An Ethnobotany of Indiana Dunes National Lakeshore: Plant Uses of the Ojibwa People

Final Report

April 2009

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Table of Contents

Tables

Figures

Indiana Dunes National Lakeshore Ethnobotany
Executive Summary

Indiana Dunes National Lakeshore (INDU) was established at the south end of Lake Michigan on November 5, 1966 "to preserve for the educational, inspirational, and recreational use of the public certain portions of the Indiana dunes and other areas of scenic, scientific, and historic interest and recreational value" (P.L. 89-761, 89th Congress, 80 Stat 1309). The combination of sand dunes and diverse native flora in such close proximity to several urban areas provided the impetus for protection of the area. Subsequent amendments to the original authorizing legislation in 1976, 1980, 1986, and 1992 increased the park's acreage to over 15,000 acres including 2,182 acres in Indiana Dunes State Park that are managed by the Indiana Department of Natural Resources.

The management of INDU includes consideration of the National Environmental Policy Act of 1969, the National Historic Preservation Act of 1966 (as amended), the Native American Graves Protection and Repatriation Act of 1990, and various statutes, executive orders, and National Park Service (NPS) policies and guidelines. The NPS, consequently, strives to be responsive to the concerns of contemporary traditionally associated people including American Indian and non-Indian groups. To do so effectively, the agency needs a deeper understanding of how these groups value the natural and cultural resources within INDU boundaries. This report on Ojibway ethnobotany builds on the previous Miami-Potawatomi baseline ethnobotany (Toupal, Banks, and Carroll 2006) by providing additional traditional plant use data to further the agency's understanding of traditionally associated groups' relationship to the Indiana Dunes landscape.

Research Summary

As a supplement to the Miami-Potawatomi report, this study focused on Ojibway traditional uses. It was intended to include fieldwork with traditionally associated Ojibway groups, however, the one group who expressed interest in participating, Saginaw Chippewa, experienced internal miscommunications and elections that eventually precluded their participation. Other Ojibway groups either were not interested in participating, or not traveling the distance to the park, which averaged 350 miles. This report, consequently, is based on previously documented sources that include several original ethnographic works (e.g. Densmore (1928), Gilmore (1933), Smith (1932)). As a result of consultation with the NPS Key Official for the project, the report includes, in lieu of primary field data, a fire management chapter and fire response data for some species. As outlined in the Scope of Work, the final report includes a detailed plant catalog, descriptions of traditionally associated Ojibway groups, and future data needs.

Summary of Findings

The Ojibway people continue to use plant species found in INDU in traditional ways (Zedeño et al. 2000, 2001). Plant knowledge is not given lightly and Ojibway groups today are concerned about the fate of information they share (Saginaw Chippewa 2007).

Traditional uses by the Ojibway were found for 487 species (33.3%) of the park's 1,462 plants (Table ES1). As a supplement to the Miami-Potawatomi ethnobotany, this study found additional uses for 318 species and added 10 species. The total traditional use species documented by both reports is 983 (67.2%) of the park's 1,462 species.

Of the 487 species (Table ES2), 90% are native. Many of the introduced species with traditional uses have been here since the early settlement period, and were introduced purposefully in the 17th and 18th centuries, and shared with the tribes on occasion (Josselyn 1674). The primary traditional uses of the 50 introduced species are medicinal and as charms. Other/unspecified, food, utility, smoking, ceremonial, craft, agriculture, and dye are the other use categories found for these species.

Of the 487 traditional use species, 53 have a special status: threatened (10), endangered (8), extirpated (2), rare (11), locally rare (18), and watch list (1). Of these species, 31 have one to two uses, 10 have three to four uses, seven have five to six uses, four have seven to eight uses, and one has 13 uses (*Thuja occidentalis*). Tables in the final chapter detail traditional use by type-of-use and by park survey unit. The use categories selected for the tables are based on those found in the literature and the NPS's Ethnographic Resource Inventory.

	Miller Woods	Tolleston Dunes	West Beach	Bailly	Dune Acres Cowles Bog	IN Dunes State Park	Old Visitor Center	Keiser Unit	Tamarack Unit	Heron Rookery	Hoosier Prairie	Pinhook Bog	INDU
% traditional use spp.	35.7	36.3	35.5	39.7	36.7	37.4	37.9	37.2	38.9	42.6	33.7	37.1	33.3
agricultural	4.5	4.1	4.2	4.9	5.8	5.5	3.6	4.4	4.5	10.0	4.2	3.5	5.5
smoking	12.9	13.1	12.3	9.8	11.8	11.8	9.5	13.7	12.3	3.8	14.2	11.1	12.1
ceremonial	16.4	15.9	17.5	12.5	17.3	17.3	12.2	15.0	16.8	12.5	17.9	15.8	16.0
mythic	2.5	0.7	1.9	0.0	1.9	1.2	0.9	0.9	0.9	0.0	2.1	1.2	2.3
sacred	2.0	1.4	1.4	0.5	2.6	1.6	1.8	2.2	1.8	2.5	1.6	2.3	1.8
food	35.8	31.7	35.4	38.6	36.1	37.8	35.7	37.9	38.2	40.0	33.2	38.0	37.0
medicine	78.1	82.8	81.6	83.7	80.2	81.1	81.4	81.1	82.3	90.0	78.4	82.5	82.3
utility	20.4	24.1	23.6	22.3	26.2	26.0	22.6	26.4	25.5	23.8	23.7	23.4	25.3
craft	12.4	14.5	13.2	12.5	16.3	15.7	12.7	15.9	15.0	15.0	13.7	14.0	14.8
dye	5.5	4.1	5.7	4.3	6.1	5.5	4.5	6.2	6.4	5.0	4.7	5.3	5.1
clothing	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
trade	0.5	0.0	0.9	1.6	1.0	1.2	0.5	1.3	0.5	2.5	0.5	1.8	0.8
charm	59.2	62.1	64.6	64.7	61.0	62.6	62.0	60.8	62.7	65.0	57.4	61.4	63.0
other, unspecified	0.0	33.1	34.0	32.1	37.1	37.4	33.0	35.7	37.7	38.8	32.6	33.9	36.1

Table ES1. Percentage use category by park survey unit.

Table ES2. Ojibway traditional use plants identified in the literature (10 pages).

Scientific Name	Common Name
Acer negundo	box elder
Acer nigrum	black maple
Acer platanoides	Norway maple
Acer rubrum	red maple
Acer saccharinum	silver maple
Acer saccharum	sugar maple
Achillea millefolium	yarrow, milfoil
Acorus calamus	sweet flag
Actaea pachypoda	white baneberry
Actaea rubra	red baneberry
Adiantum pedatum	maidenhair fern
Agrimonia gryposepala	tall agrimony
Allium cernuum	nodding wild onion
Allium tricoccum	wild leek
Alnus glutinosa	european black alder
Alnus rugosa americana	speckled alder
Alopecurus aequalis	short-awned foxtail
Amaranthus albus	tumbleweed
Amelanchier arborea	juneberry, shadbush, serviceberry
Amelanchier humilis	low shadblow
Amelanchier interior	dwarf shadblow
Amelanchier laevis	allegheny shadblow
Amorpha canescens	lead plant
Amphicarpa bracteata	hog peanut
Andromeda glaucophylla	bog rosemary
Andropogon gerardii	big bluestem grass
Anemone canadensis	meadow anemone
Anemone cylindrica	thimbleweed
Anemone virginiana	tall anemone, tumbleweed
Anemonella thalictroides	rue anemone
Angelica atropurpurea	great angelica, purplestem angelica
Antennaria neglecta	cat's foot
Antennaria plantaginifolia	pussy toes
Apios americana	ground nut
Apocynum androsaemifolium	spreading dogbane
Apocynum cannabinum	indian hemp, dogbane
Apocynum sibiricum	indian hemp, dogbane
Aquilegia canadensis	wild columbine
Arabis glabra	tower mustard
Aralia nudicaulis	wild sarsaparilla
Aralia racemosa	spikenard
Arctium minus	common burdock
Arctostaphylos uva-ursi coactilis	bearberry
Arisaema atrorubens	jack-in-the-pulpit
Artemisia absinthium	Common wormwood
Artemisia caudata	beach wormwood
Asarum canadense	wild ginger

Scientific Name	Common Name
Asclepias incarnata	swamp milkweed
Asclepias syriaca	common milkweed
Asimina triloba	pawpaw
Aster azureus	sky-blue aster
Aster cordifolius	heart leaved aster
Aster dumosus	rice-button aster, bushy aster
Aster ericoides	heath aster
Aster furcatus	forked aster
Aster junciformis	rush aster
Aster laevis	smooth blue aster
Aster lateriflorus	side flowering aster
Aster linariifolius	flax-leaved aster
Aster macrophyllus	big-leaved aster
Aster novae-angliae	New England aster
Aster pilosus	hairy aster
Aster praealtus	willow aster
Aster ptarmicoides	stiff aster
Aster puniceus	swamp aster
Aster puniceus firmus	swamp aster
Aster sagittifolius	common blue wood aster
Aster sagittifolius drummondii	drummond`s aster
Aster sericeus	silky aster
Aster shortii	panicled aster
Aster simplex	marsh aster
Aster simplex interior	panicled aster
Aster umbellatus	flat-top aster
Aster vimineus	small white aster
Athyrium filix-femina michauxii	lady fern
Baptisia tinctoria crebra	yellow wild indigo
Betula lutea	yellow birch
Betula nigra	river birch
Betula papyrifera	paper birch
Betula pendula	European white birch
Betula populifolia	gray birch
Betula pumila	dwarf birch
Boehmeria cylindrica	false nettle
Botrychium virginianum	rattlesnake fern
Brassica rapa	field mustard
Calla palustris	water arum
Caltha palustris	marsh marigold
Campanula americana	tall bellflower
Campanula aparinoides	marsh bellflower
Campanula rotundifolia	harebell
Capsella bursa-pastoris	shepherd's purse
Carex alata	winged sedge, broadwing sedge
Carpinus caroliniana virginiana	blue beech
Carya cordiformis	bitter hickory
Carya glabra	pignut hickory
Carya ovata	shagbark hickory

Scientific Name	Common Name
Castanea dentata	chestnut
Castilleja coccinea	Indian paint brush
Caulophyllum thalictroides	blue cohosh
Ceanothus americanus	New Jersey tea
Celastrus scandens	climbing bittersweet
Celtis occidentalis	hackberry
Cephalanthus occidentalis	button bush
Chamaedaphne calyculata angustifolia	leatherleaf
Chenopodium album	lamb's quarters
Chenopodium boscianum	woodland goosefoot
Chimaphila umbellata cisatlantica	pipsissewa, prince's pine
Cicuta maculata	water hemlock
Cirsium altissimum	tall thistle
Cirsium arvense	field thistle, canada thistle
Cirsium discolor	pasture thistle
Cirsium muticum	swamp thistle
Cirsium pitcheri	sand thistle
Cirsium vulgare	bull thistle
Claytonia virginica	spring beauty
Clintonia borealis	blue bead
Comptonia peregrina	sweet fern
Coptis groenlandica	goldthread
Cornus alternifolia	alternate-leaved dogwood
Cornus canadensis	bunchberry
Cornus florida	flowering dogwood
Cornus obliqua	pale dogwood
Cornus racemosa	gray dogwood
Cornus rugosa	speckled dogwood
Cornus stolonifera	red osier dogwood
Cornus stolonifera baileyi	Bailey dogwood
Corylus americana	American hazelnut
Crataegus calpodendron	sugar hawthorn
Crataegus coccinea	scarlet hawthorn
Crataegus crus-galli	cockspur hawthorn
Crataegus macrosperma	large-seeded hawthorne
Crataegus mollis	downy hawthorn
Crataegus pruinosa	frosted hawthorn
Crataegus punctata	dotted hawthorn
Cynoglossum officinale	hound's tongue
Cypripedium calceolus parviflorum	small yellow lady's slipper
Cypripedium calceolus pubescens	large yellow lady's slipper
Cypripedium reginae	showy lady's slipper
Cystopteris fragilis	fragile fern
Daucus carota	queen anne's lace
Descurainia sophia	Flixweed
Dicentra cucullaria	Dutchman's breeches
Diervilla lonicera	bush honeysuckle
Dioscorea villosa	wild yam
Drosera rotundifolia	round-leaved sundew

Scientific Name	Common Name
Dryopteris cristata	crested shield fern
Echinocystis lobata	wild cucumber
Epifagus virginiana	beech drops
Epigaea repens glabrifolia	trailing arbutus
Epilobium angustifolium	fire weed
Equisetum arvense	horsetail
Equisetum hyemale affine	tall scouring rush
Equisetum X ferrissii	horsetail
Erigeron canadensis	horseweed
Erigeron philadelphicus	marsh fleabane
Erigeron strigosus	daisy fleabane
Erythronium americanum	yellow trout lily
Eupatorium maculatum	spotted Joe Pye weed
Eupatorium perfoliatum	common boneset
Eupatorium purpureum	sweet joe-pie-weed
Euphorbia corollata	flowering spurge
Euphorbia cyparissias	cypress spurge, grave-yard spurge
Fagus grandifolia	American beech
Fragaria virginiana	wild strawberry
Fraxinus americana	white ash
Fraxinus americana biltmoreana	Biltmore ash
Fraxinus nigra	black ash
Fraxinus pennsylvanica	red ash
Fraxinus pennsylvanica subintegerrima	green ash
Galium aparine	annual bedstraw
Galium asprellum	rough bedstraw
Galium boreale	northern bedstraw
Galium brevipes	short stalked bedstraw
Galium circaezans hypomalacum	wild licorice
Galium concinnum	shining bedstraw
Galium labradoricum	bog bedstraw
Galium lanceolatum	lance-leaved wild licorice
Galium obtusum	wild madder
Galium pilosum	hairy bedstraw
Galium tinctorium	stiff bedstraw; small cleaver
Galium trifidum	small bedstraw
Galium triflorum	sweet-scented bedstraw
Gaultheria procumbens	wintergreen
Gaylussacia baccata	huckleberry
Geranium maculatum	wild geranium
Geum canadense	white avens
Glyceria canadensis	rattlesnake grass
Gnaphalium obtusifolium	old-field balsam
Habenaria viridis bracteata	bracted orchid
Hamamelis virginiana	witch hazel
Helianthus occidentalis	western sunflower
Hepatica acutiloba	sharp-lobed hepatica
Hepatica americana	round-lobed hepatica
Heracleum maximum	cow parsnip

Scientific Name	Common Name
Heuchera richardsonii	prairie alum root
Hieracium canadense fasciculatum	Canada hawkweed
Hierochloe odorata	vanilla grass, sweet grass
Hordeum jubatum	squirreltail grass
Humulus lupulus	common hop
Hydrophyllum virginianum	Virginia waterleaf
Ilex verticillata	winterberry
Impatiens capensis	orange jewelweed
Impatiens pallida	yellow jewelweed
Iris virginica shrevei	blue flag, wild iris
Juglans cinerea	butternut
Juglans nigra	black walnut
Juncus dudleyi	inland rush
Juncus effusus solutus	common rush
Juncus greenei	greene's rush
Juncus tenuis	path rush
Juniperus communis	common juniper, dunes juniper
Juniperus communis depressa	common juniper
Juniperus virginiana crebra	eastern red cedar
Lactuca biennis	tall blue lettuce
Lactuca canadensis	wild lettuce
Laportea canadensis	wood nettle
Larix laricina	tamarack, larch
Lathyrus ochroleucus	pale vetchling
Lathyrus palustris	marsh vetching
Lathyrus palustris myrtifolius	marsh vetchling
Lathyrus venosus	veiny pea
Lemna minor	small duckweed
Lepidium virginicum	common peppergrass
Lilium michiganense	Turk's cap lily
Lilium philadelphicum andinum	prairie lily
Linaria vulgaris	butter & eggs, toadflax
Lindera benzoin	spicebush
Linnaea borealis americana	twinflower
Lobelia cardinalis	cardinal flower
Lonicera dioica	red honeysuckle
Lonicera japonica	Japanese honeysuckle
Lonicera prolifera	yellow honeysuckle
Lonicera tatarica	tartarian honeysuckle
Lonicera X bella	downy bush honeysuckle
Lonicera X muendeniensis	smallflower honeysuckle
Lonicera X muscaviensis	Manchurian honeysuckle
Lonicera X xylosteoides	fly honeysuckle
Lychnis alba	white campion
Lycopodium complanatum flabelliforme	trailing ground pine
Lycopodium lucidulum	shining club moss
Lycopodium obscurum	ground pine
Lycopodium tristachyum	ground cedar
Lycopus asper	rough water horehound

Scientific Name	Common Name
Maianthemum canadense	wild lily-of-the-valley
Malaxis unifolia	green adder's mouth
Medeola virginiana	Indian cucumber root
Melampyrum lineare latifolium	cow wheat
Melilotus alba	white sweet clover
Menispermum canadense	moonseed
Mentha arvensis villosa	wild mint
Mirabilis nyctaginea	wild four o'clock
Mitchella repens	partridge-berry
Monarda fistulosa	wild bergamot
Monarda punctata villicaulis	horse mint
Nemopanthus mucronata	mountain holly
Nepeta cataria	catnip
Nuphar advena	yellow pond lily
Nuphar variegatum	yellow pond lily
Nymphaea tuberosa	white water lily
Nyssa sylvatica	black gum, sour gum
Oenothera biennis	common evening primrose
Onoclea sensibilis	sensitive fern
Orobanche uniflora	one-flowered broom rape
Osmorhiza claytoni	hairy sweet cicely
Osmorhiza longistylis	smooth sweet cicely
Ostrya virginiana	hop hornbeam, ironwood
Panax quinquefolius	ginseng
Panax trifolius	dwarf ginseng
Parthenocissus inserta	thicket creeper
Parthenocissus quinquefolia	virginia creeper
Pastinaca sativa	wild parsnip
Pedicularis canadensis	wood betony
Peltandra virginica	arrow arum
Petalostemum purpureum	purple prairie clover
Phragmites communis berlandieri	common reed
Phryma leptostachya	lopseed
Physocarpus opulifolius	ninebark
Pinus banksiana	jack pine
Pinus nigra	Austrian Pine
Pinus strobus	white pine
Pinus sylvestris	Scotch pine
Plantago lanceolata	English plantain
Plantago major	common plantain
Plantago rugelii	red stalked plantain
Platanus occidentalis	sycamore
Podophyllum peltatum	may apple
Polygala paucifolia	flowering wintergreen
Polygala senega	seneca snakeroot
Polygonatum canaliculatum	smooth solomon's seal
Polygonatum pubescens	downy solomon's seal
Polygonum amphibium stipulaceum	smartweed, water knotweed
Polygonum arifolium pubescens	halbert-leaved tear-thumb

Scientific Name	Common Name
Polygonum aviculare	common knotweed
Polygonum careyi	Carey`s heartease
Polygonum coccineum	water hearts ease
Polygonum pensylvanicum laevigatum	pennsylvania knotweed
Polygonum persicaria	lady's thumb
Polygonum punctatum	smartweed
Polytaenia nuttallii	prairie parsley
Pontederia cordata	pickerel weed
Populus alba	white poplar, silver poplar
Populus balsamifera	balsam poplar
Populus candicans X jackii	
Populus deltoides	cottonwood
Populus grandidentata	large-toothed aspen
Populus nigra italica	lombardy poplar
Populus tremuloides	quaking aspen
Potentilla anserina	silverweed
Potentilla arguta	prairie cinquefoil
Potentilla norvegica	rough cinquefoil
Potentilla palustris	marsh cinquefoil
Potentilla recta	sulfur cinquefoil
Prenanthes alba	white lettuce lion's foot
Prunella vulgaris	lawn prunella
Prunus americana	wild plum
Prunus angustifolia	chickasaw plum
Prunus avium	sweet cherry
Prunus nigra	Canada plum
Prunus pensylvanica	pin cherry
Prunus pumila	sand cherry
Prunus serotina	wild black cherry
Prunus virginiana	choke cherry
Pteridium aquilinum latiusculum	bracken fern
Pycnanthemum virginianum	common mountain mint
Pyrola elliptica	large leaved shin-leaf
Pyrola rotundifolia americana	round leaved shin-leaf
Pyrus coronaria	white sweet crab
Pyrus malus	apple
Quercus alba	white oak
Quercus bicolor	swamp white oak
Quercus ellipsoidalis	Hill's oak
Quercus imbricaria	shingle oak
Quercus macrocarpa	bur oak
Quercus palustris	pin oak
Quercus rubra	red oak
Quercus velutina	black oak
Ranunculus pensylvanicus	bristly buttercup
Ranunculus sceleratus	cursed buttercup
Rhus aromatica	fragrant sumac
Rhus aromatica arenaria	sand fragrant sumac
Rhus copallina latifolia (Rhus copallinum)	winged sumac

Scientific Name	Common Name
Rhus glabra	smooth sumac
Rhus radicans	poison ivy
Rhus typhina	staghorn sumac
Rhus vernix	poison sumac
Ribes americanum	black currant
Ribes cynosbati	prickly wild gooseberry
Ribes hirtellum	northern gooseberry
Ribes missouriense	wild gooseberry
Ribes sativum	red currant
Rorippa islandica fernaldiana	marsh cress
Rosa blanda	early wild rose
Rosa canina	dog rose
Rosa carolina	pasture rose
Rosa multiflora	japanese rose
Rosa palustris	swamp rose
Rosa setigera	Illinois rose
Rubus allegheniensis	common blackberry
Rubus flagellaris	common dewberry
Rubus hispidus obovalis	swamp dewberry
Rubus idaeus strigosus	red raspberry
Rubus occidentalis	black dewberry
Rubus odoratus	purple flowering raspberry
Rubus pensylvanicus	yankee blackberry
Rubus pubescens	dwarf raspberry
Rudbeckia hirta	black-eyed susan
Rudbeckia laciniata	wild golden glow
Rumex acetosella	field sorrel
Rumex altissimus	pale dock
Rumex crispus	curly dock, yellow dock
Rumex obtusifolius	bitter dock
Sagittaria brevirostra	short beaked arrowhead
Sagittaria graminea	grass-leaved arrowhead
Sagittaria latifolia	common arrowhead
Sagittaria rigida	stiff arrowhead
Salix alba	white willow
Salix amygdaloides	peach-leaved willow
Salix babylonica	weeping willow
Salix bebbiana	beaked willow
Salix candida	hoary willow
Salix discolor	pussy willow
Salix fragilis	crack willow
Salix glaucophylloides glaucophylla	blue-leaved willow
Salix gracilis textoris	petioled willow
Salix humilis	prairie willow
Salix interior	sandbar willow
Salix lucida	shining willow
Salix nigra	black willow
Salix pedicellaris hypoglauca	willow, bog willow
Salix rigida	heart-leaved willow

Scientific Name	Common Name
Salix sericea	silky willow
Salix syrticola	dune willow
Salix X subsericea	yewleaf willow
Sambucus canadensis	elderberry, American elder
Sambucus pubens	red-berried elder
Sanguinaria canadensis	bloodroot
Sanicula canadensis	canadian black snakeroot
Sanicula marilandica	sanicle, black snakeroot
Sarracenia purpurea	pitcher plant
Sassafras albidum	sassafras
Saururus cernuus	lizard's tail
Scirpus americanus	chair maker's rush
Scirpus cyperinus	wool grass
Scirpus validus creber	great bulrush
Scutellaria epilobiifolia	marsh skullcap
Senecio aureus	golden ragwort
Silphium perfoliatum	cup plant
Sium suave	water parsnip
Smilacina racemosa	feathery false Solomon's Seal
Smilacina stellata	starry false Solomon's-seal
Smilax lasioneura	common carrion flower
Smilax tamnoides hispida	bristly green brier, bristly cat brier
Solanum americanum	black nightshade
Solanum dulcamara	bittersweet nightshade
Solidago altissima	tall goldenrod
Solidago caesia	blue-stemmed goldenrod, wreath goldenrod
Solidago flexicaulis	broad-leaved goldenrod
Solidago gigantea	late goldenrod, giant goldenrod
Solidago graminifolia media	smooth grass-leaved goldenrod
Solidago graminifolia nuttallii	grass leaved goldenrod
Solidago gymnospermoides	shiny grass-leaved goldenrod
Solidago juncea	early goldenrod
Solidago missouriensis fasciculata	Missouri goldenrod
Solidago nemoralis	old field goldenrod
Solidago ohioensis	Ohio goldenrod
Solidago patula	swamp goldenrod
Solidago racemosa gillmani	dune goldenrod, Rand's goldenrod
Solidago riddellii	riddell's goldenrod
Solidago rigida	stiff goldenrod
Solidago rugosa	rough goldenrod
Solidago sempervirens	seaside goldenrod
Solidago speciosa	showy goldenrod
Solidago tenuifolia	slender-leaved goldenrod
Solidago uliginosa	bog goldenrod
Solidago ulmifolia	elm leaved goldenrod
Sparganium eurycarpum	common bur reed
Spiraea alba	meadowsweet
Spiraea tomentosa rosea	hardhack, steeplebush
Spiranthes lacera	slender ladies' tresses

Scientific Name	Common Name
Sporobolus heterolepis	prairie dropseed
Stachys palustris homotricha	woundwort
Stellaria media	common chickweed
Symphoricarpos orbiculatus	coralberry; indian current
Symplocarpus foetidus	skunk cabbage
Taenidia integerrima	yellow pimpernel
Tanacetum vulgare	tansy
Taraxacum officinale	common dandelion
Taxus cuspidata	Japanese yew
Thalictrum dasycarpum	smooth meadow rue
Thalictrum dasycarpum hypoglaucum	smooth meadow rue
Thaspium barbinode	hairy meadow parsnip
Thuja occidentalis	arbor vitae, northern white cedar
Tilia americana	basswood, american linden
Trientalis borealis	starflower
Trillium grandiflorum	large-flowered trillium
Typha angustifolia	narrow-leaved cattail
Typha latifolia	common cattail
Ulmus americana	American elm
Ulmus pumila	Siberian elm
Ulmus rubra	slippery elm
Urtica procera	tall nettle
Uvularia grandiflora	bellwort
Uvularia sessifolia	merrybells
Vaccinium angustifolium laevifolium	early low blueberry
Vaccinium atrococcum	black highbush blueberry
Vaccinium corymbosum	highbush blueberry
Vaccinium macrocarpon	large cranberry
Vaccinium oxycoccos	small cranberry
Vaccinium vacillans	late low blueberry
Verbascum thapsus	common mullein
Verbena hastata	blue vervain
Veronicastrum virginicum	culver's root
Viburnum acerifolium	maple-leaved arrow-wood
Viburnum lentago	nanneyberry
Viburnum opulus	European highbush cranberry
Viburnum rafinesquianum	downy arrowwood
Viburnum recognitum	smooth arrow-wood
Viola canadensis	Canada violet
Viola conspersa	dog violet
Viola pubescens	downy yellow violet
Vitis aestivalis	summer grape
Vitis labrusca	fox grape
Vitis riparia	river bank grape
Xanthium strumarium	cocklebur
Xanthoxylum americanum	prickly ash
Zea mays	corn
Zizania aquatica	wild rice

Future Research Needs

Indiana Dunes National Lakeshore is well known for its plant diversity. While this study provides detailed traditional use information for many of the species in the park, 180 species remain to be researched for traditional uses. This report provides detailed information for 15% of the 1,462 species, and summarized information for 33.3% of the 1,462 species. With this research bringing the total number of traditional use species to 983 species, only 32.8% remain to be researched for traditional uses.

Other ethnobotanical areas for further study include the Ottawa and other Great Lakes area tribes. Their use and management of park species could enrich park management and interpretation of its plant resources. Field visits with Ojibway groups would be beneficial as well but given the complications of distances between communities and the park, data collection might be more successful if researchers go to those communities and target the park's species list. Additional fieldwork and literature review has the potential to expand this and the previous study to determine how many more of the park species have or had traditional uses. A caveat to the figures above is the lack of primary Ojibway data.

The traditional perspective of ethnobotany that includes care (management) of the plants suggests an investigation of historic and contemporary practices, including traditional burning. A more in-depth examination of the literature, particularly 17th and 18th century documents, should yield additional information about the purposes and extent of Indian burning. It is believed that the entire country was developed ecologically through Indian burning over at least a one thousand year period preceding European contact (Bullock 1649; Smith 1624). This area of investigation could be useful as well to the Interpretation program. Interpretive topics could include traditional management practices, the concept of traditional science, and the idea of conservation instead of preservation to increase plant health and biodiversity.

Since Native Americans view resources and places in a holistic way, future studies may need to move beyond a single-resource perspective. An ecosystem approach can contribute to management alternatives as well as a deeper understanding of traditional ecological relationships. An examination of past resource use and management, from traditional activities through the cultural influences that changed the landscape, has the potential to suggest new ways to achieve management goals.

Chapter One
Study Overview

Indiana Dunes National Lakeshore (INDU) was established at the south end of Lake Michigan (Figure 1) on November 5, 1966 “to preserve for the educational, inspirational, and recreational use of the public certain portions of the Indiana dunes and other areas of scenic, scientific, and historic interest and recreational value” (P.L. 89-761, 89th Congress, 80 Stat 1309). The combination of sand dunes and diverse native flora in such close proximity to several urban areas provided the impetus for protection of the area. Subsequent amendments to the original authorizing legislation in 1976, 1980, 1986, and 1992 increased the park’s acreage to over 15,000 acres including 2,182 acres in Indiana Dunes State Park that are managed by the Indiana Department of Natural Resources.

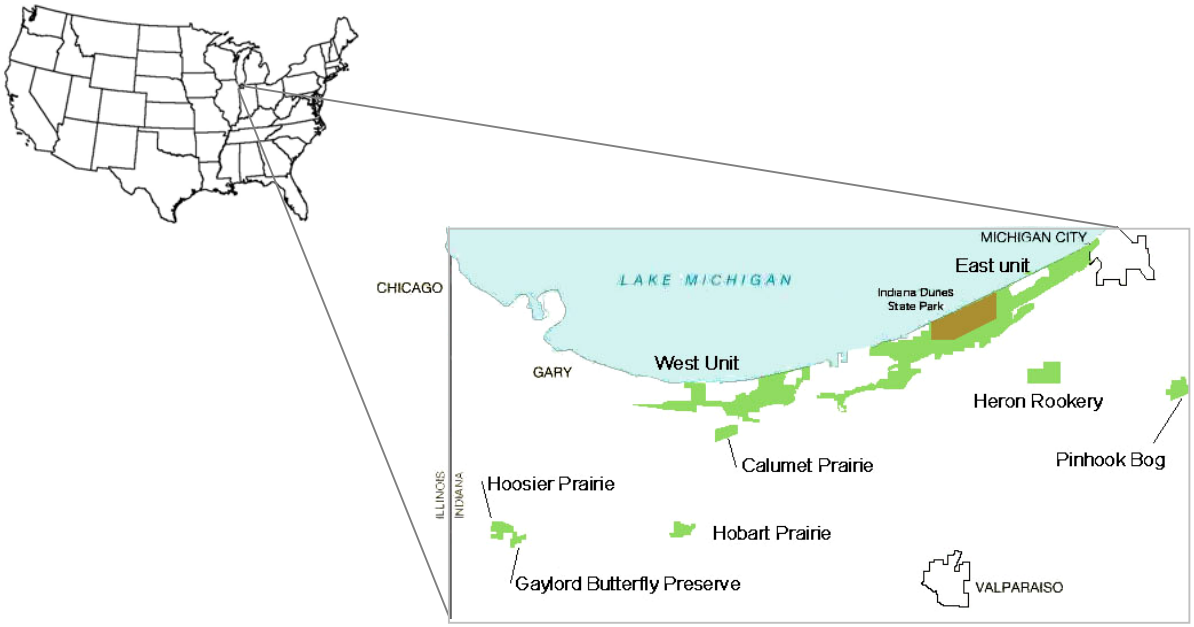

Figure 1. Indiana Dunes National Lakeshore comprises a fragmented area at the south end of Lake Michigan.

Indiana Dunes National Lakeshore encompasses a mosaic of habitats including beaches, sand dunes, bogs and other wetland areas, and woodland forests. The park includes the 1830's Bailly homestead, the 1900-era Chellberg farm, and several “Century of Progress” homes from the 1933-1934 Chicago’s World’s Fair. Today, Indiana Dunes National Lakeshore ranks 7th among national parks in native plant diversity with 1,462 species, 217 of which having special status (INDU staff 2004):

27 endangered	11 endangered, locally rare
38 threatened	5 threatened, locally rare
4 extirpated	6 extirpated, locally rare
35 rare	84 locally rare
1 rare, threatened	3 rare, locally rare
1 special concern	2 watch list

While the main goal of the park has been to protect the dunes and diverse plant life, many American Indian tribes used and cared for the area extensively to support hunting, plant gathering, and fasting activities until the land was ceded in 1832 (Toupal 2006). The landscape inherited by the park contains remnants of the traditional landscape. The Ojibway people are among many tribes who used and/or traveled through the area including the Miami, Potawatomi, Ottawa, Menominee, Meskwaki, Winnebago, Delaware, Shawnee, Kickapoo, Mascouten, Missisauga, Mohegan, Piankeshaw, Sauk-Fox, Wea, and Wyandot (Tanner 1987; Yarnell 1964). Today, Ojibway people continue to use many of the plants found in the park and the surrounding area in traditional ways (Herron 2002; Toupal 2006; Zedeño et al. 2000, 2001).

Geographic and Cultural Focus of the Research

Indiana Dunes National Lakeshore, and the plant species within it, provides the focal point for this ethnobotany. The plants found in the park once were found throughout the Great Lakes area and were used by many tribes including the Ojibway.

There are many Ojibway groups in Michigan (Figure 2) and Wisconsin (Figure 3). Identification of traditionally associated Ojibway groups began with contacting the Michigan Anishinaabek Cultural Preservation and Repatriation Alliance (MACPRA). The MACPRA president Summer Cohen recommended contacting all the Michigan tribes with interest in the southwest Michigan area (that in closest proximity to Indiana Dunes National Lakeshore), and included lists of Michigan and Wisconsin Ojibway groups:

Southwest Michigan
Grand River Band of Ottawa Indians, Grand Rapids, MI
Little River Band of Odawa, Manistee, MI
Hannahville Potawatomi Indian Community, Bark River, MI
Match-e-be-nash-shee-wish Band of Potawatomi Indians, Shelbyville, MI
Nottawaseppi Band of Huron Potawatomi, Fulton, MI
Pokagon Band of Potawatomi, Dowagiac, MI

Michigan Ojibway (aver. 351mi)
Burt Lake Band (293mi)
Grand Traverse Band (293mi)
Little Traverse Bay Bands (293mi)
Saginaw Chippewa (217mi)
Bay Mills Indian Community (432mi)
Sault Ste. Marie Tribe (432mi)
Lac Vieux Desert Band (425mi)
Keweenaw Bay Indian Community (425mi)

Wisconsin Ojibway (aver. 445mi)
Bad River Band (475mi)
Lac Court Oreilles Band (466mi)
Lac du Flambeau Band (406mi)
Red Cliff Band (513mi)
St. Croix Chippewa (452mi)
Sokaogan Mole Lake Community (360mi)

Since none of the southwest Michigan groups were Ojibway, the Michigan and Wisconsin lists provided initial focus. Distances to the park guided selection of the two closest tribes in Michigan and Wisconsin, Saginaw Chippewa Indian Tribe and the Sokaogan Mole Lake Community respectively, for initial contact.

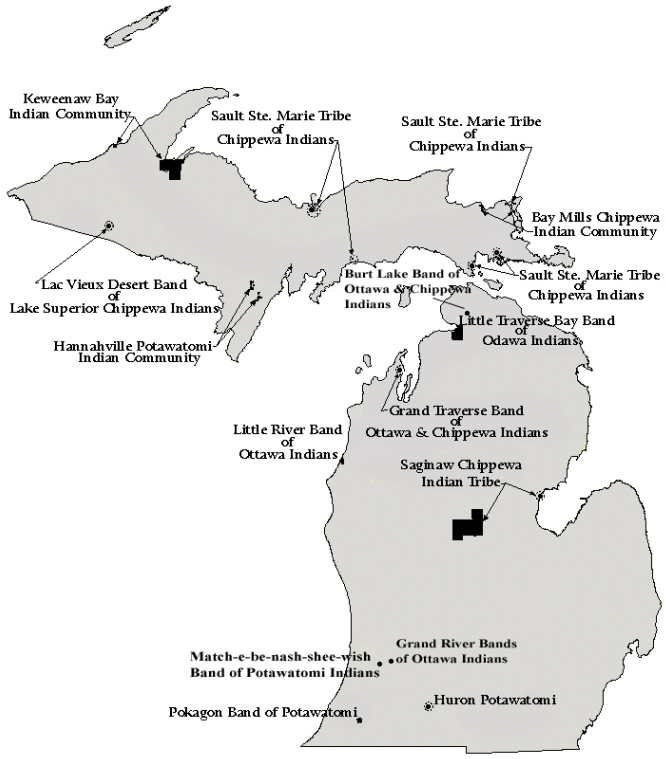

Figure 2. The tribes of Michigan (Adapted from MI Dept. of Management & Budget 1996)

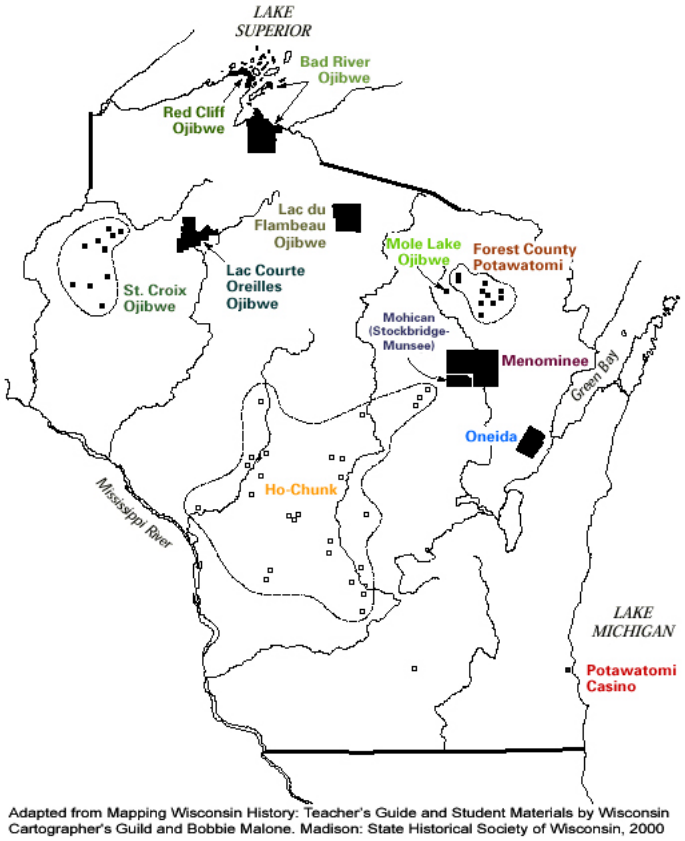

Figure 3. The tribes of Wisconsin (http://www.wisconsinstories.org/2001season/native/nj_map_today.html)

The Saginaw Chippewa Indian Tribe responded positively but the Sokaogan Mole Lake Community was not interested in participating. In an effort to have two groups participate in the study, three of the closest bands in Michigan were contacted - Burt Lake Band, Grand Traverse Band, and Little Traverse Bay Bands. While they expressed interest in the project, they felt the distance was more than their elders would care to travel.

Efforts were focused consequently on confirming participation by the Saginaw Chippewa, and extended past the 2007 field season. Tribal elections held in November resulted in enough changes in council seats to redirect the tribe's priorities, which did not include participating in the ethnobotany study. This ethnobotany, consequently, draws from numerous ethnographic and ethnohistoric sources that establish a continuity of use over the years.

Project Scope and Methodology

This ethnobotany builds upon the previous Miami and Potawatomi ethnobotany (Toupal, Banks, and Carroll 2006). It is limited to Ojibway plant use and the park plant list provided by park staff in 2004, which contains 1,462 species. As this is an unrealistic number for a plant catalog of detailed ethnobotanical information, the species in the catalog (222) are limited to those identified most commonly in the literature as well as over two dozen fungi. Traditional use information was found for 487 species and the data for the remaining species are addressed in table format in the Appendices.

Research Team

The Principal Investigator in the study was Dr. Rebecca S. Toupal. She was assisted by University of Arizona graduate student Kacy Hollenback who is pursuing a Ph.D. in Archaeology and has extensive literature review and field experience with Native Americans.

> *Dr. Rebecca S. Toupal* is an assistant research scientist with over seven years of research experience with the Bureau of Applied Research (BARA) including work with Scandinavian fishermen, and 18 American Indian tribes in the southwest and Midwest. She has a B.S. in Forestry/Range Management from the University of Montana, a Master of Landscape Architecture (MLA) from the University of Arizona (UA), and a Ph.D. in Renewable Natural Resource Studies from UA. Her publications include an article on successful conservation partnerships in the western U.S. in High Plains Applied Anthropologist, and an article on multiple cultural landscapes of a wilderness area in southern Arizona.
>
> *Kacy Hollenback* is a Ph.D. candidate in the Department of Anthropology at the University of Arizona. Her research focus is on technological change within traditional communities in the Northern Plains and Southwest United States. Her ethnographic experience with Northern

Plains and Pueblo tribes includes traditional uses of plant species and habitats. She has a Bachelors degree in Anthropology and a Masters in Archaeology from the University of Arizona. For her Masters research, she examined architecture in Northern Kohala, Hawai'i as it was embedded in upland agricultural field systems in order to develop a chronology of land use and change.

Chapter Two
Ojibway Ethnobotanical Knowledge

The traditional lives of the Ojibway people were intwined with their environments and reflected indepth knowledge of and close relationships with the resources comprising those environments. This human-nature relationship is perhaps best expressed and documented where it concerns plants. Johnston (1990) wrote that humans and animals could not survive without plants, but plants could survive without humans and animals, and consequently, have primacy over all other life. His statement, however, misrepresents the Ojibway people's relationship with the environment in two ways. It imposes a hierarchical structure to ecosystems that does not exist in the Ojibway worldview, and it ignores the Ojibway people's role in caring for the environment. They believe that they must actively take care of the plants or the plants will be in poor condition or move away, scenarios that have played out repeatedly where the Ojibway were removed from the land.

The Ojiway people have retained their traditional relationship with environments, specifically the Great Lakes environments, to some extent; enough so that they retain much ethnobotanical knowledge, particularly with regard to medicines. Documentation of their knowledge began in the late 19th century (see Hoffman 1891) and continued almost four decades later with Densmore (1928), Reagan (1928), Smith (1932), Gilmore (1933), and Stowe (1940). Smith (1932) declared the Ojibway people to be the most knowledgeable about plants, and found that their knowledge extended beyond individual species to include soils and habitats. "[They make] full use of everything that occurs [native flora] except the adventive or introduced plants. They recognize regular types of soil as sources of their medicinal plants. Sandy meadows, sandy wastes, lakes, still ponds, swamps, upland swamps, rocky openings in the forest, evergreen forests, and hardwood forests all are searched for distinctive plants. …Their knowledge of plants both in their own environment and far away is probably the best of any group of Indians. ...they make trips far away from their home to obtain necessary plants" (Smith 1932:342, 348). Densmore (1929) provided a basis for the Ojibway people's indepth knowledge when she noted that the passing on of plant knowledge began early. Children were encouraged to gather flowers from which their parents or grandparents would dry, grind, and make a beverage. In this way, the children learned the value of plants and that some plants had medicinal properties.

Of the traditional use plants he recorded, Smith (1932) found that the Ojibway made more use of species in the composite (*Asteraceae*), grass (*Poaceae*), and sedge (*Cyperaceae*) families than did other tribes; they also made use of many species of the heath family (*Ericaceae*). Moerman's (1979) analysis showed that statistically the composite family was the most important for medicinal needs. Investigations of native plant medicines have shown that these species have a real basis of effectiveness in phytochemical constituents such as monoterpenes, tannins, and salicylates (Arnason, Hebda, and Johns 1981).

The Ojibway people used a wide variety of plant parts for food including buds, flowers, shoots, leaves, fruits, nuts, seeds, roots, bulbs, rhizomes, inner bark (phloem and cambium), and sap. Fruits were the most exploited plant part, and were eaten fresh and

preserved, or dried for use in cooking, including in soups and stews. Nuts were consumed raw, or mashed for use in soups and stews. Leaves, buds, and flowers of herbaceous plants were cooked and eaten as greens. Fern shoots (*Matteuccia struthiopteris*, *Onoclea sensibilis*, *Osmunda cinnamomea*) were a particularly important source of greens in the spring and early summer (Arnason, Hebda, and Johns 1981).

The line between food and medicine plants (every plant is a medicine in Ojibway thought (Smith 1932)), and the line between medicine and ceremonial plants are not absolute. Beverages such as those made from the flowers the children collected could be for everyday use, for medicinal needs, or for spring and fall tonics that were taken as preventatives (Gilmore 1933). All of these were recognized as being beneficial to one's health and well-being.

Medicinal and ceremonial plants had critical roles in the well-being of the Ojibway people and their communities as well (Zedeño et al. 2000, 2001), and the practice of medicine and religion often coincided in some way (Arnason, Hebda, and Johns 1981). Since Indian medicine is complex, and an intricate part of maintaining a cohesive cultural unit, it must be understood as interwoven with the world view and religious beliefs of the Indian peoples (Herrick 1977). The Midewiwin or Grand Medicine Society of the Ojibway people is an ancient organization involving healing and religious guidance (Smith 1932). To become part of the Midewiwin, one progressed through a series of grades to learn the rituals and herbalism for curing physical and mental illnesses (Hoffman 1891; Landes 1968; Smith 1932).

Medicinal plants are sacred and must "be secured with the proper *mide* ceremony. This consisted of an explanatory song, and the offering of tobacco to grandmother, the earth, and Winabojo, their cultural hero" (Smith 1932:345). Only those who showed the predisposition for medicinal knowledge could become part of the Midewiwin, and that knowledge was shared through specific channels. "The young man, who had the proper dream following the period of fasting in his youth, predicting his predilection towards the medicine man's profession, was taken through a rigorous course of training. Individual knowledge was handed down through the family. Instruction to boys and girls usually comes from the uncle or aunt" (Smith 1932:349). There are four grades or degrees of the Midewiwin, each more complex than the preceding. The fourth degree is the most complex, and involves the use of charms or bewitching plants, and those most knowledgeable at this level are called jugglers or "Jessakîd." His powers include the supernatural, and he is the most feared and respected healer among the Ojibway (Smith 1932:426-427). Medicinal combinations of nine to twelve herbs were common, and reflected extensive training. The amounts of each herb varied with the strength of the plant; larger amounts of weaker medicines were combined with smaller amounts of stronger medicines. Sweetflag (*Acorus calamus*), for example, was used sparingly because its effect was so severe (Smith 1932).

As with food plants, the Ojibway people make use of many plant parts for medicinal needs. Ojibway herbalists used roots, rhizomes, and whole plants as their major source of medicine (Youngken 1924), although all other parts of plants were used as needed. The Ojibway understood that the chemical constituents in plants often were concentrated in

specific parts, and would collect these parts for specific needs but only at the appropriate time. If gathered at the wrong time, the plant's medicinal qualities may be inert, undeveloped, or dispersed (Smith 1932).

The plant materials collected from the wild are seen as special gifts, available for the taking, but with a gift of tobacco given in exchange as spiritual cooperation is a necessary component for effective treatment (Arnason, Hebda, and Johns 1981). When digging roots, for example, the herbalist would place tobacco in the cavity left by the roots, and pray through song to make the medicine potent. All plant gathering, particulary for medicinal purposes, involved songs specific to the plant and need. The need for the spiritual component is reflected as well in the results of scientific analyses to determine the reality of medicinal value. "Much of the knowledge of white men originated from studying the Indian plant uses, in the early days. Eclectic practitioners sought the Indian herbs and observed carefully what parts of the plant were used. This mass of early information was sifted scientifically by the students of medicine, and finally tested physiologically on animals. Perhaps sixty-five per cent of their remedies were found to be potent and are included in our pharmacopoeas; the other thirty-five per cent were discovered to be valueless medicinally" (Smith 1932:348). The apparent inefficacy of that thirty-five per cent supports the Ojibway herbalists' understanding that while every plant is a medicine, it is not for everyone; nor is this a limitation that reduces the plant's value as a medicine.

In the Ojibway language, plants can have multiple common names, some of which may be used for more than one species. These names reflect categories of medicinal use such as "revivers." The names are descriptive as well, illustrating the interwoven nature of the Ojibway people's relationship with plants. "The medicine name usually tells what the plant looks like, where it may be found, some peculiar taste or property, or its chief use. Often a termination is added signifying the plural of a noun or the part of the plant used, such as the wood, the leaf, the flower, the root, or the berry or fruit" (Smith 1932:348).

In addition to foods, medicines, and ceremonies, the use of plants included utility, charms, and dyes. Most of the implements used food procurement and processing were made from the wood of trees and shrubs. Birch bark, for example, was indispensable in traditional food gathering activities, and crafts. It was used to build canoes and dwellings of seasonal camps, to make storage and cooking containers, to make tools, utensils, and numerous craft items (Zedeño et al. 2000, 2001).

Charms were made with medicine plants specific to the user's need. Charms generally were for good luck in the hunt, protection in war, and success in love (Densmore 1929). Hunting charms, for example, were applied by tracing an outline of the target animal on the ground, drawing a line through its heart, and placing the appropriate medicine on the "puncture" (Smith 1932). Densmore (1929: 108) identified seven categories of charms: "(a) Love charms, (b) charms to attract worldly goods, (c) charms to insure safety and success, (d) charms to influence or attract animals, (e) protective charms, (f) charms to work evil, and (g) antidotes for evil charms." Fourth-degree healers were required to remove or counter evil charms.

Dyes were obtained from many plants including various berries and barks, gold thread roots, bloodroots, butternut and hazelnut nut hulls, and wild plums (Levi 1956). The Ojibway people would boil the material to be colored in a mixture of plant parts and some mordant to set the color. Mordants included various clays, the red or black sand that bubbles up in a spring, or stone dust, perhaps with a few, rusty, iron nails thrown in the kettle for good measure. Sometimes black oak bark (*Quercus velutina*) was used to set the color (Smith 1932).

Even as change came to the Ojibway people's traditional life, they resisted giving up their plants and practices while adopting new ones. They added introduced plants to their native pharmacopeia (e.g. *Plantago major*), and developed new uses for native plants in response to European diseases such as smallpox, tuberculosis, and venereal disease (Arnason, Hebda, and Johns 1981). The importance of foods such as wild rice and maple sap, and the medicine plants has remained, as evidenced in particular by the continuation of the Midewiwin (Zedeño et al. 2001). The Ojibway people continued to apply and teach plant knowledge to their children through the 20th century. In 1964, Yarnell reviewed traditional use of plants in the Upper Great Lakes area, placing it in an ecological, archaeological, and ethnobotanical framework (Arnason, Hebda, and Johns 1981). More recently, the continuity of Ojibway plant use was recorded by Zedeño et al. (2000, 2001) and Herron (2002). The Ojibway people's traditional relationship with their environments continues to provide a resource today that they turn to in their efforts to retain and rebuild their culture.

Chapter Three
An Ojibway Ethnobotanical Catalog: Grasses, Forbs, Shrubs, and Trees

The Indiana Dune National Lakeshore plant list contains 1,462 species; traditional uses by the Ojibway people were identified for 487 of these species (33.3%) (Table 1). Previously documented Ojibway traditional use included some of these plants but focused on food, beverage, and medicine plants (Table 2). The predominant uses of park plants are medicinal and charms, followed by food, utility, and other/unspecified uses.

	Miller Woods	Tolleston Dunes	West Beach	Bailly	Dune Acres	Dunes SP	Old Visitor Center	Keiser Unit	Tamarack Unit	Heron Rookery	Hoosier Prairie	Pinhook Bog	INDU
# plant species	563	400	598	463	852	679	583	611	566	188	563	461	1462
# traditional use species	201	145	212	184	313	254	221	227	220	80	190	171	487
agricultural	9	6	9	9	18	14	8	10	10	8	8	6	27
smoking	26	19	26	18	37	30	21	31	27	3	27	19	59
ceremonial	33	23	37	23	54	44	27	34	37	10	34	27	78
mythic	5	1	4	0	6	3	2	2	2	0	4	2	11
sacred	4	2	3	1	8	4	4	5	4	2	3	4	9
food	72	46	75	71	113	96	79	86	84	32	63	65	180
medicine	157	120	173	154	251	206	180	184	181	72	149	141	401
utility	41	35	50	41	82	66	50	60	56	19	45	40	123
craft	25	21	28	23	51	40	28	36	33	12	26	24	72
dye	11	6	12	8	19	14	10	14	14	4	9	9	25
clothing	0	0	0	0	1	0	0	0	0	0	0	0	1
trade	1	0	2	4	3	3	1	3	1	2	1	3	4
charm	119	90	137	119	191	159	137	138	138	52	109	105	307
other, unspecified	0	48	72	59	116	95	73	81	83	31	62	58	176

	Miller Woods	Tolleston Dunes	West Beach	Bailly	Dune Acres	Dunes SP	Old Visitor Center	Keiser Unit	Tamarack Unit	Heron Rookery	Hoosier Prairie	Pinhook Bog	INDU
% traditional use species	35.7	36.3	35.5	39.7	36.7	37.4	37.9	37.2	38.9	42.6	33.7	37.1	33.3
agricultural	4.5	4.1	4.2	4.9	5.8	5.5	3.6	4.4	4.5	10.0	4.2	3.5	5.5
smoking	12.9	13.1	12.3	9.8	11.8	11.8	9.5	13.7	12.3	3.8	14.2	11.1	12.1
ceremonial	16.4	15.9	17.5	12.5	17.3	17.3	12.2	15.0	16.8	12.5	17.9	15.8	16.0
mythic	2.5	0.7	1.9	0.0	1.9	1.2	0.9	0.9	0.9	0.0	2.1	1.2	2.3
sacred	2.0	1.4	1.4	0.5	2.6	1.6	1.8	2.2	1.8	2.5	1.6	2.3	1.8
food	35.8	31.7	35.4	38.6	36.1	37.8	35.7	37.9	38.2	40.0	33.2	38.0	37.0
medicine	78.1	82.8	81.6	83.7	80.2	81.1	81.4	81.1	82.3	90.0	78.4	82.5	82.3
utility	20.4	24.1	23.6	22.3	26.2	26.0	22.6	26.4	25.5	23.8	23.7	23.4	25.3
craft	12.4	14.5	13.2	12.5	16.3	15.7	12.7	15.9	15.0	15.0	13.7	14.0	14.8
dye	5.5	4.1	5.7	4.3	6.1	5.5	4.5	6.2	6.4	5.0	4.7	5.3	5.1
clothing	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
trade	0.5	0.0	0.9	1.6	1.0	1.2	0.5	1.3	0.5	2.5	0.5	1.8	0.8
charm	59.2	62.1	64.6	64.7	61.0	62.6	62.0	60.8	62.7	65.0	57.4	61.4	63.0
other, unspecified	0.0	33.1	34.0	32.1	37.1	37.4	33.0	35.7	37.7	38.8	32.6	33.9	36.1

Table 1. Number and percent of traditional plants for Indiana Dunes survey units.[1]

[1] The survey unit labels come from an older park plant list. The "Visitor Center" survey unit refers to the old Visitor Center area, and not the new Calumet Dune Interpretive Center.

Source	Food	Beverage	Medicine
Hoffman 1891	8	2	48
Densmore 1928	39	8	69
Reagan 1928	25	2	10
Smith 1932	64	12	183
Gilmore 1933	25	8	70
Stowe 1940	12	2	10

Table 2. Number of previously documented Ojibway traditional use species.

Representative sites of the habitats at the park include Miller Woods (Figure 4), West Beach (Figure 5), Howes Prairie (Figure 6), and Pinhook Bog (Figure 7). Medicine plants are associated with, but not limited to, bogs and other wet areas. Prairies provided many food and utility plants. While dunes areas have species that would have been used, these areas, according to Potawatomi sources, tended to be associated with fasting and would not have been frequented for plant gathering (Toupal 2006). Given the close relationship among the Potawatomi, Ojibway, and Ottawa, it is reasonable to assume that a similar cultural role existed for all three groups.

Figure 4. Miller Woods.

Figure 5. West Beach.

Figure 6. Howes Praire.

Figure 7. Pinhook Bog.

The genera and species chosen for this catalog include those mentioned and/or identified during the previous ethnobotany (Toupal 2006) that also had Ojibway uses as well as other identified in the literature. Those species from the previous study have been expanded with ethnobotanical data, and Ojibway names and fire responses when available. Each species starts a new page. The genera that were discussed in the literature without specific species, are treated as single entries, the implication being that the ethnobotanic data for the genera applies to all its species. Mosses, lichens, and fungi are placed at the end of the catalog and alphabetized as a group rather than within the herbaceous catalog.

Each entry begins with scientific names and synonyms, and common and vernacular names. Descriptive information includes nativity, introduction notes if applicable and available, habitat, fire response, photographs, and traditional uses. While this report is specific to Ojibwe peoples, some literature sources are included that refer to Great Lakes tribes, which includes Ojibwe, or to Anishinaabek, which encompasses Ojibwe, Odawa, and Potawatomi. Traditional use information is summarized for the entire plant list in Appendices One and Two.

Scientific name *Acer negundo*

Synonyms *Acer negundo* var. *variegatum*

Common name box elder

Other names ash-leaf maple, California boxelder, western boxelder, Manitoba maple (USDA-NRCS 2006)

Ojibway name adjagobi'múk, adjagobi' múk (Smith 1932); mō^{n}zomĭsh (Hoffman 1891)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, Bailly area, Dune Acres (Cowles Bog), Keiser Unit, Tamarack Unit, Indiana Dunes State Park

Boxelder is natively a tree of river bottoms and disturbed sites on heavy, wet soils, often seasonally flooded (up to 30 days) (USDA-NRCS 2006).

Fire Response Boxelder is believed to reestablish after fire by wind-dispersed seeds. It may also sprout from the roots, the root collar, or stump (Lanner 1983; Weaver 1960). (Also see http://www.fs.fed.us/database/feis/research_project_summaries/Neumann01/all.html)

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Traditional Uses:

Food

Ojibway (Herron 2002; Yarnell 1964)

Sap used to make a beverage (Zedeño et al. 2000).

Dried bark is pounded into flour for soup or bread (Stowe 1940).

Sap mixed with the sap of the sugar maple to make a beverage (Smith 1932).

Medicine

Anishinaabek (Ojibway, Odawa, Potawatomi) (Herron 2002)

Ojibway (Herron 2002)

Bark used to make a medicine (Zedeño et al. 2000).

The inner bark was used as an emetic (Meeker, Elias, and Heim 1993).

Infusion of inner bark taken as an emetic (Smith 1932).

The inner bark from four branches is used as an emetic. The bark is boiled to make an internal decoction (Hoffman 1891).

Charm

Ojibway

Bark used to make a charm for protection (Zedeño et al. 2000).

Scientific name *Acer nigrum*

Synonyms
- *Acer nigrum var. palmeri*
- *Acer saccharum ssp. nigrum*
- *Acer saccharum var. nigrum*
- *Acer saccharum var. viride*
- *Saccharodendron nigrum*

Common name black maple

Other names black sugar maple, rock maple (ars-grin.gov)

Ojibway name shishigirne-wish (Reagan 1928)

Nativity Native

Habitat Heron Rookery

Bottomland, hydromesophytic-forest

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Paleoindian (10,000BC-6000BC) to the Historic period (1600AD-2002AD) (Herron 2002).

Food

Ojibway

The bark is dried, and pounded into flour for soup or bread (Stowe 1940).

Sugar from sap (Hoffman 1891).

Medicine

Ojibway

The inner bark of many trees including maple, iron wood, beech, basswood, sassafras, and chokecherry were boiled into a drink for tuberculosis (Herron 2002).

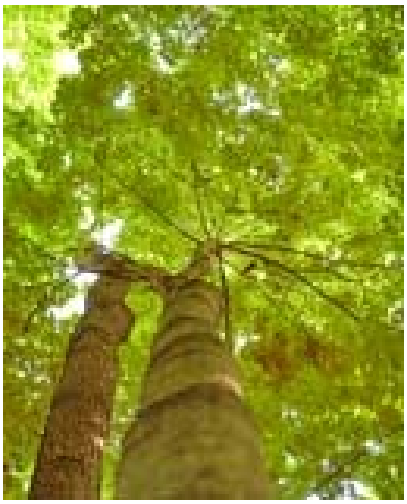
Decoction of inner bark used for diarrhea. Also as a diuretic (Hoffman 1891).

Utility

The wood is used in rice cultivation (Zedeño et al. 2000).

Wood used to make arrows. Root used to make the bowl for the dice bowl game (Hoffman 1891).

Scientific name	*Acer platanoides*
Synonyms	*Acer platanoides L. var. schwedleri*
Common name	Norway maple
Ojibway name	shishigirne-wish (Reagan 1928)
Nativity	Introduced
Introduction Notes	The earliest importation to America was to Philadelphia in 1756 (Nowak and Rowntree 1990) by John Bartram, who later offered it for sale in his garden catalogue of 1762. (Nowak D.J. and A.R. Rowan. 1990. History and Range of Norway Maple. Journal of Arboriculture 16: 291-296.)
Habitat	Miller Woods, Indiana Dunes State Park, Visitor Center
	Disturbed; wet areas
Fire Response	Norway maple regenerates after fire by coppicing (Simpfendorfer 1989). It is a tree with adventitious bud/root crown/soboliferous species root sucker; an initial off-site colonizer (off-site, initial community) and secondary colonizer (on-site or off-site seed sources) (Stickney 1989a).



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Traditional Uses:

Food

Ojibway

The bark is dried, and pounded into flour for soup or bread (Stowe 1940).

Scientific name	*Acer rubrum*
Common name	Red maple
Ojibway name	zhiishiigimewanzh, -iig, zhiishiigimiiwanzh, -iig; jishigimewanj, -in (Baraga 1966); zhiigmewanzh, zhiiishiigmewanzh (Rhodes 1993); cicigîme'wîc (Smith 1932)
Nativity	Native
Habitat	Miller Woods, Tolleston Dunes, West Beach, Bailly, Dune Acres (Cowles Bog), Indiana Dunes State Park, Old Visitor Center area, Keiser Unit, Tamarack Unit, Heron Rookery, Pinhook Bog Swamp-complex, Bog, Dune-complex
Fire Response	(Raunkiær plant life-forms introduced in 1904) *Acer rubrum* is a phanerophyte, projecting into the air on stems with resting buds more than 25 cms above soil level (Chapman and Crow 1981), which makes it intolerant of fire; even large individuals can be killed by moderate fires (Walters and Yawney 1990). Postfire mortality is relatively high for saplings, but the thicker bark of older trees makes them more fire-resistant (Ward and Stephens 1989). Fire can stimulate sprouting of dormant red maple buds on the root crown (Scheiner et al. 1988; Walters and Yawney 1990). Seedlings also sprout and may produce dense clumps following fire (McGee1980; Swan 1970). Postfire regrowth is often rapid, and begins within a month following summer and fall burns; significant increases in stem density occur by the third and fourth postfire months. Red maple establishes through seed from June through August (Flinn and Wein 1988), and regenerates by coppicing following fire (Simpfendorfer 1989).

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Archaic (6000BC-1000BC) and the Historic period (1600AD-2002AD) (Herron 2002).

Food

Ojibway

The sap is used in sugar production (Zedeño et al. 2000).

The bark is dried, and pounded into flour for soup or bread (Stowe 1940).

Medicine

Anishinaabek (Herron 2002)

Ojibway

The bark is used as a medicine (Zedeño et al. 2000).

Used as a wash to cure sore eyes (Meeker, Elias, and Heim 1993).

The bark or cambium is boiled to make tea that can be used as an eye wash or to cure sore eyes (Smith 1932).

Ceremonial

Anishinaabek

Small trees (2"-3" diameter) are used as frame beams for the sweat lodge. The trees are 15' to 20' high with the leaves stripped below the top one to two feet. The remaining leaves are to show respect for the tree's spirit and to allow the tree to participate in the ceremony through its actively growing apical meristem (Herron 2002).

Decoration

Ojibway

Punkwood and the leaf are used in decorations (Zedeño et al. 2000).

The leaf is used in beadwork designs (Smith 1932).

Charm

Ojibway

The bark is used as a charm (Zedeño et al. 2000).

Scientific name	*Acer saccharinum*
Synonyms	*Acer dasycarpum* *Acer saccharinum var. laciniatum* *Acer saccharinum var. wieri* *Argentacer saccharinum*
Common name	silver maple
Other names	soft maple, silverleaf maple, white maple, river maple, swamp maple, water maple (USDA-NRCS 2006)
Ojibway name	šigme-winš (Gilmore 1933); zhiishiigimewanzh, -iig, zhiishiigimiiwanzh- iig, innīnâ´tik (Hoffman 1891); shishigime-wish, shishigime-wish (Reagan 1928)
Nativity	Native
Habitat	Miller Woods, Tolleston Dunes, West Beach, Bailly area, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Heron Rookery, Hoosier Prairie (rare), Indiana Dunes State Park Bottomland forest, stream banks, flood plains, and lake edges where it grows best on better-drained, moist alluvial soils, at elevations of 30-600 meters (USDA-NRCS 2006).
Fire Response	Silver maple is easily killed by fire (Merz 1978). Surface fires kill seedlings and saplings and wound larger trees which exacerbates the tendency of silver maple to rot. Weeds and vines follow fires and create heavy competition for tree seedlings (Myers and Buchman 1984). Silver maple has adventitious buds at the root crown and is soboliferous with root suckers (http://www.fs.fed.us/database/feis).

USDA-NRCS PLANTS Database / Herman, D.E. et al. 1996. North Dakota tree handbook. USDA NRCS ND State Soil Conservation Committee; NDSU Ext. and Western Area Power Admin., Bismarck, ND

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Traditional Uses:

Food

Ojibwa

Sap for sugar maple production (Zedeño et al. 2000).

The bark is dried, and pounded into flour for soup or bread (Stowe 1940).

Sap used to make sugar (Gilmore 1933; Reagan 1928).

Medicine

Anishinaabek (Ojibway, Odawa, Potawatomi) (Herron 2002)

Ojibway

Bark used to make a medicine (Zedeño et al. 2000).

Decoction of inner bark used for diarrhea; compound decoction of inner bark taken as a diuretic (Hoffman 1891; Meeker, Elias, and Heim 1993).

Infusion of root bark taken for gonorrhea (Reagan 1928).

Bark boiled and used as a wash for old, stubborn, running sores, and to make a cough remedy (Gilmore 1933; Wallis 1922).

Utility

Ojibwa

Wood used to make arrows. Root used to make the bowl for the dice bowl game (Reagan 1928).

Bark, with hemlock and swamp oak bark boiled together to make a wash to remove rust from steel or iron (Gilmore 1933).

Charm

Ojibway

Bark used to make a charm for protection (Zedeño et al. 2000).

Scientific name	*Acer saccharum*
Common name	sugar maple
Other names	sugar bush (Toupal, Banks, and Carroll 2006); hard maple, head maple, sugartree, bird's-eye maple (USDA-NRCS 2006)
Anishinaabek name	ininaatig (sugar maple), iskigamizigan (family sugar bush), ziinibaakwadoke giizis (March, the sugar-making moon), onaabani giizis (April, the maple sap-boiling moon) (Herron 2002)
Ojibway name	aninaatig, -oog, ininaatig, -oog, ininâtig (*Acer* spp.) (Baraga 1966); a´nina´tĭg (Densmore 1928); ninaatig and sinaamizh (Rhodes 1993); seeg-ning-quan (Merring 1960); inênatîk, înena' tîg (indian tree) and adjagobi´mĭn (Smith 1932); innĭnâ' tik (Hoffman 1891)
Nativity	Native
Habitat	West Beach, Bailly area, Dune Acres (Cowles Bog), Keiser Unit, Tamarack Unit, Heron Rookery, Pinhook Bog, Indiana Dunes State Park Most commonly in rich, mesic woods but also found in drier upland woods, canyons, ravines, valleys, stream terraces, streambanks, and occasionally on dry rocky hillsides, at 500-1,700 meters elevation. It is a dominant or codominant in many northern hardwood and mixed mesophytic forests (USDA-NRCS 2006).
Fire Response	Sugar maple is sensitive to fire (Daubenmire 1936). The thin bark is easily damaged by even light ground fires, and "cambial injury occurs even in trees that show little external damage" (Curtis 1959). Large trees occasionally survive light fires (Kittredge 1934). Kittredge (1934) noted that sugar maple sprouts poorly after fire. Although sprouting is common in young sugar maples following mechanical disturbances, it is relatively uncommon after fire. Sugar maple reestablishes through seedling sprouts and seedlings (Maissurow 1941). Curtis (1959) found that mature trees top-killed by fire do not sprout, but small saplings occasionally will sucker. Simpfendorfer (1989) added that sugar maple regenerates by coppicing following fire. It is a survivor species, regenerating on-site from the surviving root crown or caudex, from off-site seed sources (http://www.fs.fed.us/database/feis). (Also see http://www.fs.fed.us/database/feis/research_project_summaries/Neumann01/all.html & http://www.fs.fed.us/database/feis/research_project_summaries/Elliott99/all.html)

Traditional Uses:

Archaeological evidence for Anishinaabek use dates back to the Woodland period (1000BC-1600AD) (Herron 2002).

Agriculture

Ojibway

Sap used in cultivatio (Zedeño et al. 2000).

Food

Ojibway

March is the sugar-making moon and April is the maple sap-boiling moon. Maple tapping begins with a pipe ceremony and tobacco offering. Taps or tubes called spiles or negwaakwaan. Traditional spiles were made from sumac (*Rhus typhina*) or copper (Herron 2002).

Sap for a beverage, and as a seasoning (Zedeño et al. 2000).

Used to make maple syrup and sugar. Traditionally used birch bark buckets for collecting sap but now use metal buckets (Danielsen 1999).

The sap was harvested for maple syrup (Meeker, Elias, and Heim 1993).

Maple sugar production has been important since prehistoric times. The sap of the sugar maple tree is an important seasonal staple that was once used instead of salt. Maple sugar could be stored for use throughout the year. The syrup could be used to preserve other staples such as fruits (Holman and Egan 1985).

Bark dried, pounded into flour for soup or bread (Stowe 1940).

Sap saved as it comes from the tree, to drink alone or mixed with box elder or birch sap. Maple sugar was used to season all kinds of meats; replaced now with salt. Sap was allowed to sour during historic times to make maple vinegar (cîwa'bo) that was used to cook venison as a sweet-sour meat. A fresh spruce branch was used traditionally to stir the boiling sap to reduce the foam. The sugar camps were "rather permanent" with the framework of the boiling house being left intact. Each camp had a bark-covered wigwam for the storage of sap gathering and preparation tools, which were made of birchbark, sewn with boiled basswood fiber or the cores of Jack pine roots. Vessels were waterproofed with pitch from boiled Jack pine cones. Hollowed basswood logs were used as storage vats, and rolls of birchbark would be stored for repair material. The collection of sap lasted one month, and occurred during the day, ceasing an hour before dark when the flavor would begin to turn bitter. A fresh spruce branch is used to stir the sap as it cooks to dissipate the foam that accumulates. The sugar is stored in birchbark baskets (mokoks) that hold 25 to 75 pounds. All of the sap collected is used (Smith 1932).

Sugar and syrup are made from the sap (Gilmore 1933; Hoffman 1891; Reagan 1928).

Sugar and syrup are made from the sap. Sugar is dissolved in cold water to make a summer drink. Processing the sap involves the use of several of plants. In the maple sugar camp, elm, cedar, or birch bark was used to cover storage and processing lodges; cedar boughs and rush mats were used for lodge flooring; ironwood hooks were used to hang smaller kettles over the fire; maple wood was used for

utensils that came in contact with the sap, syrup, and sugar; balsam gum was used to seal dishes; taps were made from slippery elm wood; birch bark dishes were used to catch the sap, which was transferred to birch bark buckets and basswood troughs; and birch bark was used to cover the troughs. A spruce branch was used to stir the cooking sap; basswood bark was used to strain the syrup; rushes were used to clean the cooking kettles; birch bark containers were used to mold the sugar, and basswood bark was used to hold the molds together (Densmore 1928).

Le Jeuene (1634) and Rasles (1723), Jesuit priests, documented that the bark and sap were used for food, the latter for sugar (Thwaites 1896).

Great Lakes tribes

Sap used for food (Yarnell 1964).

Medicine

Anishinaabek (Ojibway, Odawa, Potawatomi) (Herron 2002)

Ojibway

Sap, bark (Zedeño et al. 2000).

The inner bark was used medicinally as a cough syrup or expectorant (Meeker, Elias, and Heim 1993)

An infusion of bark from shoots was used as an eyewash, and to treat cataracts (Merring 1960).

A decoction is made from the inner bark to treat diarrhea (Hoffman 1891).

Utility

Ojibwa

Sugar maple wood carved into large serving spoons and utensils covered with cultural symbols (Herron 2002).

Wood used in wild rice cultivation; sap and wood used in sugar maple production; sap used in cultivation (Zedeño et al. 2000).

Wood was used to make paddles for stirring maple sugar or wild rice while scorching or parching it. Wood also was used to make bowls, arrows, and many other objects of utility (Smith 1932).

Used to make paddles for stirring maple sap (Densmore 1928).

Craft

Ojibway

Decayed wood, ashes (decorative) (Zedeño et al. 2000).

Charm

Ojibway

Sap, bark (Zedeño et al. 2000).

Trade

Chippewa

Sap was made into sugar and used as a commodity of intertribal commerce (Gilmore 1933).

In the spring, each of the Little Traverse families would bring a large *mocok*, a box made of birch bark, filled with 80-100 pounds of sugar, presumably maple, for the priest who ran the school to take to Detroit and trade for dry goods for the children (Blackbird 1887).

Scientific name	*Achillea millefolium*
Common name	yarrow, milfoil
Other names	wooly yarrow (Yarnell 1964); common yarrow, bloodwort, carpenter's weed, hierba de las cortaduras, plumajillo, milfoil (plants.usda)
Ojibway name	ajidamoowaanow, a´djidamo´wano (Densmore 1928); ojidumowaunoh (Zichmanis and Hodgins 1982); adjidamo´anŭk, waabigwan, wabîgwon, wa' bîgwûn (white flower) (Smith 1932)
Nativity	Native
Habitat	Miller Woods, Tolleston Dunes, West Beach, Bailly area, Dune Acres (Cowles Bog), Old Visitor Center area area, Keiser Unit, Tamarack Unit, Hoosier Prairie, Pinhook Bog, Indiana Dunes State Park
Fire Response	Not being highly flammable (Hogenbirk and Sarrazin-Delay 1995), western yarrow usually is only slightly damaged by fire (Berch, Gamiet, and Deom 1988; Higgins and Mack 1987; Smith and Busby 1981), although it is susceptible to mortality and reduction by severe fire (Mitchell 1984). Western yarrow regenerates from rhizomes following fire (Bourdot, Field, and White 1985). While cover and frequency of western yarrow generally increase one to two years after fire, it does not do so with any consistent pattern (Anderson, Smith, and Owensby 1970; Blaisdell 1953; Bork, Smith, and Willoughby 1996; Gibson and Hulbert 1987; Hogenbirk and Sarrazin-Delay 1995; Raper, Clark, Matthews, and Aldrich 1985; Vogl and Ryder 1969). After an initial increase, western yarrow may decrease to unburned levels as early as three years after a burn (Brown and DeByle 1989; Higgins, Kruse, and Piehl 1989; Swan 1970; Wright and Bailey 1982). Late spring burning usually reduces western yarrow (Anderson, Smith, and Owensby 1970; Bidwell, Engle, and Claypool 1990; Tester 1996).

Traditional Uses:

Medicine

Ojibwa

Flower, root, and plant used (Zedeño et al. 2000).

Flowers were put on coals and inhaled to break fever, a root decoction was used on skin "eruptions" and various parts of the plant were used as a stimulant (Meeker, Elias, and Heim 1993).

The leaves are used as a poultice for spider bites, and the flower heads were placed on coals to create a smoke that was inhaled to break a fever (Smith 1932).

The root is dried and chewed to make a tonic that is spit on limbs. A leaf decoction is made for headaches; the fumes are inhaled, and the leaves are chewed. A root decoction is made to treat skin eruptions (Densmore 1928).

Great Lakes tribes (Yarnell 1964)

Ceremonial

Ojibwa

Flowers were smoked ceremonially (Meeker, Elias, and Heim 1993).

The dried flower heads are part of the kinnikinnick smoking mixture, which is used in medicine lodge ceremonies (Smith 1932).

Charm

Ojibwa

Flower, root, and plant used (Zedeño et al. 2000).

Scientific name *Acorus calamus*

Common name sweet flag

Other names sweetflag, bitter root (Herron 2002), *Calamus aromaticus* (Josselyn 1674); sweet sedge, calamus, sweet flag, sweet root, sweet rush, sweet cane, gladdon, sweet myrtle, myrtle grass, myrtle sedge, cinnamon sedge (Grieve, M. A Modern Herbal <botanical.com>)

Anishinaabek name wiikenh (Meeker, Elias, and Heim 1993)

Ojibway name wiikenh, wike 'angelica root' (Baraga 1966); wikĕn´, mashkosii-zhaabozigan, mŭckosija´bosigŭn, nabagashk, -oon, na´bugŭck (Densmore 1928); wikan (Gilmore 1933); we´ke, na´bŭgŭck (something flat) (Smith 1932)

Nativity Native

Habitat Bailly area, Indiana Dunes State Park

Sedge meadow

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Traditional Uses:

Others Archaeological evidence for Anishinaabek use found for the Historic period (1600AD-2002AD) (Herron 2002).

Medicine

Anishinaabek

Root fragments used as throat lozenge during singing at pow-wows (Herron 2002).

Ojibwa

Rhizome, root used (Zedeño et al. 2000).

Roots used by the Chippewa as an infusion for colds, coughs and as a physic. In a decoction as a gargle for sore throats, toothaches, and cold remedies and in an unstated manner for cramps and as a hallucinogen (Meeker, Elias, and Heim 1993).

The root was chewed to threat a sore throat. It was used to make a throat tonic for singers, and as a heart stimulant (Hebda 1979).

The rhizomes are steeped with prickly ash (*Zanthoxylum*

americanum) and sassafras (*Asarum canadense*) to treat colds, coughs, and bronchitis (Gilmore 1933).

The root is a quick-acting physic; an inch and a half of root was the most that should be used and even that was quite harsh. It was used to treat cold in the throat and to cure stomach cramps. A tea made with the root in combination with sarsparilla root, is used on gill nets to ensure a good catch; a net treated with this tea retains the odor of the sweet flag root after being in the water for 12 hours (Smith 1932).

The root powder was snuffed to treat colds. The dried root was chewed to treat toothaches. A root decoction was used for sore throats and as a physic with children (Densmore 1928).

Great Lakes tribes

Root used (Yarnell 1964).

Utility

Anishinaabek (Herron 2002)

A tea of sweetflag and sarsaparilla (*Aralia nudicaulis*) was used to soak gill nets to attract white fish (Smith 1932).

Great Lakes tribes

Used for wigwam thatch (Yarnell 1964).

Charm

Ojibwa

Rhizome, root used (Zedeño et al. 2000).

Great Lakes tribes

Root used (Yarnell 1964).

Scientific name *Actaea pachypoda*

Synonyms *Actaea alba*

Common name white baneberry

Other names white cohosh (Yarnell 1964)

Ojibway name wapkadak (Gilmore 1933)

Nativity Native

Habitat Bailly, Dune Acres (Cowles Bog), Indiana Dunes State Park, Old Visitor Center area, Keiser Unit, Heron Rookery, Pinhook Bog

Mesophytic-forest, Disturbed-wet

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Traditional Uses:

Medicine

Ojibway

Convulsions in children: root decoction (Gilmore 1933).

Scientific name	*Actaea rubra*
Common name	red baneberry
Other names	snakeberry (Yarnell 1964)
Ojibway name	wiishkbobijiibik, wîckobidji'bîk (sweet root) (Smith 1932); wi' cosidji' bĭka, wi´cosidji´bĭk (Densmore 1928); ojiibikens, odzī´bĭkĕns´, odzibike^{n}s (Hoffman 1891)
Nativity	Native
Habitat	Dune Acres (Cowles Bog), Pinhook Bog
	Dune-complex, Mesophytic-forest
Fire Response	Fire generally kills aboveground portions of red baneberry but early postfire recovery included sprouting, vigorous growth, and first-year fruit productionm (Crane, Habeck, and Fischer 1983; Keller 1980). Also see http://www.fs.fed.us/database/feis/pdfs/others/Hamilton06/Hamilton06.pdf

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Traditional Uses:

Medicine

Ojibway

Roots are used medicinally (Zedeño et al. 2000).

Roots were used for a variety of ailments, including stomach troubles and gynecological problems (Meeker, Elias, and Heim 1993).

A tea is made from the root for women after childbirth to "clear up the system"; men eat the root to treat stomach troubles (Smith 1932).

A root decoction is made to treat excessive menstrual flow (Densmore 1928).

A root decoction is made to treat stomach trouble, including swallowing hair (Hoffman 1891).

Charm

Ojibway

Roots are used as charms (Zedeño et al. 2000).

Scientific name *Adiantum pedatum*

Common name maidenhair fern

Other names lady fern (ASFIMI), sweet fern (COPE)

Ojibway name macadac cawdac (black legged fern)

Nativity Native

Habitat West Beach, Dune Acres (Cowles Bog), Old Visitor Center area area, Keiser Unit, Indiana Dunes State Park

Hydromesophytic-forest

©Tom Barnes, University of Kentucky

Traditional Uses:

Others Archaeological evidence for Anishinaabek use found for the Historic period (1600AD-2002AD) (Herron 2002).

Medicine

Anishinaabek

Two or three horizontal roots are chopped up and boiled in two quarts of water until a 1/2 quart of tea remains, which is strained for storage. It is used to treat cirrhosis of the liver at a dosage of one teaspoon to eight ounces of hot or cold water after meals over the course of a few months. The treatment will not work if the person continues to drink alcohol. An infusion of the above ground plant is drunk for arthritis, bronchial disorders, asthma, coughs, hoarseness, fever, and menstrual pains. Hair loss can be slowed by mixing the ashes of the fern with a half cup of olive oil and a tablespoon of herb vinegar, then applying to the scalp. Pouring a leaf infusion on the hair and scalp treats dandruff (Herron 2002).

Scientific name *Agrimonia gryposepala*

Common name tall agrimony

Other names cocklebur (Yarnell 1964); tall hairy agrimony (Smith 1933)

Ojibway name saga' tîgans (seeds stick) (Smith 1932); zaugautigauhnse (Zichmanis and Hodgins 1982)

Nativity Native

Habitat West Beach, Dune Acres (Cowles Bog), Visitor Center area, Keiser Unit, Indiana Dunes State Park

Hydromesophytic-forest

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Traditional Uses:

Others Archaeological evidence for Anishinaabek use found for the Historic period (1600AD-2002AD) (Herron 2002).

