

Clintonia

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Flowers of Spring

Norm Zika

The late Norm Zika, one of the original NFBS members, contributed much to local botany, teaching botany classes at the Museum of Science, writing numerous articles, leading field trips, conducting important plant surveys, collecting specimens and working at the Clinton Herbarium.

After the long winter, that special time finally arrives, SPRING! April's restive weather is usually followed by a luxuriant May. It is time to see Coltsfoot blooming along the roadsides, large masses of snowy white Trilliums in leafless woodlands and Marsh-Marigolds flourishing in the wet meadows and marshy brooks, displaying their waxy sepals.

Why do specific perennials sprout so early in the spring? These herbaceous plants build up a food supply during the previous growing season in the underground stems that are important to plants as regions of food accumulation. This food reserve provides the energy for these plants to get an early start, as compared to the delayed root-action of other plants, to produce flowers.

Underground stems are of several kinds, each specialized in a different way. There are four principal modifications:

RHIZOME (=Rootstalk) The rhizomes are perennial stems which grow at or below the soil surface. Rhizomes frequently resemble roots superficially. They are, however true stems. They have nodes, internodes, buds, and often leaves. The stems are rich in accumulated foods in the form of starch. Examples are Wild Ginger (*Asarum canadense*) with aromatic, pungent rhizomes, Wood Anemone, (*Anemone quinquefolia*), toothed, whitish rhizome, Bloodroot (*Sanguinaria canadensis*), thick prostrate rhizome with abundant red-orange acrid juice, Trillium (*Trillium spp.*) short tube-like rhizome.

TUBER: A tuber is a much enlarged and swollen portion of a branch (Stolon). Since the tuber is a modified stem it contains scale leaf and auxiliary buds. Starch is the most common stored food in tubers. Examples are: Spring Beauty (*Claytonia spp.*), small deep-seated tuber, Squirrel Corn (*Dicentra canadensis*), subterranean shoots bearing scattered grain-like tubers.

CORM: A corm is an underground stem that is short, thickened and fleshy. It may be flattened vertically so that it is broader than high. In some species food used in the early growth of the shoot comes from the corm, which shrinks, as the growth proceeds. After the leaves have matured, food is moved downward and one or more new corms are formed on top of the old exhausted corm. Examples are: Jack-in-the Pulpit (*Arisaema spp.*), and common Crocus.

BULBS: A bulb is a very short stem wrapped in thickened bulb scales, which are modified leaves. The scales are the chief sides of food accumulation. Bulbs of onions and hyacinths are said to be layered, for the scales form a series of rings that can be seen when the bulb is cut across. The bulbs of most lilies are scaly. The scales do not encircle but are small, fleshy, and loosely attached to the stem. Examples are Adder's Tongue (*Erythronium spp.*), a deep, scaly bulb, Wild Leek, (*Allium tricoccum*) slender ovoid bulb with fleshy coats.

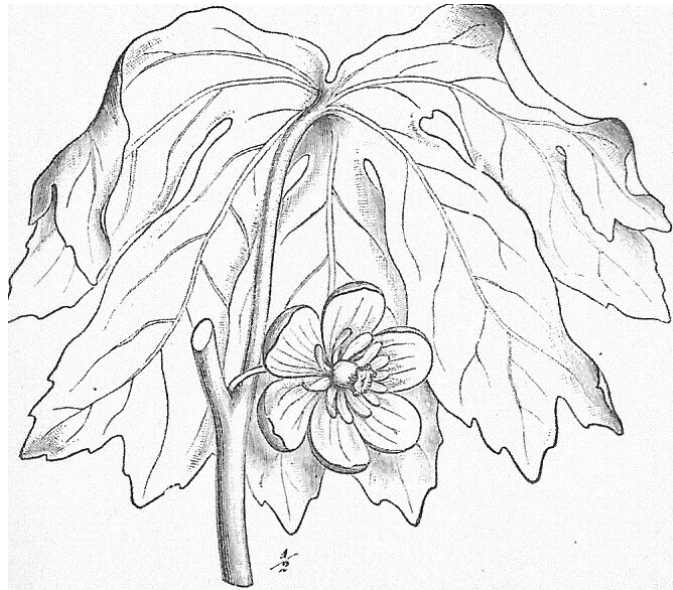
The Hammocks Nature Trail

Michael Siuta

On several occasions in 2009 and 2010 I visited the Hammocks Nature Trail, a small nature preserve of the Town of Orchard Park, NY. This small preserve, of only a few acres, is located off of N. Buffalo Street, a little south of Southwestern Blvd, and runs along the north bank of Smoke Creek behind the TOPS Market Plaza and the Hammocks apartment complex. Common weeds abound near the roadside entrance, but things change quickly as soon as you walk in a bit. The trail runs through a mixed hardwood area with several mature trees, particularly White Ash and Black Walnut. The ground is very moist with a nice variety of understory herbs. Some parts would be classified as a floodplain swamp woods. The diversity of wet-loving species is impressive. The list below represents plants found through the entire growing season.

