Illinois
Department of
Natural Resources
Division of Natural Heritage
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RECEIVED
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MEMO

Date: March 8, 2005

To: Kathy Barker
IDNR - ORC operations
One Natural Resources Way
Spring field, IL 62702-1271

From: Debra Nelson
IDNR Natural Heritage Biologist
8916 Wilmot Road
Spring Grove, IL 60081

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Subject: Wildlife Preservation Fund Grant 04-L34W - Volo Bog SNA

I have enclosed the signed request for reimbursement for threatened and endangered plant species survey work at Volo Bog State Natural Area completed by Margo Milde as contracted. This packet also contains maps, hard copies of all data and reports, and a floppy disk containing all data and reports in MS Word and excel format as received from Ms. Milde.

Hard copies of the data, maps and reports are on file here in my office at Chain O'Lakes. They have also been sent to the Natural Heritage Database manager, Tara Kieninger. The spreadsheets containing the element occurrence data has also been provided to the database staff (Jeanie Barnes), electronically via e-mail. I will also provide one copy of the entire packet to be held at the site by the site interpreter, Stacy Iwanicki.

Ms. Milde did some exceptional work in areas of the park that are very difficult to access and navigate due to thick vegetation, unstable floating mat, and poison sumac. She spent many more hours than anticipated and found, mapped and GPS'ed many populations of state listed species that had not been verified for over 10 years. One species not previously documented in the data base (*Utricularia intermedia*), was also found at the site during her surveys.

Please let me know if there is anything else needed to process the request for reimbursement.

THANKS!

Volo Bog 2003 – Days in the field – Margo Milde
Feb 15 (approx) – winter bog walk with Deb Nelson
June 29 – boardwalk
July 4 – boardwalk
Aug 28 – Volo Pond and boardwalk, including kayak
Aug 29 – Pistakee Bog sedge meadow
Sept 10 – Brandenburg Bog and S Sedge meadow
Sept 27 – Brandenburg Bog E and nearby old field/brush edge
Sept 29 - Pistakee Bog NW corner, including "2nd sedge meadow" south of stables
Oct 1 – Pistakee Bog – walk from Bat Barn to Visitor Center through bog center
Oct 4 – Volo Bog, berm N of Visitor Center and nearby areas of Tamarack View trail
Oct 22 – Brandenburg Bog, SE portion
Oct 24 – N Brandenburg Bog, shrub/carr and ruderal areas to N (access from residential street)
Oct 29 – Pond and nearby areas in Mgmt unit 13 (across road from visitor center)
Nov 1 – Mesic woods on slope S of Brandenburg Lake, old field in Mgmt unit #10
Nov 29 – Inventoried recently cleared area SW of Pistakee Bog (N Wilson tract)
Nov 30 – Woods S of bat barn; old field, pine plantation, and degraded woods in units # 26 and 27
Dec 27 – N Wilson tract, S edge of Pistakee Bog (give info to Deb for management work)
Dec 28 – Tamarack View Trail – esp. brush edges next to moat and long plastic boardwalk

Volo Bog 2004 – Days in the field – Margo Milde
Feb 12 – Tamarack View Trail, general
Feb 13 – Winter Tamarack Zone/Low Shrub Zone survey, Volo Bog
Feb 14 – Survey marsh, shrub-carr S of Volo Bog
Feb 16 – Winter Tamarack Zone/Low Shrub Zone survey, Volo Bog
Feb 17 – Winter outer marsh survey, Volo Bog
Feb 18 – Winter survey – shrub/carr and marsh SW of Volo Bog, incl. Oak Island
Feb 19 – Winter survey of "dead tamaracks" area N of Volo Bog
Apr 22 – Tamarack View Trail, emphasis on spring ephemerals
Apr 23 – Woods on slope S and SW of Brandenburg Bog
Apr 26 – Wilson Tract, including recently cleared area
May 10 – Sedge meadow SE of Bat Barn and shrub/carr (Pistakee Bog)
May 24 – Volo Bog boardwalk
May 26 – Volo Tamarack View trail and neighboring woodlands, meadows
May 28 – Deerpath Trail (S of Brandenburg Bog) and nearby woods, fields, brush
May 29 – Marshes S, SE, and E of Brandenburg Bog
June 2 – Volo Bog pond survey by kayak
June 3 – Kayak "Bird Blind and berm" marsh
June 4 – S central portion, Brandenburg Bog
June 5 – Marsh edge and meadows NE of Volo Bog
June 7 – Woods S of Bat Barn, and native prairie in N Wilson Tract
June 9 – S and SE Brandenburg Bog

June 29 – N Wilson Tract, Sedge meadow, mesic prairie, wet prairie
July 3 – Volo "biodiversity day, looked at boardwalk plus ruderal areas near Visitor Center for their list!
July 18 – NW and W portion of Pistakee Bog; mesic and wet prairie – Wilson tract; old field NW of Wilson Tract
July 28 – Kayak Brandenburg Lake with Deb Nelson to visit mat (NW corner) and bogy inlet (SW corner)
Sept 11 – Volo Bog boardwalk and Tamarack View Trail (emphasis on long plastic boardwalk on Tamarack View trail for future management activities)

ADDITIONAL:
Separate project funded with Region 2 contractual funds:
Transects through Sedge Meadow SE of Bat Barn (July 10) and NE of Long Plastic Boardwalk towards Volo Bog (July 11 2004); additional information used in inventory.

FINAL REPORT
VOLO BOG STATE NATURAL AREA

Grant Title:

"Endangered and threatened plant species at Pistakee Bog and Volo Bog Nature Preserves: location, field verification, and GPS"
Wildlife Preservation Fund, FY04 Large Project Proposal

Completed By:

Margo R. Milde
1206 Raleigh Road
Glenview, IL 60025
Phone (847) 724-4716
Email: mrm1206@yahoo.com

Cost: $3,200

Dates of Project: July 1 2003 – December 31, 2004

IDNR Contact: Debra Nelson, Natural Heritage Biologist, District 8

SUMMARY of FINDINGS:

Species List:

A comprehensive species list was completed for the entire site (see attached spreadsheet, "Volo Species List – VOLO BOG STATE NATURAL AREA"). Information pertaining to population size and locations (for the more uncommon species) was included for each element. Only species observed by me at this site during the period of time covered by this project were included in this list (this list is *not* a compilation of previous lists.) 493 species were found during the project period, of which 378 are native species, and 115 are non-natives. Shorter lists are included separately for species established in the site's prairie restorations, and for introduced plantings.

Illinois Listed Plant Species (Endangered and Threatened):

I found a total of 21 listed plant species on this site during the project period as follows:

Endangered:

Betula alleghaniensis	Yellow Birch
Calla palustris	Water Arum
Calopogon tuberosus	Grass Pink Orchid
Carex canescens var. *disjuncta*	Silvery Sedge
Carex chordorrhiza	Cordroot Sedge
Carex disperma	Shortleaf Sedge
Carex trisperma	Three-seeded Sedge
Cypripedium parviflorum var. *makasin*	Small Yellow Lady's Slipper
Cypripedium reginae	Showy Lady's Slipper

Eriophorum virginicum	Rusty Cotton Grass
Pogonia ophioglossoides	Snake-mouth
Sarracenia purpurea	Pitcher Plant
Schoenoplectus smithii	Smith's Bulrush
Trientalis borealis	Star-flower
Vaccinium corymbosum	Highbush Blueberry
Vaccinium oxycoccos	Small Cranberry

Threatened:

Chamaedaphne calyculata	Leatherleaf
Epilobium strictum	Downy Willow Herb
Larix laricina	Tamarack
Menyanthes trifoliata	Buckbean
Utricularia intermedia	Flat-leaved Bladderwort

Listing and nomenclature for these species is that used by the Illinois Endangered Species Protection Board in their 2004 update. I developed a spreadsheet for each listed species, detailing each occurrence of that species, along with the date found, population estimate, GPS coordinates, habitat, associates, and threats or other observations. These are attached to this correspondence and will be submitted to the Natural Heritage Database in Springfield. GIS mapping was done separately by District Natural Heritage Biologist Deb Nelson and will also be submitted to the Natural Heritage Database in Springfield.

Days in the field:
I spent 18 partial (at least 4 hours) or full days in the field at this site in 2003, and 26 partial or full days in 2004 in the field. (See attached listing, "List of Partial or Full Days in the Field at Volo Bog State Natural Area".) This well exceeds the minimum number of visits required as stated in the project description.

Conclusion:
Although Volo Bog State Natural Area faces threats on many fronts in the upcoming decade, many of its listed and otherwise uncommon plant species still remain. Addidionally, it appears that many of the plant communities are still relatively intact and worthy of future protection and attention.

Should you have any questions, please do not hesitate to contact me.

Sincerely yours,

Margo R Milde
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Glenview, IL 60025
Phone (847) 724-4716
Email: mrm1206@yahoo.com

VOLO BOG SNA **Including Volo Bog State Nature Preserve and Pistakee Bog State Nature Preserve**
Lake and McHenry Counties, Illinois
Comprehensive Site Inventory Dates: 2003 - 2004 By: Margo Milde for WPF Grant 04-L34W

