Klamath Network Featured Creature
April 2012

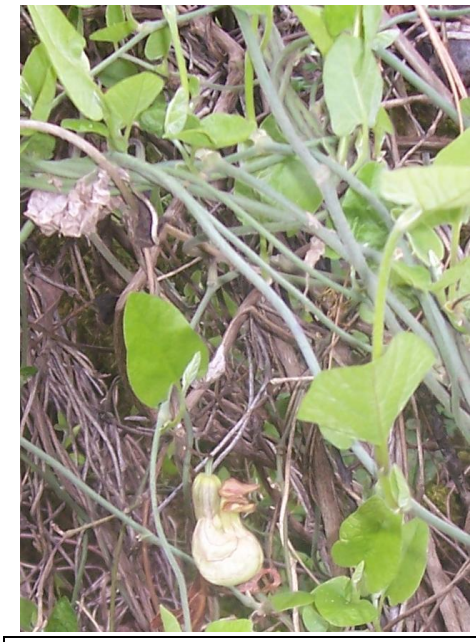
California Pipevine (*Aristolochia californica*)

FIELD NOTES:

General Description: California pipevine is a woody vine with deciduous arrowhead-shaped leaves. Stems can grow to 12 ft (3.5 m) in length. Flowers are composed of fused sepals in a U-shaped tube (resembling a tobacco pipe), petals are absent. The flowers of the pipevine are unique in that they 'grow up.' The purplish-brown flowers appear before the leaves and can be quite small (<1cm), they grow as they mature, eventually reaching 2-4 cm (see image at right). This is the opposite of most plants whose flowers have reached full size when they open. The fruits are a 6 winged capsule, resembling a star fruit. They split open when ripe.

Pollination: Mature flowers emit a foul smell (similar to rotting meat). This smell attracts flies, in particular the fungus gnat. The gnats fly into the flower and become temporarily trapped. The extra time they spend in the flowers enhances the transfer of pollen. The California pipevine is not insectivorous, as one might conclude from watching flies enter the plant and not promptly exiting. However, if you are patient and keep watching, the flies will eventually exit.

Ecology: California pipevine is the host plant to the western swallowtail butterfly. The swallowtail lays its small reddish eggs on the leaves. When the eggs hatch the larvae (caterpillars) feed on the leaves and fruits. In the process of eating the leaves the larvae ingest toxins contained in the leaves. These toxins do not adversely affect the swallowtail caterpillars, but make them poisonous to would be predators. (How cool is that!)



Roland Hall, Whiskeytown NRA



Pipevine fruits © 2008 Neal Kramer

Evolution: Members of the Aristolochiales are known as paleoherbs. The paleoherb hypothesis suggests members of this group have close relations to the earliest flowering plants, and have uncomplicated flowers with a mix of monocot and dicot features.

Habitat: California Pipevines are usually found in partial shade in forest, chaparral, or streamside habitats, where soils tend to be moist.

Distribution: This species is a California endemic!! It occurs in the California Coast Ranges from Monterey Co. north and in the W. Sierra foothills north to Shasta Co.

Where to see it in the Klamath Parks: California Pipevine is only found at Whiskeytown NRA.

References:

Marin Chapter CNPS: http://www.marin.edu/cnps/pipevine.html

Bay natives: http://www.baynatives.com/plants/Aristolochia-californica/

Flora of North America: http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=233500156



A fat caterpillar courtesy of Bay Natives (see link above)