

Upland Game Propagation Site Chosen

Democrat 2-27-38

DeWitt—The biological survey of the St. Charles CCC camp has started development of the Big Island Chute farm to favor all types of upland game native to this section, which includes quail, rabbits, squirrels, doves, turkeys and deer.

Approximately 800 acres are involved in this development bordering Big Island Chute from the sub-headquarters camp site to a point just below Turner's landing.

All of the game species named, except turkeys and deer, now inhabit this area, and it is expected that these will seek refuge on this upland area during periods of high water.

To meet the requirements of quail, the area is being broken up into small cultivated fields which will be surrounded by wood lots, grass areas, brushy fence rows and thickets. The maximum quail density under the best of conditions is one bird per acre, and the more border areas between cultivated field and different cover types the more nearly the maximum number of quail can be realized.

Complete development of this area will require several months and will include food and cover planting, reforestation, erosion control, construction of brush shelters and the necessary truck trails.

Big Lake Refuge Project Pushed Despite High Water.

Special to the Gazette. 3-11-38

Blytheville, March 10.—The project to conserve water and wildlife at Big Lake, 17 miles west of here, check flood erosion, increase fur production, provide staple water supplies and improve the federal refuge by building a road to the warden's house and a natural swimming pool and four-acre park, is proceeding despite recent high water.

There are 125 WPA workers employed on the project, started December 1. It was announced that \$50,000 would be spent in two years. A mile of road to the highway and the six-mile boundary line have been cleared.

Rinard Dierboe Jr. of Des Moines, Ia., is director of the project, sponsored by the Biological Survey, Department of Agriculture. There are 6,400 acres in the refuge.

Engineers Told Of Need Of Conservation

Gazette 3-20-38

An expanded 10-year program of wildlife conservation calling for \$500,000 expenditure annually will be presented to Arkansas sportsmen within a few weeks, Tom Mull of Holly Grove of the Educational Division of the state Game and Fish Commission, told members of the Little Rock Engineers Club at the Hotel Freiderica yesterday.

Construction of state game farms, holding ponds to receive young fish from hatcheries for a short time before they are transplanted into streams, feeding grounds for ducks in swampy sections, and establishment of co-operation between sportsmen and farmers to provide new breeding grounds will be included in the program.

The \$100,000 available from licenses required for hunting certain animals and birds, and of licenses for fishing with artificial bait is not sufficient to finance an adequate conservation program, Mr. Mull said.

He said general licenses which would be required of hunters and fishermen regardless of the kind of game they sought or means used would provide about \$150,000 yearly. The revenue from general licenses would increase with an increase of game from the expanded program, he estimated.

Program Needed.

The rapid depletion of wildlife from droughts, floods, deforestation, drainage projects, use of the automatic shotgun, the increase of the army of sportsmen, and ability of sportsmen to reach any hunting ground or stream in automobiles over good roads necessitates a new conservation program to prevent extinction of wildlife, Mr. Mull said.

Mr. Mull showed movie reels which he made of Arkansas wildlife. He was introduced by Vice President E. M. Shaw, who directed the program. President E. F. Nelson presided.

Candidates Nominated.

Nominees selected by two committees for the club's annual election April 2 are: J. M. Page and Col. John R. For-dyce, president; Joe F. Mayne and Drew

Lander, vice president; Mr. Shaw and Leonard White, secretary-treasurer; W. M. Mulhollan and W. W. Zass, director. A change in the dates of the meeting of the Mid-South Section of the American Society of Civil Engineers from April 15 and 16 to April 29 and 30 was announced.

Fish-Rearing Pond Planned

Buffalo River Park to Be Improved by State Board. Democrat 4-6-38

Plans for construction and operation of a fish-rearing pond in Searcy county to supply fish for the Buffalo river in the area of the new Buffalo River park in Newton county, were announced today by S. G. Davies, state parks commissioner, and D. N. Graves, game and fish commission secretary.

