## **Native Plants of Ohio - a Selection for Ohio Gardens**

## Compiled by Hope Taft and Debra Knapke - 1/2020; resources notes - see last page

| Common Name                          | Scientific Name                                     | Family                        | Bloom     | Habitat - growing conditions; misc. information                         | Flower                   | Heritage Garden           | Pollinators & likely pollinators  |
|--------------------------------------|---|-------------------------------|-----------|---|--------------------------|---------------------------|---|
| woody plants (including vin          | es)   |                               |           |   |                          |                           | • .   |
| American cranberry                   | Vaccinium macrocarpon                               | heath [Ericaceae]             | may-june  | bogs - acidic conditions required                                       | pink                     | bog                       | bees: bumble (buzz pollination; most effective) leaf-cutter, honey  |
| blackberry                           | Rubus allegheniensis                                | rose [Rosaceae]               | may-july  | woods: edges; fields  | white                    | Appalachian               | LOTS: long- & short-tongued bees:honey, bumble, little carpenter, mason, green metallics, & andrenid; wasps, sm. to med. butterflies, skippers                          |
| black chokeberry                     | Aronia melanocarpa                                  | rose [Rosaceae]               | may       | low woods; swamps, bogs & moist thickets; occasionally in dry upland    | white                    | bog                       | can self-pollinate; ?? small bees; "mason & andrenid spp. bees are common visitors of spring-blooming shrubs in the Rose family"  |
| bladdernut                           | Staphylea trifolia                                  | bladdernut [Staphyleaceae]    | april-may | woods: mesic to moist floodplains; riverbanks; & thickets               | white                    | rain garden border        | bees: honey, bumble, halictid, andrenid; flies: syrphid, dance, & giant bee fly   |
| blueberry, highbush                  | Vaccinium corymbosum                                | heath [Ericaceae]             | may-june  | forested bogs; lake & stream borders; & sandy swamps                    | white                    | 0                         | bees: bumble, andrenid, & honey   |
| buttonbush                           | Cephalanthus occidentalis                           | madder [ Rubiaceae]           | june-aug  | streamsides; pond lake edges; floodplains                               | white                    | dogwood glade,<br>bog     | bees: honey, bumble, cuckoo, long-horned, leaf-cutting, green metallic; various wasps; flies: thick-headed, syrphid; butterflies, & skippers; ruby-throated hummingbird |
| elderberry                           | Sambucus canadensis                                 | honeysuckle [Caprifoliaceae]  | june-july | woods: edges; pond/stream edges; swamps; soil: wet                      | white                    | meadow, medicinal         | ?? bees: honey, little carpenter, halictid; flies: syrphid, bee, muscid, etc.; beetles: long-horned, tumbling flower, etc.  |
| meadowsweet                          | Spiraea alba var. latifolia (syn.Spiraea latifolia) | rose [Rosaceae]               | june-sept | woods: moist; fields/old meadows; soil: rocky                           | pink                     | sedge meadow              | bees: bumble, & others; wasps; adult long-horned beetles; & Virginia ctenucha moth  |
| mountain laurel                      | Kalmia latifolia                                    | heath [Ericaceae]             | may-june  | woods: oak-hemlock; soil: rocky-sandy; obligate: acid soil              | pink-red                 | Appalachian               | bees: bumble & other insects; pollen is spring-loaded; flower will self-pollinate if not insect-pollinated  |
| pasture rose                         | Rosa carolina                                       | rose [Rosaceae]               | june-july | woods: open; pastures; soil: dry-rocky-sandy                            | pink-red                 | blue grass region         | 1st - long-tongued bees: bumble, anthophorine, & digger. 2nd - green metallic bees, syrphid flies, & various beetles  |
| pawpaw                               | Asimina triloba                                     | custard apple [Annonaceae]    | april     | woods: well-drained-deep fertile bottomland & upland habitat            | purple                   | Appalachian,<br>woodland  | flies: flesh, blow, & others; ?? carrion beetles, too. petals & scent resemble rotting carrion.   |
| prairie rose                         | Rosa setigera                                       | rose [Rosaceae]               | june-july | woods: open; thickets: wet; roadsides                                   | pink-red                 | herb garden walls         | 1st - bees: honey, bumble, anthophorine, miner, large leaf-cutting bees, & halictine; 2nd - syrphid flies   |
| red chokeberry                       | Aronia arbutifolia                                  | rose [Rosaceae]               | april     | thickets: wet & dry; hillsides: dry/wet; swampy areas                   | white                    |                           | can self-pollinate; ?? small bees; "mason & Andrena spp. bees are common visitors of spring-blooming shrubs in the Rose family"   |
| spicebush                            | Lindera benzoin                                     | laurel [Lauraceae]            | april     | woods: moist bottomlands; ravines, valleys; streamsides                 | yellow                   | blackhand outcrop         | small bees & flies; flowers are perfect or dioecious, need at least 2 plants  |
| spotted wintergreen                  | Chimaphila maculata                                 | pyrola [Pyrolaceae]           | june-aug  | woods: dry-conifers-oaks; soil: sandy, acid                             | white                    |                           | cross-pollinated, primarily - bumblebees, then honeybees  |
| strawberry bush; hearts a-<br>bustin | Euonymus americanus                                 | spindle tree [Celastraceae]   | may-june  | woods: slopes, moist understory, low sandy area; ravines; & streambanks | grn-yellow;<br>fruit red | Appalachian               | not well-documented: bees suggested "mason & &rena spp. bees are common visitors of spring-blooming shrubs in the Rose family"  |
| steeplebush                          | Spiraea tomentosa                                   | rose [Rosaceae]               | july-sept | thickets: wet, sandy; prairies: wet, sandy; sandy marshes & bogs        | pink                     | ponds, sedge<br>meadow    | bees, flies, and beetles& rare Karner Blue butterfly; produces a lot of pollen, small amount of nectar  |
| swamp rose                           | Rosa palustris                                      | rose [Rosaceae]               | june-aug  | lake shores; swamps/marshes; soil: wet                                  | pink-red                 | fen                       | 1st - bumblebees & other long-tongued bees. 2nd - halictid bees, syrphid flies, tumbling flower beetles, & other beetles. No nectar, only pollen                        |
| trailing arbutus                     | Epigaea repens                                      | heath [Ericaceae]             | march-may | woods: dry-rocky, (evergreen); soil: acid                               | white-pink               |                           | bumblebees  |
| trumpet creeper                      | Campsis radicans                                    | bignonia [Bignoniaceae]       | july-sept | woods: moist; thickets; roadsides - very vigorous grower!!              | orange-red               | pergola, bluegrass region | 1st - ruby-throated Hummingbird & sphinx moths. 2nd - Baltimore & Orchard Orioles; bees: bumble, honey. 3rd - halictid bees; ants; flies                                |
| trumpet honeysuckle                  | Lonicera sempervirens                               | honeysuckle [Caprifoliaceae]  | may-july  | woods: edges; thickets; roadsides                                       | pnk-org-red              | Allegheny                 | cross-pollinated by the ruby-throated hummingbird   |
| virgin's-bower                       | Clematis virginiana                                 | buttercup [Ranunculaceae]     | july-sept | thickets: moist; streambanks; floodplains: moist very vigorous grower!! | white                    | pergola, bluegrass region | staminate flowers attract halictid bees, wasps, & various flies. No information for pistillate flowers  |
| herbaceous plants                    |   |                               |           |   |                          |                           |   |
| American columbo                     | Frasera caroliniensis (syn. Swertia)                | gentian [Gentianaceae]        | june-july | woods: dry-open; meadows; roadside banks                                | green-white              | cedar glade               | long-tongued bees: honey, bumble, etc.  |
| American ginseng ♥                   | Panax quinquefolius                                 | ginseng [Araliaceae]          | july-aug  | woods: rich soils - difficult to establish                              | white                    | medicinal                 | ?? small bees & various flies visit the flowers for nectar or pollen  |
| arrow leaved aster                   | Symphyotrichum sagittifolium<br>(syn. Aster)        | aster [Asteraceae]            | aug-oct   | woods; streambanks  | blue-purple              | woodland                  | long-tongued & short-tongued bees; flies: syrphid & bee; wasps; occasional butterflies or skippers  |
| ashy sunflower                       | Helianthus mollis                                   | aster [Asteraceae]            | july-sept | woods: open; prairie fields; soils: dry; needs hihg quality habitat     | yellow                   | prairie                   | bees: bumble, miner, large leaf-cutting, cuckoo, green metallic, other halictids; bee flies & butterflies   |
| biennial gaura                       | Gaura biennis                                       | evening-primrose [Onagraceae] | june-oct  | fields; meadows; roadsides; gravelly embankments                        | white                    |                           | long-tongued bees (espec. bumble) & nectar-seeking moths  |
| black-eyed Susan                     | Rudbeckia hirta                                     | aster [Asteraceae]            | june-oct  | fields: dry; roadsides  | yellow                   | cedar glade               | wide range: bees & flies; some wasps, butterflies, & beetles  |
| blazingstar                          | Liatris spicata                                     | aster [Asteraceae]            | july-sept | prairies: wet, remnants   | pnk-pur                  | prairie, fen              | bees: bumble, long-horned, leaf-cutting; butterflies, & skippers  |
| bloodroot                            | Sanguinaria canadensis                              | poppy [Papaveraceae]          | march-may | woods: rich   | white                    | woodland                  | bees: honey, bumble, little carpenter, halictid, & Andrenid   |
| blue cohosh ♥                        | Caulophyllum thalictroides                          | barberry [Berberidaceae]      | april-may | woods: rich-moist, mixed hardwoods                                      | yellow                   | woodland, Lloyd           | bees: small halictid & bumble; flies: syrphid, tachinid etc.; parasitoid wasps  |
| blue vervain                         | Verbena hastata                                     | vervain [Verbenaceae]         | july-sept | stream & lake edges; fields: wet; ditches; disturbed wet areas          | blue-purple              | sedge meadow              | long-tongued & short-tongued bees; wasps; flies; small butterflies, skippers, & moths   |
| blue-eyed grass                      | Sisryinchium angustifolium                          | iris [Iridaceae]              | may-july  | woods: open; meadows: wet; roadsides                                    | blue-purple              | cedar glade               | bees: halictid & green metallic bees, less freq. bumble; bee & syrphid flies feed on pollen or suck nectar  |

