

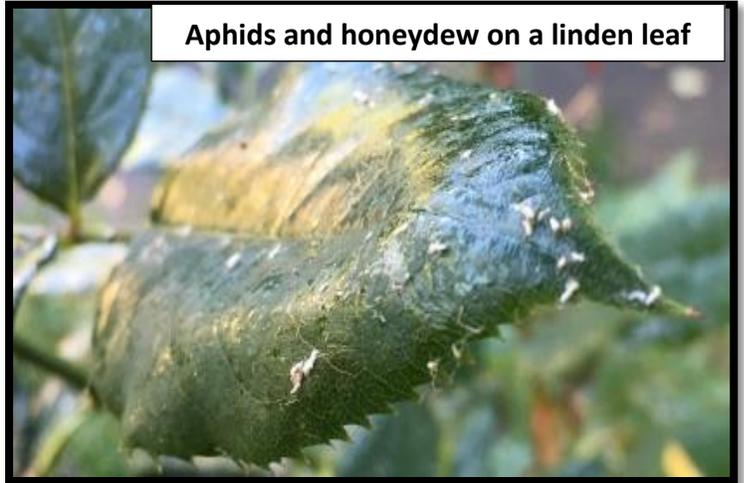
Resident Fact Sheet: Aphids in Snoqualmie's Street Trees

What is the sticky "sap" falling from the trees?

It's not actually sap. It's the excretions of aphids. Aphids are small insects that feed on trees with soft-tissue leaves. They suck the juices that are the result of photosynthesis (sugars) out of the leaves, and excrete them. This causes a rain of a sticky substance known as "honeydew" on sidewalks, roads and cars below.

Secondary problems:

- 1) Honeydew causes a fungus, black sooty mold to develop on the trunks and branches of trees. The main impact of this fungus is that it looks unsightly; it is not harmful to the tree.
- 2) Various insects, including some wasps are drawn to honeydew.
- 3) Ants "farm" the aphids, and protect them from natural predators.



Aphids and honeydew on a linden leaf

Compounding factors: Drought stress and tree stress in general are compounding factors for the aphid problem. Trees produce more sugars when they are stressed, which in turn attracts more aphids. This summer's drought has caused a great deal of tree stress, making the aphid problem worse.

How prevalent is the problem?

1247 street trees in Snoqualmie are affected, or 13% of the total population. Three species in particular are susceptible to aphids: tuliptrees (*Liriodendron tulipifera*), littleleaf lindens (*Tilia cordata*) and red oaks (*Quercus rubra*). Of these species, lindens are the most susceptible, and worst affected.

What is the City doing?

- *Lindens are being phased-out.* As they die, we will replace with different species that are not affected by aphids. In some limited cases, individual streets are being evaluated for removal/replacement of lindens.
- The City will be conducting a trial of new biological controls (natural predators of aphids) in 2017.

Why can't pesticides be used to kill the aphids?

In short, because the available pesticide options may also kill bees. Bees are plant pollinators, and are essential to agriculture. In Wilsonville, Oregon in 2013, 50,000 bees died as a result of pesticide treatment of 55 linden trees.

This resulted in fines, and the state of Oregon banning the use of pesticides in the neonicotinoid group for lindens in 2015. Information on this case can be found at the links below.

<https://xerces.org/the-wilsonville-bee-kill/>

http://www.oregonlive.com/environment/index.ssf/2015/02/oregon_bans_use_of_bee-killing.html

What can residents do?

- Residents can treat the problem by spraying the trees with water. A steady stream from a garden hose onto the leaves of the tree will knock off or kill many of the aphids, and also wash off the honeydew. This will provide temporary relief, but may have to be repeated at intervals through the summer.