Medicine

Ojibway

The root is used medicinally (Zedeño et al. 2000).

The root was traditionally used to treat urinary problems, and as a love medicine, usually snuck into the food of another person to act as an aphrodisiac (Meeker, Elias, and Heim 1993).

The root is used with other ingredients to make a medicine to treat urinary problems (Smith 1932).

Charm

Ojibway

The root is used as a charm (Zedeño et al. 2000).

Scientific name *Allium canadense*

Common name wild onion, wild garlic

Other names meadow garlic (Smith 1933)

Nativity Native

Habitat Bailly area, Dune Acres (Cowles Bog), Visitor Center area, Heron Rookery, Hoosier Prairie, Indiana Dunes State Park

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Traditional Uses:

Food

Ojibwa

Bulbs used in the spring as an article of food, the small wild onion was sweet (Smith 1932).

Scientific name	*Allium cernuum*
Common name	nodding wild onion
Ojibway name	bagwaji-zhi/agaagawinzh, -iig, bgoji-zhgaagwinzh, bgwaji-zhgaagwinzh (Rhodes 1993); zhi/agaagawanzh, -iig, cîgaga´wûnj (skunk plant) (Smith 1932)
Nativity	Native
Special status	locally rare
Habitat	Miller Woods; prairie

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Traditional Uses:

Food

Ojibwa

The plant is used as a vegetable (Zedeño et al. 2000).

Traditional food source (Meeker, Elias, and Heim 1993).

Bulbs used in the spring as an article of food, the small wild onion was sweet (Smith 1932).

Scientific name *Allium tricoccum*

Common name wild leek

Other names ramp (Yarnell 1964)

Ojibway name bagwaji-zhi/agaagawanzh, -iig, bûgwa´djijîca´gowûnj (unusual onion) (Smith 1932); zhi/agaagawanzh, -iig, zhi/agaagawanzhiins, siga´gawûnj (Densmore 1928); zhigaugohnsheehnse (Zichmanis and Hodgins 1982)

Nativity Native

Habitat Dune Acres (Cowles Bog), Keiser Unit, Heron Rookery, Pinhook Bog, Indiana Dunes State Park

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Traditional Uses:

Mythic

Ojibwa

This is known as Winabojo's onion, the one he pointed out for food (Smith 1932).

Food

Ojibwa

The plant is used as a vegetable (Zedeño et al. 2000).

It is gathered in the spring when it is fuller, and may be dried for later use; it is more bitter than the wild onion (Smith 1932).

Medicine

Ojibwa

The root is used as a medicine (Zedeño et al. 2000).

Decoction of the root wasused as a quick-acting emetic (Meeker, Elias, and Heim 1993).

A root decoction is used as an emetic (Densmore 1928).

Charm

Ojibwa

The root is used as a charm (Zedeño et al. 2000).

Scientific name *Alnus glutinosa*

Common name European black alder

Anishinaabek name wadobin (root to sew a canoe) (*Alnus* spp.) (Smith1932)

Nativity Introduced

Introduction notes *Alnus glutinosa* has been in cultivation in the northeast since colonial times. Early records have it escaping cultivation on Long Island as early as the 1870s (J. of the Torrey Botanical Club 1876, Vol. 6: 115, 259). A 1900 record (Rhodora, Vol. 2: 157) has it "well established" in West Medford Massachusetts, though there was "no record of introduction." Fernald (1950) reported that it was "locally naturalized" from Newfoundland to Illinois and south from Delaware to Pennsylvania. (DCNR Invasive Plants in Pennsylvania. <http://www.dcnr.state.pa.us/forestry/invasivetutorial/euro_black_alder.htm>) (Fernald, M. L. 1950. Gray's Manual of Botany, 8th edition. American Book Company, Boston Flora of North America Association ed. 2000. Flora of North America vol. 3. Oxford University Press, Oxford, New York.)

Habitat Hydromesophytic-forest, Bottomland

© Robert H. Mohlenbrock @ USDA-NRCS PLANTS Database / USDA NRCS. 1995. Northeast wetland flora: Field office guide to plant species. Northeast National Technical Center, Chester.

Traditional Uses:

Archaeological evidence for Anishinaabek use found for the Historic period (1600AD-2002AD) (Herron 2002).

Medicine

Ojibwa

Historic medicinal uses include infusion of bark for anemia, decoction of root for bloody stools, and decoction of bark mixed with powdered bumblebees for difficult childbirth (Gilmore 1933; Meeker, Elias, and Heim 1993).

Decorative

Ojibwa

The bark is used (Zedeño et al. 2000).

Dye

Ojibwa

The inner bark used to make a yellow dye (Smith 1932).

The inner bark was boiled with that of *Cornus sericea* for traditional dyes; dust from silt grindstones was added to dyes to set colors (Densmore 1928).

Scientific name *Alnus rugosa americana*

Synonyms
- *Alnus incana* ssp. *rugosa* (current accepted)
- *Alnus incana* var. *americana*
- *Alnus rugosa*

Common name speckled alder

Other names
- mountain alder (Smith 1933)

Ojibway name wado' bîn (root to sew a canoe) or wado'b (Smith 1932); wadûb' (Densmore 1928)

Nativity Native

Habitat West Beach, Dune Acres (Cowles Bog), Visitor Center, Keiser Unit, Tamarack Unit, Indiana Dunes State Park

Dune-complex, Swamp-complex

Fire Response Speckled alder sprouts quickly from persistent root crowns following mild fires. Severe fires delay regeneration. In the Great Lake States, regeneration reaches peak abundance after 10 years (A. D. Revill Associates 1978).

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Traditional Uses:

Medicine

Ojibwa

- The bark and root are used medicinally (Zedeño et al. 2000).
- The bark is used as an astringent and emetic (Stowe 1940).
- The bark is steeped with the bark of larch or tamarack to treat anemia (Gilmore 1933).
- The root is used for its hemostatic properties, the root tea acts as an astringent and coagulant (Smith 1932).
- A weak root decoction with powdered dried bumblebees is used for difficult labor. A root decoction is made with *Cornus alternifolia*, *C. stolonifera* as a wash to treat sore eyes (Densmore 1928).

Utility

Ojibwa

- The roots are used in sewing birchbark canoes (Smith 1932).

Decorative

Ojibwa

The bark is used decoratively (Zedeño et al. 2000).

sewing birchbark canoes with roots (Smith 1932

Dye

Ojibwa

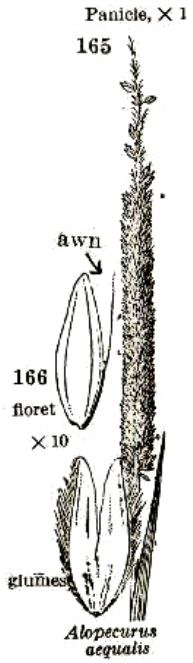
The inner bark makes a light yellow dye. When mixed with other plants, a red, red-brown, or black dye is obtained. In some instances, speckled alder would be used to dye sweet grass a reddish-yellow, and the women would chew the inner bark before drawing the sweet grass through their mouth (Smith 1932).

Charm

Ojibwa

The bark and root are used as charms (Zedeño et al. 2000).

Scientific name	*Alopecurus aequalis*
Common name	short-awned foxtail
Other names	shortawn foxtail
Nativity	Native
Habitat	Visitor Center, Pinhook Bog



Drawing by Agnes Chase from Norman C. Fassett's Grasses of Wisconsin
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Traditional Uses:

Medicine

Ojibwa

Unspecified use (Yarnell 1964).

Scientific name *Amaranthus albus*

Synonyms
- *Amaranthus albus* var. *pubescens*
- *Amaranthus graecizans*
- *Amaranthus graecizans* var. *pubescens*
- *Amaranthus pubescens*

Common name tumbleweed

Other names amaranth (Herron 2002); tumble pigweed, white pigweed, prostrate pigweed (plants.usda.gov)

Nativity Native

Habitat Widespread, generally below 2200m (7200 feet) (Hickman 1993).

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Traditional Uses:

Archaeological evidence for Anishinaabek use found for the Woodland period (1000BC-1600AD) (Herron 2002).

Unspecified

- Ojibwa
  - Based on archaeological remains (Herron 2002).

Scientific name	*Amelanchier arborea*
Common name	juneberry, shadbush, serviceberry
Nativity	Native
Habitat	West Beach, Bailly area, Dune Acres (Cowles Bog), Visitor Center area, Keiser Unit, Tamarack Unit, Pinhook Bog, Indiana Dunes State Park
Fire Response	Fire top-kills downy serviceberry (Scheiner, Sharik, Roberts, and Vande Kopple 1988), but it will recolonize sites following fire (Saunders, Smathers, and Ramseur 1983; Scheiner, Sharik, Roberts, and Vande Kopple 1988). It is a survivor species regenerating from the surviving root crown on-site and by seed from off-site colonizer in postfire year one and two (http://www.fs.fed.us/database/feis/).

Traditional Uses:

Food

- Ojibwa
  - fruit (Densmore 1929; Zedeño et al. 2000)
- Great Lakes tribes
  - Fruit used for food (Yarnell 1964).

Utility

- Ojibwa
  - Stalks used to make arrows "in very old times" (Densmore 1929).

Scientific name *Amelanchier humilis*

Common name low shadblow

Other names low shadbush (*AMELANCHIER* Systematics and Evolution http://biology.umaine.edu/)

Nativity Native

Habitat Keiser Unit, Indiana Dunes State Park

Dune-complex, Mesophytic-forest

Fire Response Given its strong suckering habit (*AMELANCHIER* Systematics and Evolution http://biology.umaine.edu/), low shadblow likely survives fire.

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Traditional Uses:

Food

Ojibwa

Fruit is used for food (Yarnell 1964).

Utility

Ojibwa

Stalks used to make arrows by Ojibwa "in very old times" (Densmore 1929:147).

Scientific name *Amelanchier interior*

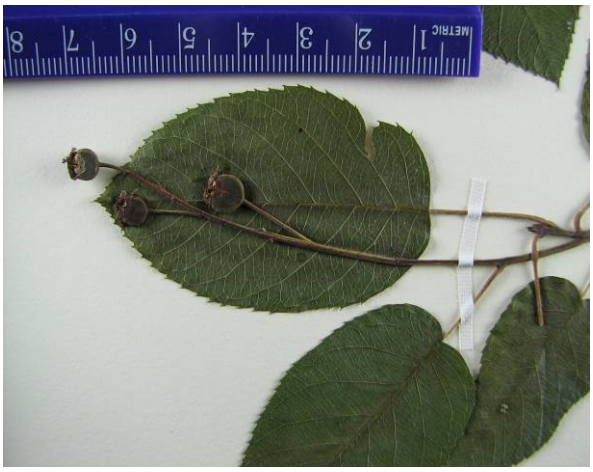
Common name dwarf shadblow

Other names Wiegand's shadbush (*AMELANCHIER* Systematics and Evolution http://biology.umaine.edu/)

Nativity Native

Habitat Miller Woods, Dune Acres (Cowles Bog), Keiser Unit, Tamarack Unit

Savanna-complex



Traditional Uses:

Food

Ojibwa

Fruit is used for food (Yarnell 1964).

Utility

Ojibwa

Stalks used to make arrows by Ojibwa "in very old times" (Densmore 1929:147).

Scientific name *Amelanchier laevis*

Common name allegheny shadblow

Other names juneberry, service berry (Yarnell 1964); smooth shadbush (*AMELANCHIER* Systematics and Evolution http://biology.umaine.edu/)

Ojibway name goziga'-gominaga'wûnj (thorny wood) or gozîgago' mînûn (thorny berry) or bîsega'gomînaga'wûnj or goziga'gomînûk (Smith 1932)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Bailly area, Visitor Center area, Keiser Unit, Tamarack Unit, Pinhook Bog, Indiana Dunes State Park Dune-complex

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Traditional Uses:

Food

Ojibwa

The berries are eaten (Zedeño et al. 2000).

The berries are eaten, and dried for winter use (Smith 1932).

The berries are eaten (Densmore 1929).

Medicine

Ojibwa

The bark is used for medicine (Zedeño et al. 2000).

An infusion of bark was taken by expectant mothers (Meeker, Elias, and Heim 1993).

The bark is used to make a tea for expectant mothers (Smith 1932).

Utility

Ojibwa

Stalks used to make arrows by Ojibwa "in very old times" (Densmore 1929:147).

Charm

Ojibwa

The bark is used as a charm (Zedeño et al. 2000).

Scientific name *Amorpha canescens*

Common name lead plant

Ojibway name we´abŏnag´kak (Hoffman 1891)

Nativity Native

Habitat Hoosier Prairie

Prairie-dry, Praire-wet

Fire Response Leadplant is well adapted to fire and generally recovers rapidly. Height, crown width, and cover have been shown to increase following fire (Bock and Bock 1981). Leadplant most likely recovers following fire via sprouting from rhizomes, the root crown, or roots, and some seedling establishment from seed stored on-site (Johnson and Anderson 1986).

Traditional Uses:

Medicine

Ojibwa

The root is used for medicine (Zedeño et al. 2000).

In traditional medical practices, a decoction of the root was used to treat gastrointestinal troubles and other stomach pains (Meeker, Elias, and Heim 1993).

Charm

Ojibwa

The root is used as a charm (Zedeño et al. 2000).

Scientific name *Amphicarpa bracteata*

Common name hog peanut

Other names ground bean (Yarnell 1964)

Ojibway name bagwaji-miskodiisimin, Bûgwûdj´mĭskodi´simĭn, bûgwa´dimîskodi´sîmîn, bûg wûdj' miskodi' simîn (Densmore 1928)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, Bailly area, Dune Acres (Cowles Bog), Visitor Center area, Keiser Unit, Tamarack Unit, Heron Rookery, Hoosier Prairie, Indiana Dunes State Park

Savanna-complex, Bottomland

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Traditional Uses:

Food

Ojibwa

The beans are cooked (Gilmore 1933).

The roots are boiled (Densmore 1928).

Medicine

Ojibwa

Traditionally a compound decoction of the root was used as a physic (Meeker, Elias, and Heim 1993).

Scientific name *Amphicarpa bracteata comosa*

Synonyms
- *Amphicarpaea bracteata* var. *comosa*
- *Amphicarpaea comosa*
- *Amphicarpaea pitcheri*
- *Falcata comosa*
- *Falcata pitcheri*
- *Glycine comosa*

Common name lowland hog peanut

Other names
- American hogpeanut

Ojibway name bûgwa' dj mîs-kodi' sîmîn (unusual red bean) (Amphicarpa pitcheri, syn. Amphicarpaea bracteata var. comosa) (Smith 1932); bûg wûdj' miskodi' simîn (Densmore 1928)

Nativity Native

Habitat West Beach, Visitor Center area, Tamarack Unit

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Traditional Uses:

Food
- Ojibwa
  - The beans are cooked (Gilmore 1933).
  - The beans and root are cooked (Smith 1932).
  - The roots are boiled (Densmore 1928).

Scientific name *Andromeda glaucophylla*

Synonyms
- *Andromeda polifolia* var. *glaucophylla*
- *Andromeda glaucophylla*
- *Andromeda glaucophylla* var. *iodandra*
- *Andromeda polifolia* ssp. *glaucophylla*

Common name bog rosemary

Ojibway name bîne' mîkci (swamp partridge berry) (Smith 1932)

Nativity Native

Habitat Pinhook Bog

Fire Response Bog rosemary sprouts from rhizomes after fire (Flinn 1980; Flinn and Wein 1977; Gates 1942; Jacquemart 1998) unless the fire burns deeply into the peat and kills the roots and rhizomes (Boucher 2003; Christensen, Clausen, and Curtis 1959). It is a small rhizomatous shrub with adventitious bud/root crown, a geophyte having growing points deep in the soil, and a ground residual colonizer (Stickney 1989b).

Traditional Uses:

Food

Ojibwa

The leaf is used as a beverage (Zedeño et al. 2000).

The young leaves and tips were boiled fresh or dried and drunk as a beverage by the Ojibwa (Meeker, Elias, and Heim 1993).

The young, tender leaves, and tips are boiled for a beverage tea, and it is gathered and dried for later use as well (Smith 1932).

Scientific name *Andropogon gerardii*

Common name big bluestem grass

Other names beard grass (Yarnell 1964); big bluestem, turkeyfoot, bluejoint (plants.usda)

Ojibway name mûckode' kanĕs (Densmore 1928)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Bailly area, Dune Acres (Cowles Bog), Visitor Center area, Keiser Unit, Hoosier Prairie, Indiana Dunes State Park

Prairie-wet

Fire Response Big bluestem regrows from surviving rhizomes after fire. Following summer burns, regrowth is from either undamaged apical meristems or from new tillers from underground rhizomes (Ewing and Engle 1988). Spring and fall burns when the aboveground foliage is dead result in normal spring growth. In general, spring burning has a stimulating effect on growth and vigor of big bluestem (Kucera 1981). In response to burns in March and May, Curtis and Partch (1948) found an increase in the number and height of flowering stems, and an increase in seedlings.

Traditional Uses:

Medicine

Ojibwa

The root is used as a medicine (Zedeño et al. 2000).

The roots were used in a decoction for stomach pain and as a diuretic (Meeker, Elias, and Heim 1993).

A root decoction is made for stomach pain. A root decoction with snowberry is made to treat stoppage of urine (Densmore 1928).

Charm

Ojibwa

The root is used as a charm (Zedeño et al. 2000).

Scientific name *Anemone canadensis*

Common name meadow anemone

Other names Canada anemone (Yarnell 1964)

Ojibway name mîdewidji' bîk (medicine lodge root) (Smith 1932); wabesgung (Gilmore 1933); wisog' ibŏk (*Anemone* sp., hart's horn), pesi' kwadzhi' bwiko' kŏk (*Anemone canadensis*) (Hoffman 1891); midewidjeebik (Zichmanis and Hodgins 1982)

Nativity Native

Habitat Miller Woods

Prairie-wet

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Traditional Uses:

Medicine

Ojibwa

The root and leaf are used for medicine (Zedeño et al. 2000).

The root was eaten to clear the throat for singing in ceremonies, a poultice of roots was used on wounds, an infusion of the root was used as a wash for sores and the leaves were used for nasal hemorrhages, bleeding sores, and wounds (Meeker, Elias, and Heim 1993).

The root is chewed and applied as a styptic. A leaf poultice is placed in the nostril to treat nose bleeds. The roots are steeped and applied to sores (Gilmore 1933).

The root is eaten to clear the throat in order to sing well during the medicine ceremony (Smith 1932).

The dried, powdered leaves are used to treat headaches. A root decoction was made for back pain (Hoffman 1891).

Charm

Ojibwa

The root and leaf are used as charms (Zedeño et al. 2000).

Scientific name *Anemone cylindrica*

Common name thimbleweed

Ojibway name gande gwa' son-înke' cînagwûk (looks like tumble-weed) (Smith 1932); Traditionally an infusion of the root was used to relieve lung congestion and tuberculosis (Meeker, Elias, and Heim 1993)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Dune Acres (Cowles Bog), Visitor Center area, Tamarack Unit, Indiana Dunes State Park

Prairie-wet, Disturbed-dry, Savanna-conplex

Traditional Uses:

Medicine

Ojibwa

The root is used as a medicine (Zedeño et al. 2000).

Traditionally an infusion of the root was used to relieve lung congestion and tuberculosis (Meeker, Elias, and Heim 1993).

The root is used to make a tea to treat lung congestion and tuberculosis (Smith 1932).

Charm

Ojibwa

The root is used as a medicine (Zedeño et al. 2000).

Scientific name *Anemone virginiana*

Common name tall anemone, tumbleweed

Other names thimbleweed (Peattie 1930; Yarnell 1964); tall thimbleweed (plants.nrcs.usda.gov/)

Ojibway name wiisagibag (Meeker, Elias, and Heim 1993); wisŏg´ibŏk, pesīkwadzhi´bwiko´kŏk (Hoffman 1891)

Nativity Native

Habitat Bailly area, Dune Acres (Cowles Bog), Visitor Center area, Tamarack Unit, Indiana Dunes State Park

Mesophytsic-forest, Disturbed-wet

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Traditional Uses:

Medicine

Ojibwa

Unspecified (Zedeño et al. 2000).

The roots are boiled with the roots of hepatica (*Hepatica trloba*) and sweet cicely (*Osmorhiza longistylis*) to make a remedy for amenorrhea (Meeker, Elias, and Heim 1993).

Scientific name *Anemonella thalictroides*

Synonyms *Thalictrum thalictroides*

Common name rue anemone

Ojibway name biimaakwad (Meeker, Elias, and Heim 1993); beemaukoot (Zichmanis and Hodgins 1982)

Nativity Native

Habitat West Beach, Bailly area, Dune Acres (Cowles Bog), Visitor Center area, Heron Rookery, Hoosier Prairie, Pinhook Bog, Indiana Dunes State Park

Mesophytic-forest

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Traditional Uses:

Unspecified

Ojibwa

Unspecified (Zedeño et al. 2000).

This species was used by the Great Lakes Ojibwa (Meeker, Elias, and Heim 1993).

Scientific name *Antennaria neglecta*

Common name cat's foot

Other names field pussytoes (plants.usda.gov); pussytoes (Herron 2002)

Ojibway name gagîge' bûg (everlasting leaf) (Smith 1932); gaagigebag (Meeker, Elias, and Heim 1993)

Nativity Native

Habitat Bailly area, Dune Acres (Cowles Bog), Hoosier Prairie, Pinhook Bog Prairie-dry, Disturbed-dry

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Traditional Uses:

Archaeological evidence for Anishinaabek use found in the Historic period (1600AD-2002AD) (Herron 2002).

Medicine

Ojibwa

The plant is used as a medicine (Zedeño et al. 2000).

An infusion of the plant was used in traditional medicine as a gynecological aid after childbirth (Meeker, Elias, and Heim 1993).

The whole herb is used to make a tea for women who have just given birth to help purge the afterbirth and begin internal healing (Smith 1932) (Smith discusses *Antennaria neodioica*, which is now *Antennaria howellii* ssp. *neodioica*. Two varieties of *A. neglecta*, var. *attenuata* and var. *neodioica*, are now *Antennaria howellii* ssp. *neodioica* as well, so his data may apply here),

Charm

Ojibwa

The plant is used as a charm (Zedeño et al. 2000).

Scientific name *Antennaria plantaginifolia*

Common name pussy toes

Other names woman's tobacco (plants.usda.gov)

Ojibway name gaagigebagoons (Meeker, Elias, and Heim 1993); kagigaebugohnse (Zichmanis and Hodgins 1982)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Bailly area, Dune Acres (Cowles Bog), Visitor Center area, Keiser Unit, Tamarack Unit, Hoosier Prairie, Pinhook Bog, Indiana Dunes State Park

Mesophytic-forest, Savanna-complex, Prairie-dry

Traditional Uses:

Medicine

Ojibwa

The plant is used as a medicine (Zedeño et al. 2000).

The plant is used for stomach aches and as an expectorant (Meeker, Elias, and Heim 1993).

Charm

Ojibwa

The plant is used as a medicine (Zedeño et al. 2000).

Scientific name *Apios americana*

Synonyms *Apios tuberosa*

Common name ground nut

Other names wild potato, Indian potato, wild sweet potato, American potato bean, wild bean, ground bean, hopniss, Dakota peas, sea vines, pea vines, pomme de terre, patates en chapelet, American potato bean (Stevens 2006)

Ojibway name pin (Gilmore 1933); opin (Meeker, Elias, and Heim 1993)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Bailly area, Dune Acres (Cowles Bog), Visitor Center area, Keiser Unit, Tamarack Unit, Hoosier Prairie, Pinhook Bog, Indiana Dunes State Park

Hydromesophytic-forest

Traditional Uses:

Food

Ojibwa

The nut or fruit is eaten (Zedeño et al. 2000).

The edible root was an important source of food for the Native Americans (Meeker, Elias, and Heim 1993).

A common native food plant of temperate, eastern North America, west to the wet margins of prairies, ground nut was used extensively by the Native Americans (Kindscher 1987).

The tubers are used raw or cooked. Groud nut is an important food plant (Gilmore 1933).

Lescarbot (1612) and Le Jeuene (1633), both Jesuit priests, said the roots were a famine food (*Apios tuberosa*, syn. *A. americana*) (Thwaites 1896).

Scientific name *Apocynum androsaemifolium*

Synonyms
- *Apocynum androsaemifolium* subsp. *androsaemifolium* var. *incanum*
- *Apocynum pumilum* var. *rhomboideum*
- *Apocynum scopulorum*

Common name spreading dogbane

Other names bitterroot, flytrap dogbane (plants.usda.gov)

Ojibway name "wesa' wûckwûn" (nearly blue flowers) or "magosîñe' cnakwûk" (needlelike) (Smith 1932); ma-kwona' gĭc obji-bĭk, sasa' bikwan (Densmore 1928); baebaumukwodjeebikissing (Zichmanis and Hodgins 1982)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Bailly area, Dune Acres (Cowles Bog), Visitor Center area, Keiser Unit, Tamarack Unit, Hoosier Prairie, Indiana Dunes State Park

Prairie, Savanna

Fire Response Spreading dogbane responds well to fire disturbance (Voss 1996), and regrows rapidly after "cool" fire (Chapman and Crow 1981a). It maintains comparable pre and postfire frequencies through its ability to sprout from adaptive rhizomes (Archibold 1989; Chapman and Crow 1981a; Fischer and Clayton 1983; Stickney 1985; Stickney 1989b). Spreading dogbane has been reported after fall and spring burns (Chapman and Crow 1981b) and following low- (Hooker and Tisdale 1974) and high-severity fires (Armour, Bunting, and Neuenschwander 1984). Spreading dogbane is reported to die out without frequent fire disturbance (Archibold 1989), although populations have been reported up to 134 years following fire (McNeil and Zobel 1980).

Traditional Uses:

Medicine

Ojibwa

The root and stem are used for medicines (Zedeño et al. 2000).

Used as an aid in sore throats, headaches, and nosebleeds as well as being used for heart palpitations and as a gynecological aide (Meeker, Elias, and Heim 1993).

The stalk and root are steeped to make a women's tea that keeps the kidneys "free" during pregnancy. Knowledge about using the root as a charm is obtained at the fourth level of the medicine lodge (Smith 1932).

The root is used to treat convulsions. A decoction of the root is used to treat heart palpitations, nosebleeds, and sore ears, and taken internally to treat colds. The powdered root is used to treat headaches (Densmore 1928).

Ceremonial

Ojibwa

The root is eaten during the medicine lodge ceremony (Smith 1932).

Utility

Ojibwa

The outer rind was used for sewing. The strongest fibers come from mature plants in the fall, and are stronger than hemp (Smith 1932).

Decoration

Ojibwa

The root is used for decoration (Zedeño et al. 2000).

Charm

Ojibwa

The root and stem are used for charms (Zedeño et al. 2000).

The root was chewed to counteract evil charms (Meeker, Elias, and Heim 1993).

The root is chewed to protect oneself from evil charms (Smith 1932).

Scientific name *Apocynum cannabinum*

Synonyms
- *Apocynum album* var. *hypericifolium*
- *Apocynum cannabinum* var. *angustifolium*
- *Apocynum cannabinum* var. *glaberrimum*
- *Apocynum cannabinum* var. *greeneanum*
- *Apocynum cannabinum* var. *nemorale*
- *Apocynum cannabinum* var. *pubescens*
- *Apocynum cannabinum* var. *suksdorfii*
- *Apocynum pubescens*
- *Apocynum suksdorfii*
- *Apocynum suksdorfii* var. *angustifolium*

Common name indian hemp, dogbane

Other names hemp dogbane, common dogbane (plants.usda.gov)

Ojibway name zesabiins, sasáp-binš (Gilmore 1933)

Nativity Native

Habitat Miller Woods, Bailly area, Dune Acres (Cowles Bog), Visitor Center area, Tamarack Unit

Disturbed-dry, Disturbed-wet

Fire Response Indianhemp redevelops from rhizome and root crown sprouts following even severe-intensity fires (Catling, Sinclair, and Cuddy 2001). Response to fire frequency is conflicting. Some researchers have found it to increase following fire (Fishbein, Gori, and Meggs 1995; Johnson and Knapp 1995), while other found it to be killed by fire (Bowles et al. 1996; Heikens, West, and Robertson 1994).

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Traditional Uses:

Medicine

Ojibwa

The root is used for medicine (Zedeño et al. 2000).

Utility

Ojibwa

The fiber was used for making cordage (Meeker, Elias, and Heim 1993).

The fiber is used to make the best fine cordage (Gilmore 1933).

Decoration
- Ojibwa
  - The fiber is used decoratively (Zedeño et al. 2000).

Charm
- Ojibwa
  - The root is used as a charm (Zedeño et al. 2000).

Scientific name *Apocynum sibiricum*

Synonyms *Apocynum cannabinum*

Common name indian hemp, dogbane

Other names dogbane (Toupal, Banks, and Carroll 2006); hemp dogbane, common dogbane (plants.usda.gov)

Ojibway name zesabiins, sasáp-binš (Gilmore 1933)

Nativity Native

Habitat Miller Woods, Bailly area, Dune Acres (Cowles Bog), Visitor Center area, Tamarack Unit, Hoosier Prairie, Indiana Dunes State Park

Grows from the Gulf of Mexico to northern Lake Superior in open woods, thickets, and borders of woods (Yarnell 1964).

Fire Response Indianhemp regrows from rhizomes and root crown sprouts following even severe-intensity fires (Catling, Sinclair, and Cuddy 2001). Some researchers have found it to increase following fire (Fishbein, Gori, and Meggs 1995; Johnson and Knapp 1995), while others found it to be killed by fire (Bowles et al. 1996; Heikens, West, and Robertson 1994). Conflicting results may be due to the depth of growing points combined with fire severity and other site conditions. Generally, it is considered to respond rhizomatously to fire (Stickney 1989b).

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Traditional Uses:

Medicine

Ojibwa

The root is used for medicine (Zedeño et al. 2000).

Utility

Ojibwa

The fiber was used for cordage (Meeker, Elias, and Heim 1993).

The fiber is used to make the best fine cordage (Gilmore 1933).

Decoration

Ojibwa

The fiber is used decoratively (Zedeño et al. 2000).

Charm

Ojibwa

The root is used as a charm (Zedeño et al. 2000).

Scientific name *Aquilegia canadensis*

Synonyms
- *Aquilegia australis*
- *Aquilegia canadensis* var. *australis*
- *Aquilegia canadensis* var. *coccinea*
- *Aquilegia canadensis* var. *eminens*
- *Aquilegia canadensis* var. *hybrida*
- *Aquilegia canadensis* var. *latiuscula*
- *Aquilegia coccinea*
- *Aquilegia latiuscula*
- *Aquilegia phoenicantha*

Common name wild columbine

Other names meeting-houses, wild columbine, honeysuckle (plants.usda.gov)

Ojibway name misudidjeebik (Zichmanis and Hodgins 1982)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Bailly area, Dune Acres (Cowles Bog), Visitor Center area, Keiser Unit, Tamarack Unit, Indiana Dunes State Park

Mesophytic-forest, Dune-complex

Fire Response Where wild columbine was highly abundant on a nonburned site, it was found to be abundant on a corresponding burned site (up to 5 years postfire), suggesting it is a fire survivor (Croskery and Lee 1981). Wild columbine regrows from the caudex and growing points in soil. It is a ground residual colonizer on-site, and secondary colonizer from off-site seed sources (Stickney 1989a).

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Traditional Uses:

Archaeological evidence for Anishinaabek use found for the Historic period (1600AD-2002AD) (Herron 2002).

Medicine

Ojibwa

The root is used as medicine (Zedeño et al. 2000).

The root was used for stomach trouble (Meeker, Elias, and Heim 1993)

The root is used to treat stomach troubles (Smith 1932).

Charm

Ojibwa

The root is used as a charm (Zedeño et al. 2000).

Scientific name *Arabis glabra*

Synonyms
- *Arabis glabra* var. *furcatipilis*
- *Arabis glabra* var. *glabra*
- *Turritis glabra*

Common name tower mustard

Other names
- tower rockcress (plants.usda.gov)

Ojibway name misodjidamo' anûk (black squirrel tail) (Smith 1932)

Nativity Native

Habitat Dune Acres (Cowles Bog), Tamarack Unit

Prairie

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Traditional Uses:

Medicine
- Ojibwa
  - The plant is used as a medicine (Zedeño et al. 2000).

Charm
- Ojibwa
  - The plant is used as a charm (Zedeño et al. 2000).

Scientific name	*Aralia nudicaulis*
Common name	wild sarsaparilla
Ojibway name	bebamabi' k (root runs far through the ground), sometimes called o kadak (wild carrot) (Smith 1932); wabos' odji' bîk (Densmore 1928); bah-gwa-nan (Reagan 1928); baebaumaubeek (Zichmanis and Hodgins 1982)
Nativity	Native
Habitat	Miller Woods, Tolleston Dunes, West Beach, Bailly area, Dune Acres (Cowles Bog), Visitor Center area, Keiser Unit, Tamarack Unit, Hoosier Prairie, Pinhook Bog, Indiana Dunes State Park Mesophytic-forest, Dune-complex
Fire response	(Raunkiær plant life-forms introduced in 1904) *Aralia nudicaulis* is a chamaephyte,a low-growing perennial with dormant overwintering buds at or just above the surface of the ground (Chapman and Crowe 1981). Sarsaparilla regrows rapidly after a "cool" fall or spring fire from surviving rhizomes although flowers do not appear during the first post-fire growing season (Chapman and Crowe 1981a). Few wild sarsaparilla plans come in from seed immediately following fire (Ahlgren 1966). It also sprouted from rhizomes following a spring light- to moderate-severity lightning fire (Archibold 1979). Depending on fire intensity and time of burning, wild sarsaparilla can decrease initially in frequency and biomass following fire (Krefting and Ahlgren 1974; Sidhu 1973). It generally decreases in frequency by about 50 percent the first year but within 4 years, will recover with an increase in frequency ranging from 50 to 90 percent of pre-burn levels (Ahlgren 1966; Ohmann and Grigal 1966). In red pine (*Pinus resinosa*) and eastern white pine forests of the Lake States, wild sarsaparilla does well following fire and is prevalent on fresh burns (Wright and Bailey 1982). Also see: http://www.fs.fed.us/database/feis/research_project_summaries/Quintilio91/all.html

Traditional Uses:

Medicine

Ojibwa

The root is used as a medicine (Zedeño et al. 2000)

The leaves were used as a blood medicine and for fainting spells; the roots were used in poultices for curing boils (Meeker, Elias, and Heim 1993).

The root is a strong medicine. It is pounded and applied as a poultice for boils or carbuncles. It was used as a blood purifier during pregnancy by boiling the pounded root in water to make a tea; when

used to cure cough, it was called "wabo’s ûskwe" (rabbit) (Smith 1932).

A root decoction was taken internally to improve circulation. A root poultice was used to treat skin sores. A root powder was snuffed to treat nosebleeds. A root decoction was used for stoppage of menstruation (Densmore 1928).

A tea was made to treat fainting, fits, blood (Reagan 1928).

Charm

Ojibwa

The root is used as a charm (Zedeño et al. 2000).

The root was used as a charm to chase snakes away (Meeker, Elias, and Heim 1993).

Other

Ojibwa

The root was combined with the root of sweet flag and put on fish nets (Meeker, Elias, and Heim 1993).

A tea made with the root in combination with sweet flag root, is used on gill nets to ensure a good catch (Smith 1932).

Scientific name *Aralia racemosa*

Common name Spikenard

Other names American spikenard (Smith 1933)

Ojibway name nezhikewang, okaadaak, o´kadak´, aya' bĭdjidji' bikûgisĭn (Densmore 1928); (gi)chi-okaadaak, či-kadak, ci-kadak (Gilmore 1933)

Nativity Native

Habitat Bailly area, Keiser Unit, Tamarack Unit, Hoosier Prairie

Mesophytic-forest, Swamp-complex

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Traditional Uses:

Medicine

Ojibwa

The root is used as a medicine (Zedeño et al. 2000).

A compound decoction of the root was used as an abortifacient, a decoction of the root was taken for coughs, a poultice of roots was used to treat boils, fractured bones, sprains, and strained muscles (Meeker, Elias, and Heim 1993).

A root poultice was used to treat boils (Gilmore 1933).

A root decoction was taken internally for coughs. A root poultice was used to treat boils. A root decoction with red currant (*Ribes triste*) and sarsaparilla (*A. nudicaulis*) was taken for stoppage of menstruation. A fresh or dried root poultice was used on sprains, and strained muscles. When mixed with equal parts wild ginger and mashed, the root poultice was used on fractures (Densmore 1928).

Charm

Ojibwa

The root is used as a charm (Zedeño et al. 2000).

Scientific name *Arctium minus*

Common name common burdock

Other names burdock (Toupal, Banks, and Carroll 2006); lesser burdock (Smith 1933); bardane, wild burdock, wild rhubarb, beggar's button (plants.usda.gov)

Ojibway name (gi)chi-mazaan, gi' masan (big stickers) (Smith 1932), wiisagibag, -oon, wi´sûgibûg´ (Densmore 1928), wiisagijiibik

Nativity Introduced

Introduction notes Documented in Oregon by 1881 (www.gbif.org).

Habitat Bailly area, Dune Acres (Cowles Bog), Keiser Unit, Tamarack Unit, Indiana Dunes State Park

Old fields

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Traditional Uses:

Medicine

Ojibwa

The root is used as medicine (Zedeño et al. 2000).

The roots were said by the Ojibwa to have a tonic effect, as well as beign used for stomach pain (Meeker, Elias, and Heim 1993).

The root is part of a medicine used for stomach pain; it is used also as a tonic (Smith 1932).

A leaf tea is made for coughs (Densmore 1928).

Charm

Ojibwa

The root is used as a charm (Zedeño et al. 2000).

Scientific name	*Arctostaphylos uva-ursi coactilis*
Synonyms	*Arctostaphylos uva-ursi*
Common name	bearberry
Other names	kinnikinnik (Yarnell 1964); kinnikinnick (Smith 1933); Kinnikinnick also refers to a mix of species that likely did not include *Nicotiana* spp. (Herron 2002).
Anishinaabek name	asemaa; assemabama (refers to bearberry) (big tobacco) (West 1934)
Ojibway name	apaakozigan (Meeker, Elias, and Heim 1993; Rhodes 1993), paakwigan (Rhodes 1993), miskwaabiimag, me-squah-be-mag, mesgwah-be-mag (mi-squa-bi-mag, mis-gwa-bi-mag) (Reagan 1928), saga´komĭnagûnj´ (Densmore 1928)
Nativity	Native
Special status	rare
Habitat	Miller Woods, West Beach, Dune Acres (Cowles Bog), Visitor Center area, Keiser Unit, Tamarack Unit, Indiana Dunes State Park Bracken grassland, oak savanna
Fire response	Fire effects vary with the season, severity and intensity of the fire, site and surface soil characteristics, as well as the age, location, and vigor of the plants. When kinnikinnick is rooted in mineral soil, it can survive moderate fire (Rowe 1983), but when it is rooted in organic soil horizons, it is killed by fires that remove those horizons (Arno, Simmerman, and Keane 1985; Bradley 1984; Fischer and Bradley 1987). Some kinnikinnick root crowns may survive if the duff and soil are moist enough (Crane and Fischer 1986). Kinnikinnick plants are resistant enough to ignition as to inhibit fire spread in light, flashy fuels (Gawlowska 1969; Keown 1977). Also see: http://www.fs.fed.us/database/feis/research_project_summaries/Dunwiddie98/all.html and http://www.fs.fed.us/database/feis/research_project_summaries/Metlen06/all.html

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Archaic (6000BC-1000BC) to the Historic period (1600AD-2002AD) (Herron 2002).

Smoking

Anishinaabek (Herron 2002)

Ojibwa

The leaves are smoked (Densmore 1928; Reagan 1928; Stowe 1940).

Chippewa (Densmore 1928)

Great Lakes tribes (Yarnell 1964)

Ceremonial

Ojibwa

The leaves are smoked (Densmore 1928).

The leaves are used for medicine ceremonies (Reagan 1928).

Food

Ojibwa

The fruit and leaf ar used for seasoning, and the fruit is eaten (Zedeño et al. 2000).

The berries were cooked with meat as a seasoning (Meeker, Elias, and Heim 1993).

The berries are cooked with meat for broth (Stowe 1940).

The berries are cooked with meat to season the broth (Densmore 1928).

Great Lakes tribes (Yarnell 1964)

Medicine

Ojibwa

The root, leaves, and plant are used for medicines (Zedeño et al. 2000).

An infusion of the pounded plant was used as a wash for rheumatism and for general illnesses and the leaves were smoked to relieve headaches (Meeker, Elias, and Heim 1993).

The leaves are smoked with tobacco or red willow to treat headaches (Densmore 1928).

Pulverized, dried leaves compounded and smoked for headache. Roots smoked in pipes as charms to attract game (Densmore 1928).

Infusion of pounded plants used as wash for rheumatism. Decoction of bark taken for internal blood diseases. Leaves used for medicine ceremonies. Leaves smoked to cause intoxication. Infusion of pounded plants used as wash for general illnesses. Leaves used for medicinal purposes (Reagan 1928).

Great Lakes tribes (Yarnell 1964)

Utility

Ojibwa (Densmore 1928)

Great Lakes tribes (Yarnell 1964)

Charm

Ojibwa (Densmore 1928)

The root, leaves, and plant are used as charms (Zedeño et al. 2000).

The root was smoked in a pipe to attract game (Meeker, Elias, and Heim 1993).

Great Lakes tribes (Yarnell 1964)

Scientific name *Arisaema atrorubens*

Synonyms *Arisaema triphyllum* ssp. *triphyllum*

Common name jack-in-the-pulpit

Other names Indian turnip, Indian onion, wild turnip, marsh turnip, swamp turnip, meadow turnip, pepper turnip, wild pepper, bog onion, arum, American arum, three-leaved arum, wake robin, American wake robin, dragon turnip, dragon root, brown dragon, devil's ear, memory root, priest's-pintle, lords-and-ladies, starch plant, starchwort, aronknolle (Broyles 2005)

Ojibway name caca' go-mîn (Smith 1932)

Nativity Native

Habitat Bailly area, Dune Acres (Cowles Bog), Visitor Center area, Keiser Unit, Tamarack Unit, Heron Rookery, Pinhook Bog, Indiana Dunes State Park

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Traditional Uses:

Food

Great Lakes tribes (Yarnell 1964)

Medicine

Ojibwa

The root is used as medicine (Zedeño et al. 2000).

The Chippewas made a poultice to relieve sore eyes (Broyles 2005).

The root was used to treat sore eyes (Smith 1932).

A root decoction is used external to treat sore eyes (Densmore 1928).

General medicine (Reagan 1928).

The plant is used with snakeroot (*Sanicula* sp.?) and cherry bark to treat coughs and fevers (Harris 1915).

Charm

Ojibwa

The root is used as a charm (Zedeño et al. 2000).

Scientific name *Artemisia absinthium*

Synonyms *Artemisia absinthium* var. *insipida*

Common name common wormwood

Other names Absinth wormwood; absinthium (plants.usda.gov)

Ojibway name moosewijiibik, moose-ojiibik, muse' odji' bĭk (Densmore 1928)

Nativity Introduced

Introduction notes Introduced before 1671 by 17th century New England colonists for its medicinal properties (Josselyn 1672), and naturalized by the mid-to-late 17th century (Mack 2003). Introduced 1750 (Weishan 1999). Wormwood was brought by the Europeans during the early settlement period. (Heller 2000). Absinth is native to Eurasia and was introduced to North America in the mid to late 1800s because of its purported medicinal values (Maw, Thomas, and Stahevitch 1985).

Habitat Tamarack Unit

Disturbed-dry

Fire response Low-severity fires top-kill absinth wormwood and may completely kill some plants since the plants' perennating buds are at or near the soil surface, and susceptible to fire. If the perennating buds survive, the plant will resprout from them. Abundant green herbaceous material can reduce fire severity during the spring, consequently fire damage to the plant community including absinth wormwood. Multiple, consecutive annual spring fires can reduced absinth wormwood as much as 96 percent (Steuter and Plumb 1988).

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Traditional Uses:

Medicine

Ojibwa

The plant is used for medicine (Zedeño et al. 2000).

The Ojibwa used this plant boiled, as a warm compress for sprained or strained muscles (Meeker, Elias, and Heim 1993).

The top of the plant is boiled to make a warm compress for sprains and strained muscles (Densmore 1928).

Charm

Ojibwa

The plant is used as a charm (Zedeño et al. 2000).

Scientific name *Artemisia caudata*

Synonyms
- *Artemisia campestris* ssp. *caudate*
- *Artemisia campestris* var. *caudata*
- *Artemisia caudata*
- *Artemisia caudata* var. *calvens*
- *Artemisia forwoodii*
- *Oligosporus campestris* ssp. *caudatus*
- *Oligosporus caudatus*

Common name beach wormwood (*A. campestris*)

Other names common sagewort, field sagewort (plants.usda.gov); field southernwood (PFAF)

Ojibway name muse' odji' bĭk (Densmore 1928)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Dune Acres (Cowles Bog), Visitor Center area, Keiser Unit, Tamarack Unit, Hoosier Prairie, Indiana Dunes State Park

Foredune-complex, Dune-complex

Fire response Field sagewort is top-killed by fire, but appears in early postfire communities and persists on repeatedly burned sites (Knops 2006; Pase and Lindenmuth 1971). It regrows from the caudex/herbaceous root crown, and surviving growing points in soil (Stickney 1989b).

Traditional Uses:

Medicine
- Ojibwa
  - The root is used for medicine (Zedeño et al. 2000).

Charm
- Ojibwa
  - The root is used as a charm (Zedeño et al. 2000).

Scientific name *Asarum canadense*

Common name wild ginger

Other names monkey-jug (Peattie 1930); Canadian wildginger (Smith 1933); American wild ginger, Indian ginger, Canadian snakeroot, snakeroot, Vermont snakeroot, heart snakeroot, southern snakeroot, black snakeroot, coltsfoot snakeroot, coltsfoot, false coltsfoot, black snakeweed, broad-leaved asarabacca, asarum, colicroot, beaver potato (Broyles 2005)

Anishinaabek name name pin (sturgeon potato)

Ojibway name namepin, -iig, name´pĭn (Densmore 1928), name´pîn, sturgeon potato (Smith 1932), numaepin (Zichmanis and Hodgins 1982), agabwen (Gilmore 1933); ke-bwan (as a medicine) (Merring 1960)

Nativity Native

Habitat Bailly area, Dune Acres (Cowles Bog), Visitor Center area, Heron Rookery, Pinhook Bog, Indiana Dunes State Park

Northern mesic forest

Grows from Missouri and North Carolina to Minnesota and Quebec in rich woods and shaded calcareous ledges (Yarnell 1964).

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD-2002AD) (Herron 2002).

Ceremonial

The root is used as a smudge. Smudge plants have special messenger spirits so their smoke is more effective at transcending prayers to the Creator (Herron 2002).

Food

Anishinaabek (Herron 2002)

Ojibwa

The root is used as a spice (Herron 2002; Zedeño et al. 2000a).

Root for seasoning (Zedeño et al. 2000).

Used for food and flavoring (Yarnell 1964).

The roots are available in spring and summer. They are used as seasoning when cooking food. The ginger will remove "any muddy taste from fish" and make any meat digestible even when someone is sick. When cooking on a large scale, the root is prepared in lye water (Smith 1932).

The root is treated with lye and used in cooking to season food (Densmore 1928; Stowe 1940).

Medicine

Anishinaabek (Herron 2002)

Ojibwa

The root is used for medicine (Zedeño et al. 2000)

The root of this plant was used in traditional medicine for various purposes. It was cooked with foods to aid digestion, a compound poultice was used on inflammations, bruises, and contusions. It was combined with other herbs as a strengthening agent, and it was used as an appetite stimulant (Meeker, Elias, and Heim 1993).

The root is chewed or used to make tea to treat stomach pain (Hebda 1979).

The roots, mixed with three other species, are used to treat muscular aches and pains, headaches, stomachaches, nose congestion (Merring 1960).

The rhizome and root are used to treat gas (Stowe 1940).

The root is used to treat bruises and contusions (Gilmore 1933).

It is a ‘potato’ for sick people. After chewing the root, they can eat what they want (Smith 1932).

The dried root is chewed or mixed with food to treat indigestion. The root is applied as poultice to treat inflammation. The roots are dried, mixed with equal parts of spikenard, mashed and applied as poultice to fractures (Densmore 1928).

Charm

Ojibwa

The root is used as a charm (Zedeño et al. 2000).

Other

Ojibwa

The root is used to make a mosquito repellent (Herron 2002).

A cooked root was ground into fine powder and sprinkled onto clothes as a perfume (Gilmore 1933).

Scientific name *Asclepias incarnata*

Common name swamp milkweed

Other names rose milkweed (plants.usda.gov)

Ojibway name bagizowin, bû' giso' wĭn (Densmore 1928), zesab, sasáp (Gilmore)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Dune Acres (Cowles Bog), Visitor Center area, Keiser Unit, Tamarack Unit, Hoosier Prairie, Pinhook Bog, Indiana Dunes State Park

Marsh-complex

Fire response Fire can kill swamp milkweed back to the caudex, which usually is not deeply rooted. Survival would depend upon fire severity; the plant can survive a cool fire and sprout from the caudex. Fire would have the greatest effect on this species late in the growing season (summer and fall). Seeds are not shed until October or November, so late season fires would kill the current seed crop. In the long run, swamp milkweed should have no difficulties in maintaining populations; recovery from fire is controlled by the severity of the fire and availability of adequately wet habitat (Pavek 1992).

Traditional Uses:

Medicine

Ojibwa

The root is used for medicine (Zedeño et al. 2000).

Native American used the root as a strengthening bath for both adults and children (Meeker, Elias, and Heim 1993).

The root is steeped to bathe children or weak adults, or to soak feet (Densmore 1928).

Utility

Great Lakes Tribes (Yarnell 1964)

Ojibway

Identified in Ohio Hopewell and rock shelter textiles (Whitford 1941).

Fiber used for twine (Gilmore 1933).

Charm

Ojibwa

The root is used as a charm (Zedeño et al. 2000).

Scientific name *Asclepias syriaca*

Common name common milkweed

Other names silkweed (Yarnell 1964)

Anishinaabek name inini wunj (Indian man juice plant) (Smith 1932); historically, cabo sikun (milk) and ininiwunj (Indian plant)

Ojibway name ininiwa/inzh, inĭ´nĭwûnj (Densmore 1928), ininiwish (Zichmanis and Hodgins 1982), zhaabozigan, cabo' sîkûn (milk) or înîni'wûnj (Indian plant) (Smith 1932), ninwanzh, ninwinshk (Rhodes 1993); nini-winš (Gilmore 1933)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Bailly area, Dune Acres (Cowles Bog), Visitor Center area, Keiser Unit, Tamarack Unit, Hoosier Prairie, Pinhook Bog, Indiana Dunes State Park

Old fields


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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD-2002AD) (Herron 2002).

Food

Anishinaabek (Herron 2002)

Flower buds eaten in the spring before the flowers completely open. Fresh flowers and shoot tips also eaten in meat soups. \Young stems and unopened flower buds eaten after being fried in oil (Herron 2002).

Ojibwa (Yarnell 1964)

Flower eaten as a vegetable (Zedeño et al. 2000).

The young flower buds of milkweed are edible and were eaten as greens (Meeker, Elias, and Heim 1993).

Young shoots, flower buds cooked like spinach; young pods (2 cm) cooked with salt and vinegar (Hebda in Arnason, Hebda, and Johns 1981).

The fresh flowers and tips of shoots are eaten in soup, usually with meat; the flowers may be dried for winter use in soup (Smith 1932).

Medicine

Anishinaabek (Herron 2002)

White sap used as a wart medicine. Sap collected in late summer (Herron 2002).

Ojibwa

Root used separately or with entire plant (Zedeño et al. 2000).

Used as a gynecological aid to produce post-birth milk flow in the

mother (Meeker, Elias, and Heim 1993).

The root was used as a female remedy (Smith 1932).

The root is boiled and cooled, then one tablespoon* put in food to treat women in confinement and to induce milk flow (Densmore 1928; *Hebda 1979).

Great Lakes tribes (Yarnell 1964)

Charm

Ojibwa

Root used separately or with entire plant (Zedeño et al. 2000).

The root was combined with root fibers of boneset and applied to a whistle for calling deer (Meeker, Elias, and Heim 1993).

The milk or sap is used in combination with Canada hawkweed milk on deer calls to enhance imitating the call of a hungry or distressed fawn when hunting (Smith 1932).

Scientific name *Asimina triloba*

Common name Pawpaw

Nativity Native

Habitat Bailly area, Dune Acres (Cowles Bog), Visitor Center area, Keiser Unit, Tamarack Unit, Heron Rookery, Indiana Dunes State Park

Mesophytic-forest

Fire response Pawpaw cover is believed to be reduce by fire in spite of having adventitious-bud root crown and root suckering. In a study of fire effects on vegetation in the prairie-woodland transition zone, fires were conducted for 3 consecutive years. The vegetation was monitored for almost 20 years after the last fire was conducted. Pawpaw stems increased in number only in the absence of fire, and only after 13 years had passed since the last fire (Anderson and Schwegman 1991).

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Traditional Uses:

Food

Great Lakes tribes

The fruit is eaten (Aller 1954).

Ojibway

Bonnecamp (1749), a Jesuit priest, documented that the fruits were eaten (Thwaites 1896).

Scientific name *Aster cordifolius*

Synonyms

Symphyotrichum cordifolium

Aster cordifolius ssp. sagittifolius

Aster cordifolius var. *furbishiae*, *A. c.* var. *incisus*, *A. c.* var. *lanceolatus*, *A. c.* var. *moratus*, *A. c.* var. *polycephalus*, *A. c.* var. *racemiflorus*, *A. c.* var. *sagittifolius*

Aster finkii var. *moratus*

Aster lowrieanus var. *incisus*, *A. l.* var. *lanceolatus*

Aster plumarius, Aster sagittifolius

Symphyotrichum cordifolium var. *furbishiae*, *S. c.* var. *lanceolatum*, *S. c.* var. *moratum*, *S. c.* var. *polycephalum*, *S. c.* var. *racemiflorum*

Symphyotrichum sagittifolium

Common name heart leaved aster

Other names blue wood aster (Yarnell 1964)

Ojibway name naskosi'îcûs (Smith 1932); name'g osibûg' (Densmore 1928)

Nativity Native

Habitat West Beach, Bailly area, Dune Acres (Cowles Bog), Visitor Center area, Keiser Unit, Heron Rookery, Pinhook Bog, Indiana Dunes State Park

Mesophytic-forest, Dune-complex

Traditional Uses:

Food

Ojibway

Leaves boiled and eaten with fish (Densmore 1928).

Medicine

Ojibway

The root is used for medicine (Zedeño et al. 2000).

Charm

Ojibway

The root is used as a charm (Zedeño et al. 2000).

The root is smoked in a pipe to make incense to attract deer when hunting (Meeker, Elias, and Heim 1993).

The root is a hunting charm; it is one of nineteen species smoked to make an incense to attract deer (Smith 1932).

Scientific name *Aster dumosus*

Synonyms
- *Symphyotrichum dumosum* var. *dumosum*
- *Aster coridifolius*
- *Aster dumosus* var. *coridifolius*
- *Aster dumosus* var. *gracilentus*

Common name rice-button aster, bushy aster

Ojibway name naskosi'îcûs (Smith 1932); name'g osibûg' (Densmore 1928)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Dune Acres (Cowles Bog), Visitor Center area, Tamarack Unit, Hoosier Prairie

Panne, Prairie-dry, Disturbed-dry

© 2004 Janet Novak, http://www.ct-botanical-society.org/galleries/symphyotrichumdumo.html

Traditional Uses:

Food

Ojibway

Leaves boiled and eaten with fish (Densmore 1928).

Charm

Ojibway

The root is a hunting charm; it is smoked to attract deer (Smith 1932).

Scientific name *Aster macrophyllus*

Synonyms
Eurybia macrophylla
Aster ianthinus
Aster macrophyllus, A. m. var. *apricensis, A. m.* var. *excelsior, A. m.* var. *ianthinus, A. m.* var. *pinguifolius, A. m.* var. *sejunctus, A. m.* var. *velutinus*
Aster multiformis
Aster nobilis
Aster riciniatus
Aster roscidus
Aster violaris

Common name big-leaved aster

Other names starwort, frostflower (Yarnell 1964)

Ojibway name naskosi' îcûs (Smith 1932); name'g osibûg' (Densmore 1928)

Nativity Native

Habitat Bailly area, Dune Acres (Cowles Bog), Visitor Center area, Keiser Unit, Tamarack Unit, Pinhook Bog, Indiana Dunes State Park

Mesophytic-forest

Fire response Rapid vegetative regrowth after "cool" fire (Chapman and Crowe 1981).

Traditional Uses:

Food

Ojibway

The leaves and roots are eaten (Zedeño et al. 2000).

The young, tender leaves are eaten; the root is used in soup, and then called nêmêgosi' bûg (trout leaf) (Smith 1932).

Leaves boiled and eaten with fish (Densmore 1928).

Medicine

Ojibway

The root and plant are used for medicine (Zedeño et al. 2000).

The Ojibwa used an infusion of the root as a headache cure (Meeker, Elias, and Heim 1993).

Young roots were used to treat headaches by making a tea to bathe the head. The headache remedy is called "megîsi' bûg or mêgêsi' bûg (eagle leaf). It is considered a weak remedy (Smith 1932).

Charm

Ojibway

The root and plant are used as a charms (Zedeño et al. 2000).

The Ojibwa used the whole plant as a charm in hunting. (Meeker, Elias, and Heim 1993).

It is a good hunting charm for deer (Smith 1932).

Scientific name *Aster novae-angliae*

Synonyms
Symphyotrichum novae-angliae
Lasallea novae-angliae
Virgulus novae-angliae

Common name New England aster

Ojibway name wiiniziikens, winĭ´sĭkĕns, name'g osibûg' (Densmore 1928); waanisikensiwang, waunissikaehnsiwung (Zichmanis and Hodgins 1982)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Bailly area, Dune Acres (Cowles Bog), Keiser Unit, Hoosier Prairie

Prairie-wet, Disturbed-wet

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Traditional Uses:

Food

Ojibway

Leaves boiled and eaten with fish (Densmore 1928).

Medicine

Ojibway

The root and plant are used for medicines (Zedeño et al. 2000).

Traditionally this plant was used to revive an unconscious patient (Meeker, Elias, and Heim 1993).

Ceremonial

Ojibway

Traditionally this plant was smudged (Meeker, Elias, and Heim 1993).

The powdered root was smoked in earliest times by Ojibwa (Densmore 1928).

Charm

Ojibway

The root and plant are used as a charms (Zedeño et al. 2000).

The root is smoked in a pipe to attract game (Meeker, Elias, and Heim 1993).

Scientific name *Aster puniceus*

Synonyms
Symphyotrichum puniceum var. *puniceum, S. p.* var. *calderi*
Symphyotrichum firmum
Aster calderi, A. conduplicatus, A. firmus, A. forwoodii, A. lucidulus
Aster puniceus ssp. *firmus*
Aster puniceus var. *calderi*
A. p. var. *calvus, A. p.* var. *compactus, A. p.* var. *demissus, A. p.* var. *firmus, A. p.* var. *lucidulus, A. p.* var. *oligocephalus, A. p.* var. *perlongus*

Common name swamp aster

Other names purplestem aster (plants.usda.gov)

Ojibway name wiiniziikens, winĭ´sĭkĕns, name'g osibûg (Densmore 1928)

Nativity Native

Habitat *Aster puniceus*: Bailly area, Dune Acres (Cowles Bog), Tamarack Unit, Indiana Dunes State Park

Aster puniceus: Bog

Aster puniceus firmus: Miller Woods, Tolleston Dunes, West Beach, Dune Acres (Cowles Bog), Tamarack Unit, Pinhook Bog, Indiana Dunes State Park

Aster puniceus firmus: Marsh-complex

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Traditional Uses:

Food

Ojibway

The leaves are eaten (Zedeño et al. 2000).

Leaves boiled and eaten with fish (Densmore 1928).

Medicine

Ojibway

The root is used for medicine (Zedeño et al. 2000).

Charm

Ojibway

The root is used as a charm (Zedeño et al. 2000).

The Ojibwa smoked the fine roots of this aster species, along with tobacco, to attract game (Meeker, Elias, and Heim 1993).

Used as a charm (Densmore 1928).

Scientific name *Athyrium filix-femina michauxii*

Synonyms *Athyrium filix-femina* ssp. *angustum, A. f.* var. *rubellum*

Athyrium angustum, A. a. var. *rubellum, A. a.* var. *subtripinnatum*

Common name lady fern

Other names common ladyfern (Smith 1933); subarctic ladyfern (plants.usda.gov)

Ojibway name a´sawan (Densmore 1928); ana´ganûck (fern), nokomi´skînûn (grandmother?) (Smith 1932)

Nativity Native

Habitat Bailly area, Dune Acres (Cowles Bog), Visitor Center area, Keiser Unit, Tamarack Unit, Hoosier Prairie, Pinhook Bog, Indiana Dunes State Park

Aspen/Birch forest

Grows in damp thickets, meadows, swamps, and brooksides.

Fire response Fire decreases lady fern cover and frequency on drier sites, but sprouting is likely on subhygric sites (Hawkes, Feller, and Meehan 1990). Also see: http://www.fs.fed.us/database/feis/pdfs/others/Hamilton06/Hamilton06.pdf and http://www.fs.fed.us/database/feis/research_project_summaries/Hamilton03/all.html

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD-2002AD) (Herron 2002).

Medicine

Ojibwa

The root is used for medicine (Zedeño et al. 2000)

A compound decoction of the root is used as a diuretic. Grated root is applied to skin sores, and an infusion of the root is used to bring on milk flow when a woman had caked breasts (Meeker, Elias, and Heim 1993).

The dried root is ground and used to treat sores. A tea is made from the root to aid milk flow in mothers (Smith 1932).

A root tea is made with nettle to treat stoppage of urine (Densmore 1928).

Charm

Ojibwa

The root is used as a charm (Zedeño et al. 2000).

Scientific name *Baptisia tinctoria crebra*

Synonyms *Baptisia tinctoria*

Common name yellow wild indigo

Other names false indigo (Arnason, Hebda, and Johns 1981); horseflyweed (Moerman 1998; plants.usda.gov); rattleweed (University of Wisconsin-Stevens Point)

Ojibway name

Nativity Native

Habitat Hoosier Prairie

Savanna-complex

Fire response

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Traditional Uses:

Medicine

Ojibwa

Unspecified medicinal use (Zedeño et al. 2000)

It has been reported that the Chippewa used this plant for medicinal purposes, but the uses were not specified. (Meeker, Elias, and Heim 1993).

Unspecified medicinal use (Reagan 1928).

Charm

Ojibwa

Unspecified use as a charm (Zedeño et al. 2000).

Scientific name *Betula lutea*

Synonyms *Betula alleghaniensis var. alleghaniensis*, *B. a.* var. *fallax*

Betula lutea var. *fallax*

Common name Yellow birch

Ojibway name wi'nîsîk (Smith 1932); wi' umis' sik (Hoffman 1891)

Nativity Native

Habitat Dune Acres (Cowles Bog)

Bog, Swamp-complex

Fire response Yellow birch seedlings and saplings are killed by even low-severity fires (Erdmann 1990). Small trees were killed by fire that left large trees unharmed (Sinclair 1962). Yellow birch is a poor sprouter following fire, although seed germination and establishment are enhanced by fire disturbance. It typically forms pure patches following fire (Maissurow 1941).

© Mark Brand, University of Connecticut Plant Database

Traditional Uses:

Food

Ojibwa

The sap is a beverage (Zedeño et al. 2000).

The sap is mixed with maple sap to make a beverage (Smith 1932).

Medicine

Ojibwa

The bark is used for medicine (Zedeño et al. 2000)

A decoction of bark is taken for blood diseases (Reagan 1928).

A compound decoction of the inner bark with the bark of sugar maple is used as a diuretic (Hoffman 1891).

Ceremonial

Ojibwa

Bark is placed on the coffins when burying the dead (Reagan 1928).

Utility

Ojibwa

The bark is used to build dwellings and lodges, to make birch bark canoes, storage containers, sap dishes, rice baskets, buckets, trays, winnowing dishes, and other dishes (Reagan 1928).

Charm

Ojibwa

The bark is used as a charm (Zedeño et al. 2000).

Scientific name *Betula nigra*

Common name river birch

Other names black birch, red birch, Japanese red birch, water birch (http://plant-materials.nrcs.usda.gov/kspmc/culturallysignificant.html)

Nativity Native

Habitat Keiser Unit

Bottomland

Fire response Large river birch trees can survive spring fires, but seedlings are killed (Anderson and Schwegman 1991). Repeated fires will probably eliminate river birch from a stand. In Wisconsin, river birch occurred on a number of floodplain locations, but did not occur in a neighboring low marsh that had been subjected to repeated grass fires (Whitford 1990)


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Traditional Uses:

Medicine

Ojibwa

The bark is used for medicine (Zedeño et al. 2000)

A decoction of the bark is made to relieve stomach pain (Meeker, Elias, and Heim 1993).

Charm

Ojibwa

The bark is used as a charm (Zedeño et al. 2000).

Scientific name	*Betula papyrifera*
Common name	paper birch
Anishinaabek name	wiigwaasi mitoog (Smith 1932)
Ojibway name	wiigwaas, -an, - ag, wigwâss, - ag, wigwâs, - an (Baraga 1966), wigwas (Gilmore 1933), wîgwas(Smith 1932), wiigwaasaatig, wi´gwasa´tĭg (Densmore 1928), wiigwaasaatig, wiigwaasi-mitig, wiigwaasimizh, wiigwaasmizh, wiigwaaso-mtig, wiigwaatig (Rhodes 1993)
Nativity	Native
Habitat	Dune Acres (Cowles Bog), Keiser Unit, Indiana Dunes State Park Aspen/Birch forest Grows in rich, moist hillsides and stream, lake, and swamp borders (Yarnell 1964).
Fire response	Paper birch is well adapted to fire, recovering quickly through seedling establishment and vegetative regeneration (A. D. Revill Associates 1978; Lutz 1956; Viereck and Schandelmeier 1980). Young trees also sprout from the root collar following top-kill, but sprouting decreases after about 40 to 60 years of age (Perala and Alm 1990). As a forest type, paper birch stands are one of the least flammable with canopies of high moisture content and lush understories (Foster and King 1986). Also see: http://www.fs.fed.us/database/feis/pdfs/others/Hamilton06/Hamilton06.pdf

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Archaic (6000BC -1000BC) to the Historic period (1600AD -2002AD) (Herron 2002).

Paper birch bark was found at twenty-seven locations throughout the Juntunen site on Bois Blanc Island, Michigan (Yarnell 1964).

Ceremonial

Ojibwa

Saplings are used ceremonially (Zedeño et al. 2000).

The men would to draw images on birchbark scrolls as reminders of midewiwin rituals, practices, and medicines. Their medicine lodges followed the same construction as the wigwam though they were much longer: being eighty, a hundred and even a hundred and fifty feet in length. Medicine lodge frameworks were held together with horizontal saplings secured by basswood bark cord at every junction

of poles. During use, the sides of this framework were covered with cattail mats and the top with sewed birch bark. A bone needle and nettle string were used to sew the cattail mats together with an invisible stitch that makes a windproof cover. The entrance of the lodge [faced] the east, and there [was] an exit to the west. A fire [was] usually burning just inside the eastern entrance, the smoke ascending through a smoke hole left in the roof. (340-341)"

Mythic

Chippewa (Herron 2002)

Sacred

Anishinaabek

Thin inner bark used for scroll that was written upon (burned) with a smoldering stick; sticks tied to ends of scroll to prevent splitting, tearing; bark made flexible for baskets by heating near fire. A small piece of *wigwas* (birch bark) taken on vision quests today. Bark used with maple syrup from *Acer saccharum*, wintergreen, and an unspecified plant for vision quests. It is the men's responsibility to gather birch bark and wood for sweat lodge ceremonies. A contemporary medicine wheel had four one-foot long sections of birch log placed on end at the cardinal points and painted red (east), yellow (south), black (west), and white (north). Within the 30'-40' medicine wheel was a ceremonial sweat lodge and fire pit. Birch bark is used to make ceremonial rattles (Herron 2002).

Ojibwa

This and white cedar are the two most sacred trees of the Ojibwa (Smith 1932).

Medicine

Ojibwa

The bark is used for medicine (Zedeño et al. 2000).

An infusion of the inner bark was used to treat blood diseases, and a compound decoction of the root bark was used as a gastrointestinal aid (Meeker, Elias, and Heim 1993).

The root has a sweetish, wintergreen flavor and was used to season medicine. The root bark cooked with maple sugar was used to alleviate stomach cramps (Smith 1932).

Utility

Anishinaabek

Birch bark is used to make *makakoon* (carrying baskets). Sweetgrass and porcupine quills may be woven in with the bark. Birch bark is used as a fire starter in the sweat lodge, and birch wood is used in the fire. Birch bark is used to make *wiigiwaaman* (lodges) and *jimaanan* (canoes) (Erickson 2000). Lodge style varies by season. Summer lodges have cattail skirting instead of birch bark along the bottom two feet for air circulation. Winter lodges are double-framed and have moss insulation between the frames (Erickson 2000). Birch bark is used to cover the lodge. It is rolled up into a tube and placed horizontally in the ground from the fire pit to outside the walls. The tube provides oxygen to slow-burning fires that are covered with rocks, dirt, cattail mats and animal hides (Reisetter 2001). Soft inner layers of bark separated and used as diapers during historic times (Reisetter 2001). Birch bark torches are used during the spring fishing season to spear fish.

Chippewa

In the spring, each of the Little Traverse families would bring a large *mocok*, a box made of birch bark, filled with 80-100 pounds of sugar, presumably maple, for the priest who ran the school to take to Detroit and trade for dry goods for the children (Blackbird 1887).

Ojibwa

Birchbark resists decay. The bark was used to waterproof and windproof wigwams, to make winnowing trays, buckets, baskets (*mokoks*), and canoes (*tciman*). Birchbark, which ranges from paper-thin to thick enough to make strong canoes, is gathered in the latter part of June and into July when it is most easily peeled. Families will make pilgrimages to birch groves, and make tobacco offerings before harvesting the bark. The bark for canoes comes from trees 10" to 15" in diameter and very straight. The wood from the trees harvested for canoes is used later for firewood. Birchbark for covering wigwams are sewn with basswood fibers (Smith 1932:413).

The wigwam was easily constructed in a half-day's time. Poles were thrust into the ground in a circle of from twelve to twenty feet, their tips bent and securely tied in the center with basswood bark cord to form a hemisphere, about eight feet in height at the center. The whole was then covered with bark of balsam, or woven cattail mats, and roofed with birch bark. An entrance and smoke hole were left and mats thrown upon the ground. It was much warmer than a tepee and better adapted to the heavy snow fall of the north, and to low temperatures. All of their storage houses and their smaller sweat lodges were similarly made (Smith 1932:340-341).

Birchbark vessels keep contents from decay, even gummy maple syrup for as long as a year (Densmore 1928), making storage for winter use possible (Yarnell 1964).

Craft

Chippewa (Herron 2002)

Ojibwa

The bark is used for decorative purposes (Zedeño et al. 2000).

Ojibwe women "experimented with plant materials laid upon birch bark until they found the design that suited them." Charred deer antler or flour was used to coat the underside of a leaf chosen for a design. The leaf was pressed onto the birchbark to create an outline, which was then placed beneath the bead loom so the pattern could be copied with beadwork. Beadworked designs would be applied to sashes, anklets, bracelets, knee-lets, belts, coats, and moccasins (Smith 1932:413).

Dye

Ojibwa

Strips of bark harvested in May, June, July; the innermost bark provided a reddish dye (Smith 1932).

Inner bark was used for dye. It was collected in late June to early July (Densmore 1928).

Charm

Ojibwa

The bark is used as a charm (Zedeño et al. 2000).

Scientific name *Betula pendula*

Synonyms
- *Betula alba*
- *Betula pendula dalecarlica*
- *Betula verrucosa*

Common name European white birch

Other names silver birch, weeping birch (www.efloras.org); white birch (Kindle 1922)

Nativity Introduced

Habitat Hoosier Prairie

Disturbed-dry

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Traditional Uses:

Food

Ojibwa

The bark and fruit are used (Zedeño et al. 2000).

Medicine

Ojibwa

The bark is used in medicines (Zedeño et al. 2000).

Ceremonial

Ojibwa

The bark is used in ceremonies (Zedeño et al. 2000).

Utility

Ojibwa

The bark and wood are used in wild rice cultivation. The bark and gum are used in sugar maple production. The bark is used in cultivation (Zedeño et al. 2000).

Charm

Ojibwa

The bark is used as a charm (Zedeño et al. 2000).

Scientific name *Betula pumila*

Common name dwarf birch

Other names low birch, swamp birch (Yarnell 1964); bog birch (plants.usda.gov)

Ojibway names bîne' mîcins (partridge tips) (Smith 1932)

Nativity Native

Habitat Dune Acres (Cowles Bog)

Bog, Marsh-complex

Fire response Gray birch is usually top-killed by fire. When conditions are extremely dry, fire that burns all the organic matter and shallow roots, kills the trees. Gray birch's thin bark is very flammable, so the tree is easily injured by fire (Brown 1960; Starker 1932). Gray birch will sprout from the stump following fire (Bjorkbom 1972; Martin 1955). It also colonizes burns with abundant wind-dispersed seed.

Robert H. Mohlenbrock @ USDA-NRCS PLANTS Database/USDA NRCS. 1995. Northeast wetland flora: Field office guide to plant species. Northeast Nat'l Tech. Center, Chester

Traditional Uses:

Food

Ojibwa

The bark and fruit are used (Zedeño et al. 2000).

Medicine

Ojibwa

The cone is used for medicine (Zedeño et al. 2000).

Traditional uses include inhaling the smoke of the catkins as a respiratory aid and an infusion of the catkins taken after childbirth and during menses for strength (Meeker, Elias, and Heim 1993).

The tiny cones are placed on coals to create an incense to treat catarrh. A tea is made with the cones for women during menses, and after giving birth to regain strength (Smith 1932).

Utility

Ojibwa

The twigs are used as ribs in sweet grass baskets (Smith 1932).

Decoration

Ojibwa

The branches are used decoratively (Zedeño et al. 2000).

Charm

Ojibwa

The cone is used as a charm (Zedeño et al. 2000).

Scientific name *Boehmeria cylindrica*

Synonyms *Boehmeria cylindrica drummondiana*

Common name false nettle

Other names stingless nettle (BOCA) (Yarnell 1964)

rough false nettle (BOCADR)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, Bailly area, Dune Acres (Cowles Bog), Visitor Center area, Keiser Unit, Tamarack Unit, Hoosier Prairie, Pinhook Bog, Indiana Dunes State Park

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Traditional Uses:

Utility

Ojibwa

Fiber used for bowstring by Ojibwa (Whitford 1941).

Scientific name *Botrychium virginianum*

Common name rattlesnake fern

Ojibway names gîckênsîne' namûkûk (man, squaw and baby; name refers to the paired stems and central fruiting frond) (Smith 1932); ozaga' tigŭm (Hoffman 1891)

Nativity Native

Habitat Bailly area, Dune Acres (Cowles Bog), Visitor Center area, Keiser Unit, Tamarack Unit, Heron Rookery, Pinhook Bog, Indiana Dunes State Park

Mesophytic-forest

Robert H. Mohlenbrock @ USDA-NRCS PLANTS Database / USDA SCS. 1991. Southern wetland flora: Field office guide to plant species. South National Technical Center, Fort Worth

Traditional Uses:

Medicine

Ojibwa

The stem and root are used for medicine (Zedeño et al. 2000).

Native Americans used a poultice of fresh mashed root to treat snake bites and as a snake repellant. The plant was also used as a tuberculosis remedy and to treat lung problems (Meeker, Elias, and Heim 1993).

The plant is good for lung trouble and consumption (Smith 1932).

A poultice of fresh root is used for snakebite (Densmore 1928).

They bruise and apply the roots to cuts (Hoffman 1891).

Charm

Ojibwa

The stem and root are used as charms (Zedeño et al. 2000).

Scientific name	*Brassica rapa*
Synonyms	*Brassica rapa* var. *rapa* *Brassica campestris*
Common name	field mustard
Other names	birdsrape mustard, wild mustard, wild turnip, wild rutabaga, bird's rape (plants.usda.gov)
Nativity	Introduced
Introduction notes	1750 (Weishan 1999). An early New England staple root crop.
Habitat	Prairie and sandy soils

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Traditional Uses:

Medicine

Ojibwa

It is used for medicine (Zedeño et al. 2000).

Used by the Ojibwa for unspecified medical purposes (Meeker, Elias, and Heim 1993).

Plant used for medicinal purposes (Reagan 1928).

Charm

Ojibwa

It is used as a charm (Zedeño et al. 2000).

Scientific name *Calla palustris*

Common name water arum

Other names wild calla (Yarnell 1964)

Ojibwa name nikaunowuhnshk (Zichmanis and Hodgins 1982); nikauno wuhnshk (Herron 2002)

Nativity Native

Habitat Tamarack Unit, Pinhook Bog

Bog

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD -2002AD) (Herron 2002).

Medicine

Ojibwa

Unspecified medicinal use (Zedeño et al. 2000).

Used by the Great Lakes Ojibwa, but no specific use was listed. Neighboring tribes used a poultice of the roots to reduce swelling. (Meeker, Elias, and Heim 1993).

Charm

Ojibwa

Used as a charm (Zedeño et al. 2000).

Scientific name *Caltha palustris*

Common name marsh marigold

Other names cowslip (Arnason, Hebda, and Johns 1981)

Ojibwa names o 'gîte' bûg (Densmore 1928; Smith 1932); mi"gde-beguk (Gilmore 1933); Ogitebag (Meeker, Elias, and Heim 1993); ogitaebug (Zichmanis and Hodgins 1982)

Nativity Native

Habitat Bailly, Dune Acres (Cowles Bog), Indiana Dunes State Park, Visitor Center area, Keiser Unit, Tamarack Unit, Hoosier Prairie, Pinhook Bog Hydromesophytic-forest

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Traditional Uses:

Food

Ojibwa

The spring leaves are used as greens with pork (Smith 1932).

Young plants cut at the ground and cooked as greens with meat or fat (Gilmore 1933).

The leaf is a vegetable (Zedeño et al. 2000).

Medicine

Ojibwa

Used to treat colds with a root tea. For the stoppage of urine, leaves and stalks with wild currant are used. To treat scrofula and sores, the root is dried, powdered, and applied moist. In confinement for women, a root decoction with bur snakeroot is used (Densmore 1974).

To treat sores, the roots are boiled, mashed, and used as a poultice (Gilmore 1933).

To make a cough syrup, the plant is boiled with maple sugar (Stowe 1940).

A decoction of the roots was used as a diaphoretic, an expectorant and an emetic, as well as to treat colds. A poultice of boiled and mashed roots was applied to sores. The roots were also mashed or powdered and used as a poultice on scrofulous sores (Meeker, Elias, and Heim 1993).

The roots, leaf, and stalk are medicine (Zedeño et al. 2000).

(Reagan 1928).

Charm

Ojibwa

Root, leaf, and stalk are used as a charm (Zedeño et al. 2000).

Scientific name *Campanula americana*

Synonyms *Campanulastrum americanum*

Common name tall bellflower

Nativity Native

Habitat Bailly, Keiser Unit, Tamarack Unit
Disturbed-dry

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Traditional Uses:

Medicine

Ojibwa

Root has unspecified medicinal use (Zedeño et al. 2000).

Charm

Ojibwa

Root is used as a charm (Zedeño et al. 2000).

Scientific name	*Campanula aparinoides*
Common name	marsh bellflower
Nativity	Native
Habitat	Miller Woods, West Beach, Dune Acres (Cowles Bog), Keiser Unit, Hoosier Prairie Marsh-complex

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Traditional Uses:

Medicine

Ojibwa

Unspecified medicinal use (Zedeño et al. 2000).

Charm

Ojibwa

Used as a charm (Zedeño et al. 2000).

Scientific name *Campanula rotundifolia*

Common name Harebell

Other names blue bell, hare bell (Yarnell 1964)

Native names adota'gons (little bell) (Smith 1932); zi' gĭnĭ' ce (Densmore 1928); mekmi"swa" (Gilmore 1933); zeegineesh (Zichmanis and Hodgins 1982), mekminswan (Meeker, Elias, and Heim 1993)

Nativity Native

Habitat West Beach, Dune Acres (Cowles Bog), Indiana Dunes State Park, Keiser Unit, Tamarack Unit
Savanna-complex

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Traditional Uses:

Medicine

Ojibwa

The root is combined with the roots of three unnamed plants to treat lung troubles (Smith 1932).

To treat a sore ear, steep the root and create an eardrop (Densmore 1974).

Used to make "Thirty-two medicine" in which 32 plants are used (Gilmore 1933).

Unspecified medicinal use (Zedeño et al. 2000).

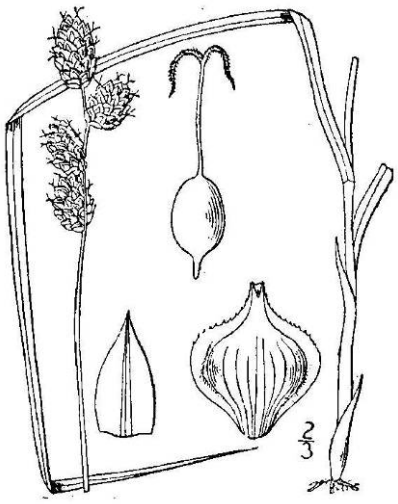
The roots of this plant were used in traditional medicine in an infusion for ear drops and in a compound for lung troubles. (Meeker, Elias, and Heim 1993).

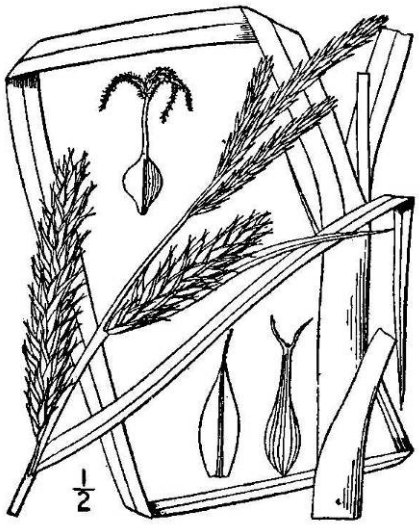
Charm

Ojibwa

Used as a charm (Zedeño et al. 2000).

Scientific name	*Carex* spp.
Common name	Sedge
Nativity	Native
Habitat	The 94 species of sedge are found throughout the park.





Carex alata *Carex atherodes*

Traditional Uses:

Unspecified

Scientific name *Carya cordiformis*

Common name bitter hickory

Other names bitternut, swamp hickory, pignut hickory, pignut, pig hickory, white hickory, red hickory, bitter walnut, bitter pecan, bow wood (Broyles 2005)

Anishinaabek name Mitigwaguk

Nativity Native

Habitat Bailly area, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Heron Rookery, Pinhook Bog

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Archaic (6000BC-1000BC) to the Historic period (1600AD-2002AD) (Herron 2002).

