

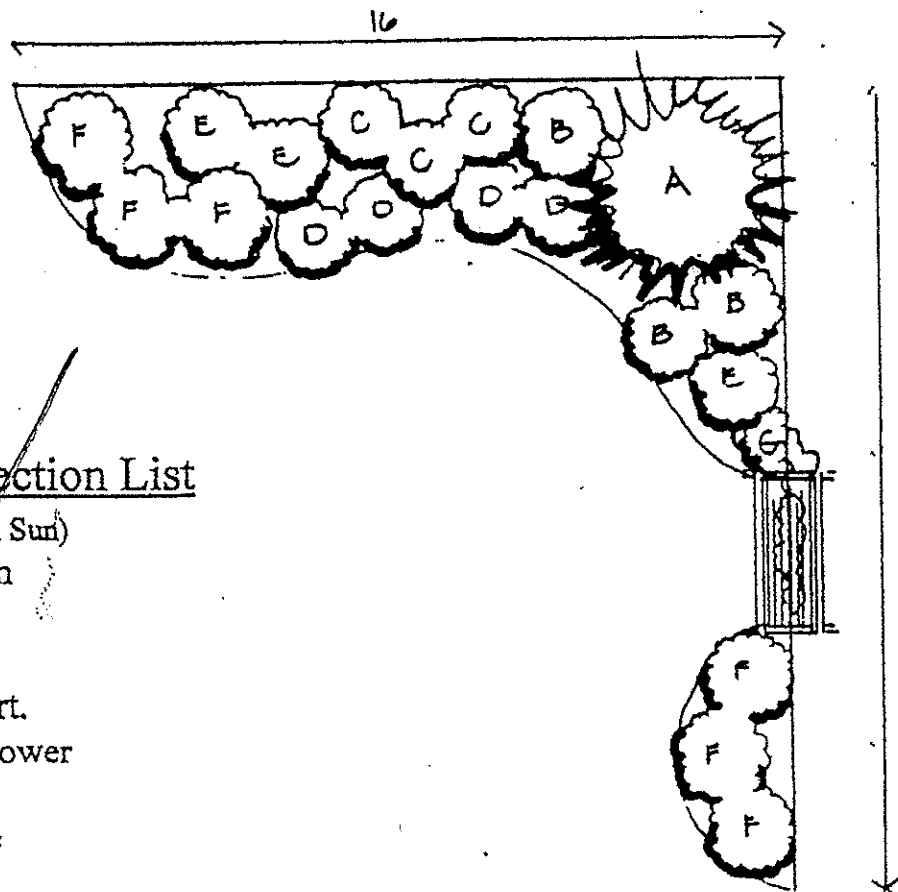


North Garden Center
3001 Catalpa Dr. 274-1154

Beaver Valley Garden Center
2074 Beaver Valley Rd. 427-4110
Main Office, 937-274-1154

South Garden Center
6000 Far Hills Ave. 434-1326

Butterfly and Hummingbird Garden



Plant Selection List

(Full Sun)

- A 1 Butterfly Bush
- B 3 Monarda
- C 3 Delphinium
- D 4 Coreopsis Vert.
- E 3 White Coneflower
- F 6 Red Daylily
- G 1 Trumpet Vine

PERFECT PERENNIALS EVERYTIME

As with all successful endeavors, happy plants are no accident. Good plant health is the result of the gardener taking time in the beginning to prepare a welcome bed for them.

Do this by incorporating into your soil a mixture of the "big three". That is, one third each (and three inches down), of organic compost, manure and topsoil for every 6-8" of tilled soil. Once in the ground, feed your new plants every 7-10 days with a good all purpose fertilizer mixed according to package directions. Don't forget, your new garden will require extra water its first season, so remember to make this very important step a habit.

