



Washington Butterfly Association

G'num*

The newsletter of the Washington Butterfly Association

P.O. Box 31317 Seattle WA 98103
www.naba.org/chapters/nabaws

*G'num is the official greeting of WBA. It is derived from the name of common Washington butterfly food plants, of the genus *Eriogonum*.

WBA Meeting Programs

WBA meetings are held on the first Wednesday of each month. They are held at the UW Center for Urban Horticulture (3501 NE 41st Street, Seattle) and begin at 7:00 p.m. The first fifteen minutes are used for social reception and viewing of displays.

January 21

“Winter Party - Potluck and Gift Exchange”

Saturday, January 21 5pm-10pm

At the home of Jon Pelham:

February 7

“Back from the Brink of Extinction”

Mary Jo Anderson from the Portland Zoo will present a fascinating program on how the Portland Zoo worked with several governmental and environmental agencies to bring back the Oregon Silverspot. This has become a national model. You will never forget this truly amazing story of what can be done if we care and work together.

March 7

“Discovering the Unique Wildlife of Madagascar”

Dave and Jo Nunnallee have recently returned from Madagascar with many tales and photos of the wildlife and natural history of this unique country. Dave's wonderful photographs always make us feel like we joined them on the trip and share in their adventures.

April 4

“Butterfly updates in the South Cascades and the Columbia Basin”

Dr. Robert M. Pyle will discuss the many changes which are taking place in the butterfly populations of the South Cascades and the Columbia Basin area. New discoveries, splits, and the fascinating changes of this region. He will also present his latest book. Dr. Pyle is always a big draw so come early and stay late!

WBA Mission Statement

The Washington Butterfly Association is devoted to scientific understanding and enjoyment of butterflies and their ecology through conservation and education.

Mountain Butterflies of the Cascades and Olympics

The 4-page insert to the August 2006 issue of the Washington Trails Association magazine has been reprinted with the permission of Andrew Engelson and Idie Ulsh. For more information on the activities of WTA, see:

<http://www.wta.org/>

News about the Oregon Silverspot Rearing Program



PORTLAND, Ore. -- The Oregon Zoo has collected more than 8,000 eggs from 32 rare Oregon silverspot butterflies -- by far the most it has ever collected during eight years of

involvement in a captive-rearing program to help save the delicate creatures from extinction.

Previously, the most eggs collected had been 5,200. After a year of care, the zoo will release the endangered butterfly pupae at the Nature Conservancy's 280-acre Cascade Head Preserve, north of Lincoln City, where they will emerge as butterflies.

This year, female silverspot butterflies were collected from Mt. Hebo and induced to lay eggs at the Oregon Zoo's butterfly-breeding facility. The butterfly eggs are collected daily and put into petri dishes where they hatch into tiny larvae.

"Each larva is only about one millimeter long when it hatches," said Mary Jo Andersen, butterfly conservationist. "They look like tiny specks, but when you observe them under a microscope, you can see that they are perfect miniature caterpillars."

These tiny caterpillars are then placed in special jars and cooled in refrigerators during the winter, simulating their winter period of inactivity, known as diapause.

"In the spring, we bring them out of diapause and raise the young caterpillars throughout the summer," said Andersen. "They're fed the rare plant *Viola adunca*, and when they pupate we release them back into the wild, where they emerge as beautiful butterflies."

"This conservation effort is serving as a model for rebuilding an ecosystem," said Tony Vecchio, Oregon Zoo director. "Through the combined efforts of Seattle's Woodland Park Zoo, the Nature Conservancy, and the U.S. Fish and Wildlife Service, we hope to stabilize the butterfly population and bring it back from the brink of extinction."

The Oregon silverspot butterfly is listed as threatened under the U.S. Endangered Species Act. It was once found in coastal grasslands from northern California to southern Washington, but has disappeared from all but a handful of sites along the Oregon coast due to habitat loss and the disappearance of its host plant, the western blue violet.

During the preceding decade, monitoring at Cascade Head revealed a dramatic decline in the number of butterflies seen flying. In years prior to 1992, average numbers exceeded 1,000 adults, but in 1998, only 57 of the butterflies were found.

In 1999, in response to the dramatic decline in the butterfly population, the Oregon Zoo in Portland, Woodland Park Zoo in Seattle, the Nature Conservancy, Washington State Fish and Wildlife, U.S. Fish and Wildlife Service and others took action to save the threatened species and its habitat.

Currently, the Nature Conservancy, working collaboratively with U.S. Forest Service, is restoring the native butterfly habitat through small, controlled burns. Scientists hope that by bringing back the western blue violet -- which silverspot caterpillars depend on for food -- the butterfly population can return to its historic numbers and ranges.

"Our cooperative conservation efforts are being seen more and more as part of the new zoo ethic," said Andersen. "It's becoming quite common for zoos to work outside their traditional captive programs to aid in the protection of species in their natural habitats."

The zoo is also involved with conservation projects involving Taylor's checkerspot butterflies and Mardon skipper butterflies.

According to Vecchio, butterfly populations throughout North America are in decline, with 23 species listed as either endangered or threatened. To address this problem, the Oregon Zoo has supported the Association of Zoos and Aquariums' Butterfly Conservation Initiative, which involves nearly 50 national zoos and aquariums. The initiative is designed to bring together government and non-government agencies to aid in the recovery of imperiled North American butterflies.

The zoo is a service of Metro and is dedicated to its mission to inspire the community to create a better future for wildlife. Committed to conservation, the zoo is currently working to save endangered California condors, Oregon silverspot butterflies, western pond turtles and Kincaid's lupine. Other projects include studies on black rhinos, Asian elephants, polar bears and bats.