SPECIES NAME	FAMILY	COMMON NAME	COEFFICIENT OF CONSERVATISM	POPULATION SIZE (EST.)	HABITATS	
Acalypha rhomboidea	Euphorbiaceae	Three-seeded mercury	0	Infrequent	Moist woods edge	15
Acer negundo	Aceraceae	Box elder	0	Common	Various, mostly ruderal	throughout
Acer rubrum	Aceraceae	Red maple	7	Infrequent	Tamarack Zone - all three bogs, low woods edge and floating mat - B Lake	2,4,15
Acer saccharinum	Aceraceae	Silver maple	0	Common	Moist edges	throughout
Acer saccharum	Aceraceae	Sugar maple	3	Common	Mesic woodland	throughout
Achillea millefolium	Compositae	Common yarrow, milfoil	-	Occasional	Various, mostly ruderal	throughout
Acnida altissima	Amaranthaceae	Water hemp	0	Infrequent	Ruderal wetlands	14, 15
Agalinis purpurea var. parviflora	Scrophulariaceae	Purple false foxglove	7	Infrequent	Floating mat - Volo Bog and Brandenburg Lake	4, 15
Agrimonia gryposepala	Rosaceae	Tall agrimony	2	Infrequent	Disturbed woodlands, woods edges	1, 4, 9, 10, 20
Agropyron repens	Gramineae	Quack grass	-	Occasional	Old field, ruderal	throughout
Agrostis alba	Gramineae	Redtop grass	-	Abundant	Various, mostly ruderal	throughout
Agrostis alba var. palustris	Gramineae	Creeping bent	10	Infrequent	B and P bogs	4
Agrostis hyemalis	Gramineae	Tickle grass	1	Infrequent	Floating mat - Volo Bog	15
Alisma subcordatum	Alismaceae	Common water plantain	4	Common	Bogs, marshes, sedge meadows	2, 4, 6, 15
Alisma triviale	Alismaceae	Large-flowered water plantain	4	Common	Bogs, marshes, sedge meadows	2, 4, 6, 15
Alliaria petiolata	Cruciferae	Garlic mustard	-	Abundant	Mesic woodland, edges	Throughout
Allium cernuum	Lliaceae	Nodding wild onion	7	Occasional	Prairie, woodland edges	1, 2, 6, 9, 15, 16
Amaranthus powellii	Amaranthaceae	Tall amaranth	-	Occasional	Old field, ruderal	throughout
Ambrosia artemisiifolia var. elatior	Compositae	Common ragweed	0	Abundant	Various, mostly ruderal	throughout
Ambrosia trifida	Compositae	Giant ragweed	0	Common	Ruderal wetlands	throughout
Amphicarpaea bracteata	Leguminosae	Upland hog peanut	4	Occasional	Mesic woodland, edges	14, 20, 9, 11, 12, 16
Amphicarpaea bracteata var. com	Leguminosae	Lowland hog peanut	5	Infrequent	Marsh edges	4, 15
Andropogon gerardii	Gramineae	Big bluestem grass	5	Infrequent	Native prairie	6 (North Wilson tract)
Anemone quinquefolia	Ranunculaceae	Wood anemone	7	Infrequent	Mesic woodland	1, 4 (woodland SW of B. Bog), 2
Anemone virginiana	Ranunculaceae	Thimbleweed	5	Occasional	Mesic woodland	1, 2, 4, 9, 20
Anemonella thalictroides	Ranunculaceae	Rue anemone	7	Infrequent	Mesic sloping woods near bogs	4, 9, 20
Angelica atropurpurea	Umbelliferae	Great angelica	7	Occasional	Sedge meadows, shrub-carr	2
Antennaria plantaginifolia	Compositae	Pussy toes	3	Infrequent	Old field S of Bat Barn, moist meadow W of berm	1, 11
Apocynum cannabinum	Apocynaceae	Indian hemp	4	Infrequent	Old field edge	9
Apocynum sibiricum	Apocynaceae	Prairie Indian hemp, dogbane	2	Occasional	Old field, ruderal	throughout
Arabis laevigata	Cruciferae	Smooth bank cress	5	Infrequent	Moist woods edge	9, 15
Aralia nudicaulis	Araliaceae	Wild sarsaparilla	8	Infrequent	Moist woods on slope near bogs, bogs	4
Arisaema triphyllum	Araceae	Jack-in-the-pulpit	4	Infrequent	Woods on slope S of Brandenburg Lake	4
Aronia prunifolia	Rosaceae	Chokeberry	6	Occasional	Bogs - Tamarack and Tall Shrub Zones	2, 4, 15
Asclepias incarnata	Asclepiadaceae	Swamp milkweed	4	Occasional	Marshes, sedge meadows	2, 4, 15
Asclepias syriaca	Asclepiadaceae	Common milkweed	0	Common	Old field, ruderal, native prairie	1, 6, 11, 12, 16, 17
Asclepias verticillata	Asclepiadaceae	Whorled milkweed	1	Occasional	Dry old field	1, 2 (old field S of Bat Barn)
Asparagus officinalis	Liliaceae	Asparagus	-	Infrequent	Ruderal	15 (Visitor center, shop, garage)
Aster azureus	Compositae	Sky-blue aster	8	Infrequent	Native mesic prairie	6 (North Wilson tract)
Aster borealis	Compositae	Rush aster, Northern bog aster	10	Infrequent	Bog (Low Shrub Zone, Tamarack Zones), Tamarack Zone - P Bog	2, 4, 15
Aster lateriflorus	Compositae	Side-flowering aster	4	Infrequent	Moist woodlands bordering on marshes	4, 15
Aster novae-angliae	Compositae	New England aster	4	Occasional	Marshes, sedge meadows	2, 4, 6, 13, 15
Aster pilosus	Compositae	Hairy aster	0	Abundant	Old field, ruderal	throughout
Aster puniceus	Compositae	Bristly aster	8	Common	Marshes, sedge meadows, bogs	2, 4, 6, 15
Aster puniceus var. firmus	Compositae	Shining aster	7	Occasional	Marshes, sedge meadows, bogs	2, 6
Aster sagittifolius var. drummondii	Compositae	Drummond's aster	2	Infrequent	Mesic woodland	4, 9, 12, 16, 20
Aster simplex	Compositae	Marsh aster, panicled aster	3	Occasional	Moist edges	4, 8
Athyrium filix-femina var. michauxii	Polypodiaceae	Lady fern	8	Rare	Woods on slope S of Brandenburg Lake	4
Barbarea vulgaris	Cruciferae	Winter cress, yellow rocket	-	Common	Old field, ruderal	throughout
Berberis thunbergii	Berberidaceae	Japanese barberry	-	Occasional	Disturbed woodland	throughout
Betula alleghaniensis	Betulaceae	Yellow birch	10	Infrequent	Bog - Tamarack Zone, Tall Shrub Zone	15 (N and NW of Volo pond cent
Betula pumila	Betulaceae	Dwarf birch, bog birch	10	Occasional	Bog (Low Shrub and Tamarack Zones), shrub-carr	2, 4, 6, 15
Bidens cernua	Compositae	Nodding bur marigold	5	Occasional	Bog (Mat, Low Shrub Zones)	2, 4, 15
Bidens comosa	Compositae	Swamp tickseed	5	Occasional	Bog (Mat, Low Shrub Zones), marsh, sedge meadow	2, 4, 6, 15

Bidens connata	Compositae	Purple-stemmed tickseed	5	Occasional	Bog (Mat, Low Shrub Zones), marsh, sedge meadow	2, 4, 6, 15
Bidens coronata	Compositae	Tall swamp marigold	9	Infrequent	Marsh	4, 15
Bidens frondosa	Compositae	Common beggar's ticks	1	Common	Ruderal wetlands	throughout
Boehmeria cylindrica	Urticaceae	False nettle	2	Common	Marshes, sedge meadows, moist woods edges	throughout
Botrychium virginianum	Ophioglossaceae	Rattlesnake fern	6	Infrequent	Sloping moist woods near the bogs	4, 15
Brasenia schreberi	Nymphaeaceae	Water shield	10	Infrequent	Volo pond center	15
Brassica kaber	Cruciferae	Charlock	0	Occasional	Old field, ruderal	throughout
Bromus ciliatus	Gramineae	Fringed brome	10	Infrequent	Marshes, sedge meadows	2, 4, 6, 15
Bromus inermis	Gramineae	Hungarian brome	-	Common	Old field, ruderal	throughout
Bromus japonicus	Gramineae	Japanese chess	-	Infrequent	Old field, ruderal	throughout
Calamagrostis canadensis	Gramineae	Blue joint grass	3	Abundant	Marsh, sedge meadows, shrub-carr	2, 3, 4, 6, 15
Calla palustris	Araceae	Water arum	10	Infrequent	Tall shrub Zone and Tamarack Zone - Volo Bog	15
Calopogon tuberosus	Orchidaceae	Grass pink orchid	10	Rare	Floating mat - Volo pond center	15
Caltha palustris	Ranunculaceae	Marsh marigold	5	Common	Marsh areas bordering bogs	2, 4, 15
Campanula aparinoides	Campanulaceae	Marsh bellflower	8	Occasional	Marshes, sedge meadows, Low Shrub and Mat zones - Volo	2, 4, 15
Capsella bursa-pastoris	Cruciferae	Shepherd's purse	-	Occasional	Ruderal	15
Cardamine bulbosa	Cruciferae	Bulbous cress	6	Occasional	Marshes, sedge meadows, bogs (Tall Shrub and Tamarack Zones)	2, 4
Cardamine pensylvanica	Cruciferae	Pennsylvania bitter cress	4	Occasional	Moist old fields, moist woods edges	4
Carduus nutans	Compositae	Nodding thistle	-	Common	Old field, ruderal	throughout
Carex aquatilis var. altior	Cyperaceae	Long-bracted tussock sedge	5	Infrequent	Sedge meadows S and E of B Bog	4
Carex atherodes	Cyperaceae	Hairy-leaved lake sedge	5	Infrequent	Sedge meadow	6 (North Wilson tract)
Carex bebbii	Cyperaceae	Bebb's oval sedge	6	Occasional	Marshes, sedge meadows	2, 4, 6, 15
Carex bicknellii	Cyperaceae	Copper-shouldered oval sedge	10	Infrequent	Native mesic prairie	6 (North Wilson tract)
Carex blanda	Cyperaceae	Common wood sedge	1	Occasional	Mesic woodlands, woods edge	1, 9, 12, 16, 20
Carex canescens var. disjuncta	Cyperaceae	Gray bog sedge	10	Occasional	Bog (Volo only) - Tall Shrub, Tamarack, and Low Shrub Zones	15 (bog)
Carex cephalophora	Cyperaceae	Short-headed bracted sedge	3	Infrequent	Mesic woodland	9, 12, 16, 20
Carex chordorrhiza	Cyperaceae	Cordroot sedge	10	Rare	Low Shrub Zone - Volo Bog only	15 (bog)
Carex comosa	Cyperaceae	Bristly sedge	5	Common	Marsh, sedge meadows, shrub-carr	2, 5, 15
Carex cristatella	Cyperaceae	Crested oval sedge	4	Common	Marsh, sedge meadows, moist fields	2, 4, 6, 8, 13, 15
Carex disperma	Cyperaceae	Two-seeded sedge	10	Infrequent	Tamarack Zones - bogs	2, 4, 15 - bogs
Carex granularis	Cyperaceae	Pale sedge	4	Occasional	Moist old field, mesic prairie, moist woods edges	2, 4, 6, 8, 15
Carex hystericina	Cyperaceae	Porcupine sedge	5	Occasional	Marsh, sedge meadow, shrub-carr	2, 4, 15
Carex interior	Cyperaceae	Prairie star sedge	10	Infrequent	Tall Shrub and Tamarack Zones - B and P bogs; Low Shrub Zone - Volo	2, 4, 15
Carex lacustris	Cyperaceae	Common lake sedge	6	Occasional	Marsh, sedge meadow, shrub-carr	2, 4, 15
Carex lasiocarpa var. americana	Cyperaceae	Narrow-leaved woolly sedge	10	Infrequent	Tamarack and Low Shrub Zones - bogs; sedge meadows	2, 4, 15
Carex leptalea	Cyperaceae	Slender sedge	10	Occasional	Tall Shrub, Tamarack, and Low Shrub Zones - bogs	2, 4, 15
Carex normalis	Cyperaceae	Spreading oval sedge	5	Infrequent	Woods edges	9, 12, 16, 20
Carex pellita	Cyperaceae	Broad-leaved woolly sedge	4	Occasional	Marshes, sedge meadows, moist old fields	2, 4, 6, 8, 13, 15
Carex pensylvanica	Cyperaceae	Common oak sedge	5	Occasional	Mesic woods, woods edges	9, 11, 12, 16, 20
Carex radiata	Cyperaceae	Straight-styled wood sedge	6	Infrequent	Mesic woodland	12, 16, 20
Carex rosea	Cyperaceae	Curly-styled wood sedge	4	Infrequent	Mesic woodland	12, 16, 20
Carex sartwellii	Cyperaceae	Running marsh sedge	6	Occasional	Sedge meadows, Wet prairie	6 (North Wilson tract)
Carex scoparia	Cyperaceae	Lance-fruited oval sedge	7	Rare	Floating mat - Volo Bog	15
Carex sparganioides	Cyperaceae	Loose-headed bracted sedge	3	Infrequent	Mesic woods N of Volo Bog	12, 15
Carex sterilis	Cyperaceae	Fen star sedge	10	Rare	Floating Mat - Volo Bog	15
Carex stipata	Cyperaceae	Common fox sedge	3	Common	All wetlands, including bogs	throughout
Carex stricta	Cyperaceae	Common tussock sedge	5	Occasional	Marshes, sedge meadows	2, 4, 6, 15
Carex trisperma	Cyperaceae	Three-seeded bog sedge	10	Infrequent	Tall Shrub, Tamarack, and Low Shrub Zones - bogs	2, 4, 15
Carex vulpinoidea	Cyperaceae	Brown fox sedge	2	Occasional	Disturbed moist areas, roadside ditches	throughout
Carya ovata	Juglandaceae	Shagbark hickory	5	Occasional	Mesic and dry woods	1, 4, 9, 12, 16, 20
Catalpa speciosa	Bignoniaceae	Hardy catalpa	-	Infrequent	Woods edges	4, 7
Celastrus orbiculatus	Celastraceae	Oriental bittersweet	-	Common	Woods and woods edges	throughout
Celtis occidentalis	Ulmaceae	Hackberry	3	Occasional	Moist woods edges	2, 4, 15
Cerastium vulgatum	Caryophyllaceae	Mouse-ear chickweed	-	Occasional	Ruderal areas, dry old fields	1, 2 (Bat Barn), 15
Ceratophyllum demersum	Ceratophyllaceae	Coontail, hornwort	5	Occasional	Marsh moat around Volo Bog	15
Chamaedaphne calyculata	Ericaceae	Leatherleaf	10	Occasional	Low Shrub Zone - Volo Bog only	15
Chelone glabra	Scrophulariaceae	Turtlehead	8	Infrequent	Marshes, sedge meadows, shrub-carr	2, 4
Chenopodium album	Chenopodiaceae	Lamb's quarters	-	Occasional	Ruderal areas, dry old fields	1, 2 (Bat barn), 15
Cichorium intybus	Compositae	Chicory	-	Common	Ruderal	throughout

