



THE SOUTHEASTERN CORNER OF REELFOOT LAKE, SHOWING THE GREAT LILY-PAD CIRCLES IN THE FOREGROUND

The dark spots in the middle of the airplane picture are submerged cypress trees. Grassy Island and Willow Point extend out into the lake in the background.

REELFOOT—AN EARTHQUAKE LAKE

BY WILBUR A. NELSON

With Illustrations from Official Photographs, U. S. Army Air Service, Taken by Captain A. W. Stevens and Lieutenant George W. Polk, Engineering Division

REELFOOT, an earthquake lake of Tennessee, was born about the time that the first venturesome pioneers began to settle along the banks of the mighty Mississippi.

Perhaps De Soto, in his wanderings along the Mississippi River, saw this country as a vast unbroken wilderness. As he thrust wearily northward along the west bank of the "Father of Waters," to the great Indian village of Cahokia, he little dreamed that this placid wilderness would within three hundred years be torn and racked by Nature's forces, and that during one of the greatest earthquakes of historical time lakes covering tens of thousands of acres would come into existence over night.

The old Spanish settlement of New Madrid, formed many years after De Soto had come and gone, did, however, play a prominent part in recording the story of Reelfoot, for here resided many of our American pioneers whose letters supply the details of that, to them, awful winter.

THE LEGEND OF REELFOOT LAKE

At the beginning of the 19th century this region was called Indian Country, and rightly so, for in the rich bottom lands dwelt a tribe of the Chickasaws, which camped at the base of bluffs that rose 300 feet above the Mississippi, providing the lookout points so needed in a wilderness.

Legend says that at the time of our story a mighty chief ruled wisely, yet his heart was heavy, for his only son had been born with a deformed foot. As the boy grew up he developed normally, but his walk was different from all other Indians. He walked and ran with a rolling motion; so his people called him Kalopin, meaning Reelfoot.

When the old chief died, Reelfoot became chief. He, too, was sad and lonely, for as yet none of the Indian maidens had stirred in him the thoughts of love.

His father had often recorded to him tales of the mighty tribes dwelling to the south, and of the wondrous beauty of their maidens. So, restless in spirit, when the robins arrived from the north, seeking a mating ground, he likewise gathered a few of his chosen tribesmen—Osceola, Nashola, and Biwier—and wandered south in quest of a princess.

THE DREAM PRINCESS IS FOUND

Many days they journeyed. Finally their canoes, floating down the river, entered a domain having different tribal customs, and there were signs which told them that they were approaching the abode of a mighty chieftain.

Reelfoot sent runners forward to notify the great Choctaw chief, Copenhaw, that a friendly party approached. Soon the chief's councilor came forward to welcome the strangers to the council fire.

When the village was reached Reelfoot went forward to offer the requisite homage to Copenhaw, and then, continues the legend, he beheld his dream princess, more beautiful than he had ever dared imagine, sitting close by the side of the chief, her father.

The old chief was stately and dignified, as all Indians are on such occasions, and after they had smoked the great peace pipe and eaten of the freshly killed game, he inquired of young Reelfoot the reason for his visit.

Reelfoot replied that he was on a pilgrimage to find a princess to rule his tribe with him, and that now he saw his heart's desire for the first time.

At this the old chief was filled with wrath, for he knew the beauty and entrancing charm of his only daughter, and what chief would want his daughter to marry one deformed, even though he be powerful!

So old Copenhaw told Reelfoot that his daughter was only to be given in wedlock to a Choctaw chieftain, and under no circumstances could she join a tribe which



THE NORTHEAST CORNER OF REELFOOT LAKE AROUND WALNUT LOG

Walnut Log Hotel is situated in the clearing in the foreground, on the left bank of the lake. The light-colored area to the north of the water is shallow water, covered with lily-pod growth; the dark-colored water in the middle foreground is deeper water, free from lily pads, and the dark specks are dead cypress trees. This part of the lake is famous for its ducks. The Mississippi River is the light portion in the upper right corner, and the southern end of Reelfoot Lake is in the background to the left.



REFLECTED SUNLIGHT ON LILY PADS AND SEED MOSS IN REELFOOT LAKE PRODUCES THE EFFECT OF SNOW

This effect is produced only in a photograph, as it does not suggest snow in reality. Note the parallel lines of trees growing on the low crests, indicating the rhythmic motion of the earth at the time of the quake (see text, page 106).



AËRIAL VIEW OF THE NORTHEASTERN CORNER OF REELFOOT LAKE, SHOWING THE SUBMERGED CHANNEL OF BAYOU DE CHIEN

The channel shows up clearly in this airplane view, as the water is much deeper than the shallow lake water, and the lily pads only grow in shallow water, up to the banks of this old submerged channel. To the left of the Bayou de Chien are masses of cypress trees growing in water five feet deep (see also illustration, page 105).



