



## Leaf-Feeding Beetles

### Elm Leaf Beetle & Imported Willow Leaf Beetle

*One of the most common and destructive leaf-feeding beetles of trees is the elm leaf beetle. Elm leaf beetles are pests of Siberian, American and Chinese elms. Adult beetles are about ¼ " long, yellow to green with black stripes. Larvae are yellow with black markings. Both adults and larvae feed on foliage, with the adults chewing holes and the larvae skeletonizing the leaf surface. In spring, adults lay clusters of lemon-colored eggs on the underside of leaves. Larvae feed for about three weeks before crawling down to the bottom of the tree to pupate, emerging as adults one to two weeks later. A second generation emerges in late July.*

Infested trees may lose leaves throughout the summer, often turning entirely brown by early August. Besides making the tree unattractive, repeated infestations leave trees more vulnerable to borer damage. In addition, adult beetles often seek winter shelter inside, becoming household nuisances.

A related beetle, the *imported willow leaf beetle*, is a nuisance pest of willows and poplars. Adults of this species are 3/16 " long, blue-black and shiny. They lay their yellow-green eggs on leaf undersides in mid-June. Both larvae and adults feed on the foliage, chewing holes and skeletonizing leaves. Several generations are produced, and adults spend the winter under bark.

Spray as soon as damage is noticed, usually in mid June and again in late July/early August. Recommended chemicals include acephate, *Bacillus thuringiensis san diego* or *tenebrionis* or carbaryl (Sevin).

### June Beetles, Asiatic Garden Beetles, Asparagus Beetles and Mexican Bean Beetles

These beetles are pests of vegetables and flowers. *June beetles (June bugs)* and *Asiatic garden beetles* are both night-flying brown beetles as adults and white grubs as larvae. June beetles prefer to feed on roses, bramble fruits and strawberries, and Asiatic garden beetles feed on a wide variety of garden ornamentals and vegetables. White grubs feed on grass roots. Adults of both of these beetles can be caught with light traps or handpicked at night. Tilling garden soil will eliminate some grubs, as will milky spore disease, which is also used to control the more serious *Japanese beetle* (see separate information sheet for more details).

As their names imply, *asparagus beetles* and *Mexican bean beetles* are pests of vegetable crops. They are discussed separately in the information sheet about vegetable pests.

### **Bark Beetles**

Several species of bark beetles attack ornamental trees and shrubs. Adults are generally brown to black, and they range size from 1/8 " up to 1 inch long. Their larvae are white grubs that tunnel through the wood underneath the surface of tree bark. Infested trees show numerous small round holes in the bark, and all or part of the crown of the tree may turn yellow and then brown. These insects transmit disease. The *elm bark beetle* and the *Asian longhorned beetle* are two of the most serious bark beetles. The *elm bark beetle* is covered under Dutch elm disease, and the *Asian longhorned beetle* is covered in its own separate information sheet.

### **Beneficial Beetles**

Sometimes mistaken for cockroaches or black vine weevils, ground beetles are large, long-legged, hard-shelled beetles that are very beneficial. They have a shiny, often metallic, iridescence, and they may be black, green, bronze, or a combination of these colors. Usually found on the ground or under objects or debris, they will run rather than fly when disturbed. Ground beetles are nocturnal, and they prey on a number of different insects, most notably caterpillars. Ground beetle larvae are also predators. They are about an inch long and segmented. Their legs are grouped near the front, and their heads are distinct from their bodies. If you find these beetles in your garden, leave them alone!