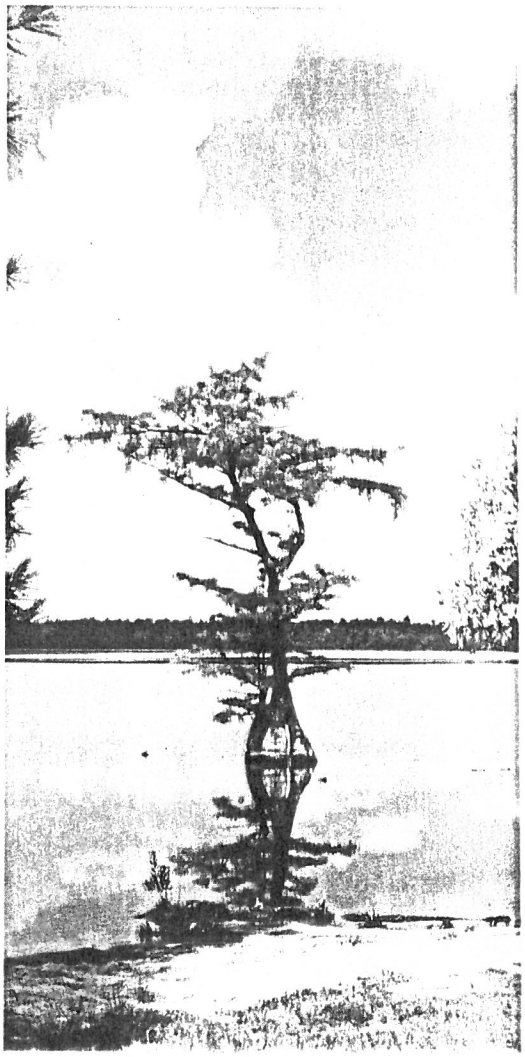
1977 "Wildlife"

Photo by Jim Page



Mystery surrounds the formation of Jones Lake (above left) and other shallow oval depressions known as the Bay Lakes. Swimming is a popular summertime activity (left) at Jones Lake State Park. Bald cypress can be seen along the shore of Jones Lake (above).

JONES LAKE STATE PARK

By Marcia Constantino

Jones Lake is one of the fascinating "Carolina Bays" whose origin is still a geologic mystery. The Carolina Bays, so called because they were first studied in the Carolinas where they are most abundant and because of the bay trees growing around them, occur in a general northwest-southeast line on the Atlantic Coastal Plain from northern Virginia to southern Georgia. There are thousands of them in North Carolina ranging in size from a few hundred feet to several miles in length; and none of these shallow elliptical depressions is deeper than twelve feet.

Jones Lake State Park covers 2,208 acres adjacent to Bladen Lakes State Forest including Jones Lake and Salter's Lake, another Carolina Bay. The park's recreational activities center aound Jones Lake; Salter's Lake is not now developed for public use. Other well known Bays in the state are Lake Waccamaw, White Lake, Bay Tree Lake, and Singletary Lake.

Even the geologists who study the Bays cannot agree on their origin. According to one theory, all the basins were formed at the same time by a large shower of meteorites striking the earth from the northwest. Another theory proposes that the basins were first dug out by underground springs and then enlarged by wind and wave action over thousands of years. Whatever their origin, nowhere else in the world are similar basins found.

Today, except for a few of the Bay Lakes, the depressions no longer contain water, having gradually filled in with peat. Jones Lake, which covers an area of 224 acres, is now only one-third of its original size.

In the 1730's Jones Lake was known as Woodward's Lake for Samuel Woodward, a local justice of the peace. It was later

1959 "wildlife"

The BAY LAKES

By Darrell E. Louder
Fisheries Investigator

The origin of North Carolina's Bay Lakes remains a puzzle to geologists—but recent investigations by Wildlife Resources Commission fishery biologists have shed new light on sport-fishing potentials in these five natural lakes.

THE Bay Lakes, as they are popularly known, consist of five natural lakes: Salters, Jones, Singletary, White and Black. In size they range from 224 acres to 1,418 acres and are located in the heart of Bladen County. They drain indirectly into the Cape Fear River. Relatively shallow, the deepest reading is 11.8 feet in Singletary Lake.

The Bay Lakes have surface drainage, with the outlets being shallow and intermittent during dry years. Streams coming into the lakes flow through extensive swamps with little gradient, resulting in very dark water in all the lakes except White Lake, which is virtually colorless.

