The Ten Most Unwanted Varmints in Texas
(Invasive Forest Pests Present or Threatening to Enter)

1. Emerald Ash Borer
2. Formosan Termite
3. Asian Longhorned Beetle
4. Sudden Oak Death
5. Gypsy Moth
6. European Wood Wasp
7. Banded Elm Bark Beetle
8. Pine Shoot Beetle
9. Soapberry Borer
10. Japanese Cedar Longhorned Beetle

Blue = Known to be present in Texas  Red = Not yet found in Texas
Description of Invasive Forest Pests Present in or Threatening Texas

1. **Emerald ash borer**: *Agrilus planipennis* (Buprestidae). Exotic pest of ash, recently introduced from Asia; present in southeastern Michigan, Ontario, Virginia, Maryland, and northwestern Ohio. May infest and kill small to very large trees. Symptoms include dead or dying ash with D-shaped exit holes and winding, sawdust-filled galleries under the bark. Adults are bright green, about 13 mm (½") long. Not yet found in Texas.

2. **Formosan termite**: *Coptotermes formosanus* (Rhinotermitidae). Present in some 20 Texas counties. Identifiable by tear drop-shaped heads of soldiers (compared to parallel-sided heads of native subterranean termites). Winged adults swarm in May or early June and are attracted to lights. Infests wood in use and may nest in variety of live trees. May be transported in infested landscape timbers or mulch to colonize new areas.

3. **Asian longhorned beetle**: *Anoplophora glabripennis* (Cerambycidae). Large black beetle, 20 - 40 mm (3/4-1½") long with white spots and long black and white antennae; introduced into northeastern U.S. in 1996. Attacks and kills a variety of hardwoods, preferring maples (also poplar, willow, elm, etc.). Symptoms are declining trees with large, circular exit holes and boring dust in bark of trunk and large limbs. Not yet established in Texas.

4. **Sudden oak death**: Caused by the newly-identified fungus *Phytophthora ramorum*. Detected in several counties in California and Oregon on oaks and variety of other hardwoods and some conifers. Cankers and black ooze on trunk of affected trees precede death. Not yet detected in Texas.

5. **Gypsy moth**: *Lymantria dispar* (Lymantriidae). Introduced from Europe and well established in eastern U.S. Larva is hairy with parallel rows of red dots on body. Feeds on and defoliates a variety of hardwoods, particularly oaks. Females are unable to fly and larvae disperse on silken threads. Egg masses may be transported long distances on recreational vehicles, outdoor furniture, etc. Not yet established in Texas.

6. **European wood wasp**: *Sirex noctilio* (Sirecidae). Introduced pest of pines, including loblolly pine, in Australia, New Zealand, Africa, and South America. Larva is cylindrical, creamy white grub without legs, up to 30 mm (1⅛") long. Larval tunnels in wood are packed with chewed bark. Adult of variable size (9-36 mm) with four yellow membranous wings. Infested trees have discolored foliage and may be killed. Not yet detected in Texas.

7. **Banded elm bark beetle**: *Scolytus schevyrewi* (Scolytidae). Newly-discovered bark beetle infesting elms in numerous western states, including New Mexico (also may attack Russian olive, willows, and fruit trees). A native of Asia, the adult is a small, cylindrical beetle (3-4 mm in length) with light and dark bands. It is a close relative to the bark beetle that vectors Dutch elm disease. Not yet detected in Texas.

8. **Pine shoot beetle**: *Tomicus piniperda* (Scolytinae). Established in Lake States, where infestations are of concern in Christmas tree plantations. Southern pines are suitable hosts. Adults are black beetles about the size of a match head. They bore in pith of pine shoots for maturation feeding. Attacks seldom kill the host tree, but cause shoot dieback. Larvae feed in pine stumps and logs. Not yet found in Texas.

9. **Soapberry borer**: *Agrilus prionurus* (Buprestidae). First detected in September 2003 in Austin attacking soapberry (*Sapindus* spp.) trees. Native of Mexico and Central America. Adult is metallic wood borer that leaves oval exit hole in bark when it emerges; larvae are white, elongated grubs with the segment behind the head enlarged and flattened. The larvae make sawdust-filled galleries beneath the bark and in the sapwood.

10. **Japanese cedar longhorned beetle**: *Callidium rufipes* (Cerambycidae). Wood-boring beetle of Asian origin, recently found in Connecticut and North Carolina. Attacks variety of cedars and cypress trees. Adults are 6-12 mm (¼-½") long with long antennae. Larvae feed beneath bark, eventually entering bark. Not yet found in Texas.