Planting for Pollinators in Colorado

Everyone knows about Monarch Butterflies needing milkweed, but many of our other native pollinators have special relationships with plants, too! This presentation will discuss how best to plant for the benefit of our native pollinators.

Relying on public parks as a reservoir for diversity isn't enough anymore. We all need to help at home!



European Honeybees

"generalists". They will pollinate anything, though they may not be as efficient as native bees with some native plants. If you wish to plant for honeybees, they do seem to prefer purple flowers.

- Russian Sage, Perovskia atriplicifolia,
- Blue Mist Spirea, Caryopteris clandonensis 'Blue Mist', and
 - Catmint, Nepeta faassenii.
 - These plants are *not* native.



Bumble bees

Bumble bees are a threatened species.

 Plant native bunch grasses like switchgrass, grama grass, and little bluestem for bumble bee nesting sites.

•Bumble bees' vibration frequency is perfect to "buzz pollinate" your tomato plants!





And More Bees...

Many other native bees have special relationships with native plants:

- •The Cucurbit Bee pollinates your Squash-type plants. This little bee will even sleep in the squash blossoms at night!
 - The Globe Mallow Bee needs Globe Mallow,
 - The Sunflower Bee specializes in gathering nectar and pollen from Sunflowers.



Let's talk about Keystone Plants

Keystone plants are the ones that support the greatest number of pollinators.

Entire ecosystems can rise on the presence keystone plants.

- •Trees are the best keystone plants: Oak, Chokecherry, Native Plum, Willow, Cottonwood, Aspen, even Pines host hundreds of different moths & butterflies!
 - Blackberry 102 moths & butterflies
 - Native Rose 91 moths & butterflies
 - Native Goldenrod 79 moths & butterflies
 - Sunflowers 69 moths & butterflies
 - Strawberry 66 moths & butterflies
- •Be prepared to tolerate a little munching on your plants to allow your butterfly larvae to grow!

Specialist Butterflies

Many butterflies have specific host plants, or a group of plants that they need to complete their life cycle.



Black Swallowtail Butterflies' native host plants are toxic, but it has adapted to also utilize culinary herbs like Dill, Parsley, Fennel and Cilantro. Plant these to support Swallowtails!

The Red Admiral





Red Admiral Butterflies prefer plants in the Nettle family as their host plants. Spotted Deadnettle, *Lamium maculatum*, is a shade tolerant groundcover that you may find at your local nursery.

Checkered Skippers





Checkered Skippers need plants in the Mallow Family, like Prairie Winecups, Globe Mallow, and Hollyhocks.

And more Skippers...



Many other Skipper Butterflies need native grasses to nest in and feed on. Skippers are an intermediate species. They have characteristics of both moths and butterflies.

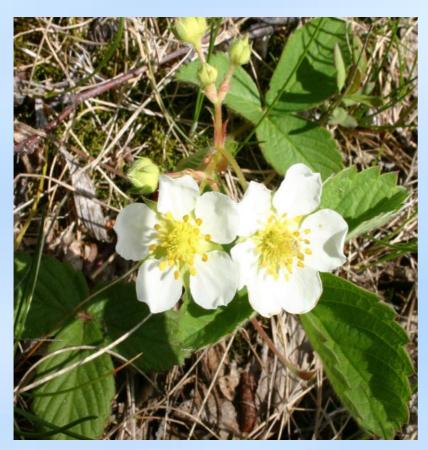
Fritillaries





Fritillary Butterflies need Violets, and some can also use our native Flax, Linum lewisii.

The Gray Hairstreak





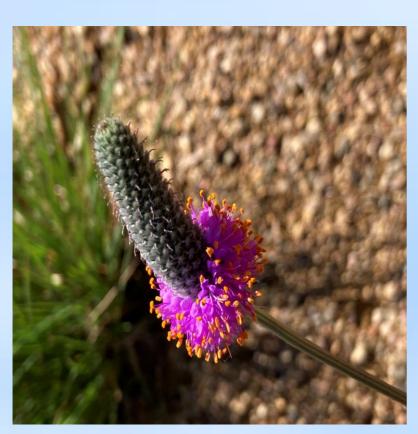
Gray Hairstreaks will use Mints, Legumes, Strawberries, and Mallows as their host plants.

The American Lady



American Lady Butterflies prefer Pearly Everlasting and Pussytoes.

Reakirt's Blue





Reakirt's Blue Butterfly prefers plants in the legume family like Purple Prairie Clover.

A Real Specialist – The Hackberry Emperor





The Hackberry Emperor relies on Hackberry Trees.

The Clouded Sulphur



Clouded Sulphur Butterflies like Golden Banner, Clovers and Vetches.

(Note: Golden Banner can cause skin irritation.)

The Two-Tailed Swallowtail



The Two-Tailed Swallowtail needs Chokecherry and other Cherries.

Weidemeyer's Admiral





Weidemeyer's Admiral Butterfly likes Aspen, Willow, Cottonwood, Chokecherry, and Serviceberry.

The Gorgone Checkerspot



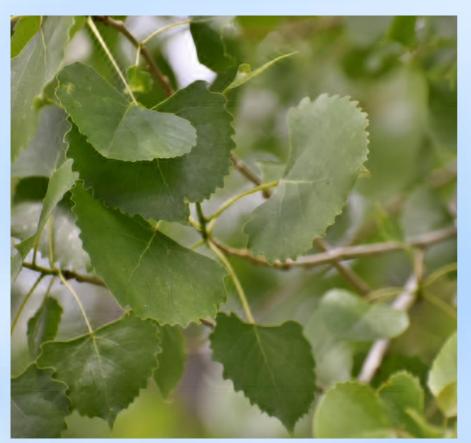
The Gorgone Checkerspot needs Sunflowers.

