

PREFACE

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The Sligo Branch, which is a tributary of the Anacostia River, drains that area which lies immediately to the east of Kensington, Woodside, Silver Springs, and Taroma Park. It has for many years been the object of occasional visits on the part of the botanists of Washington. Specimens representing more than three hundred species collected in this area, are to be found in the District Flora collection at the National Herbarium, many of these having been collected forty or more years ago.

Due to the marked growth by the Washington suburbs, much of the original flora has been destroyed. Recent development of the Sligo Parkway, while it has added much to the convenience of motorists and created excellent picnic facilities, has been accompanied by considerable destruction of the native vegetation.

Charles Lester Boyd

However, there yet remain many sections which are of interest botanically. Extension of New Hampshire Avenue has stimulated a large building program in some of the finest of these wooded sections.

The author has for thirty-one years resided within easy reach of the Sligo Branch. During all that time it has been his favorite place for botanical excursions.

A Dissertation Submitted to the Faculty of the Graduate School of Arts and Sciences of the Catholic University of America, in Partial Fulfillment of the Requirements for the Degree of Master of Sciences

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This dissertation was conducted under the
direction of Hugh J. O'Neill
Signature of Major Professor.

as Major Professor, and was approved by

J. B. Parker as reader.

INTRODUCTION

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The chief physiographic feature is the fall line which separates the Piedmont from the Coastal Plain areas. The Piedmont Plateau is the northeastern and higher division with its characteristic uplands, underlain by very ancient rocks. The Sligo has worn a narrow channel down into the old surface, with rugged,

77°2'30"

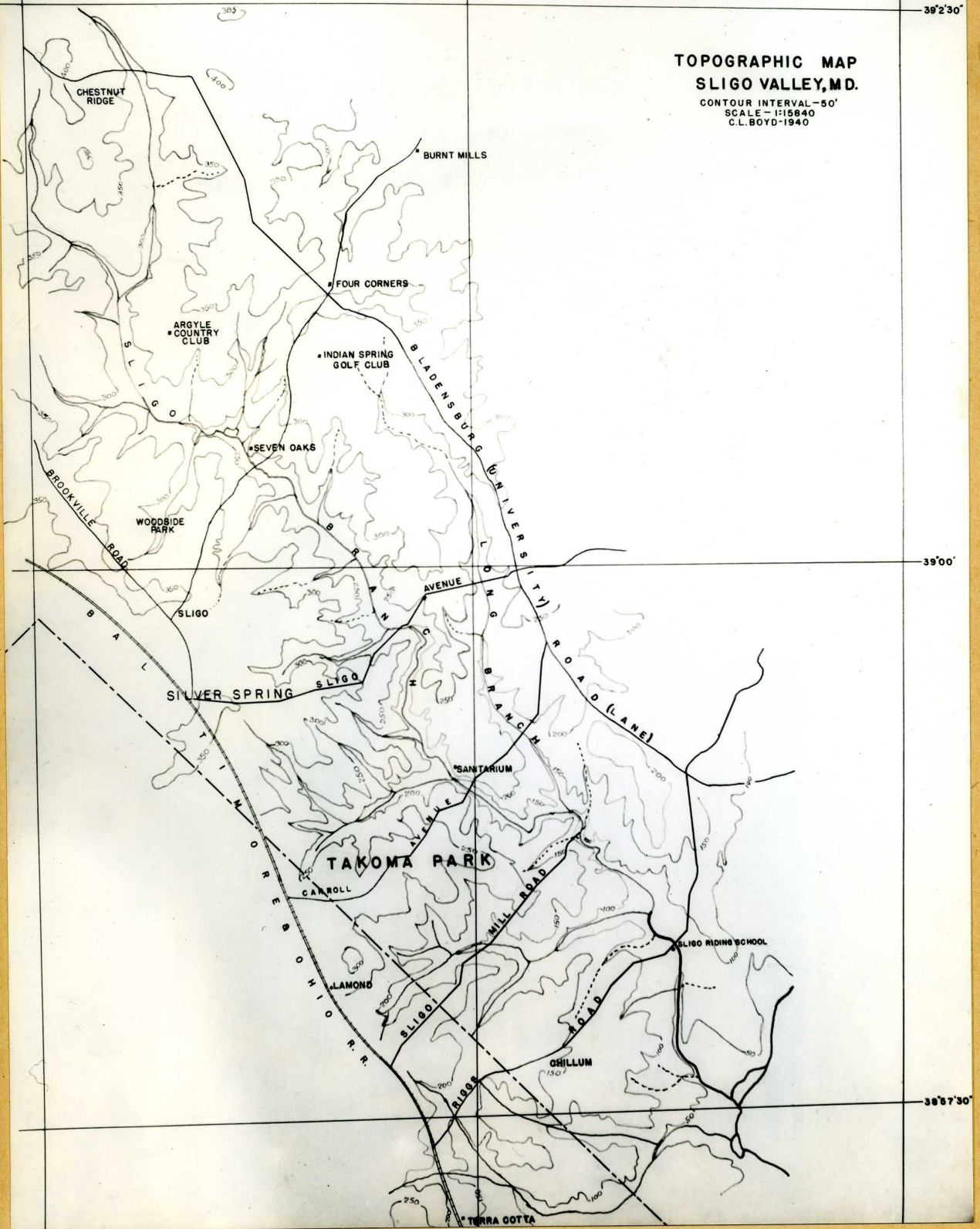
77°00"

