

A Floral Survey of Quadrants D2 and D3 of Greenwoods Conservancy

Darcy A. King*

INTRODUCTION

Greenwoods Conservancy, a thousand-acre property located in Burlington, New York, was placed under conservation easement by the Otsego Lake Trust. This easement allows the Biological Field Station to manage and research the "forever wild" area (Taylor, 1994). With the development of field laboratories, hiking trails and a road, Greenwoods is an ideal place to study and learn. The property includes the pristine 70-acre Cranberry Bog and its watershed, wetlands, forests, meadows, and many more communities - all with unique ecological value. During the summer of 1994 a preliminary floral survey was conducted of quadrants D2 and D3 around Cranberry Bog (Figure 1). This work is a taxonomic list of flora collected in that area.

METHODS AND MATERIALS

Vascular plant specimens were collected on July, 19, 20, 27, 29 and August 16. A group of two or more people surveyed areas, within the two quadrants, collecting as many different plant species as possible. Using plastic bags and carrying cases (vasculums), the specimens were kept in optimum condition until returning back to the field station. The plant specimens were then sorted and pressed using newspaper, blotter, cardboard, and wooden frames. They then were dried at 100°F, overnight, in an oven. After the plants were preserved, which is the purpose of drying, identification manuals were used to identify the specimens to family, genus, and species (Brown, 1979; Cobb, 1963; Fernald, 1950; Peterson, 1968; Petrides, 1986; Smith, 1966). They were then mounted on herbarium paper and kept on file for later reference.

RESULTS AND DISCUSSION

A total of 137 plant specimens were collected (Table 1). The specimens represented are indicative of at least two different types of major plant communities located in quadrants D2 and D3. There are deciduous forest and grassland. There is a meadow that was once used for farming. Black-eyed Susan, Ox-eye Daisy, and Timothy are a few of the common species that were found there. Bordering the meadow is a deciduous forest, this is indicated by the presence of Red Oak, Fire Cherry, and Sugar Maple. Across the road from the meadow the forest includes Yellow Birch, Red Maple, Sugar Maple, and Basswood. Throughout the two quadrants plant specimens like Indian Pipe, Red Raspberry, Lady Fern, and New York Fern are abundant. The area also contains a Hemlock bottom, typified by Eastern Hemlock. There are also at least two stages of succession occurring in quadrants D2 and D3, old fields and maturing forests. Within the outlined area there are more habitats which include a sphagnum bog, old fields, forests, and a pond.

*Otsego County Conservation Association, F.H.V. Mecklenburg Conservation Fellow, Summer 1994.

Table 1. The following is a taxonomic list of flora collected during this study in quadrants D2 and D3.

