

## ***GENERAL TREE SPRAYS #1, #2, #3~ INSECTS***

### **Aphids**

These are soft-bodied and often naked insects of various colors. Some may have wings but many do not. A few may secrete a white, cottony, wax-like material for protection and have a woolly appearance. The females are capable of bearing living young which account for very rapid increases in population. They are often found on new, rapidly growing plant tissue that is soft and succulent. Therefore, they are found in the early spring or on plant material that produces new soft growth during the summer or favorable growth periods. When high populations of this insect are present and persists for a period of time, there is often an accumulation of honeydew or aphid excrement on the foliage or any object below the aphid. This sugary substance leaves a sticky mess on the surface and if rainfall is light or nonexistent, a fungus will use the sugar as a food source, covering the surface with black sooty mold.



Aphid mass on new Crabapple leaves.

### **Leaf hoppers, lace bugs, and plant bugs**

These are a group of insects with piercing, sucking mouth parts. These may build up on specific plants from time to time and cause leaf damage. This group inserts its mouth part into plant tissue and sucks out the cell contents, leaving a small light spot on the leaf, which resembles a stipple pattern. This stipple pattern sometimes can be confused with mite damage, so one has to look closely at the tissue for other symptoms to identify the pest. Leaf hoppers often leave cast skins at the site. They also inject saliva that is often toxic to the leaves of some plants that results in a scorch or burn on the leaf margin called hopper burn. Lace bugs leave shiny, black, tar-like spots of excrement on the underside of the leaf which helps to identify them. Plant bugs may feed on lower and upper leaf surfaces forming a stipple pattern, leaf distortion or definite spots that may be confused with other problems. The insects inject toxins with their saliva so a group of cells die, dry, and may resemble a fungal leaf spot. The feeding damage will often appear as a group of spots. Adults are often in the area and will hide behind leaves or branches when you examine the tissue.



Lace Bug on Cotoneaster. Adult, nymph and dark shiny spots of excrement.



Plant Bug damage on Locust. Symptoms will mimic Leaf Hopper damage.

## Eastern Tent Caterpillars

Nests or tents of the eastern tent caterpillar, *Malacosoma americanum* (Fabricius), are a common sight in along fence rows and in homeowner trees during the spring months. The eastern tent caterpillar makes its nest in the fork of branches and does not enclose leaves like the fall webworm. Tent caterpillars are generally active until early June and fall webworms are active in July through September.

### Plants Attacked

The eastern tent caterpillars prefer wild cherry along roadways, but it can be found making nests in ornamental apple, crabapple, plum, peach, and cherry in landscapes. Occasionally it will form nests in ash, birch, willow, maple, oak and poplar.

### Damage

One or two colonies can completely defoliate small trees. Periodic, major outbreaks result in numerous colonies in larger trees which can also do considerable defoliation. Since this defoliation occurs early in the season, the plants must set out new leaves at considerable energy expense. Besides making a tree look unsightly with the webs it constructs in the crotches of limbs and branches, the caterpillars arouse much concern among area residents when they migrate in mass in search of new food or a place to complete their development. During periods of migration, caterpillars may be seen by the thousands traveling over roads, streets, driveways, and sidewalks.



### Description and Life Cycle

The eastern tent caterpillar is easily identified when it builds its white silk nest in the crotch of small trees or where several limbs meet on larger trees. Eastern tent caterpillars have thick, tan hair and are black in color with irregular blue and white mottling. Some of the white markings define stripes. The eastern tent caterpillar has a diagnostic solid white stripe down the back. Tent caterpillars overwinter in the egg stage. Egg masses are attached to small twigs and appear as shiny, dark gray foam wrapped around the twig. These masses are about one inch long and contain 150 to 350 eggs. The eggs hatch in early spring just as the leaf buds begin to show green. The tiny black caterpillars sun themselves on the egg mass but soon move to a nearby fork in the branches. Here they begin to spin silk and form a tent. The larvae migrate to the new leaves to feed, usually in the morning or early afternoon. After feeding the larvae return to the nest. The larvae lay down silk trails wherever they go and these trails serve as roadways for other larvae. Feeding continues for four to six weeks until the larvae are about two inches long. Mature larvae usually leave the nest and tree to search for a suitable place to spin a cocoon. The larvae spin compact, spindle-shaped cocoons of white to yellow silk. The adults emerge in two to four weeks. The adults are about one inch long, are reddish brown in color and have two creamy-white stripes running obliquely across the front wings. Forest tent caterpillars do not make a nest and the adult moths have dark brown stripes instead of white. Mating occurs soon after emergence and the females attach their new egg masses to tree branches. These masses stay on the tree until the following spring. There is only one generation per year.