76°57'30"

39°2'30"

TOPOGRAPHIC MAP SLIGO VALLEY, MD.

CONTOUR INTERVAL - 50'
SCALE - 1:15840
C.L. BOYD - 1940



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lected within the area. All specimens recorded as from Takoma, Silver Springs, Woodside, Kensington and Terra Cotta, have been included in this list. Silver Springs, Woodside, and especially Kensington, lie in part in the Rock Creek drainage area and it is possible that a few specimens listed may have been collected on that side of the divide. However, it is highly probable that a careful search would reveal all of these within our range and so it is felt proper that these be included in the list. The same is true of Terra Cotta. The small stream which drains that area flows into the Northwest Branch less than one fifth of a mile below its juncture with the Sligo. Terra Cotta was accessible to Washington botanists, and many specimens have been collected from there, especially from the so-called Terra Cotta Swamp. We have rightly included these in our list.

Careful search in the herbarium of the University of Maryland added nearly a dozen additional species.

To supplement further the list of grasses, search was made in the herbarium of the Catholic University. Almost no specimens from the actual Sligo drainage are to be found. However, many specimens collected by the late Theodore Holm at Terra Cotta and Bunker Hill, were found and these have been included as species which may confidently be expected within our limits.

An addition not originally planned is a list of fungi, the results of collections made during July, August and September of 1939.

Specimens of all collections made by the author are to be found in the Herbarium of Washington Missionary College, located on the Sligo in Takoma Park, or in his own personal herbarium.

INTRODUCTION

The Sligo Branch rises in Wheaton Township, Montgomery County, flows in a southeasterly direction for a distance of seven and one-fourth miles, measured in a straight line, to its juncture with the Northwest Branch about one-third of a mile north of the Queen's Chapel Road. The total area of the Sligo drainage is twelve square miles. The region immediately west is drained by Rock Creek; that to the east by Northwest Branch. The exact location of the divides which separate the Sligo basin from that of the adjacent streams can be seen by reference to the topographical map.

For convenience sake, both in the preparation and in the future use of this Flora, the territory has been arbitrarily limited as follows: on the west by the Baltimore and Ohio railroad from Terra Cotta Station northward to Silver Springs, north on the Brookville Road to Wheaton; on the north by the highway leading from Wheaton to Chestnut Ridge; on the east by the Bladensburg Road from Chestnut Ridge south to Riggs Road, on Riggs Road to Agar Road, south on Agar Road to the Queen's Chapel Road; and on the south by Queen's Chapel Road to Bunker Hill Road, west on Bunker Hill Road to Sargents Road, north one-half mile on Sargents Road to the unpaved road which leads due west one-third mile to Terra Cotta Station.