Cicuta bulbifera	Umbelliferae	Bulblet-bearing water hemlock	8	Occasional	Marshes, sedge meadows	2, 4, 15
Cicuta maculata	Umbelliferae	Spotted water hemlock	6	Occasional	Sedge meadows, wet prairie, moist old field	2, 4, 6, 7, 8, 15
Cinna arundinacea	Gramineae	Common wood reed grass	5	Occasional	Mesic woodlands, woods edge	4, 9, 15, 16
Circaea lutetiana var. canadensis	Onagraceae	Enchanter's nightshade	1	Common	Disturbed woodland and woods edges	throughout
Cirsium arvense	Compositae	Field thistle, Canada thistle	-	Common	Ruderal areas, dry old fields	throughout
Cirsium muticum	Compositae	Swamp thistle	10	Occasional	Marshes, sedge meadows, shrub-carr	2, 4, 6, 15
Cirsium vulgare	Compositae	Bull thistle	-	Occasional	Ruderal, dry old fields	throughout
Comandra umbellata	Santalaceae	Bastard toadflax	7	Infrequent	Native mesic prairie	6 (North Wilson tract)
Convallaria majalis	Liliaceae	European lily-of-the-valley	-	Occasional	Disturbed woodland (W of P Bog), P and B Bogs	1, 2, 4, 6
Convolvulus arvensis	Convolvulaceae	Field bindweed	-	Common	Ruderal areas, dry old fields	throughout
Convolvulus sepium	Convolvulaceae	Hedge bindweed	1	Common	Disturbed moist areas, marsh edges, sedge meadows	2, 4, 6, 15
Cornus obliqua	Cornaceae	Blue-fruited dogwood	6	Common	Shrub-carr, marsh edges, and Tall Shrub Zone in bogs	2, 4, 6, 15
Cornus racemosa	Cornaceae	Gray dogwood	1	Common	Disturbed woodland and woods edges	throughout
Cornus stolonifera	Cornaceae	Red-osier dogwood	6	Common	Shrub-carr, marsh edges, and Tall Shrub Zone in bogs	2, 4, 5, 15
Coronilla varia	Leguminosae	Crown vetch	-	Occasional	Ruderal areas, dry old fields	throughout
Corylus americana	Betulaceae	American hazelnut	5	Occasional	Dry woods, woods edges; also Tall Shrub Zone in B Bog	4, 11, 12
Cryptotaenia canadensis	Umbelliferae	Honewort	2	Infrequent	Disturbed woods S of Bat Barn	1
Cuscuta gronovii	Convolvulaceae	Common dodder	4	Common	Marshes, sedge meadows, wet prairie	2, 4, 6, 15
Cyperus ferruginescens	Cyperaceae	Rusty nut sedge	2	Infrequent	Marsh moat - Volo Bog, floating mat- Volo Pond Center; dist. moist areas	15
Cyperus rivularis	Cyperaceae	Brook nut sedge	4	Infrequent	Floating mat - Volo pond center	15
Cyperus strigosus	Cyperaceae	Long-scaled nut sedge	1	Occasional	Marsh edges; floating mat - Volo Bog	2, 4, 15
Cypripedium parviflorum var. make	Orchidaceae	Small yellow lady's slipper	10	Infrequent	Tamarack and Tall Shrub Zones - B Bog	4
Cypripedium reginae	Orchidaceae	Showy lady's slipper	10	Infrequent	Tamarack and Tall Shrub Zones - B and P Bogs	2, 4
Dactylis glomerata	Gramineae	Orchard grass	-	Occasional	Ruderal	throughout
Daucus carota	Umbelliferae	Queen Anne's lace	-	Common	Ruderal, dry old fields	throughout
Decodon verticillatus	Lythraceae	Swamp loosestrife	8	Infrequent	Marsh moat NW of Volo Bog; floating mat - Brandenburg Lake	4, 15
Desmodium glutinosum	Leguminosae	Pointed tick trefoil	5	Occasional	Dry woods, woods edges	1, 9, 12, 16
Dianthus armeria	Caryophyllaceae	Deptford pink	-	Occasional	Ruderal, dry old fields	throughout
Digitaria ischaemum	Gramineae	Smooth crab grass	-	Occasional	Ruderal	throughout
Digitaria sanguinalis	Gramineae	Hairy crab grass	-	Occasional	Ruderal	throughout
Dioscorea villosa	Dioscoreaceae	Wild yam	7	Infrequent	Woods S of Brandenburg Lake	4
Dodecatheon meadia	Primulaceae	Shooting star	6	Occasional	Mesic open wood, edges	4, 9, 12
Dryopteris cristata	Polypodiaceae	Crested wood fern	10	Infrequent	Tamarack and Tall Shrub Zones - all three bogs	2, 4, 15
Dryopteris spinulosa	Polypodiaceae	Spinulose shield fern	8	Infrequent	Tamarack and Tall Shrub Zones - all three bogs, low woods	2, 4, 15
Dryopteris thelypteris var. pubesc	Polypodiaceae	Marsh shield fern	6	Common	Marshes, sedge meadows, Shrub-carr, all Bog Zones	2, 6, 4, 15
Duchesnea indica	Rosaceae	Indian strawberry	-	Occasional	Ruderal, dry old fields	throughout
Dulichium arundinaceum	Cyperaceae	Three-way sedge	9	Infrequent	Low Shrub Zone and Floating Mat - Volo Bog; "2nd Sedge Meadow" - P Bog	2, 15
Echinochloa crusgalli	Gramineae	Barnyard grass	0	Infrequent	Low shrub zone, Volo pond and moat edges	15
Echinocystis lobata	Cucurbitaceae	Wild cucumber	5	Occasional	Marsh and moat edges	2, 4, 15
Elaeagnus umbellata	Elaeagnaceae	Autumn olive	-	Occasional	Ruderal, dry old fields	throughout
Eleocharis acicularis	Cyperaceae	Needle spike rush	2	Occasional	Marshes, Floating mats (Volo and B bogs), Tamarack Zone (P Bog)	2, 4, 15
Eleocharis elliptica	Cyperaceae	Golden-seeded spike rush	8	Infrequent	Native mesic prairie	6 (North Wilson tract)
Eleocharis erythropoda	Cyperaceae	Red-rooted spike rush	2	Common	Common in all wetlands	2, 4, 6, 15
Eleocharis intermedia	Cyperaceae	Matted spike rush	8	Infrequent	Floating mat - Volo pond center, SW corner - B Lake	4, 15
Eleocharis smallii	Cyperaceae	Marsh spike rush	5	Infrequent	Marsh Zone - Volo Bog	15
Elymus villosus	Gramineae	Silky wild rye	5	Occasional	Mesic and dry woods	1, 20
Epilobium coloratum	Onagraceae	Cinnamon willow herb	3	Common	Common in all wetlands	2, 4, 6, 15
Epilobium leptophyllum	Onagraceae	Fen willow herb	10	Occasional	Marshes, sedge meadows, shrub-carr, Low Shrub Zone of Volo Bog	2, 4, 6, 15
Epilobium strictum	Onagraceae	Downy willow herb	10	Rare	Sedge meadow S of stables; Low Shrub Zone of Volo Bog	2, 15
Equisetum arvense	Equisetaceae	Field horsetail	0	Occasional	Ruderal areas, dry old fields, dry woods edges	throughout
Equisetum x ferrissii	Equisetaceae	Joliet horsetail	2	Occasional	Ruderal	8, 15
Equisetum fluviatile	Equisetaceae	Pipes, water horsetail	7	Common	Marshes, all Volo Bog Zones	2, 4, 15
Equisetum laevigatum	Equisetaceae	Smooth scouring rush	2	Infrequent	Native mesic prairie	6 (North Wilson tract)
Eragrostis pectinacea	Gramineae	Small love grass	0	Infrequent	Ruderal	throughout
Erechtites hieraciifolia	Compositae	Fireweed	2	Occasional	Sedge meadows, marshes W and SW of P Bog	2, 6
Erigeron annuus	Compositae	Annual fleabane	0	Common	Ruderal, dry old fields	throughout
Erigeron canadensis	Compositae	Horseweed	0	Occasional	Ruderal, dry old fields (noted old fields near Bat Barn)	1, 2
Erigeron philadelphicus	Compositae	Philadelphia fleabane, marsh fl	4	Occasional	Marsh edges, sedge meadows, lower areas in mesic woodlands	throughout

