

Trees with a dense infestation of oriental bittersweet are more likely to fail during severe storms.

## **Controlling Vine Infestations**

Vines in trees can cause increased risk of a tree's failing and disrupting utilities during wind, ice, and wet snow storms. Vines increase the 'sail' area of a tree during high winds and the surface area for accumulation of damaging heavy wet snow or ice. The most common species that have been observed to increase the risk of a tree failing during a storm are oriental bittersweet (Celastrus orbiculatus) and grape (Vitis spp.). Occasionally, other species such as wisteria (Wisteria spp.) or kudzu (Pueraria montana) can infest a tree sufficiently to increase the risk of tree or large limb failure. Not all vines are necessarily detrimental. Poison ivy (Toxicodendron radicans) and Virginia creeper (Parthenocissus quinquefolia) are usually found growing on the main trunk of a tree and not over or along branches. These two species rarely need

to be controlled to reduce the risk of tree failure.

Ideally, vines are controlled before they form a dense infestation mat in the tree's canopy. After they are killed, it may take several years for the vines to decompose and eliminate the risk of tree failure during severe weather. However, any control of infesting vines will reduce the risk of tree failure by killing the leaves that increase the sail (wind) and accumulation (wet snow, ice) areas.

The simplest method of vine control is to cut the stems as close to the ground as possible. This will cause death of all aboveground tissues. However, the surviving root systems of all species will quickly send up new vines that again infest the trees. To provide longer protection, it is suggested that the cut stems of problematic species be treated with an herbicide to kill the root systems. Treating the cut stems, and not spraying the foliage, dramatically reduces the amount of herbicide that is needed and reduces the impact to any vegetation that is near the treated vines. It is important to follow all label directions when applying herbicide.

Herbicide control is not a panacea because new plants will develop from seeds buried in the soil or deposited by birds or deer. Therefore, it will be necessary to periodically treat an area to control any new vines. Because the new vines are much smaller, it should be relatively easier to implement a maintenance program than for the initial control effort.