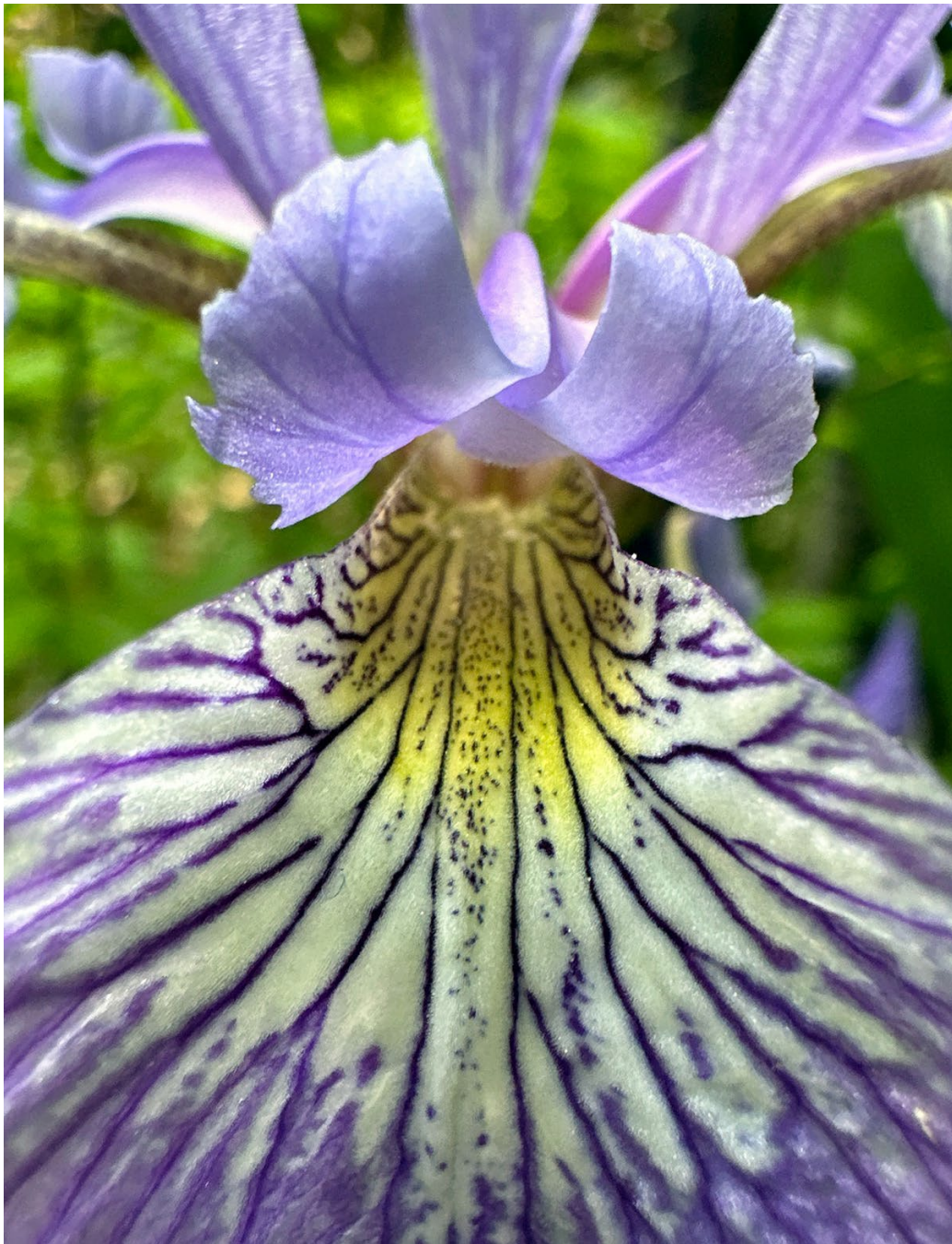




Flora of Ward Pound Ridge Reservation

Third Quarterly Report

March 16 – June 15, 2023

Patricia Butter
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July 4, 2023

The Friends of Trailside Museum and Ward Pound Ridge Reservation
PO Box 236
Cross River, NY 10518

Dear Officers of the Board of The Friends of Trailside,

On behalf of myself and my colleagues, Devon Cummings and Daniel Atha, it gives me great pleasure to present to the Board of the Friends of Trailside Museum the third quarterly report of the Flora Project covering the period of March 16 through June 15, 2023. We gratefully acknowledge the financial support of the Friends, and we hope our results so far surpass your expectations.

As the growing season began, we observed the first small flowering weeds of spring, dug deep into the cold, rich mud to obtain specimens of Skunk Cabbage, *Symplocarpus foetidus* in flower, delighted in the dramatic display of spring ephemeral flowers, and the following procession of flowering herbs, shrubs and trees. During one field day, as we sought to find a rare plant from a written record from 1999, we were brought to an area where we found not that plant, but two other rare plants – one a new record for WPRR. All of these experiences demonstrate the unique and beautiful habitats that are so important for conservation at The Ward Pound Ridge Reservation.

In consideration of the objectives of the Flora Project, we prioritized areas of known conservation concern for study during this period. We collected 126 plant specimens at over twenty locations throughout the Ward Pound Ridge Reservation and traveled over fourteen miles of trails during eleven days of field study. We documented three rare plant species, one previously unrecorded at WPRR, and one plant that is the first specimen record from Westchester County.

As the next quarter brings forth an abundance of flowers and fruits, we will continue to employ the highest scientific standards as we work towards our ultimate goal - to identify and document every plant species currently growing on the Reserve as well as plant communities of conservation importance and concern. We hope that you agree that we have begun to make significant progress towards that goal. We are thankful for your generous support.

Respectfully Yours,

Patricia Butter

Flora of Ward Pound Ridge Reservation

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We gratefully acknowledge the Westchester County Parks Staff that have generously contributed their time and expertise to this study: Taro Ietaka, Jeff Main, Daniela Ciatto, Hayley Lewis, Brendan Wallace, Lindsey Feinberg, Michael Gambino, and Kristina Hayek.