Erigeron strigosus	Compositae	Daisy fleabane	5	Infrequent	Old field S of Bat Barn	1
Eriophorum virginicum	Cyperaceae	Rusty cotton grass	10	Infrequent	Low Shrub and Tamarack Zones - Volo Bog	15
Erysimum cheiranthoides	Cruciferae	Wormseed mustard	-	Infrequent	Ruderal, old field, woods edges	15
Euonymus alatus	Celastraceae	Winged euonymus	-	Occasional	Disturbed woodlands	4, 12, 16
Euonymus europaeus	Celastraceae	European spindle tree	-	Infrequent	Ruderal, woods edges	4, 15
Euonymus fortunei	Celastraceae	Winter creeper	-	Infrequent	Disturbed woodlands	12, 16
Eupatorium altissimum	Compositae	Tall boneset	0	Infrequent	Ruderal, dry old fields	throughout
Eupatorium maculatum	Compositae	Spotted Joe Pye weed	4	Common	Marshes, sedge meadows, shrub-carr, floating mats (Volo and B Bogs)	2, 4, 6, 15
Eupatorium perfoliatum	Compositae	Common boneset	4	Occasional	Marshes, floating mats (Volo and B bogs)	2, 4, 15
Eupatorium rugosum	Compositae	White snakeroot	4	Common	Dry woods	9, 12, 16, 20
Eupatorium serotinum	Compositae	Late boneset	0	Infrequent	Lower slope of woods near Volo marsh moat; Oak Island	14, 15, 20
Euphorbia corollata	Euphorbiaceae	Flowering spurge	2	Infrequent	Old field	1
Euphorbia esula	Euphorbiaceae	Leafy spurge	-	Occasional	Ruderal, old field	20, 21, 22
Euphorbia supina	Euphorbiaceae	Spotted creeping spurge	0	Occasional	Ruderal areas	15
Festuca elatior	Gramineae	Tall fescue	-	Occasional	Ruderal, dry old fields	throughout
Festuca obtusa	Gramineae	Nodding fescue	5	Infrequent	Woods S of B Lake	4
Fragaria virginiana	Rosaceae	Wild strawberry	1	Occasional	Moist woods edges, moist fields	throughout
Fraxinus pennsylvanica var. subin	Oleaceae	Green ash	1	Occasional	Disturbed mesic woodlands, marsh edges	throughout
Galium aparine	Rubiaceae	Annual bedstraw, cleavers	1	Common	Disturbed mesic woodlands, marsh edges	throughout
Galium boreale	Rubiaceae	Northern bedstraw	7	Infrequent	Native mesic prairie	6 (North Wilson tract)
Galium concinnum	Rubiaceae	Shining bedstraw	5	Occasional	Dry woods	9, 11, 12, 20
Galium labradoricum	Rubiaceae	Bog bedstraw	10	Infrequent	Sedge meadow	6 (North Wilson tract)
Galium obtusum	Rubiaceae	Wild madder	5	Occasional	Marshes, sedge meadows	2, 4, 6, 15
Galium tinctorium	Rubiaceae	Stiff bedstraw	8	Common	Marshes, sedge meadows	2, 4, 15
Galium trifidum	Rubiaceae	Small bedstraw	10	Infrequent	Marshes, sedge meadows	2, 4, 15
Galium triflorum	Rubiaceae	Sweet-scented bedstraw	5	Common	Mesic woodlands, Tamarack and Tall Shrub Zones - all Bogs	2, 4, 15
Gentiana andrewsii	Gentianaceae	Closed bottle gentian	8	Infrequent	Moist meadow - E end of long plastic boardwalk - Tamarack View trail	18, 20
Geranium maculatum	Geraniaceae	Wild geranium	4	Occasional	Dry woods	9, 11, 12, 20
Geum aleppicum var. strictum	Rosaceae	Yellow avens	7	Occasional	Marshes, sedge meadows, Tamarack Zones - P and B bogs	2, 4, 6
Geum canadense	Rosaceae	White avens, wood avens	1	Common	Mesic and dry woods	1, 4, 9, 11, 12,14, 20
Glechoma hederacea	Labiatae	Creeping Charlie	-	Infrequent	Ruderal	15
Gleditsia triacanthos	Leguminosae	Honey locust	2	Occasional	Woods and woods edges	1, 4, 9, 11, 12, 14, 20
Glyceria striata	Gramineae	Fowl meadow grass	4	Common	Marshes, sedge meadows, lower wooded slopes	throughout
Glycine max	Leguminosae	Soybean	-	Infrequent	Ruderal, old ag fields	7
Gnaphalium obtusifolium	Compositae	Old-field balsam	2	Infrequent	Woods edges	14
Habenaria hyperborea var. hurone	Orchidaceae	Northern bog orchid	10	Infrequent	Tall Shrub and Tamarack Zones - B Bog	4
Habenaria lacera	Orchidaceae	Ragged fringed orchid	10	Rare	Tamarack Zone - Volo Bog	15
Hackelia virginiana	Boraginaceae	Stickseed	0	Occasional	Disturbed woodlands	1, 4, 9, 11, 12, 14, 20
Hedeoma pulegioides	Labiatae	American pennyroyal	3	Occasional	Dry woods, Oak Island	1, 9, 15
Helianthus grosseserratus	Compositae	Sawtooth sunflower	2	Common	Marshes, sedge meadows, disturbed wetlands	2, 4, 6, 15
Helianthus hirsutus	Compositae	Hispid sunflower	5	Occasional	Dry woods edges	4, 8
Hemerocallis fulva	Lliaceae	Orange day lily	-	Infrequent	Ruderal	4 (N), 15
Hepatica americana	Ranunculaceae	Round-lobed hepatica	9	Rare	Upper wooded slopes S of B Bog	4
Hesperis matronalis	Cruciferae	Dame's rocket	-	Common	Ruderal, disturbed woodlands	throughout
Heuchera richardsonii	Saxifragaceae	Prairie alum root	8	Infrequent	Native mesic prairie	6 (North Wilson tract)
Hibiscus trionum	Malvaceae	Flower-of-an-hour	-	Infrequent	Ruderal	15
Hieracium caespitosum	Compositae	Field hawkweed	-	Occasional	Ruderal, old field	15, 6
Hordeum jubatum	Gramineae	Squirrel-tail grass	-	Occasional	Ruderal	15
Hypericum majus	Hypericaceae	Large St. Johnswort	6	Infrequent	Marsh moat NW of Volo Bog	15
Hypericum perforatum	Hypericaceae	Common St. John's wort	-	Occasional	Ruderal, old field	1, 6, 11, 12, 16
Hypericum virginicum var. fraseri	Hypericaceae	Marsh St. John's wort	8	Occasional	Low Shrub and Floating Mat zones - Volo Bog; NW floating mat - B Lake; Sedge Mea	2, 4, 15
Hypoxis hirsuta	Amaryllidaceae	Yellow star grass	9	Infrequent	Moist meadow S of Volo Bog	15 (long plastic boardwalk)
Hystrix patula	Gramineae	Bottlebrush grass	5	Occasional	Mesic woodlands	1, 4, 20
Ilex verticillata	Aquifoliaceae	Michigan holly, winterberry	9	Common	Tall Shrub Zones - all three bogs	2, 4, 15
Impatiens capensis	Balsaminaceae	Orange jewelweed, spotted tou	3	Common	Marshes, sedge meadows, mesic woodlands, all bog zones	throughout
Iris virginica var. shrevei	Iridaceae	Blue flag	5	Occasional	Marshes	2, 4, 15
Juglans nigra	Juglandaceae	Black walnut	5	Occasional	Dry woods edges	1, 3, 12, 14
Juncus acuminatus	Juncaceae	Sharp-fruited rush	6	Infrequent	Floating mat - Volo pond center	15