Food

Medicine

Ojibwa

Chippewa Indians treated convulsions by inhaling the fumes of freshly cut shoots, which were placed on hot stones in a sweat lodge (Broyles 2005).

Utility

Anishinaabek

Wood carved into axe handles and other tools. Wood used to be used to make hunting bows (Herron 2002).

Ojibwa

The wood was used in wild rice cultivation (Zedeño et al. 2000).

Craft

Ojibwa

Shell and bark used (Zedeño et al. 2000).

Scientific name	*Carya glabra*
Common name	pignut hickory
Native names	Me-te-gwaw-bawk (hickory tree), Me-gwaw-baw-ko paw-gon (hickory nut) (Blackbird 1887);
Nativity	Native
Habitat	Bailly, Dune Acres (Cowles Bog), Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Heron Rookery, Pinhook Bog
Fire Response	Periodic fires favor oaks over less fire-resistant species such as hickories (Harmon 1984). Pignut hickory is readily damaged by fire (Smalley 1990), but the specific effects of fire vary with topography, slope, aspect, and season of burn (Loomis 1973). Seedlings are often top-kill.

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Traditional Uses:

Medicine

Ojibwa

Used to treat Influenza with an infusion of bark (Merring 1960).

Scientific name *Carya ovata*

Common name shagbark hickory

Ojibway name baggan, bgaan (Rhodes 1993), bagaanaako-bagaan, baga´ nako´ bagan (Smith 1932), mitigwaabaak, mĭ´tĭgwabak´(Densmore 1928), mtigwaabaak (Rhodes 1993), mîtîgwaba´k (Smith 1932)

Nativity Native

Habitat Pinhook Bog

Grows in rich woods, bottoms, and slopes (Yarnell 1964).

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Archaic (6000BC-1000BC) to the Historic period (1600AD-2002AD) (Herron 2002).

Food

Ojibwa

nuts ((Meeker, Elias, and Heim 1993; Zedeño et al. 2000)

Medicine

Ojibwa

stem (Zedeño et al. 2000)

Fresh young shoots were steamed and the vapor inhaled to treat headaches (Meeker, Elias, and Heim 1993).

Utility

Ojibwa

Wood used for bows, arrows, and general utility (Smith 1932).

Craft

Ojibwa

Wood used (Zedeño et al. 2000).

Charm

Ojibwa

Stem used (Zedeño et al. 2000).

Scientific name *Castanea dentate*

Common name Chestnut

Nativity Native

Habitat Miller Woods
Mesophytic-forest

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Woodland (1000BC-1600AD) period (Herron 2002).

Food

Ojibwa

Nuts are eaten (Thwaites 1896 as cited in Aller 1954).

Chestnuts were boiled and when the oil rose to the top it was skimmed off, stored and used to flavor sagamite [bread made from corn flour] or other foods (Aller 1954:65n6).

Scientific name *Castilleja coccinea*

Common name Indian paint brush

Other names Scarlet painted cup (Yarnell 1964); painted-cup (Arnason, Hebda, and Johns 1981)

Native names winabojo' noko' mĭs wi' nĭzĭsûn' (Densmore 1928); ?nenzbozh ookomisan miinizisan, nanabush okomission meensissun (Zichmanise and Hodgins 1982)

Nativity Native

Habitat Indiana Dunes State Park
Prairie-dry, Savanna-complex, Panne

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Traditional Uses:

Medicine

Ojibwa

Used to treat rheumatism, paralysis, and colds. The flowers are used in a decoction and are steeped (Densmore 1974).

An infusion of the flowers was used to treat colds, and a simple or compound decoction of the flowers to treat paralysis (Meeker, Elias, and Heim 1993).

The flower is used for medicinal purposes (Zedeño et al. 2000).

Charm

Ojibwa

Flower is used as a charm (Zedeño et al. 2000).

Scientific name *Caulophyllum thalictroides*

Common name blue cohosh

Other names papoose root (Yarnell 1964)

Native names oci'gîmîc (Smith 1932); bécigodji' bigûk (Densmore 1928)

Nativity Native

Habitat Tolleston Dunes, Bailly, Indiana Dunes State Park (R), Old Visitor Center area area,
Keiser Unit
Mesophytic-forest

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Traditional Uses:

Medicine

Ojibway

The root is used for female troubles, particularly menstrual cramps. The fine roots are boiled to make an emetic tea (Smith 1932).

Used for lung trouble. A root decoction is taken internally. For indigestion a root decoction is also made. Used for stomach cramps and as an emetic (Densmore 1974).

Root has an unspecified medicinal use (Zedeño et al. 2000).

Charm

Ojibway

Root is used as a charm (Zedeño et al. 2000).

Scientific name *Ceanothus americanus*

Common name New Jersey tea

Other names inland ceanothus, Indian tea, walpalo tea, mountain sweet,wild snowbell, red root and spangles (http://plant-materials.nrcs.usda.gov/kspmc/culturallysignificant.html); deer brush (PFAF)

Native names Kadegimnedu (Gilmore 1933)

Nativity Native

Habitat Dune Acres (Cowles Bog), Indiana Dunes State Park, Old Visitor Center area area,
Keiser Unit, Heron Rookery, Pinhook Bog
Savanna-complex, Prairie-dry, Prairie-wet

Fire Response New Jersey tea is well adapted to fire (Abrams and Dickmann 1982; Swan 1970). After being top-killed by fire, it sprouts from rootsocks (Curtis 1959). Where frequent fires occur it becomes a conspicuous dominant, forming clusters among prairie grasses.

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Traditional Uses:

Medicine

Ojibway

A root tea is used for constipation. In addition, a root tea mixed with other herbs is used for pulmonary trouble (Gilmore 1933).

Root has unspecified medicinal uses (Zedeño et al. 2000).

Charm

Ojibway

Root is used as a charm (Zedeño et al. 2000).

Scientific name *Celastrus scandens*

Common name climbing bittersweet

Other names waxwork, staff tree (Yarnell 1964); American bittersweet (Smith 1933)

Native names manîdobima' kwît (spirit-twisted; the name refers to the twisted intestines of Winabojo) (Smith 1932); bima' kwûd (Densmore 1928); biimaakwod (Rhodes 1993)

Nativity Native

Habitat Bailly, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit
Dist-dry, Foredune-complex, Savanna-complex

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Traditional Uses:

Archaeological evidence for Anishinaabek use dates back to the Historic period (1600 AD-2002AD) (Herron 2002).

Food

Ojibway

Historically, the inner bark was prepared into a starvation food (broth) that could sustain a family for weeks. The inner bark is used to make a soup, usually in winter when no other food is available (Smith 1933).

Unspecified use as food (Yarnell 1964).

Medicine

Ojibway

Historically, the bark root used to make tea for liver affections, rheumatism, and obstructed menstruation including leucorrhea (Naegele 1996).

The red berries are used for stomach trouble (Smith 1932).

A decotion of the roots is used as a physic for babies. It also is used for the stoppage of urine. A decotion of the stalk is used to treat skin eruptions (Densmore 1974).

To treat sores, the roots are cooked and an ointment is made (Gilmore 1933).

Unspecified medicinal use (Reagan 1928).

A decoction of the stalk is used for skin eruptions. A decoction of the root is used as a physic for babies and as a diuretic. The boiled

rootsare used as an ointment for cancerous or obstinate sores, and the berries were used for stomach troubles (Meeker, Elias, and Heim 1993).

The roots, berries, and stalk have unspecified medicinal purposes (Zedeño et al. 2000).

Charm

Ojibway

The roots, berries, and stalk are used as charms (Zedeño et al. 2000).

Scientific name	*Celtis occidentalis*
Common name	hackberry
Other names	northern hackberry (Herron 2002)
Nativity	Native
Habitat	Miller Woods, Tolleston Dunes, West Beach, Bailly area, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Pinhook Bog
Fire Response	This tree is highly susceptible to fire damage, which opens the way for wood decay organisms (Krajicek 1958). Seedling and saplings are killed by fire on the Konza prairie (Reichman 1987), and Krajicek (Krajicek 1958) states that small, and rarely large trees will sprout from stumps.

Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Woodland period (1000BC-1600AD) (Herron 2002).

Scientific name	*Cephalanthus occidentalis*
Common name	button bush
Native names	qua-mi-shiki (Arnason et al. 1981)
Nativity	Native
Habitat	West Beach, Dune Acres (Cowles Bog), Old Visitor Center area area, Hoosier Prairie Marsh-complex
Fire Response	Because the bases of buttonbush shrubs are partially submerged during most of the year, fire may not be a threat. Buttonbush resprouts following fire (Forthman 1973; Gunderson 1984).

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Traditional Uses:

Medicine

Ojibway

A tea is made of stems and leaves to stop menstrual flow, pain, cramps (Arnason et al. 1981; Merring 1960).

Scientific name *Chamaedaphne calyculata angustifolia*

Common name leatherleaf

Other names cassandra (Yarnell 1964)

Native names wabackîki' bûg (rabbit leaf) or macki' gobûgons (little swamp leaf) (Smith 1932)

Nativity Native

Habitat West Beach, Dune Acres (Cowles Bog), Old Visitor Center area area
Bog

Fire Response Leatherleaf's persistence in communities over long periods of time has been attributed to its regeneration following fire (Dansereau 1959). Its rhizomes are buried deep in the mineral soil and survive all but the most severe fires (Flinn 1980).

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Traditional Uses:

Food

Ojibway

The leaf is used to make a beverage tea. It also is dried for later use (Smith 1932).

Native Americans used the leaves fresh or dried in a beverage (Meeker, Elias, and Heim 1993).

Leaf is used in a beverage (Zedeño et al. 2000).

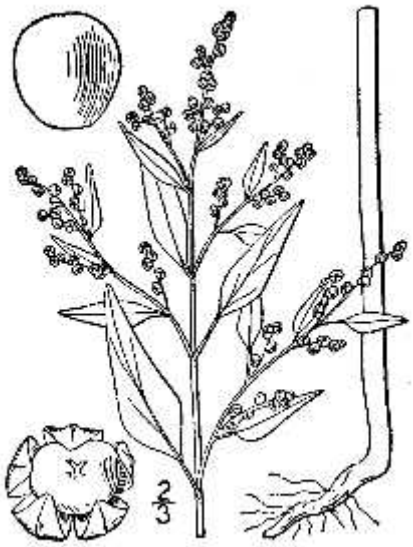
Scientific name	*Chenopodium album*
Common name	lamb's quarters
Other names	lambsquarters (Smith 1933); common lambsquarters, white goosefoot (plants.usda.gov)
Nativity	Introduced
Introduction notes	Documented in Oregon by 1885 (www.gbif.org)
Habitat	Dune Acres, Indiana Dunes State Park, Keiser Unit, Tamarack Unit, Pinhook Bog Disturbed-dry

Bill Summers @ USDA-NRCS PLANTS Database / USDA SCS. 1989. Midwest wetland flora: Field office illustrated guide to plant species. Midwest National Technical Center, Lincoln, NE.

Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Woodland period (1000BC-1600AD) (Herron 2002).

Scientific name	*Chenopodium boscianum*
Synonyms	*Chenopodium berlandieri var. boscianum*
Common name	woodland goosefoot
Other names	Southern huauzontle (PFAF)
Nativity	Native
Habitat	Bailly, Dune Acres (Cowles Bog), Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Heron Rookery, Pinhook Bog Disturbed-dry



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Traditional Uses:

Archaeological evidence for Anishinaabek use dates back to the Woodland period (1000BC-1600AD) (Herron 2002).

Scientific name	*Chimaphila umbellata cisatlantica*
Common name	pipsissewa, prince's pine
Other names	wintergreen, waxflower (Yarnell 1964)
Anishinaabek name	gagigebug (everlasting leaf) (Smith 1932)
Ojibway name	gaagigebag, ga´gige´bûg (Densmore 1928), gaabgebag (Rhodes 1993), ga´gîge´bûg (Smith 1932), yaskopteg (Gilmore 1933), ga' gîge'bûg (everlasting leaf) (Smith 1932)
Nativity	Native
Special status	threatened
Habitat	Miller Woods, Tolleston Dunes, West Beach, Dune Acres, Indiana Dunes State Park, Tamarack Unit Pine forest Grows in dry woods (Yarnell 1964).
Fire Response	Prince's-pine is a fire-sensitive species that is very susceptible to damage and often shows a strong decline following fire (Halpern 1989; McLean 1968; Spies 1991; Stickney 1991). Survival probably depends to a great extent on damage to rhizomes, so it depends on depth of rhizomes, fire severity.

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD-2002AD) (Herron 2002).

Medicine

Chippewa

Strong tea is used to treat sore eyes; it is mixed with wintergreen to reduce the strength of the eye wash (also recorded by Densmore 1974); the tea is helpful for incontinence. It was used historically for stomach troubles, chronic ulcers, renal dropsy, and scrofulous conditions (Smith 1932) (Herron 2002).

Ojibwa

Plant and root used (Zedeño et al. 2000).

A decoction of the root was used for sore eyes, an infusion of the plant was used for stomach troubles, and the whole plant was used to treat gonorrhea (Meeker, Elias, and Heim 1993).

A root decoction was used to treat sore eyes in the form of drops (Densmore 1974).

Plant used with other herbs to treat Gonorrhoea (Gilmore 1933).

Used to make a tea for stomach troubles (Smith 1932).

Charm

Ojibwa

Plant and root used (Zedeño et al. 2000).

Scientific name *Cicuta maculata*

Common name water hemlock

Other names musquash root (Smith 1932; Yarnell 1964)

Native names apagwasî'gons or abagwasî'gans (Smith 1932), wanûkons´ (Densmore 1928)

Nativity Native

Habitat Dune Acres (Cowles Bog), Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit
Marsh-complex, Prairie-wet

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Traditional Uses:

Medicine

Ojibway

It is used medicinally, and smoked as hunting medicine. The root is part of a smoking mixture used to attract buck deer (Smith 1932).

Most sources list the use of this plant as "unspecified", yet in addition the seeds were mised with tobacco and smoked. Reported to be the most poisonous plant to ingest in the Great Lakes region (Meeker, Elias, and Heim 1993).

Root and seeds have unspecified medicinal purposes (Zedeño et al. 2000).

Charm

Ojibway

Roots and seeds are used as a charm (Zedeño et al. 2000).

Scientific name *Cirsium vulgare*

Common name bull thistle

Ojibway name (gi)chi-mazaanashk, ji´ masa´nûck (Smith 1932)

Nativity Introduced

Introduction notes Several varieties found in Puritan gardens in 1637 (Josselyn 1674). Here for three centuries (Haughton 1978) Bull thistle was introduced into the eastern United States several times during the 19th century. *Cirsium vulgare* is a native of Europe, western Asia, and North Africa (Kok and Gassmann 2003).

Habitat Miller Woods, Tolleston Dunes, West Beach, Dune Acres, Indiana Dunes State Park, Tamarack Unit, Hoosier Prairie

Old fields

Fire Response Bull thistle colonization may be enhanced (Ashton 1981; Benson and Kurth 1995; Messinger 1974;Rice and Randall 2001) or depressed (Dailey 2001; Hulbert 1986) by fire.

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Traditional Uses:

Medicine

Ojibwa

Root used (Zedeño et al. 2000).

The root of this species was used by the Ojibwa as a cure for stomach cramps (Meeker, Elias, and Heim 1993).

Charm

Ojibwa

Root used (Zedeño et al. 2000).

Scientific name	*Claytonia virginica*
Common name	spring beauty
Native names	meeautikwaeaugpineeg (Zichmanis and Hodgins 1982 1982)
Nativity	Native
Habitat	Miller Woods, West Beach, Dune Acres (Cowles Bog), Indiana Dunes State Park, Keiser Unit, Tamarack Unit Mesophytic-forest

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Traditional Uses:

Medicine
- Ojibway
  - Root has unspecified medicinal use (Zedeño et al. 2000).

Charm
- Ojibway
  - Root is used as a charm (Zedeño et al. 2000).

Scientific name *Clintonia borealis*

Common name blue bead

Other names corn lily, blue-bead lily (Yarnell 1964); Yellow bluebeadlily (Smith 1933)

Native names gînose' wîbûg (muskellunge leaf), adota'gons (little bell) (Smith 1932), ozawa tootaugauhnse (Zichmanis and Hodgins 1982)

Nativity Native

Habitat Swamp-complex

Fire Response Vegetative regrowth after "cool" fire (Chapman and Crowe 1981).

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Traditional Uses:

Medicine

Ojibway

The root is used to make a tea to help parturition. Said to be used by dogs to poison their teeth to kill prey. If a person is bitten, a poultice of the root would be required to draw out the poison (Smith 1932).

Bums: fresh leaf; scrofula: decoction; sores: externally (Densmore 1974).

A decoction of leaves applied to scrofulous sores and an infusion of the root to aid parturition (Meeker, Elias, and Heim 1993).

Root has unspecified medicinal purposes (Zedeño et al. 2000).

Crafts

Ojibway

The leaves were used in the decorative arts (Meeker, Elias, and Heim 1993).

Charm

Ojibway

Root is used as a charm (Zedeño et al. 2000).

Scientific name *Comptonia peregrina*

Common name sweet fern

Anishinaabek name gibaime nunagwus (coverer) (Herron 2002)

Ojibway name gibaime' nûna'gwûs (coverer) (Myrica aspleniifolia, syn. Comptonia peregrina) (Smith 1932), kba' agne' minš (Gilmore 1933)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Dune Acres (Cowles Bog), Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Hoosier Prairie
Marsh-complex

Fire Response Fire can either reduce or increase the frequency of sweetfern (Niering 1981; Ohmann and Grigal 1977; Vogl 1971). Sweetfern colonizes newly burned sites primarily by sprouting from rhizomes (Hall et al. 1976).

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Traditional Uses:

Archaeological evidence for Anishinaabek use dates back to the Historic period (1600AD-2002AD) (Herron 2002).

Food
- Ojibway
  - The leaf is used to make a beverage and the fruit of the plant is eaten (Zedeño et al. 2000).
  - Used for beverage (Gilmore 1933:127).

Medicine
- Ojibway
  - The leaf and sprig have unspecified medicinal purposes (Zedeño et al. 2000).
  - The burned, dried leaves was used for fevers and a decoction or infusion of leaves was used to cure stomach cramps (Meeker, Elias, and Heim 1993).
  - Leaves used for a medicinal tea. A leaf infusion with *Nepeta cataria* is used to trear fevers. In addition, the leaves are used in steam baths (Gilmore 1933).
  - The leaves are used to make a tea to treat flux and stomach cramps (Smith 1932).

Ceremonial

Ojibwa

The leaf is used in ceremony (Zedeño et al. 2000).

The leaves are used for medicine and ceremonial incense (Yarnell 1964).

Utility

Ojibway

The leaves are used to line buckets when they pick blueberries, and to cover the berries so they do not spoil (Smith 1932).

Charm

Ojibway

The leaf and sprig are used as charms (Zedeño et al. 2000).

Scientific name *Coptis groenlandica*

Synonyms *Coptis trifolia*

Common name goldthread

Other names gold thread, cankerroot (Yarnell 1964); threeleaf goldthread (Smith 1933)

Anishinaabek name

Ojibway name wesa wa' nikwe'ak (yellow ?) and wesa wadji'bîkwe'ak (yellow root) (Smith 1932)

Nativity Native

Habitat Bailly, Dune Acres (Cowles Bog), Old Visitor Center area area, Keiser Unit, Tamarack Unit
Bog

Fire Response Goldthread will survive cool fires, sprouting from the rhizome if top-killed. However, the rhizome is sufficiently near the surface that it may be killed by moderate-severity fires. Removal of the overstory appears to have a negative effect on goldthread (Chapman and Crow 1981; Foster 1984).

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Traditional Uses:

Medicine

Ojibway

A decoction of the root is used to soothe and heal the gums during teething, and as a mouthwash for sore mouths in adults (Smith 1932).

The root has unspecified medicinal purposes (Zedeño et al. 2000).

Utility

Ojibway

The roots are added to other plants to enhance yellow dyes (Smith 1932).

The root is decorative (Zedeño et al. 2000).

Charm

Ojibway

The root is used as a charm (Zedeño et al. 2000).

Scientific name *Cornus alternifolia*

Common name alternate-leaved dogwood

Other names Pagoda dogwood, green osier, blue dogwood (Yarnell 1964); alternateleaf dogwood (Smith 1933)

Native names moso'mîc (moose tree) (Smith 1932), mu^{n}s-minš (Gilmore 1933), moozomizh, muj´omĭj´ (Densmore 1928), moozwemizh (Meeker, Elias, and Heim 1993)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Dune Acres (Cowles Bog), Hoosier Prairie
Hydromesophytic-forest

Fire Response Fire survival and postfire regeneration strategies for alternate-leaf dogwood are not well documented in the literature. If the roots or stems survive fire, it may reproduce vegetatively. Alternate-leaf dogwood may colonize fire disturbed sites with animal-dispersed seed (Perala 1974; Sakai et al. 1985). erala (1974) reported that alternate-leaf dogwood was "encouraged" by prescribed fire in an aspen-mixed hardwood forest in north-central Minnesota.

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Traditional Uses:

Archaeological evidence for Anishinaabek use dates back to the Archaic (6000BC-1000BC), Woodland (1000BC-1600AD), and Historic periods (1600AD-2002AD) (Herron 2002).

Medicine

Ojibway

The inner bark is used as an emetic. The bark is also part of the kinnikinnick mixture (Smith 1932).

Sore eyes are treated by steeping the roots and then bathing the eye. It is used with red-oisier dogwood (Densmore 1974; Gilmore 1933).

The inner bark was used as a cough remedy and emetic and an infusion of scraped root was used as an eye wash or eye compress (Meeker, Elias, and Heim 1993).

The bark, root, and plant have unspecified medicinal purposes (Zedeño et al. 2000).

Utility

Ojibway

The bark has unspecified ceremonial puroposes (Zedeño et al. 2000).

Utility

Ojibway

The twigs provide thatch and the root is boiled to make a wash for muskrat traps that also acts as a lure (Smith 1932).

Charm

Ojibway

The plant was used as a charm on muskrat traps (Meeker, Elias, and Heim 1993).

The bark, root, and plant are used as charms (Zedeño et al. 2000).

Scientific name *Cornus canadensis*

Common name Bunchberry

Other names dwarf cornel (Yarnell 1964); bunchberry dogwood (Smith 1933)

Native names ode' imînîdji' bîk (strawberry root, or heart-berry root) (Smith 1932), caca' gomin (Densmore 1928), zhaushaugominaehnse (Zichmanis and Hodgins 1982)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Bailly, Dune Acres (Cowles Bog), Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Hoosier Prairie
Marsh-complex

Fire Response Rapid vegetative regrowth after "cool" fire (Chapman and Crowe 1981). Bunchberry is classed as moderately susceptible to fire-kill (Fischer and Bradley 1987; Fischer and Clayton 1983; McLean 1968). It usually responds to fire by rhizome sprouting rather than by germination from buried seed (Ahlgren 1959; Cooper 1928)

Traditional Uses:

Food

Ojibway

Berries eaten raw (Densmore 1928).

The fruit of the plant are eaten (Zedeño et al. 2000).

Medicine
- Ojibway
  - The root is used to make a tea for babies' colic (Smith 1932)
  - The root has unspecified medicinal uses (Zedeño et al. 2000).

Charm
- Ojibway
  - The root is used as a charm (Zedeño et al. 2000).

Scientific name *Cornus florida*

Common name flowering dogwood

Native names Nemwatik (Gilmore 1933)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Indiana Dunes State Park, Keiser Unit, Tamarack Unit

Hydromesophytic-forest, Mesophytic-forest

Fire Response Flowering dogwood has been variously described as a fire-tolerant (Landers 1987) and fire-intolerant species (Grelen 1983). Its bark is among the thinnest of all eastern trees (Harmon 1984), and mature individuals are readily damaged by fire (McLemore 1990). Flowering dogwood usually sprouts following fire (Gill and William 1974)

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Traditional Uses:

Medicine

Ojibwa

The bark is used for unspecified medicinal purposes (Zedeño et al. 2000).

The inner bark is steeped with *Sanguinaria*, *Asarurn*, and *Ostrya* to

treat cough (Gilmore 1933)

Fresh young shoots were steamed and the vapor inhaled to treat headaches (Meeker, Elias, and Heim 1993).

Smoking

Anishinaabek (Herron 2002)

Charm

Ojibwa

Bark used as a charm (Zedeño et al. 2000).

Scientific name *Cornus stolonifera*

Synonyms *Cornus sericea*

Common name red osier dogwood

Other common names red willow (Toupal, Banks, and Carroll 2006); redosier dogwood; American dogwood, western dogwood, redstem dogwood (Broyles 2005)

Anishinaabek name meskwabimic (red bush) (Smith 1932), mĭs' kwabi' mĭc (Densmore 1928), meskwabi-minš (Gilmore 1933)

Nativity Native

Habitat Miller Woods, Bailly area, Dune Acres, Indiana Dunes State Park, Keiser Unit, Tamarack Unit, Hoosier Prairie, Pinhook Bog

Foredune-complex

Fire Response Red-osier dogwood is considered to be a semi-fire-tolerant, seed-banking species (Rowe 1983). Red-osier dogwood is able to sprout from surviving roots or stolons and from the base of aerial stems following fire (Fischer and Bradley 1987) (Fischer and Clayton 1983; Parminter 1983; White 1965). It can be killed by severe fires (Fischer and Bradley 1987).

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD-2002AD) (Herron 2002).

Smoking

Anishinaabek (Herron 2002)

Ojibwa (Densmore 1928)

nuts ((Meeker, Elias, and Heim 1993; Zedeño et al. 2000)

Bark smoked (Jones 1861; Reagan 1928).

Ceremonial

Ojibwa

bark (Zedeño et al. 2000)

Medicine

Ojibwa (Densmore 1928)

Bark and root used (Zedeño et al. 2000).

Densmore (1929) documented decoction of root used as an eye wash. She (Densmore 1974) noted dosage of a handful of roots in 1.5 pints of water, and boiling of inner bark with that of other species for various dyes including *Sanguinaria canadensis*, *Alnus incana*, *Prunus americana*, and *Juglans cinerea* (Herron 2002).

A bark decoction with poison ivy is used to treat diarrhea. In addition the bark is steeped to make a wash (Gilmore 1933).

Great Lakes tribes (Yarnell 1964)

Utility

Anishinaabek (Herron 2002)

Craft

Anishinaabek

Stems are used to make dreamcatcher frames (Herron 2002).

Ojibwa

Twigs used (Zedeño et al. 2000).

Dye

Ojibwa (Densmore 1928)

Great Lakes tribes (Yarnell 1964)

Charm

Ojibwa

Bark and root used (Zedeño et al. 2000).

Scientific name	*Corylus americana*
Common name	American hazelnut
Vernacular Name	Pahkihteensi
Ojibway name	bagaan, -ag, bagan´ (Densmore 1928), bagaanimizh, -iig, pikanin-minš (Gilmore 1933), bagaanensiminagaawanzh, bgaanensmin'gaawanzh> (Rhodes 1993), mako-bagaanaak, mŭkwobaga´nak (bear nut), mûkwo´baga´nak (Smith 1932), Paw-gaw-nays (Blackbird 1887)
Nativity	Native
Habitat	Miller Woods, West Beach, Dune Acres, Indiana Dunes State Park, Keiser Unit, Tamarack Unit
	Pine forest
Fire Response	Low- to moderate-severity fires top-kill American hazelnut (Buckman 1965). It survives fire by sprouting from rhizomes (Buckman 1965; Clark 1990). The underground roots and rhizomes can survive low- to moderate-severity fires when the humus is moist. They are relatively shallow, however, and vulnerable to fire when the humus is dry and combustible (Buckman 1964).

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Archaic (6000BC-1000BC) to the Woodland period (1000BC-1600AD) (Herron 2002).

Food

Ojibwa

Nuts were eaten (Densmore 1928; Smith 1932; Thwaites 1896; Zedeño et al. 2000)

Nuts used fresh and stored for winter (Gilmore 1933).

Traditionally the hazelnut was gathered for food (Meeker, Elias, and Heim 1993).

Medicine

Ojibwa (Densmore 1928)

The bark is boiled and applied as a poultice to cuts (Smith 1932).

The stalk is burned and charcoal used subdermally to treat convulsions (Densmore 1974).

The bark is used for unspecified medicinal purposes (Zedeño et al. 2000).

Utility

Ojibwa

Branches, typically an enlarged base and crooked branches with such a base, are preferred for drum sticks. Twigs may be bundled with the tips sheared to make a broom or brush. The twigs may be used as ribs in baskets (Smith 1932).

Traditionally the branches were used for sticks in drumming (Meeker, Elias, and Heim 1993).

Craft

Ojibwa

Bark and branches used (Zedeño et al. 2000).

Dye

Ojibwa (Densmore 1928)

Traditionally the inner bark used in a process of making a dark dye (Meeker, Elias, and Heim 1993).

The seed hulls are used to set the black dye of the butternut (Smith 1932).

Charm

Ojibwa

Bark used (Zedeño et al. 2000).

Scientific name *Crataegus* spp.

Common name Hawthorn

Native name mînesaga' wûnj (berries and thorn bush) (Smith 1932), mĭne' saga' wunj (Densmore 1928), minesga-wĭnš (Gilmore 1933)

Nativity Native

Habitat *Crataegus calpodendron* - Pinhook Bog, Disturbed-wet

Crataegus coccinea - Hoosier Prairie, Bog, Prairie-wet

Crataegus crus-galli - Bailly area, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Hoosier Prairie, Pinhook Bog, Disturbed-dry

Crataegus macrosperma - Indiana Dunes State Park, Disturbed-wet

Crataegus mollis - Old Visitor Center area area, Keiser Unit, Heron Rookery, Disturbed-wet

Crataegus pruinosa - Bailly area, Indiana Dunes State Park, Disturbed-wet

Crataegus punctata - Bailly area, Indiana Dunes State Park, Pinhook Bog, Disturbed-wet

Description

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD-2002AD) (Herron 2002).

Food

Ojibway

The thorn apple fruit was squeezed by hand, formed into cakes, and dried on birch bark. The cakes were stored uncooked for later cooking and consumption (Adams 1961).

The apples are eaten (Smith 1932).

Haws squeezed into cakes without cooking; dried and stored for winter (Densmore 1928).

Medicine

Ojibway

A root decoction is used to treat consumption (Gilmore 1933).

The fruit and the bark are used medicinally, but only by women by the time. The bark is part of a smoking mixture used to attract deer (Smith 1932).

A root decoction is used to treat pain in back and female weakness (Densmore 1928).

Utility

Ojibway

The thorns are used as sewing awls on such things as buckskin (Smith 1932).

Scientific name	*Daucus carota*
Common name	queen anne's lace, wild carrot
Ojibway name	okaadaak, kaudauk (Zichmanis and Hodgins 1982)
Nativity	Introduced
Introduction notes	Arrived with the early settlers; documented in the Governor's Palace garden in Williamsburg (Haughton 1978). Queen-Anne's-lace is a native of Europe that was transported to the United States with early settlers and has spread tremendously (IL DNR 2006a).
Habitat	Indiana Dunes State Park, Keiser Unit, Heron Rookery, Pinhook Bog Disturbed-dry

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD-2002AD) (Herron 2002).

Food

Roots eaten as survival food and to improve vision (Herron 2002).

Medicine

Ojibwa

Unspecified medicinal use (Zedeño et al. 2000).

Charm

Ojibwa

Used as a charm (Zedeño et al. 2000)

Other, unspecified

Ojibwa

Used by the Great Lakes Ojibwa, no use was specified (Meeker, Elias, and Heim 1993).

Scientific name *Drosera rotundifolia*

Common name round-leaved sundew

Other names roundleaf sundew

Native name wawiaeneegaeguhnsh (Zichmanis and Hodgins 1982)

Nativity Native

Habitat Pinhook Bog

Wet and moist places in poor peaty soils, occasionally forming a floating fringe on small ponds. Prefers a sandy peaty soil, succeeding in poor soils and bogs. Requires a sunny position (PFAF 2006).

Fire Response Round-leaved sundew is most likely killed even by fast moving, low-severity fires. However, fires in bogs are generally patchy and round-leaved sundew probably survives in unburned microsites (FEIS). Frequent fire is necessary to maintain some of the bog (Crowder et al. 1990; Schnell 1976).

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Traditional Uses:

Medicine

Ojibwa

Unspecified medicinal use (Zedeño et al. 2000).

Other, unspecified

Ojibwa

Used by the Great Lakes Ojibwa, no use was specified (Meeker, Elias, and Heim 1993).

Charm

Ojibwa

Used as a charm (Zedeño et al. 2000).

Scientific name *Equisetum arvense*

Common name Horsetail

Other names snakeweed; snakeroot (Toupal, Banks, and Carroll 2006); scouring rush, field horsetail (Yarnell 1964)

Ojibway name jasibonskok (Gilmore 1933), aiankošing (Gilmore 1933), gežibnusk (Gilmore 1933), gîji´ bînûsk (duck round) (Smith 1932)

Nativity Native

Habitat West Beach, Dune Acres, Tamarack Unit

Marsh-complex, Prairie-wet, Disturbed-wet

Fire Response Field horsetail usually occurs in moist habitats that do not undergo frequent fire. When fires do occur, however, they are often severe due to high fuel loads. Field horsetail is adapted to survive such fires; it has deep rhizomes that are not killed by even severe fires (Kovalchik 1987).

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Traditional Uses:

Food

Ojibwa

Plant gathered to feed domesticated ducks and fed to ponies to make their coats glossy (Smith 1932).

Medicine

Ojibwa

Decoction of stems taken for dysuria (Gilmore 1933).

Infusion of whole plant used for dropsy (Smith 1932).

Plant, root, and stem used (Zedeño et al. 2000).

A decoction of field horsetail roots were used as a remedy for difficulty in urinating (Meeker, Elias, and Heim 1993).

Craft

Ojibwa

Stem used (Zedeño et al. 2000).

Charm

Ojibwa

Plant pieces carried in men's pockets to prevent their rivals from having good luck (Gilmore 1933).

Plant, root, and stem used as a charm (Yarnell 1964; Zedeño et al. 2000).

Pieces of the stem were used as luck charms (Meeker, Elias, and Heim 1993).

Scientific name *Erigeron* spp.

Common name fleabane

nokwe' sîgûn (Smith 1932)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Bailly area, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Heron Rookery, Hoosier Prairie, Pinhook Bog

Daniel J. Reed & UT Herbarium & Austin Peay State Univ.

Traditional Uses:

Medicine

Ojibwa

It is a nokwe' sîgûn or perfume for curing sick headache (*Erigeron ramosus*, syn. *E. strigosus*) (Smith 1932).

The Ojibwa used parts of the plant to help cure headaches (Meeker, Elias, and Heim 1993).

Plant has unspecified medicinal purposes (Zedeño et al. 2000).

Medicine

Ojibwa

It is used as a charm (Zedeño et al. 2000)

Scientific name *Eupatorium perfoliatum*

Common name common boneset

Other names thoroughwort (Yarnell 1964)

Ojibway name niya ´wibûkûk (Densmore 1928), šiabuksing, šašabwaksing (Gilmore 1933), piškagamisag (Gilmore 1933), she-yan-shah-puh-ki-sin (Arnason et al. 1981)

Nativity Native

Habitat Bailly area, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Tamarack Unit, Heron Rookery, Pinhook Bog

Marsh-complex
Grows in low woods or thickets, swales, wet shores, etc (Yarnell 1964).

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Traditional Uses:

Medicine

Ojibwa (Gilmore 1933)

Plant, root, and flower tops used (Zedeño et al. 2000).

The roots of this plant were used to correct irregular menstrual flow and the boiled flower tops were used to aid in the pains of rheumatism (Meeker, Elias, and Heim 1993).

A decoction of stem and leaves as tea or steam is used to treat Typhoid fever, colds, gallstones (Merring 1960).

Chew leaf and apply to treat rattlesnake bite. Boil with Monarda fistulosa, and wash to treat rheumatism. Use root for irregular menses (Gilmore 1933).

Charm

Ojibwa

Plant, root, and flower tops used (Zedeño et al. 2000).

The root fibers were combined with the roots of common milkweed and applied to a whistle to attract deer (Meeker, Elias, and Heim 1993).

Scientific name *Eupatorium purpureum*

Common name sweet joe-pie-weed

Other names sweetscented joepyeweed (Smith 1933)

Ojibway name biaškagemesek (Gilmore 1933), bû´gîsowe (bathing) (Smith 1932), méskwana' kûk bû' giso' wĭn (Densmore 1928)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Hoosier Prairie

Disturbed-wet, Disturbed-dry

Emmet J. Judziewicz & WI State Herbarium

Traditional Uses:

Medicine

Ojibwa (Gilmore 1933)

Root and plant used (Zedeño et al. 2000).

Wash with root decoction to treat inflamed joints. A root decoction is used to bathe children (Densmore 1974).

A strong solution is made from the root and used to bathe boys until they are six years old. It is believed to strengthen them (Smith 1932).

Used with other herbs for miscarriage. The tops are steeped and the vapor inhaled for colds (Gilmore 1933).

Traditionally, the plant was used to "counteract the bad effects of a miscarriage", an infusion of plant tops was inhaled to treat colds, and a solution of the root was used as a strengthening wash for babies (Meeker, Elias, and Heim 1993).

Utility

Ojibwa

Wood used for bows, arrows, and general utility (Smith 1932).

Charm

Ojibwa

Root and plant used (Zedeño et al. 2000).

Scientific name *Fagus grandifolia*

Common name American beech

Other names beech, beech nuts, beech tree, Carolina beech, gray beech, red beech, white beech, ridge beech (Broyles 2005)

Anishinaabek name gawemic (Smith 1932)

Ojibway name šewe-minš (Gilmore 1933), gawe´mîc (Smith 1932), Au-zhaw-way-mish (beech tree), Au-zhaw-way-min (beech nut) (Blackbird 1887)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, Bailly area, Dune Acres, Old Visitor Center area area, Keiser Unit, Hoosier Prairie, Pinhook Bog

Mesophytic-forest, Hydromesophytic-forest

Fire Response Thin bark renders American beech highly vulnerable to injury by fire. Postfire colonization is through root suckering (Niering 1981; Swan 1970; Tubbs and Houston 1990). Fire usually top-kills American beech. Mortality of young trees is related to fire severity. Cool fires kill 40 to 50 percent of the seedlings and saplings (Garrison et al. 1977)

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Paleoindian (10,000BC-6000BC) to the Historic period (1600AD-2002AD) (Herron 2002).

Food

Great Lakes tribes (Yarnell 1964)

Ojibwa

Nuts were eaten (Gilmore 1933; Zedeño et al. 2000).

The sweet nuts are eaten fresh as there typically are never enough to store (Smith 1932).

Allouez (1670), a Jesuit priest, documented that the nuts were eaten (Thwaites 1896).

Medicine

Anishinaabek

The inner bark of many trees including maple, iron wood, beech, basswood, sassafras, and chokecherry were boiled into a drink for tuberculosis (Herron 2002).

Ojibwa

The bark is combined with black birch, red-osier dogwood barks to treat pulmonary trouble (Gilmore 1933).

Bark is used for unspecified medicinal purposes (Zedeño et al. 2000)

Leaves are used for unspecified medicinal purposes (Yarnell 1964).

In traditional medical practices the bark was used to treat pulmonary troubles (Meeker, Elias, and Heim 1993).

Utility

Ojibwa

Wood used for bows, arrows, and general utility (Smith 1932).

Charm

Ojibwa

Bark is used as a charm (Zedeño et al. 2000)

Scientific name *Fragaria virginiana*

Synonyms Also Fragaria vesca, European wood strawberry.

Common name wild strawberry

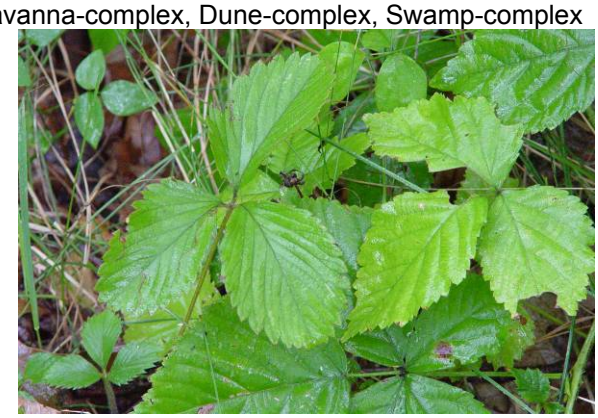
Anishinaabek name odeimin (means heart berry); odeimini djibik (strawberry root)

Ojibway name ode'min, -an (berry), de-min (Gilmore 1933), ode´imîn (Smith 1932), odaemin (Zichmanis and Hodgins 1982) ode'iminijiibik (root) ode´imĭnĭdji´bĭk (Densmore 1928), ode´ imînîdji´ bîk (heart berry root) (Smith 1932)

Nativity Native

Habitat Miller Woods, Pinhook Bog

Prairie-wet, Prairie-dry, Savanna-complex, Dune-complex, Swamp-complex



strawberry (left) and poison ivy (right)

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD-2002AD) (Herron 2002).

Food

Ojibwa

Le Jeuene (1633), a Jesuit priest, documented that the fruits were eaten (Thwaites 1896).

The berry is eaten, and made into preserves for winter use (Densmore 1974; Gilmore 1933; Reagan 1928; Smith 1932).

fruit (Zedeño et al. 2000)

Salad of plantain, strawberry, and dandelion leaves, and columbine flowers used in the spring to boost iron levels after a winter when fresh plants are scarce (Herron 2002).

Medicine

Anishinaabek

Root bark of four large plants boild down from 1 pint to a third pint, strained and used as an eyewash (Herron 2002).

Ojibwa

Root has unspecified medicinal purpose (Zedeño et al. 2000)

Women's medicine, heart medicine; two or three roots steeped in one quart of boiling water, taken for cholera infantum (Densmore 1974).

Taken for stomach aches in children and babies (Smith 1932).

An infusion of the root was used to treat "cholera infantum" and stomach aches (Meeker, Elias, and Heim 1993).

Ceremonial

Anishinaabek

Given by hosts to guests at ceremonies (Herron 2002).

Ojibwa (Meeker, Elias, and Heim 1993)

When girls start their first menstrual period, they enter a yearlong berry fast that includes blueberries and strawberries. It is how they show responsibility and patience toward the recently gained privilege of fertility. After one year fasting, young girls have ceremony conducted by grandmother who would go up to girl four times with a spoonful of strawberries, then turn away. The fourth time, the girl would be given the spoonful of strawberries, then a bowl of them. The ceremony teaches patience, humility, and self control. The spirits are allowed symbolically to eat the food first. As a coming-of-age ceremony, this activity forms a strong connection between women, the earth, and the cycles of the moon (Herron 2002).

Charm

Ojibwa

Root used as a charm (Zedeño et al. 2000)

Scientific name	*Fraxinus americana*
Common name	white ash
Other names	Biltmore ash, Biltmore white ash, cane ash, smallseed white ash (Broyles 2005)
Anishinaabek name	agimak (snowshoe wood) (Smith 1932)
Ojibway name	aagimaak, baapaagimaak, nitiminš (Gilmore 1933), bo-yak (Gilmore 1933), bwaayaak (Rhodes 1993), emkwaansaak (Rhodes 1993), puh-yahk (Arnason et al. 1981), a' gimak' (Densmore 1928)
Nativity	Native
Habitat	Dune Acres Mesophytic-forest, Hydromesophytic-forest Grows in rich, moist, loamy soil and any well-drained situation; common along stream beds (Yarnell 1964).
Fire Response	Fire kills the aboveground stem and crown of white ash. White ash resprouts from the root crown after fire (McGee 1980).

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD-2002AD) (Herron 2002).

Food

Anishinaabek (Herron 2002)

Medicine

Anishinaabek (Herron 2002)

Ojibwa

Root bark used for medicinal purposes (Reagan 1928).

Bark of root applied to wounds and cuts to stop bleeding (Merring 1960).

Historically, inner bark used in combination for a medicinal tonic (Smith 1932).

A decoction of the inner bark is used as a tonic or stimulant. In addition, a root decoction is used as an enema (Densmore 1974).

The wood and inner bark of the roots steeped in water and used as an enema historically (Densmore 1974; Naegele 1996). Inner bark combined with that of basswood to make a tea to treat constipation. Inner bark boiled down into syrup as well (Herron 2002).

Root is used for unspecified medicinal purposes (Zedeño et al. 2000)

Medicinally the root bark was used for unspecified purposes (Meeker, Elias, and Heim 1993).

Utility

Anishinaabek

Used to make sleds, toboggans, snowshoe frames, cradle boards, and long bows (Herron 2002).

Ojibwa (Herron 2002)

All ash wood is valued and used for utilitarian purposes (Smith 1932)

Wood used for fish spears (called "spear timber") and in canoe and showshoe manufacture by Ojibwa (Gilmore 1933; Reagan 1928). Wood of all three of the ashes used to make bows, arrows, snowshoe frames, sled, and cradle boards by Ojibwa (Smith 1932).

Used to make canoes and snowshoes (Reagan 1928).

Wood used to make handles for fishing spears (Gilmore 1933).

The wood of this tree was traditionally used for making snowshoe frames and sled (Meeker, Elias, and Heim 1993).

Craft

Ojibwa

wood (Zedeño et al. 2000)

Charm

Ojibwa

root (Zedeño et al. 2000)

Scientific name	*Fraxinus nigra*
Common name	black ash
Anishinaabek name	aagimaak; wisigak (bitter ash); agimak (snowshoe wood)
Ojibway name	aagimaak, a´gimak ´ (Hoffman 1891), wiisagaak, wisigak (Gilmore 1933), wiisgaak (Rhodes 1993), We-saw-gawk (Blackbird 1887), a' gimak' (Densmore 1928)
Nativity	Native
Habitat	Bailly area, Indiana Dunes State Park, Heron Rookery, Pinhook Bog Mesophytic-forest Grows in rich, moist, loamy soil and any well-drained situation; common along stream beds (Yarnell 1964).
Fire Response	Black ash is fire sensitive (Grimm 1984) and is top-killed by even moderate-severity surface fires (Heinselman 1981).

USDA-NRCS PLANTS Database / **Herman, D.E. et al. 1996. *North Dakota tree handbook*. USDA NRCS ND State Soil Conservation Committee; NDSU Extension and Western Area Power Admin., Bismarck, ND.**

Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD-2002AD) (Herron 2002).

Medicine

Ojibwa

Infusion of inner bark applied to sore eyes (Hoffman 1891).

Inner bark decoction is used as a tonic or stimulant. A root decoction is also used as an enema (Densmore 1974).

Bark has unspecified medicinal purpose (Zedeño et al. 2000)

In traditional medical practices an infusion of inner bark was used for sore eyes (Meeker, Elias, and Heim 1993).

Utility

Anishinaabek

The trees were cut and pounded into splints, then cut to size and woven into utility baskets. 3" sized baskets were used to make

offerings such as tobacco at wakes and funerals, and then buried with the person (Herron 2002).

Ojibwa

Wood used for fish spears (called "spear timber") and in canoe and showshoe manufacture (Gilmore 1933; Reagan 1928). Wood of all three of the ashes used to make bows, arrows, snowshoe frames, sled, and cradle boards (Smith 1932).

The wood is used to make basket splints. Black ash logs from a swamp are preferred. The wood is separated along the annual rings and the splints are coiled and immersed in kettles to dye them before being woven by the women (Smith 1932).

Wood logs beaten with mauls to separate the growth layers, cut into strips and woven into baskets. Wood used for fuel for quiet fires because it did not crackle and shoot sparks like other woods (Gilmore 1933).

Bark used to cover wigwams (Densmore 1928).

Strips of wood were used in basket-making (Meeker, Elias, and Heim 1993).

Great Lakes tribes (Yarnell 1964)

Craft

Ojibwa (Herron 2002)

Wood and bark used (Zedeño et al. 2000).

Dye (Yarnell 1964)

Ojibwa

Bark used to make a blue dye in a manner similar to that of blue ash (Gilmore 1933).

Charm

Ojibwa

bark (Zedeño et al. 2000)

Scientific name *Fraxinus pennsylvanica subintegerrima*

Common name green ash

Ojibway name aagimaak, a ´ gîma ´k, a ´ gîmak (Smith 1932), sagîma ´ kwûn (Smith 1932)

Nativity Native

Habitat Miller Woods, West Beach, Bailly area, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Heron Rookery, Pinhook Bog

Grows in rich, moist, loamy soil and any well-drained situation; common along stream beds.

Fire Response *Fraxinus pennsylvanica* is eliminated by summer and post-winter burns (Adams et al. 1982). While some green ash trees may survive fire, those that are top-killed are capable of "prolific" root crown sprouting following fire (Lesica 1989; Severson and Boldt 1977, 1978). The high seed pro (Barnes 1985; Boerner and Brinkman 1996)

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Traditional Uses:

Medicine

Ojibwa

The wood has unspecified medicinal purposes (Zedeño et al. 2000)

Inner bark decoction is used as a tonic or stimulant. A root decoction is also used as an enema (Densmore 1974).

The Ojibwa used the inner bark of green ash as one ingredient in a

compound tonic for unspecified purposes (Meeker, Elias, and Heim 1993).

Utility

Ojibwa

Wood used for bows, arrows, and general utility. Wood of all three of the ashes used to make bows, arrows, snowshoe frames, sled, and cradle boards by Ojibwa (Smith 1932).

Wood used for fish spears (called "spear timber") and in canoe and showshoe manufacture by Ojibwa (Gilmore 1933; Reagan 1928).

Wood used in wild rice cultivation (Zedeño et al. 2000).

Charm

Ojibwa

The wood is used as a charm (Zedeño et al. 2000)

Scientific name	*Gaultheria procumbens*
Common name	wintergreen
Other names	spiceberry, teaberry (Toupal, Banks, and Carroll 2006); crackleberry (Herron 2002); teaberry (Yarnell 1964); eastern teaberry (Smith 1933)
Anishinaabek name	winisi bugud (dirty leaf); wiinisiibagoons (Anishinaabemowin)
Ojibway name	wiinisiibag, wiinisiibagoons, winissibag 'a (Baraga 1966), winĭ´sĭbûgons´(Densmore 1928), winsibog (Gilmore 1933), weenzeebugohnse (Zichmanis and Hodgins 1982), wiinisiibagad, wînîsi ´ bûgûd (dirty leaves) (Smith 1932), owînîsi ´ mîn (Smith 1932)
Nativity	Native
Habitat	Miller Woods, Tolleston Dunes, West Beach, Dune Acres (Cowles Bog), Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit Dune-complex, Bog Grows in thin sandy woods and clearings (Yarnell 1964).
Fire Response	Vegetative regrowth after "cool" fire (Chapman and Crowe 1981). Fire top-kills wintergreen (Flinn and Wein 1977). Surviving rhizomes may sprout (Flinn 1980; Sidhu 1973; Ross 1978; Matlack, Gibson, and Good 1993). Wintergreen is not well-adapted to fire that removes litter and/or the organic layer of soil. Rhizomes are quite shallow (Flinn and Wein 1977).

Jim Stasz @ USDA-NRCS PLANTS Database

William S. Justice @ USDA-NRCS PLANTS Database

Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD-2002AD) (Herron 2002).

Food

Ojibwa

Mature red wintergreen berries are collected and eaten after several frosts have produced the strong minty flavor (Danielsen 1999).

Berries used fresh or preserved (Reagan 1928).

Tea drunk in summer on ice for refreshment (Herron 2002).

Leaves, fresh or dried, and tied basswood bark are boiled in water for tea (Densmore 1928)

Used as a beverage and seasoning (Gilmore 1933).

Leaves available spring to fall. Used for beverage, flavoring and medicine; berry also used for food (Smith 1932).

Leaf used for beverage and seasoning (Zedeño et al. 2000).

Medicine

Ojibwa

A tea is made for upset stomachs, colds, blood revitalization, and relaxation (Danielsen 1999).

Used medicinally with other herbs for colds. Tea for aches and pains (Gilmore 1933).

Leaves available spring to fall. Used to make a tea (source of methyl salicylate). The tea is used for rheumatism and "to make one feel good" (Smith 1932:369).

Plant and leaf used (Zedeño et al. 2000).

A decoction of the whole plant was taken in spring and fall as a tonic to keep the blood in good order. The plant was also used to treat colds (Meeker, Elias, and Heim 1993).

Charm

Ojibwa

Plant and leaf used (Zedeño et al. 2000).

Scientific name *Gaylussacia baccata*

Common name huckleberry

Other names crackleberry (Herron 2002)

Anishinaabek name miinan (Meeker, Elias, and Heim 1993)

Ojibway name miinan, mī ´ nŭn (Hoffman 1891)

Nativity Native

Habitat Miller Woods, Dune Acres, Indiana Dunes State Park, Keiser Unit, Tamarack Unit, Hoosier Prairie, Pinhook Bog

Savanna-complex, Bog

Fire Response Black huckleberry survives most fires by sprouting from rhizomes (Brayton and Woodwell 1966; Dunwiddie 1998; Niering 1981), but root crown sprouting is possible following "light" burning (Brayton and Woodwell 1966). Shallow black huckleberry rhizomes are susceptible to damage or death from fires that consume the upper soil levels (Laycock 1967).

Kitty Kohout & WI State Herbarium

Robert W. Freckmann & WI State Herbarium

Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD-2002AD) (Herron 2002).

Food

Ojibwa

Fruit is eaten (Zedeño et al. 2000)

Native Americans ate the fruit (Meeker, Elias, and Heim 1993).

Berries used fresh or dried (Reagan 1928).

Ceremonial

Ojibwa

Fruit were used ceremonially (Zedeño et al. 2000)

The fruits were used ceremonially (Meeker, Elias, and Heim 1993).

Trade

Ojibwa

The fruits were used as trade items (Meeker, Elias, and Heim 1993).

Scientific name *Geranium maculatum*

Common name wild geranium

Other names sticky geranium (Toupal, Banks, and Carroll 2006); potted cranebill (Yarnell 1964)

Ojibway name bezhigoojiibik, be ´ cigodji ´bigûk, be' cigodji' bigûk (Densmore 1928), ozaawaaskoniins, o´ sawaskwîni´ s (Smith 1932), pesigunk (Gilmore 1933), maeshkwaudjeebik (Zichmanis and Hodgins 1982), o' sawaskwîni' s (yellow light) (Smith 1932)

Nativity Native

Habitat West Beach, Hoosier Prairie

Mesophytic-forest

Fire Response Wild geranium increases in abundance immediately after fire (Apfelbaum and Haney 1990). The rhizome is found at the soil surface under closed canopies and 3 to 4 inches (7-9 cm) deep under open canopies (Martin 1965). It is probable that the plant is more easily killed by fire under closed canopies.

Jennifer Anderson @ USDA-NRCS PLANTS Database

Traditional Uses:

Medicine

Ojibwa

Root is used for unspecified medicinal purposes (Smith 1932; Zedeño et al. 2000).

The root is an astringent and used to treat flux and sore mouths (Smith 1932).

A root powder is used to treat a sore mouth (Densmore 1974).

Used to treat diarrhea. The roots are steeped (Gilmore 1933).

Traditional medical uses included an infusion of roots for diarrhea and dried pulverized roots for mouth soreness (Meeker, Elias, and Heim 1993).

Charm

Ojibwa

The root is used as a charm (Zedeño et al. 2000)

Scientific name *Gnaphalium obtusifolium*

Synonyms *Pseudognaphalium obtusifolium* ssp. *obtusifolium*

Common name old-field balsam

Other names life everlasting (Toupal, Banks, and Carroll 2006); rabbit tobacco; old-field balsam; mouse-ear everlasting (Yarnell 1964); sweet everlasting (Shoemaker 2000)

Native names ko-koosh-me-jm (Arnason et al. 1981)

Nativity Native

Habitat Indiana Dunes State Park, Old Visitor Center area area

Disturbed-dry, Savanna-complex

Description

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Traditional Uses:

Charm

Ojibwa

Protect house from witches (Merring 1960).

Scientific name	*Hierochloe odorata*
Synonyms	*Anthoxanthum monticola ssp. alpinum*
Common name	vanilla grass
Other common names	sweetgrass (Toupal, Banks, and Carroll 2006); Indian grass (Yarnell 1964); holy grass (http://plant-materials.nrcs.usda.gov/kspmc/culturallysignificant. html)
Anishinaabek name	weengushk (sweetgrass braids)
Ojibway name	wiingashk, wingashk (Baraga 1966), wiingashk, wiingash (Rhodes 1993), wiishkobi-mashkosi, wicko´ bimûcko´si (Densmore 1928), wîcko'bimûcko'si (sweet grass) (although Smith referred to *Anthoxanthum odoratum*, the plant and uses described, particularly in "olden times" before *A. odoratum* was introduced, are *Hierochloe odorata*)
Nativity	Native
Special status	locally rare
Habitat	Miller Woods, Tolleston Dunes, West Beach, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Hoosier Prairie Prairie-wet Grows in meadows, swales, and shores (Yarnell 1964).
Fire Response	Sweetgrass has creeping rhizomes which are often fairly deep (Hitchcock 1951; Larson 1993) and which may sprout after aerial portions are burned. Culms arise from among dead foliage of the preceding year (Fernald 1950).

Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Paleoindian period (10,000BC-6000BC) to the Historic period (1600AD-2002AD) (Herron 2002).

Ceremonial

Anishinaabek

Tobacco offerings are made before harvesting. Leaves immersed in hot water to cure a longer lasting fragrance. Braids used for display,

inclusion with other crafts, incense, wearing on ceremonial clothing, braided into hair, and smudged to bring and keep good spiritual energy to a location, person, or object (Herron 2002).

Ojibwa

Used for ceremonial, economic and pleasurable purposes (Densmore 1928).

Plant used in ceremony (Smith 1932; Zedeño et al. 2000)

Cut and burned as incense in ceremonies (Meeker, Elias, and Heim 1993).

Medicine

Anishinaabek

A medicine wheel plant of the northern direction, used for smudges, incense, and pipes. Grass is harvested in late June or early July after it has set seed and the inflorescent culms have died back. Only long sterile leaves are collected. Leaves added to smoking mixtures. Tea drunk to alleviate sore throats and coughs (Wilmer 2000).

Utility

Anishinaabek

Leaves used to make coiled baskets that are reinforced with birch bark (Wilmer 2000).

Ojibwa

Collected in mid-July to September (Jones 1936).

Long leaves used for sewing and for weaving bags and baskets (Smith 1932).

Is used in all types of basketry, braided for ornamental pieces (Meeker, Elias, and Heim 1993).

Great Lakes tribes

Some tribes soaked leaves in water and used this as a hair rinse. Sweetgrass has been used in making baskets, mats, rugs, bedding and cradleboards (Buhl 1935).

Craft

Ojibwa

Plant used in crafts and decoration (Zedeño et al. 2000)

Braided for ornamental pieces (Meeker, Elias, and Heim 1993).

Other

Ojibwa

Cut and burned as incense or the pleasureable scent (Meeker, Elias, and Heim 1993).

Scientific name *Hordeum jubatum*

Common name squirreltail grass

Other names foxtail (Toupal, Banks, and Carroll 2006); foxtail barley (Smith 1933)

Ojibway name a ´ djidamo´wano (Densmore 1928)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, Dune Acres, Old Visitor Center area area

Disturbed-dry

Fire Response Foxtail barley generally recovers after fire through off-site seeds (Pembleet al. 1981). Foxtail barley is most sensitive to spring fire that coincides with its active growing period (Wright and Bailey 1982; Young 1986).

W.L. Wagner @ USDA-NRCS PLANTS Database

Traditional Uses:

Medicine

Ojibwa

Dry root wrapped, moistened and used as a compress for sties or inflammation of lid (Densmore 1928).

The root is dried, pounded, and put in a moist cloth to sop and eye with a sty (Densmore 1974).

Root used for unspecified medicinal purposes (Zedeño et al. 2000)

The dry root was wrapped and moistened and used as a compress for sties and inflammation of the eye lid (Meeker, Elias, and Heim 1993).

Charm

Ojibwa

Root is used as a charm (Zedeño et al. 2000)

Scientific name *Impatiens capensis*

Also *Impatiens pallida* (yellow jewelweed; pale jewelweed (Yarnell 1964))

Common name orange jewelweed

Other names jewelweed

Anishinaabek name ozaawashko jiibik (yellow root)

Ojibway name ozaawashkojiibik, o ´sawaskodji ´bîk (Smith 1932), wesa´ wûs ga ´skonêk (Smith, mukikeebug (Zichmanis and Hodgins 1982)

Nativity Native

Habitat West Beach, Dune Acres, Indiana Dunes State Park, Hoosier Prairie

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD-2002AD) (Herron 2002).

Medicine

Anishinaabek

Stem juice rubbed on skin to relievel mosquito bites (Herron 2002).

Ojibwa

Poultice of bruised stems applied to rashes or other skin troubles (Gilmore 1933).

Juice of fresh plant rubbed on head for headache. Infusion of leaves used medicinally for unspecified purpose (Smith 1932).

Stem and leaf used (Zedeño et al. 2000).

Used medicinally by applying the juice of the crushed stems to skin rashes and rubbing the juice on the head to cure headaches (Meeker, Elias, and Heim 1993).

Dye

Ojibwa

Whole plant used to make a yellow dye, the material boiled in the mixture with rusty nails (Smith 1932).

Craft
    Ojibwa (Zedeño et al. 2000)
Charm
    Ojibwa
        Stem and leaf used (Zedeño et al. 2000).

Scientific name *Juglans cinerea*

Common name butternut

Nativity Native

Habitat Miller Woods, Dune Acres, Keiser Unit

Stephen L. Solheim & WI State Herbarium

Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD-2002AD) (Herron 2002).

Food

- Ojibwa
  - nut (Zedeño et al. 2000)
  - Nuts used for food (Smith 1932).
- Great Lakes tribes (Yarnell 1964)
  - Immature nuts in early summer, nuts in fall (McPherson and McPherson 1977).

Medicine

- Ojibwa
  - Decoction of plant sap taken as a cathartic (Gilmore 1933).
  - sap (Zedeño et al. 2000)
- Great Lake tribes (Yarnell 1964)

Utility

- Ojibwa
  - Whole plant used to make a yellow dye, the material boiled in the mixture with rusty nails (Smith 1932).

Dye

- Ojibwa
  - Root bark used to make a brown dye which did not need a mordant (Gilmore 1933).
  - Nut hulls used as best brown dye, because it was attained from the tree at any time of the year (Smith 1932).
  - Boiled with hazel to make a black dye. Inner bark and a little of the root boiled with black earth and ochre to make a black dye. Used with black earth to make a black dye (Densmore 1928).

Craft
- Ojibwa
  - Nut, root, and bark used (Zedeño et al. 2000).

Charm
- Ojibwa
  - sap (Zedeño et al. 2000)

Scientific name *Juglans nigra*

Common name black walnut

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Bailly area, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Heron Rookery, Hoosier Prairie, Pinhook Bog

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Paleoindian period (10,000BC-6000BC) and the Archaic period (6000BC-1000BC) (Herron 2002).

Food

Ojibwa

nut (Zedeño et al. 2000)

Great Lakes tribes (Yarnell 1964)

Immature nuts in early summer, nuts in fall (McPherson and McPherson 1977).

Dye

Ojibwa

Bark used to make a black dye. Bark used to make a dark brown dye (Gilmore 1933).

Craft

Ojibwa

nut (Zedeño et al. 2000)

Scientific name *Juniperus communis*

Also, *Juniperus communis depressa*

Common name common juniper, dunes juniper

Ojibway name giizhigaandagizi, ogaawa/inzh, oâgwanj, -ig (Baraga 1966), kanwinš (Gilmore 1933), ga ´gawan ´dagisĭd (Densmore 1928)

Nativity Native

Special status Rare

Habitat Miller Woods, West Beach, Dune Acres

Grows in poor rocky soil and pastures (Yarnell 1964).

Brother Alfred Brousseau @ USDA-NRCS PLANTS Database

Traditional Uses:

Medicine

Ojibwa (Yarnell 1964)

Decoction of twigs and leaves taken for asthma (Gilmore 1933).

Branch and leaf used (Zedeño et al. 2000).

A decoction of the twigs to treat asthma (Meeker, Elias, and Heim 1993).

Great Lakes tribes (Yarnell 1964)

Utility

Ojibwa

Bark used for weaving mats and house-building (Reagan 1928).

Charm

Ojibwa

Branch and leaf used (Zedeño et al. 2000).

Scientific name *Juniperus virginiana crebra*

Synonyms *Juniperus virginiana* var. *virginiana*

Common name eastern red cedar

Other names flat cedar, red cedar, cedar, juniper (Toupal, Banks, and Carroll 2006); eastern red cedar; cedar, cedar tree, red cedar, Virginia redcedar, pencil cedar, juniper, red juniper, evergreen, savin (Broyles 2005)

Ojibway name miskwaawaak, -oog, miskwâwak, -og (Baraga 1966), miskwa ´wak (Densmore 1928), muskwa ´wâ ´ak (Hoffman 1891)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Bailly area, Dune Acres, Indiana Dunes State Park

Grows in loamy soil on sunny slopes, dry rocky hills, and peaty swamps, and by lakes and streams.

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Traditional Uses:

Agricultural

Ojibwa

Pulp wood and wood posts sold to make paper and fencing (Reagan 1928).

Ceremonial

Ojibwa

Split strips thatched and placed on graves (Reagan 1928).

Medicine

Ojibwa (Yarnell 1964)

Compound decoction of twigs taken or used as herbal steam for rheumatism (Densmore 1928).

Bruised leaves and berries used internally for headache (Hoffman 1891).

twigs (Zedeño et al. 2000)

A compound decoction of twigs was made into an herbal steam for rheumatism (Meeker, Elias, and Heim 1993).

Utility

Ojibwa

Bark used for weaving mats and bags (Stowe 1940).

Craft

Ojibwa

bark (Zedeño et al. 2000)

Dye

Ojibwa

Bark used to make a mahogany colored dye for coloring cedar strips in mats (Densmore 1928).

Charm

Ojibwa

twigs (Zedeño et al. 2000)

Scientific name *Larix laricina*

Common name tamarack, larch

Ojibway name mashkiigwaatig, mû ´ckigwa ´tĭg (Densmore 1928), mŏsh ´kīkiwa ´dik (Hoffman 1891), mshkiigwaatig (Rhodes 1993), mûckĭgwa ´ tĭg, mûcki ´gwatĭg (Smith 1932), pskignatik (Gilmore 1933)

Nativity Native

Habitat Tamarack Unit, Pinhook Bog

Grows in cold, deep swamp and (to the north) drier uplands. Grows mostly in swamps in the Great Lakes region (Yarnell 1964).

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Paleoindian period (10,000BC-6000BC) and the Archaic period (6000BC-1000BC) (Herron 2002).

Medicine

Ojibwa

Bark used. Dried leaves used as an inhalant and fumigator (Smith 1932).

Poultice of chopped inner bark applied to burns (Densmore 1928).

Infusion of bark taken for anemic conditions (Gilmore 1933).

Infusion of roots and bark used as a general medicine (Reagan 1928).

Boiled, crushed leaves and bark used as herbal steam for headache and backache. Poultice of crushed leaves and bark applied for

headache (Hoffman 1891).

Needles and bark used (Zedeño et al. 2000).

An infusion of bark was used to treat anemia, a poultice of chopped inner bark was used on burns, and dried leaves (needles) were used as an inhalant and fumigant (Meeker, Elias, and Heim 1993).

Utility

Ojibwa

Roots used to weave bags (Densmore 1928).

Root fibers used to make durable bags. Roots used to sew canoes. Roots used as a sewing material (Smith 1932).

Roots used to sew canoes and used as the strong upper wrappings over the canoe edges (Reagan 1928).

Wood used in wild rice cultivation (Zedeño et al. 2000).

The roots were woven together to make bags and other articles (Meeker, Elias, and Heim 1993).

Craft

Ojibwa

root (Zedeño et al. 2000)

Charm

Ojibwa

Needles and bark used (Zedeño et al. 2000).

Other

Anishinaabek (Herron 2002)

Scientific name *Lathyrus* spp.

Common name pea

Other names vetchling, peavine

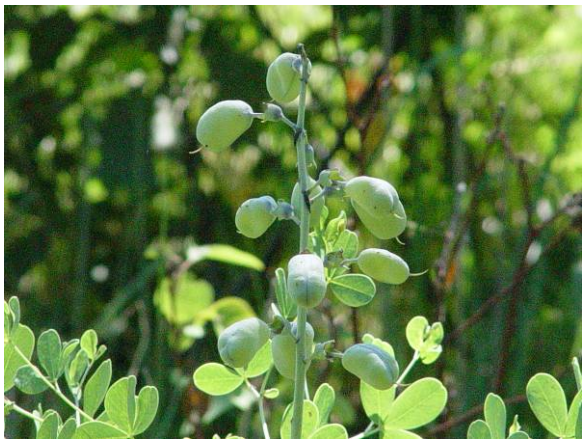
Nativity *L. japonicus var. maritimus, L. ochroleucus, L. palustris, L. palustris, L. venosus* - Native

L. latifolius - Introduced

Special status *L. japonicus glaber, L. ochroleucus* - Endangered

L. venosus - Threatened

Habitat Miller Woods, Tolleston Dunes, West Beach, Bailly area, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Heron Rookery, Pinhook Bog



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Traditional Uses:

Medicine

Ojibwa

(*Lathyrus ochroleucus*, cream peavine) Plant used for stomach trouble. Leaves and roots used to put spirit into a pony just before they expected to race him (Smith 1932).

(*Lathyrus palustris*, slenderstem peavine) Plant fed to a sick pony to make him fat (Smith 1932).

Food

Ojibwa

(*Lathyrus ochroleucus*, cream peavine) Peas used for food (Reagan

1928).

(*Lathyrus ochroleucus*, cream peavine) Roots used as a sort of Indian potato and stored in deep garden pits, like regular potatoes (Smith 1932).

(*Lathyrus palustris*, slenderstem peavine) Full grown peas shelled and cooked for food (Gilmore 1933).

(*Lathyrus palustris*, slenderstem peavine) Foliage was specially fed to a pony to make it grow fat (Smith 1932).

(*Lathyrus palustris*, slenderstem peavine) Peas used for food (Reagan 1928).

Scientific name *Lindera benzoin*

Common name spicebush

Other names spicebush; Benjamin bush (Yarnell 1964)

Nativity Native

Habitat Old Visitor Center area area, Keiser Unit, Tamarack Unit, Heron Rookery

Grows in damp woods and brooksides (Yarnell 1964).

Edward W. Chester & UT Herbarium & Austin Peay State Univ.

Traditional Uses:

Food

Ojibwa

Leaves available from spring to autumn; twigs available anytime. Used for flavoring and beverage (Gilmore 1933).

Leaf used for beverage and seasoning (Zedeño et al. 2000).

Medicine

Ojibwa (Gilmore 1933)

leaf (Zedeño et al. 2000)

Charm

Ojibwa

leaf (Zedeño et al. 2000)

Scientific name *Lycopodium complanatum flabelliforme*

Common name trailing ground pine

Other names groundpine (Toupal, Banks, and Carroll 2006), groundcedar

Ojibway name giizhikaandag, gîji´k gando´ gung (Smith 1932)

Nativity Native

Habitat West Beach, Bailly area, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Tamarack Unit, Hoosier Prairie, Pinhook Bog

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Traditional Uses:

Medicine

Ojibwa

Dried leaves used as a reviver (Smith 1932).

leaf (Zedeño et al. 2000)

The dried leaves of this plant were used as a stimulant (Meeker, Elias, and Heim 1993).

Charm

Ojibwa

leaf (Zedeño et al. 2000)

Scientific name *Monarda fistulosa*

Common name wild bergamot

Other names bergamot (Toupal, Banks, and Carroll 2006); bee-balm, horse mint, mintleaf beebalm, bergamot, Oswego-tea (http://plant-materials.nrcs.usda.gov/kspmc/ culturallysignificant. html)

Ojibway name bibi´gwûnûkûk´ wabino´wûck (Densmore 1928), sasáp-kwanins (Gilmore 1933), moshkōs´wanowins´ (Hoffman 1891), weca ´ wûs wackwî´ nek (Smith 1932)

Nativity Native

Habitat Miller Woods, West Beach, Old Visitor Center area area, Hoosier Prairie

Grows in dry thickets, clearings, and borders of woods (Yarnell 1964).

Jim Stasz @ USDA-NRCS PLANTS Database

Tom Barnes, Univ. of Kentucky

Traditional Uses:

Medicine

Ojibwa

Chewed leaves placed in nostrils for headaches. Plant tops used for colds (Gilmore 1933).

Plant boiled and steam inhaled "to cure catarrh and bronchial affections" (Smith 1932).

Infusion of plant taken or used as a bath for infant convulsions. Infusion of flowers taken for fevers. Infusion of plant taken or used as a bath for infant convulsions (Arnason, Hebda, and Johns 1981).

Decoction of root taken for "pain in the stomach and intestines" (Hoffman 1891).

Leaves, flowers, root, and entire plant used (Zedeño et al. 2000).

Chewed leaves were placed in the nostrils to relieve headaches, a decoction of the root and flowers was administered for worms, a poultice of moistened dry flowers and leaves was used as a dressing for burns. An infusion of flowers and leaves was used as a skin wash, and the steam of the boiled plant was inhaled to treat respiratory problems (Meeker, Elias, and Heim 1993).

Charm

Ojibwa

Leaves, flowers, root, and entire plant used (Zedeño et al. 2000).

Scientific name *Monarda punctata villicaulis*

Synonyms *Monarda punctata ssp. punctata var. villicaulis*

Common name horse mint

Nativity Native

Habitat Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Heron Rookery, Pinhook Bog

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Traditional Uses:

Medicine

Ojibwa

Decoction of plants taken for stomach or bowel troubles. Decoction of plants taken for sick stomach, bowels or for constipation. Plant used as a rubbing medicine (Reagan 1928).

plant (Zedeño et al. 2000)

A decoction of the plant was used to treat a sick stomach and for bowel problems and the plant was used as a rubbing medicine (Meeker, Elias, and Heim 1993).

Charm

Ojibwa

plant (Zedeño et al. 2000)

Scientific name *Osmorhiza longistylis*

Common name smooth sweet cicely

Other names anise root, sweet root (Toupal, Banks, and Carroll 2006); smooth sweet cicely; sweet cicely, anise root (Yarnell 1964); longstyle sweetroot (Smith 1933)

Ojibway name ozagadigom, osaga ´ tîkûm (Smith 1932), segede bwens (Gilmore 1933)

Nativity Native

Habitat Miller Woods, Dune Acres, Indiana Dunes State Park

Grows in rich, often alluvial woods and thickets (Yarnell 1964).

Jim Stasz @ USDA-NRCS PLANTS Database

Tom Barnes, Univ. of Kentucky

Traditional Uses:

Medicine

Ojibwa

Infusion of roots taken for amenorrhea. Decoction of roots used as nostril wash to increase dog's sense of scent (Gilmore 1933).

Infusion of root used to ease parturition. Infusion of root taken for sore throat (Smith 1932).

plant (Zedeño et al. 2000)

Traditionally this plant was used for sore throats and in gynecological ailments (Meeker, Elias, and Heim 1993).

Charm

Ojibwa

plant (Zedeño et al. 2000)

Scientific name *Ostrya virginiana*

Common name hop hornbeam, ironwood

Other names American hop-hornbeam, leverwood (Yarnell 1964); Eastern Hophornbeam (Smith 1933)

Anishinaabek name maananoons (Rhodes 1993)

Nativity Native

Habitat West Beach, Bailly area, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Heron Rookery, Pinhook Bog

Larry Allain @ USDA-NRCS PLANTS Database

Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD-2002AD) (Herron 2002).

Medicine

Ojibwa

Compound infusion of heart wood taken for lung hemorrhages. Compound decoction of heart wood used as herbal steam for rheumatism. Compound liquid made from wood taken as a cough syrup. Decoction of wood taken for kidney trouble (Densmore 1928).

Historically, wood made into decoctions for lung hemorrhaging, coughs, and kidney problems (Meeker, Elias, and Heim 1993).

Inner bark used as a medicinal tea for cancer. The inner bark of many trees including maple, iron wood, beech, basswood, sassafras, and chokecherry were boild into a drink for tuberculosis. Inner bark chips of black oak, white oak, ironwood, and *wunezik* (unknown) were boiled with four handfuls of ironwood twigs to make a medicinal tea for back pain (Herron 2002).

wood (Zedeño et al. 2000)

Traditional medical practices used a compound infusion of the heartwood for hemorrhages of the lungs and an herbal steam for rheumatism. In addition a compound liquid from the wood was used for coughs, while a decoction of wood was used for kidney problems (Meeker, Elias, and Heim 1993).

Great Lake tribes (Yarnell 1964)

Utility

Ojibwa

Used as altnernative to musclewood for war clubs. It was embedded with steel blades during the fur trading period (Herron 2002).

Used as frames for dwellings (Densmore 1928).
Used to make wigwam poles (Densmore 1929).

Craft

Ojibwa (Herron 2002)

Charm

Ojibwa

wood (Zedeño et al. 2000)

Scientific name *Panax quinquefolius*

Common name ginseng

Other names sang (Yarnell 1964); American ginseng (Smith 1933)

Anishinaabek name šuniau jibik (money root); zhooniyaa ojiibik (money root) (Gilmore 1933; Meeker, Elias, and Heim 1993)

Ojibway name jiisens, jîssê ´ns (Smith 1932), zhooniyaawijiibik, zhooniyaa-ojiibik, šuniau-jibik (Gilmore 1933)

Nativity Native

Habitat West Beach, Bailly area, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Heron Rookery, Pinhook Bog

Tom Barnes, Univ. of Kentucky

Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD-2002AD) (Herron 2002).

Food

Anishinaabek

Roots were harvested after the fruits ripened. Fruit planted in the hole the root is taken from (Herron 2002).

Medicine

Anishinaabek (Herron 2002)

Ojibwa

root (Zedeño et al. 2000)

The Great Lakes Ojibwa had no "reported" traditional uses for this plant, but no doubt it was used medicinally (Meeker, Elias, and Heim 1993).

Trade

Anishinaabek (Herron 2002)

Ojibwa

It was gathered to sell for its valuable root (Meeker, Elias, and Heim 1993).

Root became a money commodity because of the white traders' demand for it (Gilmore 1933).

Charm

Anishinaabek (Herron 2002)

Ojibwa

root (Zedeño et al. 2000)

Root considered a good luck charm if carried in the pocket (Gilmore 1933).

Scientific name *Parthenocissus quinquefolia*

Common name virginia creeper

Other names thicket creeper, five-leaved ivy, woodbine, woodbind (Broyles 2005)

Ojibway name bebaamooded, manidoo-biimaakwad, manido´bima´kwûd (Densmore 1928), manîdo´ bimakwît (Smith 1932)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Bailly area, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Hoosier Prairie

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Traditional Uses:

Food

Ojibwa

Stalks cut, boiled, peeled and the sweetish substance between the bark and the wood used for food (Densmore 1928).

Root cooked and given as a special food by Winabojo (Smith 1932).

The Chippewa would cut the stalks and roots in small pieces. The stalks would be peeled and boiled [for food] (Broyles 2005).

stalk (Zedeño et al. 2000)

Scientific name	*Pinus banksiana*
Common name	jack pine
Anishinaabek name	okikaandag (cypress tree) (Meeker, Elias, and Heim 1993)
Ojibway name	okikaandag, okikândag, -og (Baraga 1966), gîga ´ ndag, gîga´ndag (Smith 1932)
Nativity	Native
Special status	Rare
Habitat	Miller Woods, Tolleston Dunes, West Beach, Dune Acres, Indiana Dunes State Park
	Grows in sandy, sterile soil (Yarnell 1964).

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Paleoindian period (10,000BC-6000BC) to the Historic period (1600AD-2002AD) (Herron 2002).

Food

Medicine

Ojibwa

Plant used for fits and fainting (Reagan 1928).

Leaves used as a reviver (Smith 1932).

branch (Zedeño et al. 2000)

Traditionally jack pine was used as a reviver for fainting and fits, and as an anticonvulsive (Meeker, Elias, and Heim 1993).

Utility

Anishinaabek

Roots split, bark removed to make cordage for sewing and lashing heavy objects. Roots were dug with a hoe near the tree and pulled out as the person walked away from the tree (Herron 2002).

Ojibwa

Roots used for canoe and other coarse sewing (Smith 1932).

Boughs used on the ground or floor, covered with blankets and other bedding and used as a bed (Reagan 1928).

Roots used as fine sewing material for canoes and other coarse and durable sewing (Smith 1932).

Great Lakes tribes (Yarnell 1964)

Craft

Anishinaabek (Herron 2002)

Charm

Ojibwa

branch (Zedeño et al. 2000)

Scientific name *Pinus strobus*

Common name white pine

Other names eastern white pine (Smith 1933)

Anishinaabek name zhingwaak

Ojibway name zhingwaak, jinwak, -wag (Baraga 1966), jĭngwak ´ (Densmore 1928), zhingwâk ´(Hoffman 1891), jîngwa ´ k (Smith 1932), kah-be-sah-dah- ge-set (Reagan 1928), wabažinguak (Gilmore 1933)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Bailly area, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Heron Rookery, Pinhook Bog

Grows in light, fertile loam and sandy soils of granitic origin (Yarnell 1964).

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Archaic period (6000BC-1000BC) to the Historic period (1600AD-2002AD) (Herron 2002).

Ceremonial

Anishinaabek (Herron 2002)

Ojibwa

Used as a sacred smudge to communicate with the Creator. Prayer tree used in winter to make offerings to the Creator. White pine boughs sometimes included in bear's tail used to splash water on sweat rocks (Erickson 2001; Gilmore 1933).

Sacred

Anishinaabek (Herron 2002)

Food

Ojibwa

Young staminate catkins [pollen cone clusters (Meagher 1995)] of this pine cooked for food and stewed with meat (Smith 1932).

Staminate catkins and entire plant used (Zedeño et al. 2000).

Medicine

Ojibwa

Bark of young trees cut into sections and boiled with bark of *Prunus serotina* and *Prunus americana* until soft, then decoction strained, bark retained and pounded into mash, dried, then when needed, soaked in decoction and applied to wounds after any rotten flesh had

been removed; Densmore (1974) documented this treatment healed gangrene from a gunshot wound (Herron 2002).

Bark, cone, needles, and trunk used (Zedeño et al. 2000).

A compound poultice of the trunk of a young tree was used on cuts and wounds, a poultice of the pitch was applied to inflammations, the dried leaves (needles) were used as a reviver or inhalant, and the bark and cones were used in unspecified ways (Meeker, Elias, and Heim 1993).

Poultice of pitch applied to felons and similar inflammations (Gilmore 1933).

Dried leaves used as a reviver or inhalant. Bark and cones used medicinally. Bark boiled to make cough syrup, needles dried, powdered, burned as inhalant or smudge known as *sasabikwat* (Smith 1932).

Compound poultice of trunk of young tree applied to cuts and wounds (Densmore 1928).

Plant used for medicinal purposes (Reagan 1928).