| Common Name                       | Scientific Name                           | Family                        | Bloom      | Habitat - growing conditions; misc. information  | Flower      | Heritage Garden            | Pollinators & likely pollinators   |
|-----------------------------------|---|-------------------------------|------------|--|-------------|----------------------------|--|
| blue-eyed Mary                    | Collinsia verna                           | snapdragon [Scrophulariaceae] | april-june | woods: rich-low; streamsides: open; floodplains: wooded                                      | blue-white  | woodland                   | 1st - bees: honey, bumble,& little carpenter, long-horned, & mason; 2nd - dance flies, giant bee fly, butterflies, & skippers  |
| Š                                 | Solidago caesia                           | aster [Asteraceae]            | aug-oct    | wood: rich-open; thickets,   | yellow      | Appalachian                | short-tongued bees, wasps, & flies   |
| bluets; Quaker ladies             | Houstonia caerulea                        | madder [ Rubiaceae]           | april-june | woods: edges; fields: grassy; roadsides; soil-poor/lean                                      | blue-purple | alvar                      | bees: little carpenter, green metallic & other halictids; bee flies, & small butterflies   |
| boneset                           | Eupatorium perfoliatum                    | aster [Asteraceae]            | july-oct   | streambanks: wet; swamps; low areas  | white       | sedge meadow, fen          | bees, flies, wasps, butterflies, & beetles; many unusual flies & wasps visit due to very accessible nectar   |
| bottle gentian                    | Gentiana andrewsii                        | gentian [Gentianaceae]        | aug-oct    | swamps-bogs; meadows: wet  | blue        | sedge meadow               | bumble primary pollinators: can force past the closed corolla  |
| bur-cucumber                      | Sicyos angulatus                          | gourd [Cucurbitaceae]         | aug-sept   | thickets: wet; river banks; floodplains; disturbed areas-<br>moist                           | green-white | Appalachian                | long-tongued bees-honey & bumble- sphecid & vespid wasps, & various flies  |
| butterfly weed                    | Asclepias tuberosa                        | milkweed [Asclepiadaceae]     | june-sept  | fields: dry; roadsides; hillsides  | yellow-orar | oak openings dune          | honey, digger, leaf-cutting, & halictid bees; thread-waisted wasps & sphecid wasps, & butterflies: fritillaries, swallowtails & monarch; ruby-throated hummingbird                     |
|                                   | Symphyotrichum lateriflorum (syn. Aster)  | aster [Asteraceae]            | aug-oct    | woods: open; thickets; fields  | white       |                            | short-tongued bees, wasps, & flies; less common: long-tongued bees, small butterflies, skippers, beetles, & plant bugs   |
| Canada anemone                    | Anemone canadensis                        | buttercup [Ranunculaceae]     | may-july   | woods: damp-open; shore: sandy; meadows: wet   | white       | prairie, meadow            | small bees: andrenid, halictid collect pollen & syrphid flies eat it   |
| American germander                | Teucrium canadense                        | mint [Lamiaceae]              | june-aug   | stream margins; marshes; ditches: wet; low wet areas   | pink-white  |                            | long-tongued bees-most important; other bees: bumble, honey, anthophorine, cuckoo, miner, & leaf-cutting   |
| Canada goldenrod                  | Solidago canadensis                       | aster [ Asteraceae]           | aug-sept   | thickets; fields; roadsides  | yellow      |                            | long-tongued & short-tongued bees, wasps, flies, beetles; butterflies & moths  |
| Canada lily                       | Lilium canadense                          | lily [Liliaceae]              | june-aug   | streamsides; swamps; meadows: moist  | yellow-org  |                            | large butterflies: great spangled fritillary & swallowtail butterflies   |
| Canadian burnet                   | Sanguisorba canadensis                    | rose [Rosaceae]               | july-oct   | swamps-bogs; meadows: wet  | white       | fen                        | ?? little known: bees (e.g. honeybee) & probably other insects   |
| cardinal flower                   | Lobelia cardinalis                        | bellflower [Campanulaceae]    | july-sept  | streambanks; swamps-marshes; ditches: wet; soil: wet   | red         |                            | ruby-throated hummingbird; swallowtail butterflies: black, spicebush, & pipevine; sometimes larger bumble  |
| celandine poppy; wood poppy       | Stylophorum diphyllum                     | poppy [Papaveraceae]          | march-may  | woods: rich-moist; floodplains: wooded; cliffs: moist  | yellow      | woodland                   | ?? little known; flowers provide only pollen: poss. metallic wood-boring beetles various bees & flies  |
| clammy ground cherry              | Physalis heterophylla                     | nightshade [Solanaceae]       | june-sept  | woods: edges; fields-pastures; roadsides; disturbed areas                                    | yellow-pur  |                            | short-tongued bees: plasterer; some halictid & panurginus  |
| common blue violet                | Viola sororia                             | violet [Violaceae]            | march-june | woods: moist-open; floodplains: wooded; fields-lawns; slopes: wooded; disturbed grassy areas | blue-purple | woodland,<br>dogwood glade | not often visited by insects (cleistogamous flowers); sometimes attract bees, skippers, & other insects  |
| common cattail                    | Typha latifolia                           | cattail [Typhaceae]           | may-july   | lake shore/pond edges; marshes; ditches: wet   | grn-brown   | ponds                      | wind-pollinated  |
| common arrowhead                  | Sagittaria latifolia                      | water plantain [Alismataceae] | july-sept  | slow moving streams; pond/lake; swamps: shallow water  | white       | ponds                      | bees: honey, bumble, halictid bees; wasps; flies: syrphid, tachinid; butterflies, skippers, & beetles  |
| common cinquefoil                 | Potentilla simplex                        | rose [Rosaceae]               | april-june | woods: dry; fields   | yellow      | headlands sand dune        | small bees: mason, small carpenter, nomadine cuckoo, halictid; &flies: syrphid, tachinid, blow, etc.; few wasps, skippers, & butterflies   |
| common evening primrose           | Oenothera biennis                         | evening primrose [Onagraceae] | july-oct   | fields: dry-open; roadsides; disturbed areas   | yellow      | meadow                     | moths, espec. sphinx. 2nd - ruby-throated hummingbird, bees: honey, bumble, primrose miner   |
| common milkweed                   | Asclepias syriaca                         | milkweed [Asclepiadaceae]     | june-aug   | riverbanks; fields: open; roadsides; disturbed areas<br>Very vigorous grower                 | pink-white  | prairie,<br>Appalachian    | larger butterflies (monarch), predatory wasps, & long-tongued bees most likely pollinators; others: short-tongued bees, milkweed plant bugs, & moths (sphinx moths)                    |
| common sneezeweed; Helen's flower | Hellenium autumnale                       | aster [Asteraceae]            | aug-oct    | streambanks; swamps; meadows: wet  | yellow-org  |                            | long-tongued bees: honey, bumble, long-horned bees, cuckoo bees, & leaf-<br>cutting bees; other insects feed on nectar   |
| i                                 | Silphium laciniatum                       | aster [Asteraceae]            | july-sept  | prairie  | yellow      | priaire                    | long-tongued bees are primary pollinators: bumble, miner bees, larger ceaf-<br>cutting bees. 2nd - short-tongued halictine bees & syrphid flies, but are less effective<br>pollinators |
| crested dwarf iris                | Iris cristata                             | iris [Iridaceae]              | april-may  | woods: rich; ravines; hillsides: wooded; soil: acid  | blue-purple | medicinal garden           | ?? possibly long-tongued bees  |
|                                   | Symphyotrichum prenanthoides (syn. Aster) | aster [Asteraceae]            | aug-oct    | woods; thickets: wet; streambanks; fields  | blue-purple |                            | ?? native bees, honey bees; less specific information  |
| Culver's root                     | Veronicastrum virginicum                  | snapdragon [Scrophulariaceae] | july-oct   | woods; thickets; meadows: moist; roadsides   | white       | prairie, alvar             | long-tongued & short-tongued bees: honey, bumble, mason, green metallic, masked; other insects visit for nectar, but do not pollinate  |
| cup plant                         | Silphium perfoliatum                      | aster [Asteraceae]            | july-sept  | woods: moist; streambanks; floodplains   | yellow      | meadow; prairie            | long-tongued bees, butterflies, & skippers; some short-tongued bees, wasps, bee flies are occassional pollinators  |
| cut-leaved toothwort              | Cardamine concatenata                     | mustard [Brassicaceae]        | april-may  | woods: rich  | white       | woodland                   | 1st - long-tongued & short-tongued bees: honey, bumble, mason, cuckoo, halictid, & andrenid. 2nd - early spring butterflies & giant bee fly  |
| downy false foxglove              | Aureolaria virginica                      | snapdragon [Scrophulariaceae] | june-sept  | woods: dry-open; soil: sandy   | yellow      |                            | 1st - bumble. 2nd - ruby-throated hummingbird; bees: long-horned, leaf-cutting, halictid; & syrphid flies  |
| downy lobelia                     | Lobelia puberula                          | bellflower [Campanulaceae]    | july-oct   | woods: edges-clearings; roadsides  | blue-purple |                            | ?? small bees  |