Objective: The objective of the Flora Project at Ward Pound Ridge Reservation is to preserve a specimen of every vascular plant species growing spontaneously in the park and to identify and document the ecological communities, prioritizing those of conservation concern. The collection of pressed herbarium specimens of each plant species provides a physical record available for botanical study. The project expands and improves upon the historic records of the reservation by creating an easily accessible resource for conservation efforts by providing a precise and detailed data set and scientifically verifiable records, enabling park management to identify priority plant species and communities for conservation efforts.

Materials and Methods: This work was performed in accordance with the details set forth in the Flora of Ward Pound Ridge Reservation Proposal approved by the Officers of the Board of the Friends of Trailside on September 15, 2022. Field Work data and specimen collection was performed by Patricia Butter, Devon Cummings, and Daniel Atha with assistance from Jeff Main, Taro Ietaka, Lindsey Feinberg, Michael Gambino and Kristina Hayek.

Specimen collection involved creating at least two pressed and dried herbarium specimens (when populations were sufficient) to specification (11.5" x 16.5") with parts representing reproductive characteristics and both sides of the leaves of the plant. Whenever possible root structure was also represented.

The specimen data collected included GPS coordinates of the geographic location, a description of the plant's characteristics that may not be reflected in the dried specimen, the population size, and the plant community in which the species associates.

Photographs were taken of the plants in their natural setting, including detailed photos of key identifying characteristics. These photos were uploaded to the iNaturalist platform.

One specimen of each species will be mounted on archival herbarium paper together with a specimen label for Westchester County Park's herbarium.

One specimen and label of each species, together with a spreadsheet containing the relevant data will be contributed to the Steere Herbarium at the New York Botanical Garden, which has digitization capabilities to make the specimens available for study to the scientific community at large.

A spreadsheet has been established in Google docs with the data for each specimen collected.

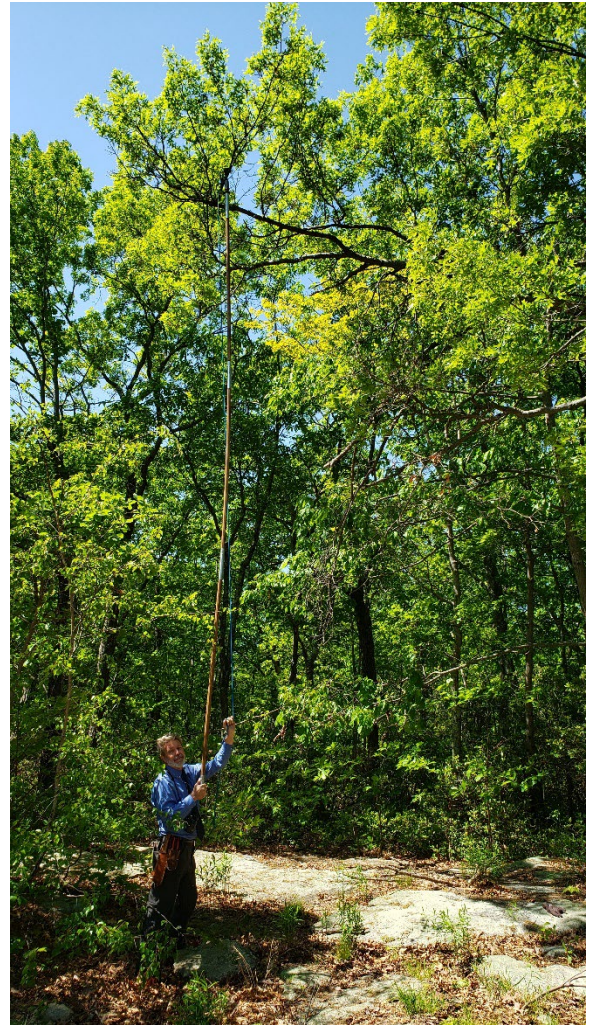
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In consideration of the objective of the Flora Project, areas of known conservation concern were prioritized for study. One hundred and twenty six plant specimens and data were collected at over twenty locations in WPRR (see Appendix I for a map and complete list of collections), in chronological order:

- The Meadow Parking area and the adjacent successional shrub meadow and woodlands.
- The wetlands that are the source of the Cross River
- The banks of the Waccabuc River, the adjacent woodlands and rocky ledges.
- The sandy meadow (former gravel pit) located near the Waccabuc River.
- The lawn in front of the Trailside Museum.
- The meadows on Pell Hill.
- The swamp near the Michigan Road parking area.
- The woodlands near marker 54.
- The summit of Joe's Hill.
- The woodlands near the Leatherman's Cave.
- The field northwest of the Maintenance Barn.
- The uplands near Raven Rocks.
- An upland shrub dominated swamp near marker 58.
- The uplands near the site of the former Fire Tower.
- An upland pool near marker 15.
- The fields near the Meadow Parking area.
- The field northwest of the Trailside Museum.
- An upland swamp and adjacent woodlands near marker 34.
- The meadows near the Michigan Road parking area.



Daniel Atha collecting a specimen of Scarlet Oak, *Quercus coccinea* near the site of the Former Fire Tower on May 17, 2023

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Specimen Collections: 126. All specimens and the associated data have been recorded in a shared spreadsheet (see Appendix II for the complete list).

- Two rare plant species were documented with specimen records.
- One plant collected was a first record of the species from Westchester County, another was the only record from the county since 1896.

Notable collections:

- Muhlenberg's Sedge (*Carex muehlenbergii* var *muehlenbergii*), NY S4, first record from Westchester County.
- Bush's Sedge (*Carex bushii*), NY S3 rare, substantial population at Michigan Road.
- Black-seeded Spear Grass (*Piptochaetium avenaceum*), NY S2, population in uplands near marker 34.
- Red Elderberry (*Sambucus racemosa*), first record from Westchester County since 1896.