HICKMAN, KENTUCKY, JUST NORTH OF REELFOOT LAKE

The town lies a few miles north of the Tennessee line and is located on a 300-foot bluff at the edge of the Mississippi River. The white strips which look like reflections, on the right bank of the river, are submerged sand banks.

was so unfortunate as to have a club-footed chieftain.

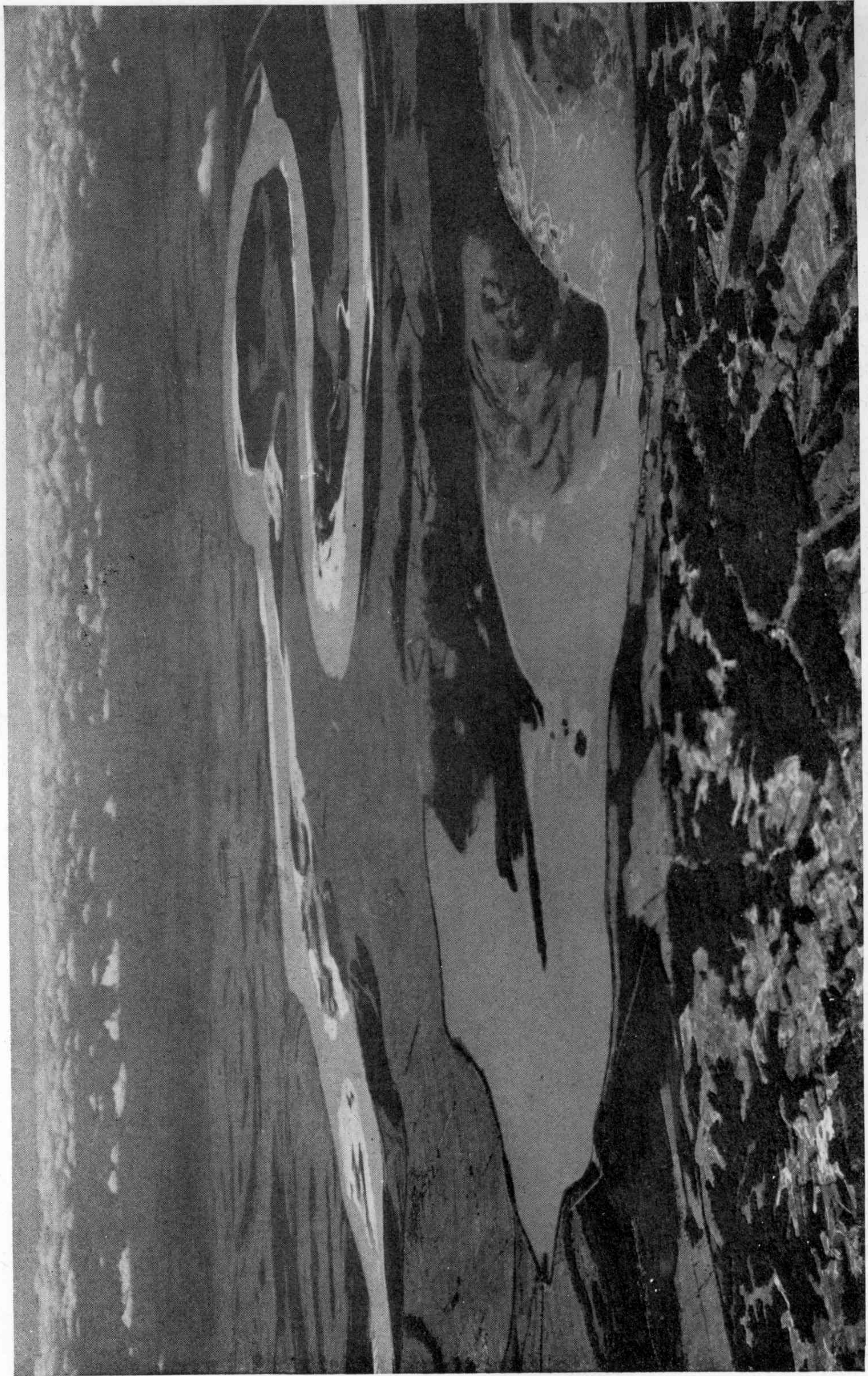
This made Reelfoot sick at heart, but he was more firmly resolved than ever to have this one Indian maiden. So he offered her father pearls and skins and other treasures which would arouse envy even in the greatest chieftain's heart. Then the old chief sent for the tribe's medicine man, who called publicly on the Great Spirit.

The Great Spirit spoke to Reelfoot, saying that an Indian must not steal his

wife from any neighboring tribe, for such was tribal law; and if he disobeyed and carried off the princess that He, the Great Spirit, would cause the earth to rock and the waters to swallow up his village and bury his people in a watery grave.

Reelfoot was frightened at this threat of dire punishment, and stifling his longings deep in his heart, sorrowfully turned his canoes toward the North Star and home.