(From a press release sent by Bill LaMarche, Oct 2, 2006)

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.

• • • • • 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 butterflies 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

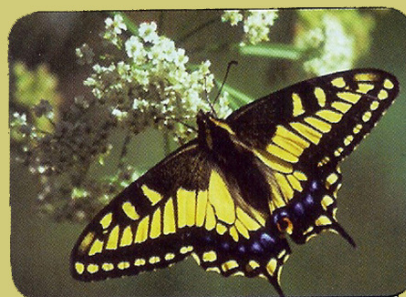
Skippers are delta-winged cousins of butterflies; this is the state's most common species, found in open areas.

mountain butterflies

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

Papilio 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

Papilio eurymedon

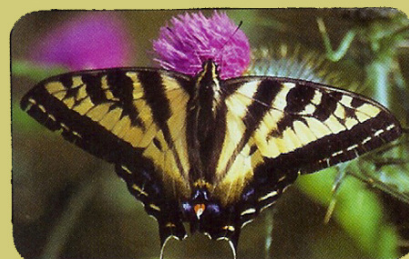
Found in open woodlands and places with flowers from lowlands to highest summits. Look for adults May–June.



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 mislabeled “Monarch.” Look for them “puddling” in wet places such as streambanks and meadows.



Satyr comma

Polygonia satyrus

Camouflaged beneath, and brightly colored on the upper wings, satyrs are found state-wide. Larvae favor nettles.



Green comma

Polygonia faunus

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

mountain butterflies • • • • • blues

One of the more common butterflies you'll encounter 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 butterflyer.

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 subalpine.



Our species profile for this issue is the Green Comma. The anglewings, or commas as they are also known, belong to the very large worldwide family Nymphalidae, the

Brushfoots. In Washington we have four species of anglewings, all of which are included in the genus *Polygonia*. Most anglewings have a fairly similar appearance dorsally, bright tawny-orange punctuated with contrasting black spots. Anglewings are fairly large, and have a characteristic white angle-shaped mark near the middle of the ventral hindwing (VHW); this is the mark for which they are named. The pointed 'elbow' of this angle mark points down and backward, toward the tip of the abdomen. Anglewings are powerful darting flyers, but when flushed often return again and again to the same area, sometimes even landing on their human disturbers. Males often perch and wait for females, and both sexes draw nourishment from animal droppings, rotting fruit, tree sap or decomposing organic material. Anglewings rarely nectar on flowers.

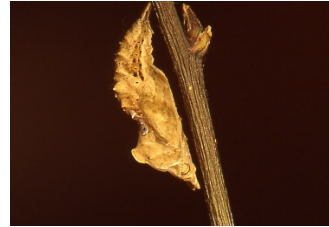


Adults diapause over the winter and as a result all commas have a very long adult life expectancy. The reported flight period for *Polygonia faunus* is mid May through September, but

individuals could also be seen at any time in the winter during any unseasonably warm weather period. An individual butterfly is likely to eclose from its chrysalis in July or August, and will still be flying in June of the following year. The Green Comma is a butterfly of moist wooded areas, and is found throughout the mountainous areas of Washington on both sides of the Cascades. *P. faunus* is absent only from the far western maritime zone and from the dry parts of the Columbia Basin. The Green Comma is a new world species, ranging from British Columbia south to central California, and east to Montana and New Mexico. It also ranges east across Canada and is found in the northernmost midwest, also in New England and south along the Appalachians as far as northernmost Georgia.

Adults typically eclose from their pupae in late July or August. After feeding for a short time they enter a summer dormancy period, spending much of their time

quietly resting in a shady area. As the hot days of summer give way to autumn the Green Comma, together with other species of *Polygonia*, become very active, seeking nutrition to tide them through the winter. During such times anglewings can be abundant in some areas, such as unpaved roadsides and wet spots in the northern forests. As the days become shorter and colder the adult butterflies find protected areas where they will diapause through the winter.



Green Commas again become active with the earliest sunny days of spring. Mating apparently does not take place until late May or early June, and oviposition occurs throughout June in

Washington. The Green Comma uses willows as its larval foodplant, the Sitka Willow, *Salix sitchensis*, apparently being the overwhelming favorite in this region. Eggs are laid singly on the leaves or catkins of the host plant. Egg stacking, common in other *Polygonia*, is not often seen in *P. faunus*. Eggs hatch in 4 to 5 days and the larvae, like most brushfoots, bear flexible branched spines. Green Comma larvae do not build nests and do not leave the host plant, feeding and resting on the under surface of the willow leaf. The larva grows quickly, pupating about 30 days after egg hatch. The brown angular chrysalis is pointed at both ends and constricted in the middle, and hangs from a single attachment (cremaster) at the posterior end. The adult butterfly ecloses about two weeks after pupation.

Most easily identified by the VHW, *P. faunus* males are colored dark brown to almost black, darker on the proximal half of the wing and with a broad gray band on the outer half. Fresh



males have a diagnostic double row of pea green chevrons in the lighter band. Females, less frequently seen, are almost unicolor on the VHW, gradually varying from chocolate brown at the base to dark hoary gray at the extremity. Other species of anglewings have a VHW coloration of cinnamon brown (Satyr Comma) or streaky gray (Hoary Comma). Only the rare *Oreas* Comma is easily confused with *P. faunus*, it having an even darker VHW.

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<https://wabutterflyassoc.org/membership/>