Juncus dudleyi	Juncaceae	Dudley's rush	4	Common	Sedge meadows, native mesic prairie, moist old fields	throughout
Juncus nodosus	Juncaceae	Joint rush	6	Infrequent	SW B Lake, moist meadow by long plastic boardwalk E of Volo Bog	4, 15
Juncus tenuis	Juncaceae	Path rush	0	Common	Disturbed mesic woodlands, ruderal areas	throughout
Juncus torreyi	Juncaceae	Torrey's rush	4	Occasional	Marshes, disturbed wetlands	2, 4, 15
Juniperus virginiana var. crebra	Pinaceae	Red cedar	2	Occasional	Ruderal, dry old fields	1, 6, 11, 12, 14
Lactuca biennis	Compositae	Tall blue lettuce	4	Infrequent	Moist woods edges	4, 14
Lactuca canadensis	Compositae	Wild lettuce	2	Infrequent	Moist woods edges	4
Lactuca serriola	Compositae	Prickly lettuce	-	Occasional	Ruderal	15
Lamium amplexicaule	Labiatae	Dead nettle, henbit	-	Infrequent	Ruderal	1
Larix laricina	Pinaceae	Tamarack, American larch	10	Common	Tamarack Zones - all three bogs	2, 4, 15
Lathyrus palustris	Leguminosae	Winged marsh vetchling	8	Occasional	Marshes, sedge meadows	2, 4, 6
Lathyrus palustris var. myrtifolius	Leguminosae	Marsh vetchling	6	Occasional	Marshes, sedge meadows	2, 4, 6
Leersia oryzoides	Gramineae	Rice cut grass	4	Common	Marshes	2, 4, 6
Lemna minor	Lemnaceae	Small duckweed	5	Abundant	Present in all wetland habitats	2, 4, 13, 15
Lemna trisulca	Lemnaceae	Forked duckweed	7	Infrequent	Marsh moat - Volo Bog	15
Leonurus cardiaca	Labiatae	Motherwort	-	Occasional	Ruderal	throughout
Lepidium campestre	Cruciferae	Field cress	-	Occasional	Ruderal, old field	throughout
Lepidium densiflorum	Cruciferae	Small peppercress	-	Occasional	Ruderal	throughout
Lepidium virginicum	Cruciferae	Common peppergrass	0	Infrequent	Ruderal, old field	8
Ligustrum vulgare	Oleaceae	Common privet	-	Infrequent	Ruderal	15
Lilium michiganense	Lliaceae	Michigan lily, turk's cap lily	6	Rare	Native mesic prairie	6 (North Wilson tract)
Linaria vulgaris	Scrophulariaceae	Butter-and-eggs, toadflax	-	Occasional	Ruderal	15
Liparis loeselii	Orchidaceae	Green twayblade	7	Infrequent	Tall Shrub Zones - all three bogs, sedge meadows	2, 4, 6, 15
Lithospermum canescens	Boraginaceae	Hoary puccoon	8	Infrequent	Native mesic prairie	6 (North Wilson tract)
Lobelia siphilitica	Lobeliaceae	Great blue lobelia	7	Occasional	Marsh edges, shrub-carr, Tall Shrub Zone - all three bogs	2, 4, 6, 15
Lobelia spicata	Lobeliaceae	Pale spiked lobelia	6	Infrequent	Native mesic prairie, moist meadows	6 (North Wilson tract), 14
Lonicera x bella	Caprifoliaceae	Showy fly honeysuckle	-	Common	Disturbed woodlands	throughout
Lonicera maackii	Caprifoliaceae	Amur honeysuckle	-	Occasional	Disturbed woodlands, woods edges	12, 16
Lotus corniculatus	Leguminosae	Bird's foot trefoil	-	Infrequent	Ruderal	16
Lychnis alba	Caryophyllaceae	White campion	-	Common	Ruderal	throughout
Lycopus americanus	Labiatae	Common water horehound	5	Common	Marshes, sedge meadows	2, 4, 6, 15
Lycopus uniflorus	Labiatae	Northern bugle weed	7	Common	Marshes, sedge meadows, all Bog Zones	2, 4, 6, 15
Lysimachia quadriflora	Primulaceae	Narrow-leaved loosestrife	9	Infrequent	Native mesic prairie; moist meadow by long plastic boardwalk E of Volo	6 (North Wilson tract), 15
Lysimachia terrestris	Primulaceae	Swamp candles	8	Rare	Floating mat - Volo pond center	15
Lysimachia thyrsiflora	Primulaceae	Tufted loosestrife	9	Common	Marshes, all Volo, P, and B Bog Zones	2, 4, 15
Lythrum alatum	Lythraceae	Winged loosestrife	7	Infrequent	Native mesic prairie	6 (North Wilson tract)
Lythrum salicaria	Lythraceae	Purple loosestrife	-	Common	All wetlands, including bogs	throughout
Malus baccata	Rosaceae	Siberian crab	-	Infrequent	Woods edges	4, 10
Malus pumila	Rosaceae	Apple	-	Occasional	Ruderal	throughout
Malva neglecta	Malvaceae	Common mallow	-	Infrequent	Ruderal	15
Matricaria matricarioides	Compositae	Pineapple weed	-	Infrequent	Ruderal	throughout
Medicago lupulina	Leguminosae	Black medick	-	Common	Ruderal, old field	throughout
Medicago sativa	Leguminosae	Alfalfa	-	Occasional	Ruderal, old field	throughout
Melilotus alba	Leguminosae	White sweet clover	-	Abundant	Ruderal, old field	throughout
Melilotus officinalis	Leguminosae	Yellow sweet clover	-	Abundant	Ruderal, old field	throughout
Mentha arvensis var. villosa	Labiatae	Wild mint	5	Common	Marshes, sedge meadows	2, 4, 6, 15
Menyanthes trifoliata	Gentianaceae	Bogbean, buckbean	10	Infrequent	Low Shrub and Floating Mat Zones - Volo Bog	15
Mimulus ringens	Scrophulariaceae	Monkey flower	6	Occasional	Marshes, sedge meadows	2, 4, 15
Mirabilis nyctaginea	Nyctaginaceae	Wild four o'clock	-	Infrequent	Ruderal	15
Monarda fistulosa	Labiatae	Wild bergamot	4	Infrequent	Native mesic prairie	6 (North Wilson tract)
Monotropa uniflora	Pyrolaceae	Indian pipe	10	Infrequent	Tamarack Zone - Volo Bog	15
Morus alba	Moraceae	White mulberry	-	Occasional	Disturbed woodlands	throughout
Muhlenbergia mexicana	Gramineae	Leafy satin grass	5	Common	Marshes, sedge meadows, lower wooded slopes	2, 4, 6, 15
Muhlenbergia schreberi	Gramineae	Nimblewill	0	Occasional	Ruderal, disturbed woodlands	throughout
Muhlenbergia sylvatica	Gramineae	Woodland satin grass	10	Infrequent	Moist woodland	15 (long plastic boardwalk)
Myriophyllum spicatum	Haloragidaceae	European water milfoil	-	Occasional	Aquatic	15 (Brandenburg Lake)
Nepeta cataria	Labiatae	Catnip	-	Common	Ruderal, old field	throughout
Nuphar variegatum	Nymphaeaceae	Bullhead lily	8	Infrequent	Aquatic - Brandenburg Lake	4