A flower of Virginia snakeroot, *Endodeca serpentaria*, NY S2 threatened
Photo: Devon Cummings

iNaturalist observations: 176

Notable observations:

- Virginia Snakeroot (*Endodeca serpentaria*), NY S2 threatened, four plants were observed, two were in flower, not collected due to scarcity, found in area near marker 34.
- Pink Lady's Slipper Orchid (*Cypripedium acaule*), locally rare, 29 plants were observed in uplands near the site of the former Fire Tower, not collected due to scarcity.

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Field Notes: Photos and observations of geographic locations have also been recorded describing the ecological communities observed. These notes will aid in planning future collection objectives, and provide valuable background data of the extant plant communities in these locations.

Research and Collaborations: Notable items accomplished include: Reporting rare plant observations to the New York Natural Heritage Program for *Carex bushii*, *Piptochaetium avenaceum* and *Endodeca serpentaria*.

On May 5, 2023, 141 specimens from the 2022 season were delivered to the Steere Herbarium at the New York Botanical Garden. The specimens were delivered together with a spreadsheet containing the data from the labels structured to conform to the Darwin Code Standards utilized by the worldwide biological community to publish their data with GBIF, the Global Biodiversity Information Facility (www.gbif.org). A complete list of the specimens delivered to the herbarium can be found in Appendix III.

Thanks to Daniel's connection, Harvey Ballard, author of the new monograph on Violets of the northeast published in the Journal of the Torrey Botanical Society, has agreed to review the determinations of *Viola* specimens from our project.

Conservation Recommendations: Our observations this quarter brought us to numerous unique ecological habitats. One of the most prominent habitats is the over 100 acres of fields and meadows at Ward Pound Ridge Reservation. Of the 9 rare plant species that we have surveyed thus far in our study, 4 occur in the fields and meadows of the park. There are an additional 7 species of rare plants with historical records from the meadows yet to be surveyed. We would like to highlight the importance of continuing the excellent maintenance program currently in place for these fields and meadows. Without a regular mowing program, the meadows would soon be overgrown with invasive and successional vines and shrubs, such as *Malus toringo* discussed in our first quarterly report.

Additional management objectives of targeted removal of invasive shrubs from successional shrub meadows and hedgerows will also be extremely helpful in slowing the spread of some of the newly emergent invasive species.

In summary, the goal of the Flora Project is to identify and document plant communities of conservation importance and concern. This study will advance scientific knowledge of our flora at county, state and regional levels. The Ward Pound Ridge Reservation is an important area for conservation, and the commitment to conservation and financial support of the Friends of Trailside comes at a crucial time. This work on the Flora of Ward Pound Ridge Reservation has been performed by Patricia Butter, Devon Cummings and Daniel Atha in approximately 192 hours of labor. The next quarter will be dedicated to further fieldwork and the collection of specimens.

Report prepared by Patricia Butter with contributions from Devon Cummings and Daniel Atha.

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From left to right top row: Pitch Pine, *Pinus rigida*, Round-lobed Hepatica, *Hepatica americana*, Dutchman's Breeches, *Dicentra cucullaria*; middle row: Beaked Hazelnut, *Corylus cornuta*, Royal Fern, *Osmunda regalis* var. *spectabilis*, Grey Willow, *Salix atrocinerea*; bottom row: Rock Harlequin, *Capnoides sempervirens*, Labrador Violet, *Viola labradorica*, Marsh Marigold, *Caltha palustris*. Photos: Devon Cummings

Flora of Ward Pound Ridge Reservation

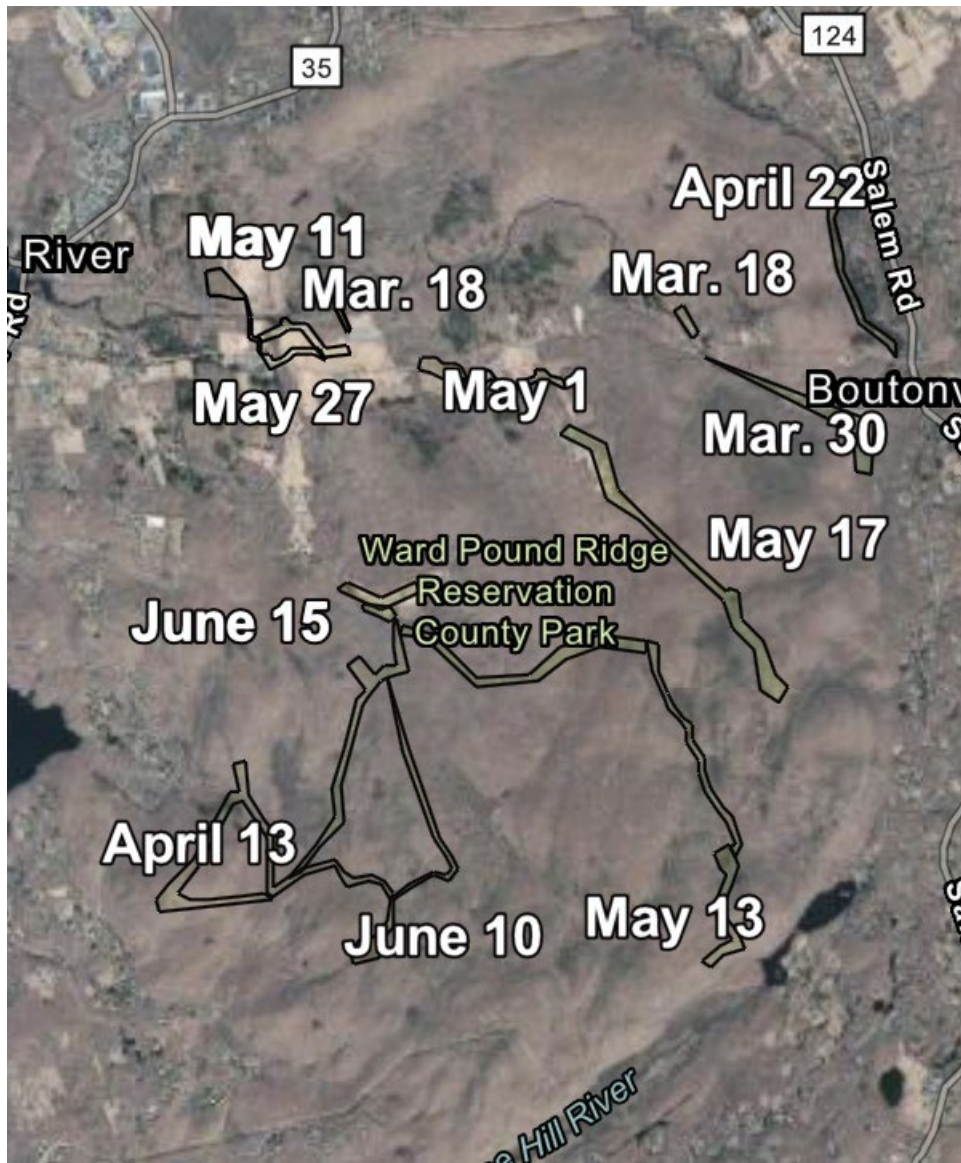
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Appendix I