Boiled, crushed leaves used as herbal steam for headache and backache. Poultice of crushed leaves applied for headaches. Boiled, crushed leaves used as herbal steam for headache and backache (Hoffman 1891).

Utility

Ojibwa

Pitch from boiled cones and resin used for caulking and waterproofing (Smith 1932).

Boughs used on the ground or floor, covered with blankets and other bedding and used as a bed (Reagan 1928).

Resin used to seal seams of birch bark canoes (Erickson 2001; Gilmore 1933).

Charm

Ojibwa

Bark, cone, needles, and trunk used (Zedeño et al. 2000).

Scientific name *Plantago lanceolata*

Common name English plantain

Other names lanceleaf plantain (Toupal, Banks, and Carroll 2006); narrow-leaved plantain (Herron 2002)

Anishinaabek name ginebigwashk (snake-like) (Densmore 1974; Meeker, Elias, and Heim 1993)

Nativity Introduced

Introduction notes Likely introduced in the 1700s with *Plantago major*.

Habitat Bailly area, Dune Acres, Indiana Dunes State Park, Keiser Unit, Tamarack Unit, Heron Rookery, Pinhook Bog

Emmet J. Judziewicz & WI State Herbarium

Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD-2002AD) (Herron 2002).

Medicine

Anishinaabek

Leaves placed on insect bites and small wounds to stop bleeding and itch (Herron 2002).

Scientific name *Plantago major*

Common name common plantain

Other names mouse-eared plantain (Toupal, Banks, and Carroll 2006)

Anishinaabek name cecaguski bugesink (Leaves grow up and also lie flat on the ground) (Smith 1932)

Ojibway name ginebigowashk, gine ´bigwûck (Densmore 1928), omakakiibag, o ´mûkik ´bûg (Densmore 1928), ceca´ gûski´ bûge sink (Smith 1932), jimûcki ´ gobûg (Smith 1932), zhaushaubiwaukissing (Zichmanis and Hodgins 1982)

Nativity Native (USDA-NRCS 2006)

Introduced (Weishan 1999; University of South Florida 2006)

Introduced, naturalized (Wisconsin State Herbarium 2006)

Introduction notes "Plantain I told you sprang up in the Countrey after the English came, but it is but one sort, and that is the broad-leaved plantain" (Josselyn 1674). During the seventeenth century, plantain (*Plantago major*) was called 'Englishman's foot' by the Amerindians of New England because it 'grew where the English have trodden' (Crosby 1986). Brought by the Europeans during early settlement period (Heller 2000).

Habitat Miller Woods, Tolleston Dunes, West Beach, Bailly area, Dune Acres, Indiana Dunes State Park

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD-2002AD) (Herron 2002).

Medicine

Ojibwa

Leaf and root used (Zedeño et al. 2000).

Leaf infusion taken for bed wetting, incontinence, coughs, bronchitis,

insect and snake bites, kidney problems, mercury poisoning, sore throat, laryngitis, and swollen neck glands. Seed decoction taken for constipation, diarrhea, epilepsy, leucorrhoea, intestinal inflammation, gastric ulcers, jaundice, spitting of blood, dropsy, and weight control. Leaf infusion applied externally for burns, dandruff, earache, fever, hemorroids, bites, joint pain, poisonous plant reactions, sore nipples, splinters, swellings, and wounds (Herron 1998).

The Ojibwa used common plantain in a number of ways, including a poultice of chopped fresh leaves for rheumatism, a simple or compound poultice of chopped root or fresh leaves for a variety of dermatological problems and snake bites, bruises, sprains and sores (Meeker, Elias, and Heim 1993).

Poultice of pounded leaves applied for medicinal purposes (Arnason, Hebda, and Johns 1981).

Poultice of soaked leaves bound on burns, scalds and snakebites. Poultice of soaked leaves bound on bruises, sprains, sores and bee stings (Smith 1932).

Poultice of chopped, fresh leaves applied for rheumatism. Simple or compound poultice of chopped root or fresh leaf used for inflammations. Poultice of chopped, fresh leaves and root applied to snakebites (Densmore 1928).

Charm

Ojibwa

Leaf and root used (Zedeño et al. 2000).

The powdered root was carried as a charm to protect one from snakebites (Meeker, Elias, and Heim 1993).

Ground root always carried in the pockets to ward off snakes (Smith 1932).

Powdered roots carried as protection against snakebites (Densmore 1928).

Scientific name *Podophyllum peltatum*

Common name may apple

Other names American mandrake, mandrake, wild mandrake,wild lemon, ground lemon, hog apple, devil's apple, Indian apple, raccoon berry, duck's foot, umbrella plant, umbrella leaf, vegetable calomel, American podofili, pomme de mai, podophylle pelte (Broyles 2005)

Nativity Native

Habitat Dune Acres, Indiana Dunes State Park, Old Visitor Center area area

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Traditional Uses:

Food

Ojibwa

Fruit considered very palatable (Gilmore 1933).

fruit (Zedeño et al. 2000)

Medicine

Ojibwa

root (Zedeño et al. 2000)

Charm

Ojibwa

root (Zedeño et al. 2000)

Scientific name *Polygala senega*

Common name seneca snakeroot

Other names snakeroot (Toupal, Banks, and Carroll 2006); seneca snakeroot; milkwort (Yarnell 1964)

Ojibway name bizhikiwashk, bi ´jikiwûck ´ (Densmore 1928), wiinizikens, winis ´sikēns ´ (Hoffman 1891)

Nativity Native

Habitat Bailly area

Grows in dry, rocky, or gravelly areas (Yarnell 1964).

Kitty Kohout & WI State Herbarium

Traditional Uses:

Food

Ojibwa (Densmore 1928)

Medicine

Ojibwa

Compound infusion or decoction of root taken for "fits." Compound infusion or decoction of root taken or used externally as stimulant. Compound infusion or decoction of root used on bleeding wounds (Densmore 1913).

Compound decoction of root taken for convulsions. Compound decoction of root prepared ceremonially and taken for heart trouble. Compound decoction of root used on bleeding wounds. Compound decoction of root taken as a stimulant. Compound decoction of root or dried root alone taken as a tonic. Roots carried for general health and safe journeys (Densmore 1928).

Plant used for medicinal purposes (Reagan 1928).

Decoction of root used for colds and cough. Infusion of leaves taken

to "destroy water bugs that have been swallowed" and for sore throat (Hoffman 1891).

Root and plant are used (Zedeño et al. 2000).

A compound infusion or decoction was used on wounds to stop bleeding, was taken or used externally as a stimulant, was used for heart troubles, and was taken as a tonic (Meeker, Elias, and Heim 1993).

Charm

Ojibwa (Densmore 1928)

Root and plant are used (Zedeño et al. 2000).

The root was also carried on long journeys as a charm for safety and good health (Meeker, Elias, and Heim 1993).

Scientific name *Polygonatum canaliculatum*

Synonyms *Polygonatum biflorum* var. *commutatum*

Common name smooth solomon's seal

Other names solomon seal (Toupal, Banks, and Carroll 2006); smooth solomon's seal

Nativity Native

Habitat Indiana Dunes State Park

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Robert H. Mohlenbrock @ USDA-NRCS PLANTS Database

Traditional Uses:

Medicine

Ojibwa

root (Zedeño et al. 2000)

Used as an incense medical charm. Plant used to insure sound sleep. Roots used to prevent measles and other diseases (Gilmore 1933).

Root used as a physic and decoction used as cough remedy. Decoction of root used as a cough remedy and root used as a physic (Smith 1932).

Decoction of root sprinkled on hot stones and used as an herbal steam for headache (Densmore 1928).

Charm

Ojibwa

root (Zedeño et al. 2000)

Used as an incense medical charm (Gilmore 1933).

Other, unspecified

Ojibwa

The root has been burned as an incense or smudge. Some believe when this is done just before going to bed you will sleep soundly and awaken refreshed, rested, and feeling younger (Broyles 2005).

Root burned, especially in the house, for the pleasant fragrance (Gilmore 1933).

Scientific name	*Polygonum* spp. Includes *Polygonum amphibium stipulaceum*, *Polygonum careyi*, *Polygonum coccineum*, *Polygonum lapathifolium*, and *Polygonum punctatum*.
Common name	smartweed
Nativity	Native
Habitat	Miller Woods, Tolleston Dunes, West Beach, Bailly area, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Heron Rookery, Hoosier Prairie, Pinhook Bog

Polygonum amphibium var. *emersum*
Robert H. Mohlenbrock @ USDA-NRCS PLANTS Database

Gary A. Monroe @ USDA-NRCS PLANTS Database

Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Archaic period (6,000BC-1,000BC) to the Woodland period (1000BC-1600AD) (Herron 2002).

Food

Ojibwa

Polygonum amphibium stipulaceum (Herron 2002)

Medicine

Ojibwa

Polygonum coccineum (syn. *P. amphibium* var. *emersum*) As a medicinal tea. Infusion of plant taken for stomach pain. Plant used as hunting medicine. Dried flowers included in hunting medicine smoked in pipes to attract buck deer to the hunter (Smith 1932).

Polygonum amphibium stipulaceum Used traditionally by the Ojibwa in an infusion to treat stomach pains, and in uspecified ways as a hunting medicine (Meeker, Elias, and Heim 1993).

Polygonum amphibium stipulaceum, *P. careyi*, *P. coccineum* (syn. *P. amphibium* var. *emersum*) (Zedeño et al. 2000)

Smoking

Ojibwa

Polygonum coccineum (syn. *P. amphibium* var. *emersum*) Smoked by Ojibwa to attract deer (Smith 1932).

Polygonum amphibium stipulaceum (Herron 2002)

Charm

Ojibwa

Polygonum amphibium stipulaceum, *P. careyi*, *P. coccineum* (syn. *P. amphibium* var. *emersum*) (Zedeño et al. 2000)

Scientific name *Populus alba*

Common name white poplar

Other names silver poplar (Toupal, Banks, and Carroll 2006); silver poplar, silverleaf poplar (Broyles 2005)

Nativity Introduced

Introduction notes 1784 (Dirr 1983). Gathered in June in colonial Williamsburg (Dutton 1992). Brought in for use as a landscape and street tree in the early Colonial era (Randall and Marinelli 1996). White poplar was first introduced to North America in 1748 (Remaley and Swearingen 2005). This poplar was brought to the North American continent in 1748 from Europe (Broyles 2005)

Habitat Miller Woods, West Beach, Dune Acres, Old Visitor Center area area, Hoosier Prairie

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Traditional Uses:

Medicine

Ojibwa

Roots and bark used for medicinal purposes. Infusion of bark and root or decoction of bark taken for internal blood diseases. Infusion of pounded plants used as wash for rheumatism and general illnesses (Reagan 1928).

Utility

Ojibwa

Wood used for pulpwood (Reagan 1928).

Scientific name *Populus deltoides*

Common name cottonwood

Other names Poplar, aspen (Herron 2002)

Nativity Native

Habitat Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Heron Rookery, Pinhook Bog

Robert H. Mohlenbrock @ USDA-NRCS PLANTS Database

J. S. Peterson @ USDA-NRCS PLANTS Database

Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD-2002AD) (Herron 2002).

Agricultural

Ojibwa

The wood is used in wild rice cultivation (Zedeño et al. 2000).

Ceremonial

Anishinaabek (Herron 2002)

Sacred

Anishinaabek

Aspens considered 'chiefs of the tree world' as they were the first tree given the spiritual role of intercessorfor the Anishinaabek. Prayers and offerings are made to the aspens and cottonwoods during the growing season (Herron 2002).

Food

Anishinaabek (Herron 2002)

Ojibwa

Buds and seeds used (Zedeño et al. 2000).

The buds and sweet seeds were eaten (Meeker, Elias, and Heim 1993).

Medicine

Anishinaabek (Herron 2002)

Ojibwa

Buds and seeds used (Zedeño et al. 2000).

Native Americans used the cotton of the seeds as an absorbent on open sores (Meeker, Elias, and Heim 1993).

Scientific name *Populus tremuloides*

Common name quaking aspen

Other names aspen; trembling aspen (Herron 2002)

Anishinaabek name asadi (poplar or bitter bark) (Smith 1932)

Ojibway name azaadi(i), azaadiins, asa ´dĭ (Densmore 1928), asadi, asadins (Smith 1932)

Nativity Native

Habitat Dune Acres, Keiser Unit, Pinhook Bog

J. S. Peterson @ USDA-NRCS PLANTS Database

Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Archaic period (6000BC-1000BC) to the Historic period (1600AD-2002AD) (Herron 2002).

Ceremonial

Anishinaabek

Trunks and branches used to build temporary arbors for ceremonies. For Thirsty Dance ceremonies, 30 to 50 trees of up to six inch diameter are cut to make the arbor frame. A special quaking aspen called the tree of life is placed in the center of the arbor as the connection between the dancers and the spirit world. This aspen is selected by the elders presiding over the dance (Herron 2002).

Sacred

Anishinaabek

Aspens considered 'chiefs of the tree world' as they were the first tree given the spiritual role of intercessorfor the Anishinaabek. Prayers and offerings are made to the aspens and cottonwoods during the growing season (Herron 2002).

Food

Anishinaabek (Herron 2002)

Ojibwa

The tree was tapped for its sap (Meeker, Elias, and Heim 1993).

Great Lakes tribes (Yarnell 1964)

Medicine

Anishinaabek (Herron 2002)

Ojibwa

Poultice of bark applied to cuts and wounds. Poultice of inner bark applied to sore arm or leg and used as a splint for broken limb (Smith 1932).

Poultice of chewed bark or root applied to cuts. Compound infusion of

root taken for "excessive flowing" during confinement. Compound decoction of inner bark prepared ceremonially for heart trouble (Densmore 1928).

Root and bark used (Zedeño et al. 2000).

A poultice of chewed bark or root is used on cuts, a compound infusion of roots was used as a gynecological aid, a compound decoction of inner bark was used to treat heart troubles, a poultice of bark was applied to cuts and wounds and a poultice of inner bark was used for sore arms or legs and as a splint for broken limb (Meeker, Elias, and Heim 1993).

Utility

Anishinaabek (Herron 2002)

Ojibwa

Wood used for pulpwood (Reagan 1928).

Sap used in sugar maple production (Zedeño et al. 2000).

Craft

Ojibwa

bark (Zedeño et al. 2000)

Charm

Ojibwa

Root and bark used (Zedeño et al. 2000).

Scientific name *Potentilla* spp.

Common name potentilla, cinquefoil

Nativity Native

Habitat Miller Woods, West Beach, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Hoosier Prairie

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Traditional Uses:

Others

Potentilla arguta ssp. *arguta*, Tall Cinquefoil

Medicine

Ojibwa

Dry, pulverized root pricked into temples or placed in nostrils for headache. Simple or compound decoction of root taken for dysentery. Poultice of moistened, dried, powdered root applied to cuts (Densmore 1928).

Potentilla norvegica ssp. *monspeliensis*, Norwegian Cinquefoil

Medicine

Ojibwa

Decoction of root gargled or root chewed for sore throat (Densmore 1928).

Plant known to be a physic, even by the very young (Smith 1932).

Potentilla palustris (Syn. *Comarum palustre*), Purple Marshlocks

Medicine

Ojibwa

Decoction of root taken for dysentery (Densmore 1928).

Plant used alone for stomach cramps (Smith 1932).

Scientific name *Prunus nigra*

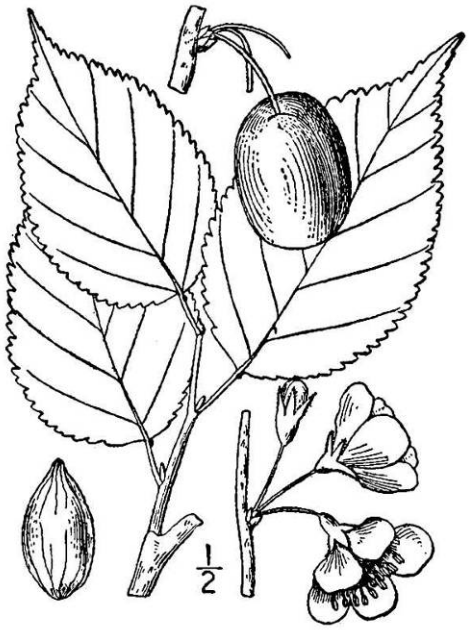
Common name Canada plum

Other names cherry (Toupal, Banks, and Carroll 2006); Canada plum

Ojibway name bagesaanaatig, -oog, bûge ´ sanatîg, bûgesana ´ tîg (Smith 1932)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Dune Acres, Old Visitor Center area area, Tamarack Unit, Hoosier Prairie



Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Woodland period (1000BC-1600AD) (Herron 2002).

Food

Ojibwa

Large quantities of plums found in thickets and gathered for food and preserves (Smith 1932).

fruit (Zedeño et al. 2000)

Native American traditionally ate the plums fresh or preserved (Meeker, Elias, and Heim 1993).

Dye

Ojibwa

Inner bark used as an astringent color fixative in dyeing with other plant dyes (Smith 1932).

Other, unspecified

Anishinaabek (Herron 2002)

Scientific name *Prunus serotina*

Common name wild black cherry

Ojibway name ookwemizh, ookwemin, okwemin, okwemij, -ig, (Baraga 1966), ikwe´mĭc (Densmore 1928), okwē ´w < =m > (Hoffman 1891), okwe ´ mîn (Smith 1932)

Nativity Native

Habitat Dune Acres, Keiser Unit

Grows in dry woods and fence rows (Yarnell 1964).

Kitty Kohout & WI State Herbarium

Traditional Uses:

Food

Ojibwa

Ripe cherries used to make whiskey. This cherry was preferred to all other wild cherries and dried for winter use (Smith 1932).

Twigs used to make a beverage. Berries cooked, spread on birch bark into little cakes, dried and stored for winter use. Berries eaten raw (Densmore 1928).

Fruit dried for winter use. Fruit eaten fresh. Dried fruit ground into a flour and used to make soup (Reagan 1928).

fruit (Zedeño et al. 2000)

The tart fruit was collected, dried and eaten with other foods throughout the winter season (Meeker, Elias, and Heim 1993).

Medicine

Ojibwa

Compound decoction of root taken for worms. Powder containing powdered root applied to burns. Compound poultice of inner bark applied to cuts and wounds. Poultice of fresh roots or decoction of bark used as a wash for “scrofulous neck.” Powder containing powdered root applied to ulcers. Compound decoction of inner bark

used as a disinfectant wash. Decoction of root given for “cholera infantum” (Densmore 1928).

Infusion of bark used for colds. Infusion of bark used for coughs (Smith 1932).

Infusion of inner bark taken for chest pain and soreness. Poultice of boiled, bruised or chewed inner bark applied to sores (Hoffman 1891).

Root and bark used (Zedeño et al. 2000).

A compound decoction of the root was used for worms, powdered root was used on burns and ulcers, a compound poultice of the inner bark was used on cuts and wounds, a poultice of fresh root was used as a wash for "scrofulous neck" a compound decoction of the inner bark was used as disinfectant wash, a decoction of the rot was used to treat "choler infantum" and an infusion of bark was used to treat coughs and colds (Meeker, Elias, and Heim 1993).

Charm

Ojibwa

Root and bark used (Zedeño et al. 2000).

Scientific name *Prunus virginiana*

Common name choke cherry

Other names common chokecherry, red chokecherry, bird cherry, jam cherry (Broyles 2005)

Anishinaabek name sawemin (Smith 1932)

Ojibway name asa/isaweminagaawanzh, asa/isawemin, assissâwemin, -an (Baraga 1966), a ´sĭsûwe ´mĭnaga ´wûnj (Densmore 1928), sisan´wewi´nakânsh (Hoffman 1891), a ´ sasawe´ mînaga ´wûnj, sawe ´ mîn (Smith 1932)

Nativity Native

Habitat Bailly area

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Woodland period (1000BC-1600AD) to the Historic period (1600AD-2002AD) (Herron 2002).

Food

Ojibwa

Fruits pounded, dried and used for food (Densmore 1928).

Fruit of this cherry was liked, especially after the fruit had been frosted (Smith 1932).

Berries used dried and fresh. Dried berry powder mixed with dried meat flour for soup (Arnason, Hebda, and Johns 1981).

Fruit dried for winter use. Fruit eaten fresh. Dried fruit ground into a flour and used to make soup (Reagan 1928).

The branch is used to make a beverage; plant used, and fruit eaten (Zedeño et al. 2000).

Medicine

Anishinaabek

The inner bark of many trees including maple, iron wood, beech, basswood, sassafras, and chokecherry were boiled into a drink for tuberculosis (Herron 2002).

Ojibwa

Compound infusion of inner bark taken for hemorrhages from the lungs. Decoction of inner bark gargled for sore throat. Decoction of inner bark taken for cramps. Decoction of inner bark taken for stomach cramps. Decoction of bark used as a wash to strengthen the

hair and make it grow. Compound decoction of inner bark used as cathartic blood cleanser for scrofula. Compound decoction of inner bark used as a disinfectant wash (Densmore 1928).

Infusion of inner bark taken for lung trouble (Smith 1932).

"Branchlets" used in unspecified manner during gestation (Hoffman 1891).

bark (Zedeño et al. 2000)

A decoction of inner bark was used to alleviate stomach cramps, a compound infusion of inner bark was used to treat lung hemorrhages, a compound decoction of inner bark was used as a disinfectant wash and a cathartic blood cleanser for scrofula. In addition, a decoction of bark was used as a wash to strengthen hair and make it grow and the inner bark was used in a decoction or infusion for sore throats and lung troubles (Meeker, Elias, and Heim 1993).

Charm

Ojibwa

bark (Zedeño et al. 2000)

Scientific name *Quercus alba*

Common name white oak

Other names stave oak, ridge white oak, northern white oak, eastern white oak, Quebec oak, forked-leaf white oak, fork-leaf oak, stone oak (Broyles 2005)

Anishinaabek name mitigomic (wooden tree) (Smith 1932)

Ojibway name mitigomizh, mītig´ōmish´ (Hoffman 1891), mîtî´gomîc (Smith 1932), miizhimizh, mishimij, -ig (Baraga 1966), miizhmizh (Rhodes 1993), mîci´ mîn (Smith 1932)

Nativity Native

Habitat Bailly area

J. S. Peterson @ USDA-NRCS PLANTS Database

Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD-2002AD) (Herron 2002).

Food

Anishinaabek (Herron 2002)

Ojibwa

nut (Zedeño et al. 2000)

The acorns were harvested for food (Meeker, Elias, and Heim 1993).

Acorns soaked in lye water to remove bitter tannin taste, dried for storage and used to make soup (Smith 1932).

Great Lakes tribes (Yarnell 1964)

Medicine

Anishinaabek

Inner bark chips of black oak, white oak, ironwood, and *wunezik* (unknown) were boiled with four handfuls of ironwood twigs to make a medicinal tea for back pain. Historically, sharpened twigs used as sewing awls, acorns eaten for food, and root bark made into infusion for diarrhea (Meeker, Elias, and Heim 1993).

Ojibwa

Decoction of root bark and inner bark taken for diarrhea (Hoffman 1891).

Root and bark used (Zedeño et al. 2000).

An infusion of the root bark was taken for diarrhea (Meeker, Elias, and Heim 1993).

Utility

Anishinaabek (Herron 2002)

Ojibwa

Wood used in making wigwams and for several other things. Wood was of much value, especially for making awls to punch holes in birch bark (Smith 1932).

The Ojibwa used the sharpened oak twigs as sewing awls (Meeker, Elias, and Heim 1993).

Craft

Ojibwa

Wood used for decorative purposes (Zedeño et al. 2000).

Scientific name *Quercus macrocarpa*

Common name bur oak

Other names mossy cup oak, burr oak (Yarnell 1964)

Ojibway name mitigomizh, mĭ´tĭgo´mĭc (Densmore 1928), mîtîgo ´mîc, mêtî´gomîc (Smith 1932), bgaakmizh (Rhodes 1993)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Hoosier Prairie, Pinhook Bog

J. S. Peterson @ USDA-NRCS PLANTS Database

Traditional Uses:

Food

Ojibwa

Nut (Zedeño et al. 2000)

Acorns treated with lye to remove bitterness and eaten (Smith 1932).

Acorns roasted in ashes or boiled, mashed and eaten with grease or duck broth. Acorns boiled, split open and eaten like a vegetable (Densmore 1928).

Medicine

Ojibwa

bark (Zedeño et al. 2000)

The bark was used to bandage a broken foot or leg, and as an astringent. A decoction of inner bark was used for cramps and for heart and lung troubles (Meeker, Elias, and Heim 1993).

Bark used as an astringent medicine. Bark used to bandage a broken foot or leg (Smith 1932).

Decoction of root or inner bark taken for cramps. Compound decoction of inner bark prepared ceremonially for heart trouble. Compound decoction of inner bark taken for lung trouble (Densmore 1928).

Dye

Ojibwa

Bark used in combination with other materials to set color (Smith 1932).

Boiled with black earth and ocher to make a black dye. Inner bark boiled with green hazel burs, added to black earth and butternut and

used as a black dye (Densmore 1928).

Charm

Ojibwa

bark (Zedeño et al. 2000)

Scientific name *Quercus palustris*

Common name pin oak

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Bailly area, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Hoosier Prairie, Pinhook Bog

Robert H. Mohlenbrock @ USDA-NRCS PLANTS Database

Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Paleoindian period (10,000BC-6000BC) to the Woodland period (1000BC-1600AD) (Herron 2002).

Food

Ojibwa

Nuts and ashes used (Zedeño et al. 2000).

Craft

Ojibwa

ashes (Zedeño et al. 2000)

Scientific name *Quercus rubra*

Common name red oak

Other names northern red oak (Smith 1933)

Anishinaabek name mitigomic (wooden tree) (Smith 1932)

Ojibway name Traditional medical uses for this tree include a compound decoction of inner bark for heart trouble, a decoction of bark for blood diseases and heart and lung troubles, and an infusion of root bark for gonorrhea.

Nativity Native

Habitat Bailly area, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Heron Rookery

Kenneth J. Sytsma & WI State Herbarium

Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD-2002AD) (Herron 2002).

Food

Ojibwa

The acorn meat was dried, pounded into flour to be added to soup or made into mush with blueberries and maple sugar (Herron 2002).

nuts (Zedeño et al. 2000)

Acorns eaten after leaching out tannins by boiling with wood ashes. Acorns also leached with lye. Used as of the most important starchy foods (Smith 1932).

Great Lakes tribes (Yarnell 1964)

Medicine

Ojibwa

Bark and root used (Zedeño et al. 2000).

Infusion of root made for gonorrhea (Meeker, Elias, and Heim 1993).

Bark used for "heart troubles and bronchial affections." Historically, inner bark used with that of bur oak, *Q. macrocarpa*, quaking aspen, and balsam poplar to make a heart medicine (Densmore 1928; Smith 1932).

Inner bark decoction used for bronchial disorders (Smith 1932).

Bark was powdered and added to a pint of water along with small portion of powdered root of Seneca snakroot, *Polygala senaga*, and steeped to make a very potent heart medicine to be taken one swallow per hour for several hours. Compound decoction of inner

bark prepared ceremonially for heart trouble (Densmore 1928).

Decoction of bark taken for internal blood diseases. Infusion of root bark taken for gonorrhea (Reagan 1928).

Decoction of root bark and inner bark taken for diarrhea (Hoffman 1891).

Great Lakes tribes (Yarnell 1964)

Utility

Ojibwa

Bark used in tanning and coloring (Reagan 1928).

Awls carved from wood (Densmore 1974).

Craft

Ojibwa

Bark and punk wood used (Zedeño et al. 2000).

Dye

Ojibwa

Inner bark used to make dye (Herron 2002).

Bark used in tanning and coloring (Reagan 1928).

Craft

Ojibwa

root (Zedeño et al. 2000)

Scientific name *Rhus aromatica*

Common name fragrant sumac

Anishinaabek name bakwanak (binding tree) (Smith 1932)

Ojibway name baakwaanibag, bŏkkwan´ībŏk (Hoffman 1891)

Nativity Native

Habitat Dune Acres

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Archaic period (6000BC-1000BC) to the Historic period (1600AD-2002AD) (Herron 2002).

Smoking

Anishinaabek (Herron 2002)

Ceremonial

Ojibwa

The bark and berries of this species were used by Native Americans for unspecified ceremonial purposes (Meeker, Elias, and Heim 1993).

Bark and berries used in medicine ceremonies (Reagan 1928).

Medicine

Ojibwa

Bark and fruit used (Zedeño et al. 2000).

The bark and berries of this species were used by Native Americans for unspecified medicinal purposes (Meeker, Elias, and Heim 1993).

Bark and berries used in medicine ceremonies and for other medicinal purposes (Reagan 1928).

Compound decoction of root taken for diarrhea (Hoffman 1891).

Dye

Ojibwa

The pith at the center of stems removed and added to hot water with red ochre dust to create light yellow dye. Inner bark was mixed with the inner bark of *Prunus americana* and the roots of *Sanguinaria canadensis* to make a bright yellow to orange dye (Densmore 1974; Smith 1932).

Charm

Ojibwa

Bark and fruit used (Zedeño et al. 2000).

Scientific name *Rhus copallina latifolia*

Synonyms *Rhus copallinum*

Common name winged sumac

Nativity Native

Habitat Miller Woods, Tamarack Unit

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Traditional Uses:

Smoking

Anishinaabek (Herron 2002)

Ceremonial

Ojibwa

Bark and berries used in medicine ceremonies (Reagan 1928).

Medicine

Ojibwa

Bark and fruit used (Zedeño et al. 2000).

Bark and berries used in medicine ceremonies and for medicinal purposes (Reagan 1928).

Charm

Ojibwa

Bark and fruit used (Zedeño et al. 2000).

Scientific name	*Rhus radicans*
Synonyms	*Toxicodendron radicans*
Common name	poison ivy
Other names	eastern poison ivy
Nativity	Native
Habitat	Miller Woods, West Beach, Dune Acres, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Hoosier Prairie
Description	 © R. S. Toupal
Traditional Uses:	
	Medicine
	Ojibwa (Zedeño et al. 2000)
	Charm
	Ojibwa (Zedeño et al. 2000)

Scientific name *Rhus typhina*

Common name staghorn sumac

Other names sumac

Anishinaabek name bakwa natig (binding tree); bakwanak (binding tree) (Smith 1932)

Ojibway name baakwaanaatig, bakwanâtig (Rhodes 1993), baakqaanaatig (Rhodes 1993), bakwana´ tîg, bakwa´ natîg, bakwana´tîg (Smith 1932), baakwaanimizh, baakwaanmizh (Rhodes 1993)

Nativity Native

Habitat Miller Woods, West Beach, Indiana Dunes State Park, Keiser Unit, Tamarack Unit

Grows in dry or gravelly soil, especially on open ridges (Yarnell 1964).

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Woodland period (1000BC-1600AD) to the Historic period (1600AD-2002AD) (Herron 2002).

Smoking

Great Lakes tribes (Yarnell 1964)

Ceremonial

Ojibwa

The straight branches of large shrubs used for ceremonial pipes (Smith 1932).

Food

Ojibwa

fruit (Zedeño et al. 2000)

The fruits ripen in the fall, and were crushed and drunk in a tea ((Meeker, Elias, and Heim 1993).

Fresh or dried berries sweetened with maple sugar and made into a hot or cool beverage like lemonade. Seed heads dried for winter use (Smith 1932).

Great Lakes tribes (Yarnell 1964)

Medicine

Ojibwa

root (Zedeño et al. 2000)

Traditionally, the roots of staghorn sumac were used as a medicine to

stop hemorrhaging (Meeker, Elias, and Heim 1993).

Infusion of gall infected leaves taken for mouth sores. Infusion of gall infected leaves taken for sore throat (Arnason, Hebda, and Johns 1981).

Root used for hemorrhages (Smith 1932).

Decoction of flowers taken for stomach pain (Densmore 1928).

Great Lakes tribes (Yarnell 1964)

Dye

Ojibwa

Inner bark and central pith of the stem mixed with bloodroot and used for the orange color (Smith 1932).

Great Lakes tribes (Yarnell 1964)

Charm

Ojibwa

root (Zedeño et al. 2000)

Scientific name	*Rhus vernix*
Common name	poison sumac
Nativity	Native
Habitat	Miller Woods, West Beach, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Tamarack Unit
Description	 © R. S. Toupal
Traditional Uses:	

Medicine
- Ojibwa
  - sap (Zedeño et al. 2000)
  - Plant considered poisonous (Gilmore 1933).

Charm
- Ojibwa
  - sap (Zedeño et al. 2000)

Scientific name *Ribes americanum*

Common name black currant

Other names raccoon berries

Ojibway name amikomin, mik-min (Gilmore 1933), amî´komîn (Smith 1932)

Nativity Native

Habitat Pinhook Bog

Joanne Kline, WI DNR & WI State Herbarium

Michael Clayton & WI State Herbarium

Traditional Uses:

Food

Ojibwa

fruit (Zedeño et al. 2000)

The fruit is good to eat when cooked (Meeker, Elias, and Heim 1993).

Berries dried for winter use and eaten fresh (Gilmore 1933; Reagan 1928; Smith 1932).

In the winter, a favorite dish was wild currants cooked with sweet corn. Berries used to make jams and preserves (Smith 1932).

Medicine

Ojibwa

Root and bark used (Zedeño et al. 2000).

The root and bark were used for unspecified medical purposes (Meeker, Elias, and Heim 1993).

Root and bark used for medicinal purposes (Reagan 1928).

Charm

Ojibwa

Root and bark used (Zedeño et al. 2000).

Scientific name *Ribes missouriense*

Also *Ribes cynosbati*, *Ribes hirtellum*

Common name wild gooseberry

Nativity Native

Habitat Dune Acres, Tamarack Unit, Hoosier Prairie

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Traditional Uses:

Food

Ojibwa

fruit (Zedeño et al. 2000)

Berries used for food (Gilmore 1933).

Fruit dried for future use and eaten fresh (Reagan 1928).

Scientific name *Ribes sativum*

Common name red currant

Other names raccoon berries

Nativity Introduced

Introduction notes *R. odoratum* cultivated since 1588 (Dirr 1983).

Habitat Miller Woods, West Beach, Dune Acres, Tamarack Unit

Robert W. Freckmann & WI State Herbarium

Traditional Uses:

Food

Ojibwa

Fruit dried for future use and eaten fresh (Gilmore 1933; Reagan 1928).

Medicine

Ojibwa

Root and bark used for medicinal purposes (Reagan 1928).

Scientific name *Rosa blanda*

Common name early wild rose

Ojibway name oginiiminagaawanzh, ogin, -iig, o ´ginīk (Hoffman 1891), ogîne´ mînaga´ ons, ogîni, ogîni´ gawûnj (Smith 1932)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Bailly area, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Heron Rookery, Hoosier Prairie, Pinhook Bog

Traditional Uses:

Medicine

Ojibwa

root (Smith 1932)

Dried, powdered flowers used for heartburn. Rose hip skin used for stomach trouble and indigestion (Smith 1932).

Infusion of root used as a wash for inflamed eyes (Hoffman 1891).

flower (Zedeño et al. 2000)

In traditional medical practices the dried powdered flowers were used for heartburn and the skin of the fruit was used to treat stomach trouble and indigestion (Meeker, Elias, and Heim 1993).

Charm

Ojibwa

flower (Zedeño et al. 2000)

Scientific name *Rubus allegheniensis*

Common name common blackberry

Other names highbush blackberry, sow-teat blackberry (Yarnell 1964); Allegheny blackberry (Smith 1933)

Anishinaabek name tacogminun (the berries); odatagago minaga wunj (blackberry stem plant) (Densmore 1928; Smith 1932)

Ojibway name odatagaagominagaawanzh, odatagaagomin, odatagâgominagawanj, -ig, odatagâgomin (Baraga 1966), tetéga-min (Gilmore 1933), o´dataga´ gomîc, odataga´ gomîc (Smith 1932)

Nativity Native

Habitat Bailly area

Grows in dry clearings and thickets (Yarnell 1964).

Kitty Kohout & WI State Herbarium

Merel R. Black & WI State Herbarium

Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD-2002AD) (Herron 2002).

Food

Ojibwa

fruit (Zedeño et al. 2000)

The juicy berries were harvested as a source of food (Meeker, Elias, and Heim 1993).

Fruit dried for winter use, and eaten fresh (Gilmore 1933).

Berries used to make jam for winter use (Smith 1932).

Medicine

Ojibwa

Traditional medical practices include using an infusion of roots to treat diarrhea and as a gynecological aid to prevent miscarriage (Meeker, Elias, and Heim 1993).

Infusion of roots taken for diarrhea. Infusion of roots taken by pregnant women threatened with miscarriage (Gilmore 1933).

Historically, stems were boiled to make a diuretic tea, and the roots were boiled for a tea to treat flux or any excessive flow of bodily secretion, also in the summer, a root tea was made for diarrhea (Smith 1932).

Charm

Ojibwa

branch (Zedeño et al. 2000)

Scientific name *Rubus flagellaris*

Common name common dewberry

Anishinaabek name tacogminun (the berries); odatagago minaga wunj (blackberry stem plant) (Densmore 1928; Smith 1932)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Hoosier Prairie

Robert H. Mohlenbrock @ USDA-NRCS PLANTS Database

Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Woodland period (1000BC-1600AD) to the Historic period (1600AD-2002AD) (Herron 2002).

Food

Anishinaabek (Herron 2002)

Ojibwa

fruit (Zedeño et al. 2000)

Medicine

Ojibwa

Leaf and root used (Zedeño et al. 2000).

Although there has been no reported medicinal use of this species by the Ojibwa, it was most likely to have been collected and eaten during July and August. The leave and roots were reported to have been used by tribes west of the ceded territories in preparing infusions for curing diarrhea and rheumatism (Meeker, Elias, and Heim 1993).

Root decoction of *R. occidentalis* (black dewberry) taken for back pain and female weakness associated with menstrual cycle, and roots

of *R. frondosus* (syn. *R. pensylvanicaus* var. *frondosus*) were combined with inner bark of *Quercus macrocarpa* for a decoction for lung troubles (Densmore 1928).

Charm

Ojibwa

Leaf and root used (Zedeño et al. 2000).

Scientific name *Rubus idaeus strigosus*

Common name red raspberry

Other names Grayleaf red raspberry (Smith 1933)

Anishinaabek name tacogminon (cold resister berries)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Bailly area, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Heron Rookery, Hoosier Prairie, Pinhook Bog

Description

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD-2002AD) (Herron 2002).

Food

Ojibwa

Branch used to make a beverage; fruit eaten and used for seasoning (Zedeño et al. 2000).

Berries used dried and fresh (Arnason, Hebda, and Johns 1981).

Twigs used to make a beverage. Berries cooked, spread on birch bark into little cakes, dried and stored for winter use, and eaten raw (Densmore 1928; Gilmore 1933).

This was a favorite fresh fruit. Berries used to make jam for winter use (Smith 1932).

Fruit dried for winter use and eaten fresh (Reagan 1928).

Medicine

Ojibwa

Root, stem, fruit, and bark used (Zedeño et al. 2000).

Decoction of roots or stems taken for measles (Gilmore 1933).

Berries used as a seasoner for medicines. Infusion of root bark used for sore eyes (Smith 1932).

Decoction of root taken for dysentery. Infusion of root bark used as a wash for cataracts (Densmore 1928).

Decoction of crushed root taken for stomach pain (Hoffman 1891).

Charm

Ojibwa

Root, stem, fruit, and bark used (Zedeño et al. 2000).

Scientific name *Rubus occidentalis*

Common name black dewberry

Other names black raspberry (Yarnell 1964)

Ojibway name makade-miskomin, makade-miskwimin, kadem-sku-min (Gilmore 1933), makadē´w <=m>ĭskwi´minŏk (Hoffman 1891), makade-miin, -an, odatagaagominagaawanzh, oda ´tagago ´mĭnaga ´wûnj (Densmore 1928)

Nativity Native

Habitat Bailly area

Jennifer Anderson @ USDA-NRCS PLANTS Database

Kitty Kohout & WI State Herbarium

Traditional Uses:

Food

Anishinaabek (Herron 2002)

Ojibwa

fruit (Zedeño et al. 2000)

The berries were a source of food (Meeker, Elias, and Heim 1993).

Berries used fresh and preserved (Arnason, Hebda, and Johns 1981).

Fruit dried for winter use and eaten fresh (Gilmore 1933).

Great Lakes tribes (Yarnell 1964)

Medicine

Ojibwa

root (Zedeño et al. 2000)

Medicinally, the roots were used in a various decoctions as an eye wash, to treat back pain and stomach pain, and as a gynecological aid (Meeker, Elias, and Heim 1993).

Decoction of roots used as a wash for sore eyes (Gilmore 1933).

Compound decoction of root taken for back pain. Compound decoction of root taken for "female weakness" (Densmore 1928).

Decoction of crushed root taken for stomach pain (Hoffman 1891).

Charm

Ojibwa

root (Zedeño et al. 2000)

Scientific name *Rudbeckia hirta*

Common name black-eyed susan

Other names cone flower (Yarnell 1964)

Ojibway name wézawab-gonik (Gilmore 1933)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Hoosier Prairie, Pinhook Bog

Grows in open woods, thickets, barrens, fields, and waste ground (Yarnell 1964).

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Traditional Uses:

Medicine

Ojibwa (Smith 1932)

flower (Zedeño et al. 2000)

The blossoms of black-eyed susan, together with other flowers were used by Native Americans to make poultices for babies for unspecified ailments (Meeker, Elias, and Heim 1993).

Poultice of blossoms and another plant used for babies (Gilmore 1933).

Great Lakes tribes (Yarnell 1964)

Dye

Ojibwa (Smith 1933; Gilmore 1933)

Charm

Ojibwa

flower (Zedeño et al. 2000)

Scientific name *Rumex crispus*

Common name curly dock

Other names dock, yellow dock, sour dock, prairie dock (Toupal, Banks, and Carroll 2006)

Ojibway name ginoozhewashk, ginoje ´wûkûn (Densmore 1928), ozaawijiibik, oza´widiji´bĭk (Densmore 1928), o ´zab <=w>etshi´w<=b>ĭk (Hoffman 1891), zhiiwibag, ci´obûg, ciobûg (Smith 1932)

Nativity Introduced

Introduction notes Curly dock is a native of Europe that was transported to the United States with early settlers and has spread tremendously (IL DNR 2006b).

Habitat Bailly area, Indiana Dunes State Park, Old Visitor Center area area, Heron Rookery

Stephen L. Solheim & WI State Herbarium

Traditional Uses:

Medicine

Ojibwa

root (Zedeño et al. 2000)

Traditionally the root was used in a poultice either dried or pounded, or powdered and moistened as a dermatological aid for ulcers, cuts, itching and swellings (Meeker, Elias, and Heim 1993).

Boiled seeds used for diarrhea (Arnason, Hebda, and Johns 1981).

Root used to close and heal cuts. Dried seeds smoked as a favorable lure to game when mixed with kinnikinnick (Smith 1932).

Poultice of moistened, dried, powdered root applied to cuts or itches. Poultice of dried, pounded root applied to ulcers and swellings (Densmore 1928).

Poultice of bruised or crushed root applied to sores and abrasions (Hoffman 1891).

Charm

Ojibwa

root (Zedeño et al. 2000)

Scientific name *Sagittaria latifolia*

Common name common arrowhead

Other names arrowroot (Toupal, Banks, and Carroll 2006); duck potato, wapatoo (Yarnell 1964); broadleaf arrowhead (Smith 1933); arrowhead, common arrowhead, Indian potato, tule potato, duck potato, muskrat potato, wapato (Broyles 2005)

Anishinaabek name muhkopin

Ojibway name waabiziipin, waubizeepin (Zichmanis and Hodgins 1982), muj´ota´bûk (Densmore 1928), čijak-kat (Gilmore 1933)

Nativity Native

Habitat Bailly area, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Heron Rookery, Pinhook Bog

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD-2002AD) (Herron 2002).

Food

Ojibwa

root (Zedeño et al. 2000)

Traditionally the root was eaten as a source of starchy food (Meeker, Elias, and Heim 1993).

"Potatoes" at the end of the roots dried, boiled and used for food (Densmore 1928).

Medicine

Anishinaabek

Tubers smashed and applied with a cloth to skin swellings and blisters (Herron 2002).

Ojibwa

root (Zedeño et al. 2000)

Traditionally an infusion of the root was used medically as an aid in indigestion (Meeker, Elias, and Heim 1993).

Plant characterized as having some medicinal uses (Gilmore 1933).

Infusion of root taken for indigestion (Densmore 1928).

Charm

Ojibwa (Densmore 1928)

root (Zedeño et al. 2000)

Scientific name	*Salix* spp.
Common name	willow
Native names	Aw-doup (willow) (Blackbird 1887), ozi' sigo' bimic (Densmore 1928) *Salix candida* is called sisi' gewe' mish (Hoffman 1891)
Nativity	*Salix alba*, white willow (Introduced - 1750 (Weishan 1999). Naturalized and long-cultivated (Dirr 1983)) *Salix amygdaloides*, peach-leaved willow; willow, almond willow, black willow, swamp willow, Dudley willow, Goodding willow (Native) *Salix babylonica* (syn. *Salix X pendulina, Salix X sepulcralis*), weeping willow (Introduced - 1730 (Dirr 1983; Weishan 1999)) *Salix bebbiana*, beaked willow (Native) *Salix candida*, hoary willow (Native) *Salix discolor*, pussy willow (Native) *Salix fragilis*, crack willow (Introduced) *Salix glaucophylloides glaucophylla* (syn. *Salix myricoides var. myricoides*), blue-leaved willow (Native) *Salix gracilis textoris* (syn. *Salix petiolaris*), petioled willow (Native) *Salix humilis*, prairie willow; small pussy willow (Native) *Salix interior*, sandbar willow (Native) *Salix lucida*, shining willow (Native) *Salix nigra*, black willow (Native) *Salix pedicellaris hypoglauca* (syn. *Salix pedicellaris*), willow; bog willow (Native) *Salix rigida* (syn. *Salix eriocephala*), heart-leaved willow (Native) *Salix sericea*, silky willow (Native) *Salix syrticola* (syn. *Salix cordata*), dune willow (Native) *Salix X subsericea* (syn. *Salix petiolaris*), yewleaf willow *(Native)*
Habitat	Miller Woods, Tolleston Dunes, West Beach, Bailly area, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Hoosier Prairie, Pinhook Bog
Fire Response	*Salix amygdaloides* - Most fires kill only aboveground plant parts, however, severe fires can completely remove soil organic layers, leaving willow roots exposed and charred, and eliminating basal sprouting (Kovalchik 1987; Rowe and Scotter 1973; Zasada 1986). Peachleaf willow sprouts from its roots following fire (Hansen et al. 1988). Its numerous wind-dispersed seeds are also important in revegetating areas following fire (Zasada 1986). *Salix bebbiana* - Bebb willow is greatly favored by fire in most habitats (Haeussler and Coates 1986). It will sprout rapidly from basal stems following disturbance (Haeussler and Coates 1986; Hansen et al. 1988; Kovalchik et al. 1988). It has small, extremely light seeds capable of dispersing over long distances (Viereck and Schandelmeier 1980). *Salix discolor* - Pussy willow survives top-kill by fire through basal sprouting (Ewing 1924; Tester and Marshall 1962; White 1965). Repeated prairie fires encourage prolific sprouting (Ewing 1924). *Salix nigra* decreases significantly following summer burns (Adams et al. 1982).

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Traditional Uses:

Medicine

Ojibwa

The inner bark is heated, and a poultice is used on the throat to treat diptheria (Arnason et al. 1981).
A decoction of the inner bark is used to treat indigestion. The root is used for dysentery (Densmore 1974).

Salix alba white willow

Archaeological evidence for Anishinaabek use dates back to the Paleoindian period to the Historic period (10,000BC-2002AD) (Herron 2002).

Medicine

Ojibwa

Historically, bark was used in smoking mixtures after it was peeled, toasted over a fire, and reduced to flakes (Smith 1932).

Utility

Ojibwa

Branches harvested and shaped into traditional fish traps used during spring spawning runs. Traps were as long as 10 feet and weighted down with rocks and tied to a tree with basswood cordage. Branches used to make beaver pelt drying frames, and low-impact lodges with light weight roofing material. Branches used to construct stalls in the Thirsty Dance arbor. These are dividers between fasting dancers. Branches may be used for sweat lodge frames and any craft requiring flexible wood such as dreamcatchers, medicine wheels, and baskets (Herron 2002; Lyford 1982).

Salix candida, hoary willow

Medicine

Ojibwa

Plant used for stomach troubles. Plant used for trembling and fainting. Bark used for medicinal purposes (Reagan 1928).

Decoction of inner bark taken for coughs (Hoffman 1891).

Salix discolor, pussy willow

Medicine

Ojibwa

Plant used for stomach troubles. Plant used for trembling and fainting. Bark used for medicinal purposes (Reagan 1928).

Salix fragilis, crack willow

Medicine

Ojibwa

Poultice of bark applied to sores as a styptic and healing aid. Bark used as a styptic and poultice for sores (Smith 1932).

Salix interior, sandbar willow

Utility

Ojibwa

Cut, peeled willows dipped in hot water to make them tough and pliable and made into baskets (Gilmore 1933).

Salix lucida, shining willow

Medicine

Ojibwa

Poultice of bark used for sores and applied to bleeding cuts (Smith 1932).

Smoking

Ojibwa

Peeled, toasted and flaked bark used for kinnikinnick or smoking mixture (Smith 1932).

Salix pedicellaris hypoglauca (syn. *Salix pedicellaris*), willow; bog willow

Medicine

Ojibwa

Bark used for stomach troubles (Smith 1932).

Scientific name *Sambucus* spp.

Synonym *Sambucus canadensis* syn. *Sambucus nigra ssp. canadensis*
Sambucus pubens syn. *Sambucus racemosa var. racemosa*

Common name Elderberry

Native names pipigwe-minan (Gilmore 1933), papaskatcîksi'gana'tîg (popgun wood) (Smith 1932)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Bailly area, Dune Acres, Indiana Dunes State Park, Keiser Unit, Tamarack Unit, Hoosier Prairie, Pinhook Bog

Fire Response *Sambucus canadensis* - Blue elderberry is fire tolerant (Aro 1971). It is able to resprout (Preston 1948; Stanton 1974; VanDersal 1938), and buried seed germinates following fire (Heit 1967). Fire generally kills aboveground parts of blue elderberry which then sprout vigorously from the root crown (Little 1979; Preston 1948; Steen 1965). A severe fire might expose and kill the root and stem buds from which sprouting occurs. Fire also scarifies buried seed, and germination usually occurs the first growing season following the fire (Heit 1967; Morgan and Neuenschwander 1988). Repeated fires may reduce elderberry (Mueggler 1965). In one case, blue elderberry spread slowly by seed and was eliminated by a second fire (Isaac 1940).

Sambucus pubens - *S. racemosa var. racemosa* can sprout from rhizomes or root crowns following fire (Conrad and McDonough 1972; Hungerford 1986; Lyon 1966; Stickney 1980; Van Dersal 1938). A very severe fire might expose and kill the rhizome or root crown and thus the plant. Fire also scarifies buried seed, and germination usually occurs the first growing season following the fire (Heit 1967).

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Traditional Uses:

Sambucus canadensis (syn. *Sambucus nigra* ssp. *canadensis*), elderberry

Archaeological evidence for Anishinaabek use dates back to Archaic (6000BC-1000BC) and Woodland (1000BC-1600AD) periods (Herron 2002).

Medicine

Ojibwa

Infusion of roots taken as an emetic (Gilmore 1933).

Food

Ojibwa

Fruit dried for winter use and eaten fresh (Gilmore 1933).

Sambucus pubens (syn. *Sambucus racemosa* var. *racemosa*), red elderberry

Medicine

Ojibwa

The bark is used as an emetic or purgative, depending on its preparation. It is a last resort purgative but the most important physic. Four internodes of the stalk are taken, because four is their magic number. These sections are measured carefully from the point of the ulna to the point of the humerus. The inner bark is secured by peeling downward. This is steeped and boiled, and the resulting liquid is drunk for constipation. It is supposed to thus save the life of one threatened with serious constipation. It is reserved for extreme cases, because of the many other physics they employ, and they consider it drastic and dangerous otherwise. If these same four sticks had been peeled upwards and the resulting tea drunk, then it would have acted as a powerful emetic." Smith claimed that the peeling had no effect on the medicinal action, that the medicine worked both ways simultaneously (Smith 1932:360).

Berries are eaten. A root tea is a medicine (Reagan 1928).

Scientific name *Sanguinaria Canadensis*

Common name Bloodroot

Other names bloodwort, tetterwort, redroot, red puccoon, puccoon-root, coonroot, white puccoon, pauson, snakebite, sweet-slumber, Indian paint (Broyles 2005)

Ojibway name meskojiibikak, meskwijiibikak, meskwa ´ dji ´ bîkûk, meskwa ´djibîkûk (Smith 1932), miskojiibik, miskwijiibik, mĭs´kodji´bĭk (Densmore 1928), meskwi-jibik (Gilmore 1933), miskwidjeebik (Zichmanis and Hodgins 1982)

Nativity Native

Habitat Miller Woods, West Beach, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Tamarack Unit, Pinhook Bog

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Traditional Uses:

Medicine

Ojibwa

Plant and root used (Zedeño et al. 2000).

Traditional medical practices found many uses for this plant including as a treatment for fainting and fits, as a blood medicine, as a cure for sore throats, and as a treatment for gonorrhea (Meeker, Elias, and Heim 1993).

Plant used medicinally (Gilmore 1933).

Juice used as face paint for the medicine lodge ceremony or when on warpath. Root juice on maple sugar used for sore throat (Smith 1932).

Compound decoction of root taken for stomach cramps (Densmore 1928).

Plant used for stomach pain, fainting and trembling in fits. Infusion of pounded plants used as wash for general illnesses and rheumatism. Leaf infusion taken as blood medicine and bark decoction used for blood disease. Poultice of plant applied or root infusion taken and used as a wash for sores and cuts. Decoction or infusion of plants taken for stomach or bowel troubles or for constipation. Infusion of roots taken and used as a wash for bleeding foot cuts. Infusion of root bark taken for gonorrhea (Reagan 1928).

Ceremonial

Ojibwa

Used for face paint and dye. Juice used as face paint for the medicine lodge ceremony or when on warpath (Smith 1932).

Dye

Ojibwa

The roots were used in making a red dye (Meeker, Elias, and Heim 1993).

Roots boiled to obtain a red dye (Jenness 1935).

Roots dug in the fall and used to make a red dye (Gilmore 1933).

Fresh or dried roots used as an orange or dark yellow dye to paint faces with clan marks (Smith 1932).

Roots boiled with the inner barks of other trees and used to make a red dye. Green or dried roots pounded and steeped to make a dark yellow dye. Double handful of shredded roots boiled with wild plum roots to make a dark yellow dye (Densmore 1928).

Craft

Ojibwa

root (Zedeño et al. 2000)

Charm

Ojibwa

Plant and root used (Zedeño et al. 2000).

Scientific name *Sarracenia purpurea*

Common name pitcher plant

Other names purple pitcherplant (Smith 1933)

Ojibway name omakakiiwidaasan, omakakiiwidaas, o´mûkiki´wida´sûn (Densmore 1928), o ´ makaki´ wîdass, o ´ makaki´ odass (Smith 1932), mukukee odaussun (Zichmanis and Hodgins 1982)

Nativity Native

Habitat Miller Woods, Bailly area, Indiana Dunes State Park, Old Visitor Center area area, Heron Rookery, Pinhook Bog

Fire Response Pitcher-plant is usually top-killed by fire but resprouts from underground rhizomes. It is Severe fires may burn into the peat layer and destroy the rhizomes, thereby killing the plant (McDaniel 1971; Schnell 1976).

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Traditional Uses:

Medicine

Ojibwa

The root is used to make a tea to aid parturition (Smith 1932; Zedeño et al. 2000).

Craft

Ojibwa

Plant is used for crafts (Zedeño et al. 2000)

Charm

Ojibwa

Root is used as a charm (Zedeño et al. 2000)

Other, unspecified

Ojibwa

Pitcher plants were reportedly used as toys for children, and known as frog leggings (Meeker, Elias, and Heim 1993).

Scientific name	*Sassafras albidum*
Common name	Sassafras
Other names	common sassafras, white sassafras, saxifrax, sassahura, mitten tree, ague tree, cinnamon wood, gumbo filé, gumbo, saloop, smelling stick, laurier des Iroquois (Broyles 2005)
Anishinaabek name	menagwake miins (fragrant root tree) (Gilmore 1933)
Ojibway name	menagwake-minš, mesknagwekik (Gilmore 1933) maanaagwaakwmizh, menaagwaakwmizh (Rhodes 1993)
Nativity	Native
Habitat	Miller Woods, Indiana Dunes State Park, Old Visitor Center area area, Tamarack Unit, Pinhook Bog Grows in well-drained, stony or sandy soil, woods, abandoned fields, and peaty swamps (Yarnell 1964).
Fire Response	Sassafras is moderately resistant to fire damage to aboveground growth. It is also highly resilient to such damage; sassafras sprouts vigorously following top-kill, even after repeated fires (Komarek 1963). Vigorously resprouts following fire (Cole and Taylor 1995).

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD-2002AD) (Herron 2002).

Food

Anishinaabek

Used with sarsaparilla root and wintergreen leaves to make original 'root beer' (Kaye and Billington 1997).

An infusion of the root was drunk historically as a beverage (Gilmore 1933).

Ojibwa

Roots available anytime. Root bark used to make a pleasant, tea like beverage. Leaves used in meat soups for the bay leaf like flavor (Gilmore 1933).

Leaf used for beverage and seasoning (Zedeño et al. 2000).

The fruits are an important food for wildlife (Meeker, Elias, and Heim 1993).

Medicine

Anishinaabek

Inner bark of root used for a tea drunk by drummers and singers to soothe throats (Kaye and Billington 1997).

An infusion of the root was drunk historically as a springtime medicine to thin the blood (Gilmore 1933).

Tea made to purify blood but drunk only in early spring or late fall to rebalance body. The inner bark of many trees including maple, iron wood, beech, basswood, sassafras, and chokecherry were boild into a drink for tuberculosis (Herron 2002).

Ojibwa

Infusion of root bark taken to thin the blood (Gilmore 1933).

Root is used (Zedeño et al. 2000)

Traditional medical practices called for an infusion of the root bark to thin the blood (Meeker, Elias, and Heim 1993).

Charm

Ojibwa

Root is used as a charm (Zedeño et al. 2000)

Scientific name *Scirpus validus creber*

Synonym *Schoenoplectus tabernaemontani*

Common name great bulrush

Other names bulrush, marsh grass; soft-stem bulrush (Yarnell 1964)

Anishinaabek name nakun askok (mat weaving grass) (Densmore 1974)

Ojibway name anaakan, ana´kun (Densmore 1928), anaakanashk, nakun-aškok (Gilmore 1933), naaknashk (Rhodes 1993), (gi)chigamiiwashk, -oon, jîka´miûskûn (Smith 1932)

Nativity Native

Habitat Tolleston Dunes, Dune Acres, Indiana Dunes State Park, Keiser Unit, Tamarack Unit, Pinhook Bog

Grows in brackish or fresh shallow water and marshes (Yarnell 1964).

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD-2002AD) (Herron 2002).

Food

Anishinaabek

Lower foot of stem eaten fresh during hunts (Gilmore 1933; Smith 1932).

Ojibwa

Sweet bulbs eaten raw in midsummer (Densmore 1928).

Tubers used for food (Yarnell 1964).

Utility

Anishinaabek

Bulrush mats used on lower walls of summer lodges for air circulation. Mat edges sewn with nettle fiber cord historically (Gilmore 1933; Smith 1932).

Ojibwa

Used for mats (Densmore 1928).

Plant used for weaving floor and wall mats (Gilmore 1933).

Rushes used for the best mats. The rushes were submersed for a few days, then cleaned and dyed as desired. The long, small-diameter rushes are preferred because there is less pith and will not crush readily when woven into mats. Rushes are pulled, not cut (Smith 1932).

Stems used for weaving large mats and baskets (Kinietz and Jones 1942).

Native Americans traditionally used bulrush in making mats and toys (Meeker, Elias, and Heim 1993).

Craft

Ojibwa

plant (Zedeño et al. 2000)

Other, unspecified

Ojibwa

Used for toys (Densmore 1928).

Scientific name *Smilacina racemosa*

Synonyms *Maianthemum racemosum* ssp. *racemosum*

Common name feathery false Solomon's Seal

Other names false solomon seal (Toupal, Banks, and Carroll 2006); feather solomon's seal (Smith 1933)

Native names agoñgo'sîmînûn (chipmunk berries) or agoñgosi' wîdji' bîk (chipmunk root) (Smith 1932), agoñg' osîmînûm (Densmore 1928), huksemins (Gilmore 1933), kiñe' wigwōshk (Hoffman 1891)

Nativity Native

Habitat Bailly area

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Traditional Uses:

Others

Food

Ojibwa

Roots added to oats to make a pony grow fat. Roots soaked in lye water, parboiled to get rid of the lye and cooked like potatoes (Smith 1932).

The root is used (Zedeño et al. 2000)

Medicine

Ojibwa

Compound decoction of root taken for back pain. Compound decoction of root taken for "female weakness" (Densmore 1928).

The root is used with *Apocynum adrosaemifolium* to keep the kidneys open during pregnancy. To cure sore throats and headaches. It is used as a reviver, aba'bûsûn (Smith 1932).

The root is dried, sprinkled on hot coals, and then the fumes inhaled for headaches and pain (Gilmore 1933).

Roots used as an inhalant for headache. Decoction of leaves used by "lying-in women." Poultice of crushed, fresh leaves applied to bleeding cuts (Hoffman 1891).

Compound containing root used for headache. Compound containing root taken "to keep kidneys open during pregnancy." Root used as a reviver. Compound containing root used for sore throat (Smith 1932).

The root is used (Zedeño et al. 2000)

Charm

Ojibwa

The root is used (Zedeño et al. 2000)

Scientific name	*Solidago* spp. Most details are not species specific; specific species include: *Solidago graminifolia media*, syn. *Euthamia gymnospermoides*; *Solidago graminifolia nuttallii*, syn. *Euthamia graminifolia* var. *nuttallii*; *Solidago gymnospermoides* syn. *Euthamia gymnospermoides* (SOGR) *Solidago latifolia* (syn. *Solidago flexicaulis*) (SOLA) *Solidago serotina* (syn. *Solidago gigantea*) (SOSE) *Solidago uliginosa* (SOUL)
Common name	Goldenrod
Native names	gi' zĭso' mûki' ki (Solidago spp.) (Densmore 1928), wasa' waskwûne'k (yellow light; *Solidago graminifolia nuttallii*) (Smith 1932), a' djkdamo' wano (*Solidago Canadensis*, *Solidago flexicaulis*, *Solidago juncea, Solidago rigida*), o' zawa' bigwûn (*Solidago speciosa*) (Densmore 1928)
Nativity	Native
Habitat	Miller Woods, Tolleston Dunes, West Beach, Bailly area, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Heron Rookery, Hoosier Prairie, Pinhook Bog
Fire Response	*Solidago caesia* - Rapid vegetative regrowth after "cool" fire (Chapman and Crowe 1981). *Solidago missouriensis fasciculate* - Prairie goldenrod has good fire tolerance in the dormant state (Wasser 1982); it can reproduce by rhizomes or from a caudex (Fernald 1950; Great Plains Flora Association 1986). Prairie goldenrod is listed as tolerant of fire in the tallgrass prairie of the Central Great Plains, even though it sometimes declines following fire. It is listed as increasing in the Canadian Great Plains after both spring and fall fires (Wright and Thompson 1978). *Solidago rigida* - Burns in March, May, and October increased *Solidago rigida*. *Solidago rugosa* - Rapid vegetative regrowth after "cool" fire (Chapman and Crowe 1981). *Solidago ulmifolia* - Rapid vegetative regrowth after "cool" fire (Chapman and Crowe 1981).

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Traditional Uses:

Medicine

Ojibwa

Decoction of root taken for lung trouble, especially chest pain (Densmore 1928).

A root decoction is used externally for cramps. In addition, the leaves are leaves dried, and a decoction is made for fever (Densmore 1974).

Solidago canadensis

Pulverized root applied to boils. The flowers are dried for poultice (with coneflower and giant hyssop) for bums. It can be applied moist to ulcers (Densmore 1974).

Euthamia graminifolia, flattop goldenrod (SOGR)

Infusion of flowers of taken for chest pain. Plant used in a hunting medicine. Flowers used in the hunting medicine and smoked to simulate the odor of a deer's hoof (Smith 1932).

Solidago juncea

A root decoction is made, 1 root/1 quart water, and taken internally for convulsions (Densmore 1974).

Solidago latifolia (syn. *Solidago flexicaulis*), zigzag goldenrod (SOLA)

Ojibwa

Root dried and gargle or chewed for sore throat (Densmore 1928).

Solidago rigida

A root decoction is used to stop urine and for enemas (Densmore 1974).

Solidago speciosa

A root decoction with pasque flower is used for lung trouble. A root decoction is used for hemorrhage from lungs. The root or stalk is mixed with grease as ointment for skin and hair. A root decoction is taken internally for cuts. The roots are steeped for a drink for difficult labor. The stalk or root is boiled and a warm compress made for sprained or strained muscles. A decoction of the root and stalk is also used as a tonic (Densmore 1974).

Scientific name *Symplocarpus foetidus*

Common name skunk cabbage

Ojibway name zhigaagobag, šikag-buk (Gilmore 1933)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Tamarack Unit, Hoosier Prairie

Scott Milburn @ USDA-NRCS PLANTS Database

Kitty Kohout & WI State Herbarium

Traditional Uses:

Medicine

Ojibwa

Infusion of roots taken as a cough medicine (Gilmore 1933).

Root is used (Zedeño et al. 2000)

The Ojibwa used an infusion of skunk cabbage roots as a cough medicine (Meeker, Elias, and Heim 1993).

Charm

Ojibwa

root (Zedeño et al. 2000)

Scientific name *Taraxacum officinale*

Common name common dandelion

Anishinaabek name weca waskwunek (yellow light); doodooshaboo jibik (milk root) (Densmore 1974; Meeker, Elias, and Heim 1993)

Ojibway name doodooshaaboojiibik, dado´cabodji´bĭk (Densmore 1928), mindimooyenh, mindemoyae (Zichmanis and Hodgins 1982), wesa´usakwûnek, weca ´ waskwûne´ k (Smith 1932)

Nativity Introduced

Introduction notes

Considered an essential plant for food and health by the time the Puritans set out for New England. A common green and dosing herb, it seeds were among those taken for evey wonam's garden plot. This commonality seems to be responsible for the lack of documentation in early records. No early record exist of its importation into the United States, and this has been suggested as evidence that its use was so prevalent in Puritan times that dandelion seed, along with seed of other essential plants, was carried to the Colonies as part of every goodwife's garden supply (Haughton 1978). Brought by the Europeans during early settlement period (Heller 2000).

Habitat Bailly area, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit

Fire Response Common dandelion is primarily adapted to fire through its prolific production of wind-dispersed seed (Toth 1991). Site colonization after fires occurs in many forested areas because of common dandelion's persistent, viable seedbank (Ahlgren 1979). Late spring burning in the tallgrass prairies of Kansas reduced common dandelion cover compared with burning at earlier dates. In shortgrass prairies of western Kansas, common dandelion was less affected by dormant season (fall and winter) burns than by spring burns (Bragg 1991).

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD-2002AD) (Herron 2002).

Food

Ojibwa

Young leaves gathered in spring and cooked as greens with pork or venison and maple sap vinegar. Young spring leaves also eaten as

greens, topped with a vinegar made from soured maple sap (Smith 1932).

A salad of plantain, strawberry, and dandelion leaves, and columbine flowers used in the spring to boost iron levels after a winter when fresh plants are scarce. In addition, wine is made from dandelions (Herron 2002).

Leaf is eaten (Zedeño et al. 2000)

Medicine

Ojibwa

Compound infusion of root taken to produce postpartum milk flow (Densmore 1928). In addition, steeped roots are made into a drink used with thistle for womens' confinement (Densmore 1974).

Roots used as a blood medicine (Reagan 1928).

Infusion of root taken for heartburn (Smith 1932).

The root is used (Zedeño et al. 2000)

The roots of this plant were traditionally used as a blood medicine, to treat heartburn and to induce postpartum milk flow (Meeker, Elias, and Heim 1993).

Charm

Ojibwa

Root (Zedeño et al. 2000)

Scientific name *Tilia americana*

Common name Basswood

Other names linden (Toupal, Banks, and Carroll 2006); American linden; bois blanc (Yarnell 1964); American basswood (Smith 1933)

Anishinaabek name wiigobaatig (the tree) (Meeker, Elias, and Heim 1993; Rhodes 1993); wiigob (the bark)

Ojibway name wiigob, wigub (Smith 1932), wiigobaatig, -oog, wiigwabaatig (Rhodes 1993), wiigobimizh, -iig, wigobimij (Baraga 1966), wigub´imîj (Densmore 1928), wigobi-minš (Gilmore 1933), wiigibiish, wiigwbiish (Rhodes 1993), wiigobiishaatig, wiigwbiishaatig (Rhodes 1993); wibog ? (Toupal, Banks, and Carroll 2006), wigub' imij (Reagan 1928)

Nativity Native

Habitat Bailly area, Dune Acres, Indiana Dunes State Park, Tamarack Unit, Heron Rookery, Hoosier Prairie

Grows in rich, well-drained, loamy soils (Yarnell 1964).

Fire Response Basswood is rated as a fire sensitive species; the thin bark is easily damaged by fire, as are the shallow roots (Crow 1990). However, basswood that has been top-killed by fire will sprout vigorously from the root crown (Voss 1985).

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Paleoindian period (10,000BC-6000BC) to the Historic period (1600AD-2002AD) (Herron 2002).

Agricultural

Ojibwa

The bark is used in wild rice cultivation; the wood and bark are used in sugar maple production; and the bark is used in cultivation (Zedeño et al. 2000).

Ceremonial

Ojibwa

Wood is used (Zedeño et al. 2000)

Food

Ojibwa

Lalemont (1663), a Jesuit priest, documented that the bark was cooked, pounded “and then put into the water in which fish has been boiled, or else mixed with fish-oil, made them excellent stews” (Thwaites 1896).

Sap, young twigs, and buds used for food (Yarnell 1964).

Sap between the bark eaten (summer) (Reagan 1928).

Young twigs and buds cooked as greens or eaten raw (Gilmore 1933).

Bark and flower used to make a beverage; branch, leaf, and sap eaten as a vegetable (Zedeño et al. 2000).

Flowers were traditionally dried and drunk in a tea (Meeker, Elias, and Heim 1993).

Medicine

Anishinaabek

Inner bark combined with that of white ash to make a tea to treat constipation. Inner bark boiled down into syrup as well. The inner bark of many trees including maple, iron wood, beech, basswood, sassafras, and chokecherry were boild into a drink for tuberculosis (Danielsen 2001).

Ojibwa

Bark, leaf, twig, and fruit used (Zedeño et al. 2000).

Traditionally the inner bark was used to treat dysentery, a jelly was used for consumption, the twigs were used for lung troubles and the leaves were used to treat burns and scalds (Meeker, Elias, and Heim 1993).

Utility

Ojibwa

Wood used as fire starting drill base plate. The plate has notches along one edge so ash produced can be dumped into tinder (Herron 2002).

Basswood cordage used to make fishing nets (Danielsen 2001).

Basswood bark was a primary material for cordage, thread, nets (Zedeño et al. 2001).

In the Great Lakes region in aboriginal times basswood apparently was the chief source of fibrous material (Jones 1937).

Bark fiber used for thread, cordage, weaving bags and baskets, tying wigwam framework, sewing mats, fish nets, snowshoes, and ropes. Wood used to make dugout canoes. Bast strips used for tying the poles of the framework of houses. Wood used to make spiles for drawing out maple sap from trees into buckets during sugar making time (Gilmore 1933).

The inner fibers of bark from young trees are used. The fibers are coiled or boiled and coiled, then stored for later use. Basswood bark fibers are woven into storage bags, used to tie the poles of wigwam frames, and used for many other needs. When used to tie wigwam poles together, the fiber is soaked and tied wet to make a tight, secure binding when dry; broad strips of bark from an elm or balsam are sewn onto the framework with basswood fibers. In the past, oak

awls were used to punch holes in the bark for sewing (Smith 1932).

The wigwam was easily constructed in a half-day's time. Poles were thrust into the ground in a circle of from twelve to twenty feet, their tips bent and securely tied in the center with basswood bark cord to form a hemisphere, about eight feet in height at the center. The whole was then covered with bark of balsam, or woven cattail mats, and roofed with birch bark. An entrance and smoke hole were left and mats thrown upon the ground. It was much warmer than a tepee and better adapted to the heavy snow fall of the north, and to low temperatures. All of their storage houses and their smaller sweat lodges were similarly made. Their medicine lodges followed the same construction though they were much longer: being eighty, a hundred and even a hundred and fifty feet in length. [The medicine lodge in the old Flambeau village at the edge of the woods] was a huge affair, about one hundred and fifty feet long, with a stout framework of saplings joined together and arched over at a height of eight feet. The framework was rigidly held together with other horizontal saplings secured by basswood bark cord at every junction of poles. During use, the sides of this framework [were] covered with cattail mats and the top with sewed birch bark. By using a bone needle and nettle string the cattail mats [were] sewed together with an invisible stitch that makes a windproof cover. The entrance of the lodge [faced] the east, and there [was] an exit to the west. A fire [was] usually burning just inside the eastern entrance, the smoke ascending through a smoke hole left in the roof (Smith 1932: 340-341).

Bark is peeled in early summer during active sap flow. It is used in the construction of sweat lodges, and braided into cordage although twine has all but replaced it as cordage. Only women lashed the lodge beams, gathered the water, and placed white cedar branches around the sweat lodge pit then up to and into the fire used to heat the rocks. Cordage used to tie up lodge implements; historically, used as lashings on birch bark canoes and wigwam lodges (Erickson 2000; Smith 1932).

Used for twine and general utility. Basswood rope used to secure willow fish traps to shoreline trees. Bark is soaked in water until needed, then split and used for sewing or lashing (Densmore 1928).

Inner bark of young sprouts used to make twine and rope. Inner bark of young sprouts used to make thread (Reagan 1928).

Craft

Ojibwa

wood (Zedeño et al. 2000)

Charm

Ojibwa

Bark, leaf, twig, and fruit used (Zedeño et al. 2000).

Scientific name *Trillium grandiflorum*

Common name large-flowered trillium

Other names trillium (Toupal, Banks, and Carroll 2006); snow trillium (Smith 1933)

Ojibway name inĭ´nĭwĭn´dĭbĭge´gûn (Densmore 1928), baushkindjibgwaun (Zichmanis and Hodgins 1982)

Nativity Native

Habitat Dune Acres, Pinhook Bog

Grows in rich woods and thickets (Yarnell 1964).

Tom Barnes, Univ. of Kentucky

Traditional Uses:

Food

Ojibwa

The greens are edible (Densmore 1928; Smith 1932).

Medicine

Ojibwa

Decoction of root "pricked in with needles" is applied subdermally near sore joints. The inner bark of root is boiled, cooled, and eardrops are made for sore ear (Densmore 1928).

root (Zedeño et al. 2000)

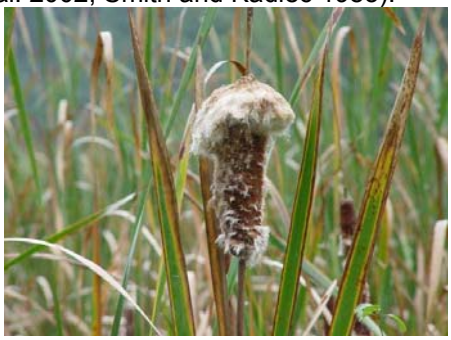
Traditionally a decoction of the root was "pricked in with needles" near sore joints, and a decoction of root bark was used as ear drops (Meeker, Elias, and Heim 1993).

Charm

Ojibwa

root (Zedeño et al. 2000)

Scientific name	*Typha latifolia*
Common name	common cattail
Other names	broadleaf cattail (Smith 1933)
Ojibway name	apakway, apûk ´we (Densmore 1928), apakweshk, apakweshkway, apakweshkwai, -an (Baraga 1966), pokwiišk, pokwiiškok (Gilmore 1933), abûkwe´skwe (wigwam cover, i.e. the plant leaves), bebamasû'n (it flies around) (Smith 1932), pukwaeshk (Zichmanis and Hodgins 1982), napōgūshk (Hoffman 1891)
Nativity	Native
Habitat	Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Heron Rookery, Pinhook Bog Grows in marshes or shallow water (Yarnell 1964).
Fire Response	After fires in established broadleaf cattail stands, broadleaf cattail typically sprouts from rhizomes. Within 1 year of the fire, burned and unburned sites may only be different in litter accumulations (Barry et al. 2002). Broadleaf cattail may also occur on burned forested and woodland sites within 1 year of a fire, even though plants were not present before the fire (Ewel 1984). These findings suggest that broadleaf cattail germinates from a persistent seed bank or is rapidly dispersed to burned sites (Gucker 2008). Fire typically only top-kills broadleaf cattail (Nelson and Dietz 1966). When established broadleaf cattail stands burn, plants sprout from the rhizome almost immediately after fire (Barry et al. 2002; Smith and Kadlec 1985).



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Traditional Uses:

Food

Ojibwa

Green flower boiled or dried and used for food. Pollen used for flour (Arnason, Hebda, and Johns 1981).

Roots and shoots used (Zedeño et al. 2000).

Medicine

Ojibwa

Poultice of root inner skin applied to carbuncles and boils (Arnason, Hebda, and Johns 1981).

Poultice of crushed root applied to sores (Hoffman 1891).

Fruit fuzz used as a war medicine (Smith 1932).

fruit (Zedeño et al. 2000)

The fuzz of the fruit was used traditionally as a war medicine (Meeker, Elias, and Heim 1993).

Utility

Ojibwa

Used for baskets and mats (Densmore 1928).

Leaves used as mats for roofing wigwams (Gilmore 1933).

Blades used to weave mats (Reagan 1928).

The leaves are woven into mats for a variety of uses including on benches, beds, and the floor, and to wind- and rain-proof the sides of medicine lodges, sweat lodges, and wigwams. In the case of the structures, woven cattail leaves are used alongside birchbark, which provides the roofing and upper walls; the mats are sewn and edged with nettle or basswood fibers. The fuzz or seed is used for mattresses and sleeping bags. The seed heads are boiled to remove the bugs, then dried before stripping the fuzz to make a mattress. Quilts are made with the fuzz and then made into sleeping bags (Smith 1932).

Charm

Ojibwa

fruit (Zedeño et al. 2000)

Scientific name	*Ulmus americana*
Common name	American elm
Native names	Aw-nib (elm) (Blackbird 1887)
Nativity	Native
Habitat	Bailly area, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Heron Rookery, Hoosier Prairie, Pinhook Bog
Fire Response	American elm greatly decreases following fire (Daubenmire 1949). Wind- and water-dispersed seed are important in the survival of American elm following fire [28]. After being top-killed, young American elm will sprout from the base following fire (Bey 1990). American elm is easily damaged by fire (Daubenmire 1936). Low- and moderate-severity fires top-kill trees up to sapling size and will wound larger trees (Guilkey 1957).

J. S. Peterson @ USDA-NRCS PLANTS Database

Traditional Uses:

Archaeological evidence for Anishinaabek use found during the Historic period (1600AD-2002AD) (Herron 2002).

Medicine

Ojibwa

Traditionally an infusion of root bark was used to treat gonorrhea.

Utility

Ojibwa

Broad strips of bark from an elm or balsam are sewn onto the wigwam framework with basswood fibers (Smith 1932).

Thick bark used to cover lodges, especially winter lodges (Reisetter 2001). Bark used for toboggans (Herron 2002).

Scientific name *Ulmus rubra*

Common name slippery elm

Other names red elm (Yarnell 1964)

Ojibway name aniib, ahnib, ah-nep (Reagan 1928), anib, ani ´b (Smith 1932), gaawaakomizh, gawa´komĭc (Densmore 1928), ozhaashigob, ojâshigob, -ig (Baraga 1966), zhaashgob (Rhodes 1993), zhiishiigimewanzh, Aw-nib (elm) (Blackbird 1887)

Nativity Native

Habitat Bailly area

Grows in bottom lands, stream banks, rich moist hillsides, and rocky ridges and slopes (Yarnell 1964).

Fire Response Young slippery elm sprouts from the root crown following fire (Abrams 1986; Reuter 1986). American elm is a fire decreaser (Auclair and Cottam 1971; Beck 1988; Curtis 1959) that is top-killed by low-or moderate-severity fires. Slippery elm is probably affected by fire in the same way due to its similiar morphology (Coladonato 1993 ULRU).

Dennis W. Woodland & WI State Herbarium

Steve Baskauf & UT Herbarium & Austin Peay State Univ.

Traditional Uses:

Agriculture

Ojibwa

Wood used in sugar maple production (Zedeño et al. 2000).

Medicine

Ojibwa

Bark and root used (Zedeño et al. 2000).

The roots of this species were used as a wash for foot cuts and the inner bark was used in curing sore throats. Slippery elm lozenges can still be purchased today for this latter purpose (Meeker, Elias, and Heim 1993).

Inner bark used (Yarnell 1964).

Inner bark used for dry, sore throat (Smith 1932).

Decoction of bark gargled or dried root chewed for sore throat (Densmore 1928).

Infusion of roots taken and used as a wash for bleeding foot cuts. Infusion of plants taken for stomach troubles. Plant used for gonorrhea (Reagan 1928).

Utility

Ojibwa

The bark was made into a sled-like "coaster" for children (Meeker, Elias, and Heim 1993).

Bark was used to cover the sides of the wigwam (Smith 1932).

Craft

Ojibwa

bark (Zedeño et al. 2000)

Charm

Ojibwa

Bark and root used (Zedeño et al. 2000).

Scientific name *Urtica procera*

Synonyms *Urtica dioica* ssp. *gracilis*

Common name tall nettle

Other names stinging nettle, nettleweed; California nettle (Smith 1933)

Native names masan (woods) (Urtica lyallii, syn. *U. dioica* spp. *gracilis*) (Smith 1932), ma' zana-tig (Densmore 1974).

Nativity Native

Habitat Indiana Dunes State Park

Grows in thickets and rich damp soil (Yarnell 1964).

Fire Response Stinging nettle is probably top-killed by fire. Perennating buds on shallow rhizomes probably survive low-severity fire. Stinging nettle regenerates from buried rhizomes and/or seed after fire (Carey 1995 URDI).

Hugh H. Iltis & WI State Herbarium

Robert W. Freckmann & WI State Herbarium

Traditional Uses:

Medicine

Ojibwa

leaf (Zedeño et al. 2000)

Poultice of soaked leaves applied to heat rash (Smith 1932).

Infusion of root taken for dysentery. Compound decoction of root taken for “stoppage of urine” (Densmore 1928).

Utility

Ojibwa

Fibers used to make cordage, thread, and nets (Zedeño et al. 2001).

Bark or rind used as a fine, stout sewing fiber. Fiber used for sewing, twine, and weaving bags (Smith 1932).

