

Yellow jacket an aggressive invader

Kia'i Moku

By Lissa Fox



Voracious, meat-seeking yellow jackets have been known to crash picnics and

barbecues. Enter: the Western yellowjacket (*Vespula pensylvanica*).

Yellowjackets were first reported in Hawaii from Kauai in 1919, but it wasn't until a particularly aggressive race was introduced in 1977 that scientists began to see yellowjackets wreak havoc on the environment.

In their native range, yellowjackets are kept in check by climate among other things. Their underground nests, formed in the spring, typically become dormant by the winter. In Hawaii, however, up to 20% of nests overwinter year after year, growing to the size of that old car your grandmother used to drive.

Yellowjackets, like many invasive species, are diet generalists. The adults feed on nectar but seek out protein for their young. They eat nearly everything they come across—killing beetles, spiders, moths, and caterpillars, and foraging on animal carcasses, even geckos.

Notably, the yellowjacket's prey also includes the native insects and spiders found only on Haleakala. The demise of these endemic species impacts the fragile ecosystem. The yellow-faced bee (genus *Hylaeus*), a native insect that pollinates the silversword, is hunted by the yellowjacket. While yellowjackets may visit silversword flowers occasionally, they are a poor substitute for the yellow-faced bee, whose population has been decimated. Without the native insects to pollinate the silversword, there will not be as many silversword seeds.

Insects are not the only victims of a yellowjacket infestation, picnickers and hunters know about the protein needs of the



A Hawaiian yellow-faced bee visits silverswords in Haleakala. This native insect does a good job of pollinating the silversword, but it is hunted by the Western yellowjacket, a collection of which is seen in the photo at left, which was provided by Forest and Kim Starr. Paul Krushelnycky took the picture above while doing research on the impact of the Western yellowjacket on native insects.

Prevention is the key to keeping invasive species at bay, but Hawaii's defense is threatened by budget woes. Consumers may need to be more aware of where our imports are coming from, and what may be coming with them. If you see something strange, report it.

yellowjacket sometimes called the "meat-bee." Colonies of voracious yellowjackets reach a size that quickly becomes overwhelming, crashing lunches and barbecues. In Haleakala National Park the yellowjackets will swarm and attack the hapless hiker who stumbles on a nest. Humans are not the only ones happy when nests are removed by park staff—the native insects have a chance to recover. But removal is short-lived. The pests are widespread throughout upper elevations of Maui, and eradication of a flying insect is nearly impossible. Prevention is the key.

The aggressive race of yellowjacket responsible for all these problems were stowaways that slipped into Hawaii in a shipment of Christmas trees in the late 1970s. Other Christmas tree hitchhikers include bats, snakes, and frogs. In 2007 inspectors turned back a shipment of Christmas trees infested with wasps. Inspections prevent an untold number of pests from

arriving in Hawaii, but a handful of pests will inevitably slip through.

The protection HDOA provides is under assault with current budget woes. Proposed layoffs of neighbor island inspectors may force cargo shipments to go through Oahu, potentially overwhelming HDOA staff there. Short-handed, HDOA may have to prioritize, leaving our islands even more exposed to the continued onslaught of invasive species.

Anna Mae Shishido of the Maui Plant Quarantine Branch noted that in just one year, "Maui inspectors found 453 insects which are not known to occur on Maui." Unfortunately, with current budget shortfalls, consumers may need to be increasingly aware of where our imports are coming from, and what may be coming with them. Are there stinging ants in your new garden plants? Maybe you've found a funny looking caterpillar that's turned out to be a lettuce killer—if you see something strange, report it by calling 643-PEST.

As for the yellowjackets we've learned to live with—if you have a nest near your home contact the Department of Health's Vec-

tor Control branch on Maui at 873-3560. They'll find and remove the wasps.

Christmas should be full of surprises, but not the biting, stinging kind. To make sure there are no castaways in this year's Christmas tree consider getting a Maui-grown Christmas tree. Pine trees are highly invasive in Haleakala National Park and the Friends of Haleakala National Park will have a pine tree removal project on December 12 (see Web site www.fhnp.org or call Matt Wordeman at 876-1673 or Elizabeth Speith at 264-4757 for more information). By getting a Christmas tree from home you're helping to remove a pest, not bringing one in.

Lissa Fox is the public relations and education specialist representing the Maui Invasive Species Committee, or MISC. "Kia'i Moku," (Guarding the Island) is prepared by the Maui Invasive Species Committee to provide information on protecting the island from invasive plants and animals that can threaten the island's environment, economy and quality of life.