## Plants of the Pollinator Pathway at the Orange Johnson House, 2025

(Note: Colonists referenced in this guide brought these plants when they settled the east prior to the Revolutionary war. Pioneers brought many of the same plants to Ohio when they settled here.)

- **1. Aster** (*Asteraceae*) is a large family of flowering plants, vines, shrubs and trees, with over 32,000 known species found in every continent but Antarctica. Here we have *Aster alpinus*, a host plant for the larvae of a number of *Lepidoptera*, and is the only species of *Aster* that is native to N. America. They have blue flowers; you can find them under the Serviceberry tree.
- **2. Black-eyed Susan** (*Rudbeckia hirta*), a native to N. America, attracts butterflies, and it is a larval host to the Bordered Patch, Gorgone Checkerspot, and Silvery Checkerspot butterflies.
- **3. Brown-eyed Susan** (*Rudbeckia triloba*), a plant native to eastern N. America, this herbaceous plant that can be biennial or short-lived perennial. Attracts a number of bees and other beneficial insects. It is a host plant to butterflies and moths, including the Silvery Checkerspot butterfly and Wavy-lined Emerald moth.
- **4. Blue Mistflower** (*Conoclinium coelestinum*) is an herbaceous perennial in the Aster family native to N. America that attracts bees and butterflies.
- **5. Butterfly weed** (*Asclepias tuberosa*) is a species of milkweed native to eastern N. America. It is a larval food plant of the queen butterfly, the dogbane tiger moth, milkweed tussock moth, and the unexpected cycnia moth. It is not a preferred host plant of the Monarch butterfly, but its flowers attract a wide variety of pollinators, Monarchs included. ("Butterfly bush" (*Buddlea*) is a different genus, not native to the Americas, thus not used)
- **6. Coreopsis** (*Coreopsis*) is a genus of flowering plants in the Aster family. Native to North America, it may often be identified as a type of tickseed. Its yellow flowers attract a variety of pollinators.
- 7. Crab Apple tree True apple trees are native to Eurasia, were cultivated in Europe for thousands of years, and brought to America by the colonists. Four crab apple trees are native to North America, and this one may be one of them (*Malus coronaria*), as its fruit is sweet compared to many other crab apples. It blossoms early, providing nectar and pollen for honey bees.
- **8. Daylily** aka Ditch Lily (*Hemerocallis fulva*) are not native; these plants were originally brought to America with the settlers. The orange daylily is actually the cultivar 'Europa'. It is not a true lily in the genus *Lilium*, but gets its common name from the superficial similarity of its flowers to *Lilium* and from the fact that each flower lasts only one day.
- **9. Feverfew** (*Tanacetum parthenium*) is a flowering plant in the daisy family, Asteraceae. Its small but prolific flowers, like tiny daisies with white petals and yellow centers, attract a variety of insects.
- **10. Flax** (*Linum usitatissimum*), in the family *Linaceae*, is native to the Middle East and was cultivated in Europe for five thousand years before coming to America with the colonists. It is grown for fiber production (Achsa Johnson reportedly grew & processed fax to weave a linen tablecloth on display in the museum), but is also grown for the health benefits of its seeds. Its flowers attract bees, butterflies, and other beneficial insects.
- 11. Glade mallow (Napaea dioica) is native to eastern North America and is a perennial herbaceous plant. It attracts various types of bees.
- **12. Goldenrod** is a common name for many species of flowering plants in the sunflower family, *Asteraceae*, commonly in reference to the genus *Solidago*. The plant is a sustainable method to enrich soil with nitrogen. *Solidago* is a major "honey plant" for beekeepers, as it produces relatively high protein pollen which helps honey bees overwinter.
- 13. Gray-head coneflower or Prairie coneflower (Ratibida pinnata) is native; another type of aster that attracts bees, butterflies and birds.

