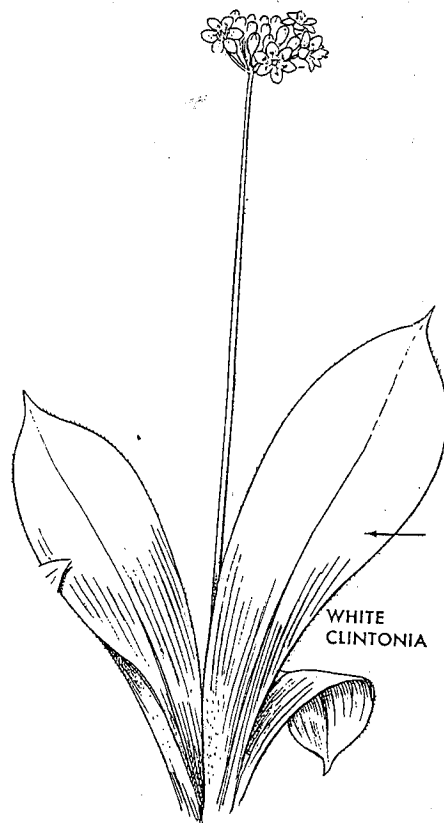


# A Survey of the Flowering Plants and Ferns at Slagle Creek Area



by Louise Hopson Howard

A SURVEY OF THE FLOWERING PLANTS AND FERNS  
AT SLAGLE CREEK AREA

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A Thesis  
Presented to  
The Graduate Faculty  
East Tennessee State University

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Science

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by  
Louise Hopson Howard

August 1972

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## APPROVAL

Louise Hopson Howard has satisfactorily completed her thesis and the undersigned members of her advisory committee recommend to the Graduate Council that it be accepted in partial fulfillment of the requirements for the Master of Science degree.

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## ACKNOWLEDGMENTS

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## INTRODUCTION

The recent emphasis on the quality of the environment makes us increasingly aware of the vital importance of knowing the present state and extent of our natural resources, including plants. Such knowledge is essential as a basis for sound conservation practices.

The project "Flora of North America North of Mexico" is a joint effort of a number of educational institutions, with the University of North Carolina as its nucleus, to assemble and catalogue all possible data on our flora. It is hoped that the present study will be used in computer programming of all available information on the flora of the United States and Canada.

A more immediate objective is the preparation of a preliminary list of the spring and summer flora found in the Slagle Creek area. It is expected that further floristic studies of this area will follow.

The present study is one of a series of studies of the flora of upper East Tennessee which have resulted in additions to the collections of plants in the local herbarium as well as the herbarium of the University of Tennessee.

The Slagle Creek area of Sullivan County, Tennessee, lies in the southwestern section of Beaver Creek

Knobs. The Beaver Creek Knobs lie within the central shale hills of the Valley and Ridge province of the Appalachian Highlands. The topography consists of parallel ridges with intervening valleys having a northeast-southwest trend. The range of elevation of the Beaver Creek Knobs is from approximately 1,327 feet at the mouth of the creek to approximately 2,200 feet above sea level at the highest points.

Slagle Creek area is also known as the Steele Creek Land Utilization area and is referred to as such in the records at the United States Forest Service Office at Elizabethton, Tennessee.

The Slagle Creek area consists of two separate parcels of land. Parcel I contains 220.22 acres located on the waters of Steele Creek and Lick Branch of Beaver Creek. It lies within the city limits of Bristol, Tennessee, in the seventeenth Civil District of Sullivan County, Tennessee. Parcel I, the more northerly of the two areas, is located two and one-half miles from the junction of State Street and the Volunteer Parkway and between United States Highways 11E and 11W. This tract is entirely forested with mixed hardwood stands. It is bounded on the north by privately owned land and the land leased by the City of Bristol from the State of Tennessee for the Steele Creek Park.

The area chosen for survey is known as Parcel II. This portion contains 992.18 acres of knob land on the



headwaters of Slagle Creek. Its northeast boundary lies within one-fourth mile of the Bristol city limits in the fourth Civil District of Sullivan County, Tennessee. The southwest portion of this tract is within one and three-fourths miles of Carden Hollow Road and four miles of United States Highway 11W.

The Slagle Creek area is suitable for study because of its accessibility and its varied topography which provides many types of habitats and a corresponding variety of species.

A survey of the flowering plants and ferns of Parcel II of Slagle Creek area was made with the primary objective of preparing a checklist of the plants in these groups. At the same time it has been possible to collect information concerning some of the ecological conditions in the area including rock formations, soil associations, drainage, and topography. This ecological information is included in order to give a general explanation for the presence of the plants which are listed.

In order to interpret environmental factors, a study of the history of the area was made with reference to the area of land which was farmed, burned, and logged.