Summer had come when the home country was reached, but to Reelfoot it



HILL LANDS OF THE REELFOOT LAKE SECTION IN THE FOREGROUND

Reelfoot Lake is in the center of the picture, the Mississippi River in the central background. The double bend of the river occurs along the line between Missouri and Kentucky, part of each bend being in each State. This view was taken looking toward the west. The cleared areas in the immediate foreground are farms; the dark areas are wooded lands.



AÉRIAL VIEW OF REELFOOT LAKE AND TIPTONVILLE, LAKE COUNTY, TENNESSEE, FROM AN ALTITUDE OF 3,000 FEET
On the banks of the Mississippi River, looking eastward, with Reelfoot Lake in the background.



A COMBINATION REFRIGERATOR, BATHTUB, AND DRINKING FOUNTAIN

This spring proved a joy to the aviators who made the photographs illustrating the Reelfoot Lake region. Here it is being used for drinking purposes.



THE SAME SPRING AS A SWIMMING POOL

The flow is sufficiently abundant to provide an entire change of water in thirty minutes. The aviators also found it an excellent place in which to keep provisions cool.

lacked one thing—Laughing Eyes, forbidden to him by the Great Spirit. Through the long summer days the Indians fished and hunted, and Reelfoot as chief was doing his part in storing up food for the coming winter.

But his activities did not keep Reelfoot from thinking of his love and wondering if the Great Spirit would really do as he said.

AND THE EARTH TREMBLED

For the first time Reelfoot did not want to believe the Great Spirit; so, as the days grew short and the maize was gathered, he planned with his warriors to go south and capture the forbidden maiden. When the first snows came they started, and, swooping down on the Choctaws, he captured the princess and fled back to the north.

Laughing Eyes was greatly frightened, for she had heard what the Great Spirit had said to Reelfoot. She feared for herself and implored that he send her back to her father; but Reelfoot was in love and, now that he possessed his longed-for bride, was willing to defy everything.

One starry night he brought his princess bride home, and there was great rejoicing among his people, for now their tribal family was complete. The festival fires burned; the pots boiled and the venison browned on the spit.

In the midst of the festival and the marriage rites the earth began to roll in rhythm with kettledrums and tom-toms.

The Indians tried to flee to the hills, but the rocking earth made them reel and stagger. Chief Reelfoot and his bride reeled also and the Great Spirit stamped his foot in anger. The Father of Waters heard and, backing on his course, rushed over Reelfoot's country.

Where the Great Spirit stamped the earth the Mississippi formed a beautiful lake, in the bottom of which lay Reelfoot, his bride and his people.

Such is the Indian legend of Reelfoot Lake.

THE ACCOUNT OF AN EYEWITNESS

Here is the account of the earthquake as given by one of the pioneers, Eliza Bryan, living at New Madrid, near the cliffs where Hickman now stands (page

99). She wrote to her pastor, the Reverend Lorenzo Dow, the following letter:

“DEAR SIR:

“On the 16th of December, 1811, about 2 o'clock a. m., a violent shock of earthquake, accompanied by a very awful noise, resembling loud but distant thunder, but hoarse and vibrating, followed by complete saturation of the atmosphere with sulphurous vapor, causing total darkness. The screams of the inhabitants, the cries of the fowls and beasts of every species, the falling trees, and the roaring of the Mississippi, the current of which was retrograde for a few minutes, owing, as it is supposed, to an eruption in its bed, formed a scene truly horrible.

“From that time until about sunrise a number of lighter shocks occurred, at which time one more violent than the first took place with the same accompaniments.

“There were several shocks in a day, but lighter than those mentioned; until the 23rd of January, 1812, when one occurred as violent as the severest of the former ones, accompanied by the same phenomena.

“From this time on until the 4th of February the earth was in continual agitation, visibly waving as a gentle sea. On that day there was another shock, nearly as hard as the preceding ones; next day four such, and on the 7th, at about 4 o'clock a. m., a concussion took place so much more violent than those preceding it that it is denominated the 'hard shock.'

“The Mississippi first seemed to recede from its banks, and its waters gathered up like a mountain, leaving for a moment many boats, which were on their way to New Orleans, on the bare sand, in which time the poor sailors made their escape from them.

“Then, rising 15 or 20 feet perpendicularly and expanding, as it were, at the same time, the banks overflowed with a retrograde current rapid as a torrent. The boats, which before had been left on the sand, were now torn from their moorings and suddenly driven up a little creek, at the mouth of which they had laid, to a distance in some instances of nearly a quarter of a mile.

“The river, falling immediately as rapidly as it had risen, receded within its banks with such violence that it took with it whole groves of young cottonwood trees which had hedged its borders. They were broken off with such regularity in some instances that persons who had not witnessed the fact could be with difficulty persuaded that it had not been the work of man. The river was literally covered with wrecks of boats.