Craft

Ojibwa

bark (Zedeño et al. 2000)

Charm

Ojibwa

leaf (Zedeño et al. 2000)

Scientific name *Vaccinium angustifolium laevifolium*

Synonyms *Vaccinium angustifolium*

Also includes *Vaccinium corymbosum* (highbush blueberry)

Common name early low blueberry

Other names blueberry (Toupal, Banks, and Carroll 2006); low sweet blueberry, sweet hurts (Yarnell 1964)

Native names mînûga' wunj (berry bush), makate' mîn (black blueberry) (*V. nigrum*, syn. *V. angustifolium*) (Smith 1932), mînaga' wûnj (Densmore 1928), minan (Gilmore 1933)

Nativity Native

Habitat Miller Woods, West Beach, Pinhook Bog

Grows in dry, rocky or sandy soil, burns, clearings, dry open barrens, and peats (Yarnell 1964).

Fire Response Low sweet blueberry is well adapted to fire (Bourgeron et al. 1988; Stocks and Martin 1980). Fire removes decadent aboveground vegetation and promotes vigorous growth (Bourgeron et al. 1988). Underground portions of the plant generally survive wildfires or prescribed fires (Vander Kloet 1988), even even when all aboveground vegetation is consumed (Brooks 1972; Chrosciewicz 1970). Rhizome mortality increases as heat penetration into the soil increases (Smith 1962). Low sweet blueberry generally sprouts from rhizomes and the root crown after fire (Hall 1955; Hoefs and Shay 1981), and may also sprout from buds on the stem base (Hoefs and Shay 1981; Vander Kloet 1988). Stems that arise from underground rhizomes are generally more vigorous than those that develop from partially burned aboveground stems (Martin 1979). (Raunkiær plant life-forms introduced in 1904) *Vaccinium angustifolium* is a chamaephyte - low-growing perennial plant whose dormant overwintering buds are borne at or just above the surface of the ground (Chapman and Crowe 1981).

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Woodland period (1000BC-1600AD) to the Historic period (1600AD-2002AD) (Herron 2002).

Agricultural

Ojibwa

Berries gathered and sold to the nearby stores (Reagan 1928).

Ceremonial

Anishinaabek

When girls start their first menstrual period, they enter a yearlong

berry fast that includes blueberries and strawberries. It is how they show responsibility and patience toward the recently gained privilege of fertility. Sometimes offered to the sacred fire during the Thirsty Dance (Herron 2002).

Mythic

Anishinaabek

It is the first fruit shown to the Anishinaabek by Nanaboozhoo (Herron 2002).

Food

Anishinaabek

Dried blueberries are combined as well with wild rice and deer venison (Broker 1983).

Berries eaten or dried and added to lard, moose fat, or deer tallow historically. The berries and fat would be boiled and seasoned with maple sugar, or added to other foods (Densmore 1928).

Le Jeuene (1633), a Jesuit priest, documented that the fruits were eaten. In (1639), he added that blueberries were “dried and pounded with meat (Thwaites 1896).

Ojibwa

fruit (Zedeño et al. 2000)

Traditionally it was eaten fresh or dried and mixed with other foods (Meeker, Elias, and Heim 1993).

Berries were mixed with nuts, bear meat, and bear fat to make cakes that in the past were a choice staple (Adams 1961).

Berries used fresh or dried (Gilmore 1933).

Berries dried like currants and cooked in winter with corn, rice and venison (Smith 1932).

Berries were boiled, seasoned, and combined with moose fat and deer tallow. Berries were dried on a frame over a fire. When needed, they were boiled, usually in broth, or to make a flavoring for other foods (Densmore 1928, 1929).

Berries sun dried for winter use, eaten fresh, and canned for future use (Reagan 1928).

Medicine

Anishinaabek

Blueberry leaf tea taken for low blood sugar associated with diabetes. Flowers of *V. angustifolium* were dried, then placed on heated stones. The fumes were inhaled for nervous system imbalances (Densmore 1974).

Ojibwa

Dried flowers placed on hot stones as inhalant for “craziness” (Densmore 1928).

Infusion of leaves taken as a blood purifier (Smith 1932).

Charm

Ojibwa

Leaf and flower used (Zedeño et al. 2000).

Scientific name *Vaccinium macrocarpon*

Also *Vaccinium oxycoccos* (small cranberry)

Common name large cranberry

Ojibway name aniibimin, anibimin, -an (Baraga 1966), a ´nibimĭn´ (Densmore 1928)

Nativity Native

Habitat Miller Woods, Dune Acres

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Robert R. Kowal & WI State Herbarium

Traditional Uses:

Agricultural

Ojibwa

Fruit sold by the bushels (Reagan 1928).

Food

Ojibwa

Fruit eaten and used to make a beverage (Zedeño et al. 2000).

The fruit was both eaten raw and drunk as a tea (Meeker, Elias, and Heim 1993).

Berries cooked and used for food (Densmore 1928).

Fruit used for food (Reagan 1928).

Le Jeuene (1657), a Jesuit priest, documented that the fruits were eaten (Thwaites 1896).

Medicine

Ojibwa

plant (Zedeño et al. 2000)

An infusion of the plant was traditionally used for nausea (Meeker, Elias, and Heim 1993).

Charm

Ojibwa

plant (Zedeño et al. 2000)

Scientific name *Verbascum thapsus*

Common name common mullein

Other names mullein, hunter's delight

Nativity Introduced

Introduction notes Brought by the Puritans (Haughton 1978). Common mullein was first introduced into the U.S. in the mid-1700's, where it was used as a piscicide, or fish poison, in Virginia. Records show that it was first described in Michigan in 1839 and on the Pacific coast in 1876, probably due to multiple introductions as a medicinal herb (Remaley 2005).

Habitat Miller Woods, Tolleston Dunes, West Beach, Bailly area, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Hoosier Prairie, Pinhook Bog

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Historic period (1600AD-2002AD) (Herron 2002).

Medicine

Anishinaabek

Teas are made from the flowers and leaves for colds, flu, and respiratory problems. The leaves are shredded and added to smoking mixtures. Sometimes it is used instead of tobacco because its smoke has anit-spasmodic properties that can reduce smoking-related coughs, asthma, and cronchitis (Herron 1998).

Clinically, mullein is an antibiotic, anti-inflammatory, anti-spasmodic, alterative, anodyne, astringent, demulcent, diuretic, expectorant, nervine, and vulnerary (Herron 1998).

Ojibwa

Peeled roots used as a heart stimulant (Arnason, Hebda, and Johns 1981).

It has been used to break nicotine addiction, and is believed to clean up tar deposits in the lungs when the smoker quits all tobacco use.

The flowers were used historically to treat tuberculosis through their diuretic properties (Smith 1932).

root (Zedeño et al. 2000)

Charm

Ojibwa

root (Zedeño et al. 2000)

Scientific name *Viburnum opulus*

Common name European highbush cranberry

Other names pimbina (Yarnell 1964)

Ojibway name aniibimin, -an, anibimin, -an (Baraga 1966), nipinminan (Gilmore 1933), aniibiminagaawashk, a ´nibîmî ´nûga ´wûck (Smith 1932)

Nativity Native

Habitat Dune Acres, Indiana Dunes State Park

Fire Response (Raunkiær plant life-forms introduced in 1904) *Viburnum* spp. are a phanerophyte - projecting into the air on stems with resting buds more than 25 cms above soil level (Chapman and Crow 1981).

R.A. Seelig @ USDA-NRCS PLANTS Database

Traditional Uses:

Food

Ojibwa

Bark eaten (Smith 1932).

Berries used fresh or in preserves (Gilmore 1933).

Fruit used for food (Reagan 1928).

Medicine

Ojibwa

The inner bark is used as a physic, and to make a tea for stomach cramps (Smith 1932).

A root tea is made to treat a prolapsed uterus (Gilmore 1933).

bark (Zedeño et al. 2000)

Traditionally, the root of staghorn sumac were used as a medicine to stop hemorrhaging (Meeker, Elias, and Heim 1993).

Utility

Ojibwa

Bark used as bait in snares for snowshoe rabbits (Smith 1932).

Charm

Ojibwa

bark (Zedeño et al. 2000)

Scientific name *Viola* spp.

Common name Violet

Native names *Viola conspersa* - wewaîe' bûgûg (Smith 1932)
Viola canadensis - maskwi widzhi wiko' kôk (Hoffman 1891)

Nativity Native

Viola odorata and *Viola arvensis* are Introduced

Introduction notes Introduced species came with early settlers (Weishan 1999).

Habitat Miller Woods, Tolleston Dunes, West Beach, Bailly area, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Heron Rookery, Hoosier Prairie, Pinhook Bog

Fire Response Rapid seed germination, and vegetative regrowth after "cool" fire (Chapman and Crowe 1981).

Kenneth J. Sytsma & WI State Herbarium

Traditional Uses:

Medicine
Ojibwa
Viola conspersa
The whole plant is used to make a tea for heart problems (Smith 1932).
Viola canadensis
A root decoction is used for back pain or bladder pain (Hoffman 1891).

Scientific name *Vitis aestivalis*

Common name summer grape

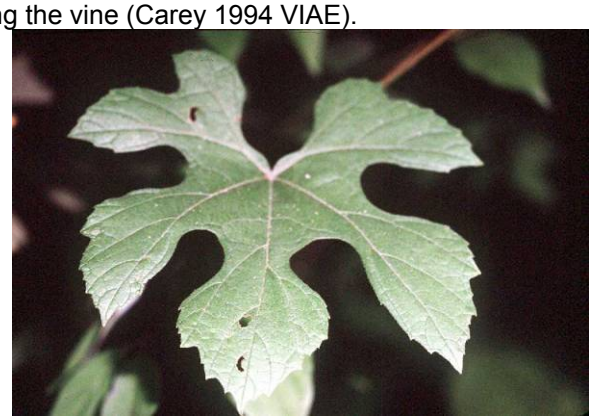
Other names possum grape (Toupal, Banks, and Carroll 2006); pigeon grape (Broyles 2005)

Native names su-min (Gilmore 1933)

Nativity Native

Habitat Miller Woods, Tolleston Dunes, West Beach, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Hoosier Prairie

Fire Response Summer grape sprouts from the root crown after fire, and dormant seed in the soil probably germinates after fire when conditions are favorable. Summer grape can function as a ladder fuel, especially when foliage is dry or debris accumulates along the vine (Carey 1994 VIAE).



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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Woodland period (1000BC-1600AD) to the Historic period (1600AD-2002AD) (Herron 2002).

Food

Ojibwa

Tendrils and leaves in the spring, leaves and fruit in the summer and early fall (McPherson and McPherson 1977).

Medicine

Ojibwa

The roots and branches are used to make a tea for pulmonary trouble (Gilmore 1933).

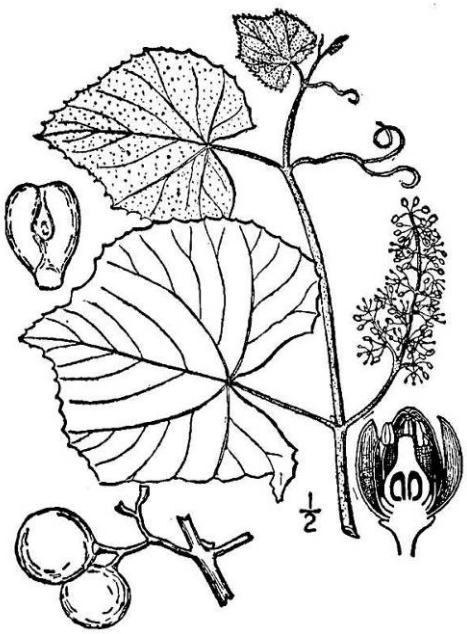
Scientific name *Vitis labrusca*

Common name fox grape

Other names wild grape (Toupal, Banks, and Carroll 2006); riverbank grape; frost grape (Yarnell 1964); frost grape, winter grape, fox grape (Broyles 2005)

Nativity Native

Habitat Miller Woods, Bailly area, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Heron Rookery, Pinhook Bog



Traditional Uses:

Medicine

Ojibwa

Root and branch used (Zedeño et al. 2000).

Charm

Ojibwa

Root and branch used (Zedeño et al. 2000).

Scientific name	*Zea mays*
Common name	Corn
Other names	wild grape (Toupal, Banks, and Carroll 2006); riverbank grape; frost grape (Yarnell 1964); frost grape, winter grape, fox grape (Broyles 2005)
Native names	Me-daw-min (corn), O-zaw-o-min (yellow corn) (Blackbird 1887), manda' mîn, also wîckobi' manda'mîn (sweet maize) and wîckobi' sî'ganûg (turns sweet in cooking) (Smith 1932)
Nativity	Introduced
Introduction notes	"*Maze*, otherwise called *Turkie*-wheat, or rather *Indian*-wheat, because it came first from thence. The leaves boiled and drunk helpeth pain in the back; of the stalkes when they are green you may make *Beverage*, as they do with *Calamels*, or Sugarcanes. The raw Corn chewed ripens felons or Cats hairs, or you may lay Samp to it: The *Indians* before it be thorow ripe eat of it parched" (Josselyn 1674). (Today, botanists generally agree that a wild grass, teosinte (Zea mexicana) is the ancestor of modern corn, originating by human selection sometime between 13,000 and 6,000 BC. Teosinte can 'pop' just like today's popcorn varieties, it shares a similar life cycle with corn, and is easily crossbred, indicating significant genetic similarities with corn. Archeological excavations in Southern Mexico have revealed maize cobs (radiocarbon dated at around 5,000 BC) with features intermediate between wild teosinte and maize. By 3,000 BC, while Mesoamericans had domesticated a number of other food plants as well, maize appeared to be of increasing importance. With other domesticated plants, maize permitted more and larger permanent settlements and provided an important element in the subsequent cultural flowering in later Mesoamerica. Columbus' is credited with bringing maize to Spain on his return voyage in 1493. Its cultivation spread quickly in the early 1500s, and fairly quickly reached worldwide distribution, achieving status as one of the most climatically adaptable members of the grass family. Kemper Center for Home Gardening <http://www.mobot.org/gardeninghelp/plantfinder/Plant.asp?code=B138>
Habitat	Miller Woods, Bailly area, Dune Acres, Indiana Dunes State Park, Old Visitor Center area area, Keiser Unit, Tamarack Unit, Heron Rookery, Pinhook Bog

Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Woodland period (1000BC-1600AD) to the Historic period (1600AD-2002AD) (Herron 2002).

Ceremonial

Ojibwa

Corn was parched, pounded, and cooked into hominy to make offerings to appease the evil spirit that lived underground so tht he would not do them harm (Blackbird 1887)

Myth

Ojibwa

The corn origin myth states that Winabojo pinched some flesh from his side and cast it upon the ground, so that it would grow and become corn for them to eat (Smith 1932).

Food

Ojibwa

Corn was a staple food item (Aller 1954).
Mature corn is soaked in lye water, rinsed, and then parboiled for eating. The ears may be roasted in the husk and made into hominy. The kernels may be cut from the cob, or boiled to a half-cooked stage and cut from the cob, then dried for winter use (Smith 1932).
Used to make a traditional food. Kernels are sorted to remove those with cracks, and lye is prepared by boiling hardwood ashes that sit overnight. The kernels are soaked in the lye for at least an hour or until the husks loosen. Then the poisonous lye is discarded and the kernels washed several times to remove any remaining lye and husks. The kernels are boiled for another hour or two alone or in a soup until they are tender (Herron 2002; Erickson 2001c).

Medicine

Ojibwa

Root and branch used (Zedeño et al. 2000).

Charm

Ojibwa

Root and branch used (Zedeño et al. 2000).

Scientific name *Zizania aquatica*

Common name wild rice

Anishinaabek name manomin (Herron 2002; Jenks 1902), mano' mîn (good berry) (Densmore 1928; Smith 1932)

Nativity Native

Habitat Indiana Dunes State Park

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Traditional Uses:

Archaeological evidence for Anishinaabek use found from the Woodland period (1000BC-1600AD) to the Historic period (1600AD-2002AD) (Herron 2002).

Agricultural

Ojibwa

Seeds scorched, winnowed and sold as breakfast food (Reagan 1928).

Ceremonial

Anishinaabek

Wild rice was a staple item. Its cultivation was entwined with religious beliefs (Jenks 1902).

Mythic

Anishinaabek

A migration story of the Anishinaabek from the Great Lakes to the east coast and back includes the finding of wild rice as an indicator of where to stop (Herron 2002).

Food

Anishinaabek

Wild rice harvesting involves white cedar ricing sticks, and birch bark winnowing trays. August is known as Manoominike Giizis (Ricing Moon). Rice beds are managed by rice chiefs. Harvested rice is parched in metal containers over wood fires. Men wearing soft moccasins gently dance on the rice to loosen the husks,then women use flat, shallow birch bark baskets to winnow the rice. They lightly toss the rice into the air so the wind can take the loosened husks (Herron 2002).

Ojibwa

Wild rice is an integral part of Ojibway culture. It was gathered and processed through a series of stages that involve a complex of plants.

Preparations for wild rice gathering took place in late summer and began when families or groups of families moved to their ricing camps, which were near the rice beds (Zedeño et al. 2001).

Grain in fall (McPherson and McPherson 1977).

Rice boiled alone or with maple sugar. Prepared rice is stored for winter. Unprepared rice is stored with dried blueberries to be cooked together. Cooked with meat in grease and seasoned with maple sugar; meat or fish broth boiled and poured over parched rice to steam (Stowe 1940).

(*Zizania palustris*, while not synonymous with *Z. aquatica*, uses are the same) This is a very important Ojibwe food. Families had harvest areas within a lake, and set up family camps for the harvest when the grains were in the milk stage. The harvest begins with a ceremony, then a quantity of rice is gathered to suffice a preliminary ceremonial feast after which the harvest is in full swing. Wild rice is cooked in venison broth and seasoned with maple sugar, or with wild fowl, which removes any muddy or wild taste (Smith 1932).

Wild rice was a primary grain staple that was gathered and processed through a series of stages that involve a complex of plants. Basswood fiber was used to bind rice sheaves; birchbark canoes were used to work in the rice beds; ash, maple, or hickory with balsam were used to make poles for propelling the canoes; white cedar was used for ricing sticks; winnowing trays and pails were made from birch or elm bark; maple wood provided a stirring paddle; cedar slats, grass, and willow branches were used to make a hulling vessel. Cedar, basswood, and elm bark was used to make storage bags; pine tar was used to seal bark storage containers; and birch bark was used to line storage pits (Densmore 1928, 1929; Vennum 1988).

Rice boiled alone or with maple sugar; prepared rice stored for winter; unprepared rice stored with dried blueberries to be cooked together; cooked with meat in grease and seasoned with maple sugar; meat or fish broth boiled and poured over parched rice to steam (Densmore 1928).

Seeds used to make gem cakes, duck stuffing and fowl stuffing. Seeds steamed into puffed rice and eaten for breakfast with sugar and cream. Seeds boiled with rabbit excrements, eaten and esteemed as a luxury (Reagan 1928).

It was a primary grain staple (Jenks 1902; Johnson 1969).

Utility

Ojibwa

The plant is used in wild rice cultivation (Zedeño et al. 2000).

Other, unspecified

Anishinaabek

Today, the Great Lakes Indian Fish and Wildlife Commission maps wild rice growth and density in northern Wisconsin and Minnesota, and works with Wisconsin and Michigan Departments of Natural Resources in wild rice restoration projects (Herron 2002).

Chapter Four
An Ojibway Ethnobotanical Catalog: Mosses, Lichens, and Fungi

In addition to the 1,462 species on the park plant list are mosses, lichens, and numerous fungi. Traditional uses were identified for 32 species. This catalog begins with a moss, followed by three lichens, and the fungi. Utility is the main use of the moss, while food is the main use of the lichens. Food and medicine are the predominant uses of the fungi followed by utility, ceremony, trade, mythic, and unspecified.

Traditional use of mushrooms was documented as early as 1653 by a Jesuit priest named Bressani. He noted that mushrooms were eaten but did not specify which species (Aller 1954). Smith (1932:402), however, “found that none of the Ojibwe eat any of the mushrooms although they have two names for them, "pîkwa' djîc" and "wajackwe' do" [muskrat]. Probably some remote ancestor had a fatal experience with mushrooms and the news has been handed down.”

Keewaydinoquay (1978) wrote a descriptive monograph of mushroom use but did not identify species in each case (Table). In a generalization, she noted that “The Ojibwe also made use of an unidentified fungus matte material, found in the windshake spaces of down timber. This is the matted vegetating mycelium of some timber fungus, such as *Fomes*, *Trametes*, *Polyporus* or *Pholiota*. This made a good tinder for use in the fire base block, and when the fire stick was rapidly twirled against this material, it caught fire and was blown into a blaze that became the basis of their fire. In all medicine lodge ceremonials, the fire was kindled in this manner and thus deemed a sacred fire. Things cooked over this fire were ceremonial, and the calumet or pipe used in the ceremonies was always lighted from a coal of the sacred fire.”

The following species information is provided to illustrate the complexity of traditional ethnobotanical knowledge. As tribal members have noted in the past, the sharing of use knowledge is for informational purposes only, not replication of uses because it is too easy for those not trained in the nuances of use and the spirit of the plant to harm themselves (Toupal et al. 2004).

Ojibway name	Description
puh-poh-wee	to unfold and enlarge unexpectedly and silently as a mushroom does
wajash-kwedo	a mushroom growing from a tree
wajash-aukee	a mushroom growing from the ground
jibiepushkwaegun	*polyporous shelf fungi*
jawendamowon nah	Happiness in the Half World; refers to death-dreamers (*Amanita* spp.)
wajash-auki-wabo	mushroom drink made from mushrooms growing from the earth
wajash-kwewabo	a mushroom drink made from mushrooms growing from a tree or the decayed part of a tree
wajashewabo	a decoction of several kinds of mushrooms
wakon	lichens growing from the cedars (edible)
wassik-ogidemagad	rotten wood shining with the mycelium of fungi; used as a light source
waw-but-to	pine wood luminescent with mycelium; used as a light source
wassikogidemagad	luminescence, 'touchwoods'; mycelial strands that produce light; known to have been used to light paths at night, and to ornament masks for night dances
wajashaukisisibakwad	the honey-top mushroom; one of the 'touchwoods'; mycelial strands that produce light; known to have been used to light paths at night, and to ornament masks for night dances
windigo-wahkon (windigo-wahkonug, pl.)	Bad-Spirit-Lichen; said to be a form of rock tripe desired by Indian women to thicken stews. ‘Bad Spirit' refers to having to climb so high up precipitous rocks to obtain it. It does not grow below 1,000’ elevation, so Michigan Ahnishinaubeg had to trade with Upper Peninsula groups or travel there to collect it.
sug-guh-tahgun	punk of any kind, punk in general, from the fungus-infected parts of any tree; used to create smoke for a variety of purposes
miskwi-miknik	Bleeding Turtle, a *wajuashauki* found under conifers. perfume; when wet it will excrete red droplets, mix these with equal parts of previously extracted oil from any sweet-smelling plant (violet, rose, wintergreen, cedar); droplets are short-lived and must be mixed soon after collection
zheebe-makisin-eiab	Under the bark rhizomous mycelia of fungi; literally, 'dead-man's-moccasin-strings'.
anung-wug	Star puff balls

Table. Additional mushroom descriptions without species identification (Keewaydinoquay 1978).

Scientific name *Sphagnum dusenii*

Common name sphagnum

Ojibway name asa'gûmîg (moss) (Smith 1932)

© R. S. Toupal

Traditional Uses:

Utility

Ojibwa

The moss is collected and dried to make mattresses (Smith 1932).

Used as an absorbent (Densmore 1928).

Scientific name *Cetraria islandica*

Common name reindeer moss (Keewaydinoquay 1978)

Ojibway name o-zhush-kwato-ahnsuk (Keewaydinoquay 1978)

Traditional Uses:

Food

Ojibway

A lichen that is eaten (Keewaydinoquay 1978).

Scientific name *Cladonia rangiferina*
Common name greygreen reindeer lichen
Ojibway name asa'gûmîg (moss) (Smith 1932)

Traditional Uses:

Food
- Ojibwa
  - Reindeer moss is eaten (Reagan 1928).

Ceremonial
- Ojibwa
  - The moss is boiled to make a wash for newborns (Smith 1932).

Scientific name *Sticta glomulifera*

Synonym *Lobaria amplissima (Zedda 2002)*

Common name spotted felt lichen

Ojibway name jîngwakons wakun (little white pine and row of eggs) or jîngwa'kwak (pine egg) (Smith 1932)

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Traditional Uses:

Food

Ojibway

The lichen growing on the bottom three feet of the White Pine tree is boiled until they coagulate and look like scrambled eggs; it is said to taste like eggs, *wawîn*, though they call it *wakûn*, fish eggs; this is an ancient and favorite food (Smith 1932).

Scientific name *Agaricus* spp.

Common name white agaric

Ojibway name waubjashaki (Keewaydinoquay 1978)

Agaricus augustus

Agaricus bisporus

Traditional Uses:

Medicine

Ojibway

Used in medicine, especially in the inhibition of sweat (Keewaydinoquay 1978).

Scientific name *Amanita bisporigera*

Common name death angel mushroom (Zedeño et al. 2000), white skulls (Keewaydinoquay 1978)

Ojibway name waubwijigan (Keewaydinoquay 1978)

Notes Known collectively as the death angel. A single specimen of any of these three mushrooms, *Amanita bisporigera*, *Amanita virosa*, and *Amanita verna*, can be deadly. All three species are pure white, with white gills that are free from the stalk. All have an annulus, or ring (which is the remnant of the partial veil, which protects the gills as they are developing) around the stalk. All three have a volva, or cup at the base, which is the remnant of the universal veil that surrounded the young fruiting body primordium. These three species are difficult to distinguish from one another without the use of a microscope. Macroscopically, *Amanita bisporigera* tends to be more slender and delicate than the other two species. *Amanita virosa* and *A. verna* are difficult to distinguish from one another, but a drop of KOH on the cap of *A. virosa* turns it bright yellow (see bottom image) (http://tomvolkfungi.net/).

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Traditional Uses:

Medicine

Ojibway

Can cause hallucinations or death (Keewaydinoquay 1978).

Ceremonial

Ojibwa

Can cause hallucinations or death (Keewaydinoquay 1978).

Scientific name *Amanita muscaria*

Common name fly agaric (Volk 1999 http://botit.botany.wisc.edu/toms_fungi/dec99.html), red top mushroom (Keewaydinoquay 1978; Zedeño et al. 2000)

Ojibway name oshtimisk (Red Top) wajashkwedo (Keewaydinoquay 1978)

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Traditional Uses:

Medicine

Ojibway

Can cause hallucinations or death (Keewaydinoquay 1978).

Ceremonial

Ojibwa

Can cause hallucinations or death (Keewaydinoquay 1978).

Scientific name	*Amanita phalloides*
Common name	vomit mushroom (Keewaydinoquay 1978)
Ojibway name	jishigagowan (Keewaydinoquay 1978)

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Traditional Uses:

Medicine

Ojibway

Can cause hallucinations or death (Keewaydinoquay 1978).

Ceremonial

Ojibwa

Can cause hallucinations or death (Keewaydinoquay 1978).

Scientific name *Amanita verna*

Common name white skulls (Keewaydinoquay 1978), vomit mushroom (Zedeño et al. 2000)

Ojibway name waubwijigan (Keewaydinoquay 1978)

Notes Known collectively as the death angel. A single specimen of any of these three mushrooms, *Amanita bisporigera*, *Amanita virosa*, and *Amanita verna*, can be deadly. All three species are pure white, with white gills that are free from the stalk. All have an annulus, or ring (which is the remnant of the partial veil, which protects the gills as they are developing) around the stalk. All three have a volva, or cup at the base, which is the remnant of the universal veil that surrounded the young fruiting body primordium. These three species are difficult to distinguish from one another without the use of a microscope. Macroscopically, *Amanita bisporigera* tends to be more slender and delicate than the other two species. *Amanita virosa* and *A. verna* are difficult to distinguish from one another, but a drop of KOH on the cap of *A. virosa* turns it bright yellow (see bottom image) (http://tomvolkfungi.net/).

Traditional Uses:

Medicine

Ojibway

Can cause hallucinations or death (Keewaydinoquay 1978).

Ceremonial

Ojibwa

Can cause hallucinations or death (Keewaydinoquay 1978).

Scientific name *Amanita virosa*

Common name white skulls (Keewaydinoquay 1978; Zedeño et al. 2000))

Ojibway name waubwijigan (Keewaydinoquay 1978)

Notes Known collectively as the death angel. A single specimen of any of these three mushrooms, *Amanita bisporigera*, *Amanita virosa*, and *Amanita verna*, can be deadly. All three species are pure white, with white gills that are free from the stalk. All have an annulus, or ring (which is the remnant of the partial veil, which protects the gills as they are developing) around the stalk. All three have a volva, or cup at the base, which is the remnant of the universal veil that surrounded the young fruiting body primordium. These three species are difficult to distinguish from one another without the use of a microscope. Macroscopically, *Amanita bisporigera* tends to be more slender and delicate than the other two species. *Amanita virosa* and *A. verna* are difficult to distinguish from one another, but a drop of KOH on the cap of *A. virosa* turns it bright yellow (see bottom image) (http://tomvolkfungi.net/).

Traditional Uses:

Medicine

Ojibway

Can cause hallucinations or death (Keewaydinoquay 1978).

Ceremonial

Ojibwa

Can cause hallucinations or death (Keewaydinoquay 1978).

Scientific name *Armillarielle mellea*

Common name honey mushroom (Pratt), Dead man's mocassin thong (a name applied to the mycelium consolidation of *Armillarielle mellea*, which climbs the host-tree under the bark) (Keewaydinoquay 1978)

Ojibway name jibi-makisineiab (Keewaydinoquay 1978)

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Traditional Uses:

Food

Ojibway

(Keewaydinoquay 1978)

Scientific name *Calvatia craniiformis*

Common name giant puffball (Zedeño et al. 2000)

Ojibway name oskwe'tûk (Smith 1932), ozush-kwado-wuk (Keewaydinoquay 1978)

© Sindhu Ramchandran

Traditional Uses:

Medicine

Ojibway

Used to stop bleeding (Keewaydinoquay 1978).

“This is kept on hand in the mature stage. The inner part has an organized mass of threads and does not break down entirely into spores as do the smaller puffballs. The substance is snuffed up the nose to stop nose bleed” (Smith 1932:370).

The inner part is snuffed to treat nosebleeds (Densmore 1928).

Scientific name *Coprinus atramentarius*

Common name change-over mushroom (Keewaydinoquay 1978)

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Traditional Uses:

Food

Ojibway

Eaten but when consumed with alcoholic beverage, it can cause hallucinations (Keewaydinoquay 1978).

Scientific name *Daedalea quercina*

Common name oak fungus (Keewaydinoquay 1978)

Ojibway name mishimij binakwan (if from the white oak and used as a comb for human hair) (Keewaydinoquay 1978)

mitigomij binakwan (if from an oak tree other than the white oak and the 'comb' is used for human hair) (Keewaydinoquay 1978)

mishimij nasikweigan (if from the white oak and used for a curry comb) (Keewaydinoquay 1978)

mitigomij nasikweigan (if from an oak tree (or stump) other than the white oak and it is used as a curry comb) (Keewaydinoquay 1978)

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Traditional Uses:

Medicine

Ojibway

Can be used as an anaesthesia (Keewaydinoquay 1978).

Utility

Ojibwa

Used as a comb for human hair. Those growing up high on a white oak are the best kind. It can be used as a fire carrier but is preferred as a comb (Keewaydinoquay 1978)

Trade

Ojibwa

It is a good trade item (Keewaydinoquay 1978).

Scientific name *Fomes fomentarius*

Common name the tinder polypore, touchwood, punk, hoof fungus, amadou, or Amadouvier (Volk 2001 http://botit.botany.wisc.edu/toms_fungi/dec2001.html)

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Traditional Uses:

Medicine

Ojibway

Used in medicine, especially in the inhibition of sweat (*Fomes* spp.). Used as a coagulant and stypic. It makes *wado*, coagulated blood, and *gassiiakideg*, a cauterizer. It can be used as an anaesthesia (Keewaydinoquay 1978).

Ceremonial

Ojibwa

Powdered, it can be added to kinnikinnick to enhance and prolong smoking (Keewaydinoquay 1978).

Utility

Ojibwa

It is a preferred fire carrier (Keewaydinoquay 1978).

Scientific name *Fomes igniarius*

Synonym *Phellinus igniarius* (http://mushroomtable.com/)

© http://mushroomtable.com/

Traditional Uses:

Medicine

Ojibway

It can be used as an anaesthesia (Keewaydinoquay 1978)

Ceremonial

Ojibwa

Powdered, it can be added to kinnikinnick to enhance and prolong smoking (Keewaydinoquay 1978).

Utility

Ojibwa

A preferred fire carrier (Keewaydinoquay 1978).

Scientific name *Fomes officinales*

Synonym *Fomitopsis officinalis* (Canadian Forest Service http://www.pfc.cfs.nrcan.gc.ca/)

Ojibway name jabosigan (jibijabosiganu, plural) (Keewaydinoquay 1978)

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Traditional Uses:

Medicine

Ojibway

Used as a purgative. Use only the white inside, which is sliced into thin pieces, about the size of a little finger, and dried thoroughly; it will be spongy, fibrous, and powderable (Keewaydinoquay 1978).

Scientific name *Ganoderma lucidum*

Common name mushroom lucidum (Zedeño et al. 2000)

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Traditional Uses:

Utility

Ojibwa

A preferred fire carrier (Keewaydinoquay 1978).

Scientific name *Ganoderma tsuga*

Common name mushroom tsuga (Zedeño et al. 2000)

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Traditional Uses:

Utility

Ojibwa

A preferred fire carrier (Keewaydinoquay 1978).

Scientific name *Lactarius deliciosus*

Common name the Bloody Flux Mushroom (the Red-water mushroom growing from the ground) (Keewaydinoquay 1978), red water mushroom (Zedeño et al. 2000)

Ojibway name miskwabo wajashauki (Keewaydinoquay 1978)

L. indigo (left) and *L. deliciosus* (right)
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Traditional Uses:

Mythic

Ojibway

One story tells of how a chief, who wanted to increase his political influence, had his medicine man direct its use in a meal for a nearby tribe. He then claimed to be able to cure the affliction and would do so if they joined with him. He gave them bowls of corn soup, and the next day they ate nothing prepared with the mushroom and their urine cleared (Keewaydinoquay 1978).

Food

Ojibway

It can be consumed safely but it will turn the urine red temporarily (Keewaydinoquay 1978).

Scientific name Lycoperdaceae

Common name puffballs

Ojibway name ozush-kwado-wuk (Keewaydinoquay 1978)

Notes Most of the dried puffballs can be used but two species are preferred *Lycoperdon caelatum* and *Calvatia caelatum* (Keewaydinoquay 1978).

Traditional Uses:

Medicine

Ojibway

Used as a haemostat. The spores are used to stop bleeding (Keewaydinoquay 1978).

Scientific name *Lycoperdon caelatum*

Synonym *Lycoperdon utriforme* (www.indexfungorum.org/ & www.rbg.vic.gov.au/)

Calvatia caelata, Calvatia utriformis, Handkea utriformis, Lycoperdon caelatum (http://www.rbg.vic.gov.au/)

Common name coagulant mushroom (Zedeño et al. 2000)

Ojibway name

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Traditional Uses:

Medicine

Ojibway

Preferred for use as a haemostat (Keewaydinoquay 1978).

Scientific name *Lycoperdon gigantea*

Common name giant puffball

Ojibway name o-zhush-kwatowuk (Keewaydinoquay 1978)

© http://mushroomtable.com/

Traditional Uses:

Medicine

Ojibway

Preferred for use as a haemostat. *Lycoperdon giganteum* was noted as late as 1910 in Whitla's Materia Medica and Therapeutics as a surgical dressing and powerful haemostat (Keewaydinoquay 1978).

Food

Ojibway

(Keewaydinoquay 1978)

Scientific name *Marasmius scorodonius*

Common name little garlic mushroom (Keewaydinoquay 1978; Zedeño et al. 2000))

Marasmius spp.

Traditional Uses:

Food
- Ojibway
  - (Keewaydinoquay 1978

Scientific name *Pleurotus ostreatus*

Common name edible pleurotus mushroom (Zedeño et al. 2000)

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Traditional Uses:

Food

Ojibway

Often part of a mushroom pie (Keewaydinoquay 1978).

Scientific name *Polyporus betulina*

Common name birch fungus (Keewaydinoquay 1978; Zedeño et al. 2000))

© William Needham,
http://www.sierrapotomac.org/W_Needham/Birch_Polypore_01_18_04.htm

Traditional Uses:

Medicine

Ojibway

It can be used as an anaesthesia (Keewaydinoquay 1978).

Scientific name	*Polyporus serpula*
Synonym	*Antrodiella serpula (http://grzyby.strefa.pl/Antrodiella_serpula.html)*
Common name	edible mushroom (Zedeño et al. 2000)
Ojibway name	wa-ko-nug (Keewaydinoquay 1978)

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Traditional Uses:

Food

Ojibway

(Keewaydinoquay 1978; Zedeño et al. 2000))

Scientific name	*Polyporus sulphureus*
Common name	chicken-of-the-woods (Zedeño et al. 2000)
Ojibway name	panadjamittigok (Keewaydinoquay 1978)

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Traditional Uses:

Food

Ojibway

(Keewaydinoquay 1978)

Scientific name *Trametes betulina*

Synonym *Lenzites betulina (http://www.grzyby.pl/gatunki/Lenzites_betulina.htm)*

Common name gilled polypore (mushroomexpert.com)

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Traditional Uses:

Utility

Ojibwa

A preferred fire carrier (Keewaydinoquay 1978).

Scientific name *Tricholoma saevum*

Synonym *Lepista saeva (www.spnh.scnhs.org.uk/lpfuli.html)*

Common name edible trichloma mushroom (Zedeño et al. 2000)

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Traditional Uses:

Food

Ojibway

Often part of a mushroom pie (Keewaydinoquay 1978).
(Zedeño et al. 2000)

Scientific name *Ustilago maydis*

Common name Mondahmin smut (Keewaydinoquay 1978), corn fungus (Zedeño et al. 2000)

Ojibway name Mondahmin (Keewaydinoquay 1978)

Notes Mondahmin is multi-colored Indian corn; the smut is blackish-brown globs that are parasitic to the corn. The nodules are gathered in the summer as they appear on the corn and stored in their natural membranes in a thoroughly dry place. They are replenished annually because the medicine loses its power if stored longer than a year (Keewaydinoquay 1978).

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Traditional Uses:

Medicine

Ojibway

It is used as a birthing aid. The juice is drunk to increase the force of uterine contractions in a difficult childbirth. It is also good for treating nerve shock, but it is a strong anti-coagulant with no known antidote so care must be taken when treating for nerve shock (Keewaydinoquay 1978).

Scientific name *Xylaria*

Common name dead men's digits (any of the *Xylaria* spp.) (Keewaydinoquay 1978)

Ojibway name jibi-e-push-kwa-e-gun (Keewaydinoquay 1978)

Xylaria polymorpha

Traditional Uses:

Unspecified

Ojibway

(Keewaydinoquay 1978)

Chapter Five
Fire: Unnatural Disturbance, Ecological Process, or Management Tool

The term ethnobotany generally brings to mind ideas of pharmaceutical uses, but it is much more complex. Reflecting human-plant relationships, ethnobotany encompasses a range of uses that, depending on the culture, require spiritual and/or physical preparations that begin long before the plant or plant part is put to use. Among the earliest preparations are practices that we consider management alternatives today, such as fire. Under traditional circumstances, Indian burning practices addressed many needs, some of which parallel contemporary purposes. In this chapter, fire behavior and effects, Indian burning, and management potential are discussed.

Fire Behavior and Effects

Fire, the burning of plant carbon, is the third most ubiquitous terrestrial disturbance after urban development and agriculture. It can have profound effects on vegetation patterns; woodlands replace grasslands, forests replace shrublands, and broad-leaved trees invade conifers. The severe wildfires of recent years have fueled fears but also contributed to a growing recognition that these fires are the result of decades of fire suppression (Gresswell 1999). Even in scientific circles, views are changing, and fire is seen by some as a biological rather than a physical process. As a physical process, fire is part of disturbance ecology. As a biological process, it parallels herbivory (Bond and van Wilgen 1996).[1]

Fire and herbivory cause similar and different plant responses. Both can influence plant growth, survival and fecundity, and impact the dynamics of seeds and seedlings (Crawley 1983). Fire impacts today, however, often are greater. Fire is one of the few perturbations that, alone or in combination with other forces, regularly kills mature plants and influences plant community structure. While herbivory can suppress plant reproduction, fire can suppress or enhance it (Bond and van Wilgen 1996).

Plant responses to fire depend on several factors. External factors affecting plant response include fire interval or frequency, the surrounding plant community and litter accumulation, fire intensity, season of burn, size of burn, and post-fire climatic conditions. These factors are reflected in three theories of population change: interval-dependent, density-dependent, and event-dependent causes.

[1] Begon et al. (1990) define disturbance as "any relatively discrete event in time that removes organisms and opens up space which can be colonized by individuals of the same or different species." White and Pickett (1985:7) define natural disturbance as "any relatively discrete event in time that disrupts ecosystem, community, or population structure and changes resources, substrate availability, or the physical environment." Sugihara, van Wagtendonk, and Fites-Kaufman (2006:62), however, view fire as an ecological process. "In its natural role, fire is not a disturbance that impacts ecosystems; rather it is an ecological process that is as much a part of the environment as precipitation, wind, flooding, soil development, erosion, predation, herbivory, carbon and nutrient cycling, and energy flow. Fire resets vegetation trajectories, sets up and maintains a dynamic mosaic of different vegetation structures and compositions, and reduces fuel accumulations. Humans have often disrupted these processes, and the result can be that fire behavior and effects are outside of their range of natural variation. At that point, fire is considered an exogenous disturbance factor."

The interval-dependent theory gives central importance to the length of fire interval. Gresswell (1999) attributes fire regimes to the interaction of physical, chemical, and biological elements of a watershed with long-term climatic conditions. The postfire interaction of vegetation mosaic and local weather determines the path of change in the plant communities (Bond and van Wilgen 1996).

The density-dependent theory focuses on the feedback between biomass production and litter accumulation, and the influence of the surrounding community on species survival or mortality. Studies of specific species in burned areas have shown that as seedlings develop and grow, a self-thinning kicks in at some point and plant growth shifts from number of individuals to size (Kenkel 1988; Kenkel et al. 1989; Pacala and Silander 1985; Schlesinger and Gill 1978; Weiner 1990). If this principal of density-dependence is expressed in fire regimes, then plant populations should reach a point conducive to burning and regulating the populations (Bond and van Wilgen 1996).

The event-dependent theory takes into consideration the combined impacts of fire intensity, season and size of burn, and post-fire climate on survival and recruitment (Bond and van Wilgen 1996; Walters and Yawney 1990). Event-dependent effects are important in regulating plant numbers and often occur independent of frequency or interval. Frequency may determine population changes at short and long intervals, but intensity and season (event) are more important at intermediate intervals (Bond and van Wilgen 1996).

Internal factors affecting plant response include plant persistence and recruitment. Persistence is characterized generally by whether the plant is a sprouter and nonsprouter. Sprouters regenerate from buds that are protected by bark or soil. The intensity of the fire combined with the thickness of protection determines whether the plant survives through sprouting. Recruitment is characterized generally by whether the plant is dependent on fire for growth and expansion. Fire-recruiters are obligate dependent and can decline to extinction in the absence of fire. Plants that are stimulated by fire may exhibit enhanced flowering, seed germination, and/or seedling recruitment. Some plants even germinate in response to smoke. Non-fire-recruiters are not dependent on fire for survival (Bond and van Wilgen 1996).

One way of categorizing fire effects is by species characteristics. The life cycle of annuals is not linked to fire. Fire ephemerals are also short-lived but depend on fire for regeneration. These species appear following a burn and are usually gone before the next burn. Non-sprouting species rely on seed storage and dispersal strategies to survive fire while sprouting species regenerate from buds above and/or below ground.

Fire controls woody species in prairie settings, and influences the composition and production of the plant community. Plants survive fire in various ways. Some protect themselves with buried growing points or thick bark. In these situations, soil and bark act as insulation. Growing points can be protected by succulent foliage as with the longleaf pine (*Pinus palustris*), whose buds are within thick clusters of needles. Some poplar species (*Populus* spp.) have buds within their main stem or roots.

Some plants do not release their seeds until a fire occurs. Several pine species are called serotinous because their cones open only in response to the heat from a fire. Some species, such as lodgepole pine (*Pinus contorta*), exhibit serotinous behavior in fire prone areas and regular seed dispersal in areas of infrequent fire.

Fire effects and plant responses are driven by several factors, but from a management standpoint, specific results tend to be achieved by controlling fire intensity and season of burn. Low- to moderate-intensity fires are less damaging and perhaps more stimulating that high-intensity fires. Seasonal impacts can be generalized for habitat or plant types, but vary by species. In tallgrass prairie, late spring burning tends to reduce forbs while winter burning tends to increase forbs (McMurphy and Anderson 1965; Towne and Owensby 1984). Two grass species found in tallgrass prairies, big bluestem (*Andropogon gerardii*) and little bluestem (*Andropogon scoparius*), however, respond differently to late spring burns. Big bluestem has been shown to double its biomass while little bluestem does not increase much. Early spring burns bring about the opposite results with little bluestem becoming much more productive in response than big bluestem (Towne and Owensby 1984). The question of habitat or species oriented fires becomes part of the equation when considering fire as a management tool.

Another factor influencing fire effects and plant responses, is frequency. In an environment such as the Indiana Dunes National Lakeshore area, fire frequency is quite variable. As bare dunes become vegetated, plant litter accumulates and fire becomes more frequent. As vegetation increases, so do humidity levels, which lowers flammability and increases decomposition of plant litter. Where plant species work in concert with fire frequency, fire becomes part of the successional scenario (Henderson 1987; Poulson 1994). Pine species at Indiana Dunes (*Pinus strobus* and *P. banksiana*) are adapted to reproduce in the ash soil produced by intense fires occurring every 30 to 100 years. The prairie habitats are well-adapted to fires occurring every 1 to 10 years. *Quercus velutina* forests re-sprout following fire but will not grow to maturity unless fires occur less than every 15 years[2]. Later successional species, such as *Acer* spp. and *Fagus* spp., have few adaptations for surviving fire. These varying fire intervals reflect the mosaic of wet areas, vegetated organic soils, and lightly vegetated dunes (Cole and Taylor 1995).

Fire can be considered a disturbance, a physical or biological process, or a management tool. In all cases, however, it is a part of a complex relationship of physical, biological, and chemical, factors. As such, it destroys and regenerates plant and animal life simultaneously. Given the complexity, one has to wonder about Indian burning practices, which occurred long before fire-control or fire-suppression technologies, as we think of them today, were known. If fires were set accidentally or carelessly, one would expect some catastrophies that would discourage fire setting. The historic record shows, however, that Indian burning occurred on a large scale once or twice a year. Indian burning shaped even Indiana Dunes National Lakeshore. “The mesophytic oak forest margins in the Great Lakes region that Cowles included in his designation of ‘mature, climax’ forest were in fact an expanded artifact of former Ojibwa burning practices” (Stewart 2002:38). Indian burning

[2] K. Cole, unpublished data

practices were based on observations and experimentation. What was this "science" behind their burning practices? A review of Indian fire provides examples that reflect the preceding generalized western science view of fire, but also raises questions.

Indian Burning

Although it is now widely accepted that frequent low-intensity fires once structured many habitats, there is limited recognition that most of those fires were set purposefully by Indian people[3]. Man's use of fire has a 400,000 year history in Europe (McCrone 2000) that includes archaeological evidence of hunting and driving game (Boyd 1999). Traditional burning practices in this country, consequently, are as ancient as human occupation of North American landscapes (Anderson 2006).

Data from western forests, including aspen ecology, reveal the widespread use of fire by Indian people. While fire history studies show that aspen historically burned at frequent intervals, they do not address the cause. Aspen burns readily burn only when leafless and with a dry understory, conditions that occur only in early spring before leaf-out and understory regrowth, or in late fall after leaf-drop and killing frosts. These periods coincide with few lightning strikes and, in the Rocky Mountains, virtually no lightning-started fires. This evidence suggests that the frequent aspen burns must have been started by Indian people, who had various needs for modifying plant communities (Kay 2000).

Eastern deciduous forests exhibit similar characteristics in that they will burn readily only when leafless, again, during a time of few lightning strikes (Kay 2000). Several lines of evidence support a history of aboriginal burning in eastern deciduous forests (Bonnicksen 2000: Hamel and Buckner 1998), including among others, the lack of lightning fire, the original structure of the forests, and species composition changes that have occurred since European settlement (Kay 2000). As Lewis (1985:75) pointed out, "fires set by hunter-gatherers differ from [lightning] fires in terms of seasonality, frequency, intensity, and ignition patterns."

Site-specific archaeological, ethnographic and historical data for the Upper Great Lakes, including Lake Michigan, further support the argument that Indian people were a primary source of ignition of surface fires (Anderton 1995; Benchley et al. 1988; Cleland 1992; Clark 1993; Conway 1979; Densmore 1929; Dobson 1978; Mason 1981; McKenney 1959; Quimby 1960; Tanner 1987; Trygg 1964; Warren 1984). Decreased burning through the 18th and 19th centuries reflected gradual changes in Indian land use practices (Cleland 1992), and the establishment of institutional fire suppression in the 1930s (Mitchell and Robson 1950; Pyne 1982) initiated nationwide ecosystem changes. Historic ecosystems and signs of traditional practices were obscured or erased from most of the country's landscapes.

Much of the country east of the Mississippi was subjected to the burning of relatively level areas between wet areas and steep, rocky hillsides (Alvord and Bidgood 1912; Beverly 1722; Birket-Smith 1918; Brickell 1737; Day 1953; Flannery 1939; Lawson 1718; Michel

[3] See Williams 2003 for Indian burning references by region - general North America (NA), boreal NA, eastern NA & Great Lakes, Rockies & the Southwest, California, Pacific Northwest, Central & South America.

1701-1702; Morgan 1851; Morton 1632; Smith 1624; Speck 1909; Spelman 1609:cvii; Strachey 1612; Swanton 1928; Van der Donck 1656). Early descriptions of eastern states are quite similar and indicate widespread Indian burning. As Captain John Smith (1624) observed, the openness of the woods in Virginia and New England was so great that one could "gallop a horse" in any direction without hindrance. Bullock (1649) recorded as well that where the Virginia woods were open, strawberries and grapes grew in abundance. While these statements were concerned with the valleys and coastal plains, early excursions into the Alleghenies resulted in similar accounts (Lederer 1670; Maxwell 1910). Beverley (1722) noted that regrowth of small trees was so rapid as to produce substantial firewood in seven years, and good board timber in 15 to 20 years. The meadows of Kentucky were maintained with annual fires (Michaux 1805), and in New England, oak and yellow pine habitats were burned annually, but the beech and maple habitats not as they were too wet to burn (Dwight 1822).

Physical descriptions by Imlay (1793), Atwater (1818), and Wells (1819), and declarations by Wells (1819), Bourne (1819), and Marsh (1867) support the conclusion that extensive prairies east of the Mississippi were the result of Indian fires. Imlay (1793) documented extensive plains similar in size to the Shenandoah Valley. Similar prairies were found in Ohio (Atwater 1818; Wells 1819), the Allegheny mountains, Indiana, Illinois, Missouri, and Mississippi (Wells 1819). Bruce's (1895:87) description of early Virginia reflects the regular burning practices of the native people. "Freedom from undergrowth was one of the most notable features of the original woods of Virginia." The geographical context of the Indian burning references in this chapter reveal extensive burning practices (see Williams 2003 for Indian burning references across the country) (Figure 8).

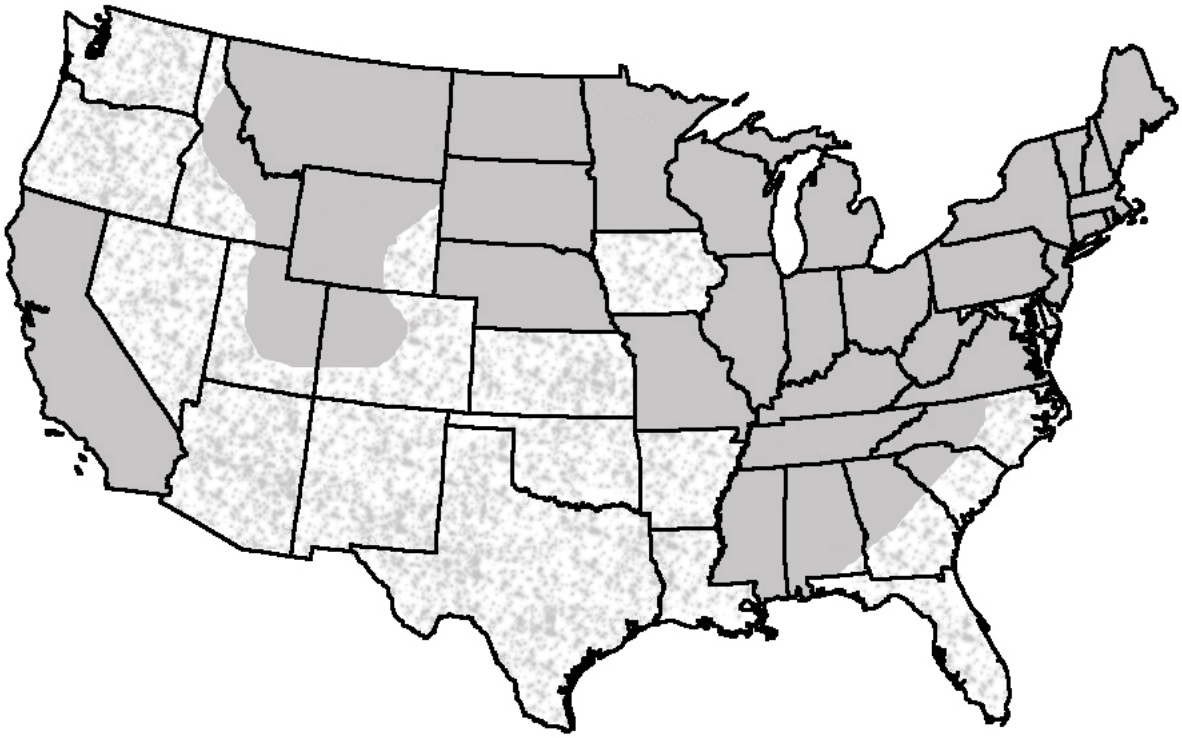

Figure 8. Indian burning in the U. S. from initial occupation through the 19th century. Shaded areas are based on references in this chapter. Speckled areas are based on Williams (2003).

The reasons for burning were many. Lewis (1973) documented the native peoples of California as having 70 reasons for burning. In northern Canada, where the vegetation is less diverse, Native Americans set fires for at least 17 different reasons (Lewis and Ferguson 1988). The most common reasons for burning were related to food production, both animal and plant. Travel, enemy relations, and pest control were other common reasons for burning:

- To drive game (Beverly 1722; Birket-Smith 1918; Bourne 1819; Brickell 1737; Clark and Royall 1996; Day 1953; Finley 1857; Flannery 1939; Flint 1822; Hennepin 1698; Hussey 1884; Kay 2000; Lawson 1718; Lyell 1849; McClure 1899; Mooney 1900; Morgan 1851; Smith 1624; Speck 1909; Spelman 1609; Strachey 1612; Swanton 1928; Van der Donck 1656; Wells 1819)
- To improve pasturage for game (Alvord and Bidgood 1912 (17th century documentation); Bourne 1819; Clark and Royall 1996; Dwight 1821; Flint 1822; Hussey 1884; Kay 2000; Lyell 1849; McClure 1899; Michel 1701-1702; Mooney 1900; Wells 1819)
- To clear brush so game could be spotted more easily (Anderson 2005; Clark and Royall 1996; Stewart 2002; Van der Donck 1656)
- To increase wild seed production (Stewart 2002)
- To increase yield of berries and other wild vegetable food (Hagen and Rhodes 1976; Heinselman 1973; Stewart 2002)
- To clear brush to improve access to seeds, nuts, berries (Anderson 2005; Fowke 1894; Kay 2000; Stewart 2002; Willoughby 1935)
- To clear aged forest to allow for early succession growth (Stewart 2002; Willoughby 1935)
- To clear land for planting crops (Kay 2000; Stewart 2002)
- To improve spring growth (Van der Donck 1656)
- To kill trees for firewood (Kay 2000)
- To keep woods open to facilitate travel (Anderson 2005; Bourne 1819; Dwight 1821; Flint 1822; Hussey 1884; Kay 2000; Lyell 1849; McClure 1899; Mooney 1900; Morton 1632; Wells 1819; Willoughby 1935)
- To rid the land of places an enemy could hide (Kay 2000)
- To reduce wildfire hazard (Anderson 2005)
- As an instrument of war (Kay 2000)
- To discourage insect pests (Anderson 2005)
- To destroy poisonous snakes and other vermin (Kay 2000)

For driving game, Indian people encircled an area and, fire sticks in hand, proceeded to drive the animals toward the center by burning the vegetation. These burns typically were done in the fall when the skins and furs were of good quality or “in season” (Brickell 1737). It would also be when the meat was at its best with the animals having come off the growing season well-prepared for winter. Hennepin (1698), a French missionary-explorer and companion of LaSalle, described Indian burning to drive game near the Indiana-Michigan border. It involved the Miami people and buffalo. Where the animals were found on vast plains of “herbs,” the Miami would encircle them, lighting fires all around them and leaving

only a few places unburned. Here, they positioned themselves to ambush animals trying to escape. Lawson (1718: 206-207) provided yet another strategy in the mountains of North Carolina:

> When these Savages go a hunting, they commonly go out in great Numbers, and oftentimes a great many Days Journey from home, beginning at the coming in of the Winter; that is, when the Leaves are fallen from the Trees, and are become dry. 'Tis then they burn the Woods, by setting Fire to the Leaves, and wither'd Bent and Grass, which they do with a Match made of the black Moss that hangs on the Trees in Carolina, and is sometimes above six Foot long. This, when dead, becomes black, (tho' of an Ash-Colour before) and will then hold Fire as well as the best Match we have in Europe. In Places, where this Moss is not found, (as towards the Mountains) they make Lintels of the Bark of Cypress beaten, which serve as well. Thus they go and fire the Woods for many Miles, and drive the Deer and other Game into small Necks of Land and Isthmus's, where they kill and destroy what they please.

In New England, Indian people had burned oak, chestnut, and pine forests to clear passages and encourage plant growth for deer for at least one thousand years, and were still doing so in the late 18th and early 19th centuries. The beech and maple forests seem to have been too wet to burn (Dwight 1821). Finley (1857) recorded the annual "ring hunt," which occurred between the Portage and Maumee Rivers, and involved a 15-20 mile circle of fire used to drive the game into a "pound." In California, a circle fire was used to drive game animals (Anderson 2005). Use of the circle fire began with burning a circle or perimeter to contain the driving fire, and then, base on wind direction, a driving fire would be set and allowed to run until it burned itself out, still within the initial perimeter burn.

In keeping the eastern woodlands open for travel, Indian people would burn twice a year, in the spring and the fall (Stewart 2002). Van der Donck (1656) noted that in New York, spring and fall "bush burning" did not occur in the same areas; those areas not burned in the fall would be burned in the spring. Wells (1819) documented burning in the region between the Alleghenies and the Mississippi to aid hunting and travel, and for other purposes, while Bourne (1819) documented the same near Chillicothe, Ohio: to aid travel and hunting, and to insure good pasture the following summer. Shaler (1891) documented annual spring burns in the "relative humid districts of Michigan." The prairie grasses were burned in the spring and the fire ceased only when it reached areas of sufficient moisture to resist burning. Regrowth in Massachusetts was quite rapid and to skip a burn would greatly hinder passage and hunting (Wood 1639).

Indian fires in jack pine areas were practiced as recently as the late 19th century to stimulate blueberry production in the Boundary Waters area (Heinselman 1973). Fowke (1894) documented annual fall burns in the Virginia-West Virginia area to keep the forest in check. Willoughby (1935) documented spring and fall burns by the tribes in general, especially those in southern New England, to keep fields and woodlands open. Indian burning for the previously stated purposes also occurred in Ohio and Kentucky (Flint 1822; Hussey 1884; Lyell 1849; McClure 1899; Mooney 1900). Mooney's documentation included

oral tradition that indicated burning was an ancient custom. In the Great Lakes and Midwest region, the Illinois, Miamis, and Menominis, among other tribes, burned to alter oak habitat (Stewart 2002). The Dakota and Ojibwa also used fire, primarily for hunting rather than agriculture (Clark and Royall 1996).

Seeing the results of Indian burning, early settlers adopted their practices and maintained the open ecosystems. Not everyone appreciated the fires, however; Pennsylvania, New England, New York, and New Jersey tried legislatively to stop the settlers from continuing the burns because the fires would continue until rain or other moisture put them out (Stewart 2002).

Management Potential

Indian fires were scheduled to address specific cultural purposes. In California, hazelnut was burned every two years to provide basketry materials. The understory of tan oaks (*Lithocarpus densiflorus*) was burned every three years to keep the litter accumulation down, while the redwood understory was burned every three to five years. Areas managed for elk habitat were burned every four or five years to improve forage (Kroeber 1939, unpublished field notes). Contemporary accounts from California identify fall as the time to burn food resources. Among the species identified are some with counterparts at Indiana Dunes National Lakeshore including strawberry (*Fragaria* spp.), gooseberry (*Ribes* spp.), blackberry (*Rubus* spp.), elderberry (*Sambucus* spp.), wild grape (*Vitis* spp.), wild onion (*Allium* spp.), clover (*Trifolium* spp.), pea (*Lathyrus* spp.), and oak (*Quercus* spp.). The burns were done between harvests and the onset of winter storms. In other parts of the country, spring and fall burns were timed to do the least harm and greatest benefit to food, medicine, and utility plants, including food plants for wildlife that would be hunted later (Bourne 1819; Shaler 1891; Stewart 2002; Van der Donck 1656; Wells 1819).

Some early European accounts of Indian burning described the starting of fires as haphazard or accidental (Beverley 1722; Dwight 1822; Higgins 1986; Lederer 1670; Maxwell 1910; Michaux 1805). No doubt there were accidental burns and wildfires, however, the use of fire to care for habitats was purposeful, and required preparation and tending. Lawson (1718) noted “matches” of moss and lintels of bark that would hold fire for many miles of ignition. Anderson (2005) describes Californian tribes as starting a flame by drilling or percussion to apply to torches consisting of tightly packed material that would hold fire for a long time. As the torch was applied, other tribal members would use a fan of feathers to control the intensity or direction of the fire.

A contemporary traditional burn at Yosemite National Park involved a preliminary ceremony and traditional ignition methods by which several people lit and drove the starter fires toward each other. The result was a tightly contained burn that created an updraft that carried the smoke away from those participating in the burn. Fire and resource managers at the park, and members of the Southern Sierra Miwuk Nation and the Tuolumne Band of Me-Wuk worked together to create a burn that would provide ecological (control of introduced species) and cultural resource benefits (reestablishment of traditional use species) (Johnson 2007).

Another contemporary example in a suburban setting emphasizes the benefit of restoring native plants to preserve culture (Shenfeld 2008). A botanist with the Mdweakanton Sioux Community near Minneapolis burned an area in Shakopee to reduce invasive species such as Canada thistle (*Cirsium arvense*), foxtail (*Alopecurus pratensis* or *A. geniculatus*), and reed canary grass (*Phalaris arundinacea*), and encourage native species such as big bluestem (*Andropogon gerardii*), prairie blazing star (*Liatris pycnostachya*), and purple coneflower (*Echinacea angustifolia* or *E. pallida*).

Traditional Indian burns have the potential to achieve the greatest number of benefits, primarily as a result of partnerships with fire and resource managers. Ecologically, dead plant material (fuel hazard) is reduced, nutrients are recycled, new growth is promoted, plant competition is reduced, and specific plant communities can be maintained. Cultural benefits can include increased production of food plants (tubers, greens, fruits, seeds, mushrooms), improved wildlife forage, and insect and disease control of food and utility plants (Anderson 2005).

The reintroduction of fire, whether as prescribed or traditional burns, can achieve these and other benefits but as a management tool, has challenging constraints. The common management objectives today parallel traditional objectives (Bond and van Wilgen 1996):

- improving forage for livestock production
- forestry operations including site preparation, fuel reduction, composition manipulation
- habitat improvement for wildlife and biodiversity
- control of undesirable plants
- to influence the hydrologic cycle such as to enhance water yield from catchments or to change plant community composition to erosion-controlling species
- to reduce wildfire hazard

The constraints to using fire as a management tool – ecological, safety, temporal, legal, global concerns (Bond and van Wilgen 1996) – can seem overwhelming but the Yosemite and Shakopee examples show fire use is not beyond reach. Where fire is not possible, other traditional habitat-altering techniques may be employed included selective harvesting, tilling, burning, pruning, sowing, weeding, and transplanting. While these practices can contribute to healthier plant communities and reduce fuel loads, in the past, Indian people preferred harvesting practices that left most of the plants in place, and later became fuel to carry their fires (Anderson 2005).

In western thinking, the traditional activities are management practices, however, that term implies control, which is not part of traditional beliefs. California tribes, for example, viewed their actions as caring for the land by "establishing a deeply experiential and reciprocal relationship" with the plants and animals (Anderson 2005:153). The Potawatomi people view habitats as "villages of plants," places where they are visitors, where they must be respectful to the neighbors and listen to what they have to say (Toupal 2006). The Ojibwa

people, by extension of their close relationships with the Potawatomi people, would have a similar perspective.

The America first seen by Europeans was one crafted largely by native people, not an untouched wilderness (Bonnicksen 2000, Kay 1998). If that condition is the elusive "pristine" sought by so many today, traditional practices, particularly burning, may be the only way to regain and preserve original vegetated conditions. Reinstituting historical burning regimes would help resource managers and agencies to achieve management goals while building government-to-government relations through collaborations (Kay 2000). The hands-off or "natural-regulation" approach pursued for so long cannot duplicate the ecological conditions first seen by Europeans; instead such an approach contributes to highly unnatural conditions that never existed in eastern or western forests (Bonnicksen 2000, Hamel and Buckner 1998). Without incorporating burns, particularly traditional burns, with modern management practices, today's ecosystems can be expected to continue to decline in biological diversity and ecological integrity (Kay 1998).

Chapter Six
Summary and Future Research

The Great Lakes region is home to many traditional use plant species. Its history includes an abundance of resources utilized by various ethnic groups and tribes well into the 19th century. Traditional use of resources declined as non-Indian settlers acquired land, but perhaps more from species displacement and decline than from human displacement. While non-Indian perspectives tend to interpret ethnobotany as medicinal uses, traditional perspectives define ethnobotany in a much more complex and holistic view. Traditional plant use reflects human-plant relationships that include care-giving, and require spiritual and/or physical preparations that begin long before the plant or plant part is put to use. Some of the earliest preparations include activities that we consider management alternatives today, activities that we apply in different ways but often for similar purposes.

The Ojibway people retain much of their traditional plant knowledge (Herron 2002; Saginaw 2006 Personal Communication; Zedeño et al. 2000, 2001). This study provides traditional use information specific to the Ojibway people for 33.3% of the 1,462 species in the park. It includes 318 species not addressed by the Miami and Potawatomi representatives. The total traditional use species documented by both reports is 983 (67.2%) of the park's 1,462 species.

While the Ojibway people's role as a member of the Three Fires is primarily medicinal (Toupal, Banks, and Carroll 2006), they also retain traditional knowledge and use of plants for food, ceremonial, utility, and other purposes. As a Three Fires tribe, do the Ojibway people view plant communities as villages of people as the Potawatomi do? Do they also view plant communities such as bogs and prairies as predominantly medicinal or food areas? Do such viewpoints reflect a management component that could be of use today? The park has protected its plants almost forty years, yet species continue to decline (2005 Personal Communication).

Other ethnobotanical areas for further study include the Ottawa and other Great Lakes area tribes. Their use and management of park species could enrich park management and interpretation of its plant resources. Field visits with Ojibway groups would be beneficial as well but given the complications of distances between communities and the park, data collection might be more successful if researchers go to those communities and target the park's species list. Additional fieldwork and literature review has the potential to expand this and the previous study to determine how many more of the park species have or had traditional uses. While 87.7% of the park's species have been identified as having traditional uses, the lack of fieldwork with this study leaves 34% of the species for which primary traditional use data has not been collected.

The traditional perspective of ethnobotany that includes care (management) of the plants suggests an investigation of historic and contemporary practices, and raises numerous questions. Historic documentation mentions Indian-set fires much more than lightning fires (Higgins 1986). Does that reflect limited observations, or fewer or smaller wildfires as a

result of reduced fuel loads from the regularly set Indian fires? A more in-depth examination of the literature, particularly 17th and 18th century documents, should yield additional information about the purposes and extent of Indian burning. It is believed that the entire country was developed ecologically through Indian burning over at least a one thousand year period preceding European contact (Bullock 1649; Smith 1624).

What relationships exist between a plant's response to fire and its use? Do food or utility plants tend to be sprouters? Do medicinal plants tend to do better without fire since bogs are identified as places of medicine? If such relationships exist, areas for potential consultation and collaboration could be identified that could result in healthier habitats and stronger tribal relations. Habitats potentially could be defined by traditional practices, reflecting cultural patterns that support consideration of such habitats as Traditional Cultural Properties.

Given archaeology's limitations for what it can tell us about Indian burning practices and coverage (Anderton 1995), other areas such as soil or tree-ring data should be reviewed. Do surface fires, for example, leave enough evidence in the soil profile to determine burn patterns? Does the organic layer where many surface fires occurred contain different components than the organic layer where few surface fires occurred? Could fire records be gleaned from tree-ring data to enhance or elucidate an examination of the soil data?

The diversity of species and habitats at Indiana Dunes National Lakeshore complicates the approach one might take to using traditional fire as a management tool. Consultation with Ojibwa, Potawatomi, and Miami tribal members would be necessary to identify species, habitats, and methods for burning. Would categorizing the 1462 species by fire response aid identification of fire types and intervals for specific habitats?

In addition to burning, what practices were used commonly and which species were targeted? Interpretive topics could include traditional management practices, the concept of traditional science, and the idea of conservation instead of preservation to increase plant health and biodiversity.

Since Native Americans view resources and places in a holistic way, future studies may need to move beyond a single-resource perspective. An ecosystem approach can contribute to management alternatives as well as a deeper understanding of traditional ecological relationships. An examination of past resource use and management, from traditional activities through the cultural influences that changed the landscape, has the potential to suggest new ways to achieve management goals.

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APPENDIX A

Ojibway Traditional Use Species by Use

Scientific Name	Synonyms	Common Name	Nativity
Acer nigrum		black maple	N
Acer rubrum		red maple	N
Acer saccharinum		silver maple	N
Acer saccharum		sugar maple	N
Aster puniceus	*Symphyotrichum puniceum var. puniceum*	swamp aster	N
Betula pendula		European white birch	I
Carya cordiformis		bitter hickory	N
Equisetum hyemale affine	*Equisetum hyemale var. affine*	tall scouring rush	N
Fraxinus pennsylvanica subintegerrima	*Fraxinus pennsylvanica*	green ash	N
Hierochloe odorata	*Anthoxanthum monticola ssp. alpinum*	vanilla grass, sweet grass	N
Juglans cinerea		butternut	N
Juniperus communis depressa	*Juniperus communis var. depressa*	common juniper	N
Juniperus virginiana crebra	*Juniperus virginiana var. virginiana*	eastern red cedar	N
Larix laricina		tamarack, larch	N
Pinus nigra		Austrian Pine	I
Populus deltoides		cottonwood	N
Populus tremuloides		quaking aspen	N
Salix sericea		silky willow	N
Thuja occidentalis		arbor vitae, northern white cedar	N
Tilia americana		basswood, american linden	N
Ulmus pumila		Siberian elm	I
Ulmus rubra		slippery elm	N
Vaccinium angustifolium laevifolium	*Vaccinium angustifolium*	early low blueberry	N
Vaccinium macrocarpon		large cranberry	N
Vaccinium oxycoccos		small cranberry	N
Zea mays		corn	I
Zizania aquatica		wild rice	N

Scientific Name	Synonyms	Common Name	Nativity
Achillea millefolium		yarrow, milfoil	N
Arctostaphylos uva-ursi coactilis	*Arctostaphylos uva-ursi*	bearberry	N
Aster cordifolius	*Symphyotrichum cordifolium*	heart leaved aster	N
Aster macrophyllus	*Eurybia macrophylla*	big-leaved aster	N
Aster novae-angliae	*Symphyotrichum novae-angliae*	New England aster	N
Aster puniceus	*Symphyotrichum puniceum var. puniceum*	swamp aster	N
Cicuta maculata		water hemlock	N
Cornus alternifolia		alternate-leaved dogwood	N
Cornus canadensis		bunchberry	N
Cornus florida		flowering dogwood	N
Cornus obliqua		pale dogwood	N
Cornus racemosa		gray dogwood	N
Cornus rugosa		speckled dogwood	N
Cornus stolonifera	*Cornus sericea ssp. sericea*	red osier dogwood	N
Cornus stolonifera baileyi	*Cornus sericea ssp. sericea*	Bailey dogwood	N
Crataegus calpodendron		sugar hawthorn	N
Crataegus coccinea	*Crataegus chrysocarpa*	scarlet hawthorn	N
Crataegus crus-galli		cockspur hawthorn	N
Crataegus macrosperma		large-seeded hawthorne	N
Crataegus mollis		downy hawthorn	N
Crataegus pruinosa		frosted hawthorn	N
Crataegus punctata		dotted hawthorn	N
Erigeron canadensis	*Conyza canadensis var. canadensis*	horseweed	N
Erigeron philadelphicus		marsh fleabane	N
Mitchella repens		partridge-berry	N
Polygonum amphibium stipulaceum		smartweed, water knotweed	N
Polygonum coccineum	*Polygonum amphibium var. emersum*	water hearts ease	N
Ranunculus pensylvanicus		bristly buttercup	N
Rhus aromatica		fragrant sumac	N
Rhus aromatica arenaria		sand fragrant sumac	N
Rhus copallina latifolia	*Rhus copallinum var. latifolia*	winged sumac	N
Rhus glabra		smooth sumac	N
Rhus typhina	*Rhus hirta*	staghorn sumac	N
Salix alba		white willow	I

Scientific Name	Synonyms	Common Name	Nativity
Salix amygdaloides		peach-leaved willow	N
Salix babylonica	*Salix X pendulina, Salix X sepulcralis*	weeping willow	I
Salix bebbiana		beaked willow	N
Salix candida		hoary willow	N
Salix discolor		pussy willow	N
Salix fragilis		crack willow	I
Salix glaucophylloides glaucophylla	*Salix myricoides var. myricoides*	blue-leaved willow	N
Salix gracilis textoris	*Salix petiolaris*	petioled willow	N
Salix humilis		prairie willow	N
Salix interior		sandbar willow	N
Salix lucida		shining willow	N
Salix nigra		black willow	N
Salix pedicellaris hypoglauca	*Salix pedicellaris*	willow, bog willow	N
Salix rigida	*Salix eriocephala*	heart-leaved willow	N
Salix sericea		silky willow	N
Salix syrticola	*Salix cordata*	dune willow	N
Salix X subsericea	*Salix petiolaris*	yewleaf willow	N
Solidago graminifolia nuttallii	*Euthamia graminifolia var. nuttallii*	grass leaved goldenrod	N
Spiraea alba		meadowsweet	N
Taenidia integerrima		yellow pimpernel	N
Tanacetum vulgare		tansy	I
Thuja occidentalis		arbor vitae, northern white cedar	N
Trientalis borealis		starflower	N
Verbascum thapsus		common mullein	I
Viburnum recognitum	*Viburnum dentatum*	smooth arrow-wood	N

Scientific Name	Synonyms	Common Name	Nativity
Acer rubrum		red maple	N
Acer saccharum		sugar maple	N
Achillea millefolium		yarrow, milfoil	N
Acorus calamus		sweet flag	N
Anemone canadensis		meadow anemone	N
Apocynum androsaemifolium		spreading dogbane	N
Arctostaphylos uva-ursi coactilis	*Arctostaphylos uva-ursi*	bearberry	N
Asarum canadense		wild ginger	N
Aster cordifolius	*Symphyotrichum cordifolium*	heart leaved aster	N
Aster novae-angliae	*Symphyotrichum novae-angliae*	New England aster	N
Betula lutea	*Betula alleghaniensis var. alleghaniensis*	yellow birch	N
Betula papyrifera		paper birch	N
Betula pendula		European white birch	I
Carpinus caroliniana virginiana	*Carpinus caroliniana ssp. virginiana*	blue beech	N
Comptonia peregrina		sweet fern	N
Cornus alternifolia		alternate-leaved dogwood	N
Cornus racemosa		gray dogwood	N
Cornus rugosa		speckled dogwood	N
Cornus stolonifera	*Cornus sericea ssp. sericea*	red osier dogwood	N
Corylus americana		American hazelnut	N
Crataegus calpodendron		sugar hawthorn	N
Crataegus coccinea	*Crataegus chrysocarpa*	scarlet hawthorn	N
Crataegus crus-galli		cockspur hawthorn	N
Crataegus macrosperma		large-seeded hawthorne	N
Crataegus mollis		downy hawthorn	N
Crataegus pruinosa		frosted hawthorn	N
Crataegus punctata		dotted hawthorn	N
Erigeron philadelphicus		marsh fleabane	N
Fraxinus nigra		black ash	N
Gaultheria procumbens		wintergreen	N
Gaylussacia baccata		huckleberry	N
Hamamelis virginiana		witch hazel	N
Hierochloe odorata	*Anthoxanthum monticola ssp. alpinum*	vanilla grass, sweet grass	N
Juniperus virginiana crebra	*Juniperus virginiana var. virginiana*	eastern red cedar	N

Scientific Name	Synonyms	Common Name	Nativity
Mitchella repens		partridge-berry	N
Orobanche uniflora		one-flowered broom rape	N
Pinus nigra		Austrian Pine	I
Polygonum coccineum	*Polygonum amphibium var. emersum*	water hearts ease	N
Populus balsamifera		balsam poplar	N
Populus deltoides		cottonwood	N
Populus grandidentata		large-toothed aspen	N
Populus nigra italica	*Populus nigra*	lombardy poplar	N
Populus tremuloides		quaking aspen	N
Ranunculus pensylvanicus		bristly buttercup	N
Rhus aromatica		fragrant sumac	N
Rhus copallina latifolia	*Rhus copallinum var. latifolia*	winged sumac	N
Rhus glabra		smooth sumac	N
Rhus typhina	*Rhus hirta*	staghorn sumac	N
Salix alba		white willow	I
Salix amygdaloides		peach-leaved willow	N
Salix babylonica	*Salix X pendulina, Salix X sepulcralis*	weeping willow	I
Salix bebbiana		beaked willow	N
Salix candida		hoary willow	N
Salix discolor		pussy willow	N
Salix fragilis		crack willow	I
Salix glaucophylloides glaucophylla	*Salix myricoides var. myricoides*	blue-leaved willow	N
Salix gracilis textoris	*Salix petiolaris*	petioled willow	N
Salix humilis		prairie willow	N
Salix interior		sandbar willow	N
Salix lucida		shining willow	N
Salix nigra		black willow	N
Salix pedicellaris hypoglauca	*Salix pedicellaris*	willow, bog willow	N
Salix rigida	*Salix eriocephala*	heart-leaved willow	N
Salix sericea		silky willow	N
Salix syrticola	*Salix cordata*	dune willow	N
Salix X subsericea	*Salix petiolaris*	yewleaf willow	N
Sanguinaria canadensis		bloodroot	N
Sassafras albidum		sassafras	N

Scientific Name	Synonyms	Common Name	Nativity
Solidago graminifolia nuttallii	*Euthamia graminifolia var. nuttallii*	grass leaved goldenrod	N
Thuja occidentalis		arbor vitae, northern white cedar	N
Tilia americana		basswood, american linden	N
Trientalis borealis		starflower	N
Vaccinium angustifolium laevifolium	*Vaccinium angustifolium*	early low blueberry	N
Vaccinium atrococcum	*Vaccinium fuscatum*	black highbush blueberry	N
Vaccinium corymbosum		highbush blueberry	N
Vaccinium vacillans	*Vaccinium pallidum*	late low blueberry	N
Viburnum rafinesquianum		downy arrowwood	N
Zizania aquatica		wild rice	N

Scientific Name	Synonyms	Common Name	Nativity
Betula papyrifera		paper birch	N
Betula pumila		dwarf birch	N
Hierochloe odorata	*Anthoxanthum monticola ssp. alpinum*	vanilla grass, sweet grass	N
Lilium michiganense		Turk's cap lily	N
Rhus glabra		smooth sumac	N
Thuja occidentalis		arbor vitae, northern white cedar	N
Vaccinium angustifolium laevifolium	*Vaccinium angustifolium*	early low blueberry	N
Vaccinium atrococcum	*Vaccinium fuscatum*	black highbush blueberry	N
Vaccinium corymbosum		highbush blueberry	N
Zizania aquatica		wild rice	N

Scientific Name	Synonyms	Common Name	Nativity
Betula papyrifera		paper birch	N
Hierochloe odorata	*Anthoxanthum monticola ssp. alpinum*	vanilla grass, sweet grass	N
Pinus strobus		white pine	N
Populus deltoides		cottonwood	N
Populus grandidentata		large-toothed aspen	N
Populus nigra italica	*Populus nigra*	lombardy poplar	N
Populus tremuloides		quaking aspen	N
Rhus glabra		smooth sumac	N
Thuja occidentalis		arbor vitae, northern white cedar	N

Scientific Name	Synonyms	Common Name	Nativity
Acer negundo		box elder	N
Acer nigrum		black maple	N
Acer platanoides		Norway maple	I
Acer rubrum		red maple	N
Acer saccharinum		silver maple	N
Acer saccharum		sugar maple	N
Allium cernuum		nodding wild onion	N
Allium tricoccum		wild leek	N
Amelanchier arborea		juneberry, shadbush, serviceberry	N
Amelanchier laevis		allegheny shadblow	N
Amphicarpa bracteata		hog peanut	N
Andromeda glaucophylla	*Andromeda polifolia var. glaucophylla*	bog rosemary	N
Apios americana		ground nut	N
Aquilegia canadensis		wild columbine	N
Arctostaphylos uva-ursi coactilis	*Arctostaphylos uva-ursi*	bearberry	N
Arisaema atrorubens	*Arisaema triphyllum ssp. triphyllum*	jack-in-the-pulpit	N
Asarum canadense		wild ginger	N
Asclepias incarnata		swamp milkweed	N
Asclepias syriaca		common milkweed	N
Asimina triloba		pawpaw	N
Aster azureus	*Symphyotrichum oolentangiense var. oolentangiense*	sky-blue aster	N
Aster cordifolius	*Symphyotrichum cordifolium*	heart leaved aster	N
Aster dumosus	*Symphyotrichum dumosum var. dumosum*	rice-button aster, bushy aster	N
Aster ericoides	*Symphyotrichum ericoides var. ericoides*	heath aster	N
Aster furcatus	*Eurybia furcata*	forked aster	N
Aster junciformis	*Symphyotrichum boreale*	rush aster	N
Aster laevis	*Symphyotrichum laeve var. laeve*	smooth blue aster	N
Aster lateriflorus	*Symphyotrichum lateriflorum var. lateriflorum*	side flowering aster	N
Aster linariifolius	*Ionactis linariifolius*	flax-leaved aster	N
Aster macrophyllus	*Eurybia macrophylla*	big-leaved aster	N
Aster novae-angliae	*Symphyotrichum novae-angliae*	New England aster	N
Aster pilosus	*Symphyotrichum pilosum var. pilosum*	hairy aster	N
Aster praealtus	*Symphyotrichum praealtum*	willow aster	N
Aster ptarmicoides	*Oligoneuron album*	stiff aster	N