<i>Acer negundo</i>	Boxelder	<i>Erechtites hieracifolia</i>	Pilewort
<i>Acer platanoides</i>	Norway Maple	<i>Erigeron annuus</i>	Daisy Fleabane
<i>Acer saccharinum</i>	Silver Maple	<i>Erythronium americanum</i>	Yellow Troutlily
<i>Acer saccharum</i>	Sugar Maple	<i>Eupatorium maculatum</i>	Joe-Pye Weed
<i>Agrimonia gyrosepala</i>	Common Agrimony	<i>Eupatorium perfoliatum</i>	Boneset
<i>Alliaria petiolata</i>	Garlic Mustard	<i>Eupatorium rugosum</i>	White Snakeroot
<i>Allium canadense</i>	Wild Garlic	<i>Euthamia graminifolia</i>	Narrow-leaved Goldenrod
<i>Amelanchier laevis</i>	Smooth Shadbush		Strawberry
<i>Amphicarpaea bracteata</i>	Hog Peanut	<i>Fragaria virginiana</i>	White Ash
<i>Apocynum androsaemifolium</i>	Spreading Dogbane	<i>Fraxinus americana</i>	Black Ash
<i>Arctium minus</i>	Common Burdock	<i>Fraxinus nigra</i>	Marsh Betstraw
<i>Arisaema triphyllum</i>	Jack in the Pulpit	<i>Galium palustre</i>	Spotted Geranium
<i>Artemisia vulgaris</i>	Common Mugwort	<i>Geranium maculatum</i>	White Avens
<i>Asclepias incarnata</i>	Swamp Milkweed	<i>Geum canadense</i>	Dame's Rocket
<i>Asclepias syriaca</i>	Common Milkweed	<i>Hesperis matronalis</i>	Common St. John's Wort
<i>Athyrium filix-femina</i>	Lady Fern	<i>Hypericum perforatum</i>	Spotted Jewelweed
<i>Barbarea vena</i>	Early Wintercress		Common Rush
<i>Berberis thunbergii</i>	Japanese Barberry	<i>Impatiens capensis</i>	Path Rush
<i>Bidens frondosa</i>	Beggar-ticks	<i>Juncus effusus</i>	Butternut
<i>Bidens tripartita</i>	Swamp Beggar-ticks	<i>Juncus tenuis</i>	Black Walnut
<i>Brassica rapa</i>	Field Mustard	<i>Juglans cinera</i>	Henbit
<i>Carex lupulina</i>	Hop-Sedge	<i>Juglans nigra</i>	Rice Cutgrass
<i>Carya cordiformis</i>	Bitternut Hickory	<i>Lamium amplexicaule</i>	Ox Eye Daisy
<i>Catalpa speciosa</i>	Catalpa	<i>Leersia oryzoides</i>	Hedge Privet
<i>Chelone glabra</i>	Turtlehead	<i>Leucanthemum vulgare</i>	Spicebush
<i>Cichorium intybus</i>	Chicory	<i>Ligustrum vulgare</i>	Great Lobelia
<i>Circaea lutetiana</i>	Enchanter's Nightshade	<i>Lindera benzoin</i>	Morrow's
<i>Cirsium arvense</i>	Bull Thistle	<i>Lobelia siphilitica</i>	Honeysuckle
<i>Cornus alternifolia</i>	Pagoda Dogwood	<i>Lonicera morrowii</i>	Birdfoot Trefoil
<i>Cornus sericea</i>	Red Osier Dogwood		Water Horehound
<i>Crataegus sp.</i>	Hawthorn	<i>Lotus corniculatus</i>	Virginia Bugleweed
<i>Dactylis glomerata</i>	Orchard Grass	<i>Lycopus americana</i>	Fringed Loosestrife
<i>Dacus carota</i>	Wild Carrot	<i>Lycopus virginicus</i>	Moneywort
<i>Dianthus ameria</i>	Deptford Pink	<i>Lysimachia ciliata</i>	Purple Loosestrife
<i>Dipsacus fullonum</i>	Teasel	<i>Lysimachia nummularia</i>	White Sweet Clover
<i>Echinochloa crus-galli</i>	Barnyard Grass	<i>Lythrum salicaria</i>	White Mulberry
<i>Elymus hystrix</i>	Bottle Brush Grass	<i>Melilotus alba</i>	Forget-me-not
<i>Epilobium ciliatum ssp. glandulosum</i>	Northern Willow Herb	<i>Morus alba</i>	Sensitive Fern
<i>Epilobium parviflorum</i>	Small-Flowered Willow Herb	<i>Myosotis scorpioides</i>	Hop Hornbeam
<i>Epipactis helleborine</i>	Helleborine Orchid	<i>Onclea sensibilis</i>	Wood Sorrel
<i>Equisetum arvense</i>	Common Horsetail	<i>Ostrya virginiana</i>	Deer Tongue Grass
		<i>Oxalis stricta</i>	
		<i>Panicum clandestinum</i>	

<i>Parthenocissus quinquefolia</i>	Virginia Creeper	<i>Rumex obtusifolius</i>	Broad Dock
<i>Penthorum sedoides</i>	Ditch Stonecrop	<i>Sisyrinchium angustifolium</i>	Narrow-leaf
<i>Phleum pratense</i>	Timothy Grass		Blue Eyed Grass
<i>Pilea pumila</i>	Clearweed	<i>Solanum dulcamara</i>	Bittersweet
<i>Plantago major</i>	Common Plantain		Nightshade
<i>Poa sp.</i>	Bluegrass	<i>Solidago canadensis</i>	Canada Goldenrod
<i>Podophyllum peltatum</i>	Mayapple	<i>Solidago flexicaulis</i>	Zigzag Goldenrod
<i>Polygonum hydropiperoides</i>	Water Pepper	<i>Solidago nemoralis</i>	Gray Goldenrod
<i>Polygonum persicaria</i>	Ladies Thumb	<i>Sonchus oleraceus</i>	Sow Thistle
<i>Polygonum sagittatum</i>	Tear Thumb	<i>Symphotrichum lanceolatum</i>	Tall White Aster
<i>Polygonum virginianum</i>	Virginia Knotweed	<i>Symphotrichum novae-anglae</i>	New England Aster
<i>Populus deltoides</i>	Cottonwood	<i>Syringia vulgaris</i>	Lilac
<i>Populus tremuloides</i>	Quaking Aspen	<i>Taraxicum officinale</i>	Dandelion
<i>Potentilla recta</i>	Cinquefoil	<i>Thalictrum dioicum</i>	Early Meadow Rue
<i>Prunella vulgaris</i>	Heal All	<i>Tilia americana</i>	American Basswood
<i>Prunus serotina</i>	Black Cherry	<i>Toxicodendron radicans</i>	Poison Ivy
<i>Pyrus communis</i>	Common Pear	<i>Trifolium campestre</i>	Small Hop Clover
<i>Quercus rubra</i>	Red Oak	<i>Trifolium pratense</i>	Red Clover
<i>Ranunculus acris</i>	Tall Buttercup	<i>Trifolium repens</i>	White Clover
<i>Ranunculus ficaria</i>	Lesser Celandine	<i>Tussilago farfara</i>	Coltsfoot
<i>Ranunculus repens</i>	Creeping Buttercup	<i>Ulmus americana</i>	American Elm
<i>Rhamnus cathartica</i>	Common Buckthorn	<i>Verbascum thapsus</i>	Mullein
<i>Ribes americanum</i>	Wild Black Currant	<i>Verbena hastata</i>	Blue Vervain
<i>Rorippa nasturtium-aquaticum</i>	Watercress	<i>Verbena urticifolia</i>	White Vervain
<i>Rosa multiflora</i>	Multiflora Rose	<i>Veronica officinalis</i>	Common Speedwell
<i>Rubdeckia hirta</i>	Black-Eyed Susan	<i>Viburnum lentago</i>	Nannyberry
<i>Rubus alleghaniensis</i>	Northern Blackberry	<i>Vicia cracca</i>	Cow Vetch
<i>Rubus flagellaris</i>	Northern Dewberry	<i>Viola sororia</i>	Common Blue Violet
<i>Rubus idaeus</i>	Red Raspberry	<i>Vitis aestivalis</i>	Sumer Grape
<i>Rubus occidentalis</i>	Black raspberry	<i>Vitis riparia</i>	Riverbank Grape
<i>Rumex crispus</i>	Curly Dock		



