CHECKLIST OF ACTIONS
To Promote Pollinators In Yards, Gardens & Parks

XERCES SOCIETY for Invertebrate Conservation

KEY:

- Promotes foraging resources
- Helps protect pollinators from pesticide exposure
- Promotes nesting and overwintering habitat
- Contributes to pollinator conservation in your community

LANDSCAPING

- ☐ Plant a **native** wildflower garden that includes species that bloom in succession all season long and are high-value to pollinators (species with ★ on **Table 1**, page 12).
- ☐ Plant **native** bunchgrasses; these plants are food for rare butterflies and also help provide nesting sites for bees.
- ☐ Reduce lawn footprint by converting as much as possible to *flowering* habitat.
- ☐ Plant ***spring***-blooming **native** wildflowers, such as woodland ephemerals in shady areas.
- ☐ Plant ***spring***-blooming **native** shrubs and trees, such as willows (*Salix*), maples (*Acer*), and native fruit trees and shrubs.
- ☐ Plant ***summer***-blooming **native** wildflowers, such as blazing star (*Liatris*), bee balm (*Monarda*), and numerous others.
- ☐ Plant ***summer***- *or* ***fall***-blooming **native** shrubs, such as wild roses (*Rosa*) or meadowsweet (*Spirea*).
- ☐ Plant ***fall***-blooming **native** wildflowers, such as asters (*Symphyotrichum*), native sunflowers (*Helianthus*), and goldenrods (*Solidago*).
- ☐ Plant **native** trees that serve as important host plants for a wide variety of butterflies and moths (species with 🦶 on **Table 1**, page 12).
- ☐ Plant **native** milkweed (*Asclepias*), violets (*Viola*), pawpaws (*Asimina*), or other regionally appropriate plants that provide critical food for specialist butterflies and moths.
- ☐ Plant species known to provide food for specialist bees in your region (species with 🐝 on **Table 1**, page 12).
- ☐ Gradually replace perennial and annual landscaping that provides little value to wildlife (e.g., daylilies, hostas, pansies) with more diverse **native** wildflower plantings.
- ☐ If non-native plants are included in landscaping, choose varieties that are known to have value to pollinators (e.g., flowers with ample pollen or nectar) **AND** that are not invasive or aggressive.
- ☐ Remove invasive species from your landscape, as well as any non-native species that appear to be spreading into wild areas (e.g., butterfly-bush).
- ☐ Ensure that new landscaping plants were not treated with neonicotinoids or other related insecticides.

Why Plant Native?

Native plants have a very long history of naturally occurring in the wild ecosystems of a given area (pre-European settlement of the Americas). Non-native plants naturally occur in other parts of the world or the country, but may be grow well in your area as ornamental or garden plants. Some non-native plants have the tendency to escape into the wild and become invasive, replacing natives plants and causing serious ecological and economic problems. Although pollinators may find some nutritional value from non-native plants, native plants do the best job of supporting the widest array of native pollinators, given their long co-evolutionary history. In fact, roughly ⅓ of bee species will only collect pollen from particular native plants, and most butterfly and moth caterpillars can only feed on particular native plant leaves.

LAWN & YARD CARE

- ☐ Avoid pesticides (including herbicides, insecticides, and fungicides) on lawns and other landscaping; choose less harmful alternatives such as non-chemical controls.
- ☐ For mowed areas, reduce mowing frequency and increase mowing height, allowing flowering weeds to flourish.
- ☐ Leave dead wood on site, including dead logs, snags, and brush; consider planting flowers around these features, to add intention and aesthetic value.
- ☐ Leave leaf litter on-site—keep a thin layer of leaves on lawn; use the rest to mulch trees/ shrubs/ garden and/or rake to woodland edges if available.
- ☐ Leave bare spots or areas with patchy vegetation in lawn; avoid thick turf and sod.
- ☐ Avoid plastic mulch/ weed barrier, heavy wood chips, and treated wood chips.
- ☐ Leave dead wildflower stems standing over the ***winter***; prune them back in ***early spring*** to 8–12" to create nesting sites for stem-nesting bees.
- ☐ Prune shrubs with pithy stems, to create nesting sites for stem-nesting bees.
- ☐ Leave some areas of lawn unmown to create tall grass habitat.
- ☐ Install a water feature (e.g., bird bath with stones to prevent insects from drowning) for pollinators that need water for nest building or other uses.
- ☐ Seed a "bee lawn" (incorporate clovers & other flowers into new or existing lawn).