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|-----------------------------|--|-------------------------------|------------|---|-------------|----------------------------------|--|
| downy wood mint             | Blephilia ciliata                        | mint [Lamiaceae]              | june-july  | woods: openings-edges; thickets; fields; roadsides; soil: alkaline  | blue-purple | cedar glade                      | long-tongued & short-tongued bees, bee flies, syrphid flies, butterflies, & skippers   |
| downy yellow violet         | Viola pubescens                          | violet [Violaceae]            | april-may  | woods: moist to dry   | yellow      | woodland                         | bees: mason, little carpenter, anthophorid, halictid, & andrenid; bee flies; small butterflies, & skippers   |
| dwarf larkspur              | Delphinium tricorne                      | buttercup [Ranunculaceae]     | april-may  | woods: rich; soil: alkaline   | blue-purple |                                  | 1st - long-tongued bees: bumble, anthophorid, & miner bees; 2nd - ruby-throated hummingbird, giant bee fly, swallowtail butterflies, skippers, & sphinx moths                                    |
| drooping trillium ♥         | Trillium flexipes                        | lily [Liliaceae]              | april-may  | woods: rich; soil: alkaline   | white       | woodland                         | ?? probable: gnats & small flies   |
| Dutchman's breeches         | Dicentra cucullaria                      | poppy [Papaveraceae]          | april-may  | woods: rich; floodplains; soil: alkaline  | white       | woodland                         | 1st - long-tongued bees: honey, bumble, mason & anthophorid. 2nd - short-tongued & andrenid bees, giant bee fly  |
| dwarf iris                  | Iris verna                               | iris [Iridaceae]              | april-may  | woods: oak-pine; soil: dry-sandy; soil: acid  | blue-purple | medicinal garden                 | ?? bees; scant information   |
| early meadow-rue            | Thalictrum dioicum                       | buttercup [Ranunculaceae]     | april-may  | woods: moist-rich   | green-brwn  |                                  | wind pollinated  |
| eastern prickly pear cactus | Opuntia humifusa                         | cactus [Cactaceae]            | june-july  | prairie dunes; soil: sandy-rocky  | yelllow-org | oak openings dune                | long-tongued & short-tongued: bumble, large carpenter, digger, leaf-cutting, halictid, & plasterer; larger bees primary cross-pollinators  |
| enchanter's nightshade      | Circaea lutetiana                        | evening primrose [Onagraceae] | june-aug   | woods: rich; floodplains: wooded  | white       | Appalachian                      | small bees: halictid & little carpenter; syrphid & bee flies   |
| false rue anemone           | Enemion biternatum (syn. Isopyrum)       | buttercup [Ranunculaceae]     | april-may  | woods: rich; thickets; soil: alkaline   | white       |                                  | ?? flowers attract medium- to small-sized bees & flies primarily; the bees collect pollen, the flies feed on pollen.   |
| fern, Christmas             | Polystichum acrostichoides               | shield fern [Dryopteridaceae] | NA         | woods: upland-mesic moisture-rocky; ravines: wooded-shaded  | NA          | woodland,<br>dogwood glade       | NA for pollinators   |
| fern, cinnamon              | Osmundastrum cinnamomea                  | royal fern [Osmundaceae]      | NA         | woods: wet to moist-sheltered locations; prairies: wet-<br>sand; ravines: sandy; bogs & seeps; high humidity; soil:<br>sandy-acid | NA          |                                  | NA - for pollinators - several species of moth larvae feed on fronds   |
| fern, lady                  | Athyrium felix-femina                    | shield fern [Dryopteridaceae] | NA         | woods: moist to mesic-sheltered locations; ravines: rocky; swamp: edges; high humidity; soil: slight acid                         | NA          | Appalachian                      | NA - for pollinators - one known species of moth larvae feeds on fronds  |
| fern, marginal              | Dryopteris marginalis                    | shield fern [Dryopteridaceae] | NA         | woods: mesic moisture-rocky (sandstone); ravines: sandstone; soil: slight acid  | NA          |                                  | NA - for pollinators - one known species of moth larvae feeds on fronds  |
| fern, ostrich               | Matteucia struthiopteris                 | sensitive fern [Onocleaceae]  | NA         | woods: rich-wet to moist; swamps; thickets: wet; soil: peaty-slight acid  | NA          | perennial border,<br>Appalachian | NA - for pollinators - one known species of moth larvae feeds on fronds  |
| fern, sensitive             | Onocleya sensibilis                      | sensitive fern [Onocleaceae]  | NA         | woods: wet to mesic; sandy savannas; thickets: wet; steamsides; bogs/swamps & edges of marshes                                    | NA          | Appalachian                      | NA - for pollinators - one known species of moth larvae feeds on fronds  |
| field thistle               | Cirsium discolor                         | aster [Asteraceae]            | july-oct   | woods: edges; fields; disturbed areas Very, very weedy, but excellent wildlife plant  | blue-purple | sedge meadow                     | 1st: bees: bumble, digger, leaf-cutting. 2nd - butterflies: monarchs, fritillaries, painted ladies, swallowtails, & sulfurs  |
| fire pink                   | Silene virginica                         | pink [Caryophyllaceae]        | may-june   | woods: slopes-rich; banks: rocky; hillsides   | red         |                                  | ?? probably: ruby-throated hummingbird & various large butterflies   |
| fireweed                    | Chamerion augustifolium (syn. Epilobium) | evening-primrose [Onagraceae] | june-aug   | fields: open-clearings; roadsides; burned over areas  | red         |                                  | 1st - long-tongued bees: bumble, leafcutting. 2nd - short-tongued bees & syrphid flies   |
| flat-topped goldenrod       | Euthamia graminifolia                    | aster [Asteraceae]            | aug-oct    | thickets; streambanks; fields: moist; roadsides   | yellow      | alvar                            | LOTS: long-tongued bees, short-tongued bees, wasps, flies, butterflies, moths, & beetles   |
| flowering spurge            | Euphorbia corollata                      | spurge [Euphorbiaceae]        | june-sept  | fields: prairie-openings; roadsides   | white       | prairie                          | bees: halictid, masked; wasps: crabronid, paper, five-banded tiphiid, sphecid, cuckoo; flies: syrphid, bee, tachinid, flesh, muscid; small butterflies: Karner blue!                             |
| foam flower                 | Tiarella cordifolia                      | saxifrage [Saxifragaceae]     | april-may  | woods: rich   | white       | woodland                         | ?? bees, butterflies, & syrphid flies; possible moth association   |
| foxglove beardtongue        | Penstemon digitalis                      | snapdragon [Scrophulariaceae] | may-july   | woods: openings; old fields; roadsides  | white-pink  | cedar glade                      | 1st - long-tongued bees: honey, bumble, anthophorine, miner, mason, & large leaf-cutting. 2nd - halictid bees, butterflies, sphinx moths, & hummingbirds   |
| fragrant waterlily          | Nymphaea odorata                         | water lily [Nymphaeaceae]     | june-sept  | ponds; water: shallow-quiet   | white       | ponds                            | 1st - small bees - halictid, some are specialist of waterlilies. 2nd - various flies & beetles   |
| fringed gentian             | Gentianopsis crinita                     | gentian [Gentianaceae]        | sept-oct   | woods: openings-wet; marshy areas; meadows: moist; slopes: wet-eroding; soil: alkaline  | blue        | alvar, fen                       | ?? 1st - bumblebees; scant information   |
| fringed milkwort            | Polygala paucifolia                      | milkwort [Polygalaceae]       | may-june   | woods: rich-moist-openings; slopes: rocky   | pink-purple |                                  | two flowers: one is self-pollinating, other is pollinated by bumblebees; pollen is placed on bumblebee by flower movement  |
| garden phlox                | Phlox paniculata                         | phlox [Polemoniaceae]         | july-sept  | woods: moist; thickets; stream banks  | pink-purple | meadow                           | butterflies, skippers, & moths: hummingbird & sphinx   |
| goat's beard                | Arunus dioicus                           | rose [Rosaceae]               | may-july   | woods: rich-moist; ravines; roadside: moist; banks-   | white       | dogwood glade                    | butterflies; host plant for the dusky azure butterfly  |
| golden Alexander            | Zizia aurea                              | parsley [Apiaceae]            | may-june   | woods: moist; thickets; floodplains; swamps   | yellow      | prairie, woodland                | self-pollinates; long-tongued bees: bumbles, cuckoo & short-tongued bees: green metallic, masked, andrenid; wasps: eumenine, spider, ichneumonid, & crabronine; flies; sm. butterflies & beetles |
| golden ragwort              | Packera aureus (syn. Senecio)            | aster [Asteraceae]            | april-july | woods: moist; swamps; meadows: wet  | yellow      | Appalachian                      | small bees: little carpenter, cuckoo, & var. halictid; & flies: syrphid & tachinid   |
| goldenseal ♥                | Hydrastis canadensis                     | buttercup [Ranunculaceae]     | april-may  | woods: rich-deep; streambanks: shaded; slopes: wooded   | white       | woodland                         | 1st - halictid & masked bees; 2nd - syrphid flies & larger bees  |

