Spotting Butterflies

How, when and where to find Lepidoptera in the Cascades and Olympics

Western tiger and pale tiger swallowtail butterflies "puddling." When looking for for butterflies along the trail keep an eye on moist areas or meadows with flowers.

By Andrew Engelson
Photos by Idie Ulsh

Butterflies are the teasers of wildlife. There you are, hiking a trail through a sun-dappled alder grove when a flash of yellow and black flutters into your view. The butterfly settles on a salmonberry leaf, and just as you've pulled out your camera, it silently flits away.

But once you know a few species commonly found in the Cascades and Olympics, you'll be hooked trying to identify them.

I recently spoke with Idie Ulsh, founding president of the Washington Butterfly Association, about where, how and when to look for butterflies in our mountains. Ulsh is an accomplished photographer, and her photos grace the fantastic guide book, *The Butterflies of Cascadia* by Robert Michael Pyle. Ulsh generously allowed *Washington Trails* to publish photos of 28 species found in the Cascades or Olympics.

The life of a butterfly

Butterflies have four stages of life: egg, larva, pupa and adult. Most butterflies are "on the wing"—in the adult stage—from March to early October.

"A butterfly's lifespan generally corresponds with the size of the butterfly," says Ulsh. The tiny blues often seen in the mountains generally only live about 10 days. Some species, however, will overwinter in the egg, pupa or chrysalid form (in the cocoon prior to becoming winged adults). A few Northwest species overwinter as adults, and one—the mourning cloak—lives for ten months, and is the longest lived butterfly in North America.

The first thing that butterflies do upon emerging from the chrysalis and unfolding their wings is to breed. In their search for mates, some butterflies "hilltop," or stake out spots on high trees or ridgelines to make themselves more prominent. A butterfly's wing colors serve two distinct purposes. The dorsal, or upperside of the wings, are colorful, and serve to attract mates. The ventral, or underside of the wings generally serves to camouflage the insects. So a butterfly such as the satyr comma has brilliant orange and yellow spots when seen with wings open, and a bark-like texture to confuse predators when its wings are closed.

As adults, butterflies also seek out nectar and water. Butterflies generally find nectar from wildflowers, but some species may nectar on tree sap or even rotting material. Males replenish levels of testosterone by obtaining mineral salts from puddles and streams. This "puddling' behavior in wet places is often a good opportunity to spot groups of butterflies in the high country.

Many species of butterflies are dependent on one or two species of plants for their survival. The red admiral, for instance, is almost exclusively dependent

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The four stages in the life of a pale tiger swallowtail (left to right): egg, larva, pupa, and adult. Butterflies generally emerge into the adult stage between March and October.

mountain butterflies

spotting butterflies on the wing in the Cascades and Olympics

photos by Idie Ulsh
Washington Butterfly Association

This 4-page color insert details 28 butterfly species commonly found in the mountains and on the trails of Washington. Some are found east of the Cascade Crest, some from the west, and some statewide. For more information, consult the guidebook *The Butterflies of Cascadia* by Robert Michael Pyle or visit the Washington Butterfly Association's website at www.naba.org/chapters/nabaws/.

Anicia checkerspot
Euphydryas anicia
According to *Butterflies of Cascadia,* this species is found abundantly on mountain ridges east of the Cascade Crest.

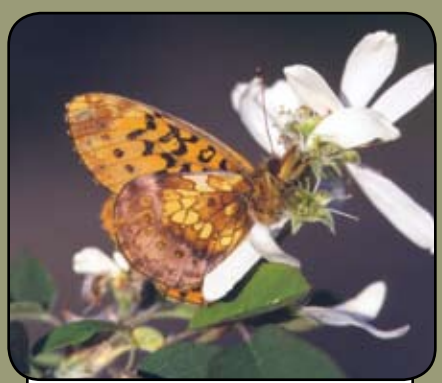
Hoffman's checkerspot
Chlosyne hoffmanni
An exclusively mountain butterfly, this species loves high meadows and moist clearings along the Cascade Crest.

Lorquin's admiral
Limenitis lorquini
Widespread throughout the state, it's named for a gold-rush era French naturalist from California. Peaks July-Aug.

Red admiral
Vanessa atalanta
This lovely butterfly is found in all areas of the state. Its larvae feed almost exclusively on stinging nettles.

Gray hairstreak
Strymon melinus
Often confused with the tailed blue, it's found throughout the state. Breeds in lowlands but will ascend to high country.

Great spangled fritillary
Speyeria cybele
Found in prairies and grasslands from low to mid-elevations, the larvae of this species feast on violets.



