

Field Notes: Early Autumn 2007

Hawthorne & Yellow Jackets

Hawthorne (*Crataegus douglasii*)

This native woody plant is a large shrub or small tree that can grow to thirty-five feet tall, with straight, strong thorns ranging from 0.5 to 1 inch long. Stems are usually clustered from the base or from a point just above the ground surface. Leaves are smooth, long, broad, dark green, shiny, and serrated at the tip. Flowers are globe-shaped and in small clusters produced in the spring. Its fruits are dark reddish-purple to black.

It provides abundant food and cover for birds such as quail. The black-tailed deer, small mammals and other wildlife species feed on the leaves and twigs of young seedlings or trees. Livestock readily eats its leaves.



Hawthorn flowers and berries have been used medicinally as an antioxidant, as a vasodilator to thin the blood, and as a hypertensive.

The dry, seedy fruits were eaten by many coastal Native Americans, both fresh and dried, often with oil or salmon roe. Some California Indians boiled the fruit for a long time in a basket or wood box, mashed them and stored them for winter when they were served with salmon oil or the grease of grizzly bear to relieve some of the dryness of the fruit.

The tree is frequently home to the Northern Shrike (Shrikes are predatory songbirds) who has the distinct habit of using the thorns to impale and even store its prey. The Loggerhead Shrike is likely to use the thorns to hold its prey while ripping it apart for consumption.



Yellow Jackets: order Hymenoptera, suborder Apocrita

... are social insects that have a colony division of labor between undeveloped female workers, males and fully developed female queens. Newly mated queens are the only members of the colony that overwinter. In spring, the queen emerges and begins the establishment of a nest by laying several eggs which hatch and mature to adult workers. This first generation of infertile workers undertakes all tasks of nest expansion including foraging for food, defending the colony entrance and feeding the queen and larvae. The colony size rapidly increases and the number of adults may reach several hundred to thousands by August.

The diet of adult yellow jackets consists mainly of food rich in sugars and carbohydrates, such as plant nectar and fruit. Also, foraging adults search for meat such as insects and fish, which they chew and condition in preparation for larval consumption. The larvae in return secrete a sugary substance that is consumed by the adults. This exchange of food between the adults and larvae is called trophallaxis.

In late summer and fall, the normal food materials are in short supply, so the yellow jackets scavenge for alternate food sources which many times leads to conflicts with humans. Late-season foods include carbonated beverages, juices, candy, ham, bologna, fish, cakes, fruit, vegetables and ice cream. Therefore, open soda containers should be checked carefully prior to consumption; garbage should be quickly removed; lids should be secured tightly; areas where yellow jacket colonies are known to exist should be avoided.

If a colony is disturbed, a person should slowly walk away with both hands covering the face to protect the more sensitive body areas. It is best to walk toward dense vegetation or enter a vehicle to avoid the stinging insects. Swift movements attract more yellow jackets. Yellow jacket stings can result in a life-threatening situation. Persons highly sensitive to yellow jacket venom should always carry a sting treatment kit during outdoor activities.

Due to yellowjackets' aggressive behavior, including stinging, many other insects exhibit mimicry, and bear superficial resemblance to them. In addition to numerous bees and wasps, the list includes some flies, moths, and beetles. Yellow jackets are considered beneficial in the garden as they eat many other pesky insects. The first hard freeze will eliminate most colonies.