## 14. <u>Herbs</u>

- o **Chamomile** (Anthemis nobilis) Native to Europe, it was so popular as a tea and useful as a poultice for all sorts of aches and pains, that the colonists brought it with them. Honey bees, bumblebees, other bees, butterflies and ladybugs are drawn to the flowers' vibrant color and sweet scent.
- o **Dill** (*Anethum graveolens*) is an annual herb in the celery family *Apiaceae*. It is native to North Africa and Arabia. We are able to grow it here for two reasons: 1) It was an extremely valuable herb in Europe and was brought to America by John Winthrop in 1630 for his garden in the Massachusetts Bay Colony (according to the Herb Society of America), so it was available to the Johnsons in 1810, and 2) it is a host plant to the black swallowtail butterfly.
- o **Lemon balm** (*Melissa officinalis*) This perennial is native to South-central Europe, the Mediterranean and Central Asia. The name *Melissa officinalis* comes from the Greek word for "honey bee," due to the plant's bee-attracting flowers, and the Latin *officinalis*, referring to its traditional use in apothecaries.
- Sage (Salvia officinalis) is native to the Mediterranean region. This member of the mint family has a long history of medicinal and culinary
  use, and was brought to North America by the early colonists. There are many Salvia species native to North America, but the one we
  have here is Salvia officinalis, apparently the cultivar 'Purpurascens.'
- **15. Hollyhock** (*Alcea rosea*) The single species of hollyhock native to N. America is the streambank wild hollyhock, which belongs to the genus *Iliamna rivularis*, and is not native to eastern N. America. The hollyhocks we have is *Alcea*, which was brought to North America by the colonists. John Josselyn admired them in New England in 1663. The flowers were used for dying. Mucilage in the root is still used in cough syrup, and starch in the root has made it popular for use in pastry and confectionery.
- 16. Iris (Iris) Perennial rhizomatous plants
  - o **Bearded Iris**, the taller iris, is native to the northern hemisphere and is pollinated by bees, especially bumblebees and mining bees. Butterflies and hummingbirds also visit the flowers.
  - $\circ$  Flag Iris, the shorter iris, is native to eastern North America.
- **17. Lamb's Ears** (*Stachys byzantine*) are herbaceous perennials native to Iran and Turkey. Colonists brought lamb's ears with them for medicinal uses, primarily for what we would call today "antimicrobial action"; it was present at The King's Garden at Fort Ticonderoga, and used as bandaging during the Civil War. The tall magenta flower spikes are loved especially by bumblebees.
- **18. Lavender** (*Lavandula*) is native to the Mediterranean and brought here by the colonists for its flowers, aroma, oils, and general appearance. The most common form in cultivation is the common or English lavender *Lavandula angustifolia* (formerly named *L. officinalis*). It attracts many varied pollinators, including bees and butterflies.
- **19. Lilac** (*Syringa vulgaris*) This species is in the olive family, *Oleaceae*. Native to the Balkan Peninsula, it was widely cultivated for its scented flowers in Europe and brought to North America by the colonists. It was often planted near the outhouse!
- **20. Milkweed** (*Asclepias*) is a very beneficial plant. Bees and flies feed on pollen and nectar from the flowers, and the leaves are the *only* host plant for the larvae of the Monarch butterfly.