Western meadow fritillary
Boloria epithore
The larvae favor violets; adults are found in open clearings and streamsides in Cascades, lowlands and Olympics.

mountain butterflies

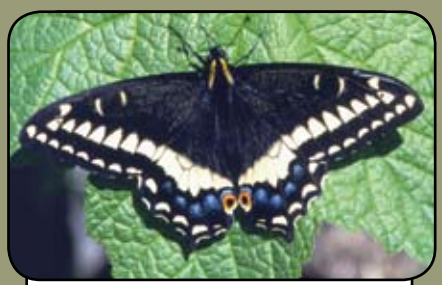
swallowtails and commas

Large and colorful, swallowtails are some of the flashiest and largest butterflies in the state. Some species, such as the anise, are abundant throughout the state, while the Indra is only found east of the Cascade Crest. Look for swallowtails puddling in wet places, nectaring on a variety of flowers, or "hilltopping" on mountain ridges.

Commas are a feat of camouflage—brightly colored on the upperside and bark-like on the underside of the wings. The state's two species are found on both sides of the Cascade Crest.

Anise swallowtail
Papilio zelicaon

Abundant in all areas of the state (except the darkest, deepest forests) this species peaks in May and July–August.

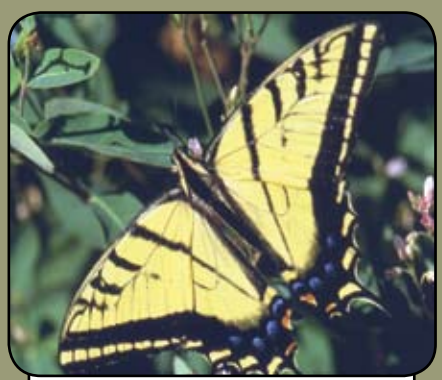


Indra swallowtail
Papilo indra

A lovely and sporadic resident of the eastern slopes of the Cascades. Look for it in canyons, streambanks and along ridges. Adults are on the wing in May.

Pale tiger swallowtail
Papilo eurymedon

Found in open woodlands and places with flowers from lowlands to highest summits. Look for adults May–June.



Two-tailed tiger swallowtail
Papilio multicaudatus

The largest of the butterflies found in Washington is common east of the Cascade Crest, and peaks in June.

Western tiger swallowtail
Papilio rutulus

One of the most common butterflies in the state and most often mislabled "Monarch." Look for them "puddling" in wet places such as streambanks and meadows.

Satyr comma
Polygonia satyrus

Camoflauged beneath, and brightly colored on the upper wings, satyrs are found statewide. Larvae favor nettles.

Green comma
Polygonia faunus

Look in woodlands east and west of the Cascade Crest for this camoflauged wonder. Adults peak Apr.–May, Aug.

butterflies and skippers

Elfins are diminutive—but speedy—butterflies. The Western pine elfin is completely dependent on pines as a food source, while the brown elfin is a generalist happy with a wide variety of plants.

Two exceptionally beautiful mountain butterflies are the mountain parnassian and the mourning cloak. Glassy, translucent wings and bright red dots distinguish the mountain parnassian. Despite its morbid name, the mourning cloak is actually North America's longest lived butterfly (10 months).

Sara's orangetip is an unmistakable beauty with its lacey wings and bright orange bands.

Skippers are a sub-category of butterflies with delta-like wings and speedy, darting flight. The woodland skipper is an abundant species, found in almost all areas of the state.

Brown elfin
Incisalia augustinus

This tiny species (about an inch across) is found in varied habitats east and west of the crest. Most abundant in April.

Western pine elfin
Incisalia eryphon

Larvae are completely dependent on ponderosa and lodgepole pines; small butterlies found east of the crest.

Mountain parnassian
Parnassius smintheus

Residing at higher elevations, this beautiful, translucent-winged species is dependent on sedums (stonecrop).

Mourning cloak
Nymphalis antiopa

Black on the underside and brown with blue dots and a fringe of yellow, they're common in the Cascades.

Mylitta crescent
Phyciodes mylitta

Very common in all areas of the state, look for mylittas in grassy, open areas. Larvae and adults favor thistles for food.

Sara's orangetip
Anthocharis sara

Common in all open areas, this graceful species has distinctive orange wingtips. Peaks in July in high country.

Woodland skipper
Ochlodes sylvanoides

Skippers are delta-winged cousins of butterflies; this is the state's most common species, found in open areas.

mountain butterflies • • • • • • • • blues

One of the more common butterflies you'll enounter on the trail are the numerous variety of blues.

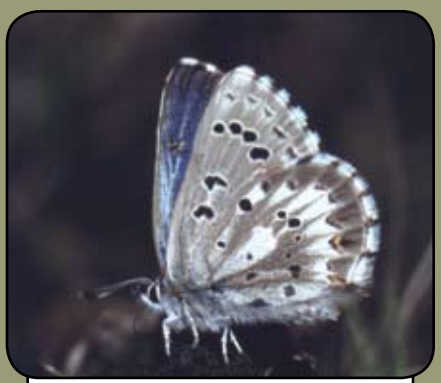
Species may be difficult to distinguish for the beginning observer, but there are a few stand-outs for the careful butterflier.