| Common Name                         | Scientific Name                         | Family                         | Bloom       | Habitat - growing conditions; misc. information  | Flower            | Heritage Garden                | Pollinators & likely pollinators  |
|-------------------------------------|---|--------------------------------|-------------|--|-------------------|--------------------------------|---|
| gray goldenrod; field<br>goldenrod  | Solidago nemoralis                      | aster [Asteraceae]             | aug-oct     | woods: dry-open  | yellow            | alvar                          | bees: long-tongued - honey, little carpenter, & short-tongued - halictid, plasterer, & andrenid (oligoleges); sphecid & vespid wasps, flies: syrphid, tachinid, flesh, blow, & muscid; butterflies, moths, & beetles  |
| gray-headed coneflower              | Ratibida pinnata                        | aster [Asteraceae]             | july-oct    | woods: edges; prairie/prairie remnants; roadsides; soil: alkaline                        | yellow            | prairie                        | 1st - bees: Epeoline cuckoo, large leaf-cutting, green metallic, & other Halictine. 2nd - wasps, flies, small butterflies, & beetles  |
| great blue lobelia                  | Lobelia siphilitica                     | bellflower [Campanulaceae]     | july-oct    | woods: wet; streambanks; roadsides; ditches: wet; low-damp areas                         | blue              | dogwood glade,<br>sedge meadow | 1st - bumble & other long-tongued bees. 2nd - ruby-throated hummingbird & large butterflies   |
| green dragon                        | Arisaema dracontium                     | arum [Araceae]                 | may-june    | woods: rich-moist-lowland; streambanks   | green-brwn        | woodland                       | simple flies (Nematocera), particularly fungus gnats  |
| green-headed coneflower             | Rudbeckia laciniata                     | aster [Asteraceae]             | july-sept   | streambanks; floodplains; soil: rich-moist   | yellow            | prairie                        | long-tongued & short-tongued bees, predatory wasps, butterflies, skippers, moths, & various flies   |
| hairy beardtongue                   | Penstemon hirsutus                      |                                | may-july    | woods: dry; fields; roadside banks   | pink-purple       |                                | 1st - bees: long-tongued - honey, bumble, anthophoridae, mason, & short-tongued - halictid. 2nd - wasps, flies, butterflies   |
| hairy puccoon                       | Lithospermum caroliniense               | borage [boraginaceae]          | may-june    | woods: dry; soil: sandy-open areas   | yellow            | cedar glade                    | butterflies & skippers (e.g. Karner blue & Hobomok skipper)   |
| harbinger-of-spring                 | Erigenia bulbosa                        | parsley [Apiaceae]             | march-april | woods: open; floodplains: woode; slopes  | white             | woodland                       | primarily small to medsize bees, misc. flies  |
| heart-leaved aster; blue wood aster | Symphyotrichum cordifolius (syn. Aster) | aster [Asteraceae]             | aug-oct     | woods: dry; thickets; clearings  | blue-purple       | woodland                       | long-tongued & short-tongued bees, wasps, flies, butterflies, skippers, & beetles   |
| heath aster; frost aster            | Symphyotrichum pilosum (syn. Aster)     | aster [Asteraceae]             | aug-oct     | fields: dry-old-open; roadsides; disturbed areas one of last plants blooming in the fall | white             | woodland                       | 1st - bees: honey, bumble, little carpenter, cuckoo, long-horned, leaf-cutting, halictid, plasterer, andrenid (some oligoleges) 2nd - wasps: sphecid, vespid, ichneumonid, braconid; flies: syrphid, bee, thick-headed, tachinid, flesh, blow, muscid, sm/med butterflies, skippers, moths, & beetles |
| hedge bindweed                      | Calystegia sepium                       | morning glory [Convolvulaceae] | june-oct    | riverbanks; fields; roadsides; disturbed areas; beaches                                  | white             | prairie                        | 1st - long-tongued bees: bumble, little carpenter bees, & oligolectic mallow, squash & gourd, & morning glory bees. 2nd - sphinx moths  |
| hispid buttercup                    | Ranunculus hispidus                     | buttercup [Ranunculaceae]      | march-may   | woods: moist; thickets; streambanks; floodplains   | yellow            | Allegheny                      | ?? bees & flies   |
| hoary tick trefoil                  | Desmodium canescens                     | pea [Fabaceae]                 | july-sept   | woods: open; thickets; fields: dry; hillsides: dry                                       | pink-purple       | oak openings                   | ?? long-tongued bees; pollen only   |
| horse nettle                        | Solanum carolinense                     | nightshade [Solanaceae]        | may-sept    | streambanks; fields: dry; roadsides; disturbed areas                                     | white             | Appalachian                    | 1st- bumblebees collect pollen, pollinate via buzz pollination  |
| Indian cucumber root                | Medeola virginiana                      | lily [Liliaceae]               | may-june    | woods: rich-moist; soil: swampy-deep-loose-slight acid soil                              | green-brwn        |                                | ?? Guessing here: flies & beetles like close relative trillium  |
| Indian hemp                         | Apocynum cannabinum                     | dogbane [Apocynaceae]          | june-sept   | woods: edges-moist; thickets: moist; pond/stream edges; fields: moist                    | white             |                                | 1st - bees : cuckoo, halictid, plasterer, masked. 2nd - sphecid wasps; flies: syrphids, bees, tachinids, calliphorids; butterflies, skippers, & beetles   |
| Indian pipe                         | Monotropa uniflora                      | Indian pipe [Monotropaceae]    | june-aug    | woods: rich parasitic - must have host plant   | white             |                                | bumblebees  |
| Indian tobacco                      | Lobelia inflata                         | bellflower [Campanulaceae]     | june-sept   | woods: open-edges; thickets; fields; disturbed areas                                     | blue-purple       | Lloyd herb garden              | small bees, mainly halictid bees  |
| Jack-in-the-pulpit                  | Arisaema triphyllum                     | arum [Araceae]                 | april-june  | woods: rich-moist  | green-brwn        | Appalachian, woodland          | fungus gnats & the larvae of parasitic thrips   |
| Jacob's ladder                      | Polemonium reptans                      | phlox [Polemoniaceae]          | april-june  | woods: moist; floodplains: wooded  | blue              | woodland                       | 1st - bees: honey, bumble, little carpenter, mason, cuckoo bees, halictid, & andrenid bees ( <i>Andrena polemonii</i> is oligolege). 2nd - giant bee fly, butterflies, skippers, & moths  |
| Jerusalem articoke                  | Helianthus tuberosus                    | aster [Asteraceae]             | aug-oct     | fencerows; streambanks; fields: moist; roadsides; soil: moist very vigorous grower       | yellow            |                                | 1st - bees: bumble, cuckoo, digger, leaf-cutting, halictid -oligoleges: digger bee & some andrenid sps, a dagger sps, & a halictid. 2nd - flies: syrphid & bee; sm-med butterflies, wasps, & beetles  |
| Joe Pye weed                        | Eutrochium fistulosum (syn. Eupatorium) | aster [Asteraceae]             | july-sept   | thickets: wet; streamsides; floodplains; meadows: moist                                  | pink-purple       | meadow,<br>Allegheny           | 1st - long-tongued bees: honey, bumbles, etc.; bee flies; butterflies, skippers, & moths  |
| Kalm's lobelia                      | Lobelia kalmii                          | bellflower [Campanulaceae]     | july-sept   | bogs/fens; cliffs: wet; soil: alkaline   | blue-purple       |                                | ?? various bees & small butterflies   |
| kidney-leaf buttercup               | Ranunculus abortivus                    | buttercup [Ranunculaceae]      | april-aug   | woods; soils: moist  | yellow            |                                | ladybird beetles, small bees, syrphid flies best? bees?   |
| lakeside daisy ♥                    | Tetraneuris herbacea                    | aster [Asteraceae]             | may-june    | soils: rocky-flat-alkaline specific cultural needs!!                                     | yellow            | alvar                          | bees: bumble, small carpenter, halictid; flies, beetles, butterflies, & skippers. Cross-pollination required  |
| large twayblade                     | Liparis liliifolia                      | orchid [Orchidaceae]           | may-july    | woods: rich-pine; thickets; streams: mossy banks   | green-red         |                                | ?? little known; poss. flesh flies because of flower color  |
| large-flowered bellwort             | Uvularia grandiflora                    | lily [Liliaceae]               | april-june  | woods: rich; soil: alkaline  | yellow            | woodland                       | bees: bumble, mason, halictid, & andrenid   |
| large-flowered trillium ♥           |   | lily [Liliaceae]               | april-may   | woods: rich  | white             | woodland                       | ?? insects rarely visit flowers: little carpenter bee observed visiting   |
| large-leaved waterleaf              | Hydrophyllum macrophyllum               | waterleaf [Hydrophyllaceae]    | may-june    | woods: rich; thickets; floodplains: wooded   | white             | woodland                       | 1st - bees: honey, bumble, mason, digger, andrenid ( <i>Andrena geranii</i> is oligilege), & halictid. 2nd - flies: syrphid & dance; butterflies, & skippers  |
| lizard's tail                       | Saururus cernuus                        | lizard's tail [Saururaceae]    | june-aug    | stream: edges; ponds: shallow; swamps/marshes  | white             | ponds                          | 1st - wind pollination ?? 2nd - beetles, flies  |
| lopseed                             | Phryma leptostachya                     | vervain [Verbenaceae]          | july-aug    | woods: rich moist; thickets  | pink-purple       |                                | occassional - bees: little carpenter & green metallic   |
| marsh marigold                      | Caltha palustris                        | buttercup [Ranunculaceae]      | april-june  | streamsides; swamps/marshes; soil: wet   | yellow            |                                | bees: honey, halictid; flies: giant bee, syrphid ?? & others  |
| mayapple                            | Podophyllum peltatum                    | barberry [Berberidaceae]       | april-june  | woods: rich, openings  | white             | woodland                       | long-tongued bees: bumblebees & others, not specified   |
| Miami mist                          | *                                       |                                | april-june  | woods: moist-rich; floodplains; meadows: wet   | blue-purple       | woodland                       | native bees: andrenid, mason (Hoplitis sp. Is oligolege); honeybees   |
| Michigan lily                       | Lilium michiganense                     | lily [Liliaceae]               | june-july   | woods: edges-moist; streambanks; meadows: wet; roadside: ditches                         | yellow-<br>orange |                                | Cross-pollination required. ?? hummingbirds; moth: sphinx, hummingbird, & butterflies: monarch, great spangled fritillary, & spicebush swallowtail  |

