

# Tree Insects

By Bob Banks



# #1 Aphids

They come in green, black, brown, pink and invisible. Called plant lice. Attacks any trees especially fruit trees. Sucks the sap on phloem and causes dieback black sooty mold and its frass (honeydew) attracts ants. Can be controlled with insecticides, strong water jets or natural enemies like lady bugs or wasps.



## #2 Bagworm



Called case moths as they leave cases at the base of trees. They extend head from case to eat leaves. Defoliates trees especially evergreens usually at the ends of branches. Control with picking off cases, insecticides and attracting birds with baths, or nesting material like sparrows.



# #3 Black Turpentine Beetle

Bore into stressed or damaged pines and red spruce in the South. Attacks the phloem layer and may cause death. Young bores holes in the bark and may cause blue stain fungus. Removal of infected trees and clearing of underbrush may control spread.



# #4 conifer sawfly



- Defoliation by sawflies is sporadic, Most all of the sawflies feed on old and current year foliage at some point in their development. enables them to saw little slits in the needles
- Pine trees
- Sawfly adults resemble large house flies but are actually broadwaisted wasps.

# #5 eastern tent caterpillar



- Defoliation of trees, building of unsightly silken nests in trees, and wandering caterpillars crawling
- found on wild cherry, apple, and crabapple, but may be found on hawthorn, maple, cherry, peach, pear and plum
- The larvae are hairy caterpillars, black with a white stripe down the back, brown and yellow lines along the sides,

# #6 fall webworm



- consecutive defoliations can cause dieback in the crown, and may contribute to the death of weak, declining trees.
- webs are located at the outer ends of branches. orange and black or red-headed and black-headed Fall webworm adults are small to medium-size moths with wingspan of 1 to 1 1/2 inches. Moths are pure white
- Many species of forest, shade, ornamental, and fruit trees are listed as hosts of the fall webworm. Hosts are almost wholly hardwoods but at least one conifer, baldcypress, is included.

# #7 gypsy moth



- Larvae can be distinguished from other species of caterpillar by its spots. Close to the head, five pairs of blue spots and six pairs of red spots to its tail.
- prefer [oak](#) trees, but may feed on many species of trees and shrubs, both hardwood and conifer.
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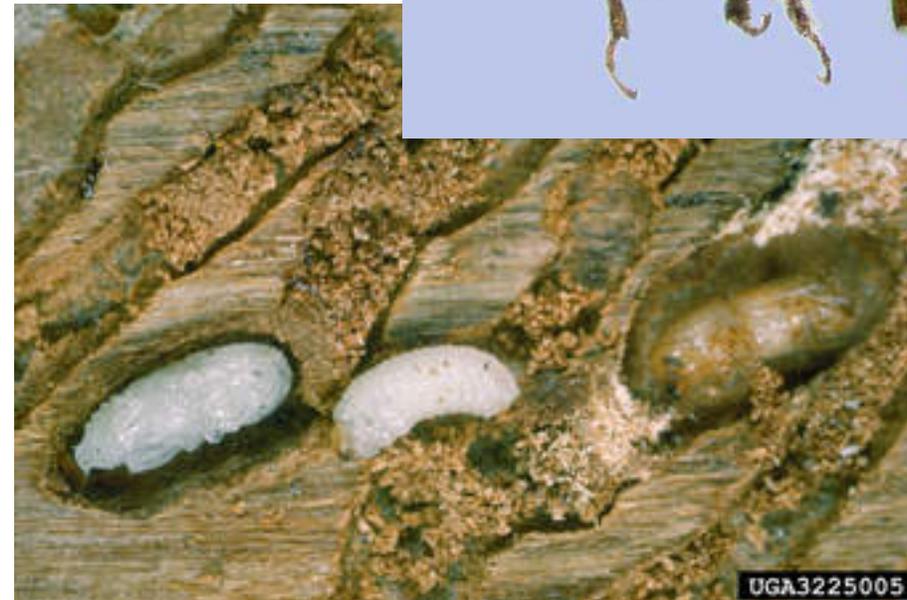
# #8 Insect gall



- abnormal outgrowths. They can be caused by various [parasites](#), from [fungi](#) and [bacteria](#), to [insects](#) and [mites](#). Galls act as both the habitat and food source for the maker of the gall
- Ash, elm, hackberry, oak, honeylocust
- Round growths mostly on petioles

# #9 Ips Engraver Beetle

A type of reddish to black weevil with distinct spine down the back. Attacks tree trunks of mostly pines and spruces with S shaped tunnels and pitch tubes. Stressed or diseased trees are a target. It damages the phloem and may girdle the tree and introduce fungi. Insecticides are not effective and infected wood should be removed.