“The surface of the earth was from time to time by these hard shocks covered to various depths by sand which issued from fissures that were made in great numbers all over this country. Some of these closed up immediately, after they had vomited forth their sand and water. In some places, however, a substance resembling coal or impure stone coal was thrown up with the sand.

“It is impossible to say what the depth of the



AN AIRPLANE VIEW OF REELFOOT LAKE, LOOKING TOWARD THE EASTERN BANK
AT SAMSBURG

All of the trees in the foreground are growing in lake water. Reflection of the sunlight on the seed moss and the lily pads growing over the lake causes the white areas. Nick's Toehead is in the right background and the buried channel of Bayou de Chien to the left of it.

fissures was; we have reason to believe that some of them were very deep.

"The site of this town was settled down at least 15 feet, but not more than a half mile below town there does not appear to be any alteration of the bank of the river.

"Back from the river large ponds, or lakes, which covered a large part of the country, were nearly dried up. The beds of some of them are elevated several feet above the former banks, producing an alteration from their original state of 10 or 20 feet, and lately it has been discovered that a lake was formed on the opposite side of the Mississippi, in the Indian country, upwards

of 100 miles long and from one to six miles wide, of a depth of from 10 to 50 feet.

"We continue to feel light shocks occasionally. It is seldom that we are more than a week without feeling one, and sometimes there are three or four in a day. There were two this winter past, much harder than for two years past; but since then they appear to be lighter than they have ever been.

"Your humble servant,

"ELIZA BRYAN."

Several such letters are full of interesting detail, yet now we know that the



CYPRESS TREES GROWING IN WATER COVERED WITH A CARPET OF SEED MOSS

facts were greatly exaggerated. For example, the 100-mile lake is nearer 14 miles in length and $4\frac{1}{2}$ miles in width.

This we do know and realize, however: that such an earthquake, if occurring at the present time, would probably cause ten times the damage which followed the San Francisco earthquake of 1906.

MANY OTHER LAKES FORMED

Reelfoot was not the only lake formed, for large areas in eastern Arkansas and northwestern Louisiana were partly submerged and a number of small lakes formed. This earthquake, known historically as the New Madrid earthquake, caused a settling and rising of the land over a large territory, and partly demolished the old Spanish settlement from which it was named.

Although the region affected was a wilderness, it was a wilderness which had lured many travelers, and during that winter of 1811-12 the frontier settlements of the Mississippi were visited by Audubon, John Bradbury, a noted English botanist, and Major Long, with his expedition, on the way to the Rocky Mountains.

In middle Tennessee lived Andrew Jackson, practicing law in the primitive courts during periods of quietude between

his expeditions against Indian foes. Davy Crockett lived near by and was getting his training, which ended so tragically in the Alamo.

Most of these noted men left accounts of what happened.

General Rogers, of Revolutionary fame, living at Rock Island, on the Caney Fork River, at the foot of Cumberland Mountains, 200 miles to the east, saw great blocks of sandstone, loosened from the top escarpment, 1,000 feet above the river, crash down the mountain sides.

A great area throughout America was affected by this earthquake. Far up in the northern woods of Canada the Indians reported that earth tremors occurred; to the west, in Missouri and Arkansas, the reports of James's expedition say that the Indians were terrified by the same quake, while to the southwest, on the Washita River, there was much fear among the settlers. At New Orleans, 500 miles away; at Detroit, 600 miles away; at Washington, 700 miles away, and even at Boston, at a distance of 1,100 miles, slight tremors were felt.

What occurred in the Reelfoot region? What happened to New Madrid? There were no hard rocks in that section; all the country was covered by rich loams and



SECOND GROWTH OF CYPRESS TREES IN REELFOOT LAKE

clays, and under this surface soil was layer after layer of loose sand and clay, down to a depth of 2,000 feet.

The earth waves came up through these 2,000 feet of sand and clays, and where breaks occurred on the surface poured streams of quicksand from deeply buried layers, veritable sand geysers.

The great forest trees moved, with branches interlocked, like fields of grain before the wind. Their trunks, not having the suppleness of youth, fell prostrate or reclined at grotesque angles to the earth.

MOTION OF EARTH SHOWN BY TREES

The rhythmic motion of the earth is well shown by the parallel lines of cypress trees growing on the low crests of

the many rolls in the Reelfoot Lake region (see illustration, page 97.) An airplane view brings to life again the roll of the earth as it occurred more than a century ago.