## HISTORY

According to the records located at the Office of the United States Forest Service in Carter County, Tennessee, the Slagle Creek Property was acquired for the United States of America under the authority of the Bankhead-Jones Farm Tenant Act by the Soil Conservation Service between the years 1941 and 1943. The tracts were administered by the Soil Conservation Service as a Land Utilization Project until January 1, 1954.

This land was originally purchased as three separate tracts. Tract thirteen, situated in the fourth Civil District, was conveyed to the United States of America by S. E. Massengill in October, 1941. Tract fifteen, situated in the seventeenth Civil District, was conveyed to the United States of America by J. I. Cox in March, 1943. Tract sixteen, located in the seventeenth Civil District, was conveyed to the United States of America by J. M. Barker, Jr. in June, 1942. Tract fifteen and tract sixteen join but are separated from tract thirteen by land owned by the State of Tennessee.

Parcel II suffered severe fire damage in 1954 and was partially burned over again in 1963. A general study and field inspection was made of the Steele Creek Land Utilization Project from September 14 to 19 of 1959. The study revealed that most of the larger trees were badly

fire scarred, resulting in stunted growth. Not all of tract thirteen was burned over, however, and no soil erosion was reported.

According to Mr. Gordon Snow (personal communication, 1972), who has lived near the entrance of Slagle Creek hollow since birth, about ten acres along the creek of tract thirteen was farmed sometime during the early 1930's. Mr. Snow also reports that this area was logged in the 1940's when a sawmill was set up at the entrance of Slagle Creek hollow near Carden Hollow Road. The sawmill was operated for approximately three years by R. E. Woods Lumber Company. The exact extent of logging is unknown.

In January of 1954 the administration of the property was transferred to the United States Forest Service. It is the Forest Service policy to dispose of, through land exchange, those Land Utilization Projects that are not inside the Forest boundary or do not form efficient management units by themselves.

On May 26, 1971, in accordance with this policy, the property was transferred from the United States Forest Service to the City of Bristol for the purpose of developing a park.

## TOPOGRAPHY

The boundary line of the Slagle Creek area follows the crests of the narrow ridge tops. The terrain of Parcel I varies from steep along the sides of the drainages to rolling on top of the knobs. There are 60 acres of rolling ridgetop land. Elevations range from 1,620 to 2,070 feet above sea level.

The terrain of Parcel II ranges from small level areas beside Slagle Creek to steep slopes that rise to gently sloping ridgetops. There are 220 acres of gently sloping land on the ridgetops. The elevation of this tract ranges from 1,100 to 2,300 feet. A topographical map of the area may be found on page 7.



Figure 1

Boundary and Topography of Slagle Creek Area

Contour Interval: 20 ft

Scale: 1-24,000

## ROCK FORMATIONS, SOILS, AND DRAINAGE

The results of a soil survey on the soils of Sullivan County by the United States Department of Agriculture (1953) show that the Slagle Creek area is underlain by Athens shale. According to the survey made by the Soil Conservation Service of the United States Department of Agriculture (1953) the soils in the Slagle Creek area are Hamblen, Whitesburg, Prader, and predominantly Dandridge.

Hamblen silt loam lies as narrow strips on creek bottoms. This soil is formed chiefly from mixed calcareous shale and acid sandstone, quartzite, or shale. It is nearly level, subject to overflow and imperfectly drained. The subsoil is waterlogged during wet periods.

Whitesburg silt loam occurs on slopes of usually less than 5 percent in calcareous shale uplands. It consists of young colluvium and local alluvium from Dandridge soils and lies on small fans, at the heads of small drains, and along intermittent drainageways. External drainage is good.

Prader silt loam is a level or nearly level soil along creeks and on the river bottoms. Much of this soil receives considerable seepage from the adjacent steep Dandridge soils on the sides of the valleys. Drainage is poor and water remains on the surface during much of the year and the water table is near the surface at all seasons.