Map of Ward Pound Ridge Reservation Plant Specimen Collection Sites

18 March – 15 June 2023



See lists of species collected below.

Flora of Ward Pound Ridge Reservation

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March 16 – June 15, 2023

Collected on March 18, 2023, Meadow Parking, Kimberly Bridge, Boutonville Road

Collector: Daniel Atha

Alnus serrulata

Ficaria verna

Equisetum arvense

Collected on March 30, 2023, Kimberly Bridge east to Waccabuc wetlands

Collectors: Patricia Butter, Devon Cummings, Daniel Atha,
Michael Gambino, Kristina Hayek

Symplocarpus foetidus

Corylus cornuta ssp. *cornuta*

Cardamine hirsuta

Symplocarpus foetidus

Collected on April 13, 2023, Michigan Road to marker 54, Joe's Hill, to Leatherman's Cave

Collectors: Patricia Butter, Devon Cummings, Daniel Atha,
Taro Ietaka, Lindsey Feinberg

Panax trifolius

Viola sororia

Dicentra cucullaria

Sanguinaria canadensis

Chrysosplenium americanum

Caltha palustris

Lindera benzoin

Carpinus caroliniana

Anemone quinquefolia

Claytonia virginica

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Erythronium americanum

Amelanchier canadensis

**Collected on April 22, 2023, Boutonville Oak, north along
Waccabuc to Gravel Pit**

Collectors: Patricia Butter, Devon Cummings

Arabidopsis thaliana

Betula populifolia

Salix cinerea ssp. *oleifolia*

Salix

Carex communis var. *communis*

Acer saccharum

Acer rubrum var. *rubrum*

Panax trifolius

Sambucus racemosa

Cardamine diphylla

Trillium erectum

Berberis thunbergii

Arisaema triphyllum

Allium tricoccum

Micranthes virginensis

Caulophyllum thalictroides

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Collected on May 1, 2023, Lawn in front of Trailside, Pell Hill

Collectors: Patricia Butter, Devon Cummings, Amy Eli
Trautwein

Cornus florida

Quercus rubra

Thalictrum thalictroides

Antennaria parlinii ssp. *fallax*

Fragaria virginiana

Viola fimbriatula

Veronica serpyllifolia ssp. *serpyllifolia*

Veronica arvensis

Anthoxanthum odoratum

Viola labradorica

Collected on May 11, 2023, Meadow northwest of Maintenance Barn

Collector: Patricia Butter

Ranunculus acris

Lonicera morrowii

Packera aurea

Collected on May 13, 2023, Raven's Rock, upland shrub dominated swamp

Collectors: Daniel Atha, Patricia Butter

Viola blanda

Cardamine pennsylvanica

Viola miniscula

Carex interior

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Viola cucullata

Viola miniscula

Luzula multiflora ssp. *multiflora*

Carex pennsylvanica

Cardamine parviflora

Carex albicans

Quercus palustris

Vaccinium pallidum

Vaccinium corymbosum

Maianthemum canadense

Uvularia perfoliata

Viola cucullata

Collected on May 17, 2023, Fire Tower to Pell Hill

Collectors: Patricia Butter, Daniel Atha, Devon Cummings,

Festuca trachyphylla

Ranunculus bulbosus

Pedicularis canadensis

Moss

Capnoides sempervirens

Gaylussacia baccata

Hypoxis hirsuta

Poa Pratensis

Carex debilis var. *rudgei*

Betula populifolia

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Prunus serotina

Quercus coccinea

Amelanchier laevis

Acer rubrum

Pinus rigida

Quercus ilicifolia

Collected on May 27, 2023, Meadow northwest of Trailside

Collectors: Patricia Butter, Devon Cummings, Jeff Main

Viburnum opulus var. *opulus*

Viburnum lentago

Stellaria graminea

Zizia aurea

Moehringia lateriflora

Micranthes pennsylvanica

Arrhenatherum elatius ssp. *elatius*

Erigeron pulchellus var. *pulchellus*

Pilosella ceaspitosa

Potentilla simplex

Carex gracillima

Krigia biflora

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**Collected on June 10, 2023, Upland swamp and environs
near marker 34**

Collectors: Patricia Butter, Devon Cummings, Daniel Atha,
Lindsey Feinberg

Galium lanceolatum

Piptochaetium avenaceum

Glyceria striata

Carex intumescens

Dichanthelium latifolium

Medeola virginiana

Carex

Carex digitalis var. *digitalis*

Carex virescens

Melampyrum lineare

Carex swanii

Carex echinata ssp. *echinata*

Carex laxiculmis var. *laxiculmis*

Festuca subverticillata

Osmundastrum cinnamomeum

Athyrium filix-femina

Onoclea sensibilis

Polystichum acrostichoides

Persicaria

Iris versicolor

Viola cucullata

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Collected on June 15, 2023, Michigan Road meadows

