

THE VASCULAR FLORA OF CHILHOWEE MOUNTAIN, BLOUNT AND SEVIER COUNTIES, TENNESSEE

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ABSTRACT

The vascular plants of Chilhowee Mountain were collected from 1962 to 1973. A checklist of the known vascular flora, which includes 116 families, 433 genera, and 953 species, subspecies, varieties, forms, or hybrids, is presented.

INTRODUCTION

An investigation of the plants of Chilhowee Mountain was undertaken to increase our knowledge of the flora and vegetation of the mountains between the Great Smoky Mountains and the Ridge and Valley Province. This paper is based on an investigation which included three years of intensive field work and annual collecting

trips from 1967 to 1973. Specimens in the University of Tennessee Herbarium from the study area were checked in July, 1973.

The aims of this research were to determine the nature of the vascular flora, to make a checklist of the vascular plants of the area, and to describe the vegetation of the fifteen cover types on the mountain. The results of this study were presented to the Graduate School of the University of Tennessee as a thesis entitled, "The Vegetation and Flora of Chilhowee Mountain" (Thomas, 1966). The thesis includes detailed analysis of the canopy, shrub, herb, and seedling strata of each of the cover types. The names of the cover-types were established by the author based on vegetation analysis. The current paper presents a list of the vascular plants of Chilhowee Mountain.

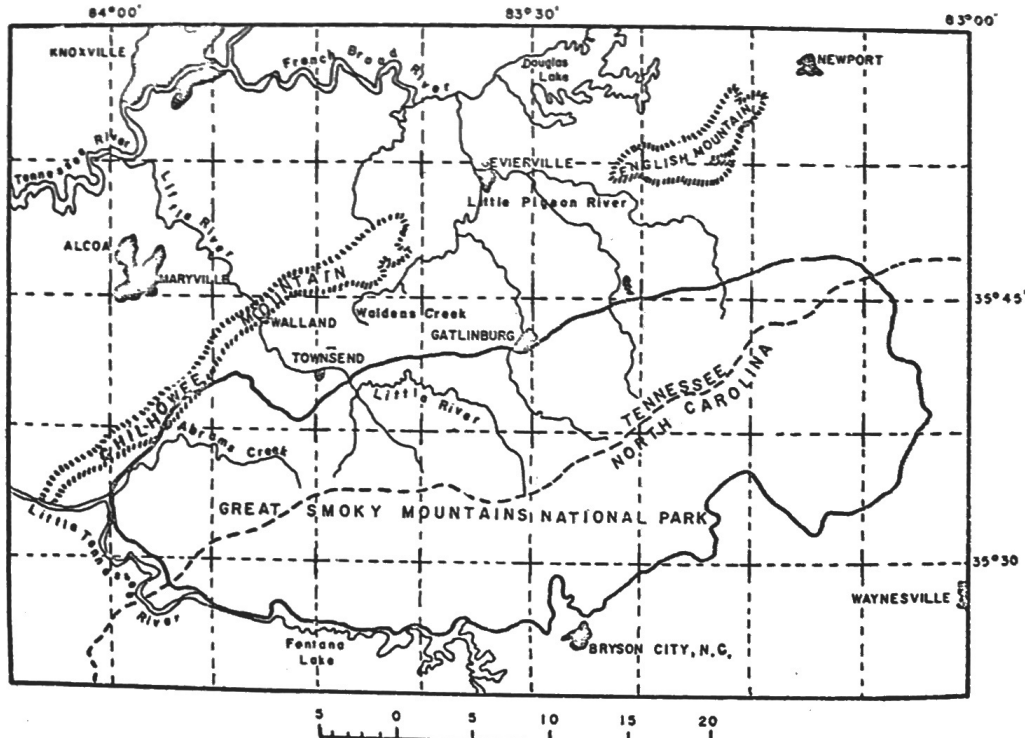


Fig. 1: Chilhowee Mountain: its position in relation to the Smokies and the surrounding area.

Chilhowee Mountain is located in Blount and Sevier Counties in the middle of easternmost Tennessee. This range of mountains runs northeast to southwest. It adjoins the Great Smoky Mountains National Park (hereafter referred to as the Smokies) on the southwest end and is about eight miles northwest of it at the northeast end. Location with respect to the surrounding area is shown in Figure 1.

Chilhowee Mountain is a narrow range of mountains that is two to six miles wide and approximately thirty-two miles long. The area is approximately 64,000 acres; elevations vary from 823 feet above sea level at Tallassee to 3,069 feet at the state fire tower on Greentop in Sevier County.

A wide array of geological formations and soils occur on Chilhowee Mountain. Although near the Smokies, it differs from them geologically (King, 1964). The vegetation is second-growth and quite different from that described by Whittaker (1956) from the Smokies. A detailed analysis of the vegetation is in the thesis (Thomas, 1966). About thirty per cent of the plants known to occur on Chilhowee Mountain have never been collected in the Smokies (Hoffman, 1964; and University of Tennessee Herbarium) although the Smokies flora is one of the best known of the entire area.

The alphabetical checklist of vascular plants follows and includes 116 families, 433 genera, and 953 species, varieties, subspecies, forms, or hybrids. Fernald (1950) and Radford, Ahles, and Bell (1964) were primary sources used in the nomenclature and identification of the specimens. Voucher specimens are on deposit in the Herbaria of the University of Tennessee and Northeast Louisiana University.