| Common Name                            | Scientific Name                              | Family                          | Bloom     | Habitat - growing conditions; misc. information  | Flower      | Heritage Garden                | Pollinators & likely pollinators   |
|--|--|---------------------------------|-----------|--|-------------|--------------------------------|--|
| mist flower; blue mistflower           | Conoclinium coelestinum (syn. Eupatorium)    | aster [Asteraceae]              | july-oct  | woods: edges; thickets; streambanks; field: edges  | blue-purple |                                | 1st - long-tongued bees, butterflies, & skippers. 2nd - short-tongued bees, flies, moths, & beetles  |
| miterwort                              | Mitella diphylla                             | saxifrage [Saxifragaceae]       | april-may | woods: rich  | white       | woodland                       | small short-tongued bees: halictid & little carpenter; syrphid flies   |
| narrow-leaved mountain mint            | Pycnanthemum tenuifolium                     | mint [Lamiaceae]                | july-sept | woods: openings; fields: dry; roadside banks   | white       |                                | long-tongued bees, short-tongued bees; wasps; flies; butterflies & skippers; beetles; & plant bugs   |
| New England aster                      | Symphyotrichum novae-angliae<br>(syn. Aster) | aster [Asteraceae]              | aug-oct   | thickets; swamps; fields   | blue-purple |                                | long-tongued bees: bumble,honey, miner, large leaf-cutting; bee flies,<br>butterflies, & skippers. cross-pollination is required. Short-tongued bees &<br>syrphid flies visit, but are non-pollinating                       |
| nodding lady's tresses ♥               | Spiranthes cernua                            | orchid [Orchidaceae]            | aug-sept  | prairies: moist-sandy; sandy savannas; shrubby bogs; gravelly seeps; limestone glades; ditches; abandoned fields | white       |                                | long-tongued & short-tongued bees occasionally visit for nectar  |
| nodding onion                          | Allium cernuum                               | lily [Liliaceae]                | july-aug  | banks: gravel; prairie remnants; roadsides; soil: alkaline   | pink-white  | prairie, cedar<br>glade, alvar | bees: honey, bumble, anthophorine, & halictid  |
| northern blue flag                     | Iris versicolor                              | iris [Iridaceae]                | may-july  | swamps/marshes; meadows: wet   | blue-purple |                                | ?? long-tongued bees & short-tongued bees; limited information   |
| northern monkshood                     | Aconitum noveboracense                       | buttercup [Ranunculaceae]       | july-aug  | streambanks; ravines: cool-shade; cliffs: moist; soil: alkaline caution: poisonous                               | blue        |                                | bumblebees; has protandrous flowers - stamens mature before the pistils are receptive to pollen: forces cross-pollination  |
| obedient plant                         | Physostegia virginiana                       | mint [Lamiaceae]                | july-oct  | thickets: wet; streambanks; swamps; soil: wet vigorous spreader  | pink-purple | meadow                         | 1st - bumblebees. 2nd - long-tongued bees &ruby-throated hummingbird   |
| Ohio spiderwort                        | Tradescantia ohiensis                        | spiderwort [Commelinaceae]      | may-june  | thickets: wet; meadows: wet; roadsides   | blue-purple | prairie                        | long-tongued bees: espec. bumblebees, then halictine bees  |
| oswego tea                             | Monarda didyma                               | mint [Lamiaceae]                | june-aug  | woods: open-wet; thickets; streambank edges; ditches: wet  | pink-red    | woodlands,<br>headlands dune   | hummingbirds, swallowtail butterflies, & probably bumblebees   |
| ox-eye daisy; false sunflower          | Heliopsis helianthoides                      | aster [Asteraceae]              | july-sept | woods: open; streambanks; floodplains; prairie; soil: moist  | yellow      | prairie, meadow                | bees: honey, bumble, little carpenter, diggger bees, cuckoo, leaf-cutting, halictid, andrenid; thread-waisted wasp, etc.; flies: syrphid, bee; goldenrod soldier beetle, etc.; painted lady butterflies & others, & skippers |
| pale touch-me-not; yellow<br>jewelweed | Impatiens pallida                            | touch-me-not [Balaminaceae]     | june-sept | woods: edges-wet; streambanks; ditches: shady  | yellow      | woodland                       | 1st - bumblebees & ruby-throated hummingbird   |
| partridge pea                          | Chamaecrista fasciculata (syn. Cassia)       | pea [Fabaceae]                  | july-sept | fields: old; roadsides; soil: sandy  | yellow      | prairie, cedar glade           | long-tongued bees: honey, bumble, long-horned, & leaf-cutting. 2 sps, Anthophora walshii & Svastra atripes are oligoleges. Can self-pollinate  |
| partridge berry                        | Mitchella repens                             | madder [ Rubiaceae]             | june-july | woods; soil: acid (subshrub)   | white       |                                | cross-pollinated by bumblebees   |
| Philadelphia fleabane                  | Erigeron philadelphicus                      | aster [Asteraceae]              | april-aug | woods: open; fields; roadsides quite weedy   | white       |                                | bees: little carpenter, cuckoo, mason, leaf-cutting cuckoo, halictid, halictid cuckoo), masked, andrenid; eumenine wasps; flies: syrphid flies, thick-headed, tachinid, flesh; butterflies, skippers; beetles; & plant bugs  |
| pickerel weed                          | Pontederia cordata                           | pickerelweed [Pontederiaceae]   | june-oct  | pond/shallow water; swamps/marshes; soil: wet  | blue-purple | ponds                          | bumblebees & other bees. $Melissodes\ apicata\ \&\ Doufourea\ novaeangliae\ are$ rare oligolectic bee visitors. 2nd - sulfur butterflies & others  |
| pink lady's slipper                    | Cypripedium acaule                           | orchid [Orchidaceae]            | may-june  | woods: pine-oak; bogs; soil: sandy-acid  | pink        |                                | queen bumblebees, deceptive technique: sweet small, but no nectar; pollen not "gatherable"   |
| pitcher plant ♥                        | Sarracenia purpurea                          | pitcher plant [ Sarraceniaceae] | may-july  | bogs/swamps; soil: low nutrient-sphagnum, acid!  | green-red   | bog                            | 1st - bumblebees. Also: pitcher plant fly: lives in flowers, gets covered with pollen, then it flies to another flower   |
| pokeweed                               | Phytolacca americana                         | pokeweed [Phytolaccaceae]       | july-sept | thickets: damp; fencerows; clearings; roadsides  | white       | all over                       | 1st - syrphid flies & halictid bees. 2nd - wasps & other flies   |
| prairie dock                           | Silphium terebinthinaceum                    | aster [Asteraceae]              | aug-sept  | prairie/prairie remnants   | yellow      | prairie, cedar glade           | 1st - long-tongued bees: honey, bumble, & miner. 2nd - halictid bees, bee flies, & ruby-throated hummingbird $$  |
| purple bergamot                        | Monarda media                                | mint [Lamiaceae]                | july-aug  | woods: moist; thickets; fields; roadsides  | purple      |                                | less specific info: bees, butterflies, & hummingbirds. Monarda oligoleges:<br>Dufourea monarda, Perdita gerhardi, & Protandrena abdominalis (bees)   |
| purple coneflower                      | Echinacea purpurea                           | aster [Asteraceae]              | june-oct  | woods: openings-edges; thickets; prairie remnants; not common in wild  | pink        | prairie                        | long-tongued & halictid bees, bee flies, butterflies, & skippers   |
| purple cress                           | Cardamine douglassii                         | mustard [Brassicaceae]          | march-may | woods: rich-moist; floodplains: wooded; cliffs: moist  | pink-purple |                                | ?? bees: honey, mason, andrenid, halictid bees; bee flies; other misc. early spring flies & butterflies  |
| purple milkwort                        | Polygala sanguinea                           | milkwort [Polygalaceae]         | june-sept | meadows/fields; roadsides  | pink-purple |                                | small to med. bees: dagger, long-horned, cuckoo, & leaf-cutting, & bee flies   |
| pussytoes                              | Antennaria neglecta                          | aster [Asteraceae]              | april-may | fields: dry pastures; soil: well-drained   | white       |                                | wind-pollinated & small bees: halictid, andrenid, cuckoo; flies: syrphid, muscid, calliphorid, & tachinid; diverse thoughts on actual pollinators  |
| putty root orchid ♥                    | Aplectrum hyemale                            | orchid [Orchidaceae]            | may-june  | woods: rich  | green-red   |                                | ?? bees: a halictid bee species is likely. deceptive technique: no nectar  |
| queen of the prairie                   | Filipendula rubra                            | rose [Rosaceae]                 | june-aug  | meadows/prairies: moist  | pink        | headlands dune                 | ?? no nectar; various bee sps. collect pollen from the flowers   |
| rattlesnake weed                       | Hieracium venosum                            | aster [Asteraceae]              | may-sept  | woods: openings-edges; clearings   | yellow      |                                | ?? Limited info; short-tongued bees  |
| rattlesnake master                     | Eryngium yuccifolium                         | parsley [Apiaceae]              | july-aug  | prairie openings   | white       |                                | long-tongued bees & short-tongued bees, wasps, flies, butterflies, skippers, moths, beetles, & plant bugs  |
| red trillium ♥                         | Trillium erectum                             | lily [Liliaceae]                | april-may | woods: rich  | dark red    | Appalachian                    | ?? probably attract flesh flies, carrion beetles, & similar insects  |