Nymphaea tuberosa	Nymphaeaceae	White water lily	7	Infrequent	Aquatic - Volo pond center, Brandenburg Lake	4, 15
Oenothera biennis	Onagraceae	Common evening primrose	0	Common	Ruderal, old field	throughout
Onoclea sensibilis	Polypodiaceae	Sensitive fern	8	Common	Marshes, sedge meadows, all Bog Zones	2, 4, 6, 15
Osmorhiza claytonii	Umbelliferae	Hairy sweet cicely	3	Occasional	Dry woodlands, woods edges	1, 4, 9, 20
Osmorhiza longistylis	Umbelliferae	Smooth sweet cicely	3	Infrequent	Dry woodlands, woods edges - S of Bat Barn	1
Osmunda cinnamomea	Osmundaceae	Cinnamon fern	7	Infrequent	Tall Shrub and Tamarack Zones - Volo and P Bog	2, 15
Osmunda regalis var. spectabilis	Osmundaceae	Royal fern	8	Infrequent	Tall Shrub and Tamarack zones - Volo Bog and P Bog	2, 15
Oxalis europaea	Oxalidaceae	Tall wood sorrel	0	Occasional	Disturbed mesic woodlands, ruderal areas	throughout
Oxalis stricta	Oxalidaceae	Common wood sorrel	0	Infrequent	Ruderal	15
Oxypolis rigidior	Umbelliferae	Cowbane	7	Common	Marshes, sedge meadows, all Bog Zones	2, 4, 6, 15
Panicum capillare	Gramineae	Old witch grass	1	Common	Ruderal, old field	throughout
Panicum dichotomiflorum	Gramineae	Knee grass	0	Common	Ruderal	throughout
Panicum implicatum	Gramineae	Old-field panic grass	2	Occasional	Ruderal, moist old field, native mesic prairie	throughout
Panicum virgatum	Gramineae	Switch grass	5	Common	Ruderal, old field	throughout
Parthenocissus inserta	Vitaceae	Thicket creeper	1	Occasional	Ruderal, old field	2 (N of Bat Barn)
Parthenocissus quinquefolia	Vitaceae	Virginia creeper	2	Common	Woodlands, wood edges	throughout
Pastinaca sativa	Umbelliferae	Wild parsnip	-	Common	Ruderal, old field	throughout
Pedicularis lanceolata	Scrophulariaceae	Fen betony	9	Infrequent	Marsh	2, 4
Penthorum sedoides	Saxifragaceae	Ditch stonecrop	5	Occasional	Marshes	2, 4, 15
Phalaris arundinacea	Gramineae	Reed canary grass	-	Abundant	All wetlands, including bogs, and all moist open areas	throughout
Phleum pratense	Gramineae	Timothy	-	Occasional	Ruderal, old field	throughout
Phlox pilosa var. fulgida	Polemoniaceae	Prairie phlox	7	Infrequent	Native mesic prairie	6 (North Wilson tract)
Phragmites australis	Gramineae	Common reed	1	Infrequent	Low Shrub and Floating Mat Zones - Volo Bog	15
Phryma leptostachya	Phrymaceae	Lopseed	4	Occasional	Disturbed woodlands	1, 20
Physalis subglabrata	Solanaceae	Tall ground cherry	0	Occasional	Ruderal, old field	throughout
Picea mariana	Pinaceae	Black spruce	-	Infrequent	Low Shrub and Tamarack Zones - Volo Bog	15
Pilea fontana	Urticaceae	Bog clearweed	7	Occasional	Marshes surrounding bogs	2, 4, 6, 15
Pilea pumila	Urticaceae	Clearweed	5	Infrequent	Mesic woodlands	throughout
Plantago lanceolata	Plantaginaceae	English plantain	-	Occasional	Ruderal	throughout
Plantago major	Plantaginaceae	Common plantain	-	Occasional	Ruderal	throughout
Plantago rugelii	Plantaginaceae	Red-stalked plantain	0	Occasional	Ruderal, disturbed moist areas, disturbed woodlands	throughout
Poa annua	Gramineae	Annual bluegrass	-	Occasional	Ruderal	throughout
Poa compressa	Gramineae	Canada bluegrass	-	Common	Ruderal	throughout
Poa pratensis	Gramineae	Kentucky bluegrass	-	Common	Ruderal	throughout
Podophyllum peltatum	Berberidaceae	May apple	4	Occasional	Mesic woodlands	4, 9, 20
Pogonia ophioglossoides	Orchidaceae	Snake-mouth orchid	10	Infrequent	Low Shrub and Floating Mat Zones - Volo Bog	15
Polygonatum canaliculatum	Liliaceae	Smooth Solomon's seal	3	Infrequent	Woodlands, wood edges	9, 20
Polygonum amphibium var. stipula	Polygonaceae	Water knotweed	4	Common	Marshes	2, 4, 15
Polygonum arenastrum	Polygonaceae	Sidewalk knotweed	-	Occasional	Ruderal	throughout
Polygonum coccineum	Polygonaceae	Water heartsease	4	Infrequent	Marshes	2, 4, 15
Polygonum hydropiper	Polygonaceae	Water pepper	2	Infrequent	Floating mat - Volo Bog	15
Polygonum hydropiperoides	Polygonaceae	Mild water pepper	7	Common	Marshes, disturbed wetlands	2, 4, 15
Polygonum lapathifolium	Polygonaceae	Heartsease	0	Occasional	Marshes, disturbed wetlands	2, 4, 15
Polygonum persicaria	Polygonaceae	Lady's thumb	-	Common	Disturbed wetlands	2, 4, 15
Polygonum sagittatum	Polygonaceae	Arrow-leaved tearthumb	8	Occasional	Marshes, sedge meadows	2
Polygonum scandens	Polygonaceae	Climbing false buckwheat	1	Occasional	Marsh edges	2, 4, 15
Polygonum virginianum	Polygonaceae	Woodland knotweed	2	Occasional	Dry woodlands, wood edges	throughout
Populus deltoides	Salicaceae	Eastern cottonwood	2	Occasional	Marsh edges, lower wooded slopes	2, 4, 15
Populus tremuloides	Salicaceae	Quaking aspen	4	Occasional	Marsh edges, shrub-carr	2, 4, 15
Potamogeton crispus	Zosteraceae	Beginner's pondweed	-	Occasional	Aquatic - Brandenburg Lake; moat - Volo Bog	4, 15
Potamogeton pectinatus	Zosteraceae	Comb pondweed, sago pondwe	5	Common	Aquatic - Volo moat, Volo pond center, Brandenburg lake	4, 15
Potentilla norvegica	Rosaceae	Rough cinquefoil	0	Infrequent	Moist meadows	6 (North Wilson tract)
Potentilla palustris	Rosaceae	Marsh cinquefoil	10	Infrequent	Floating mat and Low Shrub zones - Volo pond center	15
Potentilla recta	Rosaceae	Sulfur cinquefoil	-	Infrequent	Ruderal, old field	1
Potentilla simplex	Rosaceae	Common cinquefoil	4	Occasional	Disturbed woodlands	9, 20
Prunella vulgaris var. lanceolata	Labiatae	Self-heal	0	Occasional	Ruderal, disturbed woodlands	throughout
Prunus americana	Rosaceae	Wild plum	5	Occasional	Marsh edges	2, 4, 15
Prunus angustifolia	Rosaceae	Chickasaw plum	-	Infrequent	Ruderal, old field	12

Prunus serotina	Rosaceae	Wild black cherry	1	Common	Woodlands, wood edges	throughout
Prunus virginiana	Rosaceae	Choke cherry	3	Infrequent	Woods edges	1
Ptelea trifoliata	Rutaceae	Wafer ash, hop tree	7	Infrequent	Old field edges	8, 10
Puccinellia distans	Gramineae	Alkali grass	-	Infrequent	Ruderal (roadsides)	8, 9, 10, 13, 15
Pycnanthemum virginianum	Labiatae	Common mountain mint	5	Occasional	Sedge meadows, native mesic prairie	2, 4, 6, 15
Quercus alba	Fagaceae	White oak	5	Common	Dry and mesic woodlands	1, 4, 9, 20
Quercus x bebbiana	Fagaceae	Hybrid white x bur oak	5	Occasional	Dry and mesic woodlands	1, 6
Quercus coccinea	Fagaceae	Scarlet oak (Hill's Oak)	4	Occasional	Dry woods	1, 9
Quercus macrocarpa	Fagaceae	Bur oak	5	Common	Mesic woodlands, marsh edges	throughout
Quercus rubra	Fagaceae	Red oak	7	Occasional	Mesic woods	20
Ranunculus abortivus	Ranunculaceae	Small-flowered buttercup	0	Occasional	Mesic woods	4, 10
Ranunculus fascicularis	Ranunculaceae	Early buttercup	6	Infrequent	Dry woods	1
Ranunculus pensylvanicus	Ranunculaceae	Bristly buttercup	6	Infrequent	Marshes	2, 4
Ranunculus recurvatus	Ranunculaceae	Hooked buttercup	5	Occasional	Mesic woods	4, 9, 20
Ranunculus sceleratus	Ranunculaceae	Cursed buttercup	6	Common	Marshes, Tall Shrub Zone - all three bogs	2, 4, 15
Raphanus raphanistrum	Cruciferae	Wild radish	-	Infrequent	Old ag fields	7
Rhamnus cathartica	Rhamnaceae	Common buckthorn	-	Abundant	Disturbed woodlands, occ. In bogs (all zones)	throughout
Rhamnus frangula	Rhamnaceae	Glossy buckthorn	-	Abundant	Disturbed wetlands, frequent in bogs (all zones)	throughout
Rhus glabra	Anacardiaceae	Smooth sumac	1	Common	Ruderal, old field	throughout
Rhus radicans	Anacardiaceae	Poison ivy	2	Common	Disturbed woodlands, woods edges	1, 4, 9, 14, 20
Rhus typhina	Anacardiaceae	Staghorn sumac	1	Common	Ruderal, old field	throughout
Rhus vernix	Anacardiaceae	Poison sumac	10	Occasional	Tall Shrub and Tamarack Zones - all three bogs; shrub-carr	2, 4, 15
Ribes americanum	Saxifragaceae	Wild black currant	7	Occasional	Tall Shrub Zone - all three bogs; lower slope mesic woods by marshes	2, 4, 15
Ribes missouriense	Saxifragaceae	Wild gooseberry	5	Infrequent	Disturbed dry woods	1, 4, 10
Robinia pseudoacacia	Leguminosae	Black locust	-	Occasional	Disturbed dry woods, woods edges, ruderal	throughout
Rorippa palustris var. fernaldiana	Cruciferae	Marsh cress	4	Infrequent	Marsh Zone - Volo Bog; sedge meadow S of P Bog	6, 15
Rosa arkansana var. suffulta	Rosaceae	Sunshine rose	5	Infrequent	Ruderal, old field, also in N area Tall Shrub Zone - B Bog	3, 4, 21
Rosa carolina	Rosaceae	Pasture rose	5	Infrequent	Native mesic prairie	6 (North Wilson tract)
Rosa multiflora	Rosaceae	Multiflora rose	-	Abundant	Disturbed woodland, lower wooded slopes, ruderal	throughout
Rubus allegheniensis	Rosaceae	Common blackberry	3	Occasional	Ruderal, woods edges	throughout
Rubus flagellaris	Rosaceae	Common dewberry	3	Infrequent	Disturbed woods	1
Rubus idaeus var. strigosus	Rosaceae	Red raspberry	3	Common	Marsh edges, Tall Shrub and Tamarack Zones - P and B Bogs	2, 4, 6, 15
Rubus occidentalis	Rosaceae	Black raspberry	2	Common	Ruderal, woods edges	throughout
Rubus pensilvanicus	Rosaceae	Yankee blackberry	3	Occasional	Ruderal, woods edges	throughout
Rudbeckia hirta	Compositae	Black-eyed Susan	1	Common	Ruderal, old field, native mesic prairie	throughout
Rumex acetosella	Polygonaceae	Field sorrel	-	Occasional	Ruderal	throughout
Rumex crispus	Polygonaceae	Curly dock	-	Common	Ruderal	throughout
Rumex orbiculatus	Polygonaceae	Great water dock	8	Occasional	Marshes, shrub-carr, outer edge of Tall Shrub Zone - all three bogs	2, 4, 6, 15
Sagittaria latifolia	Alismaceae	Common arrowhead	4	Common	Marshes, all bog zones in all three bogs	2, 4, 6, 15
Salix x alba	Salicaceae	Weeping Willow	-	Infrequent	Ruderal areas, near water	4
Salix amygdaloides	Salicaceae	Peach-leaved willow	5	Occasional	Marsh edges	2, 4, 15
Salix bebbiana	Salicaceae	Beaked willow	8	Common	Marsh edges, shrub-carr, Tall Shrub Zone - all three bogs	2, 4, 6, 15
Salix candida	Salicaceae	Hoary willow	10	Infrequent	Tamarack Zone - Volo and P Bog	2, 15
Salix discolor	Salicaceae	Pussy willow	2	Abundant	All bog zones; shrub-carr; marsh edges	2, 4, 6, 15
Salix eriocephala	Salicaceae	Heart-leaved willow	5	Occasional	Marsh edges, shrub-carr	2, 4, 15
Salix interior	Salicaceae	Sandbar willow	1	Abundant	Marsh borders, shrub-carr, disturbed wetlands	2, 4, 6, 15
Salix lucida	Salicaceae	Shining willow	10	Rare	Marsh S of Brandenburg Bog	4
Salix nigra	Salicaceae	Black willow	4	Infrequent	Marsh edges	2, 4, 15
Salix pedicellaris var. hypoglauca	Salicaceae	Little bog willow	10	Infrequent	Tamarack Zone - Volo Bog	15
Salix petiolaris	Salicaceae	Meadow willow	7	Occasional	Marsh edges; Tamarack Zone - Volo Bog; shrub-carr	2, 4, 15
Salix purpurea	Salicaceae	Purple willow	-	Occasional	"1st sedge meadow" edge NW of Pistakee Bog	2
Salix x rubens	Salicaceae	Hybrid crack willow	-	Occasional	Disturbed wetland edges	2, 4, 15
Sambucus canadensis	Caprifoliaceae	Elderberry	1	Common	Lower slope mesic woods, shrub-carr, Tall Shrub Zones	2, 4, 16
Sanicula canadensis	Umbelliferae	Canada black snakeroot	7	Occasional	Mesic woodlands	1, 4
Saponaria officinalis	Caryophyllaceae	Bouncing bet, Soapwort	-	Infrequent	Ruderal	15
Sarracenia purpurea	Sarraceniaceae	Pitcher plant	10	Rare	Tamarack Zone - Volo Bog	15
Saxifraga pensylvanica	Saxifragaceae	Swamp saxifrage	10	Occasional	Marshes, shrub-carr, outer edge of Tall Shrub Zone - all three bogs	2, 4, 15
Scirpus acutus	Cyperaceae	Hard-stemmed bulrush	6	Occasional	Floating Mat and Low Shrub Zones - Volo Bog	15
Scirpus atrovirens	Cyperaceae	Dark green rush	4	Occasional	Marshes, low woods	2, 4, 15