BUTTERFLY AND HUMMINGBIRD GARDEN "INSTEADS"

Referring to the Siebenthaler handout on the "B and H" garden, this list, made many years ago, is no longer fully appropriate in today's garden, either because it lists plants that are now known to be invasive in the Midwest (butterfly bush and daylily) or because it is not explicit enough in separating native from alien for each species cited. On the other hand, the advice on layout and soil preparation is practical. Proceeding by the capital letter denoting each of the seven genera listed, here is a look at how one might better set up such a garden. Botanical names will also be listed here, along with the common names.

- A. *Buddleia*, or butterfly bush, either as species *davidii* or as any other of numerous species, came from China or other eastern lands, and will in no case support species survival in North America, as survival is fully dependent on the larvae of any pollinator, and *Buddleia* only provides all-too-common nectar to adults. Many of the numerous native plants to use in its place have bloom even more attractive to our eye, and more importantly, to the eye of critical (and sometimes threatened) pollinators. Wonderful Lepidoptera-effective substitutes include these natives: *Eupatorium dubium*, *fistulosum*, *purpureum*, and *maculatum*, which are "Joe Pye weed" species, providing long-term pink and other colored flowers, hosting over three dozen species of Lepidoptera alone, and drawing in native goldfinch, towhee, mourning dove, and junco aviators, as well as crucially important bumblebees. *Apocynum androsaemifolium* and *cannabinum*, the spreading and common dogbanes, offer, respectively, bell flowers of pink and white with dark rose centers, or pure white high-count flowers with bright red stems. Some of the pollinators attracted to the latter and other natives with white flowers (such as turtlehead) are American copper and Baltimore checkerspot butterflies. Dogbane is in fact the number one herbaceous bringer of butterflies, leaving *Buddleia* behind again, with 43 species supported!

- B. *Monarda*, or beebalm, remains a very right choice. Native species include *didyma* (Oswego tea), *punctata* ("spotted"), *fistulosa* ("wild Bergamot"), and *bradburiana*. The last is an endangered species. *M. punctata* sports a deep lavender flower; *fistulosa* is fragrant and has a true lavender colored flower.

- C. Delphinium, or larkspur, is usually sold by garden centers and other suppliers as hybridized Eurasian species. They are short-lived and usually need extra tending. However, Midwest native species include *Delphinium carolinianum*, the “wild blue larkspur” and *D. exaltum*, the “tall blue larkspur”. These will draw hummingbirds as well as some unusual and long-tongued butterflies, such as the cobweb skipper. Other native substitutes include some wonderful perennials, such as the tall bellflower, bottle gentian (with showy purple flowers August to frost), the northern and southern blue monkshoods (both threatened species), and purple prairie clover (extirpated in some areas). The gentian and the monkshoods all draw the bumblebee, our number one pollinator, as it is the only insect strong enough to open the “bottles”, which yields heavy nectar rewards.
- D. Coreopsis is a good choice if sorted out for our native species, which are *C. tripteris*, or tall coreopsis, *C. grandiflora*, the largeflower tickseed, *C. lanceolata*, the lanceleaf coreopsis, and *C. palmata*, or stiff coreopsis. All of these produce bird-attracting seeds, and draw day-flying moths and many skipper species butterflies. Again, a reminder: only the native species of *Coreopsis*, as with most plants, will likely support the larvae of native pollinators.
- E. White coneflower (*Echinacea*?). As already noted, distinct species of Lepidoptera are drawn to native white flowers, so this choice appears on the surface to be AOK. But there are problems here. First of all, there are too many species commonly called “coneflower”, so we goofed in not being “specific”. These include, for example, species within these genera: *Rudbeckia*, and *Ratibida*, as well as *Echinacea*. So we should be listing each recommended plant by its full species name, such as *Echinacea purpurea*. Another problem here is that the color white does not naturally occur in *Echinacea* genus, nor in the other two genera listed above, so we must be referring to a cultivar with “white coneflower”, and this could imply other problems. The pollinators and other native insects that are drawn to white flowers are not drawn to just any white flowers, and likely won’t lay their eggs on “man-made” colors other than the species they evolved with. We must