| Common Name                              | Scientific Name                    | Family                        | Bloom       | Habitat - growing conditions; misc. information                  | Flower                | Heritage Garden                        | Pollinators & likely pollinators  |
|--|------------------------------------|-------------------------------|-------------|--|-----------------------|--|---|
| rose-pink gentian; rose gentian          | Sabatia angularis                  | gentian [Gentianaceae]        | july-sept   | woods: openings; fields: dry-moist; roadsides                    | pink                  |  | ?? long-tongued bees & possibly other insects with long mouthparts: butterflies & skippers. Observed: little carpenter bee & large leaf-cutting bee visiting flowers  |
| round-leaved sundew ♥                    | Drosera rotundifolia               | sundew [Droseraceae]          | june-aug    | bog/swamps; soil: sphagnum; lo nutrient-acid soil!               | white                 |  | interesting conundrum as pollinating insects must avoid becoming prey; some self-pollination, some wind, & some insects - non-specific  |
| royal catchfly                           | Silene regia                       | pink [Caryophyllaceae]        | june-aug    | woods: open-dry; prairies; roadsides                             | red                   | prairie                                | larger butterflies: black swallowtail, etc. & ruby-throated hummingbird   |
| rue anemone                              | Anemonella thalictroides           | buttercup [Ranunculaceae]     | march-may   | woods: rich  | white                 | woodland                               | no nectar; bees: honey, little carpenter, cuckoo, mason, halictid, & andrenid; flies: syrphid & bee   |
| sessile trillium ♥                       | Trillium sessile                   | lily [Liliaceae]              | april-may   | woods: moist; thickets   | dark red              | Appalachian                            | ?? rank odor & color of the petals: beetles & flies that are attracted to rotting flesh; a small weevil has been observed collecting pollen   |
| sharp-lobed hepatica                     | Hepatica acutiloba                 | buttercup [Ranunculaceae]     | march-may   | woods: rich; soil: alkaline                                      | blue-purple           | woodland                               | no nectar; 1st - bees: honey, small carpenter, andrenid, & halictid; 2nd - syrphid & other flies  |
| sharp-winged monkey flower               | Mimulus alatus                     | snapdragon [Scrophulariaceae] | june-sept   | streambanks; swamps; soil: wet                                   | blue-purple           |  | bumblebees  |
| shooting star                            | Dodecatheon meadia                 | primrose [Primulaceae]        | april-june  | woods: openings-edges; prairie; cliffs/hillsides; soil: alkaline | white-pink            | prairie, cedar glade                   | bees: queen bumble, anthophorine, long-horned, green metallic: all collect pollen; flowers offer no nectar  |
| showy lady's slipper ♥                   | Cypripedium reginae                | orchid [Orchidaceae]          | june-july   | woods: wet; swamps/bogs; soil: alkaline                          | pink                  |  | ?? deceptive technique-no nectar or accessible pollen; 1st - long-tongued bees. 2nd - syrphid flies & scarab beetles  |
| showy orchis                             | Galearis spectabilis (syn. Orchis) | orchid [Orchidaceae]          | may-june    | woods: rich-moist-beech-maple                                    | purple-wht            |  | bumblebees  |
| showy skullcap                           | Scutellaria serrata                | mint [Lamiaceae]              | may-june    | woods: rich; roadside banks                                      | blue-purple           |  | ?? 1st - various bees. 2nd - butterflies & skippers   |
| skunk cabbage                            | Symplocarpus foetidus              | arum [Araceae]                | feb-april   | woods: very wet; swamps; marshes                                 | grn-brwn-<br>dark red | rain garden                            | flesh & carrion flies, & gnats; are attracted by the carrion-like appearance & unpleasant odor of inflorescence   |
| slender lady's tresses ♥                 | Spiranthes lacera                  | orchid [Orchidaceae]          | aug-sept    | woods:dry-openings-edges; fields                                 | white                 | woodland                               | long-tongued bees: bumble, leaf-cutting, mason, sweat, leaf-cutter  |
| small-flowered leafcup                   | Polymnia canadensis                | aster [Asteraceae]            | june-oct    | woods: rich-moist; soil: alkaline                                | white                 | dolomite, meadow                       | honeybees, bumblebees, & miscellaneous flies  |
| smooth ruellia                           | Ruellia strepens                   | acanthus [Acanthaceae]        | may-aug     | woods: openings-edges; thickets; roadsides; cliffs               | blue-purple           | cedar glade, prairie                   | 1st - smaller long-tongued bees, long-horned bee. 2nd - leaf-cutting bees;<br>metallic wood-boring beetles  |
| snow trillium ♥                          | Trillium nivale                    | lily [Liliaceae]              | march-april | woods: rich; cliffs: base; ledges: shade; soil: alkaline         | white                 |  | bees: andrenid, queen bumble, & bees that become active in early spring   |
| Solomon's plume; false<br>Soloman's seal | Smilacina racemosa                 | lily [Liliaceae]              | may-july    | woods: moist; thickets; slope: woodland                          | white                 | woodland                               | small bees, flies, & many beetles: seed, long-horned, click, blister, tumbling flower, flower scarab & pedilid  |
| Solomon's seal                           | Polygonatum biflorum               | lily [Liliaceae]              | may-june    | woods: dry to moist; thickets                                    | green-white           | woodland,<br>Allegheny                 | bees: bumble, anthophorid, & halictid; ruby-throated hummingbird  |
| spiked lobelia; pale spiked lobelia      | Lobelia spicata                    | bellflower [Campanulaceae]    | june-aug    | woods: edges-dry; roadsides                                      | blue-purple           | ,                                      | 1st - long-tongued bees: little carpenter, miner, mason, & leaf-cutting. 2nd - small butterflies & skippers   |
| spotted touch-me-not                     | Impatiens capensis                 | touch-me-not [Balaminaceae]   | june-sept   | woods: edges-wet; riverbanks: shaded; roadsides/ditches          | yellow-<br>orange     | woodland                               | 1st - ruby-throated hummingbird & long-tongued bees: bumblebees & honeybees. 2nd - swallowtail butterflies  |
| spring beauty                            | Claytonia virginica                | purslane [ Portulacaceae]     | march-may   | woods: moist; thickets; clearings                                | white-pink            | woodland                               | 1st - bees: honey, bumble, little carpenter, mason, cuckoo, halictid, & andrenid ( <i>Andrena erigeniae</i> is oligolege); flies: syrphids, giant bee, flesh & calliphorid. 2nd - butterflies & skippers                              |
| spring cress                             | Cardamine rhomboidea               | mustard [Brassicaceae]        | april-june  | woods: rich- wet; streambanks: wet; springs; clearings: wet      | white                 | woodland                               | bees: cuckoo, mason, little carpenter, halictid, andrenid, flies: bee, dance, syrphid, sm-med butterflies & skippers  |
| squawroot                                | Conopholis americana               | broomrape [Orobanchaceae]     | april-june  | woods: rich-oak Parasitic, must have host plant                  | yel-brwn              |  | ?? similar species pollinated by bumblebees   |
| squirrel corn                            | Dicentra canadensis                | poppy [Papaveraceae]          | april-may   | woods: rich-deep soil  | white                 | woodland                               | queen bumblebees  |
| star chickweed                           | Stellaria pubera                   | pink [Caryophyllaceae]        | april-june  | woods: moist; rocky areas  | white                 | vegetable                              | bees: cuckoo, mason, halictid, andrenid; flies: giant bee, syrphid  |
| stiff gentian; agueweed                  | Gentianella quinquefolia           | gentian [Gentianaceae]        | sept-oct    | woods: moist; streambanks; roadsides                             | blue-purple           |  | ?? closed corollas suggests that long-tongued bees cross-pollinate flowers  |
| stiff goldenrod                          | Oligoneuron rigidum                | aster [Asteraceae]            | aug-oct     | prairies: dry; fields; roadsides; soil: dry, alkaline            | yellow                | alvar                                  | long-tongued bees, short-tongued bees; wasps; flies; butterflies: monarch & others, & beetles   |
| striped white violet                     | Viola striata                      | violet [Violaceae]            | april-june  | woods: moist; streambanks; roadsides                             | white                 | woodland                               | 1st - bees: bumble, long-horned, mason bees, & andrenid ( <i>Andrena violae</i> is oligolege). 2nd - giant bee fly; butterflies, & skippers   |
| swamp milkweed                           | Asclepias incarnata                | milkweed [Asclepiadaceae]     | july-aug    | shores; swamps/marshes; ditches: wet; soil: moist                | pink-white            | Appalachian,<br>headlands sand<br>dune | 1st - bees: bumble, honey, long-horned, halictid; wasps: sphecid, vespid, tiphiid, spider; flies: mydas, thick-headed, tachinid; butterflies: swallowtail, greater fritillaries, monarch, & skippers. 2nd - ruby-throated hummingbird |
| swamp rose mallow; swamp mallow          | Hibiscus moscheutos                | mallow [Malvaceae]            | july-sept   | lakeshores/pond edges; marshes; ditches: wet                     | pink-red              | first family patio                     | 1st - bees: bumble & other long-tongued bees, rose mallow bee is an oligolege. 2nd - ruby-throated hummingbird  |
| sweet cicely; aniseroot                  | Osmorhiza longistylis              | parsley [Apiaceae]            | may-june    | woods: moist-shady   | white                 | woodland                               | sm-med. bees: cuckoo, mason, halictid, masked; wasps; flies: syrphid, bee, dance, tachinid, anthomyiid; & beetles   |
| tall bellflower                          | Campanula americana                | bellflower [Campanulaceae]    | june-sept   | woods: rich-moist; thickets; roadsides                           | blue-purple           | woodland                               | long-tongued bees: bumble & leaf-cutting (Megachile campanulae is oligolectic), halictid; butterflies, & skippers.  |