Property for the rearing pond, which probably will be about 60 acres in area, will be acquired by the Park Commission, with the Game and Fish Commission taking over operation of the pond. Present plans call for location of the pond between Marshall and Yellville.

Although the Buffalo river would be stocked in the six-mile area forming the south and east boundaries of the new park site, Mr. Graves said the effect of stocking the stream eventually would be felt for miles along the river.

Mr. Davies said today that the river, as it bounds the park area, provides one of the best fishing areas in the state. He said fishermen could make a 20-minute drive from the park site and begin a float on the river, which would require three days to return them to the park. This is because the river travels a circuitous route in that area.

Mr. Graves also announced today that the present spawning season at the Lonoke hatchery is the earliest in the history of the hatchery. He said that Joe Hogan, supervisor of the hatchery, who has been connected with similar work since 1920, said the present spawning season in Arkansas is two weeks earlier than any season in his memory.

Mr. Graves attributed the early season to recent mild weather. He said indications are that the hatch at the Lonoke ponds this year will be the best since the plant was constructed in 1927.

Fish Life At Refuge Will Be Protected

Gazette 4-24-38

Fishermen of Blytheville and north-east Arkansas may be assured that the federal Bureau of Biological Survey's work in connection with a migratory bird refuge at Big Lake, Mississippi county, will not destroy angling potentialities of the lake, Secretary D. N. Graves of the Game and Fish Commission was informed yesterday.

On behalf of the Northeast anglers Mr. Graves asked the Biological Survey to preserve fish and sufficiently deep and fresh water for piscatorial specimens in Big Lake, as the migratory bird refuge is developed.

He received yesterday from W. B. Bell, acting chief of the federal survey, assurances that it is the survey's "desire to maintain a stabilized water level ideal not only for the propagation of water fowl food plants but also for fish life."

Because of a break in a dyke during the recent floods, "the waters of Big Lake are considerably lower than they otherwise would be, but immediately upon completion of the work [of replacing it] we shall again permit the raising of Big Lake to a stable level ideal for both wildlife and fish," he wrote Graves.

"As you have most probably surmised by this time, our ultimate goal in the Big Lake refuge is the prevention by proper control of the waters entering into the lake, as well as the prevention of scouring of the vegetated portions of the lake during periods of high water."

Conserving Deer In Arkansas

Game Management Is Chiefly a Matter of Common Sense, in the Opinion of Conservation Workers, and Deer Can Become a Valuable Secondary Crop.

By Trusten Holder

Size of Arkansas's deer population is dependent more on conditions between hunting seasons than on those existing while the legal open season is in force, although the sportsman's interest in deer naturally diminishes between hunting seasons and the topic receives little attention at this time of year.

The chief limiting factor of the number of deer available for the next hunt is not the loss of bucks legally killed in season nor the loss of does killed accidentally or otherwise during the open season on bucks, although the latter cause is of course detrimental.

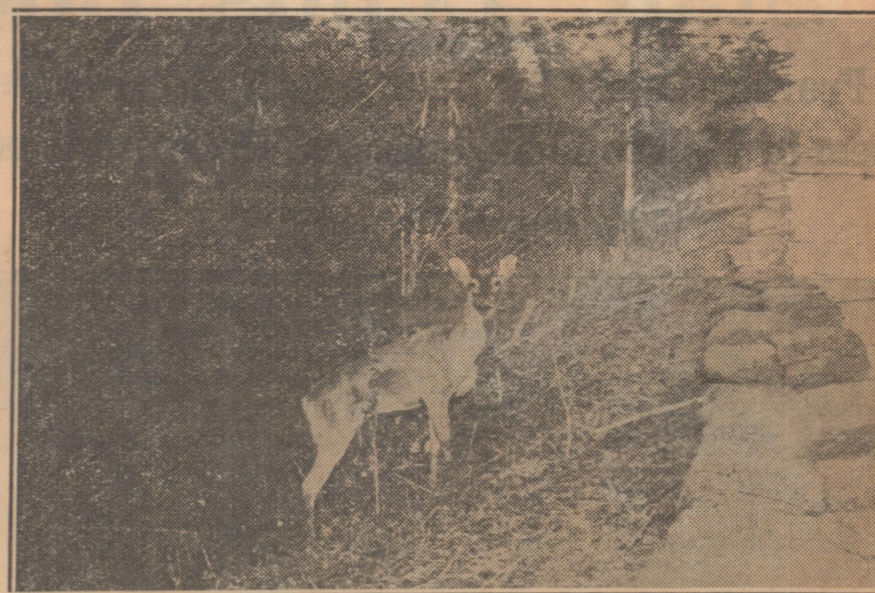
Deer are more endangered during the period which begins after the close of the hunting season and continues until after birth of the fawns in late spring. It is then that the woods are most free to pot hunters, and food and cover for deer become most scarce. As the does become heavy with fawns they fall victims to predatory animals more easily. Adequate protection for deer during this critical period would be of great aid in partially restoring the large deer herds once found in this state.

