

Notes from a Rogue entomologist:

The Oregon state insect — A tale of pests, pollinators and politics

BY RICHARD J. HILTON

The official Oregon state insect is the Oregon Swallowtail, *Papilio oregonius*, a classic yellow and black butterfly that is native to the Pacific Northwest, primarily found in the Columbia River region where the caterpillars feed on tarragon sagebrush. A brief survey of the state insect list shows that 42 states have state insects and/or state butterflies. In fact there are 11 states that have both a state butterfly and a state insect. Of the 56 insects recognized at the state level, 25 are butterflies and 17 states have the honeybee as their state insect. But, the domesticated honeybee is not native to North America, and the USDA agricultural statistics list honeybees as livestock. While honeybees provide vital pollination services to agriculture as well as honey and wax, would you really want the state mammal to be a cow instead of the beaver (and I say that as someone who definitely enjoys a good barbecued tri-tip)?

My research indicates that the first state insect was the California dog face butterfly recognized informally in 1929. The dog face butterfly is a unique insect that is only found inside California. In 1972, California made the designation official and following this groundbreaking legislative action the 70s experienced a boom in state insects with over twenty states honoring an insect and more than half the time, the domesticated honeybee was the honoree. As part of this trend, a group of folks in Oregon decided that a species of rain beetle, *Pleocoma oregonensis*, which has only been found in Oregon, would make a good candidate for state insect. Rain beetles are large scarabs found in the western US. The beetle's underside is covered with a dense mat of hairs that is quite striking. The male beetles make their mating flight in the fall with the first rains, hence the name. The beetles spend most of their

life in the soil as larval grubs feeding on roots. "Rufus the rain beetle" became the mascot for the cause, and a class of third-graders took up Rufus's banner and went to the Oregon legislature to make the case.

However, it is reported that the legislators responded in a supercilious manner, one observer noted that the schoolchildren were better behaved than the representatives. I should note that most of the information that I have regarding this episode comes from rain beetle proponents, so I expect that their view may not be entirely unbiased. In any event after the cool reception meted out for the rain beetle, the beekeepers entered the fray, pushing the hard-working honeybee for state insect. School children were enlisted on the

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At this point, it came to light that rain beetles had, on occasion, become pests on fruit trees. Normally the rain beetle grubs feed on naturally occurring roots, such as Ponderosa pine, but when the native vegetation is removed and replaced with fruit trees then the grubs will respond accordingly. In a few orchards in Hood River and The Dalles the damage to the fruit tree's roots which had accumulated over time was found to cause significant impacts to tree growth. It is not clear whether "opposition research" was the reason this information became known but, in any case, it was a fatal blow to the rain beetle's chances. Despite the beetle backers attempts to downplay the pestiferous nature of their candidate (in fact, *Pleocoma oregonensis* had not even been listed as one of the pest species), it soon became clear that once the rain beetle had been fingered as a pest that any hope of becoming state

insect was dashed. So the beetle proponents gamely searched for a new candidate to carry the torch. The goal appeared to be twofold: firstly, find an insect that was distinctly Oregon in nature that would highlight our insect diversity; secondly, prevent the honeybee from becoming the state insect. At this point, it seems that feelings were running a bit high on both sides. The situation resembled the old saying about academia, "the politics are so intense because the stakes are so low."

Finally, in 1979, Oregon emerged with the aforementioned Oregon Swallowtail butterfly as our beautiful and unobjectionable insect ambassador. The yellow swallowtail that we see flitting about here in southern Oregon is not our state insect but a more common relative, the western tiger swallowtail. This butterfly is found throughout the western US, the caterpillars are not specific to a certain type of plant, but can feed on a wide variety of trees. Certainly, the rain beetle would have made for a unique state insect—no other state has a scarab beetle. The only other beetles that are state insects are either lady beetles or lightning bugs, not to mention that the rain beetle would have been the only state insect that is also a pest. In the end, despite their unusual nature, the tourism bureau was probably quite relieved that the rain beetle effort was not successful.

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PICTURE TOP: Oregon Swallowtail (*Papilio oregonius*). <http://www.flickr.com/photos/mister-atomic/5824470756/galleries/>

PICTURE BOTTOM: Rain beetle (*Pleocoma puncticollis*). http://labs1.eol.org/pages/17264?text_id=6365308. From the Smithsonian Institution, Copyright © Smithsonian Institution, National Museum of Natural History, Entomology. Some rights reserved. Supplier: National Museum of Natural History Image Collection.

NOTE: For a color photo of a swallowtail butterfly, check out the photo on the masthead (page 1).

Silver-spotted tiger moth

BY TODD MURRAY

Apparently due to our long, wet spring, the Applegate Valley had an abundance of an unidentified fuzzy crawler. I queried many as to the name of this creature, but had no success. Not one to give up, I contacted the Master Gardener, Marsha Waite, who identified it as the "silver-spotted tiger moth." Then I did an online search and found this excellent article by Todd Murray, who gave us his full written permission to reprint it here.

Sioux Rogers



Silver-spotted tiger moth. Order: Lepidoptera; Family: Arctiidae; Species: *ophocampa argentata*

Description and Life History:

Well, I was sitting here wondering which pest to write about, and right here, in front of my nose (or at least right outside my window) is a silver-spotted tiger moth. I thought I was too late for this to be a timely "pest of the month." The silver-spotted tiger moth caterpillar is out right now, munching mostly on Douglas fir, but it can occur on true firs and pines, too. The larvae of the silver-spotted tiger moth are rather unusual looking. Larvae have dark-colored bodies with intermixed tufts of rusty and black hairs. Along the dorsum (the back), there are a series of yellowish tufts. Not many caterpillars out in the early spring look like this, so you shouldn't confuse this critter with anything else. Larvae are present for a good chunk of the year. They hatch out from eggs in late summer and early fall. Larvae feed in aggregations well into and throughout winter depending on warm temperatures. When springtime comes, larvae spread out and increase feeding activity on the tree's needles; this is usually when you will see them and their damage. In mid to late June, larvae seek out



Silver-spotted tiger moth caterpillar. <http://whatcom.wsu.edu/ag/homehort/pest/sstigermoth.htm>.

protected habitats to pupate. The adults of the silver-spotted tiger moth are rather attractive; the wings are brown with white and silver spots. Adults fly and lay eggs from July to August. The eggs are deposited on the foliage of the host trees.

Monitoring: Begin looking for aggregations of silver-spotted tiger moth larvae as early as January. These aggregations usually create a webbed tent to feed in and are isolated to a single branch. It may be difficult to spot that early in the season but continue to look for populations throughout springtime as damage becomes more apparent.

Management: The best Integrated Pest Management (IPM) approach for tiger moths is the "do nothing" method. I don't