History

Early settlers who traveled the area on the ground accepted the lakes as natural and had little cause to speculate about their origin. But when the county was mapped, and later when airplanes carried observers over the lakes, the striking resemblance between the five bodies of water became apparent. From that time on people have tried to determine how the lakes were formed. Several theories have been suggested, and the two most popular should be mentioned.

According to one theory, between 40,000 and 100,000 years ago, as determined by radiocarbon dates, the skies were lit up over southeastern North Carolina by a blinding light. A brillant mass shot earthward out of the northwest, setting up a tremendous roar and terrifying shock waves which could be felt for miles. Thousands of flaming bodies from outer space bombarded the area with the fury of an atomic explosion. Great columns of dust and debris shot into the air, leaving craters ranging from several hundred feet to several miles across. The forest was leveled by the blast; almost instantly the roar ceased and the crackling of vast forest fires could be heard. The result of this supposed meteor shower produced elliptical rays from northern Georgia to southern Virginia. Bladen County was the hardest hit, leaving many bay lakes like the five mentioned in this article.

An opposing theory is that the basins were first excavated by water from artesian springs, and then wind and wave action enlarged them to a size greater than their present acreage. The similar shape is explained by the direction of prevailing winds.

Physical Features of the Lakes

The Bay Lakes have been filling in at a slow rate and this reduction in area has been hastened by the encroachment of vegetation along the shores. At some places in the lakes, especially in Salters and Singletary, bald cypress trees can be found in water four feet deep. These cypress help form a wall which halts excessive wind and wave action, allowing other plants to become established. Over the thousands of years this procedure has formed peat beds, resulting in a decrease in surface acreage. Jones Lake has filled in 66 percent of its original size and White Lake 29 percent. The three remaining lakes are intermediate in the degree of filling.

The four main types of bottom deposits in the lakes are sand, pulpy peat, fibrous peat and blue-gray clay.

The lakes are oval in shape and have a regular shoreline. The lakes vary in size and depth as shown in Table I. The water is primarily a dark tea color, with the exception of clear White Lake. This can be explained by the difference in drainage pattern between White Lake and the other four. In White Lake the water drains from the clean sand bottom of the lake into a swamp, while in the other lakes

TABLE I. Statistics of the Bay Lakes, Bladen County, N. C.

LAKE	Area In Acres	Miles Of Shore	Length In Miles	Maximum Depth	Average Depth	No. Of Species
Salters	315	2.70	0.9	10.1	6.9	14
Jones	224	2.19	0.8	8.7	6.1	13
Singletary	572	3.92	1.5	11.8	7.0	13
White	1,068	4.77	1.8	10.6	7.5	18
Black	1,418	5.91	2.1	7.1	5.3	10