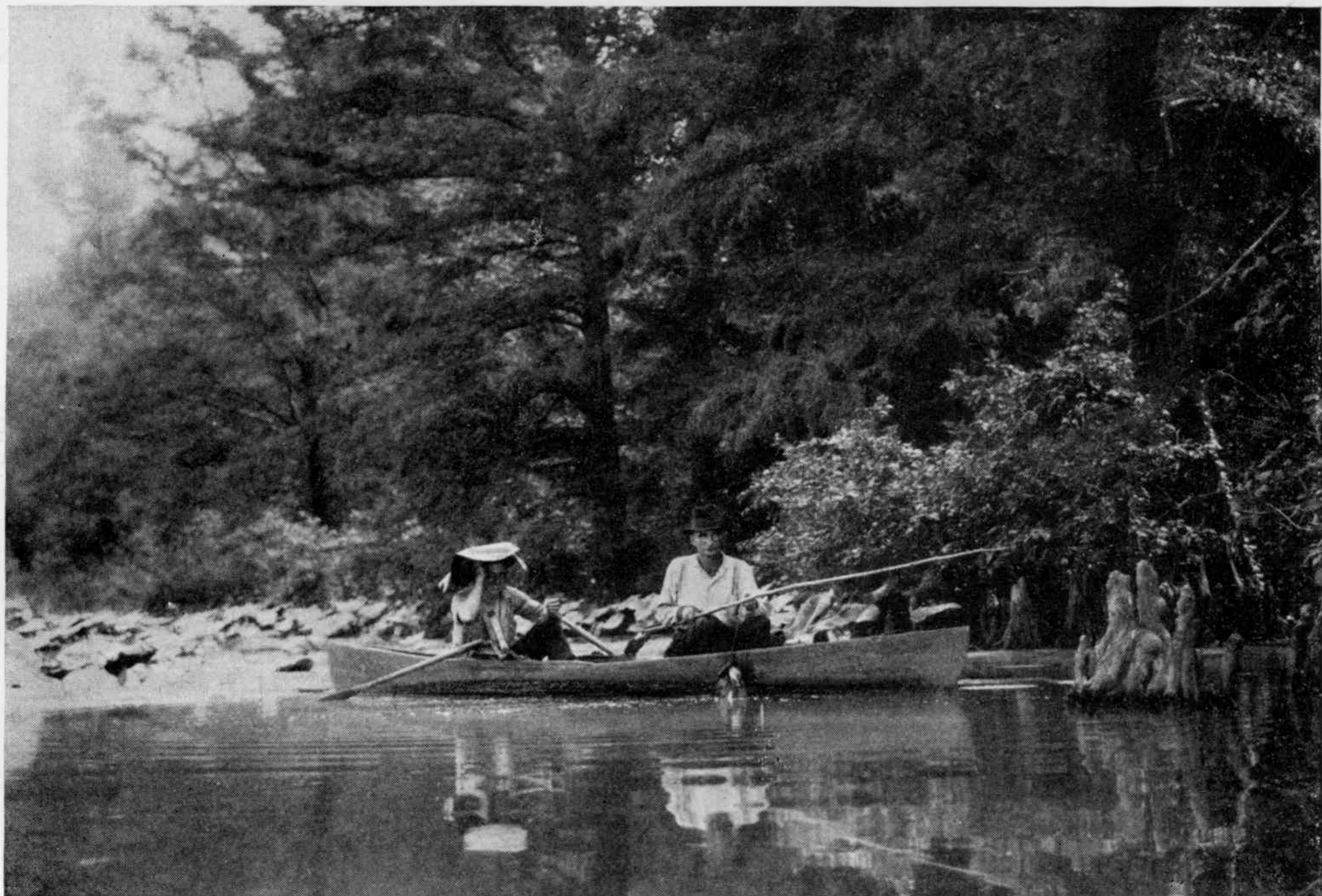
New Madrid, laid out by the Spaniards on the banks of the Mississippi, was near the center of this earth movement, and it fared badly; for here the bluffs settled and the sand geysers spouted out of crevices, which, according to eyewitnesses, were 100 feet deep. The river banks caved in and most of the old town was absorbed into the Mississippi.

The happenings are vividly described in a letter by one eyewitness, who recounts the experiences of a riverboat captain:

“We immediately cut his cable, and he put off into the middle of the river, where he soon found the current changed. The boat hurried up, for about a minute, with the velocity of the swiftest horse, and he was obliged to hold his hand to his head to keep his hat on. On the current running its natural course, which it did gradually, he proceeded down the river, and at about daylight came to a most terrific fall, which, he thinks, was at least six feet perpendicular, extending across the river and about half a mile wide.

“The whirls and rippings of this rapid were such that his vessel was altogether unmanageable and destruction seemed inevitable; some of the ripples, he thinks, were at least 30 feet deep and seemed to be formed by the water’s being violently sucked into some chasm in the river’s bottom.

“He and his men were constantly employed in pumping and bailing, by which,



ALONG THE SOUTHERN BANK OF REELFOOT LAKE, NEAR THE SPILLWAY

and the aid of Providence, he says he got safe through. As soon as he was able to look around he observed whole forests on each bank fall prostrate, to use his own comparison, like soldiers grounding their arms at the word of command.

