Contribution to the conversations on planning for The 707 Community Park
April 25, 2009:

FIRE CONTROL

While "leaving it alone" is, in my opinion, an admirable strategy, there are some management areas where this is not possible, and others where it might not be the most desirable option. This note deals with the first of these.

The forests of Gabriola belong to the Coastal Douglas-fir zone, and historically in this zone, fire has been a major part of the ecology. Its virtual elimination in past decades has, and will, result in major shifts in the ecology of the forests. One readily-observable sign of this shift is the presence of many mature specimens of grand fir (*Abies grandis*) in the Douglas-fir forest of Drumbeg Park. Unlike the thick-barked Douglas-fir, the grand fir has a thin, resin-blistered bark that makes it very susceptible to damage by fire.

In fire-adapted forests, fuel accumulation is prevented, so surface fires tend to be of low intensity, the damage is often relatively short-lived, and the net effect on the ecology is benign or beneficial. The Snunéymux^{w} almost certainly deliberately set fire to the forest so as to create openings in which deer, berries, and other food resources could flourish.

When fire is excluded from our type of forest, surface fuels accumulate and fire-vunerable species proliferate. Eventually this will result in an intense ground fire that will rapidly spread via fire ladders, such as the grand firs, to the canopy. The destructiveness of such a fire will be far greater than the “natural” low intensity fires of years gone by.

The traditional practice of considering wildfire to be excluded at all costs may be, in the long run, damaging to the forest ecosystem and may actually increase the threat to human safety, habitation , and property. Each fire successfully supressed will simply ensure that the next fire will be bigger. Eventually, the fire control methods will fail