Scientific Name	Synonyms	Common Name	Nativity
Aster puniceus	*Symphyotrichum puniceum var. puniceum*	swamp aster	N
Aster puniceus firmus	*Symphyotrichum puniceum var. puniceum*	swamp aster	N
Aster sagittifolius	*Symphyotrichum cordifolium*	common blue wood aster	N
Aster sagittifolius drummondii	*Symphyotrichum drummondii var. drummondii*	drummond`s aster	N
Aster sericeus		silky aster	N
Aster shortii	*Symphyotrichum shortii*	panicled aster	N
Aster simplex	*Symphyotrichum lanceolatum ssp. lanceolatum*	marsh aster	N
Aster simplex interior	*Symphyotrichum lanceolatum ssp. lanceolatum var. interior*	panicled aster	N
Aster umbellatus	*Doellingeria umbellata var. umbellata*	flat-top aster	N
Aster vimineus	*Symphyotrichum lateriflorum var. lateriflorum*	small white aster	N
Betula lutea	*Betula alleghaniensis var. alleghaniensis*	yellow birch	N
Betula pendula		European white birch	I
Calla palustris		water arum	N
Caltha palustris		marsh marigold	N
Carya ovata		shagbark hickory	N
Castanea dentata		chestnut	N
Celastrus scandens		climbing bittersweet	N
Chamaedaphne calyculata angustifolia		leatherleaf	N
Chenopodium album		lamb's quarters	N
Comptonia peregrina		sweet fern	N
Cornus canadensis		bunchberry	N
Cornus racemosa		gray dogwood	N
Corylus americana		American hazelnut	N
Crataegus calpodendron		sugar hawthorn	N
Crataegus coccinea	*Crataegus chrysocarpa*	scarlet hawthorn	N
Crataegus crus-galli		cockspur hawthorn	N
Crataegus macrosperma		large-seeded hawthorne	N
Crataegus mollis		downy hawthorn	N
Crataegus pruinosa		frosted hawthorn	N
Crataegus punctata		dotted hawthorn	N
Daucus carota		queen anne's lace	I
Dioscorea villosa		wild yam	N
Equisetum arvense		horsetail	N
Fagus grandifolia		American beech	N

Scientific Name	Synonyms	Common Name	Nativity
Fragaria virginiana		wild strawberry	N
Fraxinus americana		white ash	N
Fraxinus pennsylvanica		red ash	N
Gaultheria procumbens		wintergreen	N
Gaylussacia baccata		huckleberry	N
Hamamelis virginiana		witch hazel	N
Heracleum maximum		cow parsnip	N
Humulus lupulus		common hop	N
Hydrophyllum virginianum		Virginia waterleaf	N
Juglans cinerea		butternut	N
Juglans nigra		black walnut	N
Lathyrus ochroleucus		pale vetchling	N
Lathyrus palustris		marsh vetching	N
Lathyrus palustris myrtifolius	*Lathyrus palustris*	marsh vetchling	N
Lathyrus venosus		veiny pea	N
Lepidium virginicum		common peppergrass	N
Lilium philadelphicum andinum		prairie lily	N
Lindera benzoin		spicebush	N
Lonicera dioica		red honeysuckle	N
Lycopodium tristachyum		ground cedar	N
Lycopus asper		rough water horehound	N
Maianthemum canadense		wild lily-of-the-valley	N
Mentha arvensis villosa	*Mentha arvensis*	wild mint	N
Mitchella repens		partridge-berry	N
Nemopanthus mucronata		mountain holly	N
Nepeta cataria		catnip	I
Nuphar variegatum	*Nuphar luteum ssp. variegata*	yellow pond lily	N
Nymphaea tuberosa	*Nymphaea odorata ssp. tuberosa*	white water lily	N
Panax quinquefolius		ginseng	N
Parthenocissus inserta	*Parthenocissus quinquefolia*	thicket creeper	N
Parthenocissus quinquefolia		virginia creeper	N
Pedicularis canadensis		wood betony	N
Pinus strobus		white pine	N
Plantago major		common plantain	N

Scientific Name	Synonyms	Common Name	Nativity
Podophyllum peltatum		may apple	N
Polygala senega		seneca snakeroot	N
Polygonatum canaliculatum	*Polygonatum biflorum var. commutatum*	smooth solomon's seal	N
Polygonum amphibium stipulaceum		smartweed, water knotweed	N
Populus balsamifera		balsam poplar	N
Populus deltoides		cottonwood	N
Populus grandidentata		large-toothed aspen	N
Populus nigra italica	*Populus nigra*	lombardy poplar	N
Populus tremuloides		quaking aspen	N
Prunus americana		wild plum	N
Prunus angustifolia		chickasaw plum	N
Prunus avium		sweet cherry	I
Prunus nigra		Canada plum	N
Prunus pensylvanica		pin cherry	N
Prunus pumila		sand cherry	N
Prunus serotina		wild black cherry	N
Prunus virginiana		choke cherry	N
Pteridium aquilinum latiusculum		bracken fern	N
Pycnanthemum virginianum		common mountain mint	N
Pyrola rotundifolia americana	*Pyrola americana*	round leaved shin-leaf	N
Pyrus coronaria	*Malus coronaria var. coronaria*	white sweet crab	N
Pyrus malus	*Malus sylvestris*	apple	I
Quercus alba		white oak	N
Quercus bicolor		swamp white oak	N
Quercus ellipsoidalis		Hill's oak	N
Quercus imbricaria		shingle oak	N
Quercus macrocarpa		bur oak	N
Quercus palustris		pin oak	N
Quercus rubra		red oak	N
Quercus velutina		black oak	N
Rhus glabra		smooth sumac	N
Rhus typhina	*Rhus hirta*	staghorn sumac	N
Ribes americanum		black currant	N
Ribes cynosbati		prickly wild gooseberry	N

Scientific Name	Synonyms	Common Name	Nativity
Ribes hirtellum		northern gooseberry	N
Ribes missouriense		wild gooseberry	N
Ribes sativum	*Ribes rubrum*	red currant	I
Rubus allegheniensis		common blackberry	N
Rubus flagellaris		common dewberry	N
Rubus hispidus obovalis	*Rubus hispidus*	swamp dewberry	N
Rubus idaeus strigosus	*Rubus idaeus ssp. strigosus*	red raspberry	N
Rubus occidentalis		black dewberry	N
Rubus odoratus		purple flowering raspberry	N
Rubus pensylvanicus		yankee blackberry	N
Rubus pubescens		dwarf raspberry	N
Rudbeckia laciniata		wild golden glow	N
Rumex crispus		curly dock, yellow dock	I
Sagittaria latifolia		common arrowhead	N
Sambucus canadensis	*Sambucus nigra ssp. canadensis*	elderberry, American elder	N
Sambucus pubens	*Sambucus racemosa var. racemosa*	red-berried elder	N
Sassafras albidum		sassafras	N
Scirpus americanus	*Schoenoplectus americanus*	chair maker's rush	N
Scirpus validus creber	*Schoenoplectus tabernaemontani*	great bulrush	N
Sium suave		water parsnip	N
Smilacina racemosa	*Maianthemum racemosum ssp. racemosum*	feathery false Solomon's Seal	N
Symplocarpus foetidus		skunk cabbage	N
Taraxacum officinale		common dandelion	I
Taxus cuspidata		Japanese yew	I
Thuja occidentalis		arbor vitae, northern white cedar	N
Tilia americana		basswood, american linden	N
Trillium grandiflorum		large-flowered trillium	N
Typha angustifolia		narrow-leaved cattail	I
Typha latifolia		common cattail	N
Vaccinium angustifolium laevifolium	*Vaccinium angustifolium*	early low blueberry	N
Vaccinium atrococcum	*Vaccinium fuscatum*	black highbush blueberry	N
Vaccinium corymbosum		highbush blueberry	N
Vaccinium macrocarpon		large cranberry	N
Vaccinium oxycoccos		small cranberry	N

Scientific Name	Synonyms	Common Name	Nativity
Vaccinium vacillans	*Vaccinium pallidum*	late low blueberry	N
Viburnum lentago		nanneyberry	N
Viburnum opulus		European highbush cranberry	N
Vitis aestivalis		summer grape	N
Vitis labrusca		fox grape	N
Vitis riparia		river bank grape	N
Xanthoxylum americanum	*Zanthoxylum americanum*	prickly ash	N
Zea mays		corn	I
Zizania aquatica		wild rice	N

Scientific Name	Synonyms	Common Name	Nativity
Acer negundo		box elder	N
Acer nigrum		black maple	N
Acer platanoides		Norway maple	I
Acer rubrum		red maple	N
Acer saccharinum		silver maple	N
Acer saccharum		sugar maple	N
Achillea millefolium		yarrow, milfoil	N
Acorus calamus		sweet flag	N
Actaea pachypoda		white baneberry	N
Actaea rubra		red baneberry	N
Adiantum pedatum		maidenhair fern	N
Agrimonia gryposepala		tall agrimony	N
Allium tricoccum		wild leek	N
Alnus glutinosa		european black alder	I
Alnus rugosa americana	*Alnus incana ssp. rugosa*	speckled alder	N
Alopecurus aequalis		short-awned foxtail	N
Amelanchier laevis		allegheny shadblow	N
Amorpha canescens		lead plant	N
Amphicarpa bracteata		hog peanut	N
Andromeda glaucophylla	*Andromeda polifolia var. glaucophylla*	bog rosemary	N
Andropogon gerardii		big bluestem grass	N
Anemone canadensis		meadow anemone	N
Anemone cylindrica		thimbleweed	N
Anemone virginiana		tall anemone, tumbleweed	N
Antennaria neglecta		cat's foot	N
Antennaria plantaginifolia		pussy toes	N
Apocynum androsaemifolium		spreading dogbane	N
Apocynum sibiricum	*Apocynum cannabinum*	indian hemp, dogbane	N
Aquilegia canadensis		wild columbine	N
Arabis glabra		tower mustard	N
Aralia nudicaulis		wild sarsaparilla	N
Aralia racemosa		spikenard	N
Arctium minus		common burdock	I
Arctostaphylos uva-ursi coactilis	*Arctostaphylos uva-ursi*	bearberry	N

Scientific Name	Synonyms	Common Name	Nativity
Arisaema atrorubens	*Arisaema triphyllum ssp. triphyllum*	jack-in-the-pulpit	N
Artemisia absinthium		Common wormwood	I
Artemisia caudata	*Artemisia campestris ssp. caudata*	beach wormwood	N
Asarum canadense		wild ginger	N
Asclepias incarnata		swamp milkweed	N
Asclepias syriaca		common milkweed	N
Aster cordifolius	*Symphyotrichum cordifolium*	heart leaved aster	N
Aster macrophyllus	*Eurybia macrophylla*	big-leaved aster	N
Aster novae-angliae	*Symphyotrichum novae-angliae*	New England aster	N
Aster puniceus	*Symphyotrichum puniceum var. puniceum*	swamp aster	N
Aster puniceus firmus	*Symphyotrichum puniceum var. puniceum*	swamp aster	N
Athyrium filix-femina michauxii	*Athyrium filix-femina ssp. angustum*	lady fern	N
Baptisia tinctoria crebra	*Baptisia tinctoria*	yellow wild indigo	N
Betula lutea	*Betula alleghaniensis var. alleghaniensis*	yellow birch	N
Betula nigra		river birch	N
Betula papyrifera		paper birch	N
Betula pendula		European white birch	I
Betula pumila		dwarf birch	N
Botrychium virginianum		rattlesnake fern	N
Brassica rapa		field mustard	I
Calla palustris		water arum	N
Caltha palustris		marsh marigold	N
Campanula americana	*Campanulastrum americanum*	tall bellflower	N
Campanula aparinoides		marsh bellflower	N
Campanula rotundifolia		harebell	N
Capsella bursa-pastoris		shepherd's purse	I
Carya cordiformis		bitter hickory	N
Carya glabra		pignut hickory	N
Carya ovata		shagbark hickory	N
Castilleja coccinea		Indian paint brush	N
Caulophyllum thalictroides		blue cohosh	N
Ceanothus americanus		New Jersey tea	N
Celastrus scandens		climbing bittersweet	N
Cephalanthus occidentalis		button bush	N

Scientific Name	Synonyms	Common Name	Nativity
Chamaedaphne calyculata angustifolia		leatherleaf	N
Chimaphila umbellata cisatlantica	*Chimaphila umbellata ssp. cisatlantica*	pipsissewa, prince's pine	N
Cicuta maculata		water hemlock	N
Cirsium altissimum		tall thistle	N
Cirsium arvense		field thistle, canada thistle	I
Cirsium discolor		pasture thistle	N
Cirsium muticum		swamp thistle	N
Cirsium pitcheri		sand thistle	N
Cirsium vulgare		bull thistle	I
Claytonia virginica		spring beauty	N
Clintonia borealis		blue bead	N
Comptonia peregrina		sweet fern	N
Coptis groenlandica	*Coptis trifolia*	goldthread	N
Cornus alternifolia		alternate-leaved dogwood	N
Cornus canadensis		bunchberry	N
Cornus florida		flowering dogwood	N
Cornus racemosa		gray dogwood	N
Cornus stolonifera	*Cornus sericea ssp. sericea*	red osier dogwood	N
Cornus stolonifera baileyi	*Cornus sericea ssp. sericea*	Bailey dogwood	N
Corylus americana		American hazelnut	N
Crataegus calpodendron		sugar hawthorn	N
Crataegus coccinea	*Crataegus chrysocarpa*	scarlet hawthorn	N
Crataegus crus-galli		cockspur hawthorn	N
Crataegus macrosperma		large-seeded hawthorne	N
Crataegus mollis		downy hawthorn	N
Crataegus pruinosa		frosted hawthorn	N
Crataegus punctata		dotted hawthorn	N
Cynoglossum officinale		hound's tongue	I
Cypripedium calceolus parviflorum	*Cypripedium parviflorum var. parviflorum*	small yellow lady's slipper	N
Cypripedium calceolus pubescens	*Cypripedium parviflorum var. pubescens*	large yellow lady's slipper	N
Cypripedium reginae		showy lady's slipper	N
Cystopteris fragilis		fragile fern	N
Daucus carota		queen anne's lace	I
Descurainia sophia		Flixweed	I

Scientific Name	Synonyms	Common Name	Nativity
Dicentra cucullaria		Dutchman's breeches	N
Diervilla lonicera		bush honeysuckle	N
Dioscorea villosa		wild yam	N
Drosera rotundifolia		round-leaved sundew	N
Dryopteris cristata		crested shield fern	N
Echinocystis lobata		wild cucumber	N
Epifagus virginiana		beech drops	N
Epigaea repens glabrifolia	*Epigaea repens*	trailing arbutus	N
Epilobium angustifolium	*Chamerion angustifolium ssp. angustifolium*	fire weed	N
Equisetum arvense		horsetail	N
Equisetum hyemale affine	*Equisetum hyemale var. affine*	tall scouring rush	N
Equisetum X ferrissii		horsetail	N
Erigeron canadensis	*Conyza canadensis var. canadensis*	horseweed	N
Erigeron philadelphicus		marsh fleabane	N
Erigeron strigosus		daisy fleabane	N
Erythronium americanum		yellow trout lily	N
Eupatorium maculatum		spotted Joe Pye weed	N
Eupatorium perfoliatum		common boneset	N
Eupatorium purpureum		sweet joe-pie-weed	N
Euphorbia corollata		flowering spurge	N
Euphorbia cyparissias		cypress spurge, grave-yard spurge	I
Fagus grandifolia		American beech	N
Fragaria virginiana		wild strawberry	N
Fraxinus americana		white ash	N
Fraxinus americana biltmoreana	*Fraxinus americana*	Biltmore ash	N
Fraxinus nigra		black ash	N
Fraxinus pennsylvanica		red ash	N
Fraxinus pennsylvanica subintegerrima	*Fraxinus pennsylvanica*	green ash	N
Galium aparine		annual bedstraw	N
Galium asprellum		rough bedstraw	N
Galium boreale		northern bedstraw	N
Galium brevipes		short stalked bedstraw	N
Galium circaezans hypomalacum		wild licorice	N
Galium concinnum		shining bedstraw	N

Scientific Name	Synonyms	Common Name	Nativity
Galium labradoricum		bog bedstraw	N
Galium lanceolatum		lance-leaved wild licorice	N
Galium obtusum		wild madder	N
Galium pilosum		hairy bedstraw	N
Galium tinctorium		stiff bedstraw; small cleaver	N
Galium trifidum		small bedstraw	N
Galium triflorum		sweet-scented bedstraw	N
Gaultheria procumbens		wintergreen	N
Geranium maculatum		wild geranium	N
Geum canadense		white avens	N
Glyceria canadensis		rattlesnake grass	N
Habenaria viridis bracteata	*Coeloglossum viride var. virescens*	bracted orchid	N
Hamamelis virginiana		witch hazel	N
Helianthus occidentalis		western sunflower	N
Hepatica acutiloba	*Hepatica nobilis var. acuta*	sharp-lobed hepatica	N
Hepatica americana	*Hepatica nobilis var. obtusa*	round-lobed hepatica	N
Heracleum maximum		cow parsnip	N
Heuchera richardsonii		prairie alum root	N
Hieracium canadense fasciculatum		Canada hawkweed	N
Hierochloe odorata	*Anthoxanthum monticola ssp. alpinum*	vanilla grass, sweet grass	N
Hordeum jubatum		squirreltail grass	N
Humulus lupulus		common hop	N
Hydrophyllum virginianum		Virginia waterleaf	N
Ilex verticillata		winterberry	N
Impatiens capensis		orange jewelweed	N
Impatiens pallida		yellow jewelweed	N
Iris virginica shrevei	*Iris shrevei, I. versicolor var. blandescens, I. v. var. shrevei*	blue flag, wild iris	N
Juglans cinerea		butternut	N
Juncus greenei		greene's rush	N
Juniperus communis		common juniper, dunes juniper	N
Juniperus communis depressa	*Juniperus communis var. depressa*	common juniper	N
Juniperus virginiana crebra	*Juniperus virginiana var. virginiana*	eastern red cedar	N
Lactuca biennis	*Lactuca spicata*	tall blue lettuce	N
Lactuca canadensis		wild lettuce	N

Scientific Name	Synonyms	Common Name	Nativity
Laportea canadensis		wood nettle	N
Larix laricina		tamarack, larch	N
Lathyrus ochroleucus		pale vetchling	N
Lathyrus palustris		marsh vetching	N
Lathyrus palustris myrtifolius	*Lathyrus palustris*	marsh vetchling	N
Lathyrus venosus		veiny pea	N
Lemna minor		small duckweed	N
Lepidium virginicum		common peppergrass	N
Lilium michiganense		Turk's cap lily	N
Lilium philadelphicum andinum		prairie lily	N
Linaria vulgaris		butter & eggs, toadflax	I
Lindera benzoin		spicebush	N
Linnaea borealis americana	*Linnaea borealis ssp. americana*	twinflower	N
Lobelia cardinalis		cardinal flower	N
Lonicera dioica		red honeysuckle	N
Lonicera japonica		Japanese honeysuckle	I
Lonicera prolifera	*Lonicera reticulata*	yellow honeysuckle	N
Lonicera tatarica		tartarian honeysuckle	I
Lonicera X bella		downy bush honeysuckle	I
Lonicera X muendeniensis	*Lonicera X minutiflora*	smallflower honeysuckle	I
Lonicera X muscaviensis	*Lonicera ruprechtiana*	Manchurian honeysuckle	I
Lonicera X xylosteoides		fly honeysuckle	I
Lychnis alba	*Silene latifolia ssp. alba*	white campion	I
Lycopodium complanatum flabelliforme	*Lycopodium digitatum*	trailing ground pine	N
Lycopodium obscurum		ground pine	N
Maianthemum canadense		wild lily-of-the-valley	N
Malaxis unifolia		green adder's mouth	N
Medeola virginiana		Indian cucumber root	N
Melampyrum lineare latifolium		cow wheat	N
Melilotus alba	*Melilotus officinalis*	white sweet clover	I
Menispermum canadense		moonseed	N
Mentha arvensis villosa	*Mentha arvensis*	wild mint	N
Mirabilis nyctaginea		wild four o'clock	N
Mitchella repens		partridge-berry	N

Scientific Name	Synonyms	Common Name	Nativity
Monarda fistulosa		wild bergamot	N
Monarda punctata villicaulis	*Monarda punctata ssp. punctata var. villicaulis*	horse mint	N
Nemopanthus mucronata		mountain holly	N
Nepeta cataria		catnip	I
Nuphar advena	*Nuphar lutea ssp. advena*	yellow pond lily	N
Nuphar variegatum	*Nuphar luteum ssp. variegata*	yellow pond lily	N
Nymphaea tuberosa	*Nymphaea odorata ssp. tuberosa*	white water lily	N
Oenothera biennis		common evening primrose	N
Onoclea sensibilis		sensitive fern	N
Orobanche uniflora		one-flowered broom rape	N
Osmorhiza claytoni		hairy sweet cicely	N
Osmorhiza longistylis		smooth sweet cicely	N
Ostrya virginiana		hop hornbeam, ironwood	N
Panax quinquefolius		ginseng	N
Panax trifolius		dwarf ginseng	N
Pastinaca sativa		wild parsnip	I
Pedicularis canadensis		wood betony	N
Peltandra virginica		arrow arum	N
Petalostemum purpureum	*Dalea purpurea*	purple prairie clover	N
Phryma leptostachya		lopseed	N
Physocarpus opulifolius		ninebark	N
Pinus banksiana		jack pine	N
Pinus strobus		white pine	N
Plantago lanceolata		English plantain	I
Plantago major		common plantain	N
Plantago rugelii		red stalked plantain	N
Podophyllum peltatum		may apple	N
Polygala paucifolia		flowering wintergreen	N
Polygala senega		seneca snakeroot	N
Polygonatum canaliculatum	*Polygonatum biflorum var. commutatum*	smooth solomon's seal	N
Polygonatum pubescens		downy solomon's seal	N
Polygonum amphibium stipulaceum		smartweed, water knotweed	N
Polygonum careyi		Carey`s heartease	N
Polygonum coccineum	*Polygonum amphibium var. emersum*	water hearts ease	N

Scientific Name	Synonyms	Common Name	Nativity
Polygonum pensylvanicum laevigatum	*Polygonum pensylvanicum*	pennsylvania knotweed	N
Polygonum persicaria		lady's thumb	I
Polygonum punctatum		smartweed	N
Polytaenia nuttallii		prairie parsley	N
Populus alba		white poplar, silver poplar	I
Populus balsamifera		balsam poplar	N
Populus deltoides		cottonwood	N
Populus grandidentata		large-toothed aspen	N
Populus tremuloides		quaking aspen	N
Potentilla anserina	*Argentina anserina*	silverweed	N
Potentilla arguta		prairie cinquefoil	N
Potentilla norvegica	*Potentilla monspeliensis*	rough cinquefoil	N
Potentilla palustris	*Comarum palustre*	marsh cinquefoil	N
Potentilla recta		sulfur cinquefoil	I
Prenanthes alba		white lettuce lion's foot	N
Prunella vulgaris		lawn prunella	N
Prunus americana		wild plum	N
Prunus pensylvanica		pin cherry	N
Prunus serotina		wild black cherry	N
Prunus virginiana		choke cherry	N
Pteridium aquilinum latiusculum		bracken fern	N
Pycnanthemum virginianum		common mountain mint	N
Pyrola elliptica		large leaved shin-leaf	N
Pyrola rotundifolia americana	*Pyrola americana*	round leaved shin-leaf	N
Quercus alba		white oak	N
Quercus macrocarpa		bur oak	N
Quercus rubra		red oak	N
Quercus velutina		black oak	N
Ranunculus pensylvanicus		bristly buttercup	N
Ranunculus sceleratus		cursed buttercup	N
Rhus aromatica		fragrant sumac	N
Rhus copallina latifolia	*Rhus copallinum var. latifolia*	winged sumac	N
Rhus glabra		smooth sumac	N
Rhus typhina	*Rhus hirta*	staghorn sumac	N

Scientific Name	Synonyms	Common Name	Nativity
Rhus vernix	*Toxicodendron vernix*	poison sumac	N
Ribes americanum		black currant	N
Ribes cynosbati		prickly wild gooseberry	N
Ribes hirtellum		northern gooseberry	N
Ribes sativum	*Ribes rubrum*	red currant	I
Rorippa islandica fernaldiana	*Rorippa palustris ssp. fernaldiana*	marsh cress	N
Rosa blanda		early wild rose	N
Rosa canina		dog rose	I
Rosa carolina		pasture rose	N
Rosa multiflora		japanese rose	I
Rosa palustris		swamp rose	N
Rosa setigera		Illinois rose	N
Rubus allegheniensis		common blackberry	N
Rubus flagellaris		common dewberry	N
Rubus hispidus obovalis	*Rubus hispidus*	swamp dewberry	N
Rubus idaeus strigosus	*Rubus idaeus ssp. strigosus*	red raspberry	N
Rubus occidentalis		black dewberry	N
Rubus pensylvanicus		yankee blackberry	N
Rudbeckia hirta		black-eyed susan	N
Rudbeckia laciniata		wild golden glow	N
Rumex altissimus		pale dock	N
Rumex crispus		curly dock, yellow dock	I
Rumex obtusifolius		bitter dock	I
Sagittaria brevirostra		short beaked arrowhead	N
Sagittaria graminea		grass-leaved arrowhead	N
Sagittaria latifolia		common arrowhead	N
Sagittaria rigida		stiff arrowhead	N
Salix alba		white willow	I
Salix amygdaloides		peach-leaved willow	N
Salix babylonica	*Salix X pendulina, Salix X sepulcralis*	weeping willow	I
Salix bebbiana		beaked willow	N
Salix candida		hoary willow	N
Salix discolor		pussy willow	N
Salix fragilis		crack willow	I

Scientific Name	Synonyms	Common Name	Nativity
Salix glaucophylloides glaucophylla	*Salix myricoides var. myricoides*	blue-leaved willow	N
Salix gracilis textoris	*Salix petiolaris*	petioled willow	N
Salix humilis		prairie willow	N
Salix interior		sandbar willow	N
Salix lucida		shining willow	N
Salix nigra		black willow	N
Salix pedicellaris hypoglauca	*Salix pedicellaris*	willow, bog willow	N
Salix rigida	*Salix eriocephala*	heart-leaved willow	N
Salix sericea		silky willow	N
Salix syrticola	*Salix cordata*	dune willow	N
Salix X subsericea	*Salix petiolaris*	yewleaf willow	N
Sambucus canadensis	*Sambucus nigra ssp. canadensis*	elderberry, American elder	N
Sambucus pubens	*Sambucus racemosa var. racemosa*	red-berried elder	N
Sanguinaria canadensis		bloodroot	N
Sanicula canadensis		canadian black snakeroot	N
Sanicula marilandica		sanicle, black snakeroot	N
Sarracenia purpurea		pitcher plant	N
Sassafras albidum		sassafras	N
Saururus cernuus		lizard's tail	N
Scutellaria epilobiifolia	*Scutellaria galericulata*	marsh skullcap	N
Senecio aureus	*Packera aurea*	golden ragwort	N
Silphium perfoliatum		cup plant	N
Sium suave		water parsnip	N
Smilacina racemosa	*Maianthemum racemosum ssp. racemosum*	feathery false Solomon's Seal	N
Smilacina stellata	*Maianthemum stellatum*	starry false Solomon's-seal	N
Smilax lasioneura		common carrion flower	N
Solanum americanum		black nightshade	N
Solanum dulcamara		bittersweet nightshade	I
Solidago altissima	*Solidago canadensis var. scabra*	tall goldenrod	N
Solidago caesia		blue-stemmed goldenrod	N
Solidago flexicaulis		broad-leaved goldenrod	N
Solidago gigantea		late goldenrod, giant goldenrod	N
Solidago graminifolia media	*Euthamia gymnospermoides*	smooth grass-leaved goldenrod	N
Solidago graminifolia nuttallii	*Euthamia graminifolia var. nuttallii*	grass leaved goldenrod	N

Scientific Name	Synonyms	Common Name	Nativity
Solidago gymnospermoides	*Euthamia gymnospermoides*	shiny grass-leaved goldenrod	N
Solidago juncea		early goldenrod	N
Solidago missouriensis fasciculata		Missouri goldenrod	N
Solidago nemoralis		old field goldenrod	N
Solidago ohioensis	*Oligoneuron ohioense*	Ohio goldenrod	N
Solidago patula		swamp goldenrod	N
Solidago racemosa gillmani	*Solidago simplex var. gillmanii*	dune goldenrod, Rand's goldenrod	N
Solidago riddellii	*Oligoneuron riddellii*	riddell's goldenrod	N
Solidago rigida	*Oligoneuron rigidum var. rigidum*	stiff goldenrod	N
Solidago rugosa		rough goldenrod	N
Solidago sempervirens		seaside goldenrod	N
Solidago speciosa		showy goldenrod	N
Solidago tenuifolia	*Euthamia tenuifolia var. tenuifolia*	slender-leaved goldenrod	N
Solidago uliginosa		bog goldenrod	N
Solidago ulmifolia		elm leaved goldenrod	N
Spiraea alba		meadowsweet	N
Spiraea tomentosa rosea		hardhack, steeplebush	N
Spiranthes lacera		slender ladies' tresses	N
Sporobolus heterolepis		prairie dropseed	N
Stachys palustris homotricha	*Stachys pilosa var. pilosa*	woundwort	N
Stellaria media		common chickweed	I
Symphoricarpos orbiculatus		coralberry; indian current	N
Symplocarpus foetidus		skunk cabbage	N
Taenidia integerrima		yellow pimpernel	N
Tanacetum vulgare		tansy	I
Taraxacum officinale		common dandelion	I
Taxus cuspidata		Japanese yew	I
Thalictrum dasycarpum		smooth meadow rue	N
Thalictrum dasycarpum hypoglaucum	*Thalictrum dasycarpum*	smooth meadow rue	N
Thaspium barbinode		hairy meadow parsnip	N
Thuja occidentalis		arbor vitae, northern white cedar	N
Tilia americana		basswood, american linden	N
Trientalis borealis		starflower	N
Trillium grandiflorum		large-flowered trillium	N

Scientific Name	Synonyms	Common Name	Nativity
Typha latifolia		common cattail	N
Ulmus americana		American elm	N
Ulmus rubra		slippery elm	N
Urtica procera	*Urtica dioica ssp. gracilis*	tall nettle	N
Uvularia grandiflora		bellwort	N
Uvularia sessifolia	*Oakesia sessilifolia*	merrybells	N
Vaccinium angustifolium laevifolium	*Vaccinium angustifolium*	early low blueberry	N
Vaccinium atrococcum	*Vaccinium fuscatum*	black highbush blueberry	N
Vaccinium corymbosum		highbush blueberry	N
Vaccinium macrocarpon		large cranberry	N
Vaccinium oxycoccos		small cranberry	N
Vaccinium vacillans	*Vaccinium pallidum*	late low blueberry	N
Verbascum thapsus		common mullein	I
Verbena hastata		blue vervain	N
Veronicastrum virginicum		culver's root	N
Viburnum acerifolium		maple-leaved arrow-wood	N
Viburnum lentago		nanneyberry	N
Viburnum opulus		European highbush cranberry	N
Viburnum rafinesquianum		downy arrowwood	N
Viola canadensis		Canada violet	N
Viola conspersa		dog violet	N
Viola pubescens		downy yellow violet	N
Vitis aestivalis		summer grape	N
Vitis labrusca		fox grape	N
Vitis riparia		river bank grape	N
Xanthium strumarium		cocklebur	N
Xanthoxylum americanum	*Zanthoxylum americanum*	prickly ash	N

Scientific Name	Synonyms	Common Name	Nativity
Acer nigrum		black maple	N
Acer rubrum		red maple	N
Acer saccharinum		silver maple	N
Acer saccharum		sugar maple	N
Achillea millefolium		yarrow, milfoil	N
Acorus calamus		sweet flag	N
Alnus glutinosa		european black alder	I
Alnus rugosa americana	*Alnus incana ssp. rugosa*	speckled alder	N
Amelanchier arborea		juneberry, shadbush, serviceberry	N
Amelanchier humilis		low shadblow	N
Amelanchier interior		dwarf shadblow	N
Amelanchier laevis		allegheny shadblow	N
Apocynum androsaemifolium		spreading dogbane	N
Apocynum cannabinum		indian hemp, dogbane	N
Aralia nudicaulis		wild sarsaparilla	N
Arctostaphylos uva-ursi coactilis	*Arctostaphylos uva-ursi*	bearberry	N
Asclepias incarnata		swamp milkweed	N
Asclepias syriaca		common milkweed	N
Aster cordifolius	*Symphyotrichum cordifolium*	heart leaved aster	N
Aster dumosus	*Symphyotrichum dumosum var. dumosum*	rice-button aster, bushy aster	N
Aster macrophyllus	*Eurybia macrophylla*	big-leaved aster	N
Betula lutea	*Betula alleghaniensis var. alleghaniensis*	yellow birch	N
Betula papyrifera		paper birch	N
Betula pumila		dwarf birch	N
Boehmeria cylindrica		false nettle	N
Carpinus caroliniana virginiana	*Carpinus caroliniana ssp. virginiana*	blue beech	N
Carya cordiformis		bitter hickory	N
Carya ovata		shagbark hickory	N
Cicuta maculata		water hemlock	N
Clintonia borealis		blue bead	N
Comptonia peregrina		sweet fern	N
Coptis groenlandica	*Coptis trifolia*	goldthread	N
Cornus alternifolia		alternate-leaved dogwood	N
Cornus racemosa		gray dogwood	N

Scientific Name	Synonyms	Common Name	Nativity
Cornus stolonifera	*Cornus sericea ssp. sericea*	red osier dogwood	N
Corylus americana		American hazelnut	N
Crataegus calpodendron		sugar hawthorn	N
Crataegus coccinea	*Crataegus chrysocarpa*	scarlet hawthorn	N
Crataegus crus-galli		cockspur hawthorn	N
Crataegus macrosperma		large-seeded hawthorne	N
Crataegus mollis		downy hawthorn	N
Crataegus pruinosa		frosted hawthorn	N
Crataegus punctata		dotted hawthorn	N
Equisetum arvense		horsetail	N
Equisetum hyemale affine	*Equisetum hyemale var. affine*	tall scouring rush	N
Fraxinus americana		white ash	N
Fraxinus americana biltmoreana	*Fraxinus americana*	Biltmore ash	N
Fraxinus nigra		black ash	N
Fraxinus pennsylvanica		red ash	N
Fraxinus pennsylvanica subintegerrima	*Fraxinus pennsylvanica*	green ash	N
Heracleum maximum		cow parsnip	N
Hieracium canadense fasciculatum		Canada hawkweed	N
Hierochloe odorata	*Anthoxanthum monticola ssp. alpinum*	vanilla grass, sweet grass	N
Impatiens capensis		orange jewelweed	N
Iris virginica shrevei	*Iris shrevei, I. versicolor var. blandescens, I. v. var. shrevei*	blue flag, wild iris	N
Juglans cinerea		butternut	N
Juglans nigra		black walnut	N
Juncus dudleyi		inland rush	N
Juncus effusus solutus	*Juncus effusus var. solutus*	common rush	N
Juncus greenei		greene's rush	N
Juncus tenuis		path rush	N
Juniperus communis		common juniper, dunes juniper	N
Juniperus communis depressa	*Juniperus communis var. depressa*	common juniper	N
Juniperus virginiana crebra	*Juniperus virginiana var. virginiana*	eastern red cedar	N
Lactuca biennis	*Lactuca spicata*	tall blue lettuce	N
Laportea canadensis		wood nettle	N
Larix laricina		tamarack, larch	N
Lathyrus ochroleucus		pale vetchling	N

Scientific Name	Synonyms	Common Name	Nativity
Lycopodium lucidulum	*Huperzia lucidula*	shining club moss	N
Nyssa sylvatica		black gum, sour gum	N
Ostrya virginiana		hop hornbeam, ironwood	N
Phragmites communis berlandieri	*Phragmites australis*	common reed	N
Pinus banksiana		jack pine	N
Pinus strobus		white pine	N
Pontederia cordata		pickerel weed	N
Populus alba		white poplar, silver poplar	I
Populus balsamifera		balsam poplar	N
Populus candicans X jackii	*Populus balsamifera ssp. balsamifera*		N
Populus grandidentata		large-toothed aspen	N
Populus tremuloides		quaking aspen	N
Prunus americana		wild plum	N
Quercus alba		white oak	N
Quercus bicolor		swamp white oak	N
Quercus palustris		pin oak	N
Quercus rubra		red oak	N
Quercus velutina		black oak	N
Rhus glabra		smooth sumac	N
Salix alba		white willow	I
Salix amygdaloides		peach-leaved willow	N
Salix babylonica	*Salix X pendulina, Salix X sepulcralis*	weeping willow	I
Salix bebbiana		beaked willow	N
Salix candida		hoary willow	N
Salix discolor		pussy willow	N
Salix fragilis		crack willow	I
Salix glaucophylloides glaucophylla	*Salix myricoides var. myricoides*	blue-leaved willow	N
Salix gracilis textoris	*Salix petiolaris*	petioled willow	N
Salix humilis		prairie willow	N
Salix interior		sandbar willow	N
Salix lucida		shining willow	N
Salix nigra		black willow	N
Salix pedicellaris hypoglauca	*Salix pedicellaris*	willow, bog willow	N
Salix rigida	*Salix eriocephala*	heart-leaved willow	N

Scientific Name	Synonyms	Common Name	Nativity
Salix sericea		silky willow	N
Salix syrticola	*Salix cordata*	dune willow	N
Salix X subsericea	*Salix petiolaris*	yewleaf willow	N
Sanguinaria canadensis		bloodroot	N
Sarracenia purpurea		pitcher plant	N
Scirpus cyperinus		wool grass	N
Scirpus validus creber	*Schoenoplectus tabernaemontani*	great bulrush	N
Solidago speciosa		showy goldenrod	N
Tanacetum vulgare		tansy	I
Thuja occidentalis		arbor vitae, northern white cedar	N
Tilia americana		basswood, american linden	N
Trientalis borealis		starflower	N
Typha angustifolia		narrow-leaved cattail	I
Typha latifolia		common cattail	N
Ulmus americana		American elm	N
Ulmus rubra		slippery elm	N
Urtica procera	*Urtica dioica ssp. gracilis*	tall nettle	N
Viburnum opulus		European highbush cranberry	N
Vitis riparia		river bank grape	N
Zea mays		corn	I
Zizania aquatica		wild rice	N

Scientific Name	Synonyms	Common Name	Nativity
Acer rubrum		red maple	N
Acer saccharum		sugar maple	N
Alnus glutinosa		european black alder	I
Alnus rugosa americana	*Alnus incana ssp. rugosa*	speckled alder	N
Apocynum androsaemifolium		spreading dogbane	N
Betula papyrifera		paper birch	N
Betula pumila		dwarf birch	N
Carpinus caroliniana virginiana	*Carpinus caroliniana ssp. virginiana*	blue beech	N
Carya cordiformis		bitter hickory	N
Carya ovata		shagbark hickory	N
Clintonia borealis		blue bead	N
Coptis groenlandica	*Coptis trifolia*	goldthread	N
Cornus stolonifera	*Cornus sericea ssp. sericea*	red osier dogwood	N
Corylus americana		American hazelnut	N
Crataegus coccinea	*Crataegus chrysocarpa*	scarlet hawthorn	N
Crataegus crus-galli		cockspur hawthorn	N
Equisetum arvense		horsetail	N
Fraxinus americana		white ash	N
Fraxinus nigra		black ash	N
Fraxinus pennsylvanica		red ash	N
Hierochloe odorata	*Anthoxanthum monticola ssp. alpinum*	vanilla grass, sweet grass	N
Impatiens capensis		orange jewelweed	N
Juglans cinerea		butternut	N
Juglans nigra		black walnut	N
Juncus dudleyi		inland rush	N
Juncus effusus solutus	*Juncus effusus var. solutus*	common rush	N
Juniperus virginiana crebra	*Juniperus virginiana var. virginiana*	eastern red cedar	N
Laportea canadensis		wood nettle	N
Larix laricina		tamarack, larch	N
Lycopodium lucidulum	*Huperzia lucidula*	shining club moss	N
Lycopodium obscurum		ground pine	N
Ostrya virginiana		hop hornbeam, ironwood	N
Phragmites communis berlandieri	*Phragmites australis*	common reed	N
Pinus banksiana		jack pine	N

Scientific Name	Synonyms	Common Name	Nativity
Pontederia cordata		pickerel weed	N
Populus tremuloides		quaking aspen	N
Prunus americana		wild plum	N
Quercus alba		white oak	N
Quercus bicolor		swamp white oak	N
Quercus palustris		pin oak	N
Quercus rubra		red oak	N
Quercus velutina		black oak	N
Rhus glabra		smooth sumac	N
Salix alba		white willow	I
Salix amygdaloides		peach-leaved willow	N
Salix babylonica	*Salix X pendulina, Salix X sepulcralis*	weeping willow	I
Salix bebbiana		beaked willow	N
Salix candida		hoary willow	N
Salix discolor		pussy willow	N
Salix fragilis		crack willow	I
Salix glaucophylloides glaucophylla	*Salix myricoides var. myricoides*	blue-leaved willow	N
Salix gracilis textoris	*Salix petiolaris*	petioled willow	N
Salix humilis		prairie willow	N
Salix interior		sandbar willow	N
Salix lucida		shining willow	N
Salix nigra		black willow	N
Salix pedicellaris hypoglauca	*Salix pedicellaris*	willow, bog willow	N
Salix rigida	*Salix eriocephala*	heart-leaved willow	N
Salix sericea		silky willow	N
Salix syrticola	*Salix cordata*	dune willow	N
Salix X subsericea	*Salix petiolaris*	yewleaf willow	N
Sanguinaria canadensis		bloodroot	N
Sarracenia purpurea		pitcher plant	N
Scirpus cyperinus		wool grass	N
Scirpus validus creber	*Schoenoplectus tabernaemontani*	great bulrush	N
Solidago speciosa		showy goldenrod	N
Thuja occidentalis		arbor vitae, northern white cedar	N
Tilia americana		basswood, american linden	N

Scientific Name	Synonyms	Common Name	Nativity
Typha angustifolia		narrow-leaved cattail	I
Ulmus americana		American elm	N
Ulmus rubra		slippery elm	N
Urtica procera	*Urtica dioica ssp. gracilis*	tall nettle	N

Scientific Name	Synonyms	Common Name	Nativity
Alnus glutinosa		european black alder	I
Alnus rugosa americana	*Alnus incana ssp. rugosa*	speckled alder	N
Betula papyrifera		paper birch	N
Coptis groenlandica	*Coptis trifolia*	goldthread	N
Cornus stolonifera	*Cornus sericea ssp. sericea*	red osier dogwood	N
Corylus americana		American hazelnut	N
Fraxinus nigra		black ash	N
Hepatica americana	*Hepatica nobilis var. obtusa*	round-lobed hepatica	N
Impatiens capensis		orange jewelweed	N
Impatiens pallida		yellow jewelweed	N
Juglans cinerea		butternut	N
Juglans nigra		black walnut	N
Juniperus virginiana crebra	*Juniperus virginiana var. virginiana*	eastern red cedar	N
Prunus americana		wild plum	N
Prunus nigra		Canada plum	N
Quercus macrocarpa		bur oak	N
Quercus rubra		red oak	N
Quercus velutina		black oak	N
Ranunculus pensylvanicus		bristly buttercup	N
Rhus aromatica		fragrant sumac	N
Rhus glabra		smooth sumac	N
Rhus typhina	*Rhus hirta*	staghorn sumac	N
Rudbeckia hirta		black-eyed susan	N
Sanguinaria canadensis		bloodroot	N
Thuja occidentalis		arbor vitae, northern white cedar	N

Scientific Name	Synonyms	Common Name	Nativity
Thuja occidentalis		arbor vitae, northern white cedar	N

Scientific Name	Synonyms	Common Name	Nativity
Acer saccharum		sugar maple	N
Gaylussacia baccata		huckleberry	N
Panax quinquefolius		ginseng	N
Polygala senega		seneca snakeroot	N

Scientific Name	Synonyms	Common Name	Nativity
Acer negundo		box elder	N
Acer rubrum		red maple	N
Acer saccharinum		silver maple	N
Acer saccharum		sugar maple	N
Acorus calamus		sweet flag	N
Actaea rubra		red baneberry	N
Agrimonia gryposepala		tall agrimony	N
Allium tricoccum		wild leek	N
Alnus rugosa americana	*Alnus incana ssp. rugosa*	speckled alder	N
Amelanchier laevis		allegheny shadblow	N
Amorpha canescens		lead plant	N
Andropogon gerardii		big bluestem grass	N
Anemone canadensis		meadow anemone	N
Anemone cylindrica		thimbleweed	N
Angelica atropurpurea		great angelica, purplestem angelica	N
Antennaria neglecta		cat's foot	N
Antennaria plantaginifolia		pussy toes	N
Apocynum androsaemifolium		spreading dogbane	N
Apocynum sibiricum	*Apocynum cannabinum*	indian hemp, dogbane	N
Aquilegia canadensis		wild columbine	N
Arabis glabra		tower mustard	N
Aralia nudicaulis		wild sarsaparilla	N
Aralia racemosa		spikenard	N
Arctium minus		common burdock	I
Arctostaphylos uva-ursi coactilis	*Arctostaphylos uva-ursi*	bearberry	N
Arisaema atrorubens	*Arisaema triphyllum ssp. triphyllum*	jack-in-the-pulpit	N
Artemisia absinthium		Common wormwood	I
Artemisia caudata	*Artemisia campestris ssp. caudata*	beach wormwood	N
Asarum canadense		wild ginger	N
Asclepias incarnata		swamp milkweed	N
Asclepias syriaca		common milkweed	N
Aster cordifolius	*Symphyotrichum cordifolium*	heart leaved aster	N
Aster dumosus	*Symphyotrichum dumosum var. dumosum*	rice-button aster, bushy aster	N

Scientific Name	Synonyms	Common Name	Nativity
Aster macrophyllus	*Eurybia macrophylla*	big-leaved aster	N
Aster novae-angliae	*Symphyotrichum novae-angliae*	New England aster	N
Aster puniceus	*Symphyotrichum puniceum var. puniceum*	swamp aster	N
Aster puniceus firmus	*Symphyotrichum puniceum var. puniceum*	swamp aster	N
Athyrium filix-femina michauxii	*Athyrium filix-femina ssp. angustum*	lady fern	N
Baptisia tinctoria crebra	*Baptisia tinctoria*	yellow wild indigo	N
Betula lutea	*Betula alleghaniensis var. alleghaniensis*	yellow birch	N
Betula nigra		river birch	N
Betula papyrifera		paper birch	N
Betula pendula		European white birch	I
Betula pumila		dwarf birch	N
Botrychium virginianum		rattlesnake fern	N
Brassica rapa		field mustard	I
Calla palustris		water arum	N
Caltha palustris		marsh marigold	N
Campanula americana	*Campanulastrum americanum*	tall bellflower	N
Campanula aparinoides		marsh bellflower	N
Campanula rotundifolia		harebell	N
Capsella bursa-pastoris		shepherd's purse	I
Carya ovata		shagbark hickory	N
Castilleja coccinea		Indian paint brush	N
Caulophyllum thalictroides		blue cohosh	N
Ceanothus americanus		New Jersey tea	N
Celastrus scandens		climbing bittersweet	N
Chimaphila umbellata cisatlantica	*Chimaphila umbellata ssp. cisatlantica*	pipsissewa, prince's pine	N
Cicuta maculata		water hemlock	N
Cirsium arvense		field thistle, canada thistle	I
Cirsium vulgare		bull thistle	I
Claytonia virginica		spring beauty	N
Clintonia borealis		blue bead	N
Comptonia peregrina		sweet fern	N
Coptis groenlandica	*Coptis trifolia*	goldthread	N
Cornus alternifolia		alternate-leaved dogwood	N

Scientific Name	Synonyms	Common Name	Nativity
Cornus canadensis		bunchberry	N
Cornus florida		flowering dogwood	N
Cornus racemosa		gray dogwood	N
Cornus stolonifera	*Cornus sericea ssp. sericea*	red osier dogwood	N
Cornus stolonifera baileyi	*Cornus sericea ssp. sericea*	Bailey dogwood	N
Corylus americana		American hazelnut	N
Crataegus calpodendron		sugar hawthorn	N
Crataegus coccinea	*Crataegus chrysocarpa*	scarlet hawthorn	N
Crataegus crus-galli		cockspur hawthorn	N
Crataegus macrosperma		large-seeded hawthorne	N
Crataegus mollis		downy hawthorn	N
Crataegus pruinosa		frosted hawthorn	N
Crataegus punctata		dotted hawthorn	N
Cypripedium calceolus parviflorum	*Cypripedium parviflorum var. parviflorum*	small yellow lady's slipper	N
Cypripedium calceolus pubescens	*Cypripedium parviflorum var. pubescens*	large yellow lady's slipper	N
Cypripedium reginae		showy lady's slipper	N
Daucus carota		queen anne's lace	I
Descurainia sophia		Flixweed	I
Dicentra cucullaria		Dutchman's breeches	N
Diervilla lonicera		bush honeysuckle	N
Drosera rotundifolia		round-leaved sundew	N
Dryopteris cristata		crested shield fern	N
Echinocystis lobata		wild cucumber	N
Epifagus virginiana		beech drops	N
Epigaea repens glabrifolia	*Epigaea repens*	trailing arbutus	N
Epilobium angustifolium	*Chamerion angustifolium ssp. angustifolium*	fire weed	N
Equisetum arvense		horsetail	N
Equisetum hyemale affine	*Equisetum hyemale var. affine*	tall scouring rush	N
Equisetum X ferrissii		horsetail	N
Erigeron canadensis	*Conyza canadensis var. canadensis*	horseweed	N
Erigeron philadelphicus		marsh fleabane	N
Erigeron strigosus		daisy fleabane	N
Erythronium americanum		yellow trout lily	N

Scientific Name	Synonyms	Common Name	Nativity
Eupatorium maculatum		spotted Joe Pye weed	N
Eupatorium perfoliatum		common boneset	N
Eupatorium purpureum		sweet joe-pie-weed	N
Euphorbia corollata		flowering spurge	N
Euphorbia cyparissias		cypress spurge, grave-yard spurge	I
Fagus grandifolia		American beech	N
Fragaria virginiana		wild strawberry	N
Fraxinus americana		white ash	N
Fraxinus nigra		black ash	N
Fraxinus pennsylvanica		red ash	N
Fraxinus pennsylvanica subintegerrima	*Fraxinus pennsylvanica*	green ash	N
Galium aparine		annual bedstraw	N
Galium tinctorium		stiff bedstraw; small cleaver	N
Galium trifidum		small bedstraw	N
Gaultheria procumbens		wintergreen	N
Geranium maculatum		wild geranium	N
Geum canadense		white avens	N
Glyceria canadensis		rattlesnake grass	N
Gnaphalium obtusifolium	*Pseudognaphalium obtusifolium ssp. obtusifolium*	old-field balsam	N
Habenaria viridis bracteata	*Coeloglossum viride var. virescens*	bracted orchid	N
Hamamelis virginiana		witch hazel	N
Helianthus occidentalis		western sunflower	N
Hepatica acutiloba	*Hepatica nobilis var. acuta*	sharp-lobed hepatica	N
Hepatica americana	*Hepatica nobilis var. obtusa*	round-lobed hepatica	N
Heracleum maximum		cow parsnip	N
Heuchera richardsonii		prairie alum root	N
Hieracium canadense fasciculatum		Canada hawkweed	N
Hordeum jubatum		squirreltail grass	N
Humulus lupulus		common hop	N
Hydrophyllum virginianum		Virginia waterleaf	N
Ilex verticillata		winterberry	N
Impatiens capensis		orange jewelweed	N
Impatiens pallida		yellow jewelweed	N

Scientific Name	Synonyms	Common Name	Nativity
Iris virginica shrevei	*Iris shrevei, I. versicolor var. blandescens, I. v. var. shrevei*	blue flag, wild iris	N
Juglans cinerea		butternut	N
Juncus greenei		greene's rush	N
Juniperus communis		common juniper, dunes juniper	N
Juniperus communis depressa	*Juniperus communis var. depressa*	common juniper	N
Juniperus virginiana crebra	*Juniperus virginiana var. virginiana*	eastern red cedar	N
Lactuca biennis	*Lactuca spicata*	tall blue lettuce	N
Lactuca canadensis		wild lettuce	N
Laportea canadensis		wood nettle	N
Larix laricina		tamarack, larch	N
Lathyrus ochroleucus		pale vetchling	N
Lathyrus palustris		marsh vetching	N
Lathyrus venosus		veiny pea	N
Lemna minor		small duckweed	N
Lilium philadelphicum andinum		prairie lily	N
Linaria vulgaris		butter & eggs, toadflax	I
Lindera benzoin		spicebush	N
Linnaea borealis americana	*Linnaea borealis ssp. americana*	twinflower	N
Lobelia cardinalis		cardinal flower	N
Lonicera dioica		red honeysuckle	N
Lonicera japonica		Japanese honeysuckle	I
Lycopodium complanatum flabelliforme	*Lycopodium digitatum*	trailing ground pine	N
Lycopodium obscurum		ground pine	N
Maianthemum canadense		wild lily-of-the-valley	N
Malaxis unifolia		green adder's mouth	N
Medeola virginiana		Indian cucumber root	N
Melampyrum lineare latifolium		cow wheat	N
Melilotus alba	*Melilotus officinalis*	white sweet clover	I
Menispermum canadense		moonseed	N
Mentha arvensis villosa	*Mentha arvensis*	wild mint	N
Mirabilis nyctaginea		wild four o'clock	N
Mitchella repens		partridge-berry	N
Monarda fistulosa		wild bergamot	N

Scientific Name	Synonyms	Common Name	Nativity
Monarda punctata villicaulis	*Monarda punctata ssp. punctata var. villicaulis*	horse mint	N
Nemopanthus mucronata		mountain holly	N
Nepeta cataria		catnip	I
Nuphar advena	*Nuphar lutea ssp. advena*	yellow pond lily	N
Nuphar variegatum	*Nuphar luteum ssp. variegata*	yellow pond lily	N
Nymphaea tuberosa	*Nymphaea odorata ssp. tuberosa*	white water lily	N
Oenothera biennis		common evening primrose	N
Onoclea sensibilis		sensitive fern	N
Osmorhiza claytoni		hairy sweet cicely	N
Osmorhiza longistylis		smooth sweet cicely	N
Ostrya virginiana		hop hornbeam, ironwood	N
Panax quinquefolius		ginseng	N
Panax trifolius		dwarf ginseng	N
Pastinaca sativa		wild parsnip	I
Pedicularis canadensis		wood betony	N
Peltandra virginica		arrow arum	N
Phryma leptostachya		lopseed	N
Physocarpus opulifolius		ninebark	N
Pinus banksiana		jack pine	N
Pinus strobus		white pine	N
Plantago major		common plantain	N
Plantago rugelii		red stalked plantain	N
Podophyllum peltatum		may apple	N
Polygala paucifolia		flowering wintergreen	N
Polygala senega		seneca snakeroot	N
Polygonatum canaliculatum	*Polygonatum biflorum var. commutatum*	smooth solomon's seal	N
Polygonatum pubescens		downy solomon's seal	N
Polygonum amphibium stipulaceum		smartweed, water knotweed	N
Polygonum careyi		Carey`s heartease	N
Polygonum coccineum	*Polygonum amphibium var. emersum*	water hearts ease	N
Polygonum pensylvanicum laevigatum	*Polygonum pensylvanicum*	pennsylvania knotweed	N
Polygonum persicaria		lady's thumb	I
Polygonum punctatum		smartweed	N

Scientific Name	Synonyms	Common Name	Nativity
Pontederia cordata		pickerel weed	N
Populus balsamifera		balsam poplar	N
Populus grandidentata		large-toothed aspen	N
Populus tremuloides		quaking aspen	N
Potentilla arguta		prairie cinquefoil	N
Potentilla norvegica	*Potentilla monspeliensis*	rough cinquefoil	N
Potentilla palustris	*Comarum palustre*	marsh cinquefoil	N
Potentilla recta		sulfur cinquefoil	I
Prenanthes alba		white lettuce lion's foot	N
Prunella vulgaris		lawn prunella	N
Prunus americana		wild plum	N
Prunus pensylvanica		pin cherry	N
Prunus serotina		wild black cherry	N
Prunus virginiana		choke cherry	N
Pycnanthemum virginianum		common mountain mint	N
Pyrola elliptica		large leaved shin-leaf	N
Pyrola rotundifolia americana	*Pyrola americana*	round leaved shin-leaf	N
Quercus macrocarpa		bur oak	N
Quercus rubra		red oak	N
Ranunculus pensylvanicus		bristly buttercup	N
Ranunculus sceleratus		cursed buttercup	N
Rhus aromatica		fragrant sumac	N
Rhus copallina latifolia	*Rhus copallinum var. latifolia*	winged sumac	N
Rhus glabra		smooth sumac	N
Rhus radicans	*Toxicodendron radicans*	poison ivy	N
Rhus typhina	*Rhus hirta*	staghorn sumac	N
Rhus vernix	*Toxicodendron vernix*	poison sumac	N
Ribes americanum		black currant	N
Ribes cynosbati		prickly wild gooseberry	N
Ribes hirtellum		northern gooseberry	N
Rosa blanda		early wild rose	N
Rubus allegheniensis		common blackberry	N
Rubus flagellaris		common dewberry	N

Scientific Name	Synonyms	Common Name	Nativity
Rubus idaeus strigosus	*Rubus idaeus ssp. strigosus*	red raspberry	N
Rubus occidentalis		black dewberry	N
Rubus pensylvanicus		yankee blackberry	N
Rudbeckia hirta		black-eyed susan	N
Rudbeckia laciniata		wild golden glow	N
Rumex altissimus		pale dock	N
Rumex crispus		curly dock, yellow dock	I
Rumex obtusifolius		bitter dock	I
Sagittaria latifolia		common arrowhead	N
Salix candida		hoary willow	N
Salix discolor		pussy willow	N
Salix fragilis		crack willow	I
Salix lucida		shining willow	N
Salix nigra		black willow	N
Salix pedicellaris hypoglauca	*Salix pedicellaris*	willow, bog willow	N
Salix sericea		silky willow	N
Sambucus canadensis	*Sambucus nigra ssp. canadensis*	elderberry, American elder	N
Sambucus pubens	*Sambucus racemosa var. racemosa*	red-berried elder	N
Sanguinaria canadensis		bloodroot	N
Sanicula canadensis		canadian black snakeroot	N
Sanicula marilandica		sanicle, black snakeroot	N
Sarracenia purpurea		pitcher plant	N
Sassafras albidum		sassafras	N
Saururus cernuus		lizard's tail	N
Scutellaria epilobiifolia	*Scutellaria galericulata*	marsh skullcap	N
Senecio aureus	*Packera aurea*	golden ragwort	N
Silphium perfoliatum		cup plant	N
Sium suave		water parsnip	N
Smilacina racemosa	*Maianthemum racemosum ssp. racemosum*	feathery false Solomon's Seal	N
Smilacina stellata	*Maianthemum stellatum*	starry false Solomon's-seal	N
Smilax tamnoides hispida	*Smilax tamnoides*	bristly green brier, bristly cat brier	N
Solanum dulcamara		bittersweet nightshade	I
Solidago flexicaulis		broad-leaved goldenrod	N

Scientific Name	Synonyms	Common Name	Nativity
Solidago graminifolia nuttallii	*Euthamia graminifolia var. nuttallii*	grass leaved goldenrod	N
Solidago juncea		early goldenrod	N
Solidago rigida	*Oligoneuron rigidum var. rigidum*	stiff goldenrod	N
Solidago speciosa		showy goldenrod	N
Sparganium eurycarpum		common bur reed	N
Spiraea alba		meadowsweet	N
Spiraea tomentosa rosea		hardhack, steeplebush	N
Spiranthes lacera		slender ladies' tresses	N
Sporobolus heterolepis		prairie dropseed	N
Stachys palustris homotricha	*Stachys pilosa var. pilosa*	woundwort	N
Stellaria media		common chickweed	I
Symplocarpus foetidus		skunk cabbage	N
Taenidia integerrima		yellow pimpernel	N
Tanacetum vulgare		tansy	I
Taraxacum officinale		common dandelion	I
Thalictrum dasycarpum		smooth meadow rue	N
Thaspium barbinode		hairy meadow parsnip	N
Thuja occidentalis		arbor vitae, northern white cedar	N
Tilia americana		basswood, american linden	N
Trientalis borealis		starflower	N
Trillium grandiflorum		large-flowered trillium	N
Typha latifolia		common cattail	N
Ulmus americana		American elm	N
Ulmus rubra		slippery elm	N
Urtica procera	*Urtica dioica ssp. gracilis*	tall nettle	N
Uvularia grandiflora		bellwort	N
Uvularia sessifolia	*Oakesia sessilifolia*	merrybells	N
Vaccinium angustifolium laevifolium	*Vaccinium angustifolium*	early low blueberry	N
Vaccinium macrocarpon		large cranberry	N
Vaccinium oxycoccos		small cranberry	N
Verbascum thapsus		common mullein	I
Verbena hastata		blue vervain	N
Veronicastrum virginicum		culver's root	N

Scientific Name	Synonyms	Common Name	Nativity
Viburnum acerifolium		maple-leaved arrow-wood	N
Viburnum lentago		nanneyberry	N
Viburnum opulus		European highbush cranberry	N
Viburnum rafinesquianum		downy arrowwood	N
Viola canadensis		Canada violet	N
Viola conspersa		dog violet	N
Viola pubescens		downy yellow violet	N
Vitis labrusca		fox grape	N
Vitis riparia		river bank grape	N
Xanthoxylum americanum	*Zanthoxylum americanum*	prickly ash	N

Scientific Name	Synonyms	Common Name	Nativity
Acer nigrum		black maple	N
Acer rubrum		red maple	N
Acer saccharinum		silver maple	N
Acer saccharum		sugar maple	N
Acorus calamus		sweet flag	N
Adiantum pedatum		maidenhair fern	N
Alnus glutinosa		european black alder	I
Alnus rugosa americana	*Alnus incana ssp. rugosa*	speckled alder	N
Amaranthus albus		tumbleweed	N
Anemone virginiana		tall anemone, tumbleweed	N
Anemonella thalictroides	*Thalictrum thalictroides*	rue anemone	N
Antennaria neglecta		cat's foot	N
Apocynum androsaemifolium		spreading dogbane	N
Apocynum cannabinum		indian hemp, dogbane	N
Aquilegia canadensis		wild columbine	N
Arctostaphylos uva-ursi coactilis	*Arctostaphylos uva-ursi*	bearberry	N
Artemisia absinthium		Common wormwood	I
Asarum canadense		wild ginger	N
Asclepias syriaca		common milkweed	N
Betula lutea	*Betula alleghaniensis var. alleghaniensis*	yellow birch	N
Betula nigra		river birch	N
Betula papyrifera		paper birch	N
Betula pendula		European white birch	I
Betula populifolia		gray birch	N
Betula pumila		dwarf birch	N
Calla palustris		water arum	N
Carex alata		winged sedge, broadwing sedge	N
Carpinus caroliniana virginiana	*Carpinus caroliniana ssp. virginiana*	blue beech	N
Carya cordiformis		bitter hickory	N
Carya ovata		shagbark hickory	N
Castanea dentata		chestnut	N
Celastrus scandens		climbing bittersweet	N
Celtis occidentalis		hackberry	N
Chenopodium album		lamb's quarters	N

Scientific Name	Synonyms	Common Name	Nativity
Chenopodium boscianum	*Chenopodium berlandieri var. boscianum*	woodland goosefoot	N
Chimaphila umbellata cisatlantica	*Chimaphila umbellata ssp. cisatlantica*	pipsissewa, prince's pine	N
Cicuta maculata		water hemlock	N
Claytonia virginica		spring beauty	N
Clintonia borealis		blue bead	N
Comptonia peregrina		sweet fern	N
Coptis groenlandica	*Coptis trifolia*	goldthread	N
Cornus alternifolia		alternate-leaved dogwood	N
Cornus stolonifera	*Cornus sericea ssp. sericea*	red osier dogwood	N
Corylus americana		American hazelnut	N
Crataegus calpodendron		sugar hawthorn	N
Crataegus coccinea	*Crataegus chrysocarpa*	scarlet hawthorn	N
Crataegus crus-galli		cockspur hawthorn	N
Daucus carota		queen anne's lace	I
Dicentra cucullaria		Dutchman's breeches	N
Dioscorea villosa		wild yam	N
Drosera rotundifolia		round-leaved sundew	N
Epifagus virginiana		beech drops	N
Epigaea repens glabrifolia	*Epigaea repens*	trailing arbutus	N
Equisetum arvense		horsetail	N
Equisetum hyemale affine	*Equisetum hyemale var. affine*	tall scouring rush	N
Erythronium americanum		yellow trout lily	N
Fagus grandifolia		American beech	N
Fragaria virginiana		wild strawberry	N
Fraxinus americana		white ash	N
Fraxinus americana biltmoreana	*Fraxinus americana*	Biltmore ash	N
Fraxinus nigra		black ash	N
Fraxinus pennsylvanica		red ash	N
Fraxinus pennsylvanica subintegerrima	*Fraxinus pennsylvanica*	green ash	N
Galium aparine		annual bedstraw	N
Gaultheria procumbens		wintergreen	N
Gaylussacia baccata		huckleberry	N
Hierochloe odorata	*Anthoxanthum monticola ssp. alpinum*	vanilla grass, sweet grass	N
Impatiens capensis		orange jewelweed	N

Scientific Name	Synonyms	Common Name	Nativity
Juglans cinerea		butternut	N
Juglans nigra		black walnut	N
Juncus dudleyi		inland rush	N
Juncus effusus solutus	*Juncus effusus var. solutus*	common rush	N
Juncus tenuis		path rush	N
Juniperus communis depressa	*Juniperus communis var. depressa*	common juniper	N
Juniperus virginiana crebra	*Juniperus virginiana var. virginiana*	eastern red cedar	N
Laportea canadensis		wood nettle	N
Larix laricina		tamarack, larch	N
Lathyrus palustris		marsh vetching	N
Lemna minor		small duckweed	N
Lilium michiganense		Turk's cap lily	N
Linnaea borealis americana	*Linnaea borealis ssp. americana*	twinflower	N
Lobelia cardinalis		cardinal flower	N
Lycopodium lucidulum	*Huperzia lucidula*	shining club moss	N
Lycopodium obscurum		ground pine	N
Mitchella repens		partridge-berry	N
Ostrya virginiana		hop hornbeam, ironwood	N
Panax quinquefolius		ginseng	N
Pedicularis canadensis		wood betony	N
Phragmites communis berlandieri	*Phragmites australis*	common reed	N
Pinus banksiana		jack pine	N
Pinus nigra		Austrian Pine	I
Pinus strobus		white pine	N
Pinus sylvestris		Scotch pine	I
Plantago lanceolata		English plantain	I
Plantago major		common plantain	N
Platanus occidentalis		sycamore	N
Polygonatum canaliculatum	*Polygonatum biflorum var. commutatum*	smooth solomon's seal	N
Polygonatum pubescens		downy solomon's seal	N
Polygonum amphibium stipulaceum		smartweed, water knotweed	N
Polygonum arifolium pubescens	*Polygonum arifolium*	halbert-leaved tear-thumb	N
Polygonum aviculare		common knotweed	I
Pontederia cordata		pickerel weed	N

Scientific Name	Synonyms	Common Name	Nativity
Populus balsamifera		balsam poplar	N
Populus candicans X jackii	*Populus balsamifera ssp. balsamifera*		N
Populus deltoides		cottonwood	N
Populus grandidentata		large-toothed aspen	N
Populus nigra italica	*Populus nigra*	lombardy poplar	N
Populus tremuloides		quaking aspen	N
Potentilla anserina	*Argentina anserina*	silverweed	N
Prunus americana		wild plum	N
Prunus nigra		Canada plum	N
Prunus pensylvanica		pin cherry	N
Prunus virginiana		choke cherry	N
Pyrus coronaria	*Malus coronaria var. coronaria*	white sweet crab	N
Pyrus malus	*Malus sylvestris*	apple	I
Quercus alba		white oak	N
Quercus bicolor		swamp white oak	N
Quercus ellipsoidalis		Hill's oak	N
Quercus imbricaria		shingle oak	N
Quercus palustris		pin oak	N
Quercus rubra		red oak	N
Quercus velutina		black oak	N
Rhus aromatica		fragrant sumac	N
Rhus glabra		smooth sumac	N
Rhus typhina	*Rhus hirta*	staghorn sumac	N
Ribes missouriense		wild gooseberry	N
Rubus allegheniensis		common blackberry	N
Rubus flagellaris		common dewberry	N
Rubus hispidus obovalis	*Rubus hispidus*	swamp dewberry	N
Rubus idaeus strigosus	*Rubus idaeus ssp. strigosus*	red raspberry	N
Rubus occidentalis		black dewberry	N
Rumex acetosella		field sorrel	I
Sagittaria latifolia		common arrowhead	N
Salix alba		white willow	I
Salix amygdaloides		peach-leaved willow	N
Salix babylonica	*Salix X pendulina, Salix X sepulcralis*	weeping willow	I

Scientific Name	Synonyms	Common Name	Nativity
Salix bebbiana		beaked willow	N
Salix candida		hoary willow	N
Salix discolor		pussy willow	N
Salix fragilis		crack willow	I
Salix glaucophylloides glaucophylla	*Salix myricoides var. myricoides*	blue-leaved willow	N
Salix gracilis textoris	*Salix petiolaris*	petioled willow	N
Salix humilis		prairie willow	N
Salix interior		sandbar willow	N
Salix lucida		shining willow	N
Salix nigra		black willow	N
Salix pedicellaris hypoglauca	*Salix pedicellaris*	willow, bog willow	N
Salix rigida	*Salix eriocephala*	heart-leaved willow	N
Salix sericea		silky willow	N
Salix syrticola	*Salix cordata*	dune willow	N
Salix X subsericea	*Salix petiolaris*	yewleaf willow	N
Sambucus canadensis	*Sambucus nigra ssp. canadensis*	elderberry, American elder	N
Sanguinaria canadensis		bloodroot	N
Sarracenia purpurea		pitcher plant	N
Sassafras albidum		sassafras	N
Scirpus cyperinus		wool grass	N
Scirpus validus creber	*Schoenoplectus tabernaemontani*	great bulrush	N
Solidago graminifolia media	*Euthamia gymnospermoides*	smooth grass-leaved goldenrod	N
Solidago speciosa		showy goldenrod	N
Taraxacum officinale		common dandelion	I
Thuja occidentalis		arbor vitae, northern white cedar	N
Tilia americana		basswood, american linden	N
Typha angustifolia		narrow-leaved cattail	I
Ulmus americana		American elm	N
Ulmus pumila		Siberian elm	I
Ulmus rubra		slippery elm	N
Urtica procera	*Urtica dioica ssp. gracilis*	tall nettle	N
Vaccinium angustifolium laevifolium	*Vaccinium angustifolium*	early low blueberry	N
Vaccinium oxycoccos		small cranberry	N
Verbascum thapsus		common mullein	I

Scientific Name	Synonyms	Common Name	Nativity
Viburnum acerifolium		maple-leaved arrow-wood	N
Viburnum opulus		European highbush cranberry	N
Vitis aestivalis		summer grape	N
Vitis riparia		river bank grape	N
Zea mays		corn	I
Zizania aquatica		wild rice	N

APPENDIX B

Ojibway Traditional Use Species by Survey/Management Unit

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Acer negundo	box elder	N						✓	✓						✓		3
Acer platanoides	Norway maple	I						✓	✓								2
Acer rubrum	red maple	N	✓		✓			✓	✓	✓	✓				✓	✓	8
Acer saccharinum	silver maple	N	✓					✓	✓	✓					✓	✓	6
Achillea millefolium	yarrow, milfoil	N		✓	✓				✓	✓							4
Allium cernuum	nodding wild onion	N						✓									1
Amelanchier interior	dwarf shadblow	N								✓							1
Amelanchier laevis	allegheny shadblow	N						✓	✓	✓					✓		4
Amphicarpa bracteata	hog peanut	N						✓	✓								2
Andropogon gerardii	big bluestem grass	N							✓						✓		2
Anemone canadensis	meadow anemone	N			✓				✓						✓		3
Anemone cylindrica	thimbleweed	N							✓						✓		2
Antennaria plantaginifolia	pussy toes	N							✓						✓		2
Apios americana	ground nut	N						✓									1
Apocynum androsaemifolium	spreading dogbane	N			✓				✓	✓	✓				✓	✓	6
Apocynum cannabinum	indian hemp, dogbane	N								✓						✓	2
Apocynum sibiricum	indian hemp, dogbane	N							✓						✓		2
Aquilegia canadensis	wild columbine	N						✓	✓						✓	✓	4
Aralia nudicaulis	wild sarsaparilla	N							✓	✓					✓		3
Arctostaphylos uva-ursi coactilis	bearberry	N		✓	✓			✓	✓	✓					✓	✓	7
Artemisia caudata	beach wormwood	N							✓						✓		2
Asclepias incarnata	swamp milkweed	N						✓	✓	✓					✓		4
Asclepias syriaca	common milkweed	N						✓	✓	✓					✓	✓	5
Aster azureus	sky-blue aster	N						✓									1
Aster dumosus	rice-button aster, bushy aster	N						✓		✓					✓		3
Aster ericoides	heath aster	N						✓									1
Aster junciformis	rush aster	N						✓									1
Aster laevis	smooth blue aster	N						✓									1
Aster lateriflorus	side flowering aster	N						✓									1
Aster linariifolius	flax-leaved aster	N						✓									1
Aster novae-angliae	New England aster	N		✓	✓			✓	✓						✓		5
Aster pilosus	hairy aster	N						✓									1

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Aster ptarmicoides	stiff aster	N						✓									1
Aster puniceus firmus	swamp aster	N						✓	✓						✓		3
Aster sagittifolius	common blue wood aster	N						✓									1
Aster sagittifolius drummondii	drummond`s aster	N						✓									1
Aster simplex	marsh aster	N						✓									1
Aster umbellatus	flat-top aster	N						✓									1
Boehmeria cylindrica	false nettle	N								✓							1
Campanula aparinoides	marsh bellflower	N							✓						✓		2
Capsella bursa-pastoris	shepherd's purse	I							✓						✓		2
Carex alata	winged sedge, broadwing sedge	N														✓	1
Castanea dentata	chestnut	N						✓								✓	2
Celtis occidentalis	hackberry	N														✓	1
Chimaphila umbellata cisatlantica	pipsissewa, prince's pine	N							✓						✓	✓	3
Cirsium pitcheri	sand thistle	N							✓								1
Cirsium vulgare	bull thistle	I							✓						✓		2
Claytonia virginica	spring beauty	N							✓						✓	✓	3
Comptonia peregrina	sweet fern	N			✓			✓	✓	✓					✓	✓	6
Cornus alternifolia	alternate-leaved dogwood	N		✓	✓				✓	✓					✓	✓	6
Cornus canadensis	bunchberry	N		✓				✓	✓						✓		4
Cornus florida	flowering dogwood	N		✓					✓						✓		3
Cornus stolonifera	red osier dogwood	N		✓	✓				✓	✓	✓	✓			✓	✓	8
Cornus stolonifera baileyi	Bailey dogwood	N		✓					✓						✓		3
Corylus americana	American hazelnut	N			✓			✓	✓	✓	✓	✓			✓	✓	8
Cypripedium calceolus parviflorum	small yellow lady's slipper	N							✓						✓		2
Cypripedium calceolus pubescens	large yellow lady's slipper	N							✓						✓		2
Cypripedium reginae	showy lady's slipper	N							✓						✓		2
Diervilla lonicera	bush honeysuckle	N							✓						✓		2
Epifagus virginiana	beech drops	N							✓						✓	✓	3
Erigeron canadensis	horseweed	N		✓					✓						✓		3
Erigeron philadelphicus	marsh fleabane	N		✓	✓				✓						✓		4
Erigeron strigosus	daisy fleabane	N							✓						✓		2
Eupatorium purpureum	sweet joe-pie-weed	N							✓						✓		2

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Euphorbia cyparissias	cypress spurge, grave-yard spurge	I							✓						✓		2
Fagus grandifolia	American beech	N						✓	✓						✓	✓	4
Fraxinus pennsylvanica	red ash	N						✓	✓	✓	✓				✓	✓	6
Fraxinus pennsylvanica subintegerrima	green ash	N	✓						✓	✓					✓	✓	5
Galium circaezans hypomalacum	wild licorice	N							✓								1
Galium pilosum	hairy bedstraw	N							✓								1
Gaultheria procumbens	wintergreen	N			✓			✓	✓						✓	✓	5
Gaylussacia baccata	huckleberry	N			✓			✓						✓		✓	4
Geum canadense	white avens	N							✓						✓		2
Hierochloe odorata	vanilla grass, sweet grass	N	✓		✓	✓	✓		✓	✓	✓					✓	8
Hordeum jubatum	squirreltail grass	N							✓						✓		2
Ilex verticillata	winterberry	N							✓						✓		2
Juglans cinerea	butternut	N	✓					✓	✓	✓	✓	✓			✓	✓	8
Juglans nigra	black walnut	N						✓		✓	✓	✓				✓	5
Juncus dudleyi	inland rush	N								✓	✓					✓	3
Juncus greenei	greene's rush	N							✓	✓					✓		3
Juncus tenuis	path rush	N								✓						✓	2
Juniperus communis	common juniper, dunes juniper	N							✓	✓					✓		3
Juniperus virginiana crebra	eastern red cedar	N	✓		✓				✓	✓	✓	✓			✓	✓	8
Lactuca canadensis	wild lettuce	N							✓						✓		2
Laportea canadensis	wood nettle	N							✓	✓	✓				✓	✓	5
Lathyrus venosus	veiny pea	N						✓	✓						✓		3
Lilium michiganense	Turk's cap lily	N				✓			✓							✓	3
Lilium philadelphicum andinum	prairie lily	N						✓	✓						✓		3
Linaria vulgaris	butter & eggs, toadflax	I							✓						✓		2
Linnaea borealis americana	twinflower	N							✓						✓	✓	3
Lobelia cardinalis	cardinal flower	N							✓						✓	✓	3
Lonicera japonica	Japanese honeysuckle	I							✓						✓		2
Lonicera prolifera	yellow honeysuckle	N							✓								1
Lonicera X muendeniensis	smallflower honeysuckle	I							✓								1
Lychnis alba	white campion	I							✓								1
Maianthemum canadense	wild lily-of-the-valley	N						✓	✓						✓		3

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Malaxis unifolia	green adder's mouth	N							✓						✓		2
Medeola virginiana	Indian cucumber root	N							✓						✓		2
Menispermum canadense	moonseed	N							✓						✓		2
Monarda fistulosa	wild bergamot	N							✓						✓		2
Nemopanthus mucronata	mountain holly	N						✓	✓						✓		3
Nepeta cataria	catnip	I						✓	✓						✓		3
Nuphar advena	yellow pond lily	N							✓						✓		2
Oenothera biennis	common evening primrose	N							✓						✓		2
Orobanche uniflora	one-flowered broom rape	N			✓				✓								2
Osmorhiza longistylis	smooth sweet cicely	N							✓						✓		2
Panax trifolius	dwarf ginseng	N							✓						✓		2
Parthenocissus inserta	thicket creeper	N						✓									1
Parthenocissus quinquefolia	virginia creeper	N						✓									1
Pastinaca sativa	wild parsnip	I							✓						✓		2
Peltandra virginica	arrow arum	N							✓						✓		2
Pinus banksiana	jack pine	N							✓	✓	✓				✓	✓	5
Pinus strobus	white pine	N					✓	✓	✓	✓					✓	✓	6
Plantago major	common plantain	N						✓	✓						✓	✓	4
Polygonatum pubescens	downy solomon's seal	N							✓						✓	✓	3
Polygonum aviculare	common knotweed	I														✓	1
Polygonum coccineum	water hearts ease	N		✓	✓				✓						✓		4
Polygonum punctatum	smartweed	N							✓						✓		2
Pontederia cordata	pickerel weed	N								✓	✓				✓	✓	4
Populus alba	white poplar, silver poplar	I							✓	✓							2
Populus nigra italica	lombardy poplar	N			✓		✓	✓								✓	4
Potentilla anserina	silverweed	N							✓							✓	2
Prenanthes alba	white lettuce lion's foot	N							✓						✓		2
Prunus nigra	Canada plum	N						✓				✓				✓	3
Prunus pumila	sand cherry	N						✓									1
Pteridium aquilinum latiusculum	bracken fern	N						✓	✓								2
Pycnanthemum virginianum	common mountain mint	N						✓	✓						✓		3
Pyrola rotundifolia americana	round leaved shin-leaf	N						✓	✓						✓		3

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Pyrus coronaria	white sweet crab	N						✓								✓	2
Quercus bicolor	swamp white oak	N						✓		✓	✓					✓	4
Quercus ellipsoidalis	Hill's oak	N						✓								✓	2
Quercus macrocarpa	bur oak	N						✓	✓			✓			✓		4
Quercus palustris	pin oak	N						✓		✓	✓					✓	4
Ranunculus pensylvanicus	bristly buttercup	N		✓	✓				✓			✓			✓		5
Rhus glabra	smooth sumac	N		✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	11
Rhus typhina	staghorn sumac	N		✓	✓			✓	✓			✓			✓	✓	7
Rhus vernix	poison sumac	N							✓						✓		2
Ribes cynosbati	prickly wild gooseberry	N						✓	✓						✓		3
Ribes sativum	red currant	I						✓	✓								2
Rosa blanda	early wild rose	N							✓						✓		2
Rosa multiflora	japanese rose	I							✓								1
Rubus flagellaris	common dewberry	N						✓	✓						✓	✓	4
Rubus hispidus obovalis	swamp dewberry	N						✓	✓							✓	3
Rubus idaeus strigosus	red raspberry	N						✓	✓						✓	✓	4
Rubus odoratus	purple flowering raspberry	N						✓									1
Rubus pubescens	dwarf raspberry	N						✓									1
Rudbeckia hirta	black-eyed susan	N							✓			✓			✓		3
Rudbeckia laciniata	wild golden glow	N						✓	✓						✓		3
Rumex altissimus	pale dock	N							✓						✓		2
Sagittaria brevirostra	short beaked arrowhead	N							✓								1
Sagittaria graminea	grass-leaved arrowhead	N							✓								1
Salix amygdaloides	peach-leaved willow	N		✓	✓				✓	✓	✓					✓	6
Salix candida	hoary willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix discolor	pussy willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix gracilis textoris	petioled willow	N		✓	✓				✓	✓	✓					✓	6
Salix lucida	shining willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix pedicellaris hypoglauca	willow, bog willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix rigida	heart-leaved willow	N		✓	✓				✓	✓	✓					✓	6
Salix sericea	silky willow	N	✓	✓	✓				✓	✓	✓				✓	✓	8
Salix syrticola	dune willow	N		✓	✓				✓	✓	✓					✓	6