“On his arrival at New Madrid he found that place a complete wreck, sunk about 12 feet below its level, and entirely deserted; its inhabitants, with those of the adjacent country who had fled there for refuge, were encamped in its neighborhood. He represents their cries as truly distressing.

“A large barge, loaded with 500 barrels of flour and other articles, was split from end to end and turned upside down at the bank. Of nearly 30 loaded boats, only this and one more escaped destruction. The water ran 12 feet perpendicular and threw many of them a great many rods on shore; several lives were lost among the boatmen.”

Just to the south was Caruthersville, which, according to all accounts, could justly be called the Sodom of the United States, for the entire town was destroyed. The inhabitants were more fortunate, however, than the ancient people, in that they found safety in the hills and forests.

A graphic description of this community has been left by Timothy Flint:

“They had their settlement, which consisted of 100 families and which was located in a wide and very deep and fertile bottom, broken up. When I passed it and stopped to contemplate the traces of the catastrophe which remained after seven years, the crevices where the earth had burst were sufficiently manifest, and the whole region was covered with sand to a depth of two or three feet.

“The surface was red with oxidized pyrites of iron, and the sand blows, as they were called, were abundantly mixed with this kind of earth and with pieces of pit coal. But two families remained of the whole settlement. . . . When I resided there, this district, formerly so level, rich, and beautiful, had the most melancholy of all aspects of decay, the tokens of former cultivation and habitancy, which were now mementos of desolation and destruction.

“Large and beautiful orchards left uninclosed, houses uninhabited, deep chasms in the earth obvious at frequent intervals. Such was the face of the country, although the people had for years become so accustomed to frequent and small



TRAVERSING THE DEAD CYPRESS STUMPS OF REELFOOT LAKE

shocks, which did no essential injury, that the lands were gradually rising again in value, and New Madrid was slowly rebuilding with frail buildings adapted to the apprehensions of the people."

During the last 100 years the Mississippi River has continued to ravage the areas along its course during the flood seasons, and as New Madrid was partly submerged, due to the 1811-12 earthquake, so was Tiptonville in 1878, when it came in the path of this mighty current, at this point cutting away its eastern bank.

Day after day the river tore away its bluff bank, eating gradually up to the town; and then one who was there saw the spectacle of a moving town, for as the river cut into the settlement the houses were moved out and over to the far edge of the community. Thus a considerable portion of the town was gradually subjugated to the devouring power of the river in 1880. Now, content with what it has done, it is gradually moving away again to the west, leaving the town far from its former channel (see page 101).

While the Mississippi writhed back and forth across its mighty plain, the newly

born Reelfoot Lake grew more beautiful, and Nature began to heal scars on the landscape which were inflicted at its birth. Its clear, brownish water became the home of many fish and its surface was dotted with lily pads, called "yoncopins," whose gorgeous flowers had the imprisoned yellow of a river sunset. In and around the stunted cypress growths, struggling for existence in five feet of water, was a filmlike iridescent green carpet, called "moss seed." Along the borders of the lake a dense growth of saw grass, mulefoot, smartweed, and even wild rice soon appeared.

A LAND OF DELIGHT FOR THE NATURALIST

To this haven of beauty, teeming with plant growth and fish, soon came, on their yearly 20,000-mile pilgrimage, the wild denizens of the air—ducks, geese, water turkey or cormorants, coots, and the white heron, while the rail, gallinule, bittern, and teal nested among the saw grass and the lily pads.

As wild fowl and wood folk flocked in, so did the French trapper and the American hunter and pioneer. Here one still finds the mink, weasel, and otter,



A CATCH OF REELFOOT LAKE FISH AT SANSBURG

along with our friends the opossum and raccoon.

As the country was gradually developed, a number of the sport-loving settled along the lake and lived on fish from its waters and the fowls from its marshes, while the trapping of animals supplied their necessary revenue.

Located in the most-used highway of migratory birds, Reelfoot Lake is visited in the spring and autumn by no small percentage of our journeying waterfowl. From a naturalist's standpoint, the region is one of great interest, for here is to be found the Austroriparian fauna, a name designated by scientists to indicate those forms of plant and animal life which inhabit the warm region of the Gulf Coast and up the bottoms of the Mississippi River to its junction with the Ohio.

Here, too, one finds the pecan tree in all its productiveness, the bald cypress, and typical southern swamp timber, draped and festooned with wild grape and rattan vines, while on such land as has been cleared cotton is the staple crop.

The Purple Gallinule, Mississippi and Swallow-tailed Kites, Little-blue Heron,

Chuck-will's-Widow, Loggerhead Shrike, and Florida Barred Owl mark Reelfoot Lake as their northernmost point of distribution, or nearly so, while in late summer large flocks of the Wood Ibis, locally called Gourdhead, visit the lake after their breeding season is over in Louisiana.

While the season of migration marks the high tide of bird life on the lake, its summer residents are numerous and of great interest. An active ornithologist should be able to list 250 species of birds here during the course of a year.