The chief physiographic feature is the fall line which separates the Piedmont from the Coastal Plain area. The Piedmont Plateau is the northwestern and higher division with its characteristic uplands, underlain by very ancient rocks. The Sligo has worn a narrow channel down into the old surface, with rugged,

closely confined slopes. The Piedmont slope gradually descends toward the southeast and merges into the Coastal Plain near Riggs Road. Above this "fall line" the valley is narrow and in places almost gorge-like and rocky-sided, and below, wide-spreading and characteristic of the Coastal Plain. This lower, southeastern portion of the region, the Coastal Plain, is made up of unconsolidated sediments - clays, sands, and gravels - in beds as deposited upon the older crystalline rocks. Here the stream becomes noticeably sluggish and meandering.

Below Riggs Road is more recent loam and gravel of the Pleistocene. Northward along the ravines of the Sligo and its tributaries, and in North Takoma and Silver Springs, are the ancient Archaean rocks of granite-gneiss type, including granite, gneissoid granite, and schistose granite. In the uplands between the Sligo and its tributary the Long Branch in the northeastern part of Takoma, and also between North Takoma and Silver Springs, is found the Cretaceous sand and clay of the Potomac formation. Mica is abundant in the vicinity of Silver Springs and Kensington.

Lime in the soil of the Piedmont is due to accumulations of leaf mold, and not from the weathering of limestone. Soil in the Coastal Plain is more acid. This difference in the soil of the two regions is reflected in the flora. For example, *Melanthium virginicum* and *Stenanthium gramineum*, plants which require a moist, acid soil, have been collected only in the Coastal Plain at Terra Cotta swamp. The flora in the ravine of the Piedmont area includes many mountain and northern plants.

The upland areas have been under cultivation for very many

years and most of the original flora has been destroyed. Many weedy species have been introduced, chiefly plants of European origin. All plants indigenous to the region, and those found as escapes from cultivation have been included but no attempt has been made to include the many ornamental plants which are found only under cultivation.

To facilitate use of this check list in conjunction with the well known Gray's Manual, the systematic arrangement has been made identical throughout, this is the system of Engler and Prantl. The nomenclature is in accord with the rules of the International Code. Nomenclature of the American Code has been placed in synonymy to facilitate use in connection with the District Flora and other works which have employed this now discarded code.

Common names as recorded in Gray's Manual, the District Flora, and Britton and Brown, have been included to add to the practical value of the list with the botanical laity. Indications of the time of bloom are based upon the District Flora.

In the lists all species marked with an asterik are based upon specimens in the District Flora collection at the National Herbarium.

- Cheilanthes lanuginosa* (L.) Sw. Chain Fern
- Adiantum (Fourn.) L.* Maidenhair
- Adiantum pedatum* L. Waldwren
- Pteris aquilina* L. Shield Fern
- Woodsia glabella* (L.) Dur.
- Woodsia virginica* (L.) Presl Chain Fern
- Athyrium Roth*
- Athyrium filix-femina* (L.) Bernh. Lady Fern
- Athyrium filix-femina* (L.) Bernh. Lady Fern
- Abundant* Summer
- Cheilanthes lanuginosa* (L.) Sw. Walking Leaf
- Cheilanthes lanuginosa* (L.) Sw. Walking Fern
- Polystichum Roth*
- Polystichum serotiale* (Michx.) Schott Christmas Fern
- Abundant*
- Dryopteris Adans* Shield Fern
- Dryopteris hexagonoptera* (Michx.) S. Chr. Beech Fern
- Phegopteris hexagonoptera* (Michx.) Foe Summer