

THE OREGON STATE INSECT

Oregon Swallowtail Butterfly

Papilio oregonius Edwards

INTRODUCTION / HISTORY

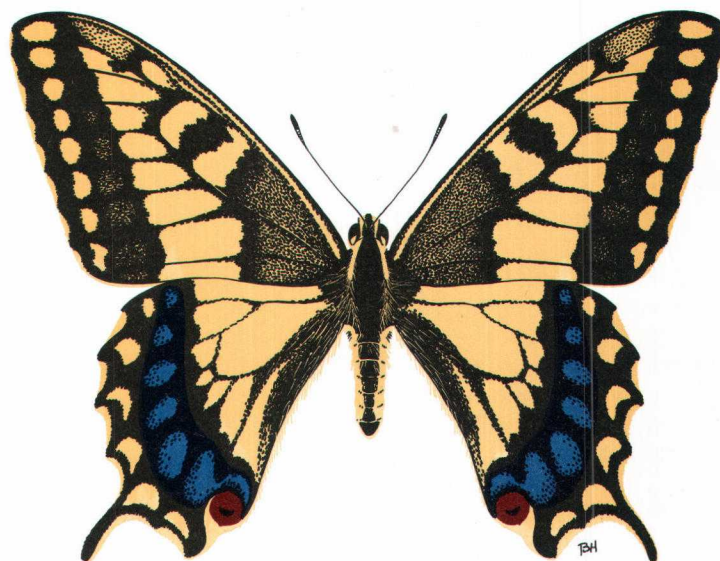
Recognizing aesthetic, educational, and regional values, the Legislative Assembly of the State of Oregon in its 1979 regular session adopted by Senate Concurrent Resolution the Oregon Swallowtail Butterfly (*Papilio oregonius*) as Oregon's official insect.

This strikingly beautiful swallowtail is a true native of the Northwest. It was first described in 1876 from a specimen collected near The Dalles by Henry Edwards—eminent actor of the San Francisco stage and enthusiastic lepidopterist, as well as trustee and vice president of the San Francisco Academy of Sciences. For description and naming, he loaned this specimen to William H. Edwards (no relative), the foremost student of American butterflies.

On June 6, 1977, the U.S. Postal Service brought this splendid butterfly to the attention of the American public through issuance of a postage stamp, one of a set of four illustrating selected American butterflies.

DISTRIBUTION / HABITAT

The Oregon Swallowtail is at home east of the Cascade Mountains in the lower sagebrush canyons of the Columbia River and its tributaries, including the Snake River drainage. Its range extends beyond Oregon into northern California, Idaho, Washington, and southern British Columbia. The larvae feed on tarragon sage (*Artemisia dracunculus* L.)—a non-commercial variety of the tarragon familiar as an herb for seasoning vinegar. This plant is characterized by its deep green color, linear leaves, and sage odor. It grows in clumps as much as 3 feet high. This is a most unusual food plant for this butterfly since its close relatives normally live on members of the parsley family (Umbelliferae). The adults seem to take nectar primarily from blossoms of various native thistles. Wary and strong fliers, they are not easily captured.



LIFE HISTORY / DESCRIPTION

Adult

There are two broods, the first flying from the end of April to June and the second from July to the end of September. Adults of this showy species are recognized by the characteristic swallowtail shape with the border of the hind wing extending into a tail-like process, and by the basically black background extensively marked with yellow. Wing expanse in males is about 3½ inches (84 to 90 millimeters), with females slightly larger at about 4 inches (100 to 104 millimeters). The black basal area nearest the body is heavily dusted with yellow scales, the midsection is divided into yellow patches, and the outer margin is rimmed with yellow spots. On the hindwing, the innermost spot is orange-red and patches of bright blue scales mark the background. This species is easily confused with the Anise Swallowtail (*Papilio zelicaon*). Aside from the fact that *oregonius* is usually larger, the most obvious distinction is color of the abdomen—*oregonius* being predominantly yellow with black stripes, *zelicaon* black with a yellow stripe down each side.

