



Check Your Property for Pine Beetle Damage



Monitor Your Property to Prevent Tree Loss

An outbreak of western pine beetle is currently killing ponderosa pine trees in the Okanagan. If you have ponderosa pine trees on your property, please take a few minutes to check them for signs of attack, such as:

1. The entire tree (all of the foliage) has turned yellow or red. Note: it may take a number of months before an attacked tree starts to change colour.
2. Woodpeckers may have stripped off some of the bark.
3. When the bark is examined closely, the tree will have a regular pattern of holes where beetles have entered the bark. Sometimes pitch or frass (sawdust) can be seen coming out of these holes.
4. If you suspect that a tree is attacked, you may carefully peel some of the layers of bark away with a hatchet to look for beetles or grubs, either inside or just under the bark. Use eye protection and gloves!
5. The beetles create a characteristic series of tunnels (galleries) inside and just underneath the bark of attacked trees. Eventually the wood also becomes stained blue due to a fungus.

During the spring and summer months, tree mortality can occur rapidly so prevention of attack and early detection are key to minimizing damage. Monitor your trees periodically throughout the year.



Adult beetles are only about 6 mm long. Photo: L. MacLauchlan



Infested trees turn yellow, then red



Woodpeckers sometimes remove bark on infested trees

Every infested tree that is removed will save many more healthy trees in your neighbourhood. Beetles can cycle through up to three generations per year.

What Can Be Done to Manage the Problem?

Prevention:

Bark beetles prefer to attack weakened trees, but can attack healthy trees during an outbreak. Keep your trees healthy by avoiding heavy pruning, root or trunk damage or fill placed over the root zone. Some supplemental watering of trees during the hot summer months may also help.

There are currently no pesticides registered for use against the western pine beetle. However, some researchers are working on insecticides and repellents that may help to prevent attack.



Western pine beetle galleries

In forested areas pine trees can be thinned out to reduce their susceptibility to attack which also reduces fire hazard.

Management of Infested Trees:

The primary method of bark beetle control is sanitation: brood-containing trees are removed and debarked or destroyed. Infested trees should not be used as firewood, transported or stored for any length of time unless they are first debarked to destroy the brood. Ideally, the infested bark should be chipped, burned or buried to ensure adults and larvae are killed. Some contractors have equipment that easily debarks infested trees. For residents of the City of Kelowna only: If you live within the City of Kelowna, prior to removing trees in steep slopes or near creeks or wetlands, check with the City Environmental Division, as a permit may be required (469-8706).

Bark beetle damage often is not detected until infested trees start to die and turn yellow or red. By the time damage is visible, the beetles may have already moved on. Therefore it is critical to find the attacked trees that still contain live brood.

Infested trees should not be used as firewood, transported, or stored for any length of time unless they are first debarked. Chip, burn or bury infested bark.

For more information:

www.na.fs.fed.us/spfo/pubs/fids/we_pine_beetle/wpb.htm

www.barkbeetles.org/western/WPBFIDL1.htm

Note for City of Kelowna residents only: In January 2006, City Council earmarked \$100,000 to help private properties in the City of Kelowna with wood disposal. See references below for more information.

City of Kelowna residents only: Pine Beetle Hotline: 469-8457

Email: trees@kelowna.ca

www.kelowna.ca (scroll down the main page to find the beetle link)