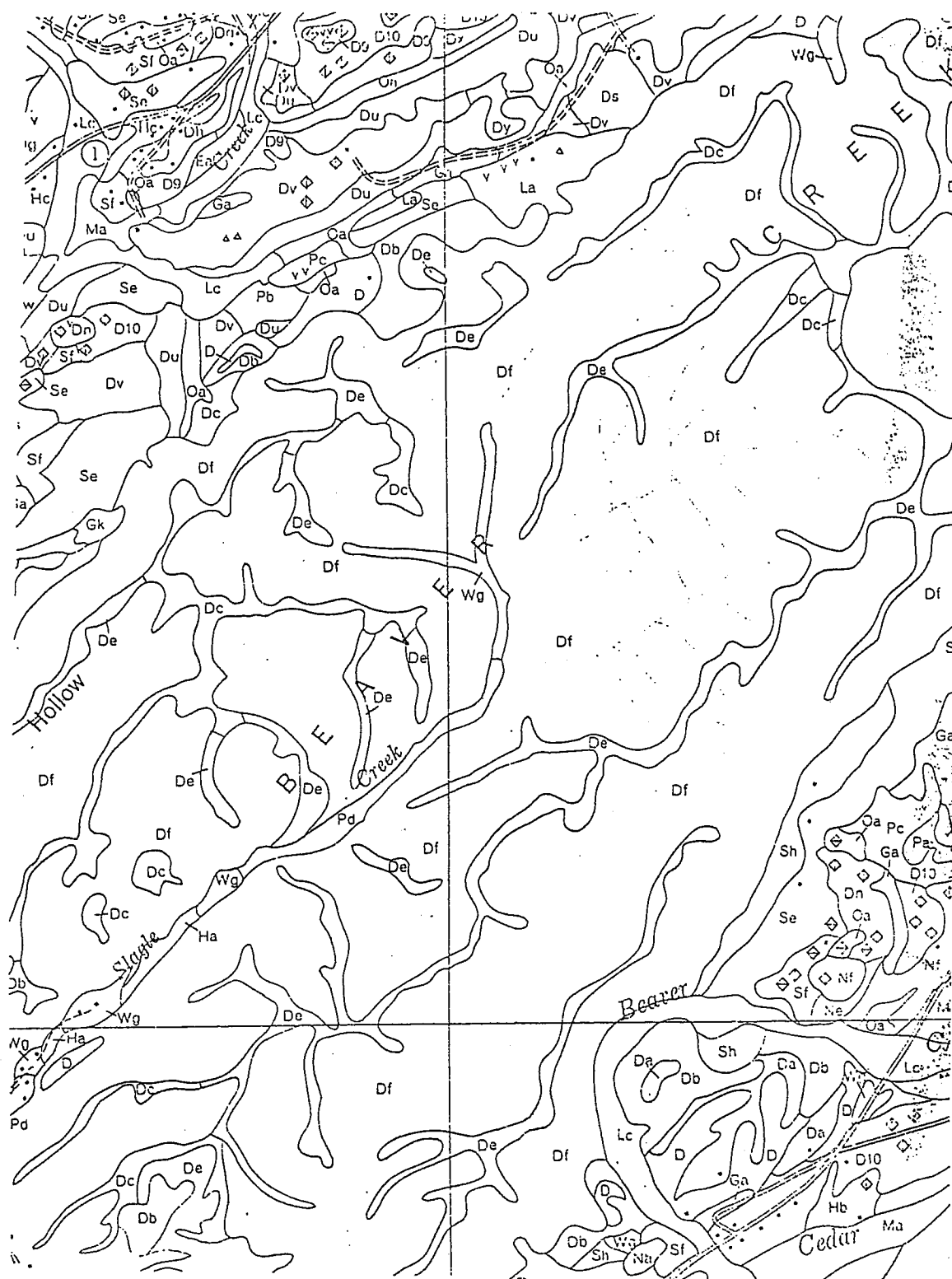
Dandridge soils, formed from calcareous shale, occur on hilly to very steep relief. The soil is medium to slightly acid and is usually shallow. Various phases of Dandridge shaly silt loam are found. Owing largely to the shallow depth, water-holding capacity is low. Dandridge shaly silt loam, eroded hilly phase, has lost most of its surface soil through erosion, and has slopes of 15 to 30 percent. Dandridge shaly silt loam, eroded steep phase, has lost practically all of its original surface layer and has a slope range from 30 to 50 percent. Dandridge silt loam, hilly phase, occupies slopes of 15 to 30 percent. Dandridge silt loam, rolling phase, is found on slopes not exceeding 15 percent. Dandridge silt loam, steep phase, is on steep slopes of 30 to 50 percent of prominent shale knobs and is associated chiefly with Needmore and other Dandridge soils. Dandridge silt loam, very steep phase, occurs on slopes exceeding 50 percent.

A soil map showing location of soils in the Slagle Creek area with some adjacent areas, is shown on page 11.

Figure 2  
Soil Map of the Slagle  
Creek Area

Symbol	Soil
Ha	Hamblen silt loam
Wg	Whitesburg silt loam
Pd	Prader silt loam
Db	Dandridge shaly silt loam, eroded steep phase
D	Dandridge shaly silt loam, eroded hilly phase
Dc	Dandridge silt loam, hilly phase
De	Dandridge silt loam, steep phase
Df	Dandridge silt loam, very steep phase





## METHODS AND MATERIALS

The survey was begun in March of 1972, and periodic visits were made to Parcel II area from that time until July of 1972. Collections were principally made along the two trails leading directly into the area surveyed.