HAUNT OF EAGLES, HERONS, AND CORMORANTS

Our national bird, the Bald Eagle, still holds its own here, amid the great expanse of forest with which the lake is surrounded, and enjoys a mixed bill of fare, consisting of swamp rabbit, fox squirrel, and fish, frequently securing the latter by robbing the Osprey in mid-air.

At least two pairs of eagles nest here at present, choosing the tops of the largest bald cypress for their huge nests, at a height of 150 feet or more above the



A THIRTY-FOUR POUND CATFISH TAKEN IN REEL-FOOT LAKE

The waters of this region teem with Bream, Gar, Crappie, and many other varieties of fish, which are caught in quantities for market.

ground. One of these nests is located adjacent to a large nesting colony of Great Blue Herons and Double-crested Cormorants, and it may be surmised that the young of these birds are always on the ample bill of fare spread out for the consumption of the young eaglets.

Two large colonies of the Herons and Cormorants have been located and visited by Mr. A. F. Ganier, of Nashville, who has made a study of the animal life of the lake. In both cases the birds have chosen an isolated portion of the cypress swamp, where several acres of the trees, standing in waist-deep water and inaccessible by boat from the open lake, have insured a relatively safe nesting place.

Each colony was found to contain about 400 nests, perhaps a third of which were those of Cormorants, the nests being placed in the tops of the cypress trees at an average height of 110 feet above the water.

HERONS AND CORMORANTS IN SAME TREE

Several nests of each of the two species are frequently placed in the same tree, the huge platforms of the Herons being placed well out on the branches, while the compact, rounded nests of the Cormorants, are saddled in the crotches formed by the larger limbs at their junction with the bole of the tree.

By the last week in April the nests of the Herons are occupied by hungry and vociferous young, while the Cormorants are just settling down to the task of incubating their four or five chalky-white eggs. Within the last few years a colony of American Egrets nested at the upper end of the lake, but these lovely birds were suddenly "shot out" by plumers, and it is not now known if any of the survivors have been able to reestablish themselves in the vicinity. A small colony of

Little Blue Herons exists at the south end of the lake, while the ever-present Green Heron completes the roll call for the breeding members of this family.

The ducks which remain to breed are confined to the Hooded Merganser and the beautifully plumaged Wood Duck, both of which nest in hollow trees, usually above the water. The latter species is fairly common here, though nearly extinct elsewhere over its former range.

A few other ducks which are found throughout the summer are crippled individuals, incapacitated during the hunting season, and it is claimed that these occasionally mate and breed.

Reelfoot is not suited for the breeding of ducks, other than the tree-nesting variety, because of the fact that there is little or no shallow marsh in its environs. The immense tracts of saw grass are submerged during the breeding season by several feet of water, while the shallow edges are occupied by growths of trees, willows, and button bushes.

Many marsh-loving birds that would otherwise nest here are discouraged from doing so by the lack of shallow grass-grown water in which to wade. The little Least Bittern, however, is a summer resident in the saw grass and the Coot is said to breed here occasionally also.

One of the most characteristic birds of the lake is the Prothonotary or Golden Swamp Warbler, which nests abundantly all about the lake, in cavities of the ancient cypress stumps. Many a fisherman, tired of his quest of the finny tribe, has laid his pole aside to watch these dainty birds, attired in gold and brown, examine each near-by stump and snag, and perhaps even the prow of his boat, with no show of fear whatever and with a constant ringing song of cheer.

The hunter's season at Reelfoot begins October 15, and old timers flock here during the first big rain, knowing that it will be followed by a cold snap and accompanied by an avalanche of ducks and geese. The Mallards are always most numerous, but the Pintails, Redheads, Black Duck, Teal—in all about 20 varieties—are to be found here. Hunters in the near-by cities are notified by telegraph by their guides when a "flight is on," and a mad influx of Nimrods follows.

The inclinations of the moving ducks

cannot be foretold by even the most experienced of the local hunters, and the flight may last a week or only for a day. At times no amount of shooting seems to affect their stay, while at other times a day's bombardment will send them all to the near-by Mississippi River, to the lakes of the St. Francis Basin, some miles to the westward, or perhaps hurry them on in their journey to the swamps and rice fields along the Gulf Coast.

When ducks fail, the hunter turns to the Coot, which at times is present in such numbers as fairly to blacken the surface of the lake. "Acres and acres of Coots" is the word brought back quite frequently by hunters who have filled their bags.

Many years ago Swans were among the most abundant of the migrating waterfowl on this extensive sheet of inland water. As late as 50 years ago they were shipped to Nashville and Memphis in box-car lots, where they were retailed at 25 cents apiece.

The Canada Goose is a regular winter visitor, and nested here in the earlier days. They adapted themselves to local conditions by choosing for their nesting sites the stumps of broken-off cypress trees, and there in comparative safety feathered their nests, after the manner of geese, with down from their own breasts.

