

POINT PLEASANT TALK & WALK

— DAVID PATRIQUIN

In an evening presentation to HFN on June 5th, Peter Bigelow, HRM's manager of Real Property Planning, provided an outline of the Comprehensive Plan for Point Pleasant Park. The plan was to be released for public review on June 25th.

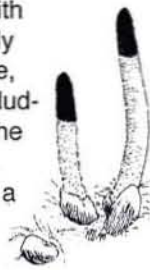
This talk was followed on June 16th by an evening walk in the Park with Peter and Parkland Planner for HRM, Stewart MacMillan.

Peter acknowledged the important contributions made by HFN over the years. He paid special tribute to Colin Stewart who had come forth with pivotal ideas on how to approach the complex issue of managing recovery of the Park after Hurricane Juan in 2003, and who had shepherded the initial consultations prior to his untimely passing. Colin stressed the need for a multifaceted team approach and for the ensured preservation and enhancement of the Park's natural and cultural assets.

Hurricane Juan was the final and longest straw in a history of challenges to the ecological integrity of the Park. Prior to its establishment in 1866, it had been cut over several times to facilitate settlement and military activities by Europeans. Management since the 1930s had emphasised clearing the understory, and had allowed an overmature forest dominated by red spruce (90%) to develop. Twenty-five hundred trees were destroyed in 2001 in efforts to eradicate the Brown Spruce Longhorn Beetle, and a further 10,000 trees were downed by an ice storm in early 2003. In late September 2003, Hurricane Juan delivered the knockout punch, downing 75% of the Parks approximately 100,000 trees. To deal with the attendant fire hazard, a large fraction of the woody debris had to be removed by spring. On the plus side, with the involvement of Colin Stewart and others (including HFN president Allan Robertson as a member of the Point Pleasant Park Advisory Committee and now its chair), dealing with this issue marked the first step in a new, comprehensive, and ecologically sensitive approach to managing the Park.

In 2005, an international design competition was held to stimulate proposals for managing the longer term recovery of the Park. One stipulation was that proposals should respond to citizens' pleas that its natural qualities be maintained. The competition was won by Ekistics Planning and Design of Dartmouth and NIP Paysages of Montreal, who were charged with preparing the Comprehensive Plan. The first full draft that Peter outlined for us on June 5th was released on June 25th for public comment, prior to preparing the final version for presentation to HRM Regional Council in September, 2008.

This plan is available in PDF at pointpleasantpark.ca/en/home/planning/default.aspx. The 312-page document, with numerous photos, summary tables, and maps, is a treasure trove of information about the natural and human history of the Park, and it lays out very clearly the principles and details of the proposed management for the next 50 years. The contents are well outlined in a 13-page executive summary. I was, like many others, skeptical about the outcome of this



process. However, I am completely swayed by the plan and share the enthusiasm and excitement expressed by Peter and others about it. The plan breaks new ground in many regards, amongst them the consultative process, the involvement of volunteers in recovery activities, a special role – past, present and future – of First Nations peoples and, key, from the HFN perspective, recognition of the complexities and subtleties of its ecological processes.

The goal of the Comprehensive Plan for Point Pleasant Park is to achieve a balance – a distinctive landscape with clearly presented historic features in an Acadian forest setting; a landscape where cultural heritage and natural resources enhance each other and are balanced with recreational uses that respect the Park's sustainability principles.

To deal with those subtleties, an 'adaptive management' approach is being implemented. In this approach, management of natural resources is treated like an experiment rather than a definitive plan. All available information is used to formulate a scheme, but the limits to predicting outcomes in ecological systems are recognised. Thus, the management process is treated as a set of experiments (large and small) – a trial is conducted, observations are made, the plan modified accordingly, and then the process repeated.

A few of the highlights in this context:

SOILS, SEEDBANKS, & NATURAL REGENERATION

There had been concern that poor soils would limit recovery, also that regeneration in this isolated area could be severely limited by lack of regenerative propagules. However, analyses of 400 soil samples suggest no major limitations and, as we have witnessed, there has been vigorous regeneration and an abundance of new plants over large areas that were bared by the hurricane. For instance, Stewart pointed to a White Pine that had put on a remarkable one metre of growth in one year! Decomposition of the immense amounts of retained old vegetation provides nutrients for regeneration. Leaving snags standing as long as possible helps to spread out the soil inputs over time. Some fallen wood is placed in direct contact with soil, other of it not so in order to slow decomposition. However, Peter commented that there seemed to be no difference in decomposition rate according to contact; rather it appears to depend on the condition of the wood when it fell. Fallen wood is placed strategically to help in erosion control. Near paths it is left in longer pieces, which are visually more attractive than shorter 'bucked-up' pieces. Only on south-facing, drought-susceptible slopes has natural regeneration been very slow or essentially nonexistent. Hence it is being augmented in these areas by tree planting.

