

PLANT BIODIVERSITY! Growing many kinds of flowers is one way to support beneficial insects that pollinate our crops, gardens and wild places. Here are examples of common Nebraska pollinators (butterflies, bees, beetles, moths, wasps and flies) and the native blooms they depend on for pollen and nectar through the seasons.

spring

Large Beardtongue & Eastern Carpenter Bee

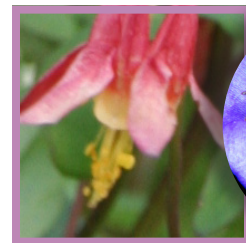
Penstemon grandiflorus & *Xylocopa virginica*



A shiny, mostly black body distinguishes this bee from its cousin, the bumble bee.

Eastern Columbine & Dark Sweat Bees

Aquilegia canadensis & *Lasioglossum* sp.



This type of tiny sweat bee is able to collect pollen from these trumpet-like flowers.

Wild Cherries, Plums & Ichneumonids

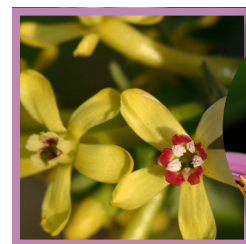
Prunus sp. & *Lissonota* sp.



This beneficial wasp, which generally can't sting, visits *Prunus* flowers for nectar.

Currants, Gooseberries & Bumble Bees

Ribes sp. & *Bombus* sp.

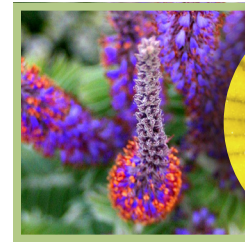


The nectar and pollen of *Ribes* flowers attract emerging bumble bee queens.

summer

Leadplant & Small Carpenter Bees

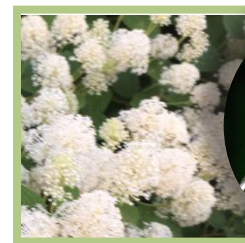
Amorpha canescens & *Ceratina* sp.



Ceratina visit *Amorpha* for pollen as well as nectar, gleaning both protein and carbohydrates.

New Jersey Tea & Syrphid Fly

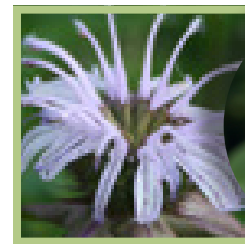
Ceanothus americanus & *Allograpta obliqua*



The second most effective pollinators on the prairie are flies, like this syrphid fly.

Bergamot Beebalm & Bee Fly

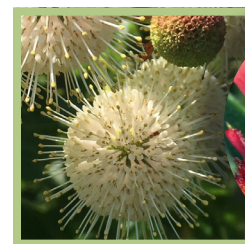
Monarda fistulosa & *Systoechus vulgaris*



Bee flies collect nectar from *Monarda* with their proboscis while hovering over the flower.

Buttonbush & Sunflower Bee

Cephalanthus occidentalis & *Svastra obliqua*



Although known for visiting sunflowers, this bee visits buttonbush for nectar.

autumn

Aromatic Aster & Blue-Green Sweat Bees

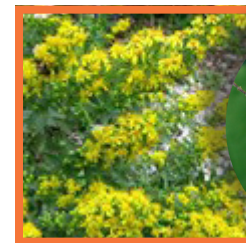
Symphotrichum oblongifolium & *Augochlorella* sp.



Asters provide valuable, late-season nectar for sweat bees.

Wichita Mountains Goldenrod & Soldier Beetle

Solidago 'Wichita Mountains' & *Podabrus flavicollis*



Beetles like this one are important pollinators, and are commonly found on goldenrod.

Dotted Blazing Star & Monarch Butterfly

Liatris punctata & *Danaus plexippus*



Monarchs only feed on nectar, but from a variety of sources including *Liatris*.

Blue Pitcher Sage & Silver Spotted Skipper

Salvia azurea & *Epargyreus clarus*



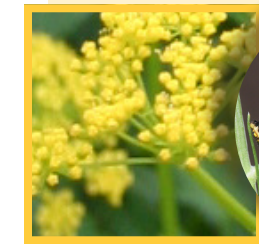
A long proboscis allows silver spotted skippers to visit this *Salvia* for nectar.

DON'T FORGET LARVAL HOSTS

Many insects (especially butterflies) lay their eggs on only certain plants. When they hatch, the larvae eat on the plant's leaves for food before morphing into adults.

Golden Alexanders & Black Swallowtail

Zizia aurea & *Papilio polyxenes*



ADULT

Cream Wild Indigo & Orange Sulphur

Baptisia bracteata & *Colias eurytheme*



ADULT

Butterfly Milkweed & Small Milkweed Bug

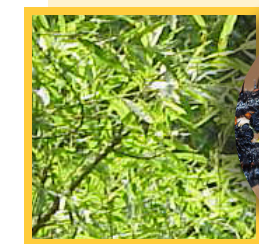
Asclepias tuberosa & *Lygaeus kalmii*



ADULT

Willows & Mourning Cloak

Salix sp. & *Nymphalis antiopa*



ADULT

Insect Photo Credits: Jim Kalisch, UNL Arthropod Library

pollinator garden calendar



spring

EMERGE

Wait until mid-April to tidy up the garden so as to not disturb overwintering insects. Many pollinators awaken from hibernation in spring from dead wood, hollow stems, unmown grass or bare ground, depending on the species. They look for mates and forage on spring flowers.

summer

NEST

Leave a wild spot to host nesting insects. By mid-summer, many pollinators lay eggs on plant leaves or in dead wood, hollow stems, unmown grass or in the ground, depending on the species. Adults and newly-hatched larvae forage on nectar and pollen from summer flowers.