Mayapple, *Podophyllum peltatum*

George William Clinton (1807-1885)

David Clinton Carter

We are pleased to publish this biography of George Clinton prepared by one of his descendents, David Clinton Carter. Mr. Carter, a resident of Vermont has family ties to the Buffalo area. He contacted the editor after finding out about Clintonia on the internet and kindly submitted this article.

George William Clinton was born to New York City mayor and former United States Senator Dewitt Clinton and Mary Dewitt Clinton in New Town, New York City, a part of Brooklyn. George was educated in Albany, where his father was serving in the legislator, then as governor. By 1881 his mother died and at age 14, in 1821, he entered Hamilton College. George William graduated in 1825 and commenced studying medicine and showed his interest in sciences and botany. He began his life-long interest in collecting plant specimens. In February 1828 his life was substantially changed when his father died leaving him orphaned at 21 with little inheritance.

Dewitt's close friends and brother-in-law Ambrose Spencer and John Canfield Spencer came to the aid of George William and persuaded to study for the law instead of medicine. George Clinton began his studies for the law with John Spencer, and three years later in 1831 was admitted to the bar, making him a fourth generation lawyer. The following year George William married his mentor's daughter, Laura Spencer and they went to have 9 children. George William and Laura lived in Canandaigua for a few years until 1836 when they moved to Buffalo, NY.

He practiced law, was appointed collector of customs, District Attorney and organized the Democratic Party. By 1841 he was elected president of the Young Men's Temperance Society of Buffalo. He advocated total abstinence of alcohol, in all forms. (Fortunately, this family trait has fallen into disuse.)

In 1842 George William Clinton was elected mayor of the city of Buffalo. The city had grown over the past 20 years from a small frontier town of less than 1000 to over 40,000. The Erie Canal was carrying thousands of settlers through every year and millions of pounds of grain were transported east, generating hundreds of jobs, business, farms, settlements and a shipping industry. Mayor Clinton was instrumental in establishing the medical school at Buffalo. The mayor, along with Millard Fillmore and others also incorporated the Buffalo General Hospital. He also established the New York Horticultural Society, Forest Lawn Cemetery (Where e and Laura are buried), and served on the University of Buffalo Board.

In 1854, George William Clinton was chosen Superior Court Judge and continued as judge until mandatory retirement at age 70 in 1877. In 1861 he formed with others the Buffalo Society of Natural Sciences, which today is the Buffalo Museum of Science. George William Clinton's hobby continued to be botany and the collection and identification of plants. In his capacity as president of the New York Horticultural Society he collected, identified and lectured on the various plants he and others were able to locate throughout the area. Clintonia is a flower which is often seen when hiking in upper elevations of Vermont, and presumably the Adirondacks. The Clintonia has yellow and sometimes white flowers with leaves that resemble Lily of the Valley. In the summer and fall the plant has a blue berry. There is also a fern identified as Clinton's Wood Fern. (Clintonia was named after Governor Dewitt Clinton and Clinton's Fern was named after George Clinton. editor) In 1882 George William donated his 30,000 specimens to the Buffalo Society of natural Science. This collection was transferred around various sites in Buffalo until 1928 when local philanthropist, Chauncey Hamlin raised \$1 million dollars amongst his friends to build the Museum of Science on Humboldt Parkway. On the third floor is one of the more significant research facilities I the nation for plants. It is called the Clinton herbarium. A large portrait of George Clinton is on the wall as you enter.

George William Clinton was always on the lookout for plants and on September 7, 1885 in Albany, New York he was wandering through a cemetery when he collapsed and died with a handful of clover. He was buried 4 days later in Forest Lawn Cemetery still clutching the clover.

On the Lookout for the Stinking Marigold (*Dyssodia papposa*).

P. M. Eckel, Research Associate, Buffalo Museum of Science, Buffalo, New York.

Firstly, I don't know about you, but personally I find the name "Stinking Marigold" somewhat off-putting. Mind you, this is the published English, common or vulgar name for a species of plant innocent of its impact in a drawing room, and apparently this is the name we are to give this plant when chatting about it. We have all encountered such names, such as Skunk Cabbage for, admittedly, the rather cumbersome scientific name *Symplocarpus foetidus*. Even then, the epithet 'foetidus' means "foul-smelling." I hope the reader has encountered this rather magnificent spring wild-flower and discovered that it smells rather like garlic. Garlic is one of the most important herbs for flavor in cooking - I haven't encountered anyone who thinks the fragrance of garlic 'foetid' but except for individuals who belong to perhaps an older generation. In various older novels and stories, the smell of cabbage and garlic were both associated with immigrants to this country, and also with poverty, especially cabbage.