- **21. Oxeye Daisy** (*Leucanthemum vulgare*) is a native rhizomatous perennial and member of the Aster family. The large, flattened center disk resembles the eye of an ox.
- **22. Oxeye sunflower** aka false sunflower (*Heliopsis helianthoides*) is a rhizomatous herbaceous perennial, native to eastern North America, where it was often found in prairies. It is attractive to many pollinators and birds eat the seeds.
- **23. Peony** (*Paeonia officinalis*) is native to Asia, Europe, and Western North America. Colonists were particularly proud of the large flowers and, when possible, planted them near their front door yards for the world to admire. During their short bloom time they attract bees and butterflies. The buds secrete a sugary nectar that attracts ants.
- **24. Prairie Dock** (*Silphium terebinthinaceum*) Native to eastern North America, this herbaceous perennial is in the Aster family. It is important for native bees which nest beneath or within these plants or use elements of the plants for their nests.
- **25. Prickly Pear Cactus** (*Opuntia*) The eastern prickly pear is native to the midwestern "sand prairies" near major river systems, such as the Mississippi, Illinois, and Ohio rivers. Native bees are the most important pollinators for the prickly pear cactus, attracted to the abundant pollen and nectar produced by the flowers.
- **26. Purple coneflower** (*Echinacea purpurea*) is native to eastern North America and most common in the open woods and prairies of the Ohio Valley. It is attractive to many pollinators and birds eat the seeds.
- **27. Obedient plant** (*Physostegia virginiana*) Native to North America, this rhizomatous herbaceous perennial is in the mint family. It is known commonly as "obedient plant" because a flower pushed to one side will stay in that position. Bumblebees love it.
- 28. Ohio Spiderwort (*Tradescantia ohiensis*) Native to eastern and central North America, it's flowers and stems are edible and can be eaten raw, while the leaves can be cooked. Leaves of the plant are mucilaginous and can be used to soothe insect bites in a similar way to aloe vera
- **29. Orange Coneflower** (*Rudbeckia fulgida*) is native to eastern North America in the Aster family. It attracts a wide variety of bees and butterflies.
- **30. Rattlesnake Master** (*Eryngium aquaticum*) Native to eastern North America, this plant is highly attractive for a wide variety of pollinators, including bees, butterflies, moths, and beneficial insects.
- **31. Red Currant** is a member of the genus *Ribes* in the gooseberry family which is considered native to Western Europe and may have been brought here by the colonists. However, ours may be *Ribes triste*, which is native to North America and Asia. Its red flowers attract butterflies and bees. Its berries are eaten by birds. Unfortunately, its leaves are eaten by deer, so the plant requires a waddle fence or constant spraying with deer repellent.
- 32. Roses Our single and open centers are particularly attractive to bees and other beneficial insects.
  - French roses (Rosa Gallica) are native to Western Europe. They tend to form a cluster or bed, and produce simple (4-8 petals) pink flowers.
  - o The Worthington Rose is a prairie rose native to eastern North America.
  - At Adena, Mrs. Thomas Worthington cultivated a prairie-type rose that became listed in The Official Registry and Checklist of The American Rose Society, where it is registered as a natural variation of R. Setigera. (Setigera means a climbing or prairie type rose.) It has become known simply as the "Worthington Rose." Its fall color is wonderful and when the hips ripen, they're a real treat for your eyes and for the birds. This rose is dioecious (male and female flowers grow on separate plants), so to get great hips, we planted more than one. This rose works beautifully in a pollinator garden for native bees and flies.
- **33. Scarlet bee balm** (*Monarda Didyma*) is native to eastern N. America in the family *Lamiaciae*, and is a terrific pollinator plant for honey bees and other bees. Hummingbirds are also attracted to it.
- **34. Sedum** A large genus of flowering succulent plants in the family Crassulaceae, members of which are commonly known as stonecrop, many species are native to the Northern Hemisphere. Its flowers attract various bees, butterflies, and hoverflies.
- **35. Serviceberry** trees (*Amelanchier arborea*) are native to eastern N. America. The name "Service" comes from the timing of the blooms which signal when the muddy back roads of Appalachia will soon be passable for circuit-riding preachers to be able to hold Sunday services again. The flowers attract many kinds of bees. The berries can be made into a fine syrup or jelly if enough are gathered before the birds get them.
- **36. Soapwort** (*Saponaria officinalis*) is native to Asia and Europe, and was brought to N. America by the colonists, who cultivated it to make soap. A liquid soap can be produced by soaking the leaves in water, and it is still used to clean delicate antique tapestries today. Its leaves are eaten by the larvae of some butterflies and moths.
- **37. Solomon's Seal** (*Polygonatum*), as the name indicates, was grown in the Middle East, particularly in Israel. However the genus is distributed throughout the temperate Northern Hemisphere, and *Polygonatum biflorum* is native to eastern and central N. America. The drooping, bell-shaped flowers attract bumblebees and hummingbirds.
- **38. Sweet Alysum** (*Alyssum maritima*) is an annual plant that reseeds itself, and native to the Mediterranean. First cultivated in Spain in the 16th century, it spread through Europe as a treatment for rabies and was brought to N. America by the colonists. It attracts bees, flower flies, stingless wasps and butterflies.
- **39. Trumpet vine** (*Campsis*) or "Hummingbird vine" is native to eastern N. America. This very aggressive grower blooms on new growth, and is very attractive to the ruby-throated hummingbird and the hummingbird moth. Invasive through its seeds and spreading roots, it is not recommended for the home garden unless you can aggressively prune above ground and control the underground runners. Here, we regularly patrol the grounds for shoots and dig them up.
- **40. Wild Bergamot** (*Monarda fistulosa*) is a native herbaceous perennial, also commonly called bee balm. A wildflower in the mint family, it has a long history of use as a medicinal by Indigenous Americans. It is popular with a variety of pollinators, including bees, hummingbirds, and lepidoptera, and is a larval host to the hermit sphinx moth, orange mint moth, and raspberry pyrausta moth.
- **41. Wild Quinine** (*Parthenium integrifolium*) is a perennial herb native to eastern N. America, in the Aster family. The unremarkable white flowers attract many kinds of bees, wasps, flies and beetles. It has many medicinal uses; during World War I its leaves were used as a substitute for quinine due to a shortage of true quinine from the bark of the Cinchona tree.
- **42. Yarrow** (*Achillea millefolium*) **is** native to the northern hemisphere, including Europe, Asia, and N. America. The European variety was brought here by the colonists. William Wood wrote of it in New England perennial gardens in 1666. It contains salicylic acid and was used by mythical Greek character Achilles to stop the flow of blood from arrow wounds of his men. Yarrow is a host plant for many different kinds of moths and used by birds to line their nests, where it is suspected to inhibit the growth of parasites.
- **43. Yellow loosestrife** (*Lysimachia vulgaris*) is in the primrose family Primulaceae. Native to eastern North America, it attracts butterflies and bees, and in particular the yellow loosestrife bee.
- **44. Zinnia** (*Zinnia*) is an annual plant in the *Aster* family, native to southwest N. America. Peruvian Zinnias were grown in 18th-century gardens and sold by Philadelphia nurseryman Bernard McMahon in 1804. They attract a wide variety of beneficial insects, including bees, butterflies, hummingbirds, and wasps.