



Forest Health Protection, Southern Region

# SMALLER EUROPEAN ELM BARK BEETLE,

*Scolytus multistriatus* (Marsham)

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**Importance.** - This beetle is the prime vector of the Dutch elm disease fungus which has destroyed millions of American elms since its introduction into the United States. The beetle attacks all native and introduced species of elms.

**Identifying the Insect.** - Adults are reddish-brown beetles about 1/4 inch (3 mm) long. The underside of the posterior is concave and armed with a prominent projection or spine on the undersurface of the abdomen. The larvae are typical, white or cream-colored, legless grubs, about the same size as adults.



Beetle feeding at twig crotch.

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**Identifying the Injury.** - Beetles excavate a 1 to 2 inch (25 to 50 mm) straight egg gallery parallel with the wood grain. Larval mines are roughly perpendicular to the egg gallery. The result is a design resembling a long-legged centipede on the inner bark and wood surface.

Symptoms of the disease are described under "Dutch Elm Disease".

**Biology.** - Smaller European elm bark beetles overwinter as larvae under the bark and develop into adults in the spring, emerging after the leaves expand. Adults feed at twig crotches of healthy elms, infecting the tree with Dutch elm disease. Then they fly on to other elms for breeding. These attacked trees have usually been weakened by drought, disease, or other stress factors. After boring through the bark, the beetles excavate their egg galleries, grooving the inner bark and wood surface in the process. When larvae are full-grown, they construct pupal cells at the end of their larval mines. New adults emerge by boring directly through the bark, leaving it peppered with tiny "shot holes." There are two generations annually.

**Control.** - The most effective method of reducing losses is probably through removal of dead and dying elms and the pruning of dead and dying limbs. Several chemical insecticides may be applied as preventative sprays or to kill beetles before they spread to uninfested trees.

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