DIRECTING & ACCELERATING SUCCESSION

The pre-hurricane forest was 90% Red Spruce-dominated softwood which was a factor in its susceptibility to hurricane damage. Hardwoods are, in general, more resistant to strong winds. Seven areas – the 'witness groves' – largely escaped hurricane damage, mostly in the back of the park beyond south-facing slopes. These

will be maintained, but with some protection, by encouraging hardwoods around them and in gaps. One stand just inland from the Shore Road is falling down naturally, and quite rapidly, in a wave-like pattern. It is an even-aged stand of White Pine, Red Spruce, and some Douglas Fir planted in the 1950s and not managed, so its trees are tall and spindly, thus highly vulnerable.

The goal of management for the park as a whole is the development of an uneven-aged, mixed Acadian forest. It is seen as both resistant and adapted to severe weather damage, and also more adaptable to climatic change than the softwood dominated forest of old. Because of the Park's small area and isolation, it will always require some management to maintain; however by working with natural processes, those efforts are minimised.

Managers will attempt to direct and accelerate the succession process through planting of selected native species, culling, and de-suckering. For example, some suckered Red Maples are being reduced to one dominant leader in order to speed growth and produce longer-living trees. No Red Spruce is being planted partially as a concession to CFIA concerns about its susceptibility to the brown spruce longhorn beetle, but there are lots of young plants of Red Spruce in any case. Stewart explained that poplars are being put in on the exposed, south-facing slopes to effect quick cover; these will be culled after 10-12 years when maple, birch, and oaks have a good start and can take over.

In 2007 and 2008 a total of 70,300 tree seedlings were planted. These included 8,600 Black Ash and 4,750 Ironwood trees which will contribute to the conservation of these once abundant species. (A full list of species and numbers of seedling planted is given in the Comprehensive Plan, Table 4.6).

INVASIVE SPECIES & CULTURAL TREES

Then there are the unwanted, invasive species – most notably Norway Maple and Japanese Knotweed. Peter showed us an area on the east side of Cambridge Road near the entrance where small, 1-2 m high Norway Maples were culled to allow Mountain Ash, Striped Maple, and other native species to come up. There are also some very large shrubs of Black Locust in this area that will be removed. Experiments are ongoing near the Shore Road to find the best way to deal with Japanese Knotweed. For the most part, the weedy type exotics that occur close to roads, such as Coltsfoot, will be tolerated because they don't generally stray far from disturbed ground, and they do perform a stabilising function there.

Some exotic species that were introduced as ornamentals to the Park will be retained where they are considered to have specific cultural or historical significance – e.g., a corridor of European Copper Beech, and clumps of Heather by the Sailor's Memorial – but will be removed from other areas. Mature specimens of other exotic trees such as European Horse Chestnut and Sycamore Maple will not be removed, but neither will they be replaced as they die off.

The management of Copper Beech is an interesting case. It is an ornamental selection of the European

Beech whose seedlings include both Copper and Green variants. The green-leaved American Beech is native to the Acadian forest, but suffers from Nectria Canker which was introduced to North America via the port of Halifax circa 1900. Hence, the green seedlings from Copper Beech are being retained. They will be used as substitutes for our native beech, at least until canker-resistant types of the native species become available.

MANAGING VEGETATION LANDSCAPE EXPERIENCE

The 'landscape experience' is another aspect of the Park's vegetation management. For example, at the Prince of Wales Tower, Peter talked about the view corridor towards Chebucto Head. They will attempt to limit the height of the vegetation in this corridor by maintaining a younger forest and/or selecting smaller species.

DRAINAGE AND WETLANDS

The British were very good drainage engineers. However, now it is desired to keep more of the water in the Park for longer periods, and to augment the wetlands. Hence there is a shift in emphasis from rapid drainage to more diffuse, natural drainage.

I have summarised only a few of the highlights related to the ecology of Point Pleasant Park. There are many other aspects that Peter talked about and that he and Stewart then illustrated on the walk. A few highlights of these: the removal of vegetation by the hurricane which exposed numerous historic sites; a stone axe approximately 3,500 years old found under one of the tree troves; a cart road that was slated for removal which turned out to be the oldest road in the Park; a master stone mason from West Dover hired to rebuild a large retaining wall built originally built by Irish immigrants; and the return of the Mi'kmaq for their spring feast and their plans for a healing garden. The Park's Comprehensive Plan provides many more details and, for Park-lovers, it's great reading!

Thanks to Peter and Stewart for these previews. As if to assure us that we are on the right path, at dusk a Pileated Woodpecker was sighted on Cambridge Drive just as we were exiting the park and allowed us several minutes viewing. Photos were difficult though, because of the darkening sky and back-lighting. Nature always retains a few treasures to herself!



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