Deer are conserved primarily for hunters. Almost any one who has investigated will verify the statement that, although the sentimentalist thinks it is a shame to kill deer and would like to see deer and other game restored, it has been the hunters who have actually performed the tasks necessary to perpetuate and conserve our wild life. Any one-sided regulation or movement designed primarily for the deer and neglecting the interests of the hunter will automatically lose the support of those most capable of bringing success.

Hunters can expect large returns from their effort spent in conserving deer. Any animal which has a natural steady increase like that of the deer will stand an annual kill of 20 per cent without reducing the original number. However, there are various ways of harvesting this surplus which vary tremendously in effect. For instance, if this 20 per cent killed each year are all does, obviously the herd will not do so well, but if, in a large herd the 20 per cent are all bucks, the deer's increase would hardly be affected. It is also obvious that large deer herds increase much more rapidly than small herds and all the bucks of a small herd may be killed during one open season. Hence it is advisable to give these small deer herds complete protection for a few years.

Game management is mostly common sense, but it is also good business. Since the deer's preferred home is usually on land not very suitable for other purposes, deer can be raised as a secondary crop. In Arkansas only the simpler steps of game management are necessary, because our human population is not dense enough to make an intensive program necessary. Nor is it at all desirable to try to increase the deer to a point of overpopulation, or even to a point above which their quality as game would decline.

Only the private land owner or the state can practice game management cheaply. Several neighboring plantations could combine and have an excellent opportunity to build and maintain a substantial deer herd. Many land owners who are in a position to do so would find ample reward in the personal pleasure derived from such a plan or the opportunity of offering hospitality to their deer-hunting friends. Unless it is necessary to restock, the cost would be negligible, and even live deer



Young deer often are forced during floods to take refuge on levees or higher ground where refugee camps and levee protection crews are located.

for restocking probably would cost no more per head than the hounds to be used in chasing them.

Plantation owners can control their land, but the state has to secure the co-operation of the public before it can succeed as a game manager. Ways of increasing co-operation present the greatest problem of Arkansas's conservationists. The old idea that game, especially anything as large as the deer, is doomed to become extinct has resulted in a scramble to get a share while the getting is good. We need to have the results of scientific fact-finding and demonstrations presented in tangible form to prove the new concept that game can be restored.

To realize that a state's deer restoration can succeed, one need only to look up the record of Pennsylvania. Deer in Pennsylvania were at one time almost exterminated. Yet today probably more deer are killed each year in Pennsylvania than there are living deer in Arkansas. Even some of the small and thickly populated New England states have more deer than Arkansas, despite the severe winter climate which kills many deer.

That deer restoration can succeed in Arkansas has been demonstrated at the Five Lakes Club in Crittenden county, where there is found one of the densest deer populations of any place in the United States. Other examples of success with deer can be found on several of the large plantations within our state.

