings churn up the air, leaving behind an air current, the National Wildlife Federation publication for children says. In the flying wedge or V, each bird is in the right position to get a lift from the current left by the bird ahead of him.

This makes less work for all the geese but the leader, and that is why several geese may take turns leading the formation during a migration. Ducks, swans, gulls and several other species of waterfowl also fly in energy-savings Vs.

Dues Notice

Please send in your dues for 1978.
Fill out the blank below and send it with your check to Jim Gaither, Membership Chairman, Box 2914, Little Rock, Arkansas 72203.

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

Please check: new member;_____ renewal_____ Date_____

Last name_____ first names of husband and wife_____

Address_____ City_____ State_____ Zip_____

Telephone_____