FRUIT & VEGETABLE GARDENS

- ☐ Plant fruit trees and fruit-bearing shrubs, including **native** species when possible (e.g., blueberries [*Vaccinium*], currants and gooseberries [*Ribes*], elderberries [*Sambucus*], chokeberries [*Aronia*]—species with 🌳 on **Table 2**, page 12).
- ☐ Plant **native** raspberries/ blackberries (*Rubus*); prune in ***early spring*** to create nest sites for stem-nesting bees.
- ☐ For more continuous fruit and flowers, plant ever-bearing varieties of strawberries (*Fragaria*), raspberries, and other fruits.
- ☐ Plant a tea or herb garden and allow plants like basil (*Ocimum*), mint (*Mentha*), and lavender (*Lavendula*) to flower; most herbs do very well in containers if space is limited (see **Table 2**, page 12).
- ☐ Plant bee-pollinated vegetables like squash (*Cucurbita*) and tomatoes (*Solanum*) **and** allow pollinator-attractive culinary garden plants—such as lettuce (*Lactuca*) and mustard (*Brassica*)—to bolt in order to provide additional floral resources (see **Table 2**, page 12).
- ☐ Avoid pesticide use on fruit and vegetable crops; manage pests by using prevention strategies (e.g., crop rotation or selection of resistant varieties) and non-chemical pest control methods (e.g., hand-picking or insectary plantings to promote beneficial insects for natural pest control).

COMMUNITY ACTION

- ☐ Organize a neighborhood **native** plant or seed exchange (**never** share non-native plants that are aggressive / potentially invasive).
- ☐ Create habitat in community hubs (e.g., libraries, post-offices, schools, or senior centers) or in unused spaces like sidewalk medians.
- ☐ Volunteer with a local park to improve habitat (e.g., removing invasive species or collecting wildflower seeds).
- ☐ Provide signage to explain your pollinator conservation actions to your neighbors.
- ☐ Host a tour of your pollinator friendly yard or garden.
- ☐ Talk about pollinators and their habitat needs to your neighbors, friends, family, local businesses, schools, library, church, etc.
- ☐ Talk to your city officials or local colleges about signing a bee friendly resolution and/or getting certified as a Bee City USA or Bee Campus USA.
- ☐ Participate in a community science project, such as bumble bee or monarch monitoring (see *Resources*, page 11).

Print additional copies of this and other habitat assessment tools at: xerces.org/habitat-assessment-guides.

Xerces Society Recommended High Value Plants for Pollinators

★ **POLLINATOR "SUPERFOODS"**—Certain native plants are known to provide exceptional forage for a wide variety of bees and other pollinators, including monarchs. See table below for a list of some of these plants.

FOOD FOR SPECIALIST BEES—Many native bees are "specialists," only collecting pollen and other resorces from specific plants. See table below for a list of plants known to provide food for a number of specialist bees.

LEPIDOPTERA HOST PLANTS—The caterpillars of many butterflies and moths can only feed on specific plants. For example, great spangled fritillary larvae only feed on violet leaves. Some plants support an amazing diversity of lepidoptera; e.g., oaks support hundreds of butterflies and moths species. Since most native plants support at least one butterfly or moth, we use for a genus supports over five species ***OR*** one species that doesn't eat anything else.

NOTE: *These lists are not exhaustive—see Resource section to identify additional native plants for your site. Some of these plants may not be appropriate for every region/site.*

TABLE 1: SUPERFOODS & HOST PLANTS

HIGH VALUE PLANTS Appropriate for *Most* Regions

Native Wildflowers

- *Agastache* [giant hyssop]—★
- *Asclepias* [milkweed]—★
- *Cirsium* [thistle (native)]—★
- *Echinacea* [purple coneflower]—★
- *Euthamia* [goldentop]—★
- *Helianthus* [sunflower]—★★
- *Lupinus* [lupine]—
- *Monarda/Monardella* [beebalm]—★★
- *Penstemon* [beardtongue]—★
- *Ratibida* [coneflower]—★
- *Salvia* [sage]—
- *Solidago* [goldenrod]—★★
- *Symphyotrichum* [aster]—★★
- *Verbena* [vervain]—★
- *Viola* [violets]—★

Native Shrubs & Trees

- *Acer* [maple]—★
- *Amelanchier* [serviceberry]—★
- *Amorpha* [leadplant/false indigo]—★★
- *Ceanothus* [wild lilac]—★★
- *Cercis* [redbud]—
- *Cornus* [dogwood]—★
- *Pinus* [pine]—
- *Prunus* [wild plum]—★★
- *Quercus* [oak]—
- *Rhus* [sumac]—
- *Ribes* [currant]—★
- *Rosa* [wild rose]—★★
- *Rubus* [raspberry/blackberry]—★
- *Salix* [willow]—★★
- *Sambucus* [elderberry]—
- *Spiraea* [spirea/meadowsweet]—★
- *Vaccinium* [blueberry/cranberry]—★★
- *Viburnum* [arrowwood/viburnum]—★

Native Grasses

- *Andropogon* [bluestem]—
- *Bouteloua* [grama]—
- *Carex* [sedges]—
- *Elymus* [wheatgrass, wildrye]—
- *Hierochloe* [sweetgrass]
- *Koeleria* [Junegrass]—
- *Muhlenbergia* [muhly]—
- *Schizachyrium* [little bluestem]—
- *Sporobolus* [dropseed]—