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Sambucus canadensis	elderberry, American elder	N						✓	✓						✓	✓	4
Sambucus pubens	red-berried elder	N						✓	✓						✓		3
Sanicula canadensis	canadian black snakeroot	N							✓						✓		2
Sanicula marilandica	sanicle, black snakeroot	N							✓						✓		2
Sarracenia purpurea	pitcher plant	N							✓	✓	✓				✓	✓	5
Saururus cernuus	lizard's tail	N							✓						✓		2
Senecio aureus	golden ragwort	N							✓						✓		2
Silphium perfoliatum	cup plant	N							✓						✓		2
Smilacina stellata	starry false Solomon's-seal	N							✓						✓		2
Smilax tamnoides hispida	bristly green brier, bristly cat brier	N													✓		1
Solanum americanum	black nightshade	N							✓								1
Solidago altissima	tall goldenrod	N							✓								1
Solidago caesia	blue-stemmed goldenrod	N							✓								1
Solidago gigantea	late goldenrod, giant goldenrod	N							✓								1
Solidago graminifolia nuttallii	grass leaved goldenrod	N		✓	✓				✓						✓		4
Solidago gymnospermoides	shiny grass-leaved goldenrod	N							✓								1
Solidago juncea	early goldenrod	N							✓						✓		2
Solidago nemoralis	old field goldenrod	N							✓								1
Solidago ohioensis	Ohio goldenrod	N							✓								1
Solidago patula	swamp goldenrod	N							✓								1
Solidago racemosa gillmani	dune goldenrod, Rand's goldenrod	N							✓								1
Solidago riddellii	riddell's goldenrod	N							✓								1
Solidago rigida	stiff goldenrod	N							✓						✓		2
Solidago rugosa	rough goldenrod	N							✓								1
Solidago tenuifolia	slender-leaved goldenrod	N							✓								1
Solidago ulmifolia	elm leaved goldenrod	N							✓								1
Spiraea alba	meadowsweet	N		✓					✓						✓		3
Spiraea tomentosa rosea	hardhack, steeplebush	N							✓						✓		2
Sporobolus heterolepis	prairie dropseed	N							✓						✓		2
Stachys palustris homotricha	woundwort	N							✓						✓		2
Symplocarpus foetidus	skunk cabbage	N						✓	✓						✓		3
Thalictrum dasycarpum	smooth meadow rue	N							✓						✓		2

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Thaspium barbinode	hairy meadow parsnip	N							✓						✓		2
Vaccinium angustifolium laevifolium	early low blueberry	N	✓		✓	✓		✓	✓						✓	✓	7
Vaccinium corymbosum	highbush blueberry	N			✓	✓		✓	✓								4
Vaccinium macrocarpon	large cranberry	N	✓					✓	✓						✓		4
Verbascum thapsus	common mullein	I		✓					✓						✓	✓	4
Viburnum acerifolium	maple-leaved arrow-wood	N							✓						✓	✓	3
Vitis aestivalis	summer grape	N						✓	✓							✓	3
Vitis labrusca	fox grape	N						✓	✓						✓		3
Xanthoxylum americanum	prickly ash	N						✓	✓						✓		3
			9	26	33	5	4	76	162	45	26	11	0	1	126	65	

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Acer negundo	box elder	N						✓	✓						✓		3
Acer rubrum	red maple	N	✓		✓			✓	✓	✓	✓				✓	✓	8
Acer saccharinum	silver maple	N	✓					✓	✓	✓					✓	✓	6
Achillea millefolium	yarrow, milfoil	N		✓	✓				✓	✓							4
Amelanchier laevis	allegheny shadblow	N						✓	✓	✓					✓		4
Amphicarpa bracteata	hog peanut	N						✓	✓								2
Andropogon gerardii	big bluestem grass	N							✓						✓		2
Anemone cylindrica	thimbleweed	N							✓						✓		2
Antennaria plantaginifolia	pussy toes	N							✓						✓		2
Apios americana	ground nut	N						✓									1
Apocynum androsaemifolium	spreading dogbane	N			✓				✓	✓	✓				✓	✓	6
Apocynum sibiricum	indian hemp, dogbane	N							✓						✓		2
Aquilegia canadensis	wild columbine	N						✓	✓						✓	✓	4
Aralia nudicaulis	wild sarsaparilla	N							✓	✓					✓		3
Artemisia caudata	beach wormwood	N							✓						✓		2
Asclepias incarnata	swamp milkweed	N						✓	✓	✓					✓		4
Asclepias syriaca	common milkweed	N						✓	✓	✓					✓	✓	5
Aster azureus	sky-blue aster	N						✓									1
Aster dumosus	rice-button aster, bushy aster	N						✓		✓					✓		3
Aster ericoides	heath aster	N						✓									1
Aster junciformis	rush aster	N						✓									1
Aster linariifolius	flax-leaved aster	N						✓									1
Aster novae-angliae	New England aster	N		✓	✓			✓	✓						✓		5
Aster pilosus	hairy aster	N						✓									1
Aster puniceus firmus	swamp aster	N						✓	✓						✓		3
Aster simplex	marsh aster	N						✓									1
Aster umbellatus	flat-top aster	N						✓									1
Boehmeria cylindrica	false nettle	N								✓							1
Caulophyllum thalictroides	blue cohosh	N							✓						✓		2
Celtis occidentalis	hackberry	N														✓	1
Chimaphila umbellata cisatlantica	pipsissewa, prince's pine	N							✓						✓	✓	3
Cirsium discolor	pasture thistle	N							✓								1

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Cirsium pitcheri	sand thistle	N							✓								1
Cirsium vulgare	bull thistle	I							✓						✓		2
Comptonia peregrina	sweet fern	N			✓			✓	✓	✓					✓	✓	6
Cornus alternifolia	alternate-leaved dogwood	N		✓	✓				✓	✓					✓	✓	6
Cornus canadensis	bunchberry	N		✓				✓	✓						✓		4
Cornus florida	flowering dogwood	N		✓					✓						✓		3
Cornus stolonifera baileyi	Bailey dogwood	N		✓					✓						✓		3
Cypripedium calceolus pubescens	large yellow lady's slipper	N							✓						✓		2
Dicentra cucullaria	Dutchman's breeches	N							✓						✓	✓	3
Epifagus virginiana	beech drops	N							✓						✓	✓	3
Erigeron philadelphicus	marsh fleabane	N		✓	✓				✓						✓		4
Erigeron strigosus	daisy fleabane	N							✓						✓		2
Eupatorium purpureum	sweet joe-pie-weed	N							✓						✓		2
Euphorbia cyparissias	cypress spurge, grave-yard spurge	I							✓						✓		2
Fagus grandifolia	American beech	N						✓	✓						✓	✓	4
Fraxinus americana biltmoreana	Biltmore ash	N							✓	✓						✓	3
Fraxinus pennsylvanica	red ash	N						✓	✓	✓	✓				✓	✓	6
Galium aparine	annual bedstraw	N							✓						✓	✓	3
Galium asprellum	rough bedstraw	N							✓								1
Galium circaezans hypomalacum	wild licorice	N							✓								1
Galium triflorum	sweet-scented bedstraw	N							✓								1
Gaultheria procumbens	wintergreen	N			✓			✓	✓						✓	✓	5
Hieracium canadense fasciculatum	Canada hawkweed	N							✓	✓					✓		3
Hierochloe odorata	vanilla grass, sweet grass	N	✓		✓	✓	✓		✓	✓	✓					✓	8
Hordeum jubatum	squirreltail grass	N							✓						✓		2
Ilex verticillata	winterberry	N							✓						✓		2
Juglans nigra	black walnut	N						✓		✓	✓	✓				✓	5
Juncus greenei	greene's rush	N							✓	✓					✓		3
Juniperus virginiana crebra	eastern red cedar	N	✓		✓				✓	✓	✓	✓			✓	✓	8
Lactuca canadensis	wild lettuce	N							✓						✓		2
Laportea canadensis	wood nettle	N							✓	✓	✓				✓	✓	5

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Lilium philadelphicum andinum	prairie lily	N						✓	✓						✓		3
Linaria vulgaris	butter & eggs, toadflax	I							✓						✓		2
Linnaea borealis americana	twinflower	N							✓						✓	✓	3
Lonicera X muendeniensis	smallflower honeysuckle	I							✓								1
Lonicera X xylosteoides	fly honeysuckle	I							✓								1
Malaxis unifolia	green adder's mouth	N							✓						✓		2
Medeola virginiana	Indian cucumber root	N							✓						✓		2
Melampyrum lineare latifolium	cow wheat	N							✓						✓		2
Menispermum canadense	moonseed	N							✓						✓		2
Oenothera biennis	common evening primrose	N							✓						✓		2
Orobanche uniflora	one-flowered broom rape	N			✓				✓								2
Parthenocissus inserta	thicket creeper	N						✓									1
Parthenocissus quinquefolia	virginia creeper	N						✓									1
Peltandra virginica	arrow arum	N							✓						✓		2
Phragmites communis berlandieri	common reed	N								✓	✓					✓	3
Pinus banksiana	jack pine	N							✓	✓	✓				✓	✓	5
Pinus strobus	white pine	N					✓	✓	✓	✓					✓	✓	6
Plantago major	common plantain	N						✓	✓						✓	✓	4
Polygonatum pubescens	downy solomon's seal	N							✓						✓	✓	3
Polygonum aviculare	common knotweed	I														✓	1
Polygonum careyi	Carey`s heartease	N							✓						✓		2
Polygonum coccineum	water hearts ease	N		✓	✓				✓						✓		4
Polygonum punctatum	smartweed	N							✓						✓		2
Polytaenia nuttallii	prairie parsley	N							✓								1
Pontederia cordata	pickerel weed	N								✓	✓				✓	✓	4
Prunus nigra	Canada plum	N						✓				✓				✓	3
Pteridium aquilinum latiusculum	bracken fern	N						✓	✓								2
Pyrola rotundifolia americana	round leaved shin-leaf	N						✓	✓						✓		3
Quercus bicolor	swamp white oak	N						✓		✓	✓					✓	4
Quercus macrocarpa	bur oak	N						✓	✓			✓			✓		4
Quercus palustris	pin oak	N						✓		✓	✓					✓	4
Ranunculus pensylvanicus	bristly buttercup	N		✓	✓				✓			✓			✓		5

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Rosa blanda	early wild rose	N							✓						✓		2
Rosa multiflora	japanese rose	I							✓								1
Rubus flagellaris	common dewberry	N						✓	✓						✓	✓	4
Rubus hispidus obovalis	swamp dewberry	N						✓	✓							✓	3
Rubus idaeus strigosus	red raspberry	N						✓	✓						✓	✓	4
Rubus odoratus	purple flowering raspberry	N						✓									1
Rubus pubescens	dwarf raspberry	N						✓									1
Rudbeckia hirta	black-eyed susan	N							✓			✓			✓		3
Rudbeckia laciniata	wild golden glow	N						✓	✓						✓		3
Rumex altissimus	pale dock	N							✓						✓		2
Sagittaria graminea	grass-leaved arrowhead	N							✓								1
Sagittaria rigida	stiff arrowhead	N							✓								1
Salix alba	white willow	I		✓	✓				✓	✓	✓					✓	6
Salix discolor	pussy willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix gracilis textoris	petioled willow	N		✓	✓				✓	✓	✓					✓	6
Salix lucida	shining willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix pedicellaris hypoglauca	willow, bog willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix rigida	heart-leaved willow	N		✓	✓				✓	✓	✓					✓	6
Salix sericea	silky willow	N	✓	✓	✓				✓	✓	✓				✓	✓	8
Salix syrticola	dune willow	N		✓	✓				✓	✓	✓					✓	6
Sambucus canadensis	elderberry, American elder	N						✓	✓						✓	✓	4
Sanicula marilandica	sanicle, black snakeroot	N							✓						✓		2
Saururus cernuus	lizard's tail	N							✓						✓		2
Scirpus validus creber	great bulrush	N						✓		✓	✓					✓	4
Senecio aureus	golden ragwort	N							✓						✓		2
Smilax tamnoides hispida	bristly green brier, bristly cat brier	N													✓		1
Solanum americanum	black nightshade	N							✓								1
Solidago altissima	tall goldenrod	N							✓								1
Solidago flexicaulis	broad-leaved goldenrod	N							✓						✓		2
Solidago gigantea	late goldenrod, giant goldenrod	N							✓								1
Solidago graminifolia media	smooth grass-leaved goldenrod	N							✓							✓	2
Solidago graminifolia nuttallii	grass leaved goldenrod	N		✓	✓				✓						✓		4

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Solidago gymnospermoides	shiny grass-leaved goldenrod	N							✓								1
Solidago juncea	early goldenrod	N							✓						✓		2
Solidago nemoralis	old field goldenrod	N							✓								1
Solidago ohioensis	Ohio goldenrod	N							✓								1
Solidago patula	swamp goldenrod	N							✓								1
Solidago riddellii	riddell's goldenrod	N							✓								1
Solidago rigida	stiff goldenrod	N							✓						✓		2
Solidago rugosa	rough goldenrod	N							✓								1
Stachys palustris homotricha	woundwort	N							✓						✓		2
Symplocarpus foetidus	skunk cabbage	N						✓	✓						✓		3
Thalictrum dasycarpum	smooth meadow rue	N							✓						✓		2
Thaspium barbinode	hairy meadow parsnip	N							✓						✓		2
Ulmus pumila	Siberian elm	I	✓													✓	2
Uvularia grandiflora	bellwort	N							✓						✓		2
Verbascum thapsus	common mullein	I		✓					✓						✓	✓	4
Veronicastrum virginicum	culver's root	N							✓						✓		2
Viburnum rafinesquianum	downy arrowwood	N			✓				✓						✓		3
Vitis aestivalis	summer grape	N						✓	✓							✓	3
			6	19	23	1	2	46	120	35	21	6	0	0	90	48	

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Acer rubrum	red maple	N	✓		✓			✓	✓	✓	✓				✓	✓	8
Acer saccharinum	silver maple	N	✓					✓	✓	✓					✓	✓	6
Acer saccharum	sugar maple	N	✓		✓			✓	✓	✓	✓			✓	✓	✓	9
Achillea millefolium	yarrow, milfoil	N		✓	✓				✓	✓							4
Adiantum pedatum	maidenhair fern	N							✓							✓	2
Alnus rugosa americana	speckled alder	N							✓	✓	✓	✓			✓	✓	6
Amelanchier arborea	juneberry, shadbush, serviceberry	N						✓		✓							2
Amelanchier laevis	allegheny shadblow	N						✓	✓	✓					✓		4
Andropogon gerardii	big bluestem grass	N							✓						✓		2
Anemone cylindrica	thimbleweed	N							✓						✓		2
Anemonella thalictroides	rue anemone	N														✓	1
Antennaria plantaginifolia	pussy toes	N							✓						✓		2
Apios americana	ground nut	N						✓									1
Apocynum androsaemifolium	spreading dogbane	N			✓				✓	✓	✓				✓	✓	6
Apocynum sibiricum	indian hemp, dogbane	N							✓						✓		2
Aquilegia canadensis	wild columbine	N						✓	✓						✓	✓	4
Aralia nudicaulis	wild sarsaparilla	N							✓	✓					✓		3
Arctostaphylos uva-ursi coactilis	bearberry	N		✓	✓			✓	✓	✓					✓	✓	7
Artemisia caudata	beach wormwood	N							✓						✓		2
Asclepias incarnata	swamp milkweed	N						✓	✓	✓					✓		4
Asclepias syriaca	common milkweed	N						✓	✓	✓					✓	✓	5
Aster azureus	sky-blue aster	N						✓									1
Aster cordifolius	heart leaved aster	N		✓	✓			✓	✓	✓					✓		6
Aster dumosus	rice-button aster, bushy aster	N						✓		✓					✓		3
Aster ericoides	heath aster	N						✓									1
Aster junciformis	rush aster	N						✓									1
Aster linariifolius	flax-leaved aster	N						✓									1
Aster novae-angliae	New England aster	N		✓	✓			✓	✓						✓		5
Aster pilosus	hairy aster	N						✓									1
Aster praealtus	willow aster	N						✓									1
Aster ptarmicoides	stiff aster	N						✓									1
Aster puniceus firmus	swamp aster	N						✓	✓						✓		3

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Aster sagittifolius	common blue wood aster	N						✓									1
Aster sericeus	silky aster	N						✓									1
Aster simplex	marsh aster	N						✓									1
Aster umbellatus	flat-top aster	N						✓									1
Campanula aparinoides	marsh bellflower	N							✓						✓		2
Campanula rotundifolia	harebell	N							✓						✓		2
Capsella bursa-pastoris	shepherd's purse	I							✓						✓		2
Carex alata	winged sedge, broadwing sedge	N														✓	1
Carpinus caroliniana virginiana	blue beech	N			✓					✓	✓					✓	4
Celtis occidentalis	hackberry	N														✓	1
Cephalanthus occidentalis	button bush	N							✓								1
Chamaedaphne calyculata angustifolia	leatherleaf	N						✓	✓								2
Chimaphila umbellata cisatlantica	pipsissewa, prince's pine	N							✓						✓	✓	3
Cirsium pitcheri	sand thistle	N							✓								1
Cirsium vulgare	bull thistle	I							✓						✓		2
Claytonia virginica	spring beauty	N							✓						✓	✓	3
Comptonia peregrina	sweet fern	N			✓			✓	✓	✓					✓	✓	6
Cornus alternifolia	alternate-leaved dogwood	N		✓	✓				✓	✓					✓	✓	6
Cornus canadensis	bunchberry	N		✓				✓	✓						✓		4
Cornus florida	flowering dogwood	N		✓					✓						✓		3
Cornus racemosa	gray dogwood	N		✓	✓			✓	✓	✓					✓		6
Cornus rugosa	speckled dogwood	N		✓	✓												2
Cornus stolonifera baileyi	Bailey dogwood	N		✓					✓						✓		3
Corylus americana	American hazelnut	N			✓			✓	✓	✓	✓	✓			✓	✓	8
Cypripedium calceolus parviflorum	small yellow lady's slipper	N							✓						✓		2
Cypripedium calceolus pubescens	large yellow lady's slipper	N							✓						✓		2
Dicentra cucullaria	Dutchman's breeches	N							✓						✓	✓	3
Diervilla lonicera	bush honeysuckle	N							✓						✓		2
Epifagus virginiana	beech drops	N							✓						✓	✓	3
Equisetum arvense	horsetail	N						✓	✓	✓	✓				✓	✓	6
Equisetum X ferrissii	horsetail	N							✓						✓		2
Erigeron canadensis	horseweed	N		✓					✓						✓		3

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Erigeron philadelphicus	marsh fleabane	N		✓	✓				✓						✓		4
Erigeron strigosus	daisy fleabane	N							✓						✓		2
Eupatorium maculatum	spotted Joe Pye weed	N							✓						✓		2
Eupatorium purpureum	sweet joe-pie-weed	N							✓						✓		2
Euphorbia cyparissias	cypress spurge, grave-yard spurge	I							✓						✓		2
Fagus grandifolia	American beech	N						✓	✓						✓	✓	4
Fraxinus americana biltmoreana	Biltmore ash	N							✓	✓						✓	3
Fraxinus pennsylvanica	red ash	N						✓	✓	✓	✓				✓	✓	6
Fraxinus pennsylvanica subintegerrima	green ash	N	✓						✓	✓					✓	✓	5
Galium aparine	annual bedstraw	N							✓						✓	✓	3
Galium circaezans hypomalacum	wild licorice	N							✓								1
Galium obtusum	wild madder	N							✓								1
Galium pilosum	hairy bedstraw	N							✓								1
Galium triflorum	sweet-scented bedstraw	N							✓								1
Gaultheria procumbens	wintergreen	N			✓			✓	✓						✓	✓	5
Geranium maculatum	wild geranium	N							✓						✓		2
Geum canadense	white avens	N							✓						✓		2
Hamamelis virginiana	witch hazel	N			✓			✓	✓						✓		4
Hepatica americana	round-lobed hepatica	N							✓			✓			✓		3
Hieracium canadense fasciculatum	Canada hawkweed	N							✓	✓					✓		3
Hierochloe odorata	vanilla grass, sweet grass	N	✓		✓	✓	✓		✓	✓	✓					✓	8
Ilex verticillata	winterberry	N							✓						✓		2
Impatiens pallida	yellow jewelweed	N							✓			✓			✓		3
Juglans nigra	black walnut	N						✓		✓	✓	✓				✓	5
Juncus dudleyi	inland rush	N								✓	✓					✓	3
Juncus effusus solutus	common rush	N								✓	✓					✓	3
Juncus greenei	greene's rush	N							✓	✓					✓		3
Juncus tenuis	path rush	N								✓						✓	2
Juniperus communis	common juniper, dunes juniper	N							✓	✓					✓		3
Juniperus virginiana crebra	eastern red cedar	N	✓		✓				✓	✓	✓	✓			✓	✓	8
Lactuca biennis	tall blue lettuce	N							✓	✓					✓		3
Lactuca canadensis	wild lettuce	N							✓						✓		2

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Lilium philadelphicum andinum	prairie lily	N						✓	✓						✓		3
Linaria vulgaris	butter & eggs, toadflax	I							✓						✓		2
Linnaea borealis americana	twinflower	N							✓						✓	✓	3
Lobelia cardinalis	cardinal flower	N							✓						✓	✓	3
Lonicera japonica	Japanese honeysuckle	I							✓						✓		2
Lonicera X muendeniensis	smallflower honeysuckle	I							✓								1
Lonicera X xylosteoides	fly honeysuckle	I							✓								1
Lychnis alba	white campion	I							✓								1
Lycopodium complanatum flabelliforme	trailing ground pine	N							✓						✓		2
Maianthemum canadense	wild lily-of-the-valley	N						✓	✓						✓		3
Medeola virginiana	Indian cucumber root	N							✓						✓		2
Menispermum canadense	moonseed	N							✓						✓		2
Mentha arvensis villosa	wild mint	N						✓	✓						✓		3
Mirabilis nyctaginea	wild four o'clock	N							✓						✓		2
Monarda fistulosa	wild bergamot	N							✓						✓		2
Nemopanthus mucronata	mountain holly	N						✓	✓						✓		3
Nuphar advena	yellow pond lily	N							✓						✓		2
Oenothera biennis	common evening primrose	N							✓						✓		2
Orobanche uniflora	one-flowered broom rape	N			✓				✓								2
Ostrya virginiana	hop hornbeam, ironwood	N							✓	✓	✓				✓	✓	5
Panax quinquefolius	ginseng	N						✓	✓					✓	✓	✓	5
Parthenocissus inserta	thicket creeper	N						✓									1
Parthenocissus quinquefolia	virginia creeper	N						✓									1
Peltandra virginica	arrow arum	N							✓						✓		2
Pinus banksiana	jack pine	N							✓	✓	✓				✓	✓	5
Pinus strobus	white pine	N					✓	✓	✓	✓					✓	✓	6
Plantago major	common plantain	N						✓	✓						✓	✓	4
Platanus occidentalis	sycamore	N														✓	1
Polygala paucifolia	flowering wintergreen	N							✓						✓		2
Polygonatum pubescens	downy solomon's seal	N							✓						✓	✓	3
Polygonum aviculare	common knotweed	I														✓	1
Polygonum careyi	Carey`s heartease	N							✓						✓		2

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Polygonum coccineum	water hearts ease	N		✓	✓				✓						✓		4
Polygonum punctatum	smartweed	N							✓						✓		2
Pontederia cordata	pickerel weed	N								✓	✓				✓	✓	4
Populus alba	white poplar, silver poplar	I							✓	✓							2
Populus nigra italica	lombardy poplar	N			✓		✓	✓								✓	4
Potentilla norvegica	rough cinquefoil	N							✓						✓		2
Potentilla palustris	marsh cinquefoil	N							✓						✓		2
Prunus nigra	Canada plum	N						✓				✓				✓	3
Pteridium aquilinum latiusculum	bracken fern	N						✓	✓								2
Pycnanthemum virginianum	common mountain mint	N						✓	✓						✓		3
Pyrola rotundifolia americana	round leaved shin-leaf	N						✓	✓						✓		3
Pyrus coronaria	white sweet crab	N						✓								✓	2
Pyrus malus	apple	I						✓								✓	2
Quercus bicolor	swamp white oak	N						✓		✓	✓					✓	4
Quercus ellipsoidalis	Hill's oak	N						✓								✓	2
Quercus macrocarpa	bur oak	N						✓	✓			✓			✓		4
Quercus palustris	pin oak	N						✓		✓	✓					✓	4
Ranunculus pensylvanicus	bristly buttercup	N		✓	✓				✓			✓			✓		5
Rhus radicans	poison ivy	N													✓		1
Rhus typhina	staghorn sumac	N		✓	✓			✓	✓			✓			✓	✓	7
Rhus vernix	poison sumac	N							✓						✓		2
Ribes cynosbati	prickly wild gooseberry	N						✓	✓						✓		3
Ribes hirtellum	northern gooseberry	N						✓	✓						✓		3
Ribes sativum	red currant	I						✓	✓								2
Rosa blanda	early wild rose	N							✓						✓		2
Rubus flagellaris	common dewberry	N						✓	✓						✓	✓	4
Rubus hispidus obovalis	swamp dewberry	N						✓	✓							✓	3
Rubus idaeus strigosus	red raspberry	N						✓	✓						✓	✓	4
Rubus odoratus	purple flowering raspberry	N						✓									1
Rubus pensylvanicus	yankee blackberry	N						✓	✓						✓		3
Rubus pubescens	dwarf raspberry	N						✓									1
Rudbeckia hirta	black-eyed susan	N							✓			✓			✓		3

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Rudbeckia laciniata	wild golden glow	N						✓	✓						✓		3
Rumex altissimus	pale dock	N							✓						✓		2
Sagittaria graminea	grass-leaved arrowhead	N							✓								1
Sagittaria rigida	stiff arrowhead	N							✓								1
Salix amygdaloides	peach-leaved willow	N		✓	✓				✓	✓	✓					✓	6
Salix candida	hoary willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix discolor	pussy willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix fragilis	crack willow	I		✓	✓				✓	✓	✓				✓	✓	7
Salix lucida	shining willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix pedicellaris hypoglauca	willow, bog willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix rigida	heart-leaved willow	N		✓	✓				✓	✓	✓					✓	6
Salix sericea	silky willow	N	✓	✓	✓				✓	✓	✓				✓	✓	8
Salix syrticola	dune willow	N		✓	✓				✓	✓	✓					✓	6
Sambucus canadensis	elderberry, American elder	N						✓	✓						✓	✓	4
Sanguinaria canadensis	bloodroot	N			✓				✓	✓	✓	✓			✓	✓	7
Sanicula canadensis	canadian black snakeroot	N							✓						✓		2
Sanicula marilandica	sanicle, black snakeroot	N							✓						✓		2
Saururus cernuus	lizard's tail	N							✓						✓		2
Smilacina stellata	starry false Solomon's-seal	N							✓						✓		2
Smilax tamnoides hispida	bristly green brier, bristly cat brier	N													✓		1
Solanum americanum	black nightshade	N							✓								1
Solanum dulcamara	bittersweet nightshade	I							✓						✓		2
Solidago altissima	tall goldenrod	N							✓								1
Solidago caesia	blue-stemmed goldenrod	N							✓								1
Solidago flexicaulis	broad-leaved goldenrod	N							✓						✓		2
Solidago gigantea	late goldenrod, giant goldenrod	N							✓								1
Solidago graminifolia media	smooth grass-leaved goldenrod	N							✓							✓	2
Solidago graminifolia nuttallii	grass leaved goldenrod	N		✓	✓				✓						✓		4
Solidago gymnospermoides	shiny grass-leaved goldenrod	N							✓								1
Solidago juncea	early goldenrod	N							✓						✓		2
Solidago nemoralis	old field goldenrod	N							✓								1
Solidago patula	swamp goldenrod	N							✓								1

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Solidago racemosa gillmani	dune goldenrod, Rand's goldenrod	N							✓								1
Solidago riddellii	riddell's goldenrod	N							✓								1
Solidago rigida	stiff goldenrod	N							✓						✓		2
Solidago rugosa	rough goldenrod	N							✓								1
Solidago tenuifolia	slender-leaved goldenrod	N							✓								1
Sporobolus heterolepis	prairie dropseed	N							✓						✓		2
Stellaria media	common chickweed	I							✓						✓		2
Symplocarpus foetidus	skunk cabbage	N						✓	✓						✓		3
Thalictrum dasycarpum	smooth meadow rue	N							✓						✓		2
Thaspium barbinode	hairy meadow parsnip	N							✓						✓		2
Uvularia grandiflora	bellwort	N							✓						✓		2
Vaccinium angustifolium laevifolium	early low blueberry	N	✓		✓	✓		✓	✓						✓	✓	7
Vaccinium corymbosum	highbush blueberry	N			✓	✓		✓	✓								4
Vaccinium oxycoccos	small cranberry	N	✓					✓	✓						✓	✓	5
Vaccinium vacillans	late low blueberry	N			✓	✓		✓	✓								4
Verbascum thapsus	common mullein	I		✓					✓						✓	✓	4
Viburnum acerifolium	maple-leaved arrow-wood	N							✓						✓	✓	3
Vitis aestivalis	summer grape	N						✓	✓							✓	3
Xanthium strumarium	cocklebur	N							✓								1
Xanthoxylum americanum	prickly ash	N						✓	✓						✓		3
			9	26	37	4	3	75	173	50	28	12	0	2	137	72	

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Acer negundo	box elder	N						✓	✓						✓		3
Acer rubrum	red maple	N	✓		✓			✓	✓	✓	✓				✓	✓	8
Acer saccharinum	silver maple	N	✓					✓	✓	✓					✓	✓	6
Acer saccharum	sugar maple	N	✓		✓			✓	✓	✓	✓			✓	✓	✓	9
Achillea millefolium	yarrow, milfoil	N		✓	✓				✓	✓							4
Acorus calamus	sweet flag	N			✓				✓	✓					✓	✓	5
Actaea pachypoda	white baneberry	N							✓								1
Agrimonia gryposepala	tall agrimony	N							✓						✓		2
Amelanchier arborea	juneberry, shadbush, serviceberry	N						✓		✓							2
Amelanchier laevis	allegheny shadblow	N						✓	✓	✓					✓		4
Amphicarpa bracteata	hog peanut	N						✓	✓								2
Andropogon gerardii	big bluestem grass	N							✓						✓		2
Anemone virginiana	tall anemone, tumbleweed	N							✓							✓	2
Anemonella thalictroides	rue anemone	N														✓	1
Angelica atropurpurea	great angelica, purplestem angelica	N													✓		1
Antennaria neglecta	cat's foot	N							✓						✓	✓	3
Antennaria plantaginifolia	pussy toes	N							✓						✓		2
Apios americana	ground nut	N						✓									1
Apocynum androsaemifolium	spreading dogbane	N			✓				✓	✓	✓				✓	✓	6
Apocynum cannabinum	indian hemp, dogbane	N								✓						✓	2
Aquilegia canadensis	wild columbine	N						✓	✓						✓	✓	4
Aralia nudicaulis	wild sarsaparilla	N							✓	✓					✓		3
Aralia racemosa	spikenard	N							✓						✓		2
Arctium minus	common burdock	I							✓						✓		2
Arisaema atrorubens	jack-in-the-pulpit	N						✓	✓						✓		3
Asarum canadense	wild ginger	N			✓			✓	✓						✓	✓	5
Asclepias syriaca	common milkweed	N						✓	✓	✓					✓	✓	5
Asimina triloba	pawpaw	N						✓									1
Aster azureus	sky-blue aster	N						✓									1
Aster cordifolius	heart leaved aster	N		✓	✓			✓	✓	✓					✓		6
Aster ericoides	heath aster	N						✓									1
Aster lateriflorus	side flowering aster	N						✓									1
Aster linariifolius	flax-leaved aster	N						✓									1
Aster macrophyllus	big-leaved aster	N		✓				✓	✓	✓					✓		5

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Aster novae-angliae	New England aster	N		✓	✓			✓	✓						✓		5
Aster pilosus	hairy aster	N						✓									1
Aster puniceus	swamp aster	N	✓	✓				✓	✓						✓		5
Aster sagittifolius	common blue wood aster	N						✓									1
Aster sagittifolius drummondii	drummond`s aster	N						✓									1
Aster shortii	panicled aster	N						✓									1
Aster simplex	marsh aster	N						✓									1
Aster umbellatus	flat-top aster	N						✓									1
Athyrium filix-femina michauxii	lady fern	N							✓						✓		2
Boehmeria cylindrica	false nettle	N								✓							1
Botrychium virginianum	rattlesnake fern	N							✓						✓		2
Caltha palustris	marsh marigold	N						✓	✓						✓		3
Campanula americana	tall bellflower	N							✓						✓		2
Capsella bursa-pastoris	shepherd's purse	I							✓						✓		2
Carpinus caroliniana virginiana	blue beech	N			✓					✓	✓					✓	4
Carya cordiformis	bitter hickory	N	✓						✓	✓	✓					✓	5
Carya glabra	pignut hickory	N							✓								1
Caulophyllum thalictroides	blue cohosh	N							✓						✓		2
Celastrus scandens	climbing bittersweet	N						✓	✓						✓	✓	4
Celtis occidentalis	hackberry	N														✓	1
Chenopodium boscianum	woodland goosefoot	N														✓	1
Cirsium altissimum	tall thistle	N							✓								1
Cirsium discolor	pasture thistle	N							✓								1
Cirsium pitcheri	sand thistle	N							✓								1
Coptis groenlandica	goldthread	N							✓	✓	✓	✓			✓	✓	6
Cornus canadensis	bunchberry	N		✓				✓	✓						✓		4
Cornus stolonifera	red osier dogwood	N		✓	✓				✓	✓	✓	✓			✓	✓	8
Cornus stolonifera baileyi	Bailey dogwood	N		✓					✓						✓		3
Crataegus crus-galli	cockspur hawthorn	N		✓	✓			✓	✓	✓	✓				✓	✓	8
Crataegus pruinosa	frosted hawthorn	N		✓	✓			✓	✓	✓					✓		6
Crataegus punctata	dotted hawthorn	N		✓	✓			✓	✓	✓					✓		6
Descurainia sophia	Flixweed	I							✓						✓		2
Drosera rotundifolia	round-leaved sundew	N							✓						✓	✓	3
Dryopteris cristata	crested shield fern	N							✓						✓		2

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Epilobium angustifolium	fire weed	N							✓						✓		2
Erigeron strigosus	daisy fleabane	N							✓						✓		2
Eupatorium perfoliatum	common boneset	N							✓						✓		2
Euphorbia corollata	flowering spurge	N							✓						✓		2
Euphorbia cyparissias	cypress spurge, grave-yard spurge	I							✓						✓		2
Fraxinus nigra	black ash	N			✓				✓	✓	✓	✓			✓	✓	7
Fraxinus pennsylvanica	red ash	N						✓	✓	✓	✓				✓	✓	6
Fraxinus pennsylvanica subintegerrima	green ash	N	✓						✓	✓					✓	✓	5
Galium aparine	annual bedstraw	N							✓						✓	✓	3
Galium circaezans hypomalacum	wild licorice	N							✓								1
Galium obtusum	wild madder	N							✓								1
Galium pilosum	hairy bedstraw	N							✓								1
Galium trifidum	small bedstraw	N							✓						✓		2
Galium triflorum	sweet-scented bedstraw	N							✓								1
Glyceria canadensis	rattlesnake grass	N							✓						✓		2
Hepatica americana	round-lobed hepatica	N							✓			✓			✓		3
Heuchera richardsonii	prairie alum root	N							✓						✓		2
Humulus lupulus	common hop	N						✓	✓						✓		3
Hydrophyllum virginianum	Virginia waterleaf	N						✓	✓						✓		3
Juglans nigra	black walnut	N						✓		✓	✓	✓				✓	5
Juncus greenei	greene's rush	N							✓	✓					✓		3
Juniperus virginiana crebra	eastern red cedar	N	✓		✓				✓	✓	✓	✓			✓	✓	8
Lactuca canadensis	wild lettuce	N							✓						✓		2
Laportea canadensis	wood nettle	N							✓	✓	✓				✓	✓	5
Lathyrus ochroleucus	pale vetchling	N						✓	✓	✓					✓		4
Lathyrus palustris	marsh vetching	N						✓	✓						✓	✓	4
Linaria vulgaris	butter & eggs, toadflax	I							✓						✓		2
Linnaea borealis americana	twinflower	N							✓						✓	✓	3
Lonicera prolifera	yellow honeysuckle	N							✓								1
Lonicera tatarica	tartarian honeysuckle	I							✓								1
Lonicera X muendeniensis	smallflower honeysuckle	I							✓								1
Lonicera X xylosteoides	fly honeysuckle	I							✓								1
Lycopodium complanatum flabelliforme	trailing ground pine	N							✓						✓		2
Mitchella repens	partridge-berry	N		✓	✓			✓	✓						✓	✓	6

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Oenothera biennis	common evening primrose	N							✓						✓		2
Orobanche uniflora	one-flowered broom rape	N			✓				✓								2
Ostrya virginiana	hop hornbeam, ironwood	N							✓	✓	✓				✓	✓	5
Panax quinquefolius	ginseng	N						✓	✓					✓	✓	✓	5
Panax trifolius	dwarf ginseng	N							✓						✓		2
Parthenocissus quinquefolia	virginia creeper	N						✓									1
Pedicularis canadensis	wood betony	N						✓	✓						✓	✓	4
Peltandra virginica	arrow arum	N							✓						✓		2
Phryma leptostachya	lopseed	N							✓						✓		2
Physocarpus opulifolius	ninebark	N							✓						✓		2
Pinus strobus	white pine	N					✓	✓	✓	✓					✓	✓	6
Plantago lanceolata	English plantain	I							✓							✓	2
Plantago major	common plantain	N						✓	✓						✓	✓	4
Polygala paucifolia	flowering wintergreen	N							✓						✓		2
Polygala senega	seneca snakeroot	N						✓	✓					✓	✓		4
Polygonum aviculare	common knotweed	I														✓	1
Polygonum careyi	Carey`s heartease	N							✓						✓		2
Polygonum pensylvanicum laevigatum	pennsylvania knotweed	N							✓						✓		2
Polygonum punctatum	smartweed	N							✓						✓		2
Prunella vulgaris	lawn prunella	N							✓						✓		2
Prunus pumila	sand cherry	N						✓									1
Prunus virginiana	choke cherry	N						✓	✓						✓	✓	4
Pteridium aquilinum latiusculum	bracken fern	N						✓	✓								2
Pyrola rotundifolia americana	round leaved shin-leaf	N						✓	✓						✓		3
Quercus bicolor	swamp white oak	N						✓		✓	✓					✓	4
Quercus ellipsoidalis	Hill's oak	N						✓								✓	2
Quercus imbricaria	shingle oak	N						✓								✓	2
Quercus palustris	pin oak	N						✓		✓	✓					✓	4
Quercus rubra	red oak	N						✓	✓	✓	✓	✓			✓	✓	7
Ranunculus pensylvanicus	bristly buttercup	N		✓	✓				✓			✓			✓		5
Ranunculus sceleratus	cursed buttercup	N							✓						✓		2
Rosa blanda	early wild rose	N							✓						✓		2
Rosa carolina	pasture rose	N							✓								1
Rubus allegheniensis	common blackberry	N						✓	✓						✓	✓	4

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Rubus hispidus obovalis	swamp dewberry	N						✓	✓							✓	3
Rubus idaeus strigosus	red raspberry	N						✓	✓						✓	✓	4
Rubus occidentalis	black dewberry	N						✓	✓						✓	✓	4
Rubus pensylvanicus	yankee blackberry	N						✓	✓						✓		3
Rubus pubescens	dwarf raspberry	N						✓									1
Rumex crispus	curly dock, yellow dock	I						✓	✓						✓		3
Sagittaria brevirostra	short beaked arrowhead	N							✓								1
Sagittaria graminea	grass-leaved arrowhead	N							✓								1
Sagittaria latifolia	common arrowhead	N						✓	✓						✓	✓	4
Sagittaria rigida	stiff arrowhead	N							✓								1
Salix alba	white willow	I		✓	✓				✓	✓	✓					✓	6
Salix lucida	shining willow	N		✓	✓				✓	✓	✓				✓	✓	7
Sambucus canadensis	elderberry, American elder	N						✓	✓						✓	✓	4
Sanicula marilandica	sanicle, black snakeroot	N							✓						✓		2
Sarracenia purpurea	pitcher plant	N							✓	✓	✓				✓	✓	5
Saururus cernuus	lizard's tail	N							✓						✓		2
Senecio aureus	golden ragwort	N							✓						✓		2
Sium suave	water parsnip	N						✓	✓						✓		3
Smilacina racemosa	feathery false Solomon's Seal	N						✓	✓						✓		3
Smilax tamnoides hispida	bristly green brier, bristly cat brier	N													✓		1
Solanum americanum	black nightshade	N							✓								1
Solanum dulcamara	bittersweet nightshade	I							✓						✓		2
Solidago altissima	tall goldenrod	N							✓								1
Solidago flexicaulis	broad-leaved goldenrod	N							✓						✓		2
Solidago graminifolia media	smooth grass-leaved goldenrod	N							✓							✓	2
Solidago graminifolia nuttallii	grass leaved goldenrod	N		✓	✓				✓						✓		4
Solidago gymnospermoides	shiny grass-leaved goldenrod	N							✓								1
Solidago juncea	early goldenrod	N							✓						✓		2
Solidago missouriensis fasciculata	Missouri goldenrod	N							✓								1
Solidago nemoralis	old field goldenrod	N							✓								1
Solidago patula	swamp goldenrod	N							✓								1
Solidago riddellii	riddell's goldenrod	N							✓								1
Solidago rugosa	rough goldenrod	N							✓								1
Solidago ulmifolia	elm leaved goldenrod	N							✓								1

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Spiraea tomentosa rosea	hardhack, steeplebush	N							✓						✓		2
Tanacetum vulgare	tansy	I		✓					✓	✓					✓		4
Taraxacum officinale	common dandelion	I						✓	✓						✓	✓	4
Thaspium barbinode	hairy meadow parsnip	N							✓						✓		2
Tilia americana	basswood, american linden	N	✓		✓			✓	✓	✓	✓				✓	✓	8
Ulmus americana	American elm	N							✓	✓	✓				✓	✓	5
Ulmus rubra	slippery elm	N	✓					✓	✓	✓	✓				✓	✓	7
Uvularia grandiflora	bellwort	N							✓						✓		2
Verbascum thapsus	common mullein	I		✓					✓						✓	✓	4
Viburnum lentago	nanneyberry	N						✓	✓						✓		3
Viburnum rafinesquianum	downy arrowwood	N			✓				✓						✓		3
Viola canadensis	Canada violet	N							✓						✓		2
Vitis labrusca	fox grape	N						✓	✓						✓		3
Xanthium strumarium	cocklebur	N							✓								1
			9	18	23	0	1	71	154	41	23	8	0	3	119	59	

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Acer negundo	box elder	N						✓	✓						✓		3
Acer rubrum	red maple	N	✓		✓			✓	✓	✓	✓				✓	✓	8
Acer saccharum	sugar maple	N	✓		✓			✓	✓	✓	✓			✓	✓	✓	9
Achillea millefolium	yarrow, milfoil	N		✓	✓				✓	✓							4
Actaea pachypoda	white baneberry	N							✓								1
Actaea rubra	red baneberry	N							✓						✓		2
Adiantum pedatum	maidenhair fern	N							✓							✓	2
Agrimonia gryposepala	tall agrimony	N							✓						✓		2
Allium tricoccum	wild leek	N						✓	✓						✓		3
Alnus rugosa americana	speckled alder	N							✓	✓	✓	✓			✓	✓	6
Amelanchier arborea	juneberry, shadbush, serviceberry	N						✓		✓							2
Amelanchier interior	dwarf shadblow	N								✓							1
Amphicarpa bracteata	hog peanut	N						✓	✓								2
Andropogon gerardii	big bluestem grass	N							✓						✓		2
Anemone cylindrica	thimbleweed	N							✓						✓		2
Anemone virginiana	tall anemone, tumbleweed	N							✓							✓	2
Anemonella thalictroides	rue anemone	N														✓	1
Angelica atropurpurea	great angelica, purplestem angelica	N													✓		1
Antennaria neglecta	cat's foot	N							✓						✓	✓	3
Antennaria plantaginifolia	pussy toes	N							✓						✓		2
Apios americana	ground nut	N						✓									1
Apocynum androsaemifolium	spreading dogbane	N			✓				✓	✓	✓				✓	✓	6
Apocynum cannabinum	indian hemp, dogbane	N								✓						✓	2
Apocynum sibiricum	indian hemp, dogbane	N							✓						✓		2
Aquilegia canadensis	wild columbine	N						✓	✓						✓	✓	4
Arabis glabra	tower mustard	N							✓						✓		2
Aralia nudicaulis	wild sarsaparilla	N							✓	✓					✓		3
Arctium minus	common burdock	I							✓						✓		2
Arctostaphylos uva-ursi coactilis	bearberry	N		✓	✓			✓	✓	✓					✓	✓	7
Arisaema atrorubens	jack-in-the-pulpit	N						✓	✓						✓		3
Artemisia caudata	beach wormwood	N							✓						✓		2
Asarum canadense	wild ginger	N			✓			✓	✓						✓	✓	5
Asclepias incarnata	swamp milkweed	N						✓	✓	✓					✓		4
Asclepias syriaca	common milkweed	N						✓	✓	✓					✓	✓	5

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Asimina triloba	pawpaw	N						✓									1
Aster azureus	sky-blue aster	N						✓									1
Aster cordifolius	heart leaved aster	N		✓	✓			✓	✓	✓					✓		6
Aster dumosus	rice-button aster, bushy aster	N						✓		✓					✓		3
Aster ericoides	heath aster	N						✓									1
Aster junciformis	rush aster	N						✓									1
Aster lateriflorus	side flowering aster	N						✓									1
Aster linariifolius	flax-leaved aster	N						✓									1
Aster macrophyllus	big-leaved aster	N		✓				✓	✓	✓					✓		5
Aster novae-angliae	New England aster	N		✓	✓			✓	✓						✓		5
Aster pilosus	hairy aster	N						✓									1
Aster praealtus	willow aster	N						✓									1
Aster puniceus	swamp aster	N	✓	✓				✓	✓						✓		5
Aster puniceus firmus	swamp aster	N						✓	✓						✓		3
Aster sagittifolius	common blue wood aster	N						✓									1
Aster sericeus	silky aster	N						✓									1
Aster simplex	marsh aster	N						✓									1
Aster umbellatus	flat-top aster	N						✓									1
Athyrium filix-femina michauxii	lady fern	N							✓						✓		2
Betula lutea	yellow birch	N			✓			✓	✓	✓					✓	✓	6
Betula papyrifera	paper birch	N			✓	✓	✓		✓	✓	✓	✓			✓	✓	9
Betula populifolia	gray birch	N														✓	1
Betula pumila	dwarf birch	N				✓			✓	✓	✓				✓	✓	6
Boehmeria cylindrica	false nettle	N								✓							1
Botrychium virginianum	rattlesnake fern	N							✓						✓		2
Caltha palustris	marsh marigold	N						✓	✓						✓		3
Campanula aparinoides	marsh bellflower	N							✓						✓		2
Campanula rotundifolia	harebell	N							✓						✓		2
Capsella bursa-pastoris	shepherd's purse	I							✓						✓		2
Carex alata	winged sedge, broadwing sedge	N														✓	1
Carpinus caroliniana virginiana	blue beech	N			✓					✓	✓					✓	4
Carya cordiformis	bitter hickory	N	✓						✓	✓	✓					✓	5
Carya glabra	pignut hickory	N							✓								1
Ceanothus americanus	New Jersey tea	N							✓						✓		2

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Celtis occidentalis	hackberry	N														✓	1
Cephalanthus occidentalis	button bush	N							✓								1
Chamaedaphne calyculata angustifolia	leatherleaf	N						✓	✓								2
Chenopodium album	lamb's quarters	N						✓								✓	2
Chenopodium boscianum	woodland goosefoot	N														✓	1
Chimaphila umbellata cisatlantica	pipsissewa, prince's pine	N							✓						✓	✓	3
Cicuta maculata	water hemlock	N		✓					✓	✓					✓	✓	5
Cirsium altissimum	tall thistle	N							✓								1
Cirsium discolor	pasture thistle	N							✓								1
Cirsium muticum	swamp thistle	N							✓								1
Cirsium pitcheri	sand thistle	N							✓								1
Cirsium vulgare	bull thistle	I							✓						✓		2
Claytonia virginica	spring beauty	N							✓						✓	✓	3
Comptonia peregrina	sweet fern	N			✓			✓	✓	✓					✓	✓	6
Coptis groenlandica	goldthread	N							✓	✓	✓	✓			✓	✓	6
Cornus alternifolia	alternate-leaved dogwood	N		✓	✓				✓	✓					✓	✓	6
Cornus canadensis	bunchberry	N		✓				✓	✓						✓		4
Cornus racemosa	gray dogwood	N		✓	✓			✓	✓	✓					✓		6
Cornus rugosa	speckled dogwood	N		✓	✓												2
Cornus stolonifera	red osier dogwood	N		✓	✓				✓	✓	✓	✓			✓	✓	8
Cornus stolonifera baileyi	Bailey dogwood	N		✓					✓						✓		3
Corylus americana	American hazelnut	N			✓			✓	✓	✓	✓	✓			✓	✓	8
Crataegus crus-galli	cockspur hawthorn	N		✓	✓			✓	✓	✓	✓				✓	✓	8
Cypripedium calceolus pubescens	large yellow lady's slipper	N							✓						✓		2
Cypripedium reginae	showy lady's slipper	N							✓						✓		2
Cystopteris fragilis	fragile fern	N							✓								1
Dicentra cucullaria	Dutchman's breeches	N							✓						✓	✓	3
Diervilla lonicera	bush honeysuckle	N							✓						✓		2
Echinocystis lobata	wild cucumber	N							✓						✓		2
Epifagus virginiana	beech drops	N							✓						✓	✓	3
Equisetum arvense	horsetail	N						✓	✓	✓	✓				✓	✓	6
Equisetum hyemale affine	tall scouring rush	N	✓						✓	✓					✓	✓	5
Erigeron philadelphicus	marsh fleabane	N		✓	✓				✓						✓		4

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Erigeron strigosus	daisy fleabane	N							✓						✓		2
Eupatorium perfoliatum	common boneset	N							✓						✓		2
Euphorbia cyparissias	cypress spurge, grave-yard spurge	I							✓						✓		2
Fagus grandifolia	American beech	N						✓	✓						✓	✓	4
Fraxinus americana	white ash	N						✓	✓	✓	✓				✓	✓	6
Fraxinus americana biltmoreana	Biltmore ash	N							✓	✓						✓	3
Fraxinus pennsylvanica	red ash	N						✓	✓	✓	✓				✓	✓	6
Fraxinus pennsylvanica subintegerrima	green ash	N	✓						✓	✓					✓	✓	5
Galium aparine	annual bedstraw	N							✓						✓	✓	3
Galium boreale	northern bedstraw	N							✓								1
Galium circaezans hypomalacum	wild licorice	N							✓								1
Galium obtusum	wild madder	N							✓								1
Galium pilosum	hairy bedstraw	N							✓								1
Galium tinctorium	stiff bedstraw; small cleaver	N							✓						✓		2
Galium triflorum	sweet-scented bedstraw	N							✓								1
Gaultheria procumbens	wintergreen	N			✓			✓	✓						✓	✓	5
Gaylussacia baccata	huckleberry	N			✓			✓						✓		✓	4
Glyceria canadensis	rattlesnake grass	N							✓						✓		2
Hamamelis virginiana	witch hazel	N			✓			✓	✓						✓		4
Helianthus occidentalis	western sunflower	N							✓						✓		2
Hepatica acutiloba	sharp-lobed hepatica	N							✓						✓		2
Hepatica americana	round-lobed hepatica	N							✓			✓			✓		3
Hieracium canadense fasciculatum	Canada hawkweed	N							✓	✓					✓		3
Hierochloe odorata	vanilla grass, sweet grass	N	✓		✓	✓	✓		✓	✓	✓					✓	8
Hordeum jubatum	squirreltail grass	N							✓						✓		2
Ilex verticillata	winterberry	N							✓						✓		2
Impatiens pallida	yellow jewelweed	N							✓			✓			✓		3
Juglans cinerea	butternut	N	✓					✓	✓	✓	✓	✓			✓	✓	8
Juglans nigra	black walnut	N						✓		✓	✓	✓				✓	5
Juncus dudleyi	inland rush	N								✓	✓					✓	3
Juncus greenei	greene's rush	N							✓	✓					✓		3
Juncus tenuis	path rush	N								✓						✓	2
Juniperus communis	common juniper, dunes juniper	N							✓	✓					✓		3
Juniperus virginiana crebra	eastern red cedar	N	✓		✓				✓	✓	✓	✓			✓	✓	8

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Lactuca canadensis	wild lettuce	N							✓						✓		2
Laportea canadensis	wood nettle	N							✓	✓	✓				✓	✓	5
Lathyrus palustris	marsh vetching	N						✓	✓						✓	✓	4
Lathyrus palustris myrtifolius	marsh vetchling	N						✓	✓								2
Lilium philadelphicum andinum	prairie lily	N						✓	✓						✓		3
Linaria vulgaris	butter & eggs, toadflax	I							✓						✓		2
Linnaea borealis americana	twinflower	N							✓						✓	✓	3
Lobelia cardinalis	cardinal flower	N							✓						✓	✓	3
Lonicera dioica	red honeysuckle	N						✓	✓						✓		3
Lonicera japonica	Japanese honeysuckle	I							✓						✓		2
Lonicera prolifera	yellow honeysuckle	N							✓								1
Lonicera tatarica	tartarian honeysuckle	I							✓								1
Lonicera X muendeniensis	smallflower honeysuckle	I							✓								1
Lonicera X muscaviensis	Manchurian honeysuckle	I							✓								1
Lycopodium complanatum flabelliforme	trailing ground pine	N							✓						✓		2
Lycopodium tristachyum	ground cedar	N						✓									1
Lycopus asper	rough water horehound	N						✓									1
Maianthemum canadense	wild lily-of-the-valley	N						✓	✓						✓		3
Malaxis unifolia	green adder's mouth	N							✓						✓		2
Medeola virginiana	Indian cucumber root	N							✓						✓		2
Monarda punctata villicaulis	horse mint	N							✓						✓		2
Nymphaea tuberosa	white water lily	N						✓	✓						✓		3
Nyssa sylvatica	black gum, sour gum	N								✓							1
Oenothera biennis	common evening primrose	N							✓						✓		2
Orobanche uniflora	one-flowered broom rape	N			✓				✓								2
Osmorhiza claytoni	hairy sweet cicely	N							✓						✓		2
Osmorhiza longistylis	smooth sweet cicely	N							✓						✓		2
Ostrya virginiana	hop hornbeam, ironwood	N							✓	✓	✓				✓	✓	5
Panax quinquefolius	ginseng	N						✓	✓					✓	✓	✓	5
Panax trifolius	dwarf ginseng	N							✓						✓		2
Parthenocissus inserta	thicket creeper	N						✓									1
Parthenocissus quinquefolia	virginia creeper	N						✓									1
Pastinaca sativa	wild parsnip	I							✓						✓		2

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Peltandra virginica	arrow arum	N							✓						✓		2
Petalostemum purpureum	purple prairie clover	N							✓								1
Phragmites communis berlandieri	common reed	N								✓	✓					✓	3
Phryma leptostachya	lopseed	N							✓						✓		2
Physocarpus opulifolius	ninebark	N							✓						✓		2
Pinus banksiana	jack pine	N							✓	✓	✓				✓	✓	5
Pinus nigra	Austrian Pine	I	✓		✓											✓	3
Pinus strobus	white pine	N					✓	✓	✓	✓					✓	✓	6
Pinus sylvestris	Scotch pine	I														✓	1
Plantago lanceolata	English plantain	I							✓							✓	2
Plantago major	common plantain	N						✓	✓						✓	✓	4
Plantago rugelii	red stalked plantain	N							✓						✓		2
Podophyllum peltatum	may apple	N						✓	✓						✓		3
Polygala paucifolia	flowering wintergreen	N							✓						✓		2
Polygonatum pubescens	downy solomon's seal	N							✓						✓	✓	3
Polygonum aviculare	common knotweed	I														✓	1
Polygonum careyi	Carey`s heartease	N							✓						✓		2
Polygonum coccineum	water hearts ease	N		✓	✓				✓						✓		4
Polygonum pensylvanicum laevigatum	pennsylvania knotweed	N							✓						✓		2
Polygonum punctatum	smartweed	N							✓						✓		2
Polytaenia nuttallii	prairie parsley	N							✓								1
Pontederia cordata	pickerel weed	N								✓	✓				✓	✓	4
Populus alba	white poplar, silver poplar	I							✓	✓							2
Populus balsamifera	balsam poplar	N			✓			✓	✓	✓					✓	✓	6
Populus deltoides	cottonwood	N	✓		✓		✓	✓	✓							✓	6
Populus nigra italica	lombardy poplar	N			✓		✓	✓								✓	4
Populus tremuloides	quaking aspen	N	✓		✓		✓	✓	✓	✓	✓				✓	✓	9
Potentilla recta	sulfur cinquefoil	I							✓						✓		2
Prunus avium	sweet cherry	I						✓									1
Prunus nigra	Canada plum	N						✓				✓				✓	3
Prunus pensylvanica	pin cherry	N						✓	✓						✓	✓	4
Prunus pumila	sand cherry	N						✓									1
Prunus serotina	wild black cherry	N						✓	✓						✓		3
Pteridium aquilinum latiusculum	bracken fern	N						✓	✓								2

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Pycnanthemum virginianum	common mountain mint	N						✓	✓						✓		3
Pyrola rotundifolia americana	round leaved shin-leaf	N						✓	✓						✓		3
Pyrus coronaria	white sweet crab	N						✓								✓	2
Pyrus malus	apple	I						✓								✓	2
Quercus bicolor	swamp white oak	N						✓		✓	✓					✓	4
Quercus ellipsoidalis	Hill's oak	N						✓								✓	2
Quercus macrocarpa	bur oak	N						✓	✓			✓			✓		4
Quercus palustris	pin oak	N						✓		✓	✓					✓	4
Quercus rubra	red oak	N						✓	✓	✓	✓	✓			✓	✓	7
Ranunculus pensylvanicus	bristly buttercup	N		✓	✓				✓			✓			✓		5
Rhus aromatica	fragrant sumac	N		✓	✓				✓			✓			✓	✓	6
Rhus glabra	smooth sumac	N		✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	11
Rhus radicans	poison ivy	N													✓		1
Rhus vernix	poison sumac	N							✓						✓		2
Ribes cynosbati	prickly wild gooseberry	N						✓	✓						✓		3
Ribes hirtellum	northern gooseberry	N						✓	✓						✓		3
Ribes missouriense	wild gooseberry	N						✓								✓	2
Ribes sativum	red currant	I						✓	✓								2
Rosa blanda	early wild rose	N							✓						✓		2
Rosa canina	dog rose	I							✓								1
Rosa carolina	pasture rose	N							✓								1
Rubus flagellaris	common dewberry	N						✓	✓						✓	✓	4
Rubus hispidus obovalis	swamp dewberry	N						✓	✓							✓	3
Rubus idaeus strigosus	red raspberry	N						✓	✓						✓	✓	4
Rubus odoratus	purple flowering raspberry	N						✓									1
Rubus pensylvanicus	yankee blackberry	N						✓	✓						✓		3
Rubus pubescens	dwarf raspberry	N						✓									1
Rudbeckia hirta	black-eyed susan	N							✓			✓			✓		3
Rudbeckia laciniata	wild golden glow	N						✓	✓						✓		3
Rumex acetosella	field sorrel	I														✓	1
Rumex altissimus	pale dock	N							✓						✓		2
Rumex obtusifolius	bitter dock	I							✓						✓		2
Sagittaria graminea	grass-leaved arrowhead	N							✓								1
Sagittaria latifolia	common arrowhead	N						✓	✓						✓	✓	4

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Sagittaria rigida	stiff arrowhead	N							✓								1
Salix amygdaloides	peach-leaved willow	N		✓	✓				✓	✓	✓					✓	6
Salix candida	hoary willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix discolor	pussy willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix fragilis	crack willow	I		✓	✓				✓	✓	✓				✓	✓	7
Salix gracilis textoris	petioled willow	N		✓	✓				✓	✓	✓					✓	6
Salix humilis	prairie willow	N		✓	✓				✓	✓	✓					✓	6
Salix interior	sandbar willow	N		✓	✓				✓	✓	✓					✓	6
Salix lucida	shining willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix nigra	black willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix pedicellaris hypoglauca	willow, bog willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix rigida	heart-leaved willow	N		✓	✓				✓	✓	✓					✓	6
Salix sericea	silky willow	N	✓	✓	✓				✓	✓	✓				✓	✓	8
Salix syrticola	dune willow	N		✓	✓				✓	✓	✓					✓	6
Sambucus canadensis	elderberry, American elder	N						✓	✓						✓	✓	4
Sambucus pubens	red-berried elder	N						✓	✓						✓		3
Sanguinaria canadensis	bloodroot	N			✓				✓	✓	✓	✓			✓	✓	7
Sanicula marilandica	sanicle, black snakeroot	N							✓						✓		2
Saururus cernuus	lizard's tail	N							✓						✓		2
Scirpus americanus	chair maker's rush	N						✓									1
Scirpus cyperinus	wool grass	N								✓	✓					✓	3
Scirpus validus creber	great bulrush	N						✓		✓	✓					✓	4
Senecio aureus	golden ragwort	N							✓						✓		2
Smilax lasioneura	common carrion flower	N							✓								1
Smilax tamnoides hispida	bristly green brier, bristly cat brier	N													✓		1
Solanum americanum	black nightshade	N							✓								1
Solanum dulcamara	bittersweet nightshade	I							✓						✓		2
Solidago altissima	tall goldenrod	N							✓								1
Solidago caesia	, wreath goldenrod	N							✓								1
Solidago flexicaulis	broad-leaved goldenrod	N							✓						✓		2
Solidago gigantea	late goldenrod, giant goldenrod	N							✓								1
Solidago graminifolia media	smooth grass-leaved goldenrod	N							✓							✓	2
Solidago graminifolia nuttallii	grass leaved goldenrod	N		✓	✓				✓						✓		4
Solidago gymnospermoides	shiny grass-leaved goldenrod	N							✓								1

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Solidago juncea	early goldenrod	N							✓						✓		2
Solidago nemoralis	old field goldenrod	N							✓								1
Solidago ohioensis	Ohio goldenrod	N							✓								1
Solidago patula	swamp goldenrod	N							✓								1
Solidago racemosa gillmani	dune goldenrod, Rand's goldenrod	N							✓								1
Solidago riddellii	riddell's goldenrod	N							✓								1
Solidago rugosa	rough goldenrod	N							✓								1
Solidago sempervirens	seaside goldenrod	N							✓								1
Solidago speciosa	showy goldenrod	N							✓	✓	✓				✓	✓	5
Solidago tenuifolia	slender-leaved goldenrod	N							✓								1
Solidago uliginosa	bog goldenrod	N							✓								1
Solidago ulmifolia	elm leaved goldenrod	N							✓								1
Sporobolus heterolepis	prairie dropseed	N							✓						✓		2
Stellaria media	common chickweed	I							✓						✓		2
Symplocarpus foetidus	skunk cabbage	N						✓	✓						✓		3
Taraxacum officinale	common dandelion	I						✓	✓						✓	✓	4
Thaspium barbinode	hairy meadow parsnip	N							✓						✓		2
Thuja occidentalis	arbor vitae, northern white cedar	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	13
Tilia americana	basswood, american linden	N	✓		✓			✓	✓	✓	✓				✓	✓	8
Trientalis borealis	starflower	N		✓	✓				✓	✓					✓		5
Trillium grandiflorum	large-flowered trillium	N						✓	✓						✓		3
Typha angustifolia	narrow-leaved cattail	I						✓		✓	✓					✓	4
Typha latifolia	common cattail	N						✓	✓	✓					✓		4
Ulmus americana	American elm	N							✓	✓	✓				✓	✓	5
Ulmus pumila	Siberian elm	I	✓													✓	2
Uvularia grandiflora	bellwort	N							✓						✓		2
Vaccinium corymbosum	highbush blueberry	N			✓	✓		✓	✓								4
Vaccinium macrocarpon	large cranberry	N	✓					✓	✓						✓		4
Vaccinium oxycoccos	small cranberry	N	✓					✓	✓						✓	✓	5
Verbascum thapsus	common mullein	I		✓					✓						✓	✓	4
Verbena hastata	blue vervain	N							✓						✓		2
Veronicastrum virginicum	culver's root	N							✓						✓		2
Viburnum acerifolium	maple-leaved arrow-wood	N							✓						✓	✓	3
Viburnum opulus	European highbush cranberry	N						✓	✓	✓					✓	✓	5

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Viburnum rafinesquianum	downy arrowwood	N			✓				✓						✓		3
Viburnum recognitum	smooth arrow-wood	N		✓													1
Viola canadensis	Canada violet	N							✓						✓		2
Viola conspersa	dog violet	N							✓						✓		2
Viola pubescens	downy yellow violet	N							✓						✓		2
Vitis aestivalis	summer grape	N						✓	✓							✓	3
Vitis labrusca	fox grape	N						✓	✓						✓		3
Xanthium strumarium	cocklebur	N							✓								1
Xanthoxylum americanum	prickly ash	N						✓	✓						✓		3
			18	37	54	6	8	113	251	82	51	19	1	3	191	116	

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Acer negundo	box elder	N						✓	✓						✓		3
Acer platanoides	Norway maple	I						✓	✓								2
Acer rubrum	red maple	N	✓		✓			✓	✓	✓	✓				✓	✓	8
Acer saccharinum	silver maple	N	✓					✓	✓	✓					✓	✓	6
Acer saccharum	sugar maple	N	✓		✓			✓	✓	✓	✓			✓	✓	✓	9
Achillea millefolium	yarrow, milfoil	N		✓	✓				✓	✓							4
Acorus calamus	sweet flag	N			✓				✓	✓					✓	✓	5
Actaea pachypoda	white baneberry	N							✓								1
Adiantum pedatum	maidenhair fern	N							✓							✓	2
Agrimonia gryposepala	tall agrimony	N							✓						✓		2
Allium tricoccum	wild leek	N						✓	✓						✓		3
Alnus rugosa americana	speckled alder	N							✓	✓	✓	✓			✓	✓	6
Amelanchier arborea	juneberry, shadbush, serviceberry	N						✓		✓							2
Amelanchier humilis	low shadblow	N								✓							1
Amelanchier laevis	allegheny shadblow	N						✓	✓	✓					✓		4
Amphicarpa bracteata	hog peanut	N						✓	✓								2
Andropogon gerardii	big bluestem grass	N							✓						✓		2
Anemone canadensis	meadow anemone	N			✓				✓						✓		3
Anemone cylindrica	thimbleweed	N							✓						✓		2
Anemone virginiana	tall anemone, tumbleweed	N							✓							✓	2
Anemonella thalictroides	rue anemone	N														✓	1
Antennaria plantaginifolia	pussy toes	N							✓						✓		2
Apios americana	ground nut	N						✓									1
Apocynum androsaemifolium	spreading dogbane	N			✓				✓	✓	✓				✓	✓	6
Apocynum cannabinum	indian hemp, dogbane	N								✓						✓	2
Aquilegia canadensis	wild columbine	N						✓	✓						✓	✓	4
Aralia nudicaulis	wild sarsaparilla	N							✓	✓					✓		3
Aralia racemosa	spikenard	N							✓						✓		2
Arctium minus	common burdock	I							✓						✓		2
Arctostaphylos uva-ursi coactilis	bearberry	N		✓	✓			✓	✓	✓					✓	✓	7
Arisaema atrorubens	jack-in-the-pulpit	N						✓	✓						✓		3
Artemisia caudata	beach wormwood	N							✓						✓		2
Asarum canadense	wild ginger	N			✓			✓	✓						✓	✓	5

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Asclepias incarnata	swamp milkweed	N						✓	✓	✓					✓		4
Asclepias syriaca	common milkweed	N						✓	✓	✓					✓	✓	5
Asimina triloba	pawpaw	N						✓									1
Aster azureus	sky-blue aster	N						✓									1
Aster cordifolius	heart leaved aster	N		✓	✓			✓	✓	✓					✓		6
Aster dumosus	rice-button aster, bushy aster	N						✓		✓					✓		3
Aster ericoides	heath aster	N						✓									1
Aster furcatus	forked aster	N						✓									1
Aster junciformis	rush aster	N						✓									1
Aster lateriflorus	side flowering aster	N						✓									1
Aster linariifolius	flax-leaved aster	N						✓									1
Aster macrophyllus	big-leaved aster	N		✓				✓	✓	✓					✓		5
Aster pilosus	hairy aster	N						✓									1
Aster puniceus	swamp aster	N	✓	✓				✓	✓						✓		5
Aster puniceus firmus	swamp aster	N						✓	✓						✓		3
Aster sagittifolius	common blue wood aster	N						✓									1
Aster simplex	marsh aster	N						✓									1
Aster umbellatus	flat-top aster	N						✓									1
Athyrium filix-femina michauxii	lady fern	N							✓						✓		2
Betula papyrifera	paper birch	N			✓	✓	✓		✓	✓	✓	✓			✓	✓	9
Boehmeria cylindrica	false nettle	N								✓							1
Botrychium virginianum	rattlesnake fern	N							✓						✓		2
Caltha palustris	marsh marigold	N						✓	✓						✓		3
Campanula rotundifolia	harebell	N							✓						✓		2
Capsella bursa-pastoris	shepherd's purse	I							✓						✓		2
Carex alata	winged sedge, broadwing sedge	N														✓	1
Carpinus caroliniana virginiana	blue beech	N			✓					✓	✓					✓	4
Carya cordiformis	bitter hickory	N	✓						✓	✓	✓					✓	5
Carya glabra	pignut hickory	N							✓								1
Castilleja coccinea	Indian paint brush	N							✓						✓		2
Caulophyllum thalictroides	blue cohosh	N							✓						✓		2
Ceanothus americanus	New Jersey tea	N							✓						✓		2
Celastrus scandens	climbing bittersweet	N						✓	✓						✓	✓	4

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Celtis occidentalis	hackberry	N														✓	1
Chenopodium album	lamb's quarters	N						✓								✓	2
Chenopodium boscianum	woodland goosefoot	N														✓	1
Chimaphila umbellata cisatlantica	pipsissewa, prince's pine	N							✓						✓	✓	3
Cicuta maculata	water hemlock	N		✓					✓	✓					✓	✓	5
Cirsium altissimum	tall thistle	N							✓								1
Cirsium discolor	pasture thistle	N							✓								1
Cirsium muticum	swamp thistle	N							✓								1
Cirsium pitcheri	sand thistle	N							✓								1
Cirsium vulgare	bull thistle	I							✓						✓		2
Claytonia virginica	spring beauty	N							✓						✓	✓	3
Comptonia peregrina	sweet fern	N			✓			✓	✓	✓					✓	✓	6
Cornus canadensis	bunchberry	N		✓				✓	✓						✓		4
Cornus florida	flowering dogwood	N		✓					✓						✓		3
Cornus obliqua	pale dogwood	N		✓													1
Cornus rugosa	speckled dogwood	N		✓	✓												2
Cornus stolonifera	red osier dogwood	N		✓	✓				✓	✓	✓	✓			✓	✓	8
Cornus stolonifera baileyi	Bailey dogwood	N		✓					✓						✓		3
Corylus americana	American hazelnut	N			✓			✓	✓	✓	✓	✓			✓	✓	8
Crataegus crus-galli	cockspur hawthorn	N		✓	✓			✓	✓	✓	✓				✓	✓	8
Crataegus macrosperma	large-seeded hawthorne	N		✓	✓			✓	✓	✓					✓		6
Crataegus pruinosa	frosted hawthorn	N		✓	✓			✓	✓	✓					✓		6
Crataegus punctata	dotted hawthorn	N		✓	✓			✓	✓	✓					✓		6
Cypripedium calceolus parviflorum	small yellow lady's slipper	N							✓						✓		2
Cypripedium calceolus pubescens	large yellow lady's slipper	N							✓						✓		2
Cypripedium reginae	showy lady's slipper	N							✓						✓		2
Cystopteris fragilis	fragile fern	N							✓								1
Daucus carota	queen anne's lace	I						✓	✓						✓	✓	4
Diervilla lonicera	bush honeysuckle	N							✓						✓		2
Dioscorea villosa	wild yam	N						✓	✓							✓	3
Echinocystis lobata	wild cucumber	N							✓						✓		2
Epifagus virginiana	beech drops	N							✓						✓	✓	3
Erigeron strigosus	daisy fleabane	N							✓						✓		2

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Eupatorium perfoliatum	common boneset	N							✓						✓		2
Euphorbia cyparissias	cypress spurge, grave-yard spurge	I							✓						✓		2
Fraxinus nigra	black ash	N			✓				✓	✓	✓	✓			✓	✓	7
Fraxinus pennsylvanica	red ash	N						✓	✓	✓	✓				✓	✓	6
Fraxinus pennsylvanica subintegerrima	green ash	N	✓						✓	✓					✓	✓	5
Galium aparine	annual bedstraw	N							✓						✓	✓	3
Galium circaezans hypomalacum	wild licorice	N							✓								1
Galium lanceolatum	lance-leaved wild licorice	N							✓								1
Galium obtusum	wild madder	N							✓								1
Galium pilosum	hairy bedstraw	N							✓								1
Galium trifidum	small bedstraw	N							✓						✓		2
Galium triflorum	sweet-scented bedstraw	N							✓								1
Gaultheria procumbens	wintergreen	N			✓			✓	✓						✓	✓	5
Gaylussacia baccata	huckleberry	N			✓			✓						✓		✓	4
Glyceria canadensis	rattlesnake grass	N							✓						✓		2
Gnaphalium obtusifolium	old-field balsam	N													✓		1
Habenaria viridis bracteata	bracted orchid	N							✓						✓		2
Heuchera richardsonii	prairie alum root	N							✓						✓		2
Hierochloe odorata	vanilla grass, sweet grass	N	✓		✓	✓	✓		✓	✓	✓					✓	8
Impatiens capensis	orange jewelweed	N							✓	✓	✓	✓			✓	✓	6
Juglans nigra	black walnut	N						✓		✓	✓	✓				✓	5
Juniperus virginiana crebra	eastern red cedar	N	✓		✓				✓	✓	✓	✓			✓	✓	8
Lactuca canadensis	wild lettuce	N							✓						✓		2
Lathyrus palustris	marsh vetching	N						✓	✓						✓	✓	4
Lathyrus venosus	veiny pea	N						✓	✓						✓		3
Lilium philadelphicum andinum	prairie lily	N						✓	✓						✓		3
Linaria vulgaris	butter & eggs, toadflax	I							✓						✓		2
Lobelia cardinalis	cardinal flower	N							✓						✓	✓	3
Lonicera dioica	red honeysuckle	N						✓	✓						✓		3
Lonicera X muendeniensis	smallflower honeysuckle	I							✓								1
Lycopodium complanatum flabelliforme	trailing ground pine	N							✓						✓		2
Lycopus asper	rough water horehound	N						✓									1
Malaxis unifolia	green adder's mouth	N							✓						✓		2

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Medeola virginiana	Indian cucumber root	N							✓						✓		2
Melampyrum lineare latifolium	cow wheat	N							✓						✓		2
Monarda punctata villicaulis	horse mint	N							✓						✓		2
Orobanche uniflora	one-flowered broom rape	N			✓				✓								2
Osmorhiza longistylis	smooth sweet cicely	N							✓						✓		2
Ostrya virginiana	hop hornbeam, ironwood	N							✓	✓	✓				✓	✓	5
Panax quinquefolius	ginseng	N						✓	✓					✓	✓	✓	5
Panax trifolius	dwarf ginseng	N							✓						✓		2
Parthenocissus inserta	thicket creeper	N						✓									1
Parthenocissus quinquefolia	virginia creeper	N						✓									1
Peltandra virginica	arrow arum	N							✓						✓		2
Petalostemum purpureum	purple prairie clover	N							✓								1
Phryma leptostachya	lopseed	N							✓						✓		2
Pinus banksiana	jack pine	N							✓	✓	✓				✓	✓	5
Pinus nigra	Austrian Pine	I	✓		✓											✓	3
Pinus strobus	white pine	N					✓	✓	✓	✓					✓	✓	6
Plantago lanceolata	English plantain	I							✓							✓	2
Plantago major	common plantain	N						✓	✓						✓	✓	4
Plantago rugelii	red stalked plantain	N							✓						✓		2
Platanus occidentalis	sycamore	N														✓	1
Podophyllum peltatum	may apple	N						✓	✓						✓		3
Polygala paucifolia	flowering wintergreen	N							✓						✓		2
Polygonatum canaliculatum	smooth solomon's seal	N						✓	✓						✓	✓	4
Polygonatum pubescens	downy solomon's seal	N							✓						✓	✓	3
Polygonum aviculare	common knotweed	I														✓	1
Polygonum careyi	Carey`s heartease	N							✓						✓		2
Polygonum punctatum	smartweed	N							✓						✓		2
Polytaenia nuttallii	prairie parsley	N							✓								1
Populus balsamifera	balsam poplar	N			✓			✓	✓	✓					✓	✓	6
Populus deltoides	cottonwood	N	✓		✓		✓	✓	✓							✓	6
Potentilla palustris	marsh cinquefoil	N							✓						✓		2
Prunella vulgaris	lawn prunella	N							✓						✓		2
Prunus pumila	sand cherry	N						✓									1

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Pteridium aquilinum latiusculum	bracken fern	N						✓	✓								2
Pycnanthemum virginianum	common mountain mint	N						✓	✓						✓		3
Pyrola rotundifolia americana	round leaved shin-leaf	N						✓	✓						✓		3
Quercus alba	white oak	N						✓	✓	✓	✓					✓	5
Quercus bicolor	swamp white oak	N						✓		✓	✓					✓	4
Quercus ellipsoidalis	Hill's oak	N						✓								✓	2
Quercus imbricaria	shingle oak	N						✓								✓	2
Quercus macrocarpa	bur oak	N						✓	✓			✓			✓		4
Quercus palustris	pin oak	N						✓		✓	✓					✓	4
Quercus rubra	red oak	N						✓	✓	✓	✓	✓			✓	✓	7
Ranunculus pensylvanicus	bristly buttercup	N		✓	✓				✓			✓			✓		5
Rhus typhina	staghorn sumac	N		✓	✓			✓	✓			✓			✓	✓	7
Rhus vernix	poison sumac	N							✓						✓		2
Ribes hirtellum	northern gooseberry	N						✓	✓						✓		3
Rosa blanda	early wild rose	N							✓						✓		2
Rosa canina	dog rose	I							✓								1
Rubus flagellaris	common dewberry	N						✓	✓						✓	✓	4
Rubus hispidus obovalis	swamp dewberry	N						✓	✓							✓	3
Rubus idaeus strigosus	red raspberry	N						✓	✓						✓	✓	4
Rubus pensylvanicus	yankee blackberry	N						✓	✓						✓		3
Rubus pubescens	dwarf raspberry	N						✓									1
Rudbeckia hirta	black-eyed susan	N							✓			✓			✓		3
Rudbeckia laciniata	wild golden glow	N						✓	✓						✓		3
Rumex acetosella	field sorrel	I														✓	1
Rumex altissimus	pale dock	N							✓						✓		2
Rumex crispus	curly dock, yellow dock	I						✓	✓						✓		3
Sagittaria brevirostra	short beaked arrowhead	N							✓								1
Sagittaria graminea	grass-leaved arrowhead	N							✓								1
Sagittaria latifolia	common arrowhead	N						✓	✓						✓	✓	4
Sagittaria rigida	stiff arrowhead	N							✓								1
Salix alba	white willow	I		✓	✓				✓	✓	✓					✓	6
Salix discolor	pussy willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix gracilis textoris	petioled willow	N		✓	✓				✓	✓	✓					✓	6

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Salix humilis	prairie willow	N		✓	✓				✓	✓	✓					✓	6
Salix lucida	shining willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix pedicellaris hypoglauca	willow, bog willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix rigida	heart-leaved willow	N		✓	✓				✓	✓	✓					✓	6
Salix sericea	silky willow	N	✓	✓	✓				✓	✓	✓				✓	✓	8
Salix syrticola	dune willow	N		✓	✓				✓	✓	✓					✓	6
Sambucus canadensis	elderberry, American elder	N						✓	✓						✓	✓	4
Sanguinaria canadensis	bloodroot	N			✓				✓	✓	✓	✓			✓	✓	7
Sanicula canadensis	canadian black snakeroot	N							✓						✓		2
Sanicula marilandica	sanicle, black snakeroot	N							✓						✓		2
Sarracenia purpurea	pitcher plant	N							✓	✓	✓				✓	✓	5
Sassafras albidum	sassafras	N			✓			✓	✓						✓	✓	5
Saururus cernuus	lizard's tail	N							✓						✓		2
Scirpus cyperinus	wool grass	N								✓	✓					✓	3
Scirpus validus creber	great bulrush	N						✓		✓	✓					✓	4
Senecio aureus	golden ragwort	N							✓						✓		2
Smilax lasioneura	common carrion flower	N							✓								1
Smilax tamnoides hispida	bristly green brier, bristly cat brier	N													✓		1
Solanum americanum	black nightshade	N							✓								1
Solanum dulcamara	bittersweet nightshade	I							✓						✓		2
Solidago altissima	tall goldenrod	N							✓								1
Solidago caesia	blue-stemmed goldenrod	N							✓								1
Solidago flexicaulis	broad-leaved goldenrod	N							✓						✓		2
Solidago gigantea	late goldenrod, giant goldenrod	N							✓								1
Solidago graminifolia nuttallii	grass leaved goldenrod	N		✓	✓				✓						✓		4
Solidago gymnospermoides	shiny grass-leaved goldenrod	N							✓								1
Solidago juncea	early goldenrod	N							✓						✓		2
Solidago nemoralis	old field goldenrod	N							✓								1
Solidago rugosa	rough goldenrod	N							✓								1
Solidago speciosa	showy goldenrod	N							✓	✓	✓				✓	✓	5
Solidago tenuifolia	slender-leaved goldenrod	N							✓								1
Spiraea tomentosa rosea	hardhack, steeplebush	N							✓						✓		2
Symphoricarpos orbiculatus	coralberry; indian current	N							✓								1