Without speculating on the common names of plants and nativist prejudice in days gone by during the nineteenth century, one might imagine from the same period a more rural society than the one we have now, and perhaps one might imagine strongly fragrant summer herbs filling a field and providing an inescapably strong and perpetual odor that could make one uncomfortable breathing on a summer's night. There are other common names full of Victorian delicacy and imagination, such as a plant called Quaker Ladies (*Houstonia*), Ragged Sailors (*Cichorium*) and the incomparable Love-in-a-mist, *Damascena*, the Fennel-flower.

When I first collected the plant which is the subject of this paper, I had thought it was Pineapple-weed (*Matricaria matricarioides*), a plant I enjoyed from childhood days playing in summer on the side of a dusty road by the beach. Its odor was one of the good things about Pineapple-weed, it is the fragrant odor that arises from the hair on the human scalp. However, when I brought the plant I found to the herbarium, I discovered at my lens that it was a Stinking Marigold. It is a Marigold because it was earlier placed in the same genus as the horticultural Marigold (*Tagetes*). It is a member of a group of plants, Composites, that all stink: *Anthemis*, *Chrysanthemum*, *Matricaria* and *Tanacetum* (Voss 1996).

The Latin generic name *Dyssodia* probably derives from the Greek adjective *dysodes*, ill-smelling, in keeping with its insulting common name (Fernald calls it Fetid Marigold). But Gleason (in Britton and Brown) also suggests a (less likely) Greek sense derived from *dys-* and *-(h)odos*, meaning 'bad road.' A good road in Greek would be *hemera* (*(h)odos*, and a bad road would be one that is impassable or difficult. In the older literature, *Dyssodia* was spelled, perhaps more accurately, with a single 's.'

For close to a decade now I have periodically driven down interstates 70, 270, 71, 271 and 90 between Buffalo, New York, and Saint Louis, Missouri, during the summer and, what with the stimulus money given to the States for highway construction by the Federal Government, lanes have been blocked, traffic backed up and a good time to examine some of the plants growing along the highway which are usually ignored when driving the speed limit (65mph). Normally there is a margin of plants (around 1-2 feet in width) that cannot compete with the median grass and herbaceous species and, for some reason, in 2010 I noticed for the first time that this strip was a dark brown. This strip was composed almost entirely of what I now know to be *Dyssodia papposa* and the population stretched for hundreds of miles. Upon entering New York State, a rest top afforded an opportunity to examine this habitat, resulting in the discovery of *Dyssodia papposa*:

USA. New York. Chautauqua Co. Ripley Twp. just beyond the border with Pennsylvania and tollbooths of Interstate 90; asphalt extreme margin of grassy verge. P. M. Eckel coll. October 24, 2010 (MO). Occuring with *Ambrosia psilostachya* DC. (= *A. coronopifolia* (T.& G.) Farw.); *Atriplex patula* L.; *Spergularia rubra* (L.) J. & C. Presl.; *Panicum capillare* L.; *Suaeda calceoliformis*.

According to the New York State Flora Atlas, the only other county in which this occurs in the State is Monroe (one of the counties touching Lake Ontario), this based on a NYFA 1990 publication. This information is duplicated by the USDA Plants website. The species does occur in Ontario (Morton & Venn 1990) and is noted in the Southern Ontario Vascular Plant Species List (David J. Bradley, 2010 based on the Ontario Plant List by Newmaster et al. 1998) but am not able to find which county or the municipality from which the records derive.

Records of *Dyssodia papposa* for New York present a curious history. While compiling an early correspondence between Charles H. Peck and George W. Clinton, the name of the species appeared in one of the letters. From Albany, New York, on Oct. 22d 1867, Peck, newly employed in the New York State herbarium, wrote:

“In looking over the Manual (New Ed.) I find several species credited to New York, not before reported. These I suppose we ought to quote. Among them is *Dysodia chrysanthemoides* on your authority, but I do not see it in your notes to me. Did you wish it omitted or was it overlooked?”

Peck’s reference to “the Manual” was to the fifth edition of Gray’s Manual of the Botany of the Northern United States that was just printed earlier in the year. On page 262, Gray noted the *Dysodia* Cav. [sic] *chrysanthemoides* Lag. “Roadsides, and banks of rivers, from Illinois southward: a common weed; now migrating eastward, established at Buffalo, N.Y., G. W. Clinton. Aug. - Oct.” p. 262.

In Clinton’s botanical journal from the 1860s and ‘70s, Clinton noted two times that he had collected this species, once on October 1, 1862, and again in September, on the 23d, 1866, both before the Manual was produced. The 1862 collection was made in Ontario, Canada, just across the Niagara River from Buffalo, New York. The botanizing ramble took Clinton along the north shore of Lake Erie, going west from Fort Erie along the tracks of the Lake Huron Railroad, a Canadian railroad. “its Ferry” refers to the ferry at the south end of a stone pier which was owned by this railroad.

” [Canada] Walked up Lake Huron Railroad. Just this side of its junction with the track from its Ferry, found *Dyssodia chrysanthemoides*, a single plant.”

The 1866 collection was made in the evening in the City of Buffalo in the old railroad cattle yards south of the City. Note the addition of a historic habitat associated with the tracks from which railroad weeds arose, that of muck from living cattle as well as their fodder:

“P.M. State Line R. R. In damp places, on the track, city side of the freight house, a small and slender form of *Juncus bufonius*. *Amarantus spinosus* gone. Nothing by the old cattle stand beyond the bridge. At Elk Street, for a long way out, right hand side of the track, muck from cattle trains has been dumped, & the weeds are luxuriant. Among them noticed *Solanum carolinense* & *Sida spinosa*, the latter much branched. The as yet missing weeds brought by railroad are

1. *Dysodia chrysanthemoides* L. Huron Road
2. *Xanthium spinosum*
3. *Physalis Philadelphica*
4. *Artemisia spinosa*
5. *Bidens tripinnata*.”