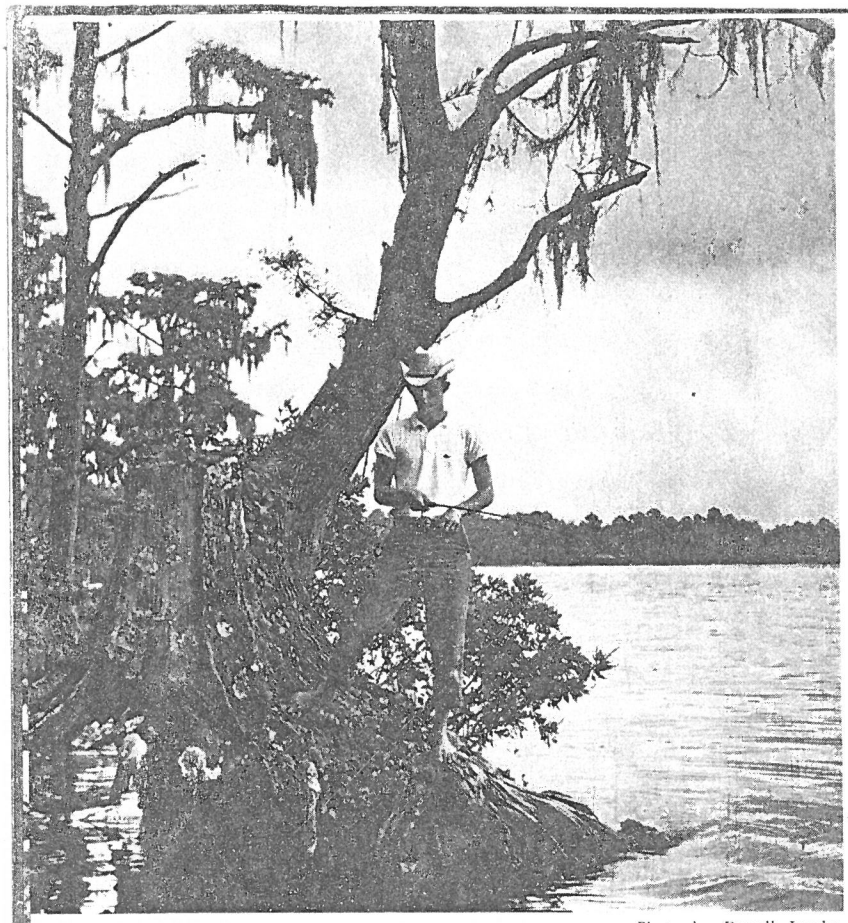


Photo by Derrell Louder

Fair largemouth bass and bluegill fishing can be found on the northwest side of White Lake, where adequate hiding places and spawning territory produce catchable numbers of the game fish.

water drains from the swamps, into the open bodies of water. The dark color comes from the large amounts of humic acid and related compounds decomposed under swampy conditions. Draining this water through the lakes, the lakes serve as catch basin and retain the dark color and high acidity.

Access

White Lake, with its numerous docks, is primarily a tourist and summer resort, and is the most accessable of the Bay Lakes. Jones Lake is a Negro recreation park and Singletary Lake is used mostly for group camping. Salters and Black lakes are in the back woods, with only one trail leading to each.

A valid Department of Conservation and Department boat license is required for these lakes, plus a special C&D fishing permit for Salters, Singletary and Jones lakes.

TABLE II. Fishes Found in the Bay Lakes.

SPECIES	Salters	Jones	Singletary	White	Black
Eastern lake chubsucker	x	x	x	x	x
Yellow bullhead	x	x	x	x	x
Bowfin	-	-	-	x	-
American eel	-	-	-	x	-
Yellow perch	x	x	x	x	x
Warmouth	x	x	x	x	x
Flier	x	x	x	x	x
Largemouth bass	x	x	x	x	-
Robin	-	-	-	x	-
Bluegill	-	-	-	x	-
Blue-spotted sunfish	x	x	x	x	x
Redfin pike	x	x	x	x	x
Chain pickerel	x	x	x	x	-
Madtom	x	x	x	x	x
Darter	x	x	x	x	-
Starhead top minnow	x	x	-	x	-
Eastern gambusia	x	x	x	x	x
Pirate perch	x	-	-	-	x
Iron-colored shiner	-	-	x	-	-
Banded sunfish	-	-	-	x	-

Fish Populations

The fish populations of the Bay Lakes are quite similar, with White Lake having 18 species and Black Lake only ten. Catches of largemouth bass and bluegill are very meager with White Lake being the only significant producer. Chain pickerel and yellow perch are caught in fair numbers in Salters Lake, Jones Lake, and Singletary Lake. As far as poundage is concerned, yellow bullhead and eastern lake chubsuckers dominate. Thus these lakes are far below par for North Carolina fishing.

Yellow Bullhead

Yellow bullheads made up from 35 to 75 percent of all fish taken in experimental netting in these lakes, with the average size about 8.5 inches. Trot lines for yellow bullheads have produced high yields in the Bay Lakes.

Yellow Perch

Catches of yellow perch up to 15 inches in length are common in Jones, Salters and Singletary lakes, but the average is around nine inches. Fifty-two percent of all fish taken in rotenone samples from Singletary Lake in 1957 were yellow perch and they made up 47 percent of the total weight. Rotenone samples in Jones Lake produced 37 percent yellow perch, making up 42.3 percent of the weight of all fish taken in the sample. From the data now on hand, it appears possible that an outstanding yellow perch fishery could be developed in these three lakes.

Chain Pickerel

Chain pickerel, or jack, are found in all but Black Lake. Good catches can be made in the spring and fall on live bait.