Scirpus cyperinus	Cyperaceae	Wool grass	6	Common	Marshes, sedge meadows, shrub-carr, all Bog Zones - all three bogs	2, 4, 6 15
Scirpus fluviatilis	Cyperaceae	River bulrush	4	Occasional	Volo Bog marsh moat; marsh at N end of Wilson tract	6 (N Wilson tract); 15
Scirpus smithii	Cyperaceae	Smith's tufted bulrush	10	Infrequent	Floating mat - Volo pond center	15
Scirpus validus var. creber	Cyperaceae	Great bulrush	5	Occasional	Marshes, sedge meadows, pond edges	2, 4, 13, 15
Scutellaria epilobiifolia	Labiatae	Marsh skullcap	5	Occasional	Marshes, sedge meadows, shrub-carr	2, 4, 6, 15
Scutellaria lateriflora	Labiatae	Mad-dog skullcap	5	Occasional	Marshes, sedge meadows, all bog zones, shrub-carr	2, 4, 6, 15
Selaginella apoda	Selaginellaceae	Marsh clubmoss	10	Infrequent	Marshes (long plastic boardwalk), floating mat - Brandenburg Bog	4, 15
Senecio aureus	Compositae	Golden ragwort	7	Infrequent	Sedge meadow (SE of Volo Bog)	15
Senecio plattensis	Compositae	Prairie ragwort	6	Infrequent	Old field near Prunus angustifolia - Tamarack View trail	12
Setaria glauca	Gramineae	Yellow foxtail	-	Occasional	Ruderal	throughout
Setaria viridis	Gramineae	Green foxtail	-	Occasional	Ruderal	throughout
Silphium integrifolium var. deamii	Compositae	Deam's rosinweed	5	Infrequent	Native mesic prairie	6 (North Wilson tract)
Sisyrinchium albidum	Iridaceae	Common blue-eyed grass	7	Infrequent	Native mesic prairie	6 (North Wilson tract)
Sium suave	Umbelliferae	Tall water parsnip	7	Occasional	Marshes, Tall Shrub Zone - all three bogs	2, 4, 15
Smilacena racemosa	Liliaceae	Feathery false Solomon's seal	3	Occasional	Dry and mesic woodlands, wood edges	1, 4, 9, 20
Smilacena stellata	Liliaceae	Starry false Solomon's seal	5	Infrequent	Marsh edges; Tall Shrub and Tamarack Zones - P and B Bogs; native mesic prairie	2, 4, 6 (North Wilson tract)
Smilax ecirrhata	Liliaceae	Upright carrion flower	5	Occasional	Mesic woodlands	1, 4, 9, 20
Smilax lasioneura	Liliaceae	Common carrion flower	5	Occasional	Woodlands, wood edges	1, 4, 9, 20
Smilax tamnoides var. hispida	Liliaceae	Bristly green brier	5	Occasional	Mesic woodlands	1, 4, 9. 20
Solanum americanum	Solanaceae	Black nightshade	0	Infrequent	Ruderal	1
Solanum carolinense	Solanaceae	Horse nettle	-	Infrequent	ruderal, old field	1
Solanum dulcamara	Solanaceae	Bittersweet nightshade	-	Common	Ruderal; all Bog zones; marsh edges	throughout
Solidago canadensis	Compositae	Canada goldenrod	1	Common	Ruderal, old field	throughout
Solidago gigantea	Compositae	Late goldenrod	4	Common	Marshes, sedge meadows, disturbed wetlands, low woods	throughout
Solidago graminifolia var. nuttallii	Compositae	Hairy grass-leaved goldenrod	3	Common	Disturbed moist areas, marsh edges, sedge meadows	throughout
Solidago riddellii	Compositae	Riddell's goldenrod	7	Infrequent	Sedge meadow - long plastic boardwalk E of Volo Bog	15
Sonchus uliginosus	Compositae	Common sow thistle	-	Common	Ruderal, old field	throughout
Sorbus aucuparia	Rosaceae	European mountain ash	-	Infrequent	Tall Shrub Zone - all three bogs	2, 4, 15
Sorghastrum nutans	Gramineae	Indian grass	5	Infrequent	Native mesic prairie	6 (North Wilson tract)
Sparganium eurycarpum	Sparganiaceae	Common bur reed	6	Infrequent	Marsh S of B Bog; floating mat - Volo Bog	4, 15
Spartina pectinata	Gramineae	Prairie cord grass	4	Occasional	Sedge meadow and wet prairie	6 (N Wilson tract); 15 (long plast
Sphenopholis intermedia	Gramineae	Slender wedge grass	4	Occasional	Sedge meadows, native mesic prairie, Tall Shrub Zone - all three bogs	2, 4, 6 (N Wilson tract), 15
Spiraea alba	Rosaceae	Meadowsweet	7	Occasional	Marsh Zone - Volo Bog	15
Spirodela polyrhiza	Lemnaceae	Great duckweed	7	Infrequent	Aquatic - Volo Bog pond	15
Sporobolus vaginiflorus	Gramineae	Sheathed rush grass	0	Infrequent	Ruderal	15
Stachys palustris var. homotricha	Labiatae	Woundwort	5	Infrequent	Marshes, sedge meadows	4
Stachys tenuifolia var. hispida	Labiatae	Marsh hedge nettle	5	Infrequent	Low woods edges	4
Stellaria media	Caryophyllaceae	Common chickweed	-	Infrequent	Ruderal	15
Syringa vulgaris	Oleaceae	Lilac	-	Rare	Ruderal	11
Taraxacum officinale	Compositae	Common dandelion	-	Common	All habitats	throughout
Thalictrum dasycarpum	Ranunculaceae	Purple meadow rue	5	Infrequent	Marshes	4
Thalictrum dasycarpum var. hypoc	Ranunculaceae	Smooth meadow rue	5	Occasional	Marshes; shrub-carr	2, 4, 15
Thalictrum dioicum	Ranunculaceae	Early meadow rue	7	Occasional	Low moist woods; marsh edges	4, 6 (N Wilson tract)
Thlaspi arvense	Cruciferae	Penny cress	-	Occasional	Ruderal, old field	throughout
Tilia americana	Tiliaceae	American basswood	5	Infrequent	Mesic woods	20
Tradescantia ohiensis	Commelinaceae	Common spiderwort	2	Infrequent	Old field edge (not planted)	1
Tragopogon dubius	Compositae	Sand goat's beard	-	Infrequent	Dry old field	21, 22
Tragopogon pratensis	Compositae	Common goat's beard	-	Common	Ruderal, old field	throughout
Trientalis borealis	Primulaceae	Starflower	10	Infrequent	Tamarack Zone - Volo Bog	15
Trifolium hybridum	Leguminosae	Alsike clover	-	Occasional	Ruderal, old field	throughout
Trifolium pratense	Leguminosae	Red clover	-	Occasional	Ruderal, old field	throughout
Trifolium repens	Leguminosae	White clover	-	Occasional	Ruderal, old field	throughout
Trillium recurvatum	Liliaceae	Red trillium	5	Infrequent	Woods S of Brandenburg Lake	4 (NE)
Triosteum aurantiacum	Caprifoliaceae	Early horse gentian	5	Rare	Woods S of Bat Barn	1
Typha angustifolia	Typhaceae	Narrow-leaved cattail	1	Occasional	Floating Mat - Volo Bog and NW Brandenburg Lake (close to lake)	4, 15
Typha x glauca	Typhaceae	Hybrid cattail	1	Occasional	Disturbed marshes (mostly near roads); B Lake mat (away from lake)	4, 22
Typha latifolia	Typhaceae	Broad-leaved cattail	1	Abundant	Marshes	2, 4, 15
Ulmus pumila	Ulmaceae	Siberian elm	-	Occasional	Ruderal, old field	10

