

Fireflies and Soldier Beetles

by Lloyd Eighme, retired entomologist

Most people are surprised to learn that we have fireflies in Skagit County. However, our western fireflies do not “fire”, that is they do not make any light. Ours are very similar in structure, but different in color compared to the eastern fireflies. These insects are commonly called fireflies or lightning bugs, but they are neither flies or bugs. They are beetles in the order Coleoptera and the family Lampyridae. Soldier beetles are similar in appearance and habits to the fireflies, but are in the family Cantharidae. Both of these beetles are predaceous, feeding on other insects, so they are considered beneficial.

Our western firefly, Ellychnia and the common soldier beetle, Podabrus, are more abundant in wooded areas, but are seen in gardens and orchards throughout Skagit County. The adults are not strong fliers, but they do fly readily and are most active around fruit trees in bloom in the spring. They appear to be feeding on pollen and nectar and may do some pollinating even though they do not collect pollen like fuzzy bees do. They feed on small insects, especially aphids and the soldier beetles help control aphid populations along with the ladybeetles. The larvae of both the firefly and the soldier beetle live in the leaf litter on the ground and are also predaceous, feeding on small insects, other insect eggs and larvae they find there.

Soldier beetles are brought to the clinic for identification more frequently than fireflies. One soldier beetle that was brought to me at clinic for identification looked different than any I had seen before. It was the usual black color, but the feet were all white. That puzzled me and I took it home for further study. I searched through all of my books and could find nothing about black soldier beetles with white feet. I began to wonder if this could be a new species of soldier beetle found only in Skagit county. I have a five volume set of books on the beetles of the Pacific Northwest and I was able to key it out to the genus Podabras, but no species was described with white feet. Should we publish a description of a new species of soldier beetle and name it Podabruas blancopodia (blanco=white, podia= feet)? The next week at clinic the same person came in who had brought me the white-footed soldier beetle and I asked him to tell where he had found it. He said it flew to a rhododendron bush next to where he was painting his house. And what color was he painting his house? White! Mystery solved. The black soldier beetle had walked across fresh white paint.

Fireflies and soldier beetles have soft bodies and the wing covers are not hardened like most beetles, but are soft and flexible. They are less than 1/2 inch in body length. Our western firefly has a red spot on either side of the thorax which extends out in front over the head. Our soldier beetles are of several sizes, but mostly black, except for the white-footed one!



Soldier Beetle with white paint