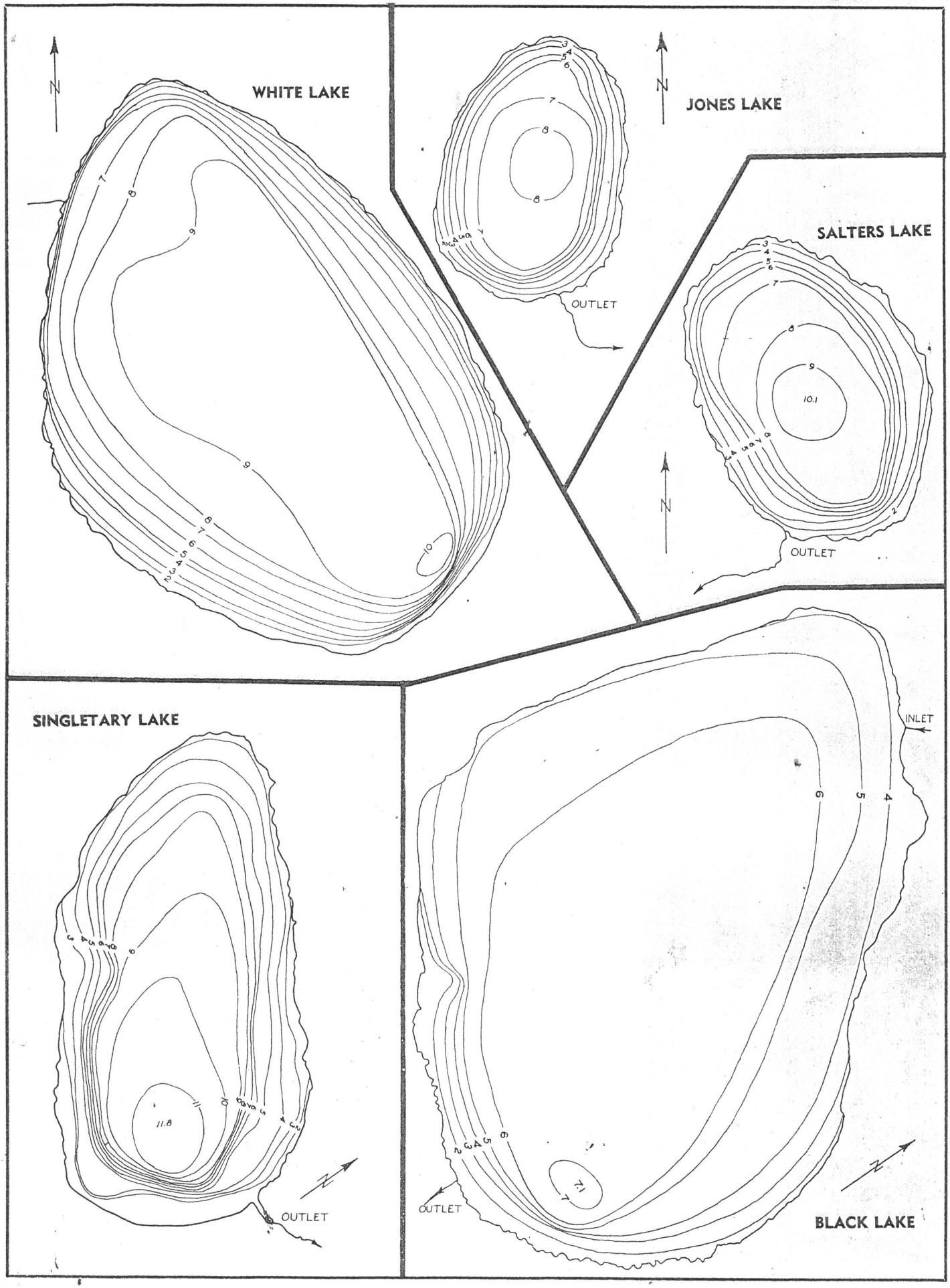
Fliers

Black Lake is the largest producer of fliers, although they are extremely small, with an average length of 4.2 inches for 463 specimens taken during the summer survey of 1958. Small though they are, they're scrappy fighters.

Largemouth Bass and Bluegill

The only worthwhile bass and bluegill fishing area in these five lakes is on the northwest side of White Lake. Here there is adequate spawning territory and also good hiding places for the fish. When fishing for bass and bluegill in this lake, remember that the water is virtually colorless and your fishing line can be seen long distances by the fish; use an extra long leader and be cautious about your approach.

Don't be disappointed if you don't catch large numbers of fish in these lakes; there simply aren't many here due to the overall unfavorable environmental conditions.


WHITE LAKE
N
JONES LAKE
OUTLET
SALTERS LAKE
10.1
OUTLET
SINGLETARY LAKE
11.8
OUTLET
INLET
7.1
OUTLET
BLACK LAKE