Collector: Patricia Butter

Carex

Carex bushii

Poa Pratensis ssp. *pratensis*

Rumex acetosella ssp. *pyrenaicus*

Lepidium virginicum ssp. *virginicum*

Carex muehlenbergii var. *muehlenbergii*

Festuca trachyphylla

Linaria canadensis

Lyonia ligustrina var. *ligustrina*

Vitis labrusca

Rosa multiflora

Cornus racemosa

Specimens Collected 16 March - 15 June, 2023

<i>botanical name</i>	<i>collection date</i>	<i>number</i>
<i>Alnus serrulata</i>	18-Mar-2023	16269
<i>Ficaria verna</i>	18-Mar-2023	16270
<i>Equisetum arvense</i>	18-Mar-2023	16271
<i>Symplocarpus foetidus</i>	30-Mar-2023	820
<i>Corylus cornuta</i> ssp. <i>cornuta</i>	30-Mar-2023	819
<i>Cardamine hirsuta</i>	30-Mar-2023	16272
<i>Symplocarpus foetidus</i>	30-Mar-2023	16273
<i>Ulmus</i>	30-Mar-2023	16274
<i>Panax trifolius</i>	13-Apr-2023	826
<i>Viola sororia</i>	13-Apr-2023	825
<i>Dicentra cucullaria</i>	13-Apr-2023	824
<i>Sanguinaria canadensis</i>	13-Apr-2023	823
<i>Chrysosplenium americanum</i>	13-Apr-2023	822
<i>Caltha palustris</i>	13-Apr-2023	821
<i>Lindera benzoin</i>	13-Apr-2023	16275
<i>Carpinus caroliniana</i>	13-Apr-2023	16276
<i>Anemone quinquefolia</i>	13-Apr-2023	16277
<i>Claytonia virginica</i>	13-Apr-2023	16278
<i>Erythronium americanum</i>	13-Apr-2023	16279
<i>Amelanchier canadensis</i>	13-Apr-2023	16280
<i>Arabidopsis thaliana</i>	22-Apr-2023	837
<i>Betula populifolia</i>	22-Apr-2023	836
<i>Salix cinerea</i> ssp. <i>oleifolia</i>	22-Apr-2023	835
<i>Salix</i>	22-Apr-2023	834
<i>Carex communis</i> var. <i>communis</i>	22-Apr-2023	833
<i>Acer saccharum</i>	22-Apr-2023	832
<i>Acer rubrum</i> var. <i>rubrum</i>	22-Apr-2023	831

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<i>Panax trifolius</i>	22-Apr-2023	830
<i>Sambucus racemosa</i>	22-Apr-2023	829
<i>Cardamine diphylla</i>	22-Apr-2023	828
<i>Trillium erectum</i>	22-Apr-2023	827
<i>Berberis thunbergii</i>	22-Apr-2023	9
<i>Arisaema triphyllum</i>	22-Apr-2023	8
<i>Allium tricoccum</i>	22-Apr-2023	7
<i>Micranthes virginensis</i>	22-Apr-2023	6
<i>Caulophyllum thalictroides</i>	22-Apr-2023	5
<i>Cornus florida</i>	1-May-2023	849
<i>Quercus rubra</i>	1-May-2023	848
<i>Thalictrum thalictroides</i>	1-May-2023	847
<i>Antennaria parlinii</i> ssp. <i>fallax</i>	1-May-2023	846
<i>Fragaria virginiana</i>	1-May-2023	845
<i>Viola fimbriatula</i>	1-May-2023	844
<i>Veronica serpyllifolia</i> ssp. <i>serpyllifolia</i>	1-May-2023	843
<i>Veronica arvensis</i>	1-May-2023	842
<i>Anthoxanthum odoratum</i>	1-May-2023	841
<i>Viola labradorica</i>	1-May-2023	840
<i>Ranunculus acris</i>	11-May-2023	881
<i>Lonicera morrowii</i>	11-May-2023	880
<i>Packera aurea</i>	11-May-2023	879
<i>Viola blanda</i>	13-May-2023	891
<i>Cardamine pennsylvanica</i>	13-May-2023	890
<i>Viola miniscula</i>	13-May-2023	889
<i>Carex interior</i>	13-May-2023	888
<i>Viola cucullata</i>	13-May-2023	887
<i>Viola miniscula</i>	13-May-2023	886
<i>Luzula multiflora</i> ssp. <i>multiflora</i>	13-May-2023	885

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<i>Carex pennsylvanica</i>	13-May-2023	884
<i>Cardamine parviflora</i>	13-May-2023	883
<i>Carex albicans</i>	13-May-2023	882
<i>Quercus palustris</i>	13-May-2023	16281
<i>Vaccinium pallidum</i>	13-May-2023	16282
<i>Vaccinium corymbosum</i>	13-May-2023	16283
<i>Maianthemum canadense</i>	13-May-2023	16284
<i>Uvularia perfoliata</i>	13-May-2023	16285
<i>Viola cucullata</i>	13-May-2023	16286
<i>Festuca trachyphylla</i>	17-May-2023	900
<i>Ranunculus bulbosus</i>	17-May-2023	899
<i>Pedicularis canadensis</i>	17-May-2023	898
<i>Moss</i>	17-May-2023	897
<i>Capnoides sempervirens</i>	17-May-2023	896
<i>Gaylussacia baccata</i>	17-May-2023	895
<i>Hypoxis hirsuta</i>	17-May-2023	894
<i>Poa Pratensis</i>	17-May-2023	893
<i>Carex debilis</i> var. <i>rudgei</i>	17-May-2023	892
<i>Betula populifolia</i>	17-May-2023	16287
<i>Prunus serotina</i>	17-May-2023	16288
<i>Quercus coccinea</i>	17-May-2023	16289
<i>Amelanchier laevis</i>	17-May-2023	16290
<i>Acer rubrum</i>	17-May-2023	16291
<i>Pinus rigida</i>	17-May-2023	16292
<i>Quercus ilicifolia</i>	17-May-2023	16293
<i>Viburnum opulus</i> var. <i>opulus</i>	27-May-2023	926
<i>Viburnum lentago</i>	27-May-2023	925
<i>Stellaria graminea</i>	27-May-2023	924
<i>Zizia aurea</i>	27-May-2023	923