Egg

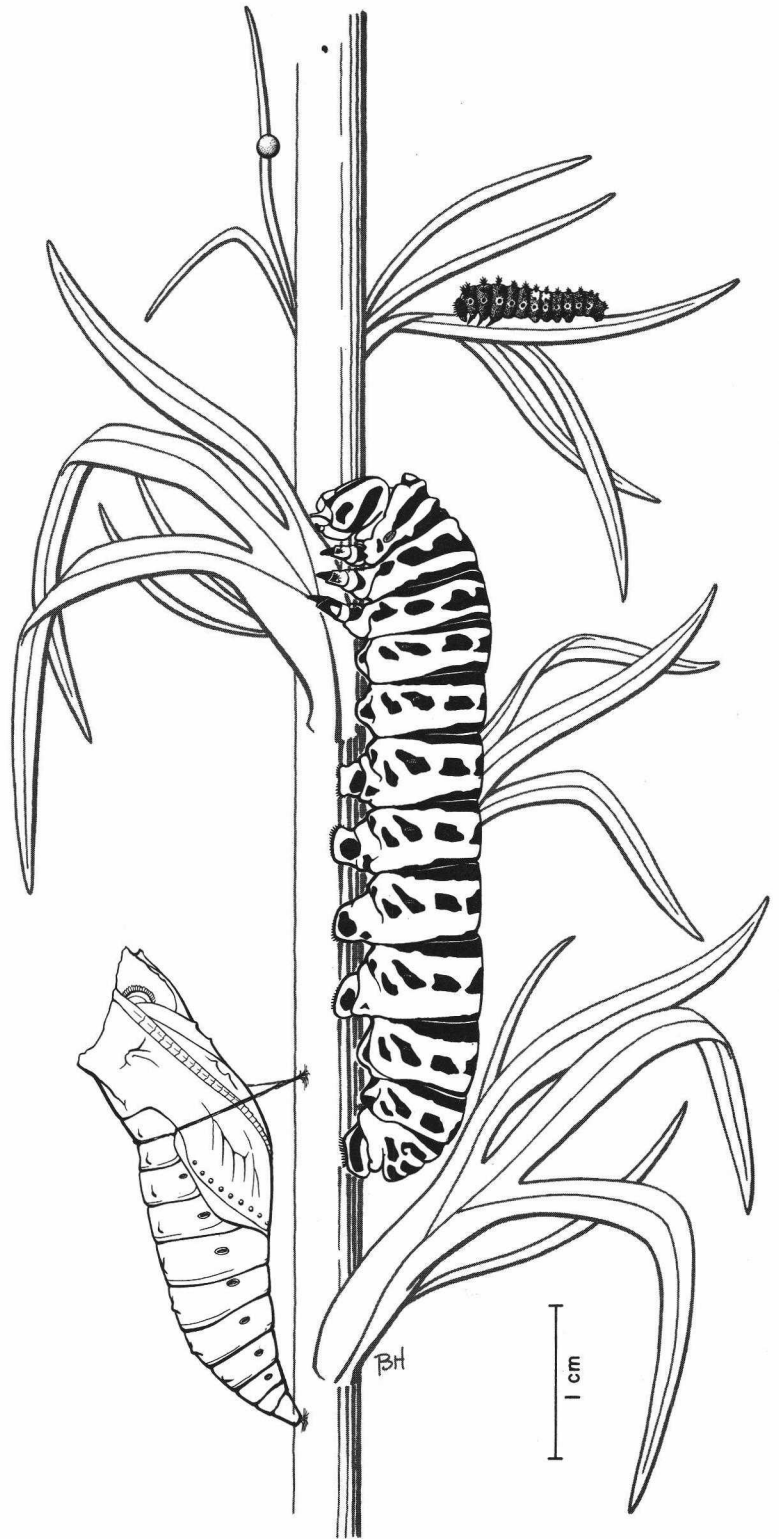
The tiny spherical eggs of *oregonius* are laid singly on the sage food plant. At first they are pearly white, then yellow, and finely pitted on the surface. They hatch in about six days.

Larva

The larvae pass through five growth stages (instars). At each molt, the skin splits down the back, the larva crawls out detaching the head capsule with its legs and then eats the cast skin (exuvium). The first three instars are black (except for a yellow saddle-like patch across the sixth and seventh segments) and roughened, with several rows of tubercles. In the fourth and fifth instars, the tubercles disappear, the body surface is smooth, and the color changes to pale green or bluish green with each segment crossed by a black stripe and black dashes separated by yellow spots. The first segment behind the head has a fold concealing a forked process (osmeterium) which is protruded when the larva is disturbed. A fully grown (fifth instar) larva is about 45 millimeters long.

Pupa

The pupa, with moderate protuberances on the head and thorax, is attached to the stem of the host plant by a silken girdle and a terminal button. Pupae immediately after pupation are light green, then either turn in a few hours to a mottled grayish brown or retain the green color. Some adults emerge in 10 to 15 days. Others, especially in the second generation where overwintering extends pupal life, require eight or nine months.



CREDITS

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