



Foothills

Nature Notes

CITY OF PALO ALTO • COMMUNITY SERVICES DEPARTMENT • OPEN SPACE, PARKS AND GOLF DIVISION

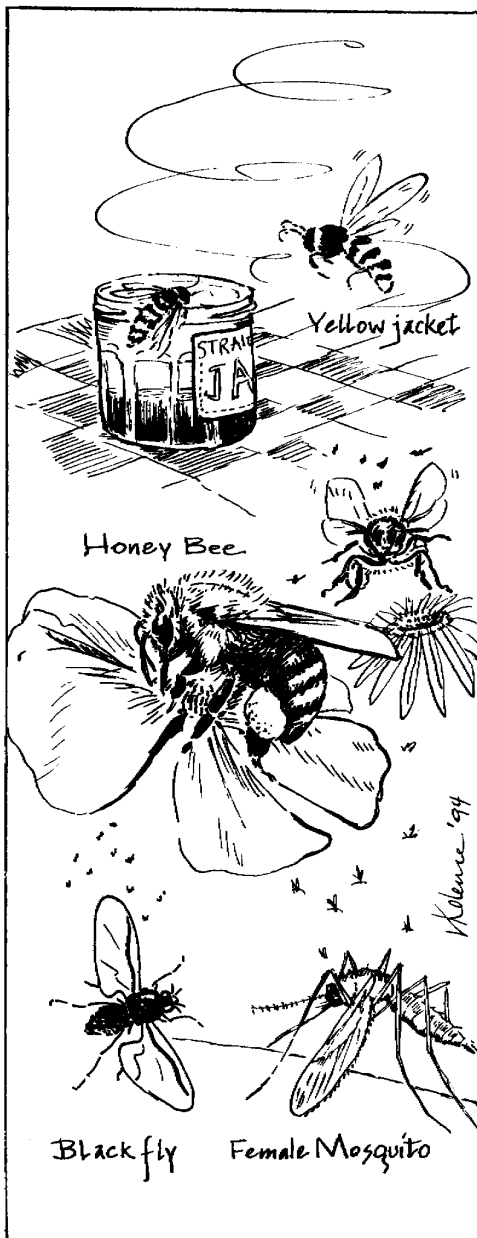
Being a Pest Comes Naturally

A pleasant outing in the foothills can suddenly be interrupted if you are bitten by one of the preserve's small creatures. There is no cause for alarm, since most of these pests have been confronted, at one time or another, around your home. These are the familiar wasps, bees, mosquitoes, gnats, and ticks found throughout the United States. They are a part of the natural community of living things. Here, they exist in complex relationships with humans and other animals, just as they did a hundred years ago.

The **Yellow Jacket** (*Vespa sp.*) which makes its paper nest in the ground, is famous for its painful sting. The female possesses poison glands, which accounts for the great pain of her sting. A similar poison is produced by jellyfish, scorpions, and a plant called Stinging Nettle. Because the yellow jacket's stinger is used only as a means of defending itself and its nest, people find themselves being stung when they excite or provoke them, even though the provocation may be unintentional. Waving your arms over a picnic lunch or freshly cooked meat can do nothing more than provoke this creature of habit.

The **Honey Bee** (*Apis mellifica*), which we usually see frequenting flowers, can only sting once. It flies away leaving its barbed stinger and part of its abdomen, including the poison gland, in the unfortunate victim. After losing part of its abdomen, the bee dies. If stung by a honey bee, use a credit card or something similar to scrape the stinger out of the wound; the stinger continues to pump poison as long as it remains in the skin. Then apply ice, which not only relieves pain, but also slows the absorption of the poison. Remember, bees and wasps are not looking for a juicy arm to sting, but are simply going about their way of life.

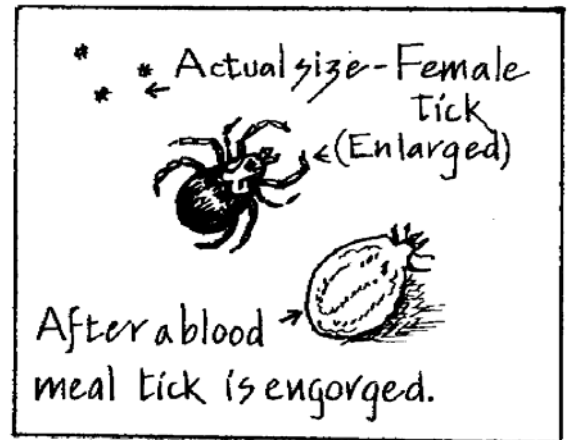
The **female mosquito**, queen of pests, must feed on the blood of a bird or mammal before its eggs will develop properly. When the mosquito draws blood from a human, viruses and disease-causing organisms can be transferred to the victim. In some parts of the world, malaria and



yellow fever are transmitted in this way. *Culex* is the generic name of the common mosquito found around homes and here in Open Space. Although capable of transmitting blood diseases of birds and other animals, *Culex* is not important as a carrier of human disease. Thanks to our friends the dragonflies, damselflies, mosquito fish, flycatchers and swallows, mosquito populations are held in check in the preserves.

Black flies, which includes the common Buffalo Gnats, are small, humpbacked, dark-colored insects that prefer strong light and warm temperatures. Related to the mosquito, black flies are capable of sucking blood to the discomfort of their hosts. Perspiring hikers are often annoyed by these gnats. The black fly is attracted to the presence of water on our skin and around our eyes. While there is some question about the exact reason, there is the possibility that the black fly is searching for a drink.

The **tick** is not an insect but a parasitic arachnid related to spiders and mites. Like the mosquito, the tick cannot deposit its eggs until it has gorged itself with a nourishing meal of blood. Some ticks are capable of going as long as nine years without a meal. In feeding on the blood on humans, they may transmit such diseases as Lyme Disease, Rocky Mountain spotted fever, tularemia, and relapsing fever. The **Pacific Coast tick** (*Dermacenter occidentalis*), found in this area, has been known to transmit some of these diseases occasionally. The **Western Black-legged tick** (*Ixodes pacificus*) is found here, and it is the major carrier of Lyme Disease. Consult your physician or a Park Ranger regarding the current precautions and first-aid procedures.



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