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Symplocarpus foetidus	skunk cabbage	N						✓	✓						✓		3
Taraxacum officinale	common dandelion	I						✓	✓						✓	✓	4
Thaspium barbinode	hairy meadow parsnip	N							✓						✓		2
Tilia americana	basswood, american linden	N	✓		✓			✓	✓	✓	✓				✓	✓	8
Typha angustifolia	narrow-leaved cattail	I						✓		✓	✓					✓	4
Typha latifolia	common cattail	N						✓	✓	✓					✓		4
Ulmus americana	American elm	N							✓	✓	✓				✓	✓	5
Ulmus pumila	Siberian elm	I	✓													✓	2
Urtica procera	tall nettle	N							✓	✓	✓				✓	✓	5
Uvularia grandiflora	bellwort	N							✓						✓		2
Verbascum thapsus	common mullein	I		✓					✓						✓	✓	4
Verbena hastata	blue vervain	N							✓						✓		2
Veronicastrum virginicum	culver's root	N							✓						✓		2
Viburnum opulus	European highbush cranberry	N						✓	✓	✓					✓	✓	5
Viburnum recognitum	smooth arrow-wood	N		✓													1
Viola canadensis	Canada violet	N							✓						✓		2
Viola conspersa	dog violet	N							✓						✓		2
Viola pubescens	downy yellow violet	N							✓						✓		2
Vitis aestivalis	summer grape	N						✓	✓							✓	3
Vitis labrusca	fox grape	N						✓	✓						✓		3
Xanthium strumarium	cocklebur	N							✓								1
Xanthoxylum americanum	prickly ash	N						✓	✓						✓		3
Zizania aquatica	wild rice	N	✓		✓	✓		✓		✓						✓	6
			14	30	44	3	4	96	206	66	40	14	0	3	159	95	

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Acer platanoides	Norway maple	I						✓	✓								2
Acer rubrum	red maple	N	✓		✓			✓	✓	✓	✓				✓	✓	8
Acer saccharinum	silver maple	N	✓					✓	✓	✓					✓	✓	6
Achillea millefolium	yarrow, milfoil	N		✓	✓				✓	✓							4
Actaea pachypoda	white baneberry	N							✓								1
Adiantum pedatum	maidenhair fern	N							✓							✓	2
Agrimonia gryposepala	tall agrimony	N							✓						✓		2
Alnus rugosa americana	speckled alder	N							✓	✓	✓	✓			✓	✓	6
Alopecurus aequalis	short-awned foxtail	N							✓								1
Amelanchier arborea	juneberry, shadbush, serviceberry	N						✓		✓							2
Amelanchier laevis	allegheny shadblow	N						✓	✓	✓					✓		4
Amphicarpa bracteata	hog peanut	N						✓	✓								2
Andropogon gerardii	big bluestem grass	N							✓						✓		2
Anemone cylindrica	thimbleweed	N							✓						✓		2
Anemone virginiana	tall anemone, tumbleweed	N							✓							✓	2
Anemonella thalictroides	rue anemone	N														✓	1
Angelica atropurpurea	great angelica, purplestem angelica	N													✓		1
Antennaria plantaginifolia	pussy toes	N							✓						✓		2
Apios americana	ground nut	N						✓									1
Apocynum androsaemifolium	spreading dogbane	N			✓				✓	✓	✓				✓	✓	6
Apocynum cannabinum	indian hemp, dogbane	N								✓						✓	2
Aquilegia canadensis	wild columbine	N						✓	✓						✓	✓	4
Aralia nudicaulis	wild sarsaparilla	N							✓	✓					✓		3
Arctostaphylos uva-ursi coactilis	bearberry	N		✓	✓			✓	✓	✓					✓	✓	7
Arisaema atrorubens	jack-in-the-pulpit	N						✓	✓						✓		3
Artemisia caudata	beach wormwood	N							✓						✓		2
Asarum canadense	wild ginger	N			✓			✓	✓						✓	✓	5
Asclepias incarnata	swamp milkweed	N						✓	✓	✓					✓		4
Asclepias syriaca	common milkweed	N						✓	✓	✓					✓	✓	5
Asimina triloba	pawpaw	N						✓									1
Aster azureus	sky-blue aster	N						✓									1
Aster cordifolius	heart leaved aster	N		✓	✓			✓	✓	✓					✓		6
Aster dumosus	rice-button aster, bushy aster	N						✓		✓					✓		3
Aster furcatus	forked aster	N						✓									1
Aster lateriflorus	side flowering aster	N						✓									1

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Aster linariifolius	flax-leaved aster	N						✓									1
Aster macrophyllus	big-leaved aster	N		✓				✓	✓	✓					✓		5
Aster pilosus	hairy aster	N						✓									1
Aster praealtus	willow aster	N						✓									1
Aster umbellatus	flat-top aster	N						✓									1
Athyrium filix-femina michauxii	lady fern	N							✓						✓		2
Boehmeria cylindrica	false nettle	N								✓							1
Botrychium virginianum	rattlesnake fern	N							✓						✓		2
Caltha palustris	marsh marigold	N						✓	✓						✓		3
Carpinus caroliniana virginiana	blue beech	N			✓					✓	✓					✓	4
Carya cordiformis	bitter hickory	N	✓						✓	✓	✓					✓	5
Carya glabra	pignut hickory	N							✓								1
Caulophyllum thalictroides	blue cohosh	N							✓						✓		2
Ceanothus americanus	New Jersey tea	N							✓						✓		2
Celastrus scandens	climbing bittersweet	N						✓	✓						✓	✓	4
Celtis occidentalis	hackberry	N														✓	1
Cephalanthus occidentalis	button bush	N							✓								1
Chamaedaphne calyculata angustifolia	leatherleaf	N						✓	✓								2
Chenopodium boscianum	woodland goosefoot	N														✓	1
Cicuta maculata	water hemlock	N		✓					✓	✓					✓	✓	5
Cirsium altissimum	tall thistle	N							✓								1
Cirsium discolor	pasture thistle	N							✓								1
Cirsium pitcheri	sand thistle	N							✓								1
Comptonia peregrina	sweet fern	N			✓			✓	✓	✓					✓	✓	6
Coptis groenlandica	goldthread	N							✓	✓	✓	✓			✓	✓	6
Cornus canadensis	bunchberry	N		✓				✓	✓						✓		4
Cornus obliqua	pale dogwood	N		✓													1
Cornus rugosa	speckled dogwood	N		✓	✓												2
Cornus stolonifera baileyi	Bailey dogwood	N		✓					✓						✓		3
Crataegus crus-galli	cockspur hawthorn	N		✓	✓			✓	✓	✓	✓				✓	✓	8
Crataegus mollis	downy hawthorn	N		✓	✓			✓	✓	✓					✓		6
Cypripedium calceolus pubescens	large yellow lady's slipper	N							✓						✓		2
Dicentra cucullaria	Dutchman's breeches	N							✓						✓	✓	3
Diervilla lonicera	bush honeysuckle	N							✓						✓		2
Echinocystis lobata	wild cucumber	N							✓						✓		2

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Epifagus virginiana	beech drops	N							✓						✓	✓	3
Epilobium angustifolium	fire weed	N							✓						✓		2
Erigeron philadelphicus	marsh fleabane	N		✓	✓				✓						✓		4
Erigeron strigosus	daisy fleabane	N							✓						✓		2
Eupatorium maculatum	spotted Joe Pye weed	N							✓						✓		2
Eupatorium perfoliatum	common boneset	N							✓						✓		2
Euphorbia cyparissias	cypress spurge, grave-yard spurge	I							✓						✓		2
Fagus grandifolia	American beech	N						✓	✓						✓	✓	4
Fraxinus americana biltmoreana	Biltmore ash	N							✓	✓						✓	3
Fraxinus pennsylvanica	red ash	N						✓	✓	✓	✓				✓	✓	6
Fraxinus pennsylvanica subintegerrima	green ash	N	✓						✓	✓					✓	✓	5
Galium aparine	annual bedstraw	N							✓						✓	✓	3
Galium brevipes	short stalked bedstraw	N							✓								1
Galium circaezans hypomalacum	wild licorice	N							✓								1
Galium obtusum	wild madder	N							✓								1
Galium pilosum	hairy bedstraw	N							✓								1
Galium trifidum	small bedstraw	N							✓						✓		2
Galium triflorum	sweet-scented bedstraw	N							✓								1
Gaultheria procumbens	wintergreen	N			✓			✓	✓						✓	✓	5
Glyceria canadensis	rattlesnake grass	N							✓						✓		2
Gnaphalium obtusifolium	old-field balsam	N													✓		1
Hepatica acutiloba	sharp-lobed hepatica	N							✓						✓		2
Hepatica americana	round-lobed hepatica	N							✓			✓			✓		3
Heuchera richardsonii	prairie alum root	N							✓						✓		2
Hierochloe odorata	vanilla grass, sweet grass	N	✓		✓	✓	✓		✓	✓	✓					✓	8
Hordeum jubatum	squirreltail grass	N							✓						✓		2
Juglans nigra	black walnut	N						✓		✓	✓	✓				✓	5
Juncus greenei	greene's rush	N							✓	✓					✓		3
Lactuca canadensis	wild lettuce	N							✓						✓		2
Laportea canadensis	wood nettle	N							✓	✓	✓				✓	✓	5
Lathyrus palustris	marsh vetching	N						✓	✓						✓	✓	4
Lepidium virginicum	common peppergrass	N						✓	✓								2
Lilium michiganense	Turk's cap lily	N				✓			✓							✓	3
Lilium philadelphicum andinum	prairie lily	N						✓	✓						✓		3

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Lindera benzoin	spicebush	N						✓	✓						✓		3
Lonicera dioica	red honeysuckle	N						✓	✓						✓		3
Lonicera prolifera	yellow honeysuckle	N							✓								1
Lonicera X bella	downy bush honeysuckle	I							✓								1
Lonicera X muendeniensis	smallflower honeysuckle	I							✓								1
Lycopodium complanatum flabelliforme	trailing ground pine	N							✓						✓		2
Lycopodium lucidulum	shining club moss	N								✓	✓					✓	3
Lycopodium tristachyum	ground cedar	N						✓									1
Medeola virginiana	Indian cucumber root	N							✓						✓		2
Menispermum canadense	moonseed	N							✓						✓		2
Mitchella repens	partridge-berry	N		✓	✓			✓	✓						✓	✓	6
Monarda fistulosa	wild bergamot	N							✓						✓		2
Monarda punctata villicaulis	horse mint	N							✓						✓		2
Nymphaea tuberosa	white water lily	N						✓	✓						✓		3
Oenothera biennis	common evening primrose	N							✓						✓		2
Orobanche uniflora	one-flowered broom rape	N			✓				✓								2
Ostrya virginiana	hop hornbeam, ironwood	N							✓	✓	✓				✓	✓	5
Panax quinquefolius	ginseng	N						✓	✓					✓	✓	✓	5
Panax trifolius	dwarf ginseng	N							✓						✓		2
Parthenocissus inserta	thicket creeper	N						✓									1
Parthenocissus quinquefolia	virginia creeper	N						✓									1
Peltandra virginica	arrow arum	N							✓						✓		2
Petalostemum purpureum	purple prairie clover	N							✓								1
Phryma leptostachya	lopseed	N							✓						✓		2
Pinus strobus	white pine	N					✓	✓	✓	✓					✓	✓	6
Plantago major	common plantain	N						✓	✓						✓	✓	4
Podophyllum peltatum	may apple	N						✓	✓						✓		3
Polygala paucifolia	flowering wintergreen	N							✓						✓		2
Polygonatum pubescens	downy solomon's seal	N							✓						✓	✓	3
Polygonum aviculare	common knotweed	I														✓	1
Polygonum careyi	Carey`s heartease	N							✓						✓		2
Polygonum punctatum	smartweed	N							✓						✓		2
Polytaenia nuttallii	prairie parsley	N							✓								1
Pontederia cordata	pickerel weed	N								✓	✓				✓	✓	4
Populus alba	white poplar, silver poplar	I							✓	✓							2

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Populus deltoides	cottonwood	N	✓		✓		✓	✓	✓							✓	6
Populus nigra italica	lombardy poplar	N			✓		✓	✓								✓	4
Potentilla recta	sulfur cinquefoil	I							✓						✓		2
Prunella vulgaris	lawn prunella	N							✓						✓		2
Prunus nigra	Canada plum	N						✓				✓				✓	3
Prunus pumila	sand cherry	N						✓									1
Pteridium aquilinum latiusculum	bracken fern	N						✓	✓								2
Pyrola elliptica	large leaved shin-leaf	N							✓						✓		2
Pyrola rotundifolia americana	round leaved shin-leaf	N						✓	✓						✓		3
Quercus bicolor	swamp white oak	N						✓		✓	✓					✓	4
Quercus ellipsoidalis	Hill's oak	N						✓								✓	2
Quercus macrocarpa	bur oak	N						✓	✓			✓			✓		4
Quercus palustris	pin oak	N						✓		✓	✓					✓	4
Quercus rubra	red oak	N						✓	✓	✓	✓	✓			✓	✓	7
Ranunculus pensylvanicus	bristly buttercup	N		✓	✓				✓			✓			✓		5
Rhus radicans	poison ivy	N													✓		1
Rhus vernix	poison sumac	N							✓						✓		2
Ribes hirtellum	northern gooseberry	N						✓	✓						✓		3
Rosa blanda	early wild rose	N							✓						✓		2
Rubus flagellaris	common dewberry	N						✓	✓						✓	✓	4
Rubus hispidus obovalis	swamp dewberry	N						✓	✓							✓	3
Rubus idaeus strigosus	red raspberry	N						✓	✓						✓	✓	4
Rubus pensylvanicus	yankee blackberry	N						✓	✓						✓		3
Rubus pubescens	dwarf raspberry	N						✓									1
Rudbeckia hirta	black-eyed susan	N							✓			✓			✓		3
Rudbeckia laciniata	wild golden glow	N						✓	✓						✓		3
Rumex acetosella	field sorrel	I														✓	1
Rumex altissimus	pale dock	N							✓						✓		2
Rumex crispus	curly dock, yellow dock	I						✓	✓						✓		3
Sagittaria graminea	grass-leaved arrowhead	N							✓								1
Sagittaria latifolia	common arrowhead	N						✓	✓						✓	✓	4
Salix amygdaloides	peach-leaved willow	N		✓	✓				✓	✓	✓					✓	6
Salix lucida	shining willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix rigida	heart-leaved willow	N		✓	✓				✓	✓	✓					✓	6
Salix sericea	silky willow	N	✓	✓	✓				✓	✓	✓				✓	✓	8

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Salix syrticola	dune willow	N		✓	✓				✓	✓	✓					✓	6
Sanguinaria canadensis	bloodroot	N			✓				✓	✓	✓	✓			✓	✓	7
Sanicula marilandica	sanicle, black snakeroot	N							✓						✓		2
Sarracenia purpurea	pitcher plant	N							✓	✓	✓				✓	✓	5
Sassafras albidum	sassafras	N			✓			✓	✓						✓	✓	5
Saururus cernuus	lizard's tail	N							✓						✓		2
Scirpus cyperinus	wool grass	N								✓	✓					✓	3
Senecio aureus	golden ragwort	N							✓						✓		2
Smilax tamnoides hispida	bristly green brier, bristly cat brier	N													✓		1
Solanum americanum	black nightshade	N							✓								1
Solanum dulcamara	bittersweet nightshade	I							✓						✓		2
Solidago altissima	tall goldenrod	N							✓								1
Solidago caesia	blue-stemmed goldenrod	N							✓								1
Solidago gigantea	late goldenrod, giant goldenrod	N							✓								1
Solidago graminifolia media	smooth grass-leaved goldenrod	N							✓							✓	2
Solidago graminifolia nuttallii	grass leaved goldenrod	N		✓	✓				✓						✓		4
Solidago gymnospermoides	shiny grass-leaved goldenrod	N							✓								1
Solidago juncea	early goldenrod	N							✓						✓		2
Solidago missouriensis fasciculata	Missouri goldenrod	N							✓								1
Solidago nemoralis	old field goldenrod	N							✓								1
Solidago patula	swamp goldenrod	N							✓								1
Solidago rugosa	rough goldenrod	N							✓								1
Solidago speciosa	showy goldenrod	N							✓	✓	✓				✓	✓	5
Spiranthes lacera	slender ladies' tresses	N							✓						✓		2
Sporobolus heterolepis	prairie dropseed	N							✓						✓		2
Stellaria media	common chickweed	I							✓						✓		2
Symplocarpus foetidus	skunk cabbage	N						✓	✓						✓		3
Taraxacum officinale	common dandelion	I						✓	✓						✓	✓	4
Thaspium barbinode	hairy meadow parsnip	N							✓						✓		2
Typha angustifolia	narrow-leaved cattail	I						✓		✓	✓					✓	4
Typha latifolia	common cattail	N						✓	✓	✓					✓		4
Ulmus americana	American elm	N							✓	✓	✓				✓	✓	5
Ulmus pumila	Siberian elm	I	✓													✓	2
Uvularia grandiflora	bellwort	N							✓						✓		2
Verbascum thapsus	common mullein	I		✓					✓						✓	✓	4

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Verbena hastata	blue vervain	N							✓						✓		2
Veronicastrum virginicum	culver's root	N							✓						✓		2
Viburnum acerifolium	maple-leaved arrow-wood	N							✓						✓	✓	3
Viburnum lentago	nanneyberry	N						✓	✓						✓		3
Viola canadensis	Canada violet	N							✓						✓		2
Viola conspersa	dog violet	N							✓						✓		2
Viola pubescens	downy yellow violet	N							✓						✓		2
Vitis aestivalis	summer grape	N						✓	✓							✓	3
Vitis labrusca	fox grape	N						✓	✓						✓		3
Xanthium strumarium	cocklebur	N							✓								1
Xanthoxylum americanum	prickly ash	N						✓	✓						✓		3
Nymphaea tuberosa	white water lily	N						✓	✓						✓		3
			8	21	27	2	4	79	180	50	28	10	0	1	137	73	

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	#of uses
Acer negundo	box elder	N						✓	✓						✓		3
Acer rubrum	red maple	N	✓		✓			✓	✓	✓	✓				✓	✓	8
Acer saccharinum	silver maple	N	✓					✓	✓	✓					✓	✓	6
Acer saccharum	sugar maple	N	✓		✓			✓	✓	✓	✓			✓	✓	✓	9
Achillea millefolium	yarrow, milfoil	N		✓	✓				✓	✓							4
Actaea pachypoda	white baneberry	N							✓								1
Adiantum pedatum	maidenhair fern	N							✓							✓	2
Agrimonia gryposepala	tall agrimony	N							✓						✓		2
Allium tricoccum	wild leek	N						✓	✓						✓		3
Alnus rugosa americana	speckled alder	N							✓	✓	✓	✓			✓	✓	6
Amelanchier arborea	juneberry, shadbush, serviceberry	N						✓		✓							2
Amelanchier humilis	low shadblow	N								✓							1
Amelanchier interior	dwarf shadblow	N								✓							1
Amelanchier laevis	allegheny shadblow	N						✓	✓	✓					✓		4
Amphicarpa bracteata	hog peanut	N						✓	✓								2
Andropogon gerardii	big bluestem grass	N							✓						✓		2
Antennaria plantaginifolia	pussy toes	N							✓						✓		2
Apios americana	ground nut	N						✓									1
Apocynum androsaemifolium	spreading dogbane	N			✓				✓	✓	✓				✓	✓	6
Apocynum sibiricum	indian hemp, dogbane	N							✓						✓		2
Aquilegia canadensis	wild columbine	N						✓	✓						✓	✓	4
Aralia nudicaulis	wild sarsaparilla	N							✓	✓					✓		3
Aralia racemosa	spikenard	N							✓						✓		2
Arctium minus	common burdock	I							✓						✓		2
Arctostaphylos uva-ursi coactilis	bearberry	N		✓	✓			✓	✓	✓					✓	✓	7
Arisaema atrorubens	jack-in-the-pulpit	N						✓	✓						✓		3
Artemisia caudata	beach wormwood	N							✓						✓		2
Asclepias incarnata	swamp milkweed	N						✓	✓	✓					✓		4
Asclepias syriaca	common milkweed	N						✓	✓	✓					✓	✓	5
Asimina triloba	pawpaw	N						✓									1
Aster azureus	sky-blue aster	N						✓									1

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	#of uses
Aster cordifolius	heart leaved aster	N		✓	✓			✓	✓	✓					✓		6
Aster junciformis	rush aster	N						✓									1
Aster lateriflorus	side flowering aster	N						✓									1
Aster macrophyllus	big-leaved aster	N		✓				✓	✓	✓					✓		5
Aster novae-angliae	New England aster	N		✓	✓			✓	✓						✓		5
Aster praealtus	willow aster	N						✓									1
Aster simplex	marsh aster	N						✓									1
Aster umbellatus	flat-top aster	N						✓									1
Aster vimineus	small white aster	N						✓									1
Athyrium filix-femina michauxii	lady fern	N							✓						✓		2
Betula nigra	river birch	N							✓						✓	✓	3
Betula papyrifera	paper birch	N			✓	✓	✓		✓	✓	✓	✓			✓	✓	9
Boehmeria cylindrica	false nettle	N								✓							1
Botrychium virginianum	rattlesnake fern	N							✓						✓		2
Caltha palustris	marsh marigold	N						✓	✓						✓		3
Campanula americana	tall bellflower	N							✓						✓		2
Campanula aparinoides	marsh bellflower	N							✓						✓		2
Campanula rotundifolia	harebell	N							✓						✓		2
Capsella bursa-pastoris	shepherd's purse	I							✓						✓		2
Carex alata	winged sedge, broadwing sedge	N														✓	1
Carpinus caroliniana virginiana	blue beech	N			✓					✓	✓					✓	4
Carya cordiformis	bitter hickory	N	✓						✓	✓	✓					✓	5
Carya glabra	pignut hickory	N							✓								1
Caulophyllum thalictroides	blue cohosh	N							✓						✓		2
Ceanothus americanus	New Jersey tea	N							✓						✓		2
Celastrus scandens	climbing bittersweet	N						✓	✓						✓	✓	4
Celtis occidentalis	hackberry	N														✓	1
Chenopodium album	lamb's quarters	N						✓								✓	2
Chenopodium boscianum	woodland goosefoot	N														✓	1
Cicuta maculata	water hemlock	N		✓					✓	✓					✓	✓	5
Cirsium altissimum	tall thistle	N							✓								1

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	#of uses
Cirsium discolor	pasture thistle	N							✓								1
Cirsium pitcheri	sand thistle	N							✓								1
Claytonia virginica	spring beauty	N							✓						✓	✓	3
Comptonia peregrina	sweet fern	N			✓			✓	✓	✓					✓	✓	6
Coptis groenlandica	goldthread	N							✓	✓	✓	✓			✓	✓	6
Cornus canadensis	bunchberry	N		✓				✓	✓						✓		4
Cornus florida	flowering dogwood	N		✓					✓						✓		3
Cornus obliqua	pale dogwood	N		✓													1
Cornus rugosa	speckled dogwood	N		✓	✓												2
Cornus stolonifera	red osier dogwood	N		✓	✓				✓	✓	✓	✓			✓	✓	8
Cornus stolonifera baileyi	Bailey dogwood	N		✓					✓						✓		3
Corylus americana	American hazelnut	N			✓			✓	✓	✓	✓	✓			✓	✓	8
Crataegus crus-galli	cockspur hawthorn	N		✓	✓			✓	✓	✓	✓				✓	✓	8
Crataegus mollis	downy hawthorn	N		✓	✓			✓	✓	✓					✓		6
Cynoglossum officinale	hound's tongue	I							✓								1
Cypripedium calceolus pubescens	large yellow lady's slipper	N							✓						✓		2
Daucus carota	queen anne's lace	I						✓	✓						✓	✓	4
Descurainia sophia	Flixweed	I							✓						✓		2
Diervilla lonicera	bush honeysuckle	N							✓						✓		2
Echinocystis lobata	wild cucumber	N							✓						✓		2
Epifagus virginiana	beech drops	N							✓						✓	✓	3
Epilobium angustifolium	fire weed	N							✓						✓		2
Erigeron philadelphicus	marsh fleabane	N		✓	✓				✓						✓		4
Erigeron strigosus	daisy fleabane	N							✓						✓		2
Fagus grandifolia	American beech	N						✓	✓						✓	✓	4
Fraxinus americana biltmoreana	Biltmore ash	N							✓	✓						✓	3
Fraxinus pennsylvanica	red ash	N						✓	✓	✓	✓				✓	✓	6
Fraxinus pennsylvanica subintegerrima	green ash	N	✓						✓	✓					✓	✓	5
Galium aparine	annual bedstraw	N							✓						✓	✓	3
Galium brevipes	short stalked bedstraw	N							✓								1
Galium circaezans hypomalacum	wild licorice	N							✓								1

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	#of uses
Galium obtusum	wild madder	N							✓								1
Galium pilosum	hairy bedstraw	N							✓								1
Galium triflorum	sweet-scented bedstraw	N							✓								1
Gaultheria procumbens	wintergreen	N			✓			✓	✓						✓	✓	5
Gaylussacia baccata	huckleberry	N			✓			✓						✓		✓	4
Glyceria canadensis	rattlesnake grass	N							✓						✓		2
Hamamelis virginiana	witch hazel	N			✓			✓	✓						✓		4
Hepatica americana	round-lobed hepatica	N							✓			✓			✓		3
Heuchera richardsonii	prairie alum root	N							✓						✓		2
Juglans cinerea	butternut	N	✓					✓	✓	✓	✓	✓			✓	✓	8
Juglans nigra	black walnut	N						✓		✓	✓	✓				✓	5
Juncus effusus solutus	common rush	N								✓	✓					✓	3
Juncus greenei	greene's rush	N							✓	✓					✓		3
Juncus tenuis	path rush	N								✓						✓	2
Laportea canadensis	wood nettle	N							✓	✓	✓				✓	✓	5
Lathyrus ochroleucus	pale vetchling	N						✓	✓	✓					✓		4
Lathyrus palustris	marsh vetching	N						✓	✓						✓	✓	4
Lathyrus palustris myrtifolius	marsh vetchling	N						✓	✓								2
Lathyrus venosus	veiny pea	N						✓	✓						✓		3
Lepidium virginicum	common peppergrass	N						✓	✓								2
Lilium philadelphicum andinum	prairie lily	N						✓	✓						✓		3
Lindera benzoin	spicebush	N						✓	✓						✓		3
Linnaea borealis americana	twinflower	N							✓						✓	✓	3
Lobelia cardinalis	cardinal flower	N							✓						✓	✓	3
Lonicera dioica	red honeysuckle	N						✓	✓						✓		3
Lonicera prolifera	yellow honeysuckle	N							✓								1
Lonicera X muendeniensis	smallflower honeysuckle	I							✓								1
Lonicera X muscaviensis	Manchurian honeysuckle	I							✓								1
Maianthemum canadense	wild lily-of-the-valley	N						✓	✓						✓		3
Medeola virginiana	Indian cucumber root	N							✓						✓		2
Menispermum canadense	moonseed	N							✓						✓		2

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	#of uses
Monarda punctata villicaulis	horse mint	N							✓						✓		2
Nymphaea tuberosa	white water lily	N						✓	✓						✓		3
Nyssa sylvatica	black gum, sour gum	N								✓							1
Onoclea sensibilis	sensitive fern	N							✓						✓		2
Orobanche uniflora	one-flowered broom rape	N			✓				✓								2
Ostrya virginiana	hop hornbeam, ironwood	N							✓	✓	✓				✓	✓	5
Panax quinquefolius	ginseng	N						✓	✓					✓	✓	✓	5
Panax trifolius	dwarf ginseng	N							✓						✓		2
Parthenocissus inserta	thicket creeper	N						✓									1
Parthenocissus quinquefolia	virginia creeper	N						✓									1
Peltandra virginica	arrow arum	N							✓						✓		2
Phryma leptostachya	lopseed	N							✓						✓		2
Pinus strobus	white pine	N					✓	✓	✓	✓					✓	✓	6
Plantago lanceolata	English plantain	I							✓							✓	2
Polygala paucifolia	flowering wintergreen	N							✓						✓		2
Polygonatum pubescens	downy solomon's seal	N							✓						✓	✓	3
Polygonum aviculare	common knotweed	I														✓	1
Polygonum careyi	Carey`s heartease	N							✓						✓		2
Polygonum punctatum	smartweed	N							✓						✓		2
Polytaenia nuttallii	prairie parsley	N							✓								1
Pontederia cordata	pickerel weed	N								✓	✓				✓	✓	4
Populus deltoides	cottonwood	N	✓		✓		✓	✓	✓							✓	6
Populus tremuloides	quaking aspen	N	✓		✓		✓	✓	✓	✓	✓				✓	✓	9
Potentilla recta	sulfur cinquefoil	I							✓						✓		2
Prunella vulgaris	lawn prunella	N							✓						✓		2
Prunus pumila	sand cherry	N						✓									1
Prunus serotina	wild black cherry	N						✓	✓						✓		3
Pteridium aquilinum latiusculum	bracken fern	N						✓	✓								2
Pycnanthemum virginianum	common mountain mint	N						✓	✓						✓		3
Pyrola rotundifolia americana	round leaved shin-leaf	N						✓	✓						✓		3
Quercus bicolor	swamp white oak	N						✓		✓	✓					✓	4

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	#of uses
Quercus imbricaria	shingle oak	N						✓								✓	2
Quercus macrocarpa	bur oak	N						✓	✓			✓			✓		4
Quercus palustris	pin oak	N						✓		✓	✓					✓	4
Quercus rubra	red oak	N						✓	✓	✓	✓	✓			✓	✓	7
Ranunculus pensylvanicus	bristly buttercup	N		✓	✓				✓			✓			✓		5
Rhus aromatica arenaria	sand fragrant sumac	N		✓													1
Rhus glabra	smooth sumac	N		✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	11
Rhus radicans	poison ivy	N													✓		1
Rhus typhina	staghorn sumac	N		✓	✓			✓	✓			✓			✓	✓	7
Ribes hirtellum	northern gooseberry	N						✓	✓						✓		3
Rorippa islandica fernaldiana	marsh cress	N							✓								1
Rosa blanda	early wild rose	N							✓						✓		2
Rosa carolina	pasture rose	N							✓								1
Rubus flagellaris	common dewberry	N						✓	✓						✓	✓	4
Rubus hispidus obovalis	swamp dewberry	N						✓	✓							✓	3
Rubus idaeus strigosus	red raspberry	N						✓	✓						✓	✓	4
Rubus pensylvanicus	yankee blackberry	N						✓	✓						✓		3
Rubus pubescens	dwarf raspberry	N						✓									1
Rudbeckia hirta	black-eyed susan	N							✓			✓			✓		3
Rudbeckia laciniata	wild golden glow	N						✓	✓						✓		3
Rumex acetosella	field sorrel	I														✓	1
Rumex altissimus	pale dock	N							✓						✓		2
Sagittaria graminea	grass-leaved arrowhead	N							✓								1
Sagittaria latifolia	common arrowhead	N						✓	✓						✓	✓	4
Sagittaria rigida	stiff arrowhead	N							✓								1
Salix alba	white willow	I		✓	✓				✓	✓	✓					✓	6
Salix gracilis textoris	petioled willow	N		✓	✓				✓	✓	✓					✓	6
Salix humilis	prairie willow	N		✓	✓				✓	✓	✓					✓	6
Salix lucida	shining willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix pedicellaris hypoglauca	willow, bog willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix rigida	heart-leaved willow	N		✓	✓				✓	✓	✓					✓	6

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	#of uses
Salix sericea	silky willow	N	✓	✓	✓				✓	✓	✓				✓	✓	8
Salix syrticola	dune willow	N		✓	✓				✓	✓	✓					✓	6
Sambucus canadensis	elderberry, American elder	N						✓	✓						✓	✓	4
Sanicula marilandica	sanicle, black snakeroot	N							✓						✓		2
Saururus cernuus	lizard's tail	N							✓						✓		2
Scirpus cyperinus	wool grass	N								✓	✓					✓	3
Scirpus validus creber	great bulrush	N						✓		✓	✓					✓	4
Senecio aureus	golden ragwort	N							✓						✓		2
Smilax lasioneura	common carrion flower	N							✓								1
Smilax tamnoides hispida	bristly green brier, bristly cat brier	N													✓		1
Solanum americanum	black nightshade	N							✓								1
Solanum dulcamara	bittersweet nightshade	I							✓						✓		2
Solidago altissima	tall goldenrod	N							✓								1
Solidago caesia	blue-stemmed goldenrod	N							✓								1
Solidago flexicaulis	broad-leaved goldenrod	N							✓						✓		2
Solidago graminifolia media	smooth grass-leaved goldenrod	N							✓							✓	2
Solidago graminifolia nuttallii	grass leaved goldenrod	N		✓	✓				✓						✓		4
Solidago gymnospermoides	shiny grass-leaved goldenrod	N							✓								1
Solidago juncea	early goldenrod	N							✓						✓		2
Solidago nemoralis	old field goldenrod	N							✓								1
Solidago patula	swamp goldenrod	N							✓								1
Solidago riddellii	riddell's goldenrod	N							✓								1
Solidago rugosa	rough goldenrod	N							✓								1
Solidago speciosa	showy goldenrod	N							✓	✓	✓				✓	✓	5
Solidago tenuifolia	slender-leaved goldenrod	N							✓								1
Spiraea alba	meadowsweet	N		✓					✓						✓		3
Taraxacum officinale	common dandelion	I						✓	✓						✓	✓	4
Thaspium barbinode	hairy meadow parsnip	N							✓						✓		2
Typha angustifolia	narrow-leaved cattail	I						✓		✓	✓					✓	4
Ulmus americana	American elm	N							✓	✓	✓				✓	✓	5
Uvularia grandiflora	bellwort	N							✓						✓		2

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	#of uses
Verbascum thapsus	common mullein	I		✓					✓						✓	✓	4
Verbena hastata	blue vervain	N							✓						✓		2
Viburnum lentago	nanneyberry	N						✓	✓						✓		3
Viburnum recognitum	smooth arrow-wood	N		✓													1
Viola canadensis	Canada violet	N							✓						✓		2
Vitis aestivalis	summer grape	N						✓	✓							✓	3
Vitis labrusca	fox grape	N						✓	✓						✓		3
Xanthium strumarium	cocklebur	N							✓								1
Xanthoxylum americanum	prickly ash	N						✓	✓						✓		3
Zea mays	corn	I	✓					✓		✓						✓	4
			10	31	34	2	5	86	184	60	36	14	0	3	138	81	

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Acer negundo	box elder	N						✓	✓						✓		3
Acer rubrum	red maple	N	✓		✓			✓	✓	✓	✓				✓	✓	8
Acer saccharinum	silver maple	N	✓					✓	✓	✓					✓	✓	6
Achillea millefolium	yarrow, milfoil	N		✓	✓				✓	✓							4
Agrimonia gryposepala	tall agrimony	N							✓						✓		2
Alnus rugosa americana	speckled alder	N							✓	✓	✓	✓			✓	✓	6
Amelanchier arborea	juneberry, shadbush, serviceberry	N						✓		✓							2
Amelanchier interior	dwarf shadblow	N								✓							1
Amelanchier laevis	allegheny shadblow	N						✓	✓	✓					✓		4
Amphicarpa bracteata	hog peanut	N						✓	✓								2
Anemone cylindrica	thimbleweed	N							✓						✓		2
Anemone virginiana	tall anemone, tumbleweed	N							✓							✓	2
Antennaria plantaginifolia	pussy toes	N							✓						✓		2
Apios americana	ground nut	N						✓									1
Apocynum androsaemifolium	spreading dogbane	N			✓				✓	✓	✓				✓	✓	6
Apocynum cannabinum	indian hemp, dogbane	N								✓						✓	2
Apocynum sibiricum	indian hemp, dogbane	N							✓						✓		2
Aquilegia canadensis	wild columbine	N						✓	✓						✓	✓	4
Arabis glabra	tower mustard	N							✓						✓		2
Aralia nudicaulis	wild sarsaparilla	N							✓	✓					✓		3
Aralia racemosa	spikenard	N							✓						✓		2
Arctium minus	common burdock	I							✓						✓		2
Arctostaphylos uva-ursi coactilis	bearberry	N		✓	✓			✓	✓	✓					✓	✓	7
Arisaema atrorubens	jack-in-the-pulpit	N						✓	✓						✓		3
Artemisia absinthium	Common wormwood	I							✓						✓	✓	3
Artemisia caudata	beach wormwood	N							✓						✓		2
Asclepias incarnata	swamp milkweed	N						✓	✓	✓					✓		4
Asclepias syriaca	common milkweed	N						✓	✓	✓					✓	✓	5
Asimina triloba	pawpaw	N						✓									1
Aster azureus	sky-blue aster	N						✓									1
Aster dumosus	rice-button aster, bushy aster	N						✓		✓					✓		3

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Aster ericoides	heath aster	N						✓									1
Aster junciformis	rush aster	N						✓									1
Aster lateriflorus	side flowering aster	N						✓									1
Aster linariifolius	flax-leaved aster	N						✓									1
Aster macrophyllus	big-leaved aster	N		✓				✓	✓	✓					✓		5
Aster pilosus	hairy aster	N						✓									1
Aster puniceus	swamp aster	N	✓	✓				✓	✓						✓		5
Aster puniceus firmus	swamp aster	N						✓	✓						✓		3
Aster simplex	marsh aster	N						✓									1
Aster umbellatus	flat-top aster	N						✓									1
Athyrium filix-femina michauxii	lady fern	N							✓						✓		2
Boehmeria cylindrica	false nettle	N								✓							1
Botrychium virginianum	rattlesnake fern	N							✓						✓		2
Calla palustris	water arum	N						✓	✓						✓	✓	4
Caltha palustris	marsh marigold	N						✓	✓						✓		3
Campanula americana	tall bellflower	N							✓						✓		2
Campanula rotundifolia	harebell	N							✓						✓		2
Carex alata	winged sedge, broadwing sedge	N														✓	1
Celastrus scandens	climbing bittersweet	N						✓	✓						✓	✓	4
Celtis occidentalis	hackberry	N														✓	1
Chenopodium album	lamb's quarters	N						✓								✓	2
Chimaphila umbellata cisatlantica	pipsissewa, prince's pine	N							✓						✓	✓	3
Cicuta maculata	water hemlock	N		✓					✓	✓					✓	✓	5
Cirsium altissimum	tall thistle	N							✓								1
Cirsium arvense	field thistle, canada thistle	I							✓						✓		2
Cirsium discolor	pasture thistle	N							✓								1
Cirsium pitcheri	sand thistle	N							✓								1
Cirsium vulgare	bull thistle	I							✓						✓		2
Claytonia virginica	spring beauty	N							✓						✓	✓	3
Comptonia peregrina	sweet fern	N			✓			✓	✓	✓					✓	✓	6
Coptis groenlandica	goldthread	N							✓	✓	✓	✓			✓	✓	6

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Cornus florida	flowering dogwood	N		✓					✓						✓		3
Cornus rugosa	speckled dogwood	N		✓	✓												2
Cornus stolonifera	red osier dogwood	N		✓	✓				✓	✓	✓	✓			✓	✓	8
Cornus stolonifera baileyi	Bailey dogwood	N		✓					✓						✓		3
Corylus americana	American hazelnut	N			✓			✓	✓	✓	✓	✓			✓	✓	8
Crataegus crus-galli	cockspur hawthorn	N		✓	✓			✓	✓	✓	✓				✓	✓	8
Cynoglossum officinale	hound's tongue	I							✓								1
Cypripedium calceolus pubescens	large yellow lady's slipper	N							✓						✓		2
Cypripedium reginae	showy lady's slipper	N							✓						✓		2
Dicentra cucullaria	Dutchman's breeches	N							✓						✓	✓	3
Diervilla lonicera	bush honeysuckle	N							✓						✓		2
Echinocystis lobata	wild cucumber	N							✓						✓		2
Epifagus virginiana	beech drops	N							✓						✓	✓	3
Equisetum arvense	horsetail	N						✓	✓	✓	✓				✓	✓	6
Erigeron strigosus	daisy fleabane	N							✓						✓		2
Eupatorium perfoliatum	common boneset	N							✓						✓		2
Euphorbia cyparissias	cypress spurge, grave-yard spurge	I							✓						✓		2
Fraxinus americana biltmoreana	Biltmore ash	N							✓	✓						✓	3
Fraxinus pennsylvanica	red ash	N						✓	✓	✓	✓				✓	✓	6
Fraxinus pennsylvanica subintegerrima	green ash	N	✓						✓	✓					✓	✓	5
Galium aparine	annual bedstraw	N							✓						✓	✓	3
Galium circaezans hypomalacum	wild licorice	N							✓								1
Galium obtusum	wild madder	N							✓								1
Galium pilosum	hairy bedstraw	N							✓								1
Galium triflorum	sweet-scented bedstraw	N							✓								1
Gaultheria procumbens	wintergreen	N			✓			✓	✓						✓	✓	5
Gaylussacia baccata	huckleberry	N			✓			✓						✓		✓	4
Geum canadense	white avens	N							✓						✓		2
Glyceria canadensis	rattlesnake grass	N							✓						✓		2
Hamamelis virginiana	witch hazel	N			✓			✓	✓						✓		4
Hepatica americana	round-lobed hepatica	N							✓			✓			✓		3

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Heuchera richardsonii	prairie alum root	N							✓						✓		2
Juglans nigra	black walnut	N						✓		✓	✓	✓				✓	5
Juncus greenei	greene's rush	N							✓	✓					✓		3
Juncus tenuis	path rush	N								✓						✓	2
Lactuca canadensis	wild lettuce	N							✓						✓		2
Laportea canadensis	wood nettle	N							✓	✓	✓				✓	✓	5
Larix laricina	tamarack, larch	N	✓						✓	✓	✓				✓	✓	6
Lathyrus palustris	marsh vetching	N						✓	✓						✓	✓	4
Lathyrus palustris myrtifolius	marsh vetchling	N						✓	✓								2
Lilium philadelphicum andinum	prairie lily	N						✓	✓						✓		3
Lindera benzoin	spicebush	N						✓	✓						✓		3
Linnaea borealis americana	twinflower	N							✓						✓	✓	3
Lonicera X muendeniensis	smallflower honeysuckle	I							✓								1
Lycopodium complanatum flabelliforme	trailing ground pine	N							✓						✓		2
Maianthemum canadense	wild lily-of-the-valley	N						✓	✓						✓		3
Medeola virginiana	Indian cucumber root	N							✓						✓		2
Melilotus alba	white sweet clover	I							✓						✓		2
Mirabilis nyctaginea	wild four o'clock	N							✓						✓		2
Orobanche uniflora	one-flowered broom rape	N			✓				✓								2
Ostrya virginiana	hop hornbeam, ironwood	N							✓	✓	✓				✓	✓	5
Panax trifolius	dwarf ginseng	N							✓						✓		2
Parthenocissus inserta	thicket creeper	N						✓									1
Parthenocissus quinquefolia	virginia creeper	N						✓									1
Peltandra virginica	arrow arum	N							✓						✓		2
Phragmites communis berlandieri	common reed	N								✓	✓					✓	3
Pinus strobus	white pine	N					✓	✓	✓	✓					✓	✓	6
Plantago lanceolata	English plantain	I							✓							✓	2
Polygala paucifolia	flowering wintergreen	N							✓						✓		2
Polygonum aviculare	common knotweed	I														✓	1
Polygonum careyi	Carey`s heartease	N							✓						✓		2
Polygonum coccineum	water hearts ease	N		✓	✓				✓						✓		4

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Polytaenia nuttallii	prairie parsley	N							✓								1
Pontederia cordata	pickerel weed	N								✓	✓				✓	✓	4
Populus balsamifera	balsam poplar	N			✓			✓	✓	✓					✓	✓	6
Populus deltoides	cottonwood	N	✓		✓		✓	✓	✓							✓	6
Populus nigra italica	lombardy poplar	N			✓		✓	✓								✓	4
Potentilla palustris	marsh cinquefoil	N							✓						✓		2
Potentilla recta	sulfur cinquefoil	I							✓						✓		2
Prunus nigra	Canada plum	N						✓				✓				✓	3
Prunus pumila	sand cherry	N						✓									1
Pteridium aquilinum latiusculum	bracken fern	N						✓	✓								2
Pycnanthemum virginianum	common mountain mint	N						✓	✓						✓		3
Pyrola rotundifolia americana	round leaved shin-leaf	N						✓	✓						✓		3
Quercus bicolor	swamp white oak	N						✓		✓	✓					✓	4
Quercus macrocarpa	bur oak	N						✓	✓			✓			✓		4
Quercus palustris	pin oak	N						✓		✓	✓					✓	4
Quercus velutina	black oak	N						✓	✓	✓	✓	✓				✓	6
Ranunculus pensylvanicus	bristly buttercup	N		✓	✓				✓			✓			✓		5
Rhus copallina latifolia	winged sumac	N		✓	✓				✓						✓		4
Rhus glabra	smooth sumac	N		✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	11
Rhus radicans	poison ivy	N													✓		1
Rhus typhina	staghorn sumac	N		✓	✓			✓	✓			✓			✓	✓	7
Rhus vernix	poison sumac	N							✓						✓		2
Ribes hirtellum	northern gooseberry	N						✓	✓						✓		3
Ribes missouriense	wild gooseberry	N						✓								✓	2
Ribes sativum	red currant	I						✓	✓								2
Rosa blanda	early wild rose	N							✓						✓		2
Rosa carolina	pasture rose	N							✓								1
Rosa palustris	swamp rose	N							✓								1
Rubus flagellaris	common dewberry	N						✓	✓						✓	✓	4
Rubus hispidus obovalis	swamp dewberry	N						✓	✓							✓	3
Rubus idaeus strigosus	red raspberry	N						✓	✓						✓	✓	4

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Rubus pensylvanicus	yankee blackberry	N						✓	✓						✓		3
Rubus pubescens	dwarf raspberry	N						✓									1
Rudbeckia hirta	black-eyed susan	N							✓			✓			✓		3
Rudbeckia laciniata	wild golden glow	N						✓	✓						✓		3
Rumex acetosella	field sorrel	I														✓	1
Rumex altissimus	pale dock	N							✓						✓		2
Sagittaria latifolia	common arrowhead	N						✓	✓						✓	✓	4
Sagittaria rigida	stiff arrowhead	N							✓								1
Salix candida	hoary willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix glaucophylloides glaucophylla	blue-leaved willow	N		✓	✓				✓	✓	✓					✓	6
Salix gracilis textoris	petioled willow	N		✓	✓				✓	✓	✓					✓	6
Salix humilis	prairie willow	N		✓	✓				✓	✓	✓					✓	6
Salix lucida	shining willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix pedicellaris hypoglauca	willow, bog willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix rigida	heart-leaved willow	N		✓	✓				✓	✓	✓					✓	6
Salix sericea	silky willow	N	✓	✓	✓				✓	✓	✓				✓	✓	8
Salix syrticola	dune willow	N		✓	✓				✓	✓	✓					✓	6
Sambucus canadensis	elderberry, American elder	N						✓	✓						✓	✓	4
Sambucus pubens	red-berried elder	N						✓	✓						✓		3
Sanguinaria canadensis	bloodroot	N			✓				✓	✓	✓	✓			✓	✓	7
Sanicula marilandica	sanicle, black snakeroot	N							✓						✓		2
Sassafras albidum	sassafras	N			✓			✓	✓						✓	✓	5
Saururus cernuus	lizard's tail	N							✓						✓		2
Scirpus cyperinus	wool grass	N								✓	✓					✓	3
Scirpus validus creber	great bulrush	N						✓		✓	✓					✓	4
Scutellaria epilobiifolia	marsh skullcap	N							✓						✓		2
Solanum americanum	black nightshade	N							✓								1
Solanum dulcamara	bittersweet nightshade	I							✓						✓		2
Solidago altissima	tall goldenrod	N							✓								1
Solidago caesia	blue-stemmed goldenrod	N							✓								1
Solidago gigantea	late goldenrod, giant goldenrod	N							✓								1

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Solidago graminifolia media	smooth grass-leaved goldenrod	N							✓							✓	2
Solidago graminifolia nuttallii	grass leaved goldenrod	N		✓	✓				✓						✓		4
Solidago gymnospermoides	shiny grass-leaved goldenrod	N							✓								1
Solidago juncea	early goldenrod	N							✓						✓		2
Solidago nemoralis	old field goldenrod	N							✓								1
Solidago patula	swamp goldenrod	N							✓								1
Solidago racemosa gillmani	dune goldenrod, Rand's goldenrod	N							✓								1
Solidago riddellii	riddell's goldenrod	N							✓								1
Solidago rugosa	rough goldenrod	N							✓								1
Solidago speciosa	showy goldenrod	N							✓	✓	✓				✓	✓	5
Solidago tenuifolia	slender-leaved goldenrod	N							✓								1
Symphoricarpos orbiculatus	coralberry; indian current	N							✓								1
Symplocarpus foetidus	skunk cabbage	N						✓	✓						✓		3
Taraxacum officinale	common dandelion	I						✓	✓						✓	✓	4
Thaspium barbinode	hairy meadow parsnip	N							✓						✓		2
Tilia americana	basswood, american linden	N	✓		✓			✓	✓	✓	✓				✓	✓	8
Trientalis borealis	starflower	N		✓	✓				✓	✓					✓		5
Ulmus pumila	Siberian elm	I	✓													✓	2
Uvularia grandiflora	bellwort	N							✓						✓		2
Vaccinium corymbosum	highbush blueberry	N			✓	✓		✓	✓								4
Vaccinium oxycoccos	small cranberry	N	✓					✓	✓						✓	✓	5
Verbascum thapsus	common mullein	I		✓					✓						✓	✓	4
Verbena hastata	blue vervain	N							✓						✓		2
Viburnum acerifolium	maple-leaved arrow-wood	N							✓						✓	✓	3
Viburnum lentago	nanneyberry	N						✓	✓						✓		3
Viburnum rafinesquianum	downy arrowwood	N			✓				✓						✓		3
Viola canadensis	Canada violet	N							✓						✓		2
Viola conspersa	dog violet	N							✓						✓		2
Viola pubescens	downy yellow violet	N							✓						✓		2
Vitis aestivalis	summer grape	N						✓	✓							✓	3
Vitis labrusca	fox grape	N						✓	✓						✓		3

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Vitis riparia	river bank grape	N						✓	✓	✓					✓	✓	5
Xanthium strumarium	cocklebur	N							✓								1
Xanthoxylum americanum	prickly ash	N						✓	✓						✓		3
			10	27	37	2	4	84	181	56	33	14	0	1	138	83	

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Acer nigrum	black maple	N	✓					✓	✓	✓						✓	5
Acer rubrum	red maple	N	✓		✓			✓	✓	✓	✓				✓	✓	8
Acer saccharinum	silver maple	N	✓					✓	✓	✓					✓	✓	6
Acer saccharum	sugar maple	N	✓		✓			✓	✓	✓	✓			✓	✓	✓	9
Actaea pachypoda	white baneberry	N							✓								1
Allium tricoccum	wild leek	N						✓	✓						✓		3
Amphicarpa bracteata	hog peanut	N						✓	✓								2
Anemonella thalictroides	rue anemone	N														✓	1
Arisaema atrorubens	jack-in-the-pulpit	N						✓	✓						✓		3
Asarum canadense	wild ginger	N			✓			✓	✓						✓	✓	5
Asimina triloba	pawpaw	N						✓									1
Aster cordifolius	heart leaved aster	N		✓	✓			✓	✓	✓					✓		6
Aster lateriflorus	side flowering aster	N						✓									1
Botrychium virginianum	rattlesnake fern	N							✓						✓		2
Carya cordiformis	bitter hickory	N	✓						✓	✓	✓					✓	5
Carya glabra	pignut hickory	N							✓								1
Ceanothus americanus	New Jersey tea	N							✓						✓		2
Chenopodium boscianum	woodland goosefoot	N														✓	1
Cirsium discolor	pasture thistle	N							✓								1
Cirsium pitcheri	sand thistle	N							✓								1
Cornus rugosa	speckled dogwood	N		✓	✓												2
Crataegus mollis	downy hawthorn	N		✓	✓			✓	✓	✓					✓		6
Daucus carota	queen anne's lace	I						✓	✓						✓	✓	4
Dioscorea villosa	wild yam	N						✓	✓							✓	3
Echinocystis lobata	wild cucumber	N							✓						✓		2
Epigaea repens glabrifolia	trailing arbutus	N							✓						✓	✓	3
Epilobium angustifolium	fire weed	N							✓						✓		2
Eupatorium maculatum	spotted Joe Pye weed	N							✓						✓		2
Eupatorium perfoliatum	common boneset	N							✓						✓		2
Euphorbia cyparissias	cypress spurge, grave-yard spurge	I							✓						✓		2
Fraxinus nigra	black ash	N			✓				✓	✓	✓	✓			✓	✓	7

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Fraxinus pennsylvanica subintegerrima	green ash	N	✓						✓	✓					✓	✓	5
Galium aparine	annual bedstraw	N							✓						✓	✓	3
Galium circaezans hypomalacum	wild licorice	N							✓								1
Galium pilosum	hairy bedstraw	N							✓								1
Galium triflorum	sweet-scented bedstraw	N							✓								1
Glyceria canadensis	rattlesnake grass	N							✓						✓		2
Juglans nigra	black walnut	N						✓		✓	✓	✓				✓	5
Lathyrus palustris	marsh vetching	N						✓	✓						✓	✓	4
Lindera benzoin	spicebush	N						✓	✓						✓		3
Monarda punctata villicaulis	horse mint	N							✓						✓		2
Orobanche uniflora	one-flowered broom rape	N			✓				✓								2
Ostrya virginiana	hop hornbeam, ironwood	N							✓	✓	✓				✓	✓	5
Panax quinquefolius	ginseng	N						✓	✓					✓	✓	✓	5
Peltandra virginica	arrow arum	N							✓						✓		2
Phryma leptostachya	lopseed	N							✓						✓		2
Physocarpus opulifolius	ninebark	N							✓						✓		2
Pinus strobus	white pine	N					✓	✓	✓	✓					✓	✓	6
Plantago lanceolata	English plantain	I							✓							✓	2
Polygala paucifolia	flowering wintergreen	N							✓						✓		2
Polygonum aviculare	common knotweed	I														✓	1
Polygonum careyi	Carey`s heartease	N							✓						✓		2
Populus deltoides	cottonwood	N	✓		✓		✓	✓	✓							✓	6
Prunella vulgaris	lawn prunella	N							✓						✓		2
Prunus americana	wild plum	N						✓	✓	✓	✓	✓			✓	✓	7
Pteridium aquilinum latiusculum	bracken fern	N						✓	✓								2
Quercus rubra	red oak	N						✓	✓	✓	✓	✓			✓	✓	7
Rosa blanda	early wild rose	N							✓						✓		2
Rubus hispidus obovalis	swamp dewberry	N						✓	✓							✓	3
Rubus idaeus strigosus	red raspberry	N						✓	✓						✓	✓	4
Rudbeckia laciniata	wild golden glow	N						✓	✓						✓		3
Rumex crispus	curly dock, yellow dock	I						✓	✓						✓		3

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Sagittaria latifolia	common arrowhead	N						✓	✓						✓	✓	4
Sanicula marilandica	sanicle, black snakeroot	N							✓						✓		2
Sarracenia purpurea	pitcher plant	N							✓	✓	✓				✓	✓	5
Solanum americanum	black nightshade	N							✓								1
Solanum dulcamara	bittersweet nightshade	I							✓						✓		2
Solidago altissima	tall goldenrod	N							✓								1
Solidago flexicaulis	broad-leaved goldenrod	N							✓						✓		2
Solidago juncea	early goldenrod	N							✓						✓		2
Solidago missouriensis fasciculata	Missouri goldenrod	N							✓								1
Solidago nemoralis	old field goldenrod	N							✓								1
Thaspium barbinode	hairy meadow parsnip	N							✓						✓		2
Tilia americana	basswood, american linden	N	✓		✓			✓	✓	✓	✓				✓	✓	8
Typha angustifolia	narrow-leaved cattail	I						✓		✓	✓					✓	4
Typha latifolia	common cattail	N						✓	✓	✓					✓		4
Ulmus americana	American elm	N							✓	✓	✓				✓	✓	5
Uvularia grandiflora	bellwort	N							✓						✓		2
Viola conspersa	dog violet	N							✓						✓		2
Vitis labrusca	fox grape	N						✓	✓						✓		3
			8	3	10	0	2	32	72	19	12	4	0	2	52	31	

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Acer saccharinum	silver maple	N	✓					✓	✓	✓					✓	✓	6
Achillea millefolium	yarrow, milfoil	N		✓	✓				✓	✓							4
Alopecurus aequalis	short-awned foxtail	N							✓								1
Amelanchier laevis	allegheny shadblow	N						✓	✓	✓					✓		4
Amorpha canescens	lead plant	N							✓						✓		2
Amphicarpa bracteata	hog peanut	N						✓	✓								2
Andropogon gerardii	big bluestem grass	N							✓						✓		2
Anemonella thalictroides	rue anemone	N														✓	1
Antennaria neglecta	cat's foot	N							✓						✓	✓	3
Antennaria plantaginifolia	pussy toes	N							✓						✓		2
Apios americana	ground nut	N						✓									1
Apocynum androsaemifolium	spreading dogbane	N			✓				✓	✓	✓				✓	✓	6
Apocynum cannabinum	indian hemp, dogbane	N								✓						✓	2
Apocynum sibiricum	indian hemp, dogbane	N							✓						✓		2
Aralia nudicaulis	wild sarsaparilla	N							✓	✓					✓		3
Artemisia caudata	beach wormwood	N							✓						✓		2
Asclepias incarnata	swamp milkweed	N						✓	✓	✓					✓		4
Asclepias syriaca	common milkweed	N						✓	✓	✓					✓	✓	5
Aster azureus	sky-blue aster	N						✓									1
Aster dumosus	rice-button aster, bushy aster	N						✓		✓					✓		3
Aster ericoides	heath aster	N						✓									1
Aster lateriflorus	side flowering aster	N						✓									1
Aster linariifolius	flax-leaved aster	N						✓									1
Aster novae-angliae	New England aster	N		✓	✓			✓	✓						✓		5
Aster pilosus	hairy aster	N						✓									1
Aster praealtus	willow aster	N						✓									1
Aster ptarmicoides	stiff aster	N						✓									1
Aster simplex	marsh aster	N						✓									1
Aster simplex interior	panicled aster	N						✓									1
Aster umbellatus	flat-top aster	N						✓									1
Athyrium filix-femina michauxii	lady fern	N							✓						✓		2

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Baptisia tinctoria crebra	yellow wild indigo	N							✓						✓		2
Betula pendula	European white birch	I	✓		✓			✓	✓						✓	✓	6
Boehmeria cylindrica	false nettle	N								✓							1
Botrychium virginianum	rattlesnake fern	N							✓						✓		2
Caltha palustris	marsh marigold	N						✓	✓						✓		3
Campanula aparinoides	marsh bellflower	N							✓						✓		2
Capsella bursa-pastoris	shepherd's purse	I							✓						✓		2
Carpinus caroliniana virginiana	blue beech	N			✓					✓	✓					✓	4
Cephalanthus occidentalis	button bush	N							✓								1
Cirsium pitcheri	sand thistle	N							✓								1
Cirsium vulgare	bull thistle	I							✓						✓		2
Comptonia peregrina	sweet fern	N			✓			✓	✓	✓					✓	✓	6
Cornus alternifolia	alternate-leaved dogwood	N		✓	✓				✓	✓					✓	✓	6
Cornus canadensis	bunchberry	N		✓				✓	✓						✓		4
Cornus stolonifera	red osier dogwood	N		✓	✓				✓	✓	✓	✓			✓	✓	8
Cornus stolonifera baileyi	Bailey dogwood	N		✓					✓						✓		3
Crataegus coccinea	scarlet hawthorn	N		✓	✓			✓	✓	✓	✓				✓	✓	8
Crataegus crus-galli	cockspur hawthorn	N		✓	✓			✓	✓	✓	✓				✓	✓	8
Cypripedium calceolus parviflorum	small yellow lady's slipper	N							✓						✓		2
Diervilla lonicera	bush honeysuckle	N							✓						✓		2
Dryopteris cristata	crested shield fern	N							✓						✓		2
Equisetum hyemale affine	tall scouring rush	N	✓						✓	✓					✓	✓	5
Erigeron philadelphicus	marsh fleabane	N		✓	✓				✓						✓		4
Eupatorium purpureum	sweet joe-pie-weed	N							✓						✓		2
Fagus grandifolia	American beech	N						✓	✓						✓	✓	4
Fraxinus americana biltmoreana	Biltmore ash	N							✓	✓						✓	3
Fraxinus pennsylvanica	red ash	N						✓	✓	✓	✓				✓	✓	6
Galium aparine	annual bedstraw	N							✓						✓	✓	3
Galium circaezans hypomalacum	wild licorice	N							✓								1
Galium concinnum	shining bedstraw	N							✓								1
Galium labradoricum	bog bedstraw	N							✓								1

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Galium pilosum	hairy bedstraw	N							✓								1
Galium triflorum	sweet-scented bedstraw	N							✓								1
Gaylussacia baccata	huckleberry	N			✓			✓						✓		✓	4
Geranium maculatum	wild geranium	N							✓						✓		2
Geum canadense	white avens	N							✓						✓		2
Glyceria canadensis	rattlesnake grass	N							✓						✓		2
Hamamelis virginiana	witch hazel	N			✓			✓	✓						✓		4
Helianthus occidentalis	western sunflower	N							✓						✓		2
Hepatica americana	round-lobed hepatica	N							✓			✓			✓		3
Hieracium canadense fasciculatum	Canada hawkweed	N							✓	✓					✓		3
Hierochloe odorata	vanilla grass, sweet grass	N	✓		✓	✓	✓		✓	✓	✓					✓	8
Ilex verticillata	winterberry	N							✓						✓		2
Impatiens pallida	yellow jewelweed	N							✓			✓			✓		3
Iris virginica shrevei	blue flag, wild iris	N							✓	✓					✓		3
Juglans nigra	black walnut	N						✓		✓	✓	✓				✓	5
Juncus dudleyi	inland rush	N								✓	✓					✓	3
Juncus effusus solutus	common rush	N								✓	✓					✓	3
Juncus greenei	greene's rush	N							✓	✓					✓		3
Juncus tenuis	path rush	N								✓						✓	2
Lactuca canadensis	wild lettuce	N							✓						✓		2
Laportea canadensis	wood nettle	N							✓	✓	✓				✓	✓	5
Lemna minor	small duckweed	N							✓						✓	✓	3
Lilium philadelphicum andinum	prairie lily	N						✓	✓						✓		3
Linaria vulgaris	butter & eggs, toadflax	I							✓						✓		2
Lobelia cardinalis	cardinal flower	N							✓						✓	✓	3
Lonicera tatarica	tartarian honeysuckle	I							✓								1
Lychnis alba	white campion	I							✓								1
Lycopodium complanatum flabelliforme	trailing ground pine	N							✓						✓		2
Lycopodium obscurum	ground pine	N							✓		✓				✓	✓	4
Lycopus asper	rough water horehound	N						✓									1
Maianthemum canadense	wild lily-of-the-valley	N						✓	✓						✓		3

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Malaxis unifolia	green adder's mouth	N							✓						✓		2
Medeola virginiana	Indian cucumber root	N							✓						✓		2
Menispermum canadense	moonseed	N							✓						✓		2
Monarda fistulosa	wild bergamot	N							✓						✓		2
Nuphar advena	yellow pond lily	N							✓						✓		2
Oenothera biennis	common evening primrose	N							✓						✓		2
Orobanche uniflora	one-flowered broom rape	N			✓				✓								2
Panax trifolius	dwarf ginseng	N							✓						✓		2
Parthenocissus quinquefolia	virginia creeper	N						✓									1
Pedicularis canadensis	wood betony	N						✓	✓						✓	✓	4
Petalostemum purpureum	purple prairie clover	N							✓								1
Pinus nigra	Austrian Pine	I	✓		✓											✓	3
Polygala paucifolia	flowering wintergreen	N							✓						✓		2
Polygonatum pubescens	downy solomon's seal	N							✓						✓	✓	3
Polygonum amphibium stipulaceum	smartweed, water knotweed	N		✓				✓	✓						✓	✓	5
Polygonum arifolium pubescens	halbert-leaved tear-thumb	N														✓	1
Polygonum aviculare	common knotweed	I														✓	1
Polygonum coccineum	water hearts ease	N		✓	✓				✓						✓		4
Polygonum pensylvanicum laevigatum	pennsylvania knotweed	N							✓						✓		2
Polygonum persicaria	lady's thumb	I							✓						✓		2
Polygonum punctatum	smartweed	N							✓						✓		2
Populus alba	white poplar, silver poplar	I							✓	✓							2
Populus grandidentata	large-toothed aspen	N			✓		✓	✓	✓	✓					✓	✓	7
Prunus avium	sweet cherry	I						✓									1
Prunus nigra	Canada plum	N						✓				✓				✓	3
Prunus pumila	sand cherry	N						✓									1
Pteridium aquilinum latiusculum	bracken fern	N						✓	✓								2
Pyrola rotundifolia americana	round leaved shin-leaf	N						✓	✓						✓		3
Pyrus coronaria	white sweet crab	N						✓								✓	2
Quercus bicolor	swamp white oak	N						✓		✓	✓					✓	4
Quercus imbricaria	shingle oak	N						✓								✓	2

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Quercus macrocarpa	bur oak	N						✓	✓			✓			✓		4
Quercus palustris	pin oak	N						✓		✓	✓					✓	4
Ranunculus pensylvanicus	bristly buttercup	N		✓	✓				✓			✓			✓		5
Ranunculus sceleratus	cursed buttercup	N							✓						✓		2
Rhus aromatica arenaria	sand fragrant sumac	N		✓													1
Rhus glabra	smooth sumac	N		✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	11
Rhus radicans	poison ivy	N													✓		1
Ribes hirtellum	northern gooseberry	N						✓	✓						✓		3
Ribes missouriense	wild gooseberry	N						✓								✓	2
Rorippa islandica fernaldiana	marsh cress	N							✓								1
Rosa blanda	early wild rose	N							✓						✓		2
Rosa carolina	pasture rose	N							✓								1
Rubus flagellaris	common dewberry	N						✓	✓						✓	✓	4
Rubus hispidus obovalis	swamp dewberry	N						✓	✓							✓	3
Rubus idaeus strigosus	red raspberry	N						✓	✓						✓	✓	4
Rubus odoratus	purple flowering raspberry	N						✓									1
Rubus pensylvanicus	yankee blackberry	N						✓	✓						✓		3
Rubus pubescens	dwarf raspberry	N						✓									1
Rudbeckia hirta	black-eyed susan	N							✓			✓			✓		3
Rumex altissimus	pale dock	N							✓						✓		2
Sagittaria graminea	grass-leaved arrowhead	N							✓								1
Salix alba	white willow	I		✓	✓				✓	✓	✓					✓	6
Salix bebbiana	beaked willow	N		✓	✓				✓	✓	✓					✓	6
Salix discolor	pussy willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix gracilis textoris	petioled willow	N		✓	✓				✓	✓	✓					✓	6
Salix lucida	shining willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix pedicellaris hypoglauca	willow, bog willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix rigida	heart-leaved willow	N		✓	✓				✓	✓	✓					✓	6
Salix sericea	silky willow	N	✓	✓	✓				✓	✓	✓				✓	✓	8
Salix syrticola	dune willow	N		✓	✓				✓	✓	✓					✓	6
Sambucus canadensis	elderberry, American elder	N						✓	✓						✓	✓	4

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Sanicula marilandica	sanicle, black snakeroot	N							✓						✓		2
Saururus cernuus	lizard's tail	N							✓						✓		2
Senecio aureus	golden ragwort	N							✓						✓		2
Smilax lasioneura	common carrion flower	N							✓								1
Smilax tamnoides hispida	bristly green brier, bristly cat brier	N													✓		1
Solanum americanum	black nightshade	N							✓								1
Solidago graminifolia media	smooth grass-leaved goldenrod	N							✓							✓	2
Solidago graminifolia nuttallii	grass leaved goldenrod	N		✓	✓				✓						✓		4
Solidago gymnospermoides	shiny grass-leaved goldenrod	N							✓								1
Solidago nemoralis	old field goldenrod	N							✓								1
Solidago ohioensis	Ohio goldenrod	N							✓								1
Solidago patula	swamp goldenrod	N							✓								1
Solidago racemosa gillmani	dune goldenrod, Rand's goldenrod	N							✓								1
Solidago riddellii	riddell's goldenrod	N							✓								1
Solidago rigida	stiff goldenrod	N							✓						✓		2
Solidago rugosa	rough goldenrod	N							✓								1
Solidago sempervirens	seaside goldenrod	N							✓								1
Solidago uliginosa	bog goldenrod	N							✓								1
Solidago ulmifolia	elm leaved goldenrod	N							✓								1
Sporobolus heterolepis	prairie dropseed	N							✓						✓		2
Symplocarpus foetidus	skunk cabbage	N						✓	✓						✓		3
Taenidia integerrima	yellow pimpernel	N		✓					✓						✓		3
Thaspium barbinode	hairy meadow parsnip	N							✓						✓		2
Tilia americana	basswood, american linden	N	✓		✓			✓	✓	✓	✓				✓	✓	8
Ulmus americana	American elm	N							✓	✓	✓				✓	✓	5
Vaccinium corymbosum	highbush blueberry	N			✓	✓		✓	✓								4
Vaccinium vacillans	late low blueberry	N			✓	✓		✓	✓								4
Verbascum thapsus	common mullein	I		✓					✓						✓	✓	4
Veronicastrum virginicum	culver's root	N							✓						✓		2
Viburnum acerifolium	maple-leaved arrow-wood	N							✓						✓	✓	3
Viburnum lentago	nanneyberry	N						✓	✓						✓		3

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Viburnum rafinesquianum	downy arrowwood	N			✓				✓						✓		3
Viburnum recognitum	smooth arrow-wood	N		✓													1
Vitis aestivalis	summer grape	N						✓	✓							✓	3
Zea mays	corn	I	✓					✓		✓						✓	4
			8	27	34	4	3	63	149	45	26	9	0	1	109	62	

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Acer rubrum	red maple	N	✓		✓			✓	✓	✓	✓				✓	✓	8
Acer saccharum	sugar maple	N	✓		✓			✓	✓	✓	✓			✓	✓	✓	9
Achillea millefolium	yarrow, milfoil	N		✓	✓				✓	✓							4
Actaea pachypoda	white baneberry	N							✓								1
Actaea rubra	red baneberry	N							✓						✓		2
Agrimonia gryposepala	tall agrimony	N							✓						✓		2
Allium tricoccum	wild leek	N						✓	✓						✓		3
Alopecurus aequalis	short-awned foxtail	N							✓								1
Amelanchier arborea	juneberry, shadbush, serviceberry	N						✓		✓							2
Amelanchier laevis	allegheny shadblow	N						✓	✓	✓					✓		4
Andromeda glaucophylla	bog rosemary	N						✓	✓								2
Anemonella thalictroides	rue anemone	N														✓	1
Antennaria neglecta	cat's foot	N							✓						✓	✓	3
Antennaria plantaginifolia	pussy toes	N							✓						✓		2
Apios americana	ground nut	N						✓									1
Aralia nudicaulis	wild sarsaparilla	N							✓	✓					✓		3
Arisaema atrorubens	jack-in-the-pulpit	N						✓	✓						✓		3
Asarum canadense	wild ginger	N			✓			✓	✓						✓	✓	5
Asclepias incarnata	swamp milkweed	N						✓	✓	✓					✓		4
Asclepias syriaca	common milkweed	N						✓	✓	✓					✓	✓	5
Aster cordifolius	heart leaved aster	N		✓	✓			✓	✓	✓					✓		6
Aster lateriflorus	side flowering aster	N						✓									1
Aster macrophyllus	big-leaved aster	N		✓				✓	✓	✓					✓		5
Aster pilosus	hairy aster	N						✓									1
Aster puniceus firmus	swamp aster	N						✓	✓						✓		3
Aster sagittifolius	common blue wood aster	N						✓									1
Aster sagittifolius drummondii	drummond`s aster	N						✓									1
Athyrium filix-femina michauxii	lady fern	N							✓						✓		2
Betula populifolia	gray birch	N														✓	1
Boehmeria cylindrica	false nettle	N								✓							1
Botrychium virginianum	rattlesnake fern	N							✓						✓		2

Scientific Name	Common Name	Nativity	agricultural	smoking	ceremonial	mythic	sacred	food	medicine	utility	craft	dye	clothing	trade	charm	other, unspecified	# of uses
Calla palustris	water arum	N						✓	✓						✓	✓	4
Caltha palustris	marsh marigold	N						✓	✓						✓		3
Capsella bursa-pastoris	shepherd's purse	I							✓						✓		2
Carya cordiformis	bitter hickory	N	✓						✓	✓	✓					✓	5
Carya glabra	pignut hickory	N							✓								1
Carya ovata	shagbark hickory	N						✓	✓	✓	✓				✓	✓	6
Ceanothus americanus	New Jersey tea	N							✓						✓		2
Celtis occidentalis	hackberry	N														✓	1
Chenopodium album	lamb's quarters	N						✓								✓	2
Chenopodium boscianum	woodland goosefoot	N														✓	1
Cirsium discolor	pasture thistle	N							✓								1
Cirsium pitcheri	sand thistle	N							✓								1
Cornus obliqua	pale dogwood	N		✓													1
Cornus rugosa	speckled dogwood	N		✓	✓												2
Cornus stolonifera	red osier dogwood	N		✓	✓				✓	✓	✓	✓			✓	✓	8
Cornus stolonifera baileyi	Bailey dogwood	N		✓					✓						✓		3
Crataegus calpodendron	sugar hawthorn	N		✓	✓			✓	✓	✓					✓	✓	7
Crataegus crus-galli	cockspur hawthorn	N		✓	✓			✓	✓	✓	✓				✓	✓	8
Crataegus punctata	dotted hawthorn	N		✓	✓			✓	✓	✓					✓		6
Cypripedium calceolus parviflorum	small yellow lady's slipper	N							✓						✓		2
Cypripedium reginae	showy lady's slipper	N							✓						✓		2
Daucus carota	queen anne's lace	I						✓	✓						✓	✓	4
Diervilla lonicera	bush honeysuckle	N							✓						✓		2
Dioscorea villosa	wild yam	N						✓	✓							✓	3
Drosera rotundifolia	round-leaved sundew	N							✓						✓	✓	3
Echinocystis lobata	wild cucumber	N							✓						✓		2
Equisetum X ferrissii	horsetail	N							✓						✓		2
Erigeron philadelphicus	marsh fleabane	N		✓	✓				✓						✓		4
Erigeron strigosus	daisy fleabane	N							✓						✓		2
Erythronium americanum	yellow trout lily	N							✓						✓	✓	3
Eupatorium perfoliatum	common boneset	N							✓						✓		2

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Euphorbia corollata	flowering spurge	N							✓						✓		2
Euphorbia cyparissias	cypress spurge, grave-yard spurge	I							✓						✓		2
Fagus grandifolia	American beech	N						✓	✓						✓	✓	4
Fragaria virginiana	wild strawberry	N						✓	✓						✓	✓	4
Fraxinus nigra	black ash	N			✓				✓	✓	✓	✓			✓	✓	7
Fraxinus pennsylvanica	red ash	N						✓	✓	✓	✓				✓	✓	6
Fraxinus pennsylvanica subintegerrima	green ash	N	✓						✓	✓					✓	✓	5
Galium aparine	annual bedstraw	N							✓						✓	✓	3
Galium circaezans hypomalacum	wild licorice	N							✓								1
Galium obtusum	wild madder	N							✓								1
Galium pilosum	hairy bedstraw	N							✓								1
Galium trifidum	small bedstraw	N							✓						✓		2
Galium triflorum	sweet-scented bedstraw	N							✓								1
Gaylussacia baccata	huckleberry	N			✓			✓						✓		✓	4
Hamamelis virginiana	witch hazel	N			✓			✓	✓						✓		4
Hepatica americana	round-lobed hepatica	N							✓			✓			✓		3
Juglans nigra	black walnut	N						✓		✓	✓	✓				✓	5
Juncus greenei	greene's rush	N							✓	✓					✓		3
Lathyrus palustris myrtifolius	marsh vetchling	N						✓	✓								2
Lobelia cardinalis	cardinal flower	N							✓						✓	✓	3
Lonicera dioica	red honeysuckle	N						✓	✓						✓		3
Lonicera X muendeniensis	smallflower honeysuckle	I							✓								1
Lonicera X muscaviensis	Manchurian honeysuckle	I							✓								1
Lycopodium complanatum flabelliforme	trailing ground pine	N							✓						✓		2
Lycopodium tristachyum	ground cedar	N						✓									1
Lycopus asper	rough water horehound	N						✓									1
Medeola virginiana	Indian cucumber root	N							✓						✓		2
Mirabilis nyctaginea	wild four o'clock	N							✓						✓		2
Monarda punctata villicaulis	horse mint	N							✓						✓		2
Nuphar variegatum	yellow pond lily	N						✓	✓						✓		3
Nyssa sylvatica	black gum, sour gum	N								✓							1

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Orobanche uniflora	one-flowered broom rape	N			✓				✓								2
Ostrya virginiana	hop hornbeam, ironwood	N							✓	✓	✓				✓	✓	5
Panax quinquefolius	ginseng	N						✓	✓					✓	✓	✓	5
Panax trifolius	dwarf ginseng	N							✓						✓		2
Peltandra virginica	arrow arum	N							✓						✓		2
Phryma leptostachya	lopseed	N							✓						✓		2
Pinus strobus	white pine	N					✓	✓	✓	✓					✓	✓	6
Plantago lanceolata	English plantain	I							✓							✓	2
Polygala paucifolia	flowering wintergreen	N							✓						✓		2
Polygonum careyi	Carey`s heartease	N							✓						✓		2
Polygonum punctatum	smartweed	N							✓						✓		2
Polytaenia nuttallii	prairie parsley	N							✓								1
Populus deltoides	cottonwood	N	✓		✓		✓	✓	✓							✓	6
Populus tremuloides	quaking aspen	N	✓		✓		✓	✓	✓	✓	✓				✓	✓	9
Prunella vulgaris	lawn prunella	N							✓						✓		2
Prunus pumila	sand cherry	N						✓									1
Pteridium aquilinum latiusculum	bracken fern	N						✓	✓								2
Pyrola rotundifolia americana	round leaved shin-leaf	N						✓	✓						✓		3
Quercus bicolor	swamp white oak	N						✓		✓	✓					✓	4
Quercus ellipsoidalis	Hill's oak	N						✓								✓	2
Quercus imbricaria	shingle oak	N						✓								✓	2
Quercus macrocarpa	bur oak	N						✓	✓			✓			✓		4
Quercus palustris	pin oak	N						✓		✓	✓					✓	4
Ranunculus pensylvanicus	bristly buttercup	N		✓	✓				✓			✓			✓		5
Rhus glabra	smooth sumac	N		✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	11
Ribes americanum	black currant	N						✓	✓						✓		3
Rorippa islandica fernaldiana	marsh cress	N							✓								1
Rosa blanda	early wild rose	N							✓						✓		2
Rosa carolina	pasture rose	N							✓								1
Rubus hispidus obovalis	swamp dewberry	N						✓	✓							✓	3
Rubus idaeus strigosus	red raspberry	N						✓	✓						✓	✓	4

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Rudbeckia hirta	black-eyed susan	N							✓			✓			✓		3
Rudbeckia laciniata	wild golden glow	N						✓	✓						✓		3
Rumex acetosella	field sorrel	I														✓	1
Sagittaria brevirostra	short beaked arrowhead	N							✓								1
Sagittaria graminea	grass-leaved arrowhead	N							✓								1
Sagittaria latifolia	common arrowhead	N						✓	✓						✓	✓	4
Salix alba	white willow	I		✓	✓				✓	✓	✓					✓	6
Salix discolor	pussy willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix lucida	shining willow	N		✓	✓				✓	✓	✓				✓	✓	7
Salix nigra	black willow	N		✓	✓				✓	✓	✓				✓	✓	7
Sambucus canadensis	elderberry, American elder	N						✓	✓						✓	✓	4
Sambucus pubens	red-berried elder	N						✓	✓						✓		3
Sanguinaria canadensis	bloodroot	N			✓				✓	✓	✓	✓			✓	✓	7
Sanicula marilandica	sanicle, black snakeroot	N							✓						✓		2
Sarracenia purpurea	pitcher plant	N							✓	✓	✓				✓	✓	5
Sassafras albidum	sassafras	N			✓			✓	✓						✓	✓	5
Saururus cernuus	lizard's tail	N							✓						✓		2
Scirpus cyperinus	wool grass	N								✓	✓					✓	3
Scirpus validus creber	great bulrush	N						✓		✓	✓					✓	4
Senecio aureus	golden ragwort	N							✓						✓		2
Smilax tamnoides hispida	bristly green brier, bristly cat brier	N													✓		1
Solanum americanum	black nightshade	N							✓								1
Solanum dulcamara	bittersweet nightshade	I							✓						✓		2
Solidago caesia	blue-stemmed goldenrod	N							✓								1
Solidago graminifolia media	smooth grass-leaved goldenrod	N							✓							✓	2
Solidago graminifolia nuttallii	grass leaved goldenrod	N		✓	✓				✓						✓		4
Solidago gymnospermoides	shiny grass-leaved goldenrod	N							✓								1
Solidago juncea	early goldenrod	N							✓						✓		2
Solidago missouriensis fasciculata	Missouri goldenrod	N							✓								1
Solidago ohioensis	Ohio goldenrod	N							✓								1
Solidago patula	swamp goldenrod	N							✓								1

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Solidago riddellii	riddell's goldenrod	N							✓								1
Solidago rugosa	rough goldenrod	N							✓								1
Sparganium eurycarpum	common bur reed	N													✓		1
Sporobolus heterolepis	prairie dropseed	N							✓						✓		2
Thaspium barbinode	hairy meadow parsnip	N							✓						✓		2
Trillium grandiflorum	large-flowered trillium	N						✓	✓						✓		3
Typha angustifolia	narrow-leaved cattail	I						✓		✓	✓					✓	4
Typha latifolia	common cattail	N						✓	✓	✓					✓		4
Ulmus americana	American elm	N							✓	✓	✓				✓	✓	5
Uvularia grandiflora	bellwort	N							✓						✓		2
Vaccinium atrococcum	black highbush blueberry	N			✓	✓		✓	✓								4
Verbascum thapsus	common mullein	I		✓					✓						✓	✓	4
Verbena hastata	blue vervain	N							✓						✓		2
Viola conspersa	dog violet	N							✓						✓		2
Vitis labrusca	fox grape	N						✓	✓						✓		3
Xanthium strumarium	cocklebur	N							✓								1
			6	19	27	2	4	65	141	40	24	9	0	3	105	58	