



*Forest Health Protection* **SLIME FLUX**,  
Caused by Bacteria

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**Importance** - This disease results in persistent, bad-smelling, bleeding cankers on the stem or at the base of many species of hardwoods. Oaks are the most seriously affected species. Incidence is low, but severe quality loss occurs to the infected tree.

**Identifying the Cause** - The prime wounding agents are insect borers, mechanical injuries, and natural cracks and splits which are rarely observed. Clear sap flowing from the wound becomes colonized with bacteria, darkens, and develops an unpleasant odor. The specific bacteria causing the dark color and odor are rarely identified. Its like the tree has a cold or the flu.

**Identifying the Injury** - Patches of wet bark having a sour smell are generally the first symptom of this disease. In addition, insects are attracted to the wet area. Often the bark in the area of the slime flux separates from the tree bole and gives a hollow sound when tapped.



Damp discoloration is slime flux.

**Biology** - Wounding of hardwoods causes sap to flow from the injured area. Bacteria colonize the sap causing the typical odor. The bacteria-laden fluid is toxic to the bark and enlarges the wound with time.

**Control** - In the forest, practices that minimize wounding will reduce the spread of this disease. For urban trees, maintaining vigorous, healthy growing conditions (through **DEEP ROOT fertilization, watering, and mulching**) and avoiding wounds will reduce the probability that trees will be affected by this disease. Removing bark from the affected area will reduce damage to an individual tree.