For those who might not appreciate any other reason, it is well to point out financial benefits to be derived from a large deer herd. Of course a freshly killed deer is worth something, even though none of it can be sold. The average buck will dress out nearly 100 pounds of venison and the hide and head, especially of the larger one, usually are prized by the hunter. However, the live deer bouncing through the woods is worth much more than a dead one. In pursuit of it sportsmen will spend liberally for licenses, dogs, guns and other hunting equipment, and by no means least, the services of guides. Most of our state would be far more attractive to tourists if we would furnish them game to shoot when they get here.

Arkansas has an excellent conservation program that is well backed by game and fish regulations. However, there is a need of a legislative act which would empower the Game and

Fish Commission to control deer hunting, much as they are at present empowered to control or manage commercial fishing within the state. For instance, the Game and Fish Commission recently closed Horseshoe Lake to commercial fishing because reports indicated that commercial fishing was proving harmful to game fish. But any regulation involving deer has to be statewide in scope.

The very essence of game management is the control of various factors where and as when they are needed. At present the efficiency of the game manager is greatly reduced from the start. Our state is too large and the conditions within our boundaries are far too varied for maximum results to be obtained from any set of regulations that must cover the state.

Under the present system small isolated herds are subjected to the same open seasons as are the larger, well established herds. Best results would come from a legislative act which would enable the Game and Fish Commission to regulate deer hunting separately in different sections of the state. Benefits derived from an accurate game survey in Arkansas would outweigh the expense involved in making and keeping such a survey up to date.

The one thing we have which counteracts some of the bad effects created by the present handicap is the system of game refuges. In addition to the federal game refuges, there are state game refuges in Arkansas with a total area of 213,510 acres. Game refuges have proved to be a successful part of our restoration program. The chief reason for their success has been co-operation the game refuges have received from the people of the state. Those living near refuges can see that game is increasing on and near the protected areas. These visible results have created a respect for state game refuges which is not as widely enjoyed by other phases of the game conservation program.

The theory behind game refuges is that the game on the protected area will increase and overflow into the territory open to hunting. This theory is especially sound when applied to deer. W. N. Deaton, supervisor of state game refuges, reports that 242 deer were recorded being killed the year before last on land adjacent to the state game refuges. However, game refuges are only a part of the restoration program and that part does not hold the solution

of all the problems connected with deer restoration. Nor are all areas suitable for game refuges. Unless the area is of sufficient size, is surrounded by a larger game territory, can be maintained as a refuge for a sufficient number of years, contains ample food, cover and water the year round, is relatively free from molestation and predatory animals, and unless it contains at least a nucleus of wild life at the start, the benefits received from such an area will not justify the expense of its upkeep.

That conservationists could hope to do more than conserve what is left of our deer may come as a surprise to some. However, the deer, in spite of its large size, has been adapted by nature for restoration.

Contrary to popular opinion, the white tail deer, the kind we have in Arkansas, is not necessarily a wilderness animal. It actually has gone with man and become established as the frontier was opened up. The frontiersmen burned and cleared some of the virgin land, making it more suitable for the deer, and at the same time reduced the numbers of the wolves and panthers so that the deer could survive. By following man the deer has increased its range both west into Colorado, New Mexico and Utah and north into Canada.

Deer thrive best, not in large tracts of virgin forest, but in cut-over areas containing a mixture of second-growth timber, brush and open patches.

The land area required to hold the deer the year round and supply all its needs is small. Most authorities agree that two or three hundred acres is sufficient for a family of deer.

Deer will tolerate and thrive, often almost without their presence being discovered, in the midst of a surprising amount of agricultural and industrial development. They rapidly become used to certain activities of man and can alter their daily routine to fit in with their changed environment.

Another feature of the deer's life which aids in rebuilding a larger deer population is that a buck will mate more than one doe. All those who have studied the habits of deer do not agree on exactly what the ratio of bucks to does should be, but it is generally agreed that a rather large percentage of the bucks can be killed each year without lowering the per cent of does that will bear fawns. It is on this basis that our game laws offer protection to does.

Other strictly biological aspects of the deer's life, such as the early age at which deer breed, the number of young each year, and the number of years during which the doe continues to produce fawns, combined with the natural instincts or ability of the deer to survive, serve to aid substantially in their restoration.