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<i>Moehringia lateriflora</i>	27-May-2023	922
<i>Micranthes pennsylvanica</i>	27-May-2023	921
<i>Arrhenatherum elatius</i> ssp. <i>elatius</i>	27-May-2023	920
<i>Erigeron pulchellus</i> var. <i>pulchellus</i>	27-May-2023	919
<i>Pilosella ceaspitosa</i>	27-May-2023	918
<i>Potentilla simplex</i>	27-May-2023	917
<i>Carex gracillima</i>	27-May-2023	916
<i>Krigia biflora</i>	27-May-2023	915
<i>Galium lanceolatum</i>	10-Jun-2023	960
<i>Piptochaetium avenaceum</i>	10-Jun-2023	959
<i>Glyceria striata</i>	10-Jun-2023	958
<i>Carex intumescens</i>	10-Jun-2023	957
<i>Dichanthelium latifolium</i>	10-Jun-2023	956
<i>Medeola virginiana</i>	10-Jun-2023	955
<i>Carex</i>	10-Jun-2023	954
<i>Carex digitalis</i> var. <i>digitalis</i>	10-Jun-2023	953
<i>Carex virescens</i>	10-Jun-2023	952
<i>Melampyrum lineare</i>	10-Jun-2023	951
<i>Carex swanii</i>	10-Jun-2023	950
<i>Carex echinata</i> ssp. <i>echinata</i>	10-Jun-2023	949
<i>Carex laxiculmis</i> var. <i>laxiculmis</i>	10-Jun-2023	948
<i>Festuca subverticillata</i>	10-Jun-2023	947
<i>Osmundastrum cinnamomeum</i>	10-Jun-2023	16294
<i>Athyrium filix-femina</i>	10-Jun-2023	16295
<i>Onoclea sensibilis</i>	10-Jun-2023	16296
<i>Polystichum acrostichoides</i>	10-Jun-2023	16297
<i>Persicaria</i>	10-Jun-2023	16298
<i>Iris versicolor</i>	10-Jun-2023	16299
<i>Viola cucullata</i>	10-Jun-2023	16300

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<i>Carex</i>	15-Jun-2023	986
<i>Carex bushii</i>	15-Jun-2023	985
<i>Poa Pratensis</i> ssp. <i>pratensis</i>	15-Jun-2023	984
<i>Rumex acetosella</i> ssp. <i>pyrenaicus</i>	15-Jun-2023	983
<i>Lepidium virginicum</i> ssp. <i>virginicum</i>	15-Jun-2023	982
<i>Carex muehlenbergii</i> var. <i>meuhlenbergii</i>	15-Jun-2023	981
<i>Festuca trachyphylla</i>	15-Jun-2023	980
<i>Linaria canadensis</i>	15-Jun-2023	979
<i>Lyonia ligustrina</i> var. <i>ligustrina</i>	15-Jun-2023	978
<i>Vitis labrusca</i>	15-Jun-2023	977
<i>Rosa multiflora</i>	15-Jun-2023	976
<i>Cornus racemosa</i>	15-Jun-2023	975

Herbarium Specimens delivered to The New York Botanical Garden 5 May 2023			
<i>botanical name</i>	Family	Collection Number	Collection Date (Verbatim)
<i>Ageratina altissima</i>	ASTERACEAE	660	10-Oct-2022
<i>Agrostis capillaris</i>	POACEAE	16253	22-Oct-2022
<i>Agrostis gigantea</i>	POACEAE	598	25-Sep-2022
<i>Alnus serrulata</i>	BETULACEAE	16246	20-Oct-2022
<i>Ambrosia artemisiifolia</i>	ASTERACEAE	673	12-Oct-2022
<i>Ambrosia artemisiifolia</i>	ASTERACEAE	566	17-Sep-2022
<i>Anaphalis margaritacea</i>	ASTERACEAE	16232	15-Oct-2022
<i>Andropogon virginicus</i> var.	POACEAE	741	22-Oct-2022
<i>virginicus Asplenium platyneuron</i>	ASPLENIACEAE	620	29-Sep-2022
<i>Bidens laevis</i>	ASTERACEAE	16258	22-Oct-2022
<i>Bidens laevis</i>	ASTERACEAE	773	26-Oct-2022
<i>Brachyelytrum erectum</i>	POACEAE	16266	29-Oct-2022
<i>Bulbostylis capillaris</i>	CYPERACEAE	732	20-Oct-2022
<i>Carex lupulina</i>	CYPERACEAE	731	20-Oct-2022
<i>Cenchrus longispinus</i>	POACEAE	614	29-Sep-2022
<i>Chamaecrista nictitans</i> var. <i>nictitans</i>	FABACEAE	564	17-Sep-2022
<i>Chimaphila maculata</i>	ERICACEAE	594	25-Sep-2022
<i>Clematis virginiana</i>	RANUNCULACEAE	705	19-Oct-2022
<i>Comptonia peregrina</i>	MYRICACEAE	631	6-Oct-2022
<i>Crocanthemum canadense</i>	CISTACEAE	16243	15-Oct-2022
<i>Crocanthemum canadense</i>	CISTACEAE	644	6-Oct-2022
<i>Cyperus brevifolioides</i>	CYPERACEAE	754	22-Oct-2022
<i>Cyperus lupulinus</i> ssp. <i>macilentus</i>	CYPERACEAE	625	29-Sep-2022