# #10 Japanese Beetles

Skeletonizes leaves, devours flowers, and larvae can chew roots. Eggs begin as white grubs mainly in soils and on lawns. Control by killing grubs in lawn in the fall. Beetle traps are ineffective and attract beetle to plants nearby.



# #11 Locust borer



- Larvae tunnel into and through the trunk and limbs of infested trees, physically weakening them and making them susceptible to wind breakage. Repeated attacks often result in the production of little more than sprout growth
- Black locust
- Newly hatched larvae bore into the inner bark and construct small hibernation cells
- Black background with bright yellow bands  $\frac{3}{4}$  inch long

# #12 Nantucket pine tip moth



- causes severe damage to buds and shoots of pine seedlings and small saplings.
- Pine trees
- Newly hatched larvae feed on new growth for a short time before boring into the shoot.
- The  $\frac{1}{4}$  inch long adult moth is mixed gray and shiny copper colored and has a wingspan of  $\frac{1}{2}$  inch. White to orange eggs are laid on needles and twigs.

# #13 pales weevil



- Adults commonly feed on the cambium of one-year-old seedlings but will also feed on and destroy older seedlings and saplings.
- Pine trees
- When larvae are mature, they construct a pupa cell in the sapwood.
- hard-shelled beetles characterized by a rigid and prominent snout with tiny chewing mouth- Adults are black or nearly so, and often speckled with whitish markings. They are  $\frac{1}{4}$ " to  $\frac{1}{3}$ " long.

# #14 periodic cicada



- Mature trees rarely suffer lasting damage, although twig die-off or flagging can result from egg-laying.
- Most trees
- The nymphs of the periodical cicadas live underground, Nearly all cicadas spend years underground as juveniles, before emerging above ground for a short adult stage of several weeks to a few months.
- The familiar winged [imago](#) (adult) periodical cicada has red eyes and a black dorsal thorax. The wings are translucent and have orange veins.

# #15 pine webworm



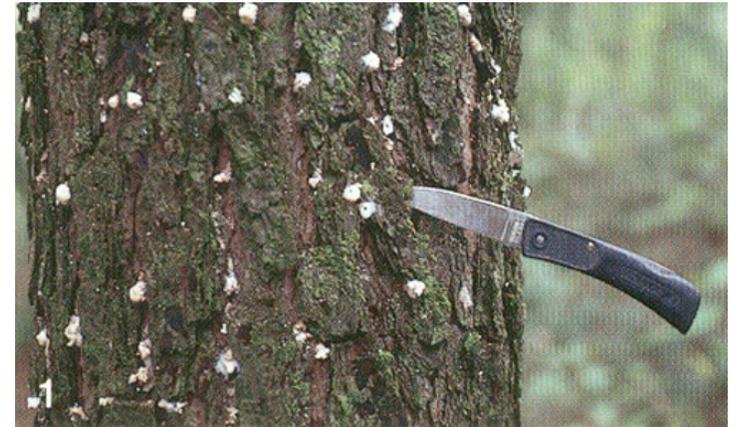
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- It usually chooses young seedlings but can infest saplings and larger trees. The eating habits of the larvae causes a loss of needles but this rarely leads to tree mortality.
- Pine trees
- adult pine webworm moths mate and lay eggs on the needles of host trees after the larvae hatch, they construct a mass of silken webbing among the pine
- Adult moths have a 1" wingspan and are mostly gray with grayish-black forewings.

# #16 Southern Pine Beetle

Most destructive pest in the South, adult 1/8 long with dark reddish brown to black back. Head is notched and back is rounded. Eggs laid in notches of trees. Bores exude white popcorn size pitch tubes. Sapwood becomes blue stained with winding S shaped grooves. Needles begin to yellow than red and die. This will kill single trees or acres. Poorly managed or overstocked stands attract them. Control is done with salvage removal of infected trees.



# #17 white pine weevil



- produces a conspicuous injury to the terminal growth of spruce trees. In late spring, new growth wilts and dies back. the needles often become lighter colored before they ultimately die and drop. Because of this injury
- Pines and spruce
- legless larval grubs then begin to feed on the wood underneath the bark.
- The adult is a small rust-colored weevil that is about 4-6 mm long. It has irregularly shaped patches of brown and white scales on the front wings. Long snout.

## #18 Asian Ambrosia Beetle-Senior Only



- Attacks hardwoods and pines with larvae in the bark forming tubes of dust on trunk. Has a sharp spine at the rear (very small). They bore into tree and bring a fungus which clogs vascular system and kills the tree. Control is done with prevention of stress due to damage, watering or improper planting. Insecticides in February may help and removing infected trees is necessary.

