

## NEEDLE DROP IN EVERGREENS

---

The carpet of shed needles beneath an evergreen is a familiar sight - often there are several seasons of needles on the ground below the tree! As a result of both natural and environmental stresses, evergreens shed their older needles. Although the loss of your evergreen's needles may at first be disconcerting, the period of natural leaf fall for the species must be taken into consideration. However, if the trees are shedding the current season's needles, or if the current season's needles are turning brown, it may be time to consult a "plant doctor". These symptoms may mean that the plant is suffering from one or more unusual conditions.

The persistence of needles varies among species. Evergreens are not "evergreen", and will drop their needles, under conditions of stress. As do other plants, evergreens shed their older needles, after a number of years. In conditions of natural leaf drop, the needles usually last around three years. Juniper and Douglas fir needles last for 10 or more years, while Bristlecone pine needles can persist up to 30 years. Arborvitae and white pine needles turn brown or yellow and drop in the autumn of the second year, and *Taxus* (yew) needles commonly turn yellow and drop in late spring or early summer of the third year.

Broadleaved evergreens also shed their leaves. Leaf drop usually occurs in the summer or early fall when the leaves are two to three years old, following maturation of the current season's growth. Plants such as the rhododendron, holly and euonymus tend to shed their older leaves during the summer or early fall months.

Leaf and needle drop may be induced by several environmental

factors. The most common of these are excessive soil moisture and drought. A lack of potassium (K) in the soil may result in the loss of older leaves, causing a denuded look. Other environmentally detrimental effects include: various human and animal activities, air pollution, attack by insects, and disease infestation. An excess of soluble salts in the environment, especially those of de-icing salts used during the last 10 years along the highways, has caused a large amount of dessication in arborvitae, hemlock, and both white and red pine.

**SOURCE:**

Adapted from Nurserygram, Vol. 4 No. 4,  
by Harold Davidson  
October, 1983