ALPHABETICAL LIST OF TAXA

ACANTHACEAE

Justicia americana (L.) Vahl.
Ruellia carolinensis (Walt.) Steud.

ACERACEAE

Acer negundo L.
A. pensylvanicum L.
A. rubrum L.
A. rubrum var. trilobum K. Koch.
A. saccharinum L.
A. saccharum Marsh.

AIZOACEAE

Mollugo verticillata L.

ALISMATACEAE

Alisma subcordatum Raf.
Sagittaria engelmanniana ssp. longirostrata (Michx.) Bogin
S. latifolia var. pubescens (Muhl.) J. G. Smith

AMARANTHACEAE

Amaranthus hybridus L.
A. spinosus L.

AMARYLLIDACEAE

Hypoxis hirsuta (L.) Coville
Narcissus pseudo-narcissus L.

ANACARDIACEAE

Rhus copallina L.
R. glabra L.
R. radicans L.
R. typhina L.

ANNONACEAE

Asimina triloba (L.) Dunal.

APIACEAE

Angelica venenosa (Greenway) Fern.
Chaerophyllum tainturieri Hook.
Cicuta maculata L.
Cryptotaenia canadensis (L.) DC.
Daucus carota L.
Ligusticum canadense (L.) Britt.
C. B. Clarke
Oxyopolis rigidior (L.) C. & R.
Sanicula canadensis L.
S. gregaria Bickn.
S. marilandica L.
S. smallii Bickn.

S. trifoliata Bickn.
Taenidia integrerrima (L.) Drude
Thaspium barbinode (Michx.) Nutt.
T. trifoliatum (L.) Gray

APOCYNACEAE

Apocynum androsaemifolium L.
A. cannabinum L.
Vinca minor L.

AQUIFOLIACEAE

Ilex montana T. & G.
Ilex montana var. mollis (Gray) Brit.
Ilex opaca Ait.

ARACEAE

Arisaema triphyllum (L.) Schott.

ARALIACEAE

Aralia nudicaulis L.
A. racemosa L.
A. spinosa L.
Hedera helix L.
Panax quinquefolia L.

ARISTOLOCHIACEAE

Aristolochia macrophylla Lam.
A. serpentaria L.
Hexastylis arifolia var. ruthii (Ashe) Blomquist
H. shuttleworthii (Britt. & Baker) Small

ASCLEPIADACEAE

Ampelopsis albida (Nutt.) Britt.
Asclepias amplexicaulis Sm.
A. exaltata L.
A. incarnata L.
A. quadrifolia Jacq.
A. syriaca L.
A. tuberosa L.
A. variegata L.
Gonolobus gonocarpus (Walt.) Perry

ASPIDACEAE

Athyrium filix-femina var. asplenoides (Michx.) Liew.
A. pycnocarpon (Speng.) Tidestrom
A. thelypteroides (Michx.) Desv.
Dryopteris intermedia (Muhl.) A. Gray
D. marginalis (L.) Gray
Onoclea sensibilis L.
Polystichum acrostichoides (Michx.) Schott.
Thelypteris hexagonoptera (Michx.) Weatherby
T. noveboracensis (L.) Nieuwl.

ASPLENACEAE

Asplenium montanum Willd.
A. platyneuron (L.) Oakes
A. resiliens Kuntz.
A. trichomanes L.
Camptosorus rhizophyllus (L.) Link.
Achillea millefolium L.
Ambrosia artemisiifolia L.
A. bidentata Michx.
A. trifida L.
Anthemis cotula L.
Antennaria fallax Greene
A. neglecta Greene
A. plantaginifolia (L.) Hook.
A. solitaria Rydb.
Aster concolor L.
A. cordifolius L.
A. curtisii T. & G.
A. divaricatus L.
A. dumosus L.
A. infernus Michx.
A. laevis L.
A. lateriflorus (L.) Britt.
A. linearifolius L.
A. lowricanus Porter
A. macrophyllus L.
A. oblongifolius Nutt.
A. patens Ait.
A. patens var. phlogifolius (Muhl.) Nees.
A. pilosus Willd.
A. prenanthoides Muhl.
A. puniceus L.
A. surculosus Michx.
A. undulatus L.
Aristolochia macrophylla Lam.
B. racemosa (Gray) Wieg.
B. frondosa L.
R. polytepis Blake
Cacalia atriplicifolia L.
C. muhlenbergii (Sch. Bip.) Fern.
Chrysanthemum leucanthemum L.
Chrysopsis mariana (L.) Ell.
C. nervosa (Willd.) Fern.
Cirsium carolinianum (Walt.) Fern. & Schubert
C. vulgare (Sw.) Tenore
Coreopsis auriculata L.
C. major Walt.
Elephantopus carolinianus Willd.
E. tomentosus L.
Erechtines hieracifolia (L.) Raf.
Erigeron annuus (L.) Pers.
E. canadensis L.
E. philadelphicus L.
E. pulchellus Michx.
E. strigosus Muhl.
Eupatorium album L.
E. aromaticum L.
E. coelestinum L.
E. fistulosum Barratt
E. incarnatum Walt.
E. maculatum L.
E. perfoliatum L.
E. purpureum L.
E. rugosum Houtt.
E. rugosum forma villicaula Fern.
E. serotinum Michx.
E. sessilifolium L.
Gnaphalium obtusifolium L.
G. purpureum L.
Helianthus amarus (Raf.) H. F. L. Rock
H. autumnale L.
Helianthus atrorubens L.