THE CORMORANTS CONDUCT FISH DRIVES

During the fall and early spring, immense flocks of Double-crested Cormorants gather on the lake and consume considerable numbers of small fish.

These birds conduct "fish drives" by forming in long, crescent-shaped lines and beating the surface of the water with wings and feet. They cause such pandemonium among the small fish that the latter rise to the top and are easily captured.

When their appetites are satisfied, the birds fly up into the dead cypress trees, where their black bodies line the limbs like carrion crows, or else they betake themselves to high air and soar away to some fresh inlet to repeat the maneuver. Local fishermen call them "nigger geese," and are glad that only comparatively few remain at the lake to breed.

The smaller mammals are as much at home in this primeval habitat as are the



A FULL-BLOWN BLOSSOM OF THE BIG YELLOW YONCOPIN LILY



AN AREA COVERED WITH YONCOPIN LILY PADS

This American equivalent of the Egyptian Lotus is the chief flower of Reelfoot Lake.



A FIELD OF YONCOPIN LILIES



VEGETATION WHICH HAMPERS MOTOR BOATING ON REELFOOT LAKE
Water milfoil (*Myriophyllum*) grows profusely in the northern part of the lake.

birds. In the early-settler days the Elk was an abundant resident of the surrounding country, but has been extinct here for nearly 75 years. During recent years the Black Bear has followed the Elk, and now the Virginia Deer has been almost extirpated.

Some few Beaver and Otter are still to be found in the swamp areas, while the Raccoon, Opossum, Mink, Muskrat, Gray and Flying Squirrels are common.

The king of the lake fish is the Alligator Gar, growing to a length of eight feet, and this species is closely followed by the bulky, though picturesque, Spoonbill Catfish. Other fish in large variety and number are present, including such famous game fish as Crappie and Bass. They swell the population of the waters to such an extent that anglers from far and near make Reelfoot the mecca of an annual pilgrimage.

Snakes are much in evidence in summer. The commonest of the swimming snakes is the Water Moccasin, which glides through the water with surprising swiftness and grace, while along the banks, in some quiet sunlit spot, may be found the thick-bodied and repulsive Stump-tailed Moccasin, which disdains to move its clumsy body aside for the passage of man or beast.

Natives say that this creature possesses some mysterious power which enables it to make its presence felt, and, according to them, "though the hunter's feet and eyes may be following a squirrel among the tree-tops, he is suddenly brought to a rigid halt in time to withdraw the foot which would next have been placed on the back of one of these venomous reptiles."

A PRIMEVAL MONSTER OF THE DISMAL SWAMPS

Most primeval of the lake's aquatic monsters is the Alligator Terrapin, or Loggerhead, which is found in holes or deep places in the swamp. Imagine a creature with moss-covered shell, thick as armor plate, as big as a washtub, and surmounted by horny scales not unlike those of the extinct Glyptodon, with huge feet bearing heavy claws, a head as large as that of a ten-year-old boy, snapping its powerful jaws, hissing and leaping at curious tormentors, and you have a picture of this denizen of the dismal swamps.

The mouth consists of a hooked bill, closing over a lower one with such power and force that a stick as large as one's wrist is readily snapped in two.

The reptiles, batrachians, and insect forms have been studied only very briefly and casually, and here lies a rich opportunity for the naturalist and student of science to investigate the animate life of the Reelfoot Lake region, which is as diversified as it is extensive.

THE NIGHT RIDERS' WAR

Some 15 years ago the State of Tennessee, realizing the value of Reelfoot Lake as a source of revenue, made it a fish and game preserve.

The trappers and settlers along the lake considered it free to all, and especially to those who had lived and settled along its borders. They resisted the right of the State, and the night riders' war of 1908 began. It culminated in October of that year, on the banks of the lake, in an attack on Quentin Rankin and Judge R. Z. Taylor, two prominent lawyers representing the landowners of that section. During the attack Rankin was hung on the banks of the lake and Judge Taylor, who was seventy years old, escaped by diving into the Bayou de Chien, and, through a fusillade of shots, swam and crawled through the lake marshes to safety.

The whole country side was implicated, and after the sheriff finished serving warrants there were not enough men left in the lake region to get in the winter supply of firewood.

But once more the Reelfoot region is peaceful. The fish industry is thriving and the sportsmen through the settlements of Samsburg and Walnut Log during the duck-hunting season.

The inhabitants make their living by fishing, and there is seldom a day when less than 2,000 pounds of fish, mostly the famous Reelfoot Crappie, are not shipped to the markets. During the fish season the daily shipments go as high as 5,000 pounds. Along with the Crappie are found the Gars, the Bream, and the large blue Channel Catfish, often weighing 30 to 50 pounds.

Here, in the heart of the United States, on the east bank of Reelfoot, is one of the few remaining primitive spots in the country.