| Common Name                                  | Scientific Name                               | Family                        | Bloom      | Habitat - growing conditions; misc. information                   | Flower      | Heritage Garden         | Pollinators & likely pollinators  |
|--|---|-------------------------------|------------|---|-------------|-------------------------|---|
| tall coreopsis                               | Coreopsis tripteris                           | aster [Asteraceae]            | july-sept  | woods: edges; thickets  | yellow      | cedar glade             | bees: bumble, cuckoo, digger, leaf-cutting, halictid, dagger; wasps: thread-waisted & others; flies: syrphid, bee, tachinid; butterflies, skippers, & goldenrod soldier beetle  |
| tall ironweed                                | Vernonia gigantea                             | aster [Asteraceae]            | aug-oct    | thickets/fields: moist; roadsides; prairie openings/meadows       | purple      | meadow                  | bee flies, butterflies, skippers, & various long-tongued bees   |
| tall meadow rue                              | Thalictrum pubescens                          | buttercup [Ranunculaceae]     | june-aug   | woods: rich; streambanks; meadows: wet                            | white       | fen                     | dioecious, wind-pollinated plant  |
| tall thoroughwort                            | Eupatorium altissimum                         | aster [Asteraceae]            | aug-sept   | woods: clearings; fields; roadsides                               | white       |                         | bees: long-tongued & short-tongued; wasps: paperp, thread-waisted, bee wolvest, scoliid, larrine, sand, spider, etc.; flies: syrphid, bee, tachinid, muscid, etc; small butterflies, skippers, beetles, & plant bugs  |
| thimbleweed                                  | Anemone virginiana                            | buttercup [Ranunculaceae]     | july-aug   | woods: dry-open-edges; fields: old; thickets; soil: alkaline      | white       | Appalachian             | sm bees: plasterer & halictid bees; & flower flies  |
| three-lobed coneflower; brown-<br>eyed Susan | Rudbeckia triloba                             | aster [Asteraceae]            | july-oct   | woods: open; thickets; soil: moist                                | yellow      |                         | bees: bumble, little carpenter, digger, cuckoo, leaf-cutting, andrenid (oligolege:<br>Andrena rudbeckiae), & halictid-green metallic; wasps: sphecid, vespid; flies: syrphid, bee, thick-headed, tachinid; sm-med butterflies, & goldenrod soldier beetle   |
| tickseed sunflower                           | Bidens coronata                               | aster [Asteraceae]            | aug-oct    | floodplains; meadows: wet; roadside: ditches an annual            | yellow      |                         | bees: honey, bumble, leaf-cutting, halictid, andrenid; beetles: goldenrod soldier & dark scarab   |
| turtlehead                                   | Chelone glabra                                | snapdragon [Scrophulariaceae] | july-sept  | stream/lake edges; swamps; roadside ditches; soil: wet            | white       |                         | 1st - bumblebees. 2nd - ruby-throated hummingbird   |
| twinleaf                                     | Jeffersonia diphylla                          | barberry [Berberidaceae]      | april-may  | woods: rich; slopes: moist-well-drained; soil: alkaline           | white       | woodland                | early bloomer; often self-pollinates; honeybees & halictid bees   |
| two-flowered Cynthia                         | Krigia biflora                                | aster [Asteraceae]            | april-aug  | woods: open; fields; roadsides                                    | yellow      | oak openings dune       | long-tongued bees: bumble, honey, little carpenters, cuckoo, mason, short-tongued: halictid, masked, andrenid (oligolege: <i>Andrena krigiana</i> ); predatory wasps; flies: syrphid, tachinid, etc.; butterflies, skippers, & beetles  |
| Venus looking-glass                          | Triodanis perfoliata                          | bellflower [Campanulaceae]    | may-july   | woods: edges; thickets; roadsides; disturbed open areas an annual | purple      |                         | 1st - small bees: little carpenter, plasterer (oligolege: <i>Colletes brevicornis</i> ), green metallics, & other halictid. 2nd - bumblebees, flies, small butterflies, & skippers  |
| Virginia bluebells                           | Mertensia virginica                           | borage [boraginaceae]         | april-may  | woods: rich   | blue        | woodland, pergola       | long-tongued bees: honey, bumble, anthophorid & mason; giant bee fly; butterflies, skippers, & sphinx moths (hummingbird moth)  |
| water hemlock                                | Cicuta maculata                               | parsley [Apiaceae]            | june-july  | streambanks; pond/lake margins; swamps; ditches: wet              | white       |                         | insects with short mouthparts - bees: leafcutter, halictid, cuckoo, plasterer, masked; wasps: sphecid, vespid, tiphiids, spider, velvet ants, cuckoo, eucoilids, braconid; flies: soldier, syrphid, thick-headed, tachinid, flesh, muscid, & misc. beetles  |
| white avens                                  | Geum canadense                                | rose [Rosaceae]               | june-aug   | woods: edges; thickets: shaded                                    | white       | woodland                | bees, wasps, flies: syrphid, & beetles  |
| white baneberry; doll's eyes ♥               | Actaea alba                                   | buttercup [Ranunculaceae]     | may-june   | woods: moist-rich; thickets; floodplains: wooded                  | white       | woodland                | only offers pollen; halictid bees   |
| white snakeroot                              | Ageratina altissima (syn. Eupatorium rugosum) | aster [ Asteraceae]           | july-oct   | woods: rich; thickets   | white       | Appalachian, woodland   | bees: leaf-cutting, halictid; wasps; flies: syrphid, tachinid, bee & others; butterflies, & moths   |
| white trout lily                             | Erythronium albidum                           | lily [Liliaceae]              | april-june | woods: moist; thickets  | white       | woodland                | bees: honey, mason, cuckoo, digger, halictid, plasterer, & &renid bees (oligolege: Andrena erythroni i). 2nd - giant bee fly, butterflies, &skippers  |
| white wild indigo                            | Baptisia alba                                 | pea [Fabaceae]                | june-aug   | woods: dry; prairie openings; roadsides                           | white       | cedar glade             | worker bumblebees pollinate the flowers   |
| whorled loosestrife                          | Lysimachia quadrifolia                        | primrose [ Primulaceae]       | june-july  | woods: open; thicket; roadsides; soil: sandy                      | yellow      | cedar glade             | bees: honey & bumble ?? Specialized oil bees (Macropis sps.)  |
| whorled milkweed                             | Asclepias verticillata                        | milkweed [Asclepiadaceae]     | june-sept  | woods: open; fields: dry; roadsides                               | white       |                         | 1st - bees: honey, bumble, halictid, halictid cuckoo; wasps: sand-loving, weevil, sphecid, five-banded tiphiid, northern paper, spider, eumenine. 2nd - flies: syrphid, thick-headed, tachinid, flesh, muscid; painted lady & other butterflies, Peck's Skipper & other skippers; squash vine borer moth & other moths; & Pennsylvania soldier beetle |
| whorled rosinweed                            | Silphium trifoliatum                          | aster [Asteraceae]            | july-sept  | woods: edges; thickets; prairie                                   | yellow      | prairie                 | ?? native bees & honeybees  |
| wild bergamot                                | Monarda fistulosa                             | mint [Lamiaceae]              | july-aug   | woods: edges; thickets; fields: dry; soil: alkaline               | purple      | headlands sand<br>dune  | long-tongued bees: bumblebees, miner, epeoline cuckoo, & large leaf-cutting, halictid (oligolege: <i>Dufourea monardae</i> ); bee flies, butterflies, skippers, & hummingbird moths. 2nd - ruby-throated hummingbird  |
| wild blue phlox; woodland phlox              | Phlox divaricata                              | phlox [Polemoniaceae]         | april-june | woods: rich-edges-openings; fields                                | blue-purple | meadow                  | long-tongued bees: bumble; bee flies; butterflies: swallowtails, skippers, & moths: hummingbird clearwing & sphinx  |
| wild columbine                               | Aquilegia canadensis                          | buttercup [ Ranunculaceae]    | april-july | woods: rich; rocky ledges   | orange-red  | dolomite                | 1st - bumblebees & ruby-throated hummingbird. 2nd - short-tongued halictid bees   |
| wild four o'clock                            | Mirabilis nyctaginea                          | four o'clock [Nyctaginaceae]  | june-oct   | roadsides; disturbed areas; soil: dry                             | pink-purple | headlands sand dune     | 1st - long-tongued (nectar) & short-tongued bees (pollen), & moths. 2nd - ruby-throated hummingbird   |
| wild garlic                                  | Allium canadense                              | lily [Liliaceae]              | may-july   | woods: moist; floodplains: wooded; meadows: moist                 | pink-white  |                         | bees: onion, mason, stelid, halictid, plasterer, masked; syrphid & bee flies, & wasps   |
| wild geranium                                | Geranium maculatum                            | geranium [Geraniaceae]        | april-june | woods: rich-moist; floodplains: wooded; cliffs: moist             | pink        | woodland,<br>medicinial | bees: bumble, mason, cuckoo, long-horned, halictid, andrenid bees (Andrena distans is an oligolege) & others; syrphid flies & dance flies, butterflies, & skippers  |