Game conservation has progressed through several stages of development. The first steps consisted of restriction of hunting privileges, but as the hunters became more numerous it became evident that a mere tightening down on hunting wasn't enough to keep our game from disappearing. The forests were being destroyed rapidly, and since they were looked upon as being the home of wild life, it was thought that we could save our game by simply saving the forests. So the idea of game conservation added its weight to the forestry conservation program. National and state forests and parks resulted. This was an advantage, except for the fact that miles and miles of forest land could exist and game still could be almost totally absent. Predatory control and artificial restocking with game followed, but even this failed to stem the decrease of our wild life. Today the hope of game restoration lies not in a further restriction of hunting, but in the education and co-operation of our people.

What is needed is first, an extensive educational program, directed especially to those of our citizens living near the places inhabited by deer so that

we may develop an open minded attitude for new and progressive conservational developments; second, an organization of all interested in conservation; third, elevation of hunting ethics. With the combined effort of the scientist, the hunter and the landowner, Arkansas soon could have a deer herd which would come nearer fulfilling our possibilities and needs in size.

U. S. Aids Nature to Provide Haven for Migratory Birds Along Lower White River

Democrat 6-19-38

DeWitt—Extensive improvements are being made on the 110,000-acre tract owned by the United States Biological Survey. The area is situated along the lower part of White river, and is known as the White River Migratory Waterfowl Refuge.

The project is being developed by two CCC units, Companies Nos. 1741 and 3791. Company No. 1741 is the only floating CCC camp in the United States. The enrollees are quartered on barges on the river.

Work completed by the CCC units during the past 19 months include installation of 30 miles of telephone lines, with 21 miles still under construction; 25 miles of roads with 45 miles additional under construction; 6,400 rods of boundary fences built; erection of steel observation towers; clearing 100 miles of boat channels; construction of nine barges, and seven motor boats.

A total of 50,000 cubic yards of earth levees have been built; 12 dams constructed; three brick residences erected at the headquarters base at St. Charles.

The refuge has planted 360 acres of submerged and marginal land to millet, smart weed, chufa, rice and other plants, and 485 acres of bottom land cleared and planted. A total of 5,400 bushels of mixed grain has been fed to ducks and most of the grain was raised on the refuge.

Officials said that 43,700 pine seedlings and 3,000 black locust, cherry, hackberry and partridge berry seedlings have been set out in soil conservation work and to provide cover for birds.

Many other projects are now under way by both the St. Charles land CCC camp and the boat camp. Last week a crew from the floating camp began work on an 800-acre area of old cotton farming land in a hilly section of the refuge not subject to inundation. A large part of it was waste land, badly eroded, when bought by the Biological Survey. It is being planted with trees and bushes and a part of it to corn and peas so duck and quail will benefit from it next fall.

It is estimated that there remains enough work to be done in the refuge to keep two CCC units employed for five years.

