

A close-up photograph of a Broad-tailed hummingbird hovering near a large yellow flower. The bird is in profile, facing right, with its long beak extended towards the flower. The background is a soft, out-of-focus yellow. The text 'Broad-tailed hummingbird' is written in a small, italicized font in the upper left corner.

*Broad-tailed  
hummingbird*

# WYOMING HOSTS MANY NATIVE POLLINATORS

*By Brenna Marsicek*

Wyoming is home to many native bees, butterflies, and other pollinators, which are perfectly adapted for our cold, windy weather and short growing seasons.

Pollination, or the process of moving pollen grains to the stigma of a plant, allows flowers and plants we love to reproduce. A short description of a few Wyoming pollinators is below; visit [wyomingbiodiversity.org/pollinators](http://wyomingbiodiversity.org/pollinators) to learn more!

## **Bumble Bees (*Bombus spp.*)**

Who can't help but admire these gentle giants? Bumble bees are large-bodied, hairy insects that are incredibly efficient pollinators thanks to their fuzzy bodies' ability to grab pollen and buzz pollinate. Buzz pollination is the process of the bee shaking a flower with such vigor that the pollen is both shaken and sucked out of the flower by gravity and static electricity. Buzz pollination also self-pollinates flowers such as tomatoes. This process makes that classic loud buzz noise for which bees are so well known. There are 22 known species of bumble bees in Wyoming and can often be

identified by the color pattern on their bodies.

## **Leafcutter Bees (*Megachile spp.*)**

These small, solitary bees are gray or black with white or tan coloring. They use scissor-like mouthparts called mandibles to cut circles out of leaves (oftentimes lilacs, roses, and alfalfa). They carry these leaf pieces back to their nests to build walls around and between egg chambers, which are created in long, narrow crevices or tubes. The damage to the plant is minimal and mostly aesthetic; however, one should note that a root weevil can cause similar



*White-shouldered bumble bee (Bombus apositus).*



*Leafcutter bee (Megachile spp.)*

looking damage to leaves (but triangular, not round-shaped) but have a very negative impact on the plant. Be sure to check with a local entomologist or a University of Wyoming Extension office to find what is cutting holes in the leaves. Leafcutter bees are commonly used in commercial alfalfa seed production in northern Wyoming.

### **Mason Bees (*Osmia spp.*)**

Mason bees are small-bodied with metallic black, green, or blue bodies. They are also solitary and build nests in crevices or tubes and use mud to seal each egg chamber. They're extremely efficient pollinators, in part because they can be active in rather cold weather and on cloudy days, which means they can collect pollen for longer in a single day and more frequently than other types of insects. You can encourage

them in your garden by providing flowering plants and hollow chambers for the female to lay eggs in.

### **Sweat Bees**

This group of tiny bees is known for landing on one's arm during the heat of the summer to lick the salt and water in perspiration. They are commonly metallic green but can also be black, gray, or other colors. Scientists suspect there is huge diversity in this group of bees, but because they're so small and difficult to identify (many require a microscope), not much is known about their numbers and species diversity.

### **Brush-footed Butterflies**

Brushfoots refer to a group of butterflies that use their two front legs not for walking or standing but rather for tasting and smelling. These

legs are somewhat shorter and have little hairs, hence this group's name. There are over 4,000 species of brush-footed butterflies across the globe. In Wyoming, there are approximately 60 species. These include fritillaries, monarchs, checkerspots (see photo page 10), and admirals. Caterpillars of butterflies are voracious eaters and consume lots of plant material, but as adults they drink nectar and accidentally collect pollen along the way.

### **Parnassian and Swallowtail Butterflies**

This group of butterflies is less diverse than the brushfoots. There are 11 species in this group found in Wyoming, including the Rocky Mountain Parnassian, the Anise Swallowtail, and the Western Tiger Swallowtail.

Photo by Dorothy Tuthill



*Mason bee (Osmia spp.).*

Photo by Dorothy Tuthill



*Sweat bee*

Photo by John Nordin



*Anicia Checkerspot (Euphydryas anicia)*

Photo by John Nordin



*Western Tiger Swallowtail (Papilio rutulus)*

Photo by Marcia Bradley



*White-lined Sphinx Moth (Hyles lineata)*

Shutterstock photo by Kenneth Rush



*Calliope hummingbird*

### **Sphinx Moths**

This moth has earned three different nicknames: hawk moth, sphinx moth, or hummingbird moth. It is mostly brown, gray, and white with a streak of orange, pink, or peach on its hindwings. This bright coloring is unusual for moths, and indicates it is active during daylight hours – usually at dusk. This caterpillar is the

well-known gardening pest – the tomato hornworm. However, if one can tolerate some damage to garden plants, it's worth the outcome with this beautiful pollinator.

### **Hummingbirds**

One of the most charismatic, vertebrate pollinators is the hummingbird. Wyoming is home to three

species (rufus, broad-tailed, and calliope). These incredible birds use long tongues and beaks to drink nectar from flowers – commonly long, tubular shaped, and red. Hummingbirds can easily maneuver in many directions and can hover by a flower by beating their wings approximately 50 beats per second.

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