Date : 7-19-94

Location : Quadrant D3 - Field

I. Angiosperms

A. Monocots

Cyperaceae

Carex scoparia

Gramineae

Calamagrostis canadensis

Blue-joint

Phleum pratense

Timothy

Iridaceae

Sisyrinchium angustifolium

Blue-eyed Grass

B. Dicots

Asclepiadaceae

Asclepias syriaca

Common Milkweed

Caryophyllaceae

Stellaria graminea

Lesser Stitchwort

Compositae

Achillea millefolium

Yarrow

Chrysanthemum leucanthemum

Ox-eye Daisy

Erigeron annuus

Daisy Fleabane

Hieracium aurantiacum

Devil's Paintbrush

Rudbeckia hirta

Black-eyed Susan

Solidago canadensis

Canada Goldenrod

Vernonia noveboracensis

New York Ironweed

Cruciferae Unknown #1

Fagaceae

Quercus rubra

Red Oak

Guttiferae

Hypericum perforatum

Common St. Johnswort

Labiatae

Agastache foeniculum

Blue Giant Hyssop

Mentha arvensis

Wild Mint

Prunella vulgaris

Heal-all

Leguminosae

Lotus corniculatus

Birdfoot Trefoil

Trifolium agrarium

Hop Clover

Trifolium hybridum

Alsike Clover

Guttiferae	
<i>Hypericum perforatum</i>	Common St. Johnswort
<i>Hypericum punctatum</i>	Spotted St. Johnswort
Labiatae	
<i>Lycopus virginicus</i>	Bugleweed
<i>Scutellaria epilobiifolia</i>	Common Skullcap
<i>Scutellaria lateriflora</i>	Mad-dog Skullcap
Onagraceae	
<i>Epilobium coloratum</i>	Purple-leaved Willow-herb
<i>Epilobium glandulosum</i>	Northern Willow-herb
Polygonaceae	
<i>Fagopyrum sagittatum</i>	Buckwheat
<i>Polygonum sagittatum</i>	Arrow-leaved Tearthumb
Primulaceae	
<i>Trientalis borealis</i>	Star Flower
Ranunculaceae	
<i>Thalictrum polygamum</i>	Tall Meadow-rue
Rosaceae	
<i>Agrimonia</i> sp.	Agrimony
<i>Coptis groenlandica</i>	Goldthread
<i>Rubus flagellaris</i>	Prickly Dewberry
<i>Rubus occidentalis</i>	Black Raspberry
<i>Spiraea latifolia</i>	Meadowsweet
Rubiaceae	
<i>Galium triflorum</i>	Fragrant Bedstraw
<i>Mitchella repens</i>	Partridgeberry
Rutaceae	
<i>Ptelea trifoliata</i>	Hoptree
Tiliaceae	
<i>Tilia</i> sp.	Basswood
Unknown #2	
Unknown #3	
Unknown #4	
Unknown #5	
Unknown #6	
Unknown #7	

II. Gymnosperms

Pinaceae

Pinus strobus
Tsuga canadensis

White Pine
Eastern Hemlock

III. AngiospermsA. Monocots

Cyperaceae

Carex lupulina
Carex lurida

Gramineae

Calamagrostis canadensis
Danthonia spicata
Glyceria striata

Blue-joint
Poverty Grass
Fowl Meadow Grass

Juncaceae

Juncus effusus

Soft Rush

Liliaceae

Maianthemum canadense
Trillium sp.

Lily-of-the-valley
Large-flowered Trillium

Orchidaceae

Habenaria sp.

Orchis

B. Dicots

Aceraceae

Acer saccharum

Sugar Maple

Balsaminaceae

Impatiens capensis

Spotted Touch-Me-Not

Caprifoliaceae

Viburnum acerifolium

Mapleleaf Viburnum

Compositae

Aster acuminatus
Carduus crispus
Solidago altissima

Whorled Wood Aster
Wetted Thistle
Tall Goldenrod

Corylaceae

Betula lenta
Betula lutea

Black Birch
Yellow Birch

Ericaceae

Vaccinium myrtilloides

Velvetleaf Blueberry

Fagaceae

Quercus prinoides

Dwarf Oak

Amaranthaceae		
	<i>Amaranthus retroflexus</i>	Green Amaranth
Balsaminaceae		
	<i>Impatiens capensis</i>	Spotted Touch-Me-Not
Campanulaceae		
	<i>Campanula rapunculoides</i>	Creeping Bellflower
Compositae		
	<i>Arctium minus</i>	Common Burdock
	<i>Aster divaricatus</i>	White Wood Aster
Juglandaceae		
	<i>Carya ovata</i>	Shagbark Hickory
Labiatae		
	<i>Mentha spicata</i>	Spearmint
	<i>Scutellaria incana</i>	Downy Skullcap
Oleaceae		
	<i>Fraxinus americana</i>	White Ash
Pyrolaceae		
	<i>Pyrola elliptica</i>	Shinleaf
Ranunculaceae		
	<i>Actaea pachypoda</i>	White Baneberry
Rosaceae		
	<i>Fragaria virginiana</i>	Common Strawberry
	<i>Spiraea latifolia</i>	Meadowsweet

Date : 8-16-94

Location : Quadrant D2 - Off the Green Trail

I. Pteridophytes

Lycopodiaceae		
	<i>Lycopodium lucidulum</i>	Shining Clubmoss
	<i>Lycopodium obscurum</i> var. <i>dendroideum</i>	Tree Clubmoss
Polypodiaceae		
	<i>Athyrium Filix-femina</i>	Lady Fern
	<i>Onoclea sensibilis</i>	Sensitive Fern
	<i>Polystichum acrostichoides</i>	Christmas Fern
	<i>Thelypteris noveboracensis</i>	New York Fern
	<i>Thelypteris palustris</i>	Marsh Fern

Corylaceae	
<i>Ainus rugosa</i>	Speckled Alder
<i>Betula lenta</i>	Black Birch
Fagaceae	
<i>Quereus sp.</i>	Oak
Oleaceae	
<i>Fraxinus americana</i>	White Ash
Rosaceae	
<i>Potentilla canadensis</i>	Dwarf Cinquefoil
<i>Pyrus coronaria</i>	American Crabapple
<i>Rubus allegheniensis</i>	Blackberry (flower)
<i>Rubus allegheniensis</i>	Blackberry (fruit)
<i>Rubus idaeus</i>	Red Raspberry
<i>Spiraea latifolia</i>	Meadowsweet
Vitaceae	
<i>Vitis aestivalis</i>	Summer Grape