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<i>Cyperus lupulinus</i> ssp. <i>macilentus</i>	CYPERACEAE	572	17-Sep-2022
<i>Dendrolycopodium obscurum</i>	LYCOPODIACEAE	590	25-Sep-2022
<i>Dennstaedtia punctilobula</i>	DENNSTAEDTIACEAE	592	25-Sep-2022
<i>Desmodium marilandicum</i>	FABACEAE	612	29-Sep-2022
<i>Dianthus armeria</i> ssp. <i>armeria</i>	CARYOPHYLLACEAE	677	12-Oct-2022
<i>Dichanthelium sphaerocarpon</i>	POACEAE	650	6-Oct-2022
<i>Digitaria ischaemum</i>	POACEAE	675	12-Oct-2022
<i>Diphasiastrum digitatum</i>	LYCOPODIACEAE	16233	15-Oct-2022
<i>Doellingeria umbellata</i>	ASTERACEAE	16251	20-Oct-2022
<i>Dryopteris intermedia</i>	DRYOPTERIDACEAE	775	26-Oct-2022
<i>Dryopteris marginalis</i>	DRYOPTERIDACEAE	602	25-Sep-2022
<i>Dulichium arundinaceum</i> var. <i>arundinaceum</i>	CYPERACEAE	765	22-Oct-2022
<i>Echinochloa crus-galli</i>	POACEAE	16262	22-Oct-2022
<i>Elaeagnus umbellata</i>	ELAEAGNACEAE	586	17-Sep-2022
<i>Eleocharis obtusa</i> var. <i>obtusa</i>	CYPERACEAE	751	22-Oct-2022
<i>Eleocharis obtusa</i> var. <i>obtusa</i>	CYPERACEAE	727	20-Oct-2022
<i>Eleusine indica</i>	POACEAE	735	20-Oct-2022
<i>Elymus virginicus</i> var. <i>virginicus</i>	POACEAE	610	25-Sep-2022
<i>Epilobium coloratum</i>	ONAGRACEAE	16255	22-Oct-2022
<i>Equisetum hyemale</i> ssp. <i>affine</i>	EQUISETACEAE	574	17-Sep-2022
<i>Eragrostis spectabilis</i>	POACEAE	16234	15-Oct-2022
<i>Erigeron canadensis</i> var. <i>canadensis</i>	ASTERACEAE	683	15-Oct-2022
<i>Euonymus alatus</i>	CELASTRACEAE	703	19-Oct-2022
<i>Eurybia divaricata</i>	ASTERACEAE	608	25-Sep-2022
<i>Galium album</i>	RUBIACEAE	712	19-Oct-2022

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<i>Galium asprellum</i>	RUBIACEAE	16259	22-Oct-2022
<i>Galium labradoricum</i>	RUBIACEAE	16256	22-Oct-2022
<i>Galium labradoricum</i>	RUBIACEAE	771	26-Oct-2022
<i>Galium lanceolatum</i>	RUBIACEAE	16268	29-Oct-2022
<i>Hamamelis virginiana</i>	HAMAMELIDACEAE	634	6-Oct-2022
<i>Hieracium gronovii</i>	ASTERACEAE	723	20-Oct-2022
<i>Hieracium paniculatum</i>	ASTERACEAE	604	25-Sep-2022
<i>Hypericum mutilum</i>	HYPERICACEAE	16254	22-Oct-2022
<i>Ilex verticillata</i>	AQUIFOLIACEAE	16265	22-Oct-2022
<i>Ionactis linariifolia</i>	ASTERACEAE	679	12-Oct-2022
<i>Juncus acuminatus</i>	JUNCAEAE	750	22-Oct-2022
<i>Juncus brevicaudatus</i>	JUNCAEAE	756	22-Oct-2022
<i>Juncus canadensis</i>	JUNCAEAE	797	3-Nov-2022
<i>Juncus tenuis</i>	JUNCAEAE	796	3-Nov-2022
<i>Juncus tenuis</i>	JUNCAEAE	763	22-Oct-2022
<i>Kalmia latifolia</i>	ERICACEAE	636	6-Oct-2022
<i>Laportea canadensis</i>	URTICACEAE	691	15-Oct-2022
<i>Lechea mucronata</i>	CISTACEAE	622	29-Sep-2022
<i>Lechea racemulosa</i>	CISTACEAE	638	6-Oct-2022
<i>Lepidium virginicum</i> ssp. <i>virginicum</i>	BRASSICACEAE	733	20-Oct-2022
<i>Lespedeza capitata</i>	FABACEAE	681	12-Oct-2022
<i>Lespedeza cuneata</i>	FABACEAE	629	6-Oct-2022
<i>Lespedeza procumbens</i>	FABACEAE	640	6-Oct-2022
<i>Lespedeza violacea</i>	FABACEAE	16242	15-Oct-2022
<i>Lespedeza violacea</i>	FABACEAE	578	17-Sep-2022