A topographical map was used as a guide to locate the points of interest for collecting specimens and to present an accurate picture of the terrain. Each trip always included North, South, East, and West slope surveys in addition to the low flood areas along the creek.

Specimens were pressed and dried in a plant press. A hand lens was used at home and a dissecting microscope was used at East Tennessee State University herbarium for identification of the specimens. All specimens collected were filed at East Tennessee State University herbarium. Duplicate specimens were also collected for the herbarium at the University of Tennessee.

## LIST OF FAMILIES, GENERA, SPECIES, AND VARIETIES

A very small number of the plants listed below were reported by reliable sources but were not collected by the writer. Each of these names is preceded by one asterisk (\*). Others were collected at a time when they were not in flower and were identified by vegetative characters of the plant. Each of these names is preceded by two asterisks (\*\*).

Scientific names for the clubmoss and ferns collected correspond to those used in Manual of the Vascular Flora of the Carolinas (Radford, 1968) except for Polystichum acrostichoides and Polystichum acrostichoides f. incisum.

These and other scientific names of the other plants listed correspond with those used in The New Britton and Brown Illustrated Flora (Gleason, 1968).

Cypripedium Calceolus and Rhus radicans were observed at several locations but were not collected.

### LYCOPODIACEAE

Lycopodium flabelliforme (Fern.) Blanchard. Running-pine.

### OPHIOGLOSSACEAE

Botrychium dissectum Sprengel. Common Grapefern.  
Botrychium virginianum (L.) Sw. Rattlesnake Fern.

## PTERIDACEAE

Adiantum pedatum L. Maidenhair Fern.  
Athyrium asplenoides (Michx.) A. A. Eaton. Lady Fern.  
Athyrium pycnocarpon (Spreng.) Tidest. Glade Fern.  
Cheilanthes lanosa (Michx.) D. C. Eaton. Hairy Lip-fern.  
Cystopteris protrusa (Weath.) Blasdell. Bladder-fern.  
Dryopteris goldiana (Hooker) Gray. Goldie's Woodfern.  
Dryopteris marginalis (L.) Gray. Marginal Shieldfern.  
Onoclea sensibilis L. Sensitive Fern.  
Polystichum acrostichoides (Michx.) Schott. Christmas Fern.  
Polystichum acrostichoides f. incisum (Gray) Gilbert.  
Pellaea atropurpurea (L.) Link. Purple Cliffbrake.  
Pteridium aquilinum (L.) Kuhn. Bracken Fern.  
Thelypteris hexagonoptera (Michx.) Weatherby. Broad Beech-fern.  
Thelypteris noveboracensis (L.) Nieuwl. New York Fern.

## ASPLENIACEAE

Asplenium platyneuron (L.) Oakes. Ebony Spleenwort.  
 \*Asplenium rhizophyllum L. Walking-fern.

## PINACEAE

Pinus echinata Mill. Yellow Pine. Short-leaf Pine.  
Pinus Strobus L. White Pine.  
Pinus virginiana Mill. Scrub Pine.

## CUPRESSACEAE

Juniperus virginiana L. Red Cedar.

## GRAMINEAE

Hystrix patula Moench. Bottle-brush Grass.  
Panicum sp.

## CYPERACEAE

Eleocharis spp. Spike Rush.  
Carex spp. Sedge.  
Cyperus spp. Galingale.

## ARACEAE

Arisaema triphyllum var. triphyllum (L.) Schott.

## JUNCACEAE

Juncus tenuis Willd. Path Rush.

## LILIACEAE

Aletris farinosa L. Colic-root. Star-grass.

Allium canadense L. Wild Onion.

Clintonia umbellulata (Michx.) Morong. Clinton's Woodlily.

Disporum lanuginosum (Michx.) Nicholson.

\*Lilium sp. Lily.

Polygonatum canaliculatum (Muhl.) Pursh. Solomon's Seal.

Smilacina racemosa (L.) Desf. False Solomon's Seal.

Smilax Bona-nox L. Greenbrier. Catbrier.

Smilax hispida Muhl. Greenbrier.

Smilax rotundifolia L.

Trillium erectum L. Wake-robin.

Uvularia grandiflora Sm. Bellwort.

Uvularia perfoliata L. Bellwort.

## DIOSCOREACEAE

Dioscorea quaternata (Walt.) Gmel. Wild Yam.

## IRIDACEAE

Iris cristata Ait. Dwarf Crested Iris.

Sisyrinchium graminoides Bickn. Blue-eyed Grass.

## ORCHIDACEAE

Aplectrum hyemale (Muhl.) Torr. Adam-and-Eve.

Corallorhiza Wisteriana Conrad. Coral-root.

Cypripedium acaule Ait. Stemless Lady-slipper.

Cypripedium Calceolus L. Yellow Lady-slipper.

Goodyera pubescens (Willd.) R. Br. Rattlesnake Plantain.

