

Journal of the Arkansas Academy of Science

Volume 3

Article 14

1950

Grassy Lake: A Biologist's Paradise

Dwight M. Moore

University of Arkansas, Fayetteville

Follow this and additional works at: <http://scholarworks.uark.edu/jaas>

 Part of the [Botany Commons](#)

Recommended Citation

Moore, Dwight M. (1950) "Grassy Lake: A Biologist's Paradise," *Journal of the Arkansas Academy of Science*: Vol. 3 , Article 14.
Available at: <http://scholarworks.uark.edu/jaas/vol3/iss1/14>

This article is available for use under the Creative Commons license: Attribution-NoDerivatives 4.0 International (CC BY-ND 4.0). Users are able to read, download, copy, print, distribute, search, link to the full texts of these articles, or use them for any other lawful purpose, without asking prior permission from the publisher or the author.

This Article is brought to you for free and open access by ScholarWorks@UARK. It has been accepted for inclusion in Journal of the Arkansas Academy of Science by an authorized editor of ScholarWorks@UARK. For more information, please contact scholar@uark.edu, cmiddle@uark.edu.

GRASSY LAKE: A BIOLOGISTS' PARADISE

Dwight M. Moore, University of Arkansas

In the southern and eastern parts of Arkansas there are many low wet areas, bayous, and, along the major rivers, oxbow lakes, associated with which are numerous so-called cypress swamps. A large number of these, however, have been at least partially drained and cleared to such an extent that much of the natural vegetation has been materially changed.

One exception is found in the western part of Hempstead County not far from the confluence of the Saline and Little Rivers. It is known as Grassy Lake. The lake and adjoining land are owned by the Hempstead County Hunting Club with members chiefly in Hope, Texarkana and Nashville. There is a limited membership and these well-advised men strive to maintain the lake in as nearly a natural condition as possible. On this account the wealth of plant and animal life is little disturbed and thus renders it a veritable Biologists' Paradise. But access to the lake is strictly on a basis of special permission from the club.

The lake lies on the west side of state highway #55 about 3 miles north of McNab and 7 miles north of Fulton which is at the crossing of the Red River by U.S. highway #67 between Hope and Texarkana. The lake is about 3 miles long and possibly $1\frac{1}{2}$ miles wide. The depth would probably average 3 or 4 feet and is almost nowhere over 6 feet deep. Thus it would be possible to wade in nearly all parts of the lake.



The present water level is a little higher than originally, due to the construction of a low retaining dam at the outlet.

Bald cypress trees dominate the lake, and many of these would approach the records for size in this state. One large one measures 24 feet in circumference at $4\frac{1}{2}$ feet above ground level. The height of the majority of these trees is quite uniform - calculated at 110 feet.

The name, Grassy Lake, has evidently been applied because of the numerous stands of the southern wild rice, (*Zizaniopsis mileacea* (Michx.) Doell. & Aschers.). This coarse grass grows to a height of 10-14 feet in large or small patches throughout the lake. It is in many of these dense growths that the alligators dwell. They may be observed by very cautious approach, but too often the alligator ears are more sensitive than the observer's eyes, and they slip away leaving only the traces of their presence in the mud and vegetation.

The one main approach to the lake passes several cottages of club members, the old club house, under a magnificent specimen of the Arkansas Oak (*Quercus arkansana* Sarg.), and down a long broad "catwalk" to the boat houses. Along this walk may be observed in the moist soil of the lake margin fern specimens seldom surpassed elsewhere in the state. Cinnamon and Royal ferns (*Osmunda cinnamomea* L. and *O. regalis* var. *spectabilis* (Willd.) A. Gray) reach a height of more than 5 feet and Sensitive fern (*Onoclea sensibilis* L.) will exceed four feet. Both chain ferns - Virginia (*Anchistea virginica* (L.) Presl.) and Dwarf (*Lorinseria areolata* (L.) Presl.) grow luxuriantly.

Along the edge of the lake may be found such ferns as lowland lady fern (*Athyrium asplenoides* (Michx.) Eat.), northern marsh fern (*Dryopteris thelypteris* var. *pubescens* (Lawson) A.R. Prince) and the grape fern (*Botrychium dissectum* var. *tenuifolium* (Underwood) Farwell).

Other interesting plants include among many others the submerged water crowfoot (*Ranunculus delphinaefolius* Torr.) and that curious floating plant, American featherfoil (*Hottonia inflata* Ell.).

From the boat landing numerous marked lanes extend toward various parts of the lake. Much of the more shallow parts of the lake is dominated by buttonbush (*Cephalanthus occidentalis* L.) which, in many places, forms dense thickets even in water several feet deep. On this account the boat lanes must be marked to insure safe return of those who go out to fish or hunt by either day or night.

Leaving the landing by shallow boats - shallow because it is frequently necessary to go over partly submerged logs - one is overawed by the tall cypress trees which, meeting overhead in a massive green vault, give a deep almost sepulchral shade which discourages most other vegetation. But everywhere the surface of quiet water is carpeted with mixtures of duckweeds and mosquito fern (*Azolla caroliniana* Willd.). Among the former are found *Lemna minor* L., *L. gibba*, L., *Spirodela polyrhiza* (L.) Schleid., *Wolffia columbiana* Karst. and *Wolffiella floridana* (J.D.S.) Thompson. So dense is the growth of these in some places that it appears almost possible to walk on it.

Nearly everywhere it is possible to observe on cypress knees and the trunks of most of the trees different levels of growth of various herbaceous plants indicating the levels at which the water has stood at periods when seeds were floating on the surface. As the water level receded, the seeds were left and later, when conditions were favorable, have germinated forming several tiers of herbaceous, and even woody vegetation. Thus the tropical density of growth develops.

Toward the west side of the lake there is considerable open water where the cypress trees and button bush occur only in scattered bunches. But even here the water is only waist deep.

In certain places half-submerged floating logs covered with mosses and other lush growth were found to carry numerous specimens of an unusual and strictly southern swamp orchid, *Habenaria quinqueseta* (Michx.) Sw. This appears to be the first record for this orchid in Arkansas. Since that collection it has also been found in similar habitat south of Little Rock, at Lakeside.

For the student of birds there are nests of various herons, buzzards and the so-called "water turkey". On shore many other smaller birds may be found.

For the herpetologist, besides the alligators - this is one of the few places in Arkansas where they still may be found out of captivity - there are various lizzards and snakes. The chameleon is fairly abundant. Cottonmouth moccasins are very numerous and a few coral snakes have been found.

With this as a very incomplete sample of the offerings of Grassy Lake it is clear to see that it is a veritable Biologists' Paradise.

(Colored movies and slides supplemented the narrative)