

### Forest Health

The biggest forest health issues on southern Vancouver Island and the Gulf Islands area are root and stem rots. There is one important root rot disease: *Phellinus weirii* (laminated root rot). *Phellinus* affects generally older trees as root contacts grow. Some important stem rots are *Phellinus pini* (red ring rot), *Echinodontium tinctorium* (brown stringy rot) and *Postia* spp. (brown cubical rot), but there are a number of others. These can be diagnosed visually with the presence of fruiting bodies on the stem, commonly called “conk”. The affected tree will likely have severe degradation regarding its commercial value.

Other forest health issues are periodic insect attack (e.g. tent caterpillar), deer predation on seedlings and on-site environmental factors such as drought and changes in flow of water to tree roots.

#### *Phellinus weirii*

This attacks most of the softwood species found here, but is particularly troublesome for Douglas-fir, grand fir and western hemlock. A related form attacks western red cedar. The fungus attacks the heartwood of roots and the lower stem. It causes stringy rot in the centre of the tree and eventually the root system is killed. Trees become very susceptible to windfall. It is transmitted from root to root contact. Identification is through exterior symptoms such as reduced branch growth, loss of needles, and a distress cone crop. Fruiting bodies are uncommon. Boring into the tree collar near the roots will confirm it. Another symptom is a group of dead or windthrown trees creating a gap in the canopy.



Tree thinning/selection harvesting in a root rot area is not advised. Treat the stand by clear cutting well around the root rot centre. The only practical long term cure is stump removal followed by planting resistant species, such as lodgepole pine, white pine and hardwoods. After one rotation (say 40 years), the area may be planted again with Douglas-fir. The disease is very persistent in old stumps, until they completely rot and the wood is taken over by competing organisms that kill the disease.

### Stem rots

Virtually all species are attacked by one form of stem rot or another. The fungus enters through a scar or broken branch and attacks the heartwood. Fruiting bodies or “conks” eventually grow out of the stem and bark allowing identification. Trees are weakened and may break off during windstorms. The rot in the centre degrades the wood from a peeler or sawlog to a pulp log. For example, Fir grade “D” has little or no heart rot and commands a domestic price of \$380/m<sup>3</sup>. Increasing rot downgrades the log to an “F” (\$230), “H” (\$111) or pulp (\$30).

There are no practical cures. Trees should be cut where they can be a danger to traffic or dwellings. Use of a “Resistograph” machine or an increment borer on the lower trunk can indicate the presence of rot.



### Insect pests

The following insects are listed in rough order of importance regarding risk of mortality or significant wood damage: balsam wooly adelgid (grand fir), ambrosia beetle (conifer logs), Douglas-fir beetle (attacks weakened trees), tent caterpillar (broadleaf trees), spruce weevil, and hemlock looper (further north). More information on insects is in “Forest Insect and disease conditions in Canada”.

Generally, insect attacks are not threatening to the forests in Southern Vancouver Island. Some, like the spruce weevil are important on the west coast in young spruce stands, but most attacks simply reduce tree growth without killing the tree. One insect, ambrosia beetles, attacks cut logs and reduces log quality. Last spring, there was a tent caterpillar outbreak on deciduous trees. Few preventative or remediation measures are economically or practically warranted for tent caterpillar. The trees survived and after one year of reduced growth, will normally recover.

If you suspect an insect attack, contact the Canadian Forest Service at their Burnside Lab in Victoria to identify the insect and determine what can be done about it.

### Environmental factors

Western red cedar is affected by drought in the Gulf Islands. The author has seen young cedar stands completely dead, on mesic (neither dry nor moist) sites. My recommendation is to plant cedar on moist sites only.

Older Douglas-fir is sensitive to underground moisture flow changes. This can occur if fill is added around the base of the trees or if the area around the base is compacted. Tree death usually occurs in a few years after the change in flow has occurred.

### Log Marketing

#### Introduction

As most of you know, getting a reasonable price for your timber, even in good market conditions is a challenge to small landowners. There are generally three options to marketing the logs:

1. Mill the timber yourself and sell the boards on the local market,
2. Arrange the sale through a log broker, logging contractor or a forestry consultant, or
3. Sell the logs yourself.

For small amounts, it is usually best to do marketing yourself (under about 1000 m<sup>3</sup>). Contact a local log buyer, such as TimberWest, Island Timberlands or local mills. For larger volumes, consider a log broker, a trusted logging contractor or an experienced forest consultant. The owner must scale the logs at the time of leaving the property or have an agreement to scale at delivery to the buyer. Log marks are easy to get; call the local District office to receive an application.

Know your grades and volumes before you cut; you will then have opportunities to get the best prices. Forestry consultants can perform an inventory of your stands or some logging contractors can do this as well. Become familiar with the Vancouver Log Market prices. See the website:

<http://www.for.gov.bc.ca/hva/logreports.htm>

This gives average prices sold during the last one to three months, by species and grades.

Logging contractors: If you decide to hire a logging contractor, there are three ways to arrange the contract.

1. The logger pays you a fixed price per m<sup>3</sup> and acquires the ownership of the wood. The logger cuts the trees, does the marketing, sells the trees and pays you the agreed rate. It is simple from the landowner's point of view. The negative side of this is that you may not capture all of the value of the wood, and there is potential for being cheated.
2. The logger offers the landowner a % of the log selling price. He or the landowner may retain ownership at the time of sale, and either one may do the marketing. This method is a reasonable way to go for small volumes.
3. The logger charges the landowner a service fee for cutting and transporting the logs, and the landowner does the log marketing. This is the preferred arrangement for larger volumes.

#### Markets.

**Local marketing:** These are local, and are usually a short distance from the land. Benefits include lower transport costs, simpler accounting and simpler administration. The negatives are that there is a lower price for logs and higher cost of scaling compared with a regional log buyer.

**Regional Southern Vancouver Island and Lower Mainland:** The Vancouver log market for prices is a baseline; normally the small landowner will not get the published log prices.

There is no easy way for a small managed forest landowner to capture export prices on his/her own logs. Know your export rights. Crown lands granted before 1906 are subject only to federal rules.

One needs an export permit and the logs must be offered to the domestic market first for a one month period. This can only happen after the logs are cut and in the water.

Usually, the landowner can obtain some export value by negotiations with a local log buyer or a log broker. The following are common international markets: US, Japan, Korea and China. Each of these markets have their own species preferences and log quality standards

Export log grades require higher quality logs grades than local grades for the same species, sizes and log defect allowed. Only a portion of total forest is worth exporting. Prices can be significantly different: e.g., in early 2007 before the meltdown, local mills were offering about \$70/m<sup>3</sup> for alder, 8" top or better while Washington state mills offered up to \$140/m<sup>3</sup>. These days, there is virtually no difference, once you take extra costs into account.

Products other than sawlogs can be marketed. Some examples are fir and cedar poles, house logs, and minor forest products like firewood, maple burls, maple tone wood, and salvage of downed trees going into the green market for wood products. The green market is expanding, e.g. for flooring and cabinets, mainly in high end US and European homes. Plan for minor forest product salvage ahead of the main harvest, so you can choose from the standing forest inventory which species and sizes can be utilized for higher value products.

### References

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