

Chainsaws in the Cathedral* – A Designer Forest for Stanley Park

*Morning the crumpled land the hills
heaving up the sky the rain
beating down like blood the darkness
lifting from the trees the waste place
where trees were leaving
a gray residue of mist*

* excerpted with permission from Peter Trower's
Chainsaws In The Cathedral – Collected Woods Poems, 1964-1998
Ekstasis Editions, 1999.

FOREST PROFESSIONALS HAVE BECOME FIRST responders following the storms that hit Stanley Park last December. What became clear when the wind abated was that over 10% of the park's 400 hectares had been flattened, shredded, uprooted and changed for the foreseeable future. It was a natural disturbance, but unexpected by the public who fail to understand the nature of forests and ecological succession. In fact, the park was extensively studied in the 1980s by MacMillan Bloedel foresters who had predicted such an event based on their evaluation of forest health at that time.

But this storm was not altogether an ill wind. The damage created an incredible opportunity for recovery – a renewal that will be augmented by human intervention. That recovery will not only restore Stanley Park to its former glory, but will also showcase the role of forestry in the modern age to an audience of over six million people each year.

To put the magnitude of the storm into perspective, a number of open-grown leafless lombardy poplars that had been planted after Hurricane Freida in 1964 were uprooted next to the Prospect Point picnic site. These trees were growing in coarse-textured, well-drained soil and had broken taproots 20 cm in diameter that were pulled over a metre out of the soil.



Photo Credit: Greg Dash, Vancouver Board of Parks and Recreation

Planning and operating in the forest today is often about much more than timber production. The 'designer forest' that can become a gladed ski run, a golf course, a riparian zone, or a park, is within the ability of today's forest professional to design and put on the ground. In most cases, those forests will be very different from the timber production forests that have historically been our objective. The structure and function of these designer forests, from both a biological and a social perspective, are the drivers of both our plans and our actions.

In the case of Stanley Park, what looked like a difficult undertaking at first glance will actually be quite simple to plan and execute. The greatest challenges are in maintaining community support for the chosen actions and in 'doing no harm.' The financial and moral support to date have been overwhelming: \$9 million has been raised to assist in the recovery, and a further \$1.5 million is lying on the ground in potential timber value.

With that much support, expectations are running high. One set of supporters asks why we haven't gotten the job done yet – another thinks we should study the park for six months before we start. As usual, the best approach lies somewhere in the middle – with a balance between urgency and care.

I have been asked to serve as project manager for the Vancouver Board of Parks and Recreation to assist with this designer forest project, but obviously I cannot do it all on my own. I am being assisted and supported by a team of forest professionals, geoscientists, ecologists, biologists and even psychologists. The days when we were sent out and expected to assess and solve all of the problems on our own, are gone.

The array of contemplated actions is being governed by risk assessment and management designed to minimize and reduce:

- further blowdown,
- fire hazard,
- geotechnical and slope stability hazards,
- biological hazards such as invasive plants and insects; and,
- hazards to workers on the ground and to the public.

Once the risk management work is completed, the task of restoring the forest will begin. The overall objective will be to recreate a fully functioning indigenous forest on most of the damaged areas. A portion of the area where risks can be managed will be retained unaltered for education and demonstration. Other areas will be cut, leaving trees to lay on the ground and the residual stand underplanted. In the majority of areas, the blow-down mate-



Photo Credit: Greg Dash



Photo courtesy of Vancouver Board of Parks and Recreation

rial will be recovered and utilized. Remaining trees and snags within the blowdown areas will be retained where it is safe to do so.

The major geotechnical hazard is the escarpment above the seawall, where upturned trees are hanging over the seawall or have slid down onto it. The proposal here is to walk an excavator along the top of the escarpment and remove these trees as well as the associated overhanging root wads and organic soils. Bioengineering will be used to stabilize the escarpment once this work has been completed.

Recovery of the blowdown material will be done by hoe-chucking to existing roads and upgraded trails. Finning is supplying a hoe-chucker with saw attachment which will minimize the need for workers on the ground. Hoe-chucking will enable the loading and hauling work to be done at night to reduce

conflicts with park visitors; however it will require dry soil conditions in order to minimize damage to the forest floor.

Logs from Stanley Park are already in great demand and are expected to be used in a number of legacy projects associated with the 2010 Olympics and the new Vancouver Convention Centre. A marketing strategy is being developed which will enable small business and home craftsmen to have an opportunity to purchase some of the material.

There is a great team of individuals and organizations working on this project. The overall effort has been guided by a steering committee which includes ABCFP members Dwight Yochim, RPF; Bob Cavill, RPF; and Ric Slaco, RPF, as well as operational, geotechnical and ecological expertise. The chair of the steering committee is Jim Lowden, director of

the Stanley District of the Vancouver Board of Parks and Recreation.

Other organizations involved in the Stanley Park project include UBC, PheroTech, Forestry Canada and the CFIA which are cooperating in monitoring the area for outbreaks of both native and exotic insects. Silviculture prescriptions, fire hazard assessment and fuel management plans are being prepared by B.A. Blackwell and Associates of North Vancouver. Field geotechnical advice is being provided by Geo Wise Engineering of North Vancouver and danger tree assessments are being done by Diamond Head Consulting of Vancouver. The new forest is being supplied and installed courtesy of PRT Inc. and Brinkman Reforestation Ltd.

Together we are restoring Stanley Park and taking the opportunity to educate the public about the profession of forestry. 🌲