Date : 7-29-94

Location : Quadrant D3 - Hardwood Forest

I. Pteridophytes

Polypodiaceae

<i>Onoclea sensibilis</i>	Sensitive Fern
<i>Polystichum acrostichoides</i>	Christmas Fern
<i>Thelypteris noveboracensis</i>	New York Fern
<i>Thelypteris palustris</i>	Marsh Fern

II. Gymnosperms

Pinaceae

<i>Pinus resinosa</i>	Red Pine
<i>Pinus strobus</i>	White Pine
<i>Tsuga canadensis</i>	Eastern Hemlock

III. Angiosperms

A. Monocots

Liliaceae

<i>Maianthemum canadense</i>	Lily-of-the-valley
------------------------------	--------------------

B. Dicots

Aceraceae

<i>Acer pensylvanicum</i>	Striped Maple
<i>Acer saccharum</i>	Sugar Maple

II. AngiospermsA. Monocots

Cyperaceae
Carex lupulina

B. Dicots

Aceraceae
Acer saccharum Sugar Maple

Oxalidaceae
Oxalis montana Common Wood Sorrel

Primulaceae
Trientalis borealis Star Flower

III. Gymnosperms

Pinaceae
Pinus strobus White Pine

Date : 7-27-94

Location : Quadrant D3 - Hardwood Forest, along the road

I. Pteridophytes

Polypodiaceae
Pteridium aquilinum Bracken Fern

II. AngiospermsA. Dicots

Aceraceae
Acer rubrum Red Maple

Aquifoliaceae
Ilex opaca American Holly (albino)

Caprifoliaceae
Sambucus canadensis Common Elderberry
Viburnum recognitum Northern Arrowhead

Celastraceae
Celastrus scandens American Bittersweet

Compositae
Aster praealtus Willow Aster
Solidago puberula Downy Goldenrod
Solidago rugosa Rough Stemmed Goldenrod

<i>Vicia cracca</i>	Cow Vetch
Oxalidaceae	
<i>Oxalis europaea</i>	Yellow Wood Sorrel
Ranunculaceae	
<i>Ranunculus ambigens</i>	Spearwort
<i>Ranunculus pensylvanicus</i>	Bristly Buttercup
Rosaceae	
<i>Potentilla recta</i>	Rough-Fruited Cinqufoil
<i>Prunus pensylvanicus</i>	Fire Cherry
<i>Spiraea latifolia</i>	Meadowsweet
Scrophulariaceae	
<i>Linaria vulgaris</i>	Butter and Eggs

Date : 7-20-94

Location : Quadrant D2 - Green Trail

I. Pteridophytes

Lycopodiaceae	
<i>Lycopodium complanatum</i>	Running Pine

II. Angiosperms

A. Dicots

Onagraceae	
<i>Circaea quadrisulcata</i>	Enchanter's Nightshade
Pyrolaceae	
<i>Monotropa uniflora</i>	Indian Pipe
Rosaceae	
<i>Dalibarda repens</i>	Dewdrop

Date : 7-20-94

Location : Quadrant D3 - Green Trail

I. Pteridophytes

Lycopodiaceae	
<i>Lycopodium clavatum</i>	Staghorn Clubmoss
<i>Lycopodium obscurum</i>	Princess Pine

Polypodiaceae	
<i>Athyrium Filix-femina</i>	Lady Fern
<i>Thelypteris noveboracensis</i>	New York Fern
<i>Thelypteris palustris</i>	Marsh Fern

REFERENCES

- Brown, L. 1979. Grasses, an identification guide. Houghton/Mifflin Company, N.Y. 240 p.
- Cobb, B. 1963. A field guide to the ferns. Houghton/Mifflin Company, Boston. 281 p.
- Fernald, M. L. 1950. Gray's manual of botany. 8th ed. Van Nostrand Reinhold Co., N.Y. 1632 p.
- Peterson, R. T. and M. McKenny. 1968. A field guide to wildflowers. Houghton/Mifflin Company, Boston. 420 p.
- Petrides, G. 1986. A field guide to trees and shrubs. Houghton/Mifflin Company, Boston. 428 p.
- Smith, R. L. 1966. Ecology and Field Biology. Harper & Row, N.Y. 686 p.
- Taylor, L. 1994. Personal communication. Biological Field Station, SUNY Oneonta.