However, from examining this entry, it could be interpreted that the *Dyssodia* was only added to a list of railroad weeds expected, but not found that day, “Huron Road” indicating that the reference was to the single plant earlier collected in Canada in 1862. It is odd that such an aggressive weed as *Dyssodia* was gathered from a population represented by only a single stem.

In House’s 1924 flora of New York State, (as *Boebera papposa* (Vent.) Rydb.) there was only a Monroe County station for the plant “On the slope of Cold’s Hill reservoir, Rochester, Baxter [coll.] (Proc. Rochester Acad 5:98. 1917). Adventive from the western states,” which may represent the Monroe station given in the NY State Flora Atlas.

Mitchell (1986), in his checklist of New York State Plants, listed *Dyssodia papposa* with a mark indicating the species was considered not persistent and not native, called “waifs or ephemerals,” growing by “chance dispersal or escaped from cultivation in the past.” He was perhaps referring to House’s citation.

Zenkert (1934) did not mention the plant under any of its synonyms, Rochester or otherwise, nor was it mentioned in the first supplement (Zenkert & Zander 1975). In the second supplement (Zander & Pierce 1979) the name appears, but

in brackets, indicating the species was not clearly established, being an adventive or a doubtful report. In Eckel's third supplement of 2005, the species is listed without indication of status except as alien to the Niagara Frontier flora.

In Clinton's first publication on the plants of Buffalo and Vicinity (1863), the species is reported (as *Dysodia chrysanthemoides*, Lag.), a publication preceding Gray's 1867 (5th) edition of the Manual. In Day's subsequent publication (1882), the species is specifically linked with the Ontario, and not the New York flora: (as *Dysodia* Cav.; *D. chrysanthemoides*, Lag.) "Rare. A 'railroad weed;' Fort Erie, Ont., not lately seen." This was the first report of the species for all of Canada (Oldham and Klymko, in press) and remained the only report for that country up to 1996 (Oldham and Klymko).

Voss (1996) reported that the species seemed unknown in Michigan until 1902, when collected at a farm. He did not note other, subsequent collections for that State, but wrote "To be expected elsewhere, as it became common along interstate highways near Chicago in the 1970s."

Dyssodia is not mentioned in a short paper by A. A. Reznicek (1980), which is a model anyone might like to use to study the halophyte flora associated with Buffalo or any other area with a roadside. The author offers several interesting hypotheses to explain past and present distributions of halophytes which appear to derive from two centers: species from the west (Central Plains) and species from coastal areas along eastern North America which colonized (when first noticed) salt factories and salt storage areas, that is, mining areas in rock strata with significant salt or saline rock deposits. The prevalence of western salt tolerant species over eastern ones may be due to their greater resistance "to the summer drought conditions that prevail along many roadsides." Other halophytes may derive from the central Great Plains and areas to the west, as opposed to coastal saline marshes to the east. The species is native to North America, north of Mexico. Three additional species in the genus grow in Mexico and Central America (Oldham & Klymko, accepted for publication).

Regional floras seem to emphasize the least striking aspect of *Dyssodia papposa* for identification. The species was immediately recognized as distinct by the great oil glands like drops of amber on the large phyllaries surrounding the petals and seeds in addition to the leaves 1-2 times pinnately dissected. See Ungar (1974) for an extensive treatment of halophytes.

Being so late in the season (October), two specimens growing with the *Dyssodia* were very fragile and shrivelled, but enough of the plant was present to diagnose the pinnatifid leaves. The plant was so coarsely hairy throughout that it suggested something in the Boraginaceae, in which family pinnatifid leaves are unknown in the eastern United States. Little bell-like structures dangling on an axis from slender pedicels is so characteristic of the common species of the genus *Ambrosia* that it was relatively easy to identify. The usual species that comes to hand is *Ambrosia artemisiifolia* L., but the plant was so coarsely hairy with strigose-hispid involucre with hairs with pustules at their bases and long-ciliate bracts that it keyed to *A. psilostachya* - to the var. *Lindheimeriana* (Scheele) Blankinship - a form typical of Mexico and adjacent southeastern Texas. All varieties of the species are generally ignored, and so it is hard to apply distributional data. The fruits are said to be "unarmed or with 4 short blunt tubercles" (Fernald 1950). When the fruits are illustrated, they are usually illustrated without tubercles - however, in the New York specimen, tubercles were quite evident.

It is to be assumed that this species is regularly represented in the suite of taxa in the narrow strip of highway. *Atriplex patula* is also widespread in saline or alkaline soil; *Spergularia rubra* has the smallest of the seeds among the species choices (three so far, all alien) in the Niagara flora: less than 0.5 mm and they are wingless. This plant "is the most widely distributed *Spergularia* species found outside of saline areas in the flora and has been in North America since at least the 1860s." (Hartman & Rabeler 2005). From the author's map, it seems to be absent from central North America in the Great Plains. The species has a greater tolerance of non-saline habitats, being found in open forests, for example, and enjoys disturbance.

Panicum capillare resembles *Puccinellia* in its diffuse inflorescence, but there is only one floret per spikelet and the lemmas are acute (not blunt). The leaves are softly villous.

A listing of halophyte or roadside species and the recent extension of their ranges occurs in an extensive recent bibliography. The relative lack of data on these species in New York State suggests a major opportunity for members of the Niagara Frontier Botanical Society to productively explore roadside medians within the Niagara Frontier Region.

The *Dyssodia* station reported here was only a brief stop late at night and does not represent a systematic exploration of roadsides in and adjacent to Interstate 90 between Buffalo, New York and the border with the State of Pennsylvania.

I would like to thank Michael Oldham of the Ontario Natural Heritage Information Centre in Peterborough, Ontario for sharing with me his paper coauthored with John Klymko on *Dyssodia papposa* in Canada.

Bibliography.