HIGH VALUE PLANTS for *Specific* Regions

Pacific Northwest

- *Baccharis* [coyotebrush]—★
- *Berberis* [barberry]—★★
- *Clarkia* [clarkia]—★★
- *Cleome* [bee plant]—★
- *Fragaria* [strawberry]—★
- *Grindelia* [gumweed]—★★
- *Helenium* [sneezeweed]—★
- *Phacelia* [phacelia]—★★
- *Rhamnus* [buckthorn]—
- *Sidalcea* [checkerbloom]—★

Great Plains & Intermountain West

- *Callirhoe* [poppymallow]—★
- *Dalea* [prairie clover]—★★
- *Ericameria* [goldenbush, rabbitbrush]—★
- *Eriogonum* [wild buckwheat]—★
- *Geranium* [wild geranium]—★
- *Heterotheca* [false goldenaster]—★★
- *Machaeranthera* [tansyaster]—★
- *Oenothera* [evening primrose]—★
- *Sphaeralcea* [globemallow]—★★
- *Vernonia* [ironweed] —★★

Great Lakes & Northeast

- *Cephalanthus* [buttonbush]—★
- *Dalea* [prairie clover]—★★
- *Eutrochium* [joe pye weed]—★
- *Ilex* [holly]—★★
- *Liatris* [blazing star]—★
- *Packera* [ragwort]—★
- *Pycnanthemum* [mountain mint]—★
- *Silphium* [cup plant]—★
- *Zizia* [Alexanders, zizia]—★★
- *Carya* [hickory]—

Southwest & California

- *Arctostaphylos* [manzanita]—★★
- *Baccharis* [coyotebrush]—★
- *Berberis* [barberry]—★
- *Bidens* [beggarticks]—★
- *Eriogonum* [wild buckwheat]—★
- *Grindelia* [gumweed]—★★
- *Larrea* [creosote bush]—★★
- *Monardella* [monardella]—★
- *Phacelia* [phacelia]—★★
- *Salvia* [sage]—

Midwest & South Central

- *Boltonia* [doll's daisy/false aster]—★★
- *Chamaecrista* [partridge pea]—★
- *Eutrochium* [joe pye weed]—★
- *Helenium* [sneezeweed]—★
- *Liatris* [blazing star]—★
- *Pycnanthemum* [mountain mint]—★
- *Silphium* [cup plant]—★
- *Tillia* [basswood]—
- *Verbesina* [wingstem]—★
- *Zizia* [Alexanders, zizia]—★★

Southeast & Mid-Atlantic

- *Baptisia* [wild indigo]—★
- *Coreopsis* [tickseed]—★
- *Desmodium* [tick-trefoil]—
- *Eutrochium* [joe pye weed]—★
- *Gaillardia* [blanketflower]—
- *Helenium* [sneezeweed]—★
- *Hibiscus* [rosemallow]—★
- *Ilex* [holly]—★★
- *Liatris* [blazing star]—★
- *Vernonia* [ironweed]—★★

GROWTH FORMS: Wildflower/Forb ( ) Shrub/Tree ( ) Grass/Sedge ( )

TABLE 2: EDIBLE LANDSCAPING PLANTS WITH VALUE TO POLLINATORS

- *Abelmoschus esculentus* [okra]
- *Allium**† [chives, garlic, leek, onions, shallot]
- *Amelanchier*† [juneberry, serviceberry]
- *Asimina*† [pawpaws]
- *Anethum graveolens** [dill]
- *Brassica** [broccoli, cabbage, cauliflower, kale]
- *Calendula* [calendula]
- *Capsicum*† [peppers (bell/chili, habanero)]
- *Castanea*† [chestnut, chinquapin]
- *Citrullus* [pine melon, watermelon]
- *Citrus* [lemon, lime, tangerine]
- *Coriandrum sativum** [coriander/cilantro]
- *Corylus*† [hazelnut]
- *Cucumis* [cucumber, melon]
- *Cucurbita*† [pumpkin, squash]
- *Diospyros virginiana*† [common persimmon]
- *Fagopyrum esculentum** [buckwheat]
- *Foeniculum vulgare** [fennel]
- *Fragaria*† [strawberry]
- *Helianthus annuus*† [sunflower]
- *Lavandula* [lavender]
- *Malus*† [apple, crab apple]
- *Matricaria** [chamomile]
- *Mentha**† [mint]
- *Ocimum** [basil]
- *Opuntia*† [prickly pear]
- *Origanum vulgare** [oregano]
- *Passiflora*† [passionfruit]
- *Persea americana* [avocado]
- *Phaseolus*† [bean (common, scarlet runner, wild)]
- *Prunus*† [almond, apricot, cherry, peach, plum]
- *Pyrus* [pear]
- *Ribes*† [currant (black, golden, red)]
- *Rosa*† [rose (dogrose, hybrid tea, wild)]
- *Rubus*† [blackberry, raspberry]
- *Sambucus*† [elderberry (black, blue, red)]
- *Solanum*† [eggplant, potato, tomato]
- *Vaccinium*† [blueberry, cranberry]
- *Vicia*† [fava bean, vetch]

NOTES: *Must be allowed to bolt/flower †Some or all members of the genus are NATIVE to North America