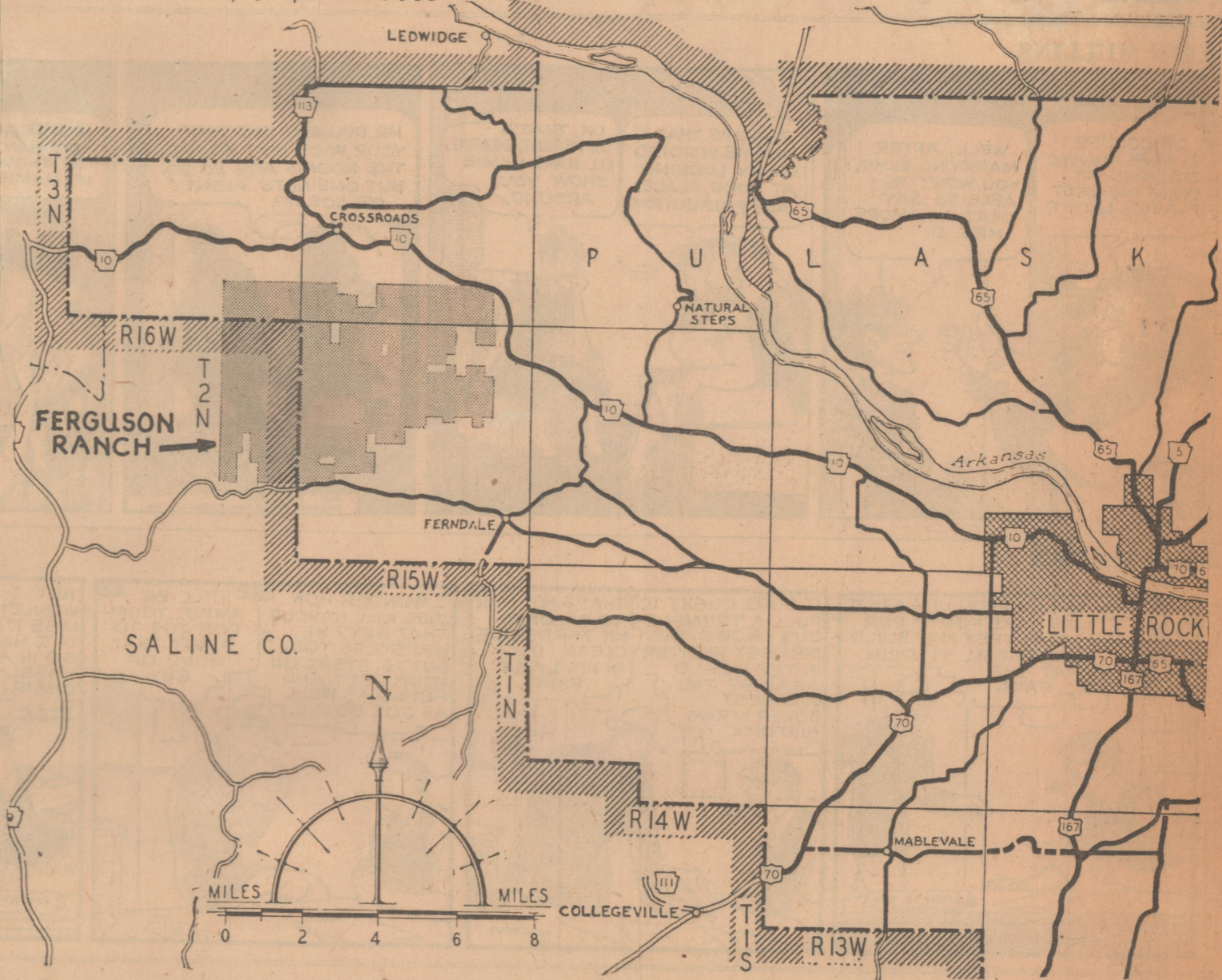
There are at least 11 lakes to be developed as storage reservoirs and 37 lakes to be planted in aquatic plants for duck food. This will necessitate the building of many miles of roads. There are approximately 150 lakes on the refuge, which, together with the river, bayous and chutes, cover an area of approximately 15,000 acres, about one-seventh of the refuge.

Lease of nearly 10,000 acres of land in western Pulaski county, known as Ferguson ranch, for use as a game refuge was announced by the state Game and Fish Commission yesterday. The project is the first of four planned by the agency, Secretary D. N. Graves of the commission said. Other refuges may be established near Batesville, south of Lake Catherine and in Pike county. Preserve in Miller county, also has been considered, Mr. Graves said.

The Ferguson ranch tract, owned by the Southern Kraft Corporation, was described by Mr. Graves as an excellent game refuge. It is about 20 miles west of Little Rock and lies between the Twelfth Street pike and Highway 10. It will be used in connection with a wild turkey restocking project, which has been approved by the United State Biological Survey. Refuge restrictions have not been placed in effect because the commission desires to lease additional acreage adjoining the ranch, Mr. Graves said.

GAME REFUGE ESTABLISHED IN PULASKI COUNTY

4-5-40 Gazette



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—Courtesy Pulaski County Planning Board.

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