autumn

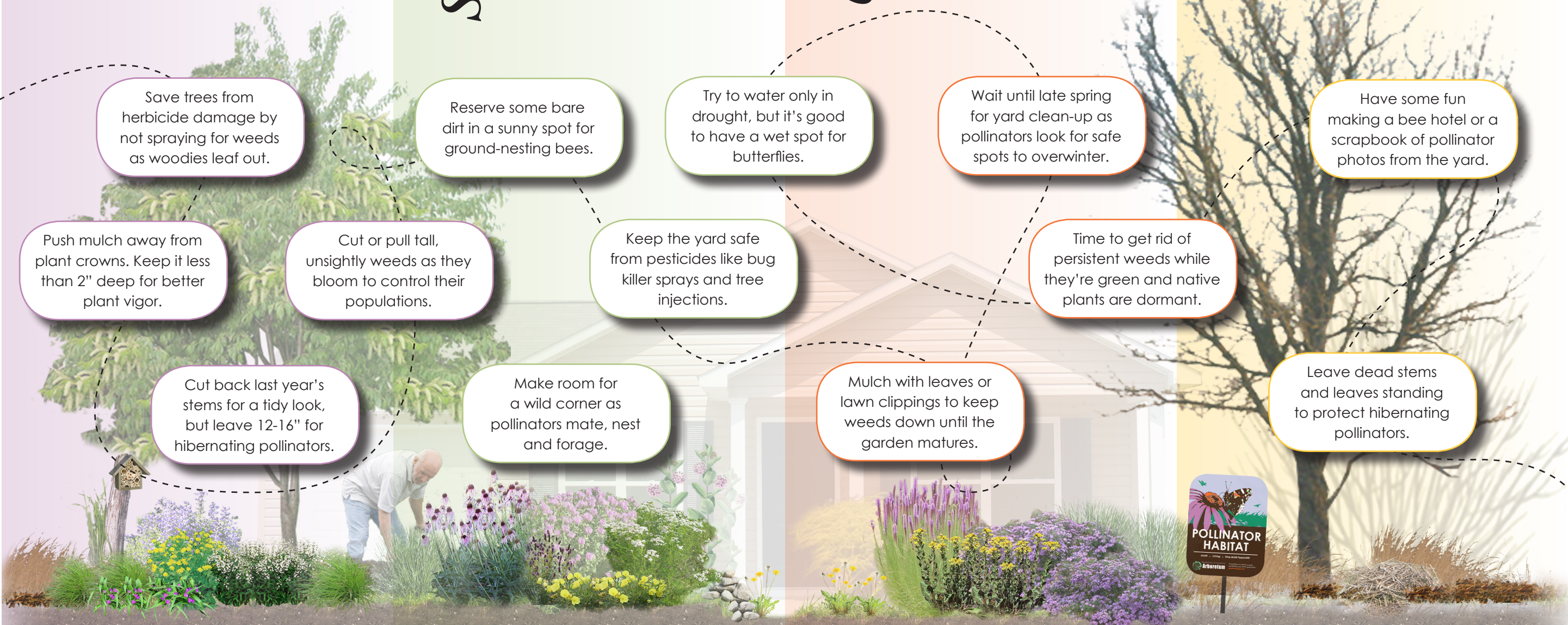
FORAGE

Grow plants like aster, sedum and goldenrod to provide forage when it might otherwise be scarce. Most pollinator larvae and adults are active during autumn and spend their time foraging on late-blooming flowers. Some species have morphed into adults by this time.

winter

OVERWINTER

Try to leave the garden undisturbed until spring so pollinators have safe places to hibernate. Most spend the winter in an inactive state, often tucked away in hidden wild spots like tall grass, shrubs, trees or fence posts, or in piles of leaves or sticks, dead wood or in the ground.



Save trees from herbicide damage by not spraying for weeds as woodies leaf out.

Reserve some bare dirt in a sunny spot for ground-nesting bees.

Try to water only in drought, but it's good to have a wet spot for butterflies.

Wait until late spring for yard clean-up as pollinators look for safe spots to overwinter.

Have some fun making a bee hotel or a scrapbook of pollinator photos from the yard.

Push mulch away from plant crowns. Keep it less than 2" deep for better plant vigor.

Cut or pull tall, unsightly weeds as they bloom to control their populations.

Keep the yard safe from pesticides like bug killer sprays and tree injections.

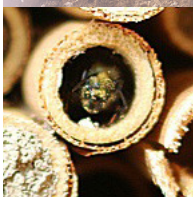
Time to get rid of persistent weeds while they're green and native plants are dormant.

Cut back last year's stems for a tidy look, but leave 12-16" for hibernating pollinators.

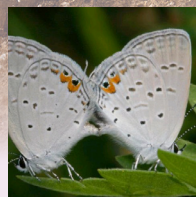
Make room for a wild corner as pollinators mate, nest and forage.

Mulch with leaves or lawn clippings to keep weeds down until the garden matures.

Leave dead stems and leaves standing to protect hibernating pollinators.



Emerging mason bee.



Mating eastern tailed blues.



Tachnid fly eggs on a caterpillar.



Ground bee nests in a lawn.



Hawk moth caterpillar larva.



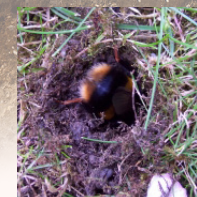
Soldier beetle feeding on pollen.



Foraging paper wasp.



Pearl crescent pupa in a chrysalis.



Bumblebee queen burrow.



NEBRASKA STATEWIDE
Arboretum