- Clinton, George W. 1863. Preliminary List of the Plants of Buffalo and Its Vicinity. 17th Annual Report of the Regents on the State Cabinet: pp. 24- 35. Albany. [Also 12-page pamphlet, Buffalo, 1864 (Zenkert 1934)].
- Day, David F. 1882. The Plants of Buffalo and Its Vicinity. Bull. Buffalo Soc. Nat. Sci., Vol. 4, April 1882, pp. 65-279, inclusive of the first supplement. Also reprinted as a pamphlet, 215 pages, Buffalo, N.Y., 1884.
- Eckel, P. M. 2005. MADCapHorse, A Revised Checklist and Nomenclatural Guide to the Vascular Flora of the Niagara Frontier Region: Flora of the Niagara Frontier Region, Third Supplement. Bull. Buffalo Soc. Nat. Sci. 16: 1-156.
- Gleason, Henry A. 1952. The New Britton and Brown Illustrated Flora of the Northeastern United States and Adjacent Canada. 3 Vols. New York Botanical Garden. New York.
- Gray, Asa. 1867. Manual of the Botany of the Northern United States, including the District East of the Mississippi and North of North Carolina and Tennessee. Ed. 5. Ivison, Blakeman, Taylor & Co. New York and Chicago.
- Hartman, R. L. and R. K. Rabeler. Spergularia in Flora of North America Vol. 5 Magnoliophyta: Caryophyllidae, part 2:pp16-23).
- House, Homer H. 1924. Annotated list of the Ferns and Flowering Plants of New York State. New York State Museum Bulletin no. 254, Albany, New York.
- Mitchell, Richard S. 1986. A Checklist of New York State Plants. New York State Museum Bulletin 458.
- Morton, J. K. & Joan M. Venn. 1990. A Checklist of the Flora of Ontario Vascular Plants. University of Waterloo Biology Series No. 34. Obtainable from Department of Biology, University of Waterloo, Waterloo, Ontario, Canada, N2L 3G1.
- Oldham, M. J. & J. Klymko. 2011. Fetid Dogweed (*Dyssodia papposa*; Asteraceae) in Canada. The Northeastern Naturalist (accepted for publication).
- Reznicek, A. A. 1980. Halophytes along a Michigan roadside with comments on the occurrence of halophytes in Michigan. The Michigan Botanist 19:23-30.
- Ungar, I. A. 1974. inland halophytes of the United States. In R. J. Reimbold & W. H. Queen (Eds.) Ecology of Halophytes. Academic Press. New York. xiv + 605 pp.
- Voss, Edward G. Michigan Flora. 1996. Part III. Dicots (Pyrolaceae- Compositae). Cranbrook Institute of Science Bulletin 61 and University of Michigan Herbarium, Ann Arbor.
- Zander, Richard H. & Gary J. Pierce. 1979. Flora of the Niagara frontier Region. Second Supplement and Checklist. Bull. Buffalo Soc. of Nat. Sci. Vol.16. Buffalo, New York.
- Zenkert, Charles A. 1934. Flora of the Niagara Frontier Region. Bull. of the Buff. Soc. of Nat. Sci. Vol.16. Buffalo, New York.
- Zenkert, C. A. & R. H. Zander. 1975. Flora of the Niagara Frontier Region, Supplement. Vol. 16. Bull. of the Buffalo Soc. of Nat. Sci., Buffalo, N.Y.

Botany Quiz

Ronald Koch

Can you name these plants that you might see on a nature walk? Answers are on page 10.

1. Once dead tops were used to get wool fibers going in one direction so they could be spun, then woven.
2. The leaves resemble the teeth of a lion. Before growing a flower stalk, the leafy rosettes are used in Europe as salad greens. Alternating rows of flower and sugar with water begin the making of tasty wine.
3. A very common plant from the edges of lakes and ponds, the root tips are edible and the pollen can be gathered and used to make pancakes.
4. Cheektowaga means land of the _____.
5. A tree with large leaves that are shaped like Valentine hearts with small teeth on the edges. The Hodenosaunee (Iroquois) carved their "false faces" from the wood, which carves very well.
6. A tree which is a source of delicious sweet syrup in early spring.
7. It is the weed from which, after much horticultural work, we now have carrots. This wild carrot (not at all edible) is better known as _____.
8. This very tall plant grows in wet spots. The Pilgrim Fathers roofed their huts with bundles of it. Our D.E.C once called it "Thruway Grass."
9. A deep woods plant, the flower resembles a man in a covered enclosure. It's also sometimes called Indian Turnip, but never eat the roots until they've been cooked for at least thirty minutes in constantly boiling water. Take no chances or you can kill yourself!
10. A tree with flowers that resemble a plant grown in gardens that flowers in early spring. It's also called yellow or _____ poplar.
11. A woodland flower with many paired leaves opposite one another along the stem. Flowers grow under these leaf pairs. It's named under a biblical king who used a device to put his imprimatur on documents. Raised circular spots on the roots resemble this tool.
12. A tree that releases large strips of bark from its trunk.
13. A tall shrub with three differently shaped leaves, simple, mitten-shaped or three-lobed. Native people sometimes sell plant roots from which a tasty tea can be made.
14. One species was used to cover the framework of canoes; another, to make a tasty soda pop; still another has a bark, which when dried, is a good fire starter.
15. Often, the lower branches of this evergreen tree are dead. Gathered bunches are great fire-starters. The needles are small and flat, with two parallel lines on the underside.
16. A small woodland shrub with variable-sized leaves. If you pluck a very small branchlet you will know how it got its name.
17. Two species cause lots of sneezing in the fall. One is usually less than a foot tall. The other can reach to a height of four feet. The leaves of the first are finely divided like those of Dusty Miller. The leaves of the second have three pointed lobes at the tip.
18. A woodland plant with one or two umbrella-like leaves. The fruit grows under the double leaves; it ripens in mid-summer. When ripe, the fruit is yellowish-white, soft and edible (spit out the seeds or swallow them without chewing them.)
19. Monarch butterflies love this plant. Young shoots only eight to ten inches tall can be boiled and eaten. The flower buds in terminal clusters can be plucked and eaten raw in salads; they taste nutty. And the pods, when only half size can be boiled and eaten. The outer "bark" from the stem can be twisted into very strong twine.
20. This umbrella-shaped tree was almost wiped out by a disease about forty years ago. The simple leaves are serrated with lop-sided bottoms.