Orchis spectabilis L. Showy Orchis.

## SALICACEAE

Populus balsamifera L. Balsam-poplar.

Salix nigra L. Black Willow.

Salix sericea Marsh. Silky Willow

## JUGLANDACEAE

- \*Carya cordiformis (Wang.) K. Koch. Bitternut.  
Carya glabra (Mill.) Sweet. Pignut Hickory.  
Carya ovata (Mill.) K. Koch. Shellbark. Shagbark.  
Carya pallida Ashe.  
Carya tomentosa (Poir.) Nutt. Mockernut Hickory.  
 \*Juglans cinerea L. Butternut. White Walnut.  
Juglans nigra L. Black Walnut.

## BETULACEAE

- Betula lenta L. Black or Sweet Birch.  
Carpinus caroliniana Walt. Hornbeam. Blue Beech.  
Corylus americana Walt. Hazel-nut.  
Ostrya virginiana (Mill.) Koch. Ironwood. Hop Hornbeam.

## FAGACEAE

- Castanea dentata (Marsh.) Borkh. Chestnut.  
Castanea pumila (L.) Mill. Chinquapin.  
Fagus grandifolia Ehrh. Beech.  
Quercus alba L. White Oak.  
Quercus borealis var. maxima (Marsh.) Ashe. Red Oak.  
Quercus coccinea Muenchh. Scarlet Oak.  
Quercus falcata Michx. Spanish Oak. Southern Red Oak.  
Quercus prinus L. Chestnut Oak.  
Quercus stellata Wang. Post Oak.  
Quercus velutina Lam. Black Oak.

## ULMACEAE

- Ulmus americana L. White or American Elm.  
Ulmus rubra Muhl. Slippery or Red Elm.

## MORACEAE

- Morus rubra L. Red Mulberry.

## URTICACEAE

- Laportea canadensis (L.) Gaud. Wood Nettle.

## ARISTOLOCHIACEAE

- Aristolochia durior Hill. Dutchman's Pipe.  
Asarum canadense L. var. canadense. Wild Ginger.

Hexastylis arifolia (Michx.) Small. Heart-leaf.  
Hexastylis virginica (L.) Small. Heart-leaf.

#### POLYGONACEAE

Polygonella polygama (Vent.) Engelm. & Gray.  
Polygonum sagittatum L. Tear-thumb.  
Rumex Acetosella L. Red Sorrel.  
Rumex crispus L. Sour Dock.

#### PHYTOLACCACEAE

Phytolacca americana L. Pokeweed. Pokeberry.

#### PORTULACACEAE

Claytonia caroliniana Michx. Spring-beauty.  
Claytonia virginica L. Spring-beauty.

#### CARYOPHYLLACEAE

Cerastium viscosum L. Mouse-ear Chickweed.  
Cerastium vulgatum L. Mouse-ear Chickweed.  
Dianthus Armeria L. Deptford-pink.  
Paronychia canadensis (L.) Wood. Whitlow-wort.  
Saponaria officinalis L. Bouncing Bet.  
Silene virginica L. Fire-pink.  
Stellaria pubera Michx. Chickweed.

#### MAGNOLIACEAE

Liriodendron Tulipifera L. Yellow Poplar. Tulip Tree.  
Magnolia acuminata L. Cucumber Tree.

#### ANNONACEAE

Asimina triloba (L.) Dunal. Papaw.

#### RANUNCULACEAE

Anemone lancifolia Pursh. Woodflower.  
Anemone quinquefolia L. Windflower.  
Anemone virginiana L. Anemone.  
Anemonella thalictroides (L.) Spach. Rue Anemone.  
Cimicifuga racemosa (L.) Nutt. Black Snakeroot.  
Clematis virginiana L. Virgin's Bower.

Delphinium tricornes Michx. Larkspur.  
Hepatica acutiloba DC. Hepatica.  
Hepatica americana (DC.) Ker. Hepatica.  
Ranunculus abortivus L. Small-flowered Crowfoot.  
Ranunculus allegheniensis Britt.  
Ranunculus bulbosus L. Buttercup.  
Ranunculus hispidus Michx.  
Ranunculus recurvatus Poir.  
Ranunculus septentrionalis Poir.  
Thalictrum clavatum DC. Meadow Rue.  
Thalictrum dioicum L. Meadow Rue.

#### BERBERIDACEAE

Caulophyllum thalictroides (L.) Michx. Blue Cohosh.  
Podophyllum peltatum L. May Apple. Mandrake.

#### MENISPERMACEAE

Menispermum canadense L. Moonseed.

#### LAURACEAE

Lindera Benzoin (L.) Blume. var. Benzoin. Spice-bush.  
Sassafras albidum (Nutt.) Nees. Sassafras.