# #19 bronze birch borer - senior



- The first indication that a tree is infested with borers is wilting and dying of the upper crown. Closer examination may reveal ridges and bumps on limbs and branches
- The bronze birch borer is a serious secondary pest of white, paper, and cut-leaf weeping birches. It has also been reported on beech.
- Bronze birch borer adults are slender, dark, iridescent, often greenish-bronze, beetles, 7-12 mm long. A fully grown larva is slightly longer than 12 mm, very slender, and has a flattened, enlarged area behind its head

# #20 leaf cutting ant - senior



- ants can carry twenty times their body weight<sup>[3]</sup> and cut and process fresh vegetation identified by their external differences. *Atta* ants have three pairs of spines and a smooth exoskeleton on the upper surface of the thorax
- Next to humans, leafcutter ants form the largest and most complex animal societies on Earth. In a few years, the central mound of their underground nests can grow to more than 98 ft across,



## #21 locust leafminer (senior)



- The adults chew holes in the leaves and skeletonize the lower leaf surfaces black locusts turn brown and are defoliated.
- Black locusts and attack apple, birch, beech, cherry, elm, oak, and hawthorn.
- Eggs and larvae
- The adult locust leafminer is a small beetle, about 6mm long with stripe.



## #22 Hemlock Woolly Adelgid-Senior Only



Appears as white cottony sacs at the base of needles near the bark. Crawlers suck the sap and prevents tree growth as needles turn grayish green and drop off. Can kill a tree over years. Hemlocks and spruces. Control with insecticides in late September and October.



# #23 orange-striped oakworm -senior



- Trees can be defoliated.
- Red and white oaks are potential hosts
- Adults lay eggs on the undersides of leaves from June to July. Caterpillars feed for 5 to 6 weeks in July to September.
- Caterpillars are black with eight orange-yellow stripes, are and about 2 inches long when fully grown. The second segment behind the head has two long, curved "horns".

# #24 sycamore lace bug - senior



- feeds on the undersides of the leaves, initially causing a white stippling that can eventually progress into chlorotic or bronzed foliage and premature senescence of leaves. In cases of severe infestations, trees may be defoliated
- Sycamore and plane trees
- The bugs overwinter as adults,
- Adult SLBs are about 3 mm long and white in color. They have a lace-like pattern on their wings, head and thorax

# #25 tussock moth -senior



- Adults do not eat but caterpillars eat leaves
- Oaks and bald cypress including alder, apple, balsam fir, birches, and larch.
- There is a white or yellow line on each side of the dark mid-dorsal larvae (caterpillar) Males are small, relatively dull-colored moths with prominent antennae Tussock – hairy projections on catrtpillar.
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# #26 twig girdler - senior



- Severe girdling can disfigure trees. Damage appears mainly in late summer and fall when adult beetles are active. Leaves on the girdled branches turn die and fall
- attack citrus, elm, hackberry, hickory, mimosa, pecan, persimmon, red oak
- Larvae hatch from eggs forming into pupae
- 1/2 to 3/4 inch long, light to dark brown with a wide gray band across the wing covers

# #27 twin-lined chestnut borer - senior



- Symptoms include dieback at the end of branches, sparse, small or discolored foliage, or leaves that wilt suddenly, turn uniformly brown
- Chestnuts and oaks, including red, black, white and bur oaks.
- borers overwinter as larvae and pupae in infested trees emerge from trees through D-shaped holes Larvae feed in cambial tissue
- elongated, greenish-black metallic wood boring beetles that are about 1/5 to 1/2 inch in length. They have two yellow stripes along their backs.

# #28 variable oakleaf caterpillar - senior



- severe widespread defoliation can occur
- several hardwoods, including all species of oak, with white oak the preferred species.
- Female moths deposit single eggs on leaves in May. Larval feeding occurs through August. Winter is spent in cocoons in the soil
- The caterpillars vary from the usual yellowish green to dull red. Mature larvae are about 1.5 inches long, with a narrow white line down the center of the back and two broader yellowish

# #29 walking stick - senior



- herbivorous, feeding mostly on the leaves of trees and shrubs, defoliation
- it consumes the foliage of [oaks](#) and other [hardwoods](#)
- eggs resemble seeds in shape and size, and have hard shells The ants take the eggs.
- ranging from (0.6 in) to over (12 in) in length with cylindrical stick-like shapes, while others have flattened, leaflike shapes

# #30 White Oak Borer- Senior Only

Larvae bores into bark and causes wood decay. It destroys the vascular system. Oozing sap will attract flies, bees, wasps, and butterflies. Control by killing larvae in early spring with insecticides. Borers stay in cut trees and can move with them to other areas. Burn wood.