| Common Name           | Scientific Name          | Family                         | Bloom      | Habitat - growing conditions; misc. information  | Flower      | Heritage Garden      | Pollinators & likely pollinators   |
|-----------------------|--------------------------|--------------------------------|------------|--|-------------|----------------------|--|
| wild ginger           | Asarum canadense         | birthwort [Aristolochiaceae]   | april-may  | woods: rich; floodplains: wooded   | red-brown   | woodland             | ?? probably attract flies or beetles   |
| wild hyacinth         | Camassia scilloides      | lily [Liliaceae]               | may-june   | woods: open-shaded; stream edges; floodplains: wooded; slopes: steep-rocky; soil: alkaline | blue-purple | Appalachian, prairie | 1st - bees: honey, bumble, cuckoo, & halictid; & flies. 2nd - occasional butterflies & wasps   |
| wild leek; ramp ♥     | Allium tricoccum         | lily [Liliaceae]               | june-july  | woods: rich-moist; bottomlands   | white       | woodland             | 1st - bees: halictid, masked, honey, bumble, & mason. 2nd - syrphid flies  |
| wild lupine ♥         | Lupinus perennis         | pea [Fabaceae]                 | april-july | savannahs: oak; soil: dry-sandy HATES clay soil  | blue        |                      | bees: honey, bumble, digger, mason, & other long-tongued bees, halictid; & bee flies. Only pollen is available, which is forcibly ejected into the faces of insect visitors  |
| wild potato-vine      | Ipomoea pandurata        | morning glory [Convolvulaceae] | july-sept  | fields; roadsides; hillsides; disturbed areas; soils: dry very vigorous grower             | white       | garden of the lost   | 1st - long-tongued bees: honey, bumble, & digger, mallow & morning glory bees (oligolectic). 2nd - swallowtail butterflies, skippers, & sphinx moths   |
| wild quinine          | Parthenium integrifolium | aster [Asteraceae]             | july-oct   | prairie openings   | white       |                      | bees: halictid; wasps: crabronine, eumenine, cuckoo, braconid, etc.; flies: syrphid, tachinid, flesh, muscid flies, anthomyiid, etc.; beetles, & plant bugs  |
| wild stonecrop        | Sedum ternatum           | stonecrop [Crassulaceae]       | april-june | banks; cliffs: moist-wooded; rocks: damp   | white       | woodland             | 1st - various bees: andrenid, etc. 2nd - wasps & flies   |
| wild strawberry       | Fragaria virginiana      | rose [Rosaceae]                | april-june | open fields; meadows   | white       | sedge meadow         | lots of bees: little carpenter, cuckoos, masons, halictids, halictid cuckoo, andrenid; lots of flies: syrphid, thick-headed, tachinid, bottle, flesh; small butterflies, & skippers  |
| wingstem              | Verbesina alternifolia   | aster [Asteraceae]             | aug-oct    | woods: edges; thickets; near streams; floodplains; soil: rich                              | yellow      | meadow               | long-tongued bees, esp. bumble; has long disk flower tubes   |
| wood nettle           | Laportea canadensis      | nettle [Urticaceae]            | july-sept  | woods: moist; stream edges; floodplains: flooded   | grn-cream   | woodland             | wind-pollinated; has stinging hairs (trichomes) on stems   |
| wood betony           | Pedicularis canadensis   | snapdragon [Scrophulariaceae]  | april-june | woods: openings-edges hemiparasitic  |             | sedge meadow         | 1st - long-tongued bees: queen bumble & mason bees   |
| woodland sunflower    | Helianthus divaricatus   | aster [Asteraceae]             | july-oct   | woods: open; thickets; roadsides   | yellow      | oak openings dune    | specialist bee pollinators: Andrena species, etc.; long-tongued bees: honey, bumble, digger bees, leaf-cutting bees, cuckoo bees, etc.; short-tongued bees: halictid; misc. wasps; misc. flies; butterflies & skippers, & goldenrod soldier beetle |
| yellow corydalis      | Corydalis flavula        | poppy [Papaveraceae]           | april-may  | woods: open-sandy; gravel banks; rocky slopes  | yellow      |                      | ?? probably bees: honeybee & bumble have been observed   |
| yellow lady's slipper | Cypripedium calceolus    | orchid [Orchidacae]            | may-july   | swamp-bogs; soil: rich-moist; soil: alkaline   | yellow      |                      | small bee: honey, little carpenter, mason, halictid, & andrenid, & possibly various flies  |
| yellow pimpernel      | Taenidia integerrima     | parsley [Apiaceae]             | may-june   | woods: dry; thickets; roadside banks; hillsides: rocky                                     | yellow      |                      | small bees: nomadine, little carpenter, halictid, carder, & andrenid; wasps (e.g. parasitic); flies: syrphid, tachinid, chloropid, March, & blow, & beetles.   |
| yellow trout lily     | Erythronium americanum   | lily [Liliaceae]               | march-may  | woods: moist   | yellow      | woodland             | 1st - bees: bumble, mason bees, & andrenid bees  |
| yellow wood sorrel    | Oxalis stricta           | wood sorrel [Oxalidaceae]      | june-oct   | woods; fields; roadsides; disturbed areas  | yellow      | prairie              | halictid & other bees, flower & bee flies, & cabbage white butterfly   |
| zigzag goldenrod      | Solidago flexicaulis     | aster [Asteraceae]             | aug-sept   | woods: rich  | yellow      | woodland             | many: long-tongued bees, small-tongued bees, wasps, flies, & butterflies. Several bee oligoleges of goldenrods: <i>Andrena</i> species   |

## Other Resources - websites in blue

Lady Bird Johnson Wildflower Center - https://www.wildflower.org/

Mary Reynolds - http://wearetheark.org/what-is-an-ark/ ARK = Acts of Restorative Kindness

North Carolina Extension Gardener Plant Toolbox - https://plants.ces.ncsu.edu/

ODNR Webpage on Invasive plants - http://ohiodnr.gov/invasiveplants

Illinois Wildflowers - pollinator & other habitat info: https://www.illinoiswildflowers.info

Xerces Society - https://xerces.org/pollinator-conservation/pollinator-friendly-plant-lists

National Wildlife Federation: Attracting Birds, Butterflies, & Other Backyard Wildlife (Expanded Second Edition) - 2019, David Mizejewski

Back to Eden: Landscaping with Native Plants - 2013, Frank Porter

Butterfly Gardening with Native Plants: How to Attract & Identify Butterflies - 2015, Christopher Kline

The Bees in Your Backyard - 2016, Joseph S. Wilson & Olivia Messinger Carril

Trees of Ohio Field Guide - 2004, Stan Tekiela

Wildflowers of Ohio - 1998 & 2008, Robert Henn; majority of plant list is from this book

Ohio Invasive Plants Council brochure: "Alternatives for Invasive Plants in Ohio: A Guide for Landscaping & Habitat Restoration" https://www.oipc.info/oipc-&-ohio-material.html

## NOTES:

- 1. <u>long-tongued bees</u>: Anthophoridae (anthophorid bees-miner, carpenter, parasitic), Apidae (honey & bumble), Megachilidae (leaf-cutting bees carder bees, mason bees, cuckoo bees, *Hoplitis* sp.), Melittidae (oil-collecting bees); **oligolege** specialist bee pollinator for various plant species
- 2. short-tongued bees: Andrenidae (andrenid bees, small miner bees), Colletidae (plasterer bees, miner bees, masked bees), Halictidae (halictid bees, green metallic bees, alkali bees, cuckoo halictid bees, dufourine bees); oligolege specialist bee pollinator for various plant species
- 3. where a plant grows implies the light condition: woods implies shade; prairie implies sun. Both implies sun to part shade or and extremely adaptable plant
- 4. 1st = primary pollinators, 2nd = secondary/less effective pollinators; some predatory insects also eat nectar and pollen and can be minor pollinators
- 5. ?? less data; dependable sources inferring probable pollinators based on similar plant species
- 6. ♥ = a plant that is endangered or it's native habitat is threatened and it may be more difficult to find (e.g. orchids, sundews, etc.). Never collect from the wild unless you have permission or a permit. Native plants should be purchased from nurseries that propagate native plants and do not collect from the wild... ask.

<u>Last note</u> - Understanding a plant's cultural needs is fundamental to creating an eco-conscious garden. There are plants that will only grow well within a limited set of conditions. And there are plants that will take over a garden if they are not planted with companions that keep them in check; 'tis the way of nature...

Second last note - This is an evolving document and will probably never be finished to our satisfaction...

Hope Taft & Debra Knapke, February, 2020 (rev.) Contact info: knapke.sage@gmail.com & ohiohoper@yahoo.com