Literature on the Vegetation of Oklahoma[1]

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The original stimulus for this bibliographic compilation on the vegetation of Oklahoma came from Dr. Frank Egler, Norfolk, Connecticut, who is sponsoring a series of such papers for all the states of the country. Oklahoma is especially favorable for the study of vegetation since it is a border state between the cold temperate North and the warm temperature South, and between the arid West and the humid East. In recognition of the above climatic differences, the state has been divided into seven sections. The parallel of 35 degrees, 30 minutes North Latitude has been utilized to divide the state into northern and southern portions. The state has been further divided into panhandle, western, central, and eastern sections, by the use of the following meridians: 96 degrees W., 98 degrees W., and 100 degrees W. In all cases, county lines have been followed so that counties would not be partitioned between two or more sections. The seven sections are as follows: Panhandle, PH; Northwest, NW; Southwest, SW; North Central, NC; South Central, SC; Northeast, NE; and Southeast, SE (Figure 1).

The various sections of the state have unique topographic features of interest to the student of vegetation. These sections and included topographic features are as follows: Panhandle: Black Mesa, high plains, playas (wet weather ponds); Northwest: Antelope Hills, Glass Mountains, gypsum hills, sand desert, Waynoka Dunes, salt plains, Great Salt Plains Reservoir; Southwest: gypsum hills, Wichita Mountains, Altus-Lugert Reservoir; North Central: redbed plains, sandstone hills, prairie plains; South Central: redbed plains, sandstone hills, Arbuckle Mountains, Lake Texoma; Northeast: Ozark Plateau, Grand Lake; Southeast: Ouachita Mountains, Gulf Coastal Plain, ox-bow lakes.

The vegetation of Oklahoma has not been subjected to detailed investigation. Of the thirteen vegetational (game type) units discussed by Duck and Fletcher (35) none has been investigated quantitatively, although a start has been made on the tall grass prairie. The forests of eastern Oklahoma have been studied in a general way, but the post oak-blackjack oak and the shinnery oak communities have received little investigative attention. Perhaps the least known are the bottomland forest communities. In view of the fact that Oklahoma lies on the western edge of the deciduous forest, vegetation studies on the oak-hickory and post oak-blackjack oak communities are urgently needed. Since the grasslands of Oklahoma lie on the eastern border of the grassland formation, and contain many southern floral elements, it is believed that quantitative investigation therein should be particularly rewarding.

This compilation comprises 165 references with information on the distribution, composition, structure, and dynamics of vegetation in Oklahoma. Included are citations from agriculture, forestry, geology, physiography, meteorology, taxonomy, and zoology, insofar as these contribute information of value in understanding natural vegetation. Reports which are ecological in nature but do not refer specifically to vegetation have been omitted.

The citations have been arranged alphabetically by authors. Comments have been added on many of the longer papers, especially if not well known to plant ecologists, or when largely zoological in content. At the end of each citation, abbreviations, in parentheses, have been added to indicate whether the contribution is regional (RE), state-wide (OK), or

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from one or more sections of the state. Abbreviations for the sections are given in Figure 1.

Additions or corrections to this bibliography for inclusion in a possible future revision will be welcomed by the authors.

VEGETATION LITERATURE

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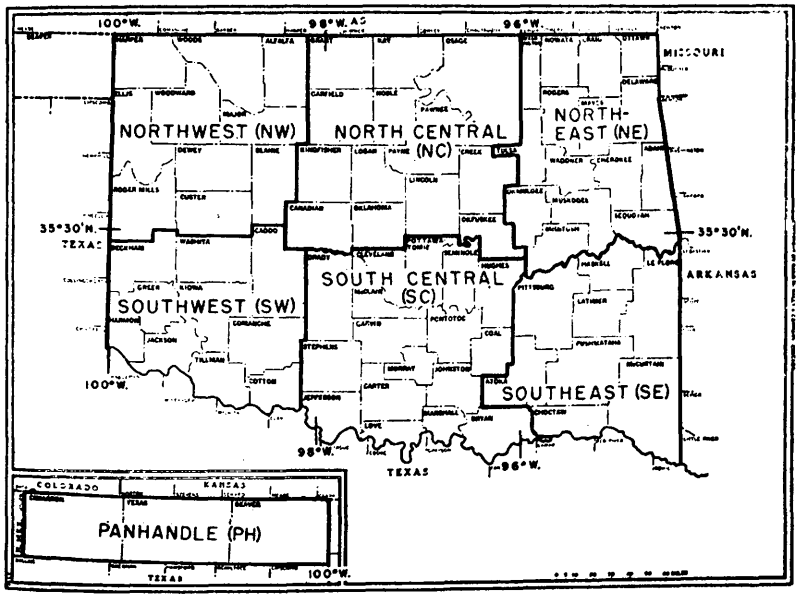

FIGURE 1. Map of Oklahoma Showing the Various Regions Cited in the Bibliography.