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<i>Ligustrum obtusifolium</i> var. <i>obtusifolium</i>	OLEACEAE	745	22-Oct-2022
<i>Lobelia inflata</i>	CAMPANULACEAE	784	26-Oct-2022
<i>Lycopus virginicus</i>	LAMIACEAE	16248	20-Oct-2022
<i>Lyonia ligustrina</i> var. <i>ligustrina</i>	ERICACEAE	707	19-Oct-2022
<i>Malus toringo</i>	ROSACEAE	582	17-Sep-2022
<i>Mentha arvensis</i>	LAMIACEAE	16257	22-Oct-2022
<i>Microstegium vimineum</i>	POACEAE	662	10-Oct-2022
<i>Mitchella repens</i>	RUBIACEAE	596	25-Sep-2022
<i>Mollugo verticillata</i>	MOLLUGINACEAE	689	15-Oct-2022
<i>Muhlenbergia</i> <i>sobolifera</i>	POACEAE	606	25-Sep-2022
<i>Myosoton aquaticum</i>	CARYOPHYLLACEA	748	22-Oct-2022
<i>Nabalus altissimus</i>	ASTERACEAE	697	15-Oct-2022
<i>Panicum</i> <i>dichotomiflorum</i>	POACEAE	16261	22-Oct-2022
<i>Paspalum laeve</i>	POACEAE	665	10-Oct-2022
<i>Paspalum setaceum</i> var. <i>muhlenbergii</i>	POACEAE	568	17-Sep-2022
<i>Penthorum sedoides</i>	PENTHORACEAE	16263	22-Oct-2022
<i>Penthorum sedoides</i>	PENTHORACEAE	16264	22-Oct-2022
<i>Persicaria arifolia</i>	POLYGONACEAE	16241	15-Oct-2022
<i>Persicaria hydropiper</i>	POLYGONACEAE	16238	15-Oct-2022
<i>Persicaria robustior</i>	POLYGONACEAE	16237	15-Oct-2022
<i>Persicaria robustior</i>	POLYGONACEAE	16240	15-Oct-2022
<i>Persicaria robustior</i>	POLYGONACEAE	16247	20-Oct-2022
<i>Photinia villosa</i>	ROSACEAE	716	19-Oct-2022
<i>Phragmites australis</i>	POACEAE	687	15-Oct-2022
<i>Pilea pumila</i> var. <i>pumila</i>	URTICACEAE	693	15-Oct-2022

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<i>Polygonum tenue</i>	POLYGONACEAE	16235	15-Oct-2022
<i>Polygonum tenue</i>	POLYGONACEAE	616	29-Sep-2022
<i>Polypodium virginianum</i>	POLYPODIACEAE	600	25-Sep-2022
<i>Polystichum acrostichoides</i>	DRYOPTERIDACEAE	695	15-Oct-2022
<i>Pycnanthemum virginianum</i>	LAMIACEAE	16245	20-Oct-2022
<i>Rhynchospora capitellata</i>	CYPERACEAE	739	22-Oct-2022
<i>Rorippa palustris</i> ssp. <i>palustris</i>	BRASSICACEAE	767	26-Oct-2022
<i>Rosa carolina</i> ssp. <i>carolina</i>	ROSACEAE	699	15-Oct-2022
<i>Rosa palustris</i>	ROSACEAE	725	20-Oct-2022
<i>Rosa virginiana</i>	ROSACEAE	721	20-Oct-2022
<i>Samolus valerandi</i>	PRIMULACEAE	760	22-Oct-2022
<i>Schizachyrium scoparium</i> var.	POACEAE	627	29-Sep-2022
<i>Scirpus cyperinus</i>	CYPERACEAE	729	20-Oct-2022
<i>Selaginella apoda</i>	SELAGINELLACEAE	16260	22-Oct-2022
<i>Setaria pumila</i> ssp. <i>pumila</i>	POACEAE	714	19-Oct-2022
<i>Sium suave</i>	APIACEAE	778	26-Oct-2022
<i>Smilax glauca</i>	SMILACEAE	795	29-Oct-2022
<i>Smilax rotundifolia</i>	SMILACEAE	782	26-Oct-2022
<i>Solidago bicolor</i>	ASTERACEAE	580	17-Sep-2022
<i>Solidago caesia</i> var. <i>caesia</i>	ASTERACEAE	658	10-Oct-2022
<i>Solidago nemoralis</i>	ASTERACEAE	16236	15-Oct-2022
<i>Solidago nemoralis</i> ssp. <i>nemoralis</i>	ASTERACEAE	576	17-Sep-2022
<i>Solidago odora</i>	ASTERACEAE	646	6-Oct-2022
<i>Solidago rugosa</i> var. <i>aspera</i>	ASTERACEAE	570	17-Sep-2022
<i>Solidago speciosa</i>	ASTERACEAE	718	20-Oct-2022

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<i>Sorghastrum nutans</i>	POACEAE	584	17-Sep-2022
<i>Spiraea alba</i> var. <i>latifolia</i>	ROSACEAE	16249	20-Oct-2022
<i>Spiraea tomentosa</i>	ROSACEAE	16250	20-Oct-2022
<i>Symphotrichum</i> <i>ericoides</i>	ASTERACEAE	16244	20-Oct-2022
<i>Symphotrichum</i> <i>ericoides</i>	ASTERACEAE	16252	22-Oct-2022
<i>Symphotrichum</i> <i>lanceolatum</i> var.	ASTERACEAE	710	19-Oct-2022
<i>Symphotrichum</i> <i>lateriflorum</i>	ASTERACEAE	16267	29-Oct-2022
<i>Symphotrichum</i> <i>novi-belgii</i>	ASTERACEAE	701	15-Oct-2022
<i>Symphotrichum</i> <i>patens</i> var. <i>patens</i>	ASTERACEAE	562	17-Sep-2022
<i>Symphotrichum</i> <i>pilosum</i> var. <i>pringlei</i>	ASTERACEAE	671	12-Oct-2022
<i>Symphotrichum</i> <i>pilosum</i> var. <i>pringlei</i>	ASTERACEAE	624	29-Sep-2022
<i>Thelypteris</i> <i>palustris</i>	THELYPTERIDACEA	652	6-Oct-2022
<i>Trichostema</i> <i>dichotomum</i>	LAMIACEAE	618	29-Sep-2022
<i>Tridens flavus</i> var. <i>flavus</i>	POACEAE	685	15-Oct-2022
<i>Vaccinium stamineum</i>	ERICACEAE	588	17-Sep-2022
<i>Verbena hastata</i>	VERBENACEAE	747	22-Oct-2022
<i>Viburnum dilatatum</i>	ADOXACEAE	737	22-Oct-2022
<i>Viola cucullata</i>	VIOLACEAE	656	6-Oct-2022