The arrowhead blue has distinctive white "arrows" pointing toward its abdomen. The Anna's blue, with its finer spots, is a common resident above 3,000 feet elevation. And the Western tailed blue has a tiny "tail" that it's happy to sacrifice to hungry predators.

Upperside (dorsal) wings of the Boisduval's blue.

Anna's blue
Lycaeides anna

The "hiker's blue" is typically found above 3,000 feet in alpine meadows of the Cascades and northeast Olympics.



Arrowhead blue
Glaucopsyche piasus

Resides in deserts, steppe, and forests east of the crest. Least common of blues, distinguished by white "arrows."

Boisduval's blue
Icaricia icarioides

Completely dependent on lupines. Generally found east of Cascade Crest and the northeastern Olympics.

Dotted blue
Euphilotes enoptes

Dependent on buckwheat, the dotted blue is found along the eastern crest of the Cascades. On the wing June–July.

Lupine blue
Icaricia lupini

Completely dependent on lupines, these blues are found east of the Cascade Crest and in the northeastern Olympics.

Melissa's blue
Lycaeides melissa

Found deserts and steppe, the Melissa's is similar to Anna's, but almost always found below 3,000 feet.

Western tailed blue
Everes amyntula

This species uses antennae-like tails to distract predators. Found in moist habitats, from low elevations to subapline.

on stinging nettles. Red admiral larvae eat nettle leaves, and the adults sip the flower's nectar. Pine elfins are dependent on ponderosa and lodgepole pine, while Boisduval's blues are completely dependent on lupines.

Success for these species requires laying eggs on the host plant. Amazingly, a female butterfly can "taste" a plant with her feet, and once she's found the right species, she'll deposit her eggs.

Finding and identifying butterflies

Telling a butterfly from a moth is one of the first steps of identification. Ulsh says that this can be done fairly easily by looking at the insect's antennae. "In North America, all moths' antennae are either feathered or tapered to a fine point," she says. "All butterflies have a knob or swelling at the end of the antennae." Moths are generally nocturnal, while butterflies are active during the day.

The best time to observe butterflies is during full sunlight, from about 10 a.m. to 4 p.m. "Butterflies usually need temperatures of about 60 degrees before they can fly," says Ulsh.

In general, the best way to spot butterflies along the trail is to "look for the two things adults need to survive," says Ulsh. "That is, water and nectar." Where a stream crosses the trail, or in moist meadows, you may find pale tiger swallowtails and anise swallowtails puddling together. Places with abundant flowers—especially the host flowers a certain species is dependent on—are also good bets. Some species favor high alpine country (the mountain Parnassian) while others prefer pine glades (Western pine elfin).

In order to identify a butterfly, first try to get as close as possible. Once a butterfly has landed, Ulsh says to "walk like a robot" with slow and methodical movements. You can usually get within about 6 feet, which is ideal for observation. A pair of binoculars can help, especially those with a close focus feature.

Next, describe the butterfly to yourself. What colors and shapes do you see on the upperside and underside wings? Photographing the butterfly is an excellent way to help with identification.

*Square-spotted blues (*Euphilotes battoides*) mating. Adult butterflies breed and nectar while "on the wing," sometimes living for as briefly as 10 days.*

Some species have minute differences, and even the most expert butterfliers have trouble distinguishing them. But Ulsh says about 70 percent of all butterflies in the state can be identified without netting them. To learn more about butterflies, consider going on a Washington Butterfly Association outing or butterfly count. To find out more, visit www.naba.org/chapters/nabaws/. An excellent resource is the guide book *The Butterflies of Cascadia* by Robert Michael Pyle and illustrated by Idie Ulsh (Seattle Audubon, $29.95, 2002).

Butterflies face ecological threats from the usual threats: pesticides, pollution and loss of habitat among them. "There used to be so many vacant lots where butterflies could find host plants," says Ulsh. "But now that vacant lots are being developed, there's less habitat for many species of Lepidoptera."

One misconception that Ulsh wants to dispel regards monarch butterflies. "There are no monarchs in Washington," Ulsh says of the well-known migratory species. "The western tiger swallowtail is very often confused with monarchs." ♦

Tips for spotting butterflies in the mountains

Look from 10 a.m. to 4 p.m. Butterflies need sunlight to fly.

Peak time "on the wing" is late June through October.

Butterflies are often found near moist areas or flower meadows.

If a butterfly lands, walk slowly and "robotically" toward it.

Think small: Over 50 percent of species are an inch or less across.

Use binoculars to help identify, or take photographs.

Consult a guide: *The Butterflies of Cascadia* by Robert Michael Pyle (Seattle Audubon, $29.95, 2002) is the definitive book.

Take a Washington Butterfly Association field trip: visit www.naba.org/chapters/nabaws/ for more info.