#### PAPAVERACEAE

Sanguinaria canadensis L. Bloodroot.

#### CRUCIFERAE

Arabis laevigata (Muhl.) Poir. Rock-cress.  
Barbarea vulgaris R. Br. Winter-cress.  
Cardamine bulbosa (Schreb.) BSP. Bitter-cress.  
Cardamine pennsylvanica Muhl. Bitter-cress.  
Dentaria diphylla Michx. Toothwort.  
Dentaria heterophylla Nutt. Toothwort.  
Dentaria incisifolia Eames. Toothwort.  
Dentaria laciniata Muhl. Toothwort.  
Lepidium campestre (L.) R. Br. Field Cress.  
Lepidium virginicum L. Pepper Grass.

#### CRASSULACEAE

Sedum ternatum Michx. Stonecrop.



## SAXIFRAGACEAE

Astilbe bitermata (Vent.) Britt. False Goat's-beard.  
Heuchera americana L. Alum-root.  
Heuchera pubescens Pursh. Alum-root.  
Hydrangea arborescens L. Wild Hydrangea.  
Mitella diphylla L. Bishop's Cap. Mitrewort.  
Tiarella cordifolia L. Foam-flower.

## HAMAMELIDACEAE

Hamamelis virginiana L. Witch Hazel.

## PLATANACEAE

Platanus occidentalis L. Sycamore. Buttonwood.

## ROSACEAE

\*\*Agrimonia pubescens Wallr. Agrimony.  
 \*\*Agrimonia striata Michx. Agrimony.  
Amelanchier arborea (Michx. f.) Fern. Service Berry.  
Aruncus dioicus (Walt.) Fern. Goat's-beard.  
Crataegus sp. Hawthorn.  
Fragaria virginiana Duchesne. Strawberry.  
Geum canadense Jacq. Avens.  
Geum virginianum L. Avens.  
Gillenia trifoliata (L.) Moench. Bowman's Root.  
Potentilla canadensis L. Five-finger. Cinquefoil.  
Potentilla recta L. Five-finger. Cinquefoil.  
Prunus americana Marsh. Wild Plum.  
Prunus serotina Ehrh. Wild Cherry. Black Cherry.  
Pyrus Malus L. Apple.  
Rosa carolina L. Rose.  
Rosa palustris Marsh. Swamp Rose.  
Rubus allegheniensis Porter. Common Blackberry.  
Rubus strigosus Michx. Red Raspberry.  
Rubus trivialis Michx. Southern Dewberry.

## CAESALPINIACEAE

Cercis canadensis L. Redbud.

## FABACEAE

\*\*Desmodium nudiflorum (L.) DC. Tick Trefoil.  
 \*\*Desmodium paniculatum (L.) DC. Tick Trefoil.  
Lathyrus venosus Muhl. Vetchling.

\*Lespedeza hirta (L.) Hornem. Bush Clover.  
Melilotus alba Desr. White Sweet Clover.  
Melilotus officinalis (L.) Desr. Yellow Sweet Clover.  
Robinia Pseudoacacia L. Black Locust.  
Robinia viscosa Vent. Clammy Locust.  
Tephrosia virginiana (L.) Pers. Goat's Rue.  
Trifolium pratense L. Red Clover.  
Trifolium procumbens L. Hop Clover.  
Trifolium repens L. White Clover.  
Vicia caroliniana Walt. Vetch.

## OXALIDACEAE

Oxalis europaea Jord. Wood-sorrel.  
Oxalis grandis Small. Wood-sorrel.  
Oxalis repens Thunb. Wood-sorrel.  
Oxalis violacea L. Wood-sorrel.

## GERANIACEAE

Geranium carolinianum L. Crane's-bill. Wild Geranium.  
Geranium dissectum L. Crane's-bill.  
Geranium maculatum L. Wild Geranium.  
Geranium rotundifolium L. Crane's Bill.

## LINACEAE

Linum virginianum L. Flax.

## POLYGALACEAE

Polygala Senega L. Seneca Snakeroot.

## EUPHORBIACEAE

Euphorbia corollata L. Flowering Spurge.

## ANACARDIACEAE

Rhus Copallina L. Shining Sumac.  
Rhus glabra L. Smooth Sumac.  
Rhus radicans L. Poison Ivy.

## AQUIFOLIACEAE

Ilex montana (T. & G.) Gray.

## CELASTRACEAE

Euonymus americanus L. Strawberry-bush.

## ACERACEAE

Acer Negundo L. Boxelder. Ash-leaved Maple.

Acer rubrum L. Red Maple.

Acer saccharum Marsh. Sugar-maple.

## HIPPOCASTANACEAE

Aesculus octandra Marsh. Yellow or Sweet Buckeye.

Aesculus Pavia L. Red Buckeye.