remember in selecting for fall or spring plantings that bees and other insects see colors in spectra beyond our eye's abilities, especially in the ultraviolet range, and their sense of fragrance is different from and again often beyond our own. These, and likely other senses we're not aware of, developed over millions of years of co-evolution with the plant world, guide the pollinators and other insects like a bullseye on a target to the plant they've adapted to so very well over the millennia. What's more, Echinacea white-flowered cultivar "White Swan" has a lower petal count and a different petal arrangement than its native parent plant, and "Milkshake", although attractive to our eye, would be total confusion to a pollinator, not only for its unnatural white color, but also because it has a profusion of petals running in different directions, making it nearly impossible to find its nectar (if it has much to offer). So changes in color and flower head are likely to cause any pollinator to regard either of these plants as total strangers. We would do much better simply either to list Echinacea purpurea with its mild purplish flower that pollinators idolize, or else to list most any native perennial that naturally grows a white flower, such as Chelone glabra (white turtlehead), or Baptisia alba (white wild indigo). Remember, you can hardly lose with ANY native unchanged by human cultivation, as there is at least one pollinator for any willing native plant, not to mention at least one beetle too (biomass), and usually a good number of other insects that have evolved with and have a symbiotic relationship with whatever native plant you may choose.

- F. Red Daylily. Again, we should have listed this under its botanical name, Hemerocallis. No need to list specific epithet here, because daylilies have been crossed back and forth beyond any reasonable use in separating their alien parent species from each other. But here's the real problem: no daylily will host any butterfly in North America! Have you ever seen a butterfly, or moth, or a hummingbird on a daylily? I haven't. Again, this plant makes a great illustration of an alien plant's typical isolation from all living things around it, be it an insect, a mammal, or another herbaceous plant! It is a stranger in a foreign land, separated by millions of years of evolution, unable and unwilling to contribute anything, often even nectar, to the native life around it. But never fear, for there are many great native substitutes for red daylilies. *Asclepias tuberosa*, or "butterfly milkweed", is a great start, as it is one

of the milkweed plants that support Monarch larvae, the only genus that does, and its bright orange-red flowers also bring in black swallowtails and a dozen other butterfly species. *Rudbeckia fulgida*, "orange coneflower" has yellow flowers with a clearly orange hue, and draws numerous Lepidoptera along with goldfinches and other attractive birds. Any of nine species of Midwest native blazing stars (*Liatris*), many of which are now threatened, will bring in dozens of butterfly species attracted to red or purple flowers, as well as the rare "glorious flower moth", *Schinia gloriosa*. Meadow blazing star, *L. ligulistylis*, blooms later, well into August, and its special pheromones are strong draws for north-returning Monarchs. Several native Echinaceas and five species of *Baptisia* (indigos) will also easily surpass red daylilies, as these will not only draw countless species of butterflies but will also provide cover for those pupae that overwinter; and the *Baptisias* are in the Legumoseae, pea family, and so they also fix nitrogen, helping the soil itself and all that live within it.

- G. Trumpet vine. This is *Campsis radicans*. Pay special attention to the epithet "radicans", as this fast-growing vine, although native, behaves like a slightly less radical kudzu! *Campsis radicans* may be the plant for you, as it will draw in hummingbirds, hosts a sphinx moth, and provides cover for birds, with an attractive orange-red flower; but be aware it also roots in wherever branches touch the ground, it sprouts from seed, and its children starts may grow as fast as the mother plant. In its place could be installed native honeysuckles (Beware the non-natives!) such as "trumpet", *Lonicera sempervirens*, which has pretty and fragrant red tube flowers and bright berries, or the endangered yellow vine honeysuckle, *L. dioica*. Also consider *Diervilla lonicera*, the northern bush honeysuckle, actually a shorter vine, with funneled flowers lasting four months, attracting clearwing and scoopwing moths, hummingbirds, purple finch, eastern bluebirds, and many other animals on different trophic levels.

There is no need to use any alien plant to attract butterflies or hummingbirds, and only natives will allow pollinators and other important "bird feeders" to avoid extinction, as their larvae depend entirely on the native plants with which their ancestors evolved.

- G.A. Christie, 2021