Ulmus rubra	Ulmaceae	Slippery elm	4	Common	Mesic woods; low woods; disturbed woods edges; Tall Shrub and Tamarack zones - b	throughout
Urtica procera	Urticaceae	Stinging nettle, Tall nettle	2	Common	Low woods edges, marsh edges, shrub-carr	2, 4, 15
Utricularia intermedia	Lentibulariaceae	Flat-leaved bladderwort	10	Infrequent	Floating Mat - NW Brandenburg Lake	4
Utricularia vulgaris	Lentibulariaceae	Great bladderwort	9	Infrequent	Marsh - Volo Bog; SW Brandenburg Lake	4, 15
Uvularia grandiflora	Liliaceae	Bellwort	7	Infrequent	Sloping woods S of Brandenburg Lake	4
Vaccinium corymbosum	Ericaceae	Highbush blueberry	8	Infrequent	Tall Shrub and Tamarack zones - all three bogs	2, 4, 15
Vaccinium oxycoccos	Ericaceae	Small cranberry	10	Infrequent	Tamarack Zone - Volo Bog (N of platform)	15
Verbascum thapsus	Scrophulariaceae	Common mullein	-	Occasional	Ruderal, old field	throughout
Verbena bracteata	Verbenaceae	Creeping vervain	0	Infrequent	Ruderal (roadsides)	8, 9, 10, 13, 15
Verbena hastata	Verbenaceae	Blue vervain	4	Occasional	Marshes, sedge meadows	2, 4, 15
Verbena stricta	Verbenaceae	Hoary vervain	4	Occasional	Ruderal, old field	throughout
Verbena urticifolia	Verbenaceae	Hairy white vervain	5	Occasional	Dry woods, woods edges	throughout
Veronica arvensis	Scrophulariaceae	Corn speedwell	-	Occasional	Ruderal	throughout
Veronica peregrina	Scrophulariaceae	Purslane speedwell	0	Occasional	Moist fields	6 (North Wilson tract)
Veronica serpyllifolia	Scrophulariaceae	Thyme-leaved speedwell	-	Occasional	Ruderal	throughout
Veronicastrum virginicum	Scrophulariaceae	Culver's root	7	Infrequent	Native mesic prairie	6 (North Wilson tract)
Viburnum lentago	Caprifoliaceae	Nannyberry	5	Occasional	Low woods; shrub-carr; marsh edges; Tall Shrub Zone - P and B Bogs	2, 4, 15
Viburnum opulus	Caprifoliaceae	European highbush cranberry	-	Common	Disturbed woods, Tall Shrub and Tamarack Zones - bogs	throughout
Viburnum recognitum	Caprifoliaceae	Smooth arrowwood	-	Occasional	Disturbed woods; Tall Shrub and Tamarack Zones - all bogs	throughout
Viburnum trilobum	Caprifoliaceae	Highbush cranberry	10	Rare	Tall Shrub Zone - B Bog	4
Vicia americana	Leguminosae	American vetch	7	Infrequent	Low woods	14, 15
Vicia villosa	Leguminosae	Hairy vetch	-	Infrequent	Ruderal, old field	15
Viola affinis	Violaceae	LeConte's violet	4	Infrequent	Sedge meadows	2, 4, 6 (North Wilson tract)
Viola nephrophylla	Violaceae	Northern bog violet	9	Infrequent	Sedge meadows	2, 6 (North Wilson tract)
Viola pallens	Violaceae	Smooth white violet	10	Occasional	Tall Shrub and Tamarack Zones - all three bogs	2, 4, 15
Viola pedatifida	Violaceae	Prairie violet	9	Infrequent	Native mesic prairie	6 (North Wilson tract)
Viola pubescens	Violaceae	Yellow violet	5	Occasional	Mesic and dry woods	1, 12, 15, 16, 20
Viola sororia	Violaceae	Common blue violet	3	Common	Moist open area, ruderal	throughout
Vitis riparia	Vitaceae	Riverbank grape	2	Common	Disturbed woods and woods edges	throughout
Wolffia columbiana	Lemnaceae	American water meal	7	Common	Marshes, ponds	2, 4, 13, 15
Zizia aurea	Umbelliferae	Golden Alexander	7	Infrequent	Moist field; native mesic prairie	6 (North Wilson tract), 15
PRAIRIE RESTORATIONS						
Amorpha canescens	Leguminosae	Lead plant	9	Infrequent	Prairie restorations	8, 16
Andropogon gerardii	Gramineae	Big bluestem grass	5	Common	Prairie restorations	6 (south), 8, 16
Andropogon scoparius	Gramineae	Little bluestem grass	5	Occasional	Prairie restorations	8, 16
Aster laevis	Compositae	Smooth blue aster	9	Infrequent	Prairie restorations	8, 16
Bouteloua curtipendula	Gramineae	Side-oats gramma	8	Infrequent	Prairie restorations	26
Coreopsis palmata	Compositae	Prairie coreopsis	6	Infrequent	Prairie restorations	8, 16
Coreopsis tripteris	Compositae	Tall coreopsis	5	Occasional	Prairie restorations	8, 16
Desmodium canadense	Leguminosae	Showy tick trefoil	4	Infrequent	Prairie restorations	8, 16
Eryngium yuccifolium	Umbelliferae	Rattlesnake master	9	Occasional	Prairie restorations	8, 16
Heliopsis helianthoides	Compositae	False sunflower	5	Common	Prairie restorations	8, 16
Lespedeza capitata	Leguminosae	Round-headed bush clover	4	Infrequent	Prairie restorations	8, 16
Parthenium integrifolium	Compositae	Wild quinine	8	Occasional	Prairie restorations	8, 16
Physostegia virginiana	Labiatae	False dragonhead, obedient pl	6	Infrequent	Prairie restorations	8, 16
Ratibida pinnata	Compositae	Yellow coneflower	4	Occasional	Prairie restorations	8, 16
Silphium integrifolium var. deamii	Compositae	Deam's rosinweed	5	Occasional	Prairie restorations	8, 16
Silphium laciniatum	Compositae	Compass plant	5	Occasional	Prairie restorations	8, 16
Silphium terebinthinaceum	Compositae	Prairie dock	5	Occasional	Prairie restorations	8, 16
Solidago rigida	Compositae	Stiff goldenrod	4	Occasional	Prairie restorations	8, 16
Sorghastrum nutans	Gramineae	Indian grass	5	Occasional	Prairie restorations	8, 16
Veronicastrum virginicum	Scrophulariaceae	Culver's root	7	Infrequent	Prairie restorations	8, 16
INTRODUCED/ESTABLISHED:						
Aquilegia canadensis	Ranunculaceae	Wild columbine	6	Infrequent	TV trail near VC (not there in 1994)	15
Pinus nigra	Pinaceae	Austrian pine	-	Occasional	Reproducing from old pine plantations	(3, 15, 27)
Pinus sylvestris	Pinaceae	Scotch Pine	-	Occasional	Reproducing from old pine plantations	(3, 15, 27)

NOTE: Nomenclature used is same as that contained in the 1994 Edition of Plants of the Chicago Region by Dr. Gerould Wilhelm and Floyd Swink, except for the following listed species exceptions, where the name
Chamaedaphne calyculata
Cypripedium parviflorum var. makasin
Menyanthes trifoliata

TABLE KEY
Natives are shown in Regular type on the table.
Non-natives are shown in *Italics* on the table.

C Value = Coefficient of Conservatism (Swink/Wilhelm 1994)

Population Estimate:
Rare (fewer than 12 plants sighted)
Infrequent (occasional in limited habitats)
Occasional (moderate populations in limited habitats, or scattered throughout the entire site)
Frequent (large populations in several habitats, or frequently found throughout the entire site)
Abundant (common over large portions of the site)

VOLO BOG

Plants on the 1994 list and not on the 2004 list

Abutilon theophrasti
Ailanthus altissima
Althea rosea
Amelanchier interior
Antennaria neglecta
Apios americana
Apocynum cannabinum
Arctium lappa
Arenaria lateriflora
Atriplex patula
Avena sativa
Bidens aristosa
Brassica nigra
Calamagrostis inexpansa brevior
Carex buxbaumii
Carex molesta
Carex utriculata
Cuscuta campestris
Cynoglossum officinale
Cyperus erythrorhizos
Diplotaxis muralis
Echinochloa crusgallii
Eleocharis compressa
Eleocharis obtusa
Epipactus helleborine
Eragrostic cilliaensis
Erigeron canadensis
Euphorbia maculata
Festuca obtusa
Galium lanceolatum
Galium mollugo
Helianthus strumosus
Hierochloe odorata
Impatiens pallida
Ludwigia palustris americana
Lysimachia ciliata
Mianthemum canadense interius
Malus ioensis
Muhlenbergia frondosa
Najas flexiles
Osmunda claytoniana

Plants on the 2004 but not 1994 list

Agrostis alba palustris
Alisma triviale
Anemonella thalictroides
Arisaema triphyllum
Athyrium filix-femina var. michauxii
Betula alleghaniensis
Calla palustris
Cardamine pensylvanica
Carduus nutans
Carex sparganioides
Carex sterilis
Ceratophyllum demersum
Cuscuta gronovii
Cyperus ferruginescens
Cyperus strigosus
Daucus carota
Duchesnea indica
Eleocharis intermecia
Equisetum x ferrissii
Erysimum cheiranthoides
Euphorbia esula
Geum canadense
Glechoma hederacea
Gnaphalium obtusifolium
Hedeoma pulegioides
Hordeum jubatum
Hypericum majus
Hypericum perforatum
Juncus torreyi
Lactuca canadensis
Lactuca serriola
Lamium amplexicaule
Lepidium campestre
Ligustrum vulgare
Lilium michiganense
Lonicera maackii
Lotus corniculatus
Lysimachia terrestris
Malus baccata
Malva neglecta
Mirabilis nyctaginea

Parnassia glauca
Poa palustris
Polygonum punctatum
Polygonum pensylvanicum
Pontederia cordata
Potentilla norvegica
Quercus bicolor
Quercus velutina
Ranunculus cymbalaria
Ranunculus flabellaris
Ranunculus septontrionalis
Rosa blanda
Salix fragilis
Salix glaucophylloides
Sanicula gregaria
Scirpus hattorianus
Scrophularia marilandica
Scutellaria parvula leonardii
Solidago altissima
Solidago ohioensis
Solidago uliginosa
Teucrium canadense
Tilia americana
Ulmus americana
Ulmus pumila
Utricularia gibba (?2004?)
Vaccinium macrocarpon
Verbebe bracteata
Xanthoxylem americanum
Myriophyllum spicatum
Osmorhiza claytonii
Polygonum hydropiper
Potamogeton crispus
Potamogeton pectinatus
Prunus angustifolia
Ptelea trifoliata
Puccinella distans
Quercus x bebbiana
Ranunculus fascicularis
Rhus typhina
Robinia pseudoacacia
Rosa arkansana var. suffulta
Rosa carolina
Rubus flagellaris
Rumex acetosella
Salix purpurea
Salix x alba
Saponaria officinalis
Scirpus smithii
Senecio aureus
Senecio plattensis
Silphium integrifolium var. deamii
Smilax ecirrhata
Smilax tamnoides var. hispida
Solanum carolinense
Solidago Canadensis
Syringa vulgaris
Thalictrum dasycarpum var. hypoglaucum
Tradescantia ohioensis
Trillium recurvatum
Typha x glauca
Triosteum aurantiacum
Uvularia grandiflora
Vaccinium oxycoccos

Compiled by Margo Milde for WPF Grant 04-L34W