## BALSAMINACEAE

Impatiens biflora Willd. Touch-me-not. Jewel-weed.

Impatiens pallida Nutt. Touch-me-not. Jewel-weed.

## RHAMNACEAE

Ceanothus americanus L. New Jersey Tea. Redroot.

## VITACEAE

Parthenocissus quinquefolia (L.) Planch. Virginia Creeper.

Vitis Baileyana Munson.

Vitis palmata Vuhl.

Vitis riparia Michx. Frost Grape. Riverbank Grape.

Vitis rupestris Scheele.

## TILIACEAE

Tilia heterophylla Vent. Basswood. Linden.

## HYPERICACEAE

Ascyrum Hypericoides L. St. Andrew's Cross.

Hypericum perforatum L. St. John's-wort.

## VIOLACEAE

Viola canadensis L. Canada Violet.

Viola eriocarpa Schw. Smooth Yellow Violet.

Viola hastata Michx. Halberd-leaved Violet.  
Viola papilionacea Pursh. Meadow-violet.  
Viola pubescens Ait. Downy Yellow Violet.  
Viola Rafinesquii Greene. Wild Pansy.  
Viola rostrata Pursh. Long-spurred Violet.  
Viola striata Ait. Pale Violet.  
Viola triloba Schw.

## LYTHRACEAE

Rotala ramosior (L.) Koehne.  
 Var. interior Fern & Griscom. Tooth-cup.

## ONAGRACEAE

Circaea canadensis Hill. Enchanter's Nightshade.

## ARALIACEAE

\*Panax sp. Ginseng.

## UMBELLIFERAE

Cicuta maculata L. Water Hemlock.  
Cryptotaenia canadensis (L.) DC. Hornwort.  
Daucus Carota L. Queen Anne's Lace.  
Osmorhiza Claytoni (Michx.) Clarke. Sweet Cicely.  
Osmorhiza longistylis (Torr.) DC. Sweet Cicely.  
Sanicula canadensis L. Black Snakeroot.  
Sanicula gregaria Bickn. Black Snakeroot.  
Sanicula trifoliata Bickn. Black Snakeroot.  
Thaspium barbinode (Michx.) Nutt.  
Zizia trifoliata (Michx.) Fern. Golden Alexanders.

## CORNACEAE

Cornus florida L. Flowering Dogwood.  
Nyssa sylvatica Marsh. Black Gum.

## ERICACEAE

Chimaphila maculata (L.) Pursh. Spotted Wintergreen.  
Gaultheria procumbens L. Wintergreen. Checkerberry.  
Kalmia latifolia L. Mountain Laurel. Ivy.  
Monotropa Hypopithys L. Pinesap.  
Oxydendrum arboreum (L.) DC. Sourwood.  
Rhododendron calendulaceum (Michx.) Torr. Flame Azalea.

Vaccinium melanocarpum C. Mohr. Southern Gooseberry.  
Vaccinium neglectum (Small.) Fern. Deerberry.  
Vaccinium stamineum L. Deerberry.  
Vaccinium tenellum Ait.  
Vaccinium vacillans Torr.

## DIAPENSIACEAE

Galax aphylla L. Galax.

## PRIMULACEAE

Anagallis arvensis L. var. arvensis L. Pimpernel.  
Lysimachia quadrifolia L. Loosestrife.  
Steironema ciliatum (L.) Raf.

## EBENACEAE

Diospyros virginiana L. Persimmon.

## OLEACEAE

Fraxinus americana L. White Ash.  
Fraxinus americana  
 Var. biltmoreana (Bead.) J. Wright. Biltmore Ash.  
 \*Fraxinus pennsylvanica  
 Var. pennsylvanica Marsh. Red Ash.  
 \*Fraxinus pennsylvanica  
 Var. subintegerrima (Vahl.) Fern. Green Ash.

## LOGANIACEAE

Spigelia marilandica L. Indian Pink. Pinkroot.

## GENTIANACEAE

Obolaria virginica L. Pennywort.

## APOCYNACEAE

Apocynum cannabinum L. Indian Hemp.

## ASCLEPIADACEAE

Asclepias incarnata L.  
 Var. pulchra (Ehrh.) Pers. Swamp Milkweed.

Asclepias quadrifolia Jacq. Milkweed.  
Asclepias syriaca L.  
Asclepias tuberosa L. Butterfly-weed. Pleurisy Root.  
Asclepias variegata L. Milkweed.

#### CONVOLVULACEAE

Ipomoea purpurea (L.) Roth. Morning-glory.  
 \*\*Cuscuta sp. Dodder.

#### HYDROPHYLLACEAE

Hydrophyllum macrophyllum Nutt. Waterleaf.  
Phacelia bipinnatifida Michx. Phacelia.

#### BORAGINACEAE

Cynoglossum virginianum L. Wild Comfrey.

