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LICHENS OF ARKANSAS II. ADDITIONAL STATE RECORDS THROUGH COMPUTER SEARCH

The lichen herbarium of the American Bryological and Lichenological Society (ABLS) is housed along with the University of Minnesota herbarium (MIN), at the University of Minnesota. Both collections have been computerized (Wetmore, C.M. 1979. Herbarium computerization at the University of Minnesota. Systematic Botany 4(4):339-350.) and are separated from each other by different data bases. Printouts of the Arkansas lichens contained in these herbariar revealed additional records for Arkansas lichens not previously reported (Moore, Jewel E. 1979. Lichens of Arkansas I. A summary of current information. Proc. Ark. Acad. Sci. 33:85-87.): Leptogium sinuatum (Huds.) Mass., Physcia constigata (Nyl.) Norrl. and Nyl., and Caloplaca flavovirescens (Wulf.) Dalla Torre and Sarnth collected by C. Wetmore in Franklin County. Ozark National Forest, Cherry Bend Campground, 1 June 1966; Peltigera malacea (Ach.) Funck collected by Delzie Demaree on West Mountain, Hot Springs National Park, 9 March 1954; Cladonia cariosa (Ach.) Spreng. collected by Delzie Demaree on West Mountain, and Cladonia pyxidata (L.) Hoffm. collected by Delzie Demaree at Daisy, Ouachita National Forest, in Pike County, 6 January 1960;

These six additions to the lichens of Arkansas bring the state list to 241 species. The systematic synopsis of the lichens of Arkansas, with common names (from Nearing, G. G. The Lichen Book. Publ. by the author. Ridgewood, New Jersey) is available from Arkansas Biota (Moore, Jewel E. 1981. Systematic synopsis of the Lichens of Arkansas. Arkansas Biota, publ. by Ark. Acad. Sci.).

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CROWLEY'S RIDGE BIOLOGICAL STATION-AN EDUCATIONAL CENTER

Arkansas may be divided into two principal regions based upon topography, geological substrate, and dominant vegetation—the Interior Highlands of the northwestern part of the state and the Gulf Coastal Plain of the southeastern part. Within the Gulf Coastal Plain is the unique geological feature known as Crowley's Ridge (Call, 1891; Foti, 1974). The ridge rises about 250 feet above the flat Mississippi Alluvial Plain and extends about 150 miles in length from Helena northward into Missouri. Crowley's Ridge Biological Station is located on two acres on Titanic Road, about two miles south of Pollard, in Clay County. There are two buildings which can be used for pioneer-type living and for laboratory work. The site is near some of the gravel pits so characteristic of the upper part of the ridge where gravel and sand are obtained for commercial uses. Surrounding the station are forest stands of oak-hickory-tulip poplar and fields for pasture and wheat production. Deep gullies, frequently encountered on the ridge, and petrified wood of trees from the Eocene Tertiary gravels are found in some of these fields.

While the station itself is small, there are ample opportunities for field studies associated with Crowley's Ridge. Big Lake National Wildlife Refuge in Mississippi County, and the adjacent Arkansas Game and Fish Commission lake yield good habitats for studying game and waterfowl associated with such cypress lakes. This area is part of the Sunken Lands which resulted from the New Madrid Earthquake of 1811-13. Also in Mississippi County are the heronries near Luxora and Burdette from which the state record for nesting glossy ibis was first reported (Hanebrink and Cochran, 1966). Other nesting species at these heronries include little blue heron, great egret, cattle egret, snowy egret, Louisiana heron, and black-crowned night heron. Other records for nesting birds and bird migrations are needed to complete the work already begun on these ridge inhabitants (Hanebrink, 1980). Research on the fishes of Crowley's Ridge has been published (Fulmer and Harp, 1977), but field studies on other animals of the ridge are needed.

Research on the forest stands of Crowley's Ridge (Clark et al., 1974; Clark, 1977) indicates that the oak-hickory-pine edaphic climax forest and the white oak-beech stands (present status of the beech-maple climax forest) establish baselines allowing comparison of the extant and extinct forest stands of the ridge. As a rule, the oak-hickory-pine forest follows the irregular outcroppings of the droughty soils in the northern part of the ridge; the white oak-beech stands coincide with the Pleistocene loess which covers the southern portion of the ridge and disappears on the ridge summits where the Tertiary sands and gravels produce the soils of the Brandon-Lexington association. The tulip poplar, unique to the Crowley's Ridge area of Arkansas, reproduces in the cut-over white oak-beech forests. Mud slides also are conducive to this invasion, as well as to invasion by the cucumber magnolia. The relict stand of two trees of bigleaf magnolia (Moore, 1953; Figler, 1981) is in Clay County; as is Chalk Bluff Natural Area (Marsh, 1977), which can be used for sampling and describing the forest types of the ridge. The distribution of Arkansas vascular plants (Smith, 1978) indicates a need for basic inventory-type field work on the ridge and throughout the state.

A field studies class from the University of Central Arkansas used Crowley's Ridge Biological Station to make excursions to some of these habitats on the ridge. The station is not so large, nor as developed, as the Ouachita Biological Station (Speairs, 1976), but it can be used as a research center for individuals or college classes to study Crowley's Ridge.

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