The Mourning Cloak



The Mourning Cloak Butterfly uses Willow, Birch, Aspen, Cottonwood, Elm and Hackberry as its host plants.

The Viceroy





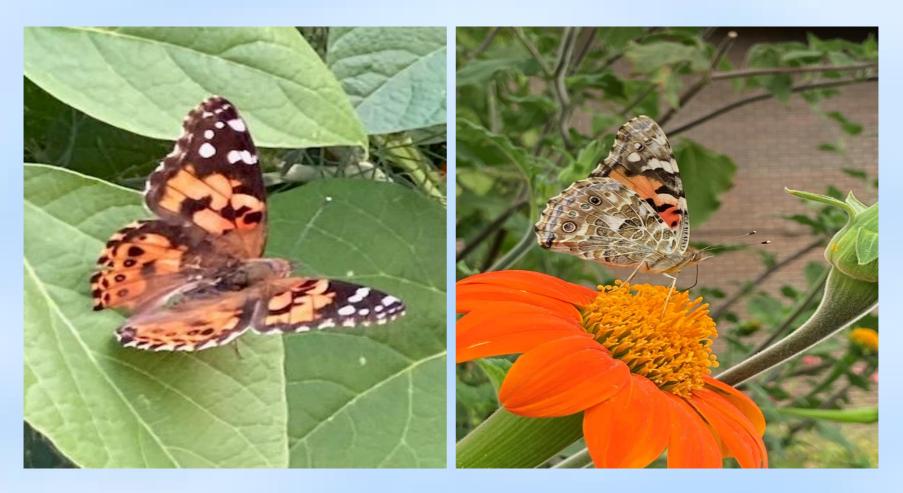
Viceroy Butterflies use Cottonwoods and Aspen for their host plant.

Another Real Specialist The Colorado Hairstreak



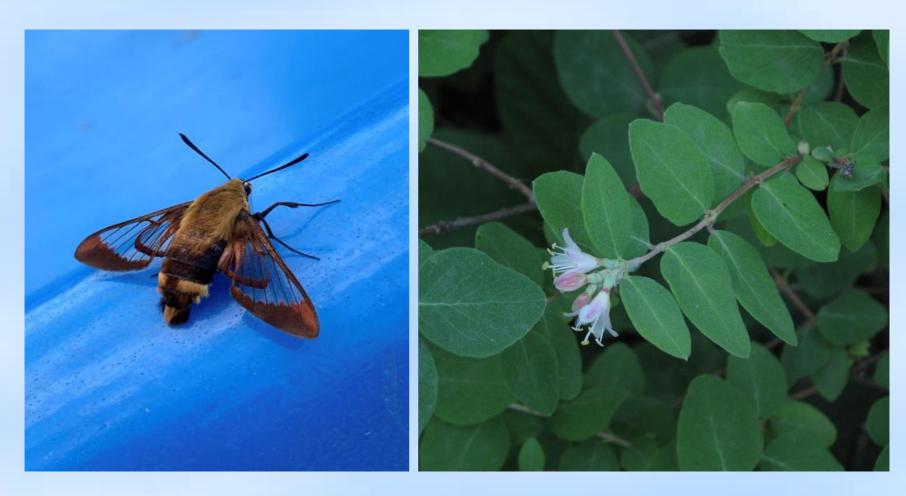
The Colorado Hairstreak (our state butterfly) needs Gambel Oak.

And the not so picky...



Painted Lady Butterflies use Thistles, Legumes, Mallows and many other plants as their host plants.

And a Neat Moth!



The Snowberry Clearwing Moth won't eat your clothes! This moth eats Western Snowberry and plants in the Symphoricarpos Genus.

Here are some additional things to

•When planting for pollinators, plant an assortment of at least 15 different plants. This helps to reduce the spread of disease by attracting a good variety of pollinators.

•Consider the full life cycle of butterflies. Provide caterpillar food (i.e. host plants) but also provide nectar flowers. Adult butterflies especially like flat-topped flowers for easy landing

•Do not use weed barrier. Many caterpillars need to drop to the ground and burrow in to complete their life cycle.



And more to know:

- Put plants, including trees, in beds rather than in lawns, as mowing can also harm caterpillars.
- •If possible, let dried stalks, leaves, and stems remain through the winter to give bee and butterfly larvae places to hide until warm weather returns.
- •Do not use chemicals in your yard as it will harm beneficial insects and birds. Native plants are meant to grow here and have long-standing relationships with our pollinators. A little nibbling here and there is okay, and you'll get beautiful butterflies in return!
- Native plants do not need heavily amended soil. Rich soil can cause floppy, short-lived plants. If you have heavy clay soil, amend a little with 15% pea gravel and 10% compost. If you have really sandy, fast draining soil, amend with 3% compost.
- •When in doubt, use native plants! Many native bees, butterflies and moths need native plants to complete their life cycle.

Resources

Coloradofrontrangebutterflies.com is a great website to learn about butterflies and their host plants.

The book "Butterflies of the Colorado Front Range", by Janet R. Chu and Stephen R. Jones, is a good field guide.

Nativeplantfinder.nwf.org is a great site to search for plants that are pollinator favorites.

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