#### VERBENACEAE

\*\*Verbena sp. Vervain.

#### LABIATAE

\*\*Collinsonia canadensis L. Horse-balm. Stone-root.  
Glechoma hederacea L. Ground Ivy.  
Monarda clinopodia L. Horsemint.  
Salvia lyrata L. Lyre-leafed Sage.  
Satureja vulgaris (L.) Fritsch. Wild Basil.  
Scutellaria elliptica Muhl. Skullcap.  
Scutellaria serrata Andr. Skullcap.  
Stachys Riddellii House. Hedge Nettle.

#### SOLANACEAE

Solanum carolinense L. Horse Nettle.

#### SCHROPHULARIACEAE

Aureolaria virginica (L.) Pennell. False Foxglove.  
Lindernia anagallidea (Michx.) Pennell. False Pimpernel.  
Pedicularis canadensis L. Lousewort.  
Penstemon laevigatus Soland. Beard-tongue.  
Veronica arvensis L.  
Veronica officinalis L.  
Veronica serpyllifolia L. var. humifusa

## BIGNONIACEAE

Anisostichus capreolata (L.) Bureau. Cross-vine.  
Campsis radicans (L.) Seem. Trumpet Creeper.

## OROBANCHACEAE

Conopholis americana (L.) Wallr. Squaw-root.  
Epifagus virginiana (L.) Bart. Beech-drops.  
Orobanche uniflora L. Cancer-root.

## ACANTHACEAE

Ruellia humilis Nutt.

## PLANTAGINACEAE

Plantago lanceolata L. English Plantain.  
Plantago Rugelii Decne. Plantain.

## RUBIACEAE

Galium Aparine L. Bed straw.  
Galium pilosum Ait.  
Galium triflorum Michx.  
Houstonia longifolia Gaertn.  
Houstonia purpurea L.  
Mitchella repens L. Partridge Berry.

## CAPRIFOLIACEAE

Lonicera dioica L. Wild Honeysuckle.  
Lonicera japonica Thunb. Japanese Honeysuckle.  
Sambucus Ebulus L. Dwarf Elder.  
Sambucus canadensis L. Common Elder.  
Viburnum acerifolium L. Maple-leaf Viburnum.  
Viburnum prunifolium L. Black Haw.

## CAMPANULACEAE

Campanula americana L. Tall Bellflower.  
Specularia perfoliata (L.) A. DC. Venus' Looking-glass.

## LOBELIACEAE

\*\*Lobelia inflata L. Indian Tobacco.

## COMPOSITAE

- Achillea Millefolium L. Yarrow.  
Antennaria plantaginifolia (L.) Richards. Pussy-toes.  
Antennaria solitaria Rydb. Pussy-toes.  
\*\*Ambrosia artemisiifolia L. Ragweed.  
\*\*Ambrosia trifida L. Ragweed.  
Aster paternus Cron.  
Chrysanthemum Leucanthemum L. Ox-eye Daisy.  
Cirsium Nuttallii DC. Thistle.  
Coreopsis grandiflora Hogg. Tickseed.  
Coreopsis major Walt. Tickseed.  
Erigeron annuus (L.) Pers. Daisy. Fleabane.  
Erigeron philadelphicus L. Fleabane.  
Erigeron pulchellus Michx. Fleabane.  
\*\*Eupatorium fistulosum Barratt. Joe-Pye Weed.  
\*\*Eupatorium perfoliatum L. Bone Set.  
\*\*Eupatorium purpureum L. Joe-Pye Weed.  
Galinsoga ciliata (Raf.) Blake.  
Helianthus divaricatus L. Sunflower.  
Hieracium pratense Tausch. Hawkweed.  
Hieracium venosum L. Hawkweed.  
Krigia occidentalis Nutt. Dwarf Dandelion.  
\*\*Lactuca canadensis L. Lettuce.  
Rudbeckia hirta L. Black-eyed Susan.  
Senecio aureus L. Golden Ragwort.  
Senecio obovatus Muhl.  
Taraxacum officinale Weber. Common Dandelion.  
\*\*Verbesina virginica L. Crownbeard. Wingstem.



## SUMMARY

A survey of the vascular plants of the Slagle Creek area in Sullivan County, Tennessee, was conducted during the spring and summer of 1972.

The list of plants observed, collected, and identified includes 87 families, 220 genera, 333 species, 10 varieties, and 1 form. This list contains 19 species of ferns, 72 species of wood plants, and 1 species of club-moss.

A considerable number of species new to the herbarium were added to the plant collections at East Tennessee State University and duplicate specimens were donated to the University of Tennessee herbarium.

The number of plants collected indicates the richness of the flora of the topographically varied area.

It is hoped that the results of this study will provide incentive for further investigation of this nature.

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