On This and That

Nomination of NFBS Officers

At the annual dinner meeting in April, a slate of candidates for Niagara Frontier Botanical Society offices was nominated. The Nominees are Jason Sorens for President Elect, Joanne Schlegel for Vice President, Judith Hoffman for Secretary, Hermann Emmert for Treasurer as well as Carol Sweeney and David Spiering for Directors. David Spiering is already on the Board and is being nominated for a second term. Edward Fuchs will continue to serve as President for one more year. Elizabeth Wells, Past President is leaving the board. The election will take place at the May Meeting, where nominations may also be made from the floor.

Answers to Botany Quiz on page 9

1. Teasel
2. Dandelion
3. Cattail
4. Crabapple
5. Basswood
6. Sugar Maple
7. Queen Anne's Lace
8. Phragmites
9. Jack in the Pulpit
10. Tulip Tree
11. Solomon's Seal
12. Shagbark Hickory
13. Sassafras
14. Birch
15. Hemlock
16. Spicebush
17. Ragweed
18. Indian Cucumber Root Sycamore
19. Milkweed
20. American Elm

2011 Invocation

It has become annual tradition. At our April dinner we start the evening with a reflection on the mystery of nature, one of Darrell Young's original creations. Unfortunately, this year there was some confusion at the beginning of the program and Darrell never had the chance to read his invocation for us. We print it here with appreciation.

**It was a dark and gloomy day recently when we returned home.
The ground was covered with a light layer of snow but,
The roads were clear although wet.
Almost precisely in the middle of the road,
Huddled up against the cold and damp,
Was an early spring robin.
A forlorn sight He made, because as we all know, all Spring robins are male.
I felt sorry for the little bugger for I thought,
You will never find a mate as the ladies, would I am sure,
Prefer something far more palatial than a strip of asphalt upon which to build a nest.**

**The seasons transform themselves, one into another.
Sometimes quickly, sometimes imperceptibly'
But always marching onward, as to a beat that we cannot hear.
And, at their peak, are always marked by snow and ice, colorful flowers,
Leafy trees and brilliant colors of reds and yellows.**

**The seasons mark the beginnings and the ends
Of life and death or restful hibernation, but always of change.
And sometimes our journeys begin too early,
And like the little Robin, we find ourselves not fully prepared.
Still, like him, we shall persevere and while worms may not be our forte,
We shall wish him well.**

**And tonight we shall enjoy the warmth, comfort and companionship of our fellow botanists
As we enjoy our evening repast. May peace and harmony be with each of you.**

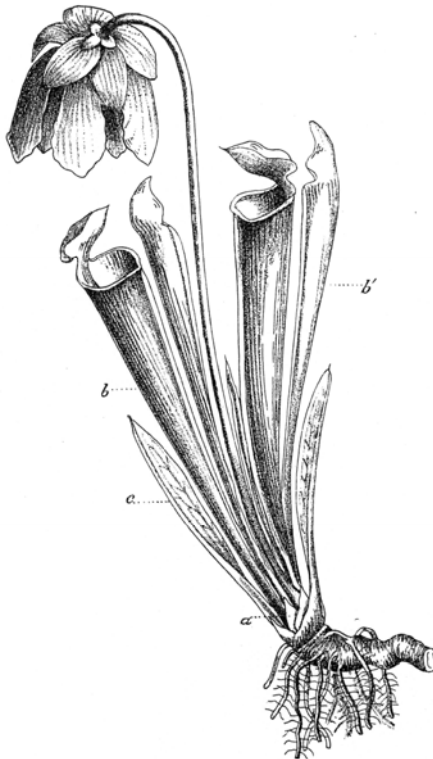
**Tallahassee to Fackahatchee:
On the Road with the Long Island Botanical Society**
Joanne Schlegel

Many will remember our NFBS field trip to Long Island in August 2007. On that trip members of the Long Island Botanical Society, including President Eric Lamont and his wife Mary Laura, were our consummate hosts and guides. With unfailing enthusiasm they led us through the interdunal swales and beaches of Fire Island National Seashore, the oak woods of Orient Beach State Park and numerous other sites, providing us all with an experience we will never forget.

This year members of the Long Island Botanical Society are currently marking their 25th anniversary, and in celebration of that event have just completed a 10-day field trip to Florida. I was privileged to join them on that trip.

The group flew from LaGuardia to Tallahassee in the Florida Panhandle on March 30. From that point on, three rental minivans provided transportation. First stop: nearby Torreya State Park. Here we saw Torrey Pines, *Torreya taxifolia*, which resemble yews. They are now one of the rarest trees on earth thanks to the invasion of a fungus which has reduced their number in the wild to about 200. We also saw actual yews (Florida Yew or *Taxus floridana*), also listed as federally endangered. This species is more tree-like than our local shrubby yew species (*Taxus canadensis*). Because the park is located at the north end of the state we also saw many trees familiar to us northerners, including Beech, White Oak, White Ash, Pignut Hickory, Tulip Tree, and Ironwood.

While in the Florida Panhandle we stopped at two magnificent bogs where we feasted our eyes on a plethora of carnivorous plants, including 3 species of sundews, 2 species of butterworts, and 2 species of pitcher plants with *Sarracenia flava* actually in flower. All this plus *Calopogon barbatus*, a beautiful bog orchid which blooms only after fire. Later that day, on the drive south, our guide led us to an off-trail stand of Corkwood (*Leitneria floridana*) in St. Mark's Wildlife Refuge. This weird looking shrub is the only member of the family Leitneriaceae and is listed as federally endangered.



Yellow Pitcher Plant *Sarracenia flava*

On April 2 we began driving southward in earnest. A day was spent at two contrasting sites in central Florida south of Orlando. In the morning we visited Highland Hammock State Park, a moist to wet climax forest where we saw

1000-year-old Live Oaks (*Quercus virginiana*), our first Bald Cypressess of the trip, and many other new plants including Marlberry (*Ardisia*), native swallowwort (*Cynanchum*), and Shoestring Fern. Then we drove to Archbold Biological Station to visit a dry “scrub community.” Here life has evolved along a spine of ancient nutrient-poor sand dunes. Plants seen included 4 species of shrubby oaks, Sand Pine (*Pinus clausa*), and a number of endemics. Highlight: seeing a federally-threatened Gopher Tortoise!

Then it was on to Fort Myers in southwest Florida where we stayed 5 nights. The days were spent exploring three renowned sites in the area: Sanibel Island, Fakahatchee Strand State Park, and Corkscrew Swamp. Sanibel’s highlights included seeing all 4 species of North American mangroves, and visiting a shell mound created by Calusa Indians centuries ago and containing unique species. In Fakahatchee and Corkscrew, at the edge of Everglades National Park, the focus was on the many epiphytic orchids and bromeliads. We were lucky enough to see a number in bloom, including a stunning Red Lady’s Tresses (*Sacoila lanceolata*) and a massive Cowhorn Orchid (*Cyrtopodium punctatum*.) We were kept very busy learning many other new species such as Pond Apple, White Stopper, and Strangler Fig.

Footnote: A personal highlight was being able to see NFBS members Phyllis and Glen Gresham on Sanibel Island. Phyllis led me on a wonderful tour which included a local native plant nursery, her own property which she has beautifully landscaped with native plants, and the town’s native-plant garden. The Greshams send greetings to all, and hope to see us in WNY this August.

GENERAL MEETINGS

General meetings are normally held at 7:30 PM on the 2nd Tuesday of each month, September through May at the Harlem Rd. Community Center, Harlem Rd at Lincoln St (a quarter mile south of Main St) in Snyder, NY. The meetings are open to the public and free of Charge.

Tuesday, May 10, 2011, Ed Fuchs will have a slide presentation from the recently donated collection of Norm Zika. Norm, a charter NFBS member, had a great love of our local flora and loved to share his knowledge in many classes and presentations

FIELD TRIPS – SUMMER 2011

Field trips are coordinated by Joanne Schlegel, 835-6042. If you plan on participating in a trip, please contact trip leader to let the leader know you are coming. Leave your phone number, in case of a scheduling change. Ideas for trips are always appreciated, as is offering to lead a field trip. GUESTS ARE ALWAYS WELCOME.

Saturday, May 7, 2011: Turkey Point Provincial Park (near Long Point in Ontario): Meet 8:30 a.m. at Front Park adjacent to the Peace Bridge. Bring passports and lunch. This will be a trip to see rare Bird’s-foot Violets in flower. This trip is tentative. If a phone call ahead to the park finds that the violets are not yet in bloom, Albert Garofalo (our speaker last January) will lead us to an alternate site for the day. Leader: Joanne Schlegel, 835-6042.

Saturday, May 14, 2011: Pfeiffer Nature Center, Portville (east of Olean): Meet at 8:30 in East Aurora, behind the movie theater on Main St. Our destination encompasses 650 acres in southern Cattaraugus County, and includes 9 miles of hiking trails. Leader: Michael Siuta, 822-2544.

Saturday, May 21, 2011: Tom Draves Arboretum, Darien: Meet at 9:00 a.m. at I-90 Park-and-Ride on Transit Road. This privately-owned arboretum encompasses 25 acres and includes 500 trees acquired from such sources as the National Arboretum & the Holden Arboretum. We will see Willowleaf Magnolia, Bigleaf Dogwood, Japanese Oak, Winged Elm, Yellowwood, Carolina Allspice, Korean Mountain Ash, and many other rarities. Mr. Draves, who is a 3rd-generation professional arborist, will act as our guide. Walking will include some hills & steps. Bring lunch. Leader: Joanne Schlegel, 835-6042.



Friday-Monday, June 10-13, 2011: Bruce Peninsula in Ontario. We will stay in Tobermory at the tip of the peninsula, explore Bruce Peninsula National Park, and take the ferry to Flowerpot Island. The Yellow Lady's Slipper orchids should be in full bloom, as well as such rarities as Dwarf Lake Iris and Lakeside Daisy (*Hymenoxys herbacea*). To reserve your place, call Joanne Schlegel by May 15 at 835-6042.

Saturday, June 25, 2011: West Seneca Oxbow Preserve. Meet at 9:00 a.m. Directions: East on Clinton, cross Harlem and continue ½ mile to where French Road comes in on left at "Vinny's". Look for driveway and open gate on right directly across from Vinny's and second driveway past "Petals & Pines" Nursery. Drive in to where you see parked cars. Leader: Dave Spiering 548-6846. Our on-site guide will be Margaret Wooster from Buffalo Niagara River Keepers.

Saturday, July 9: Brown Road & Conewango Swamp area, Cattaraugus Co. Easy roadside walking interspersed with short drives. Bring lunch. Leader: Dick Rosche. E-mail him at: drosche2@verizon.net for time and meeting place.

Sunday, July 30, and Monday, August 1, 2011: Bergen Swamp and Letchworth State Park. Sponsored by New York Flora Association, NFBS members welcome. Guides Steve Daniel and Doug Bassett. Call Ed Fuchs for times and meeting places, 598-1307.

Sunday, August 7, 2011: Mendon Ponds (south of Rochester). Our guide will be Steve Daniel who has led NYFA field trips here and knows the site intimately. Bring lunch and plan on spending most of the day. Call Joanne Schlegel for time and meeting place, 835-6042.

Saturday, September 17, 2011: Aster & Goldenrod Workshop led by John Semple. Sponsored by New York Flora Association. Details in next issue of *Clintonia*.

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Niagara Frontier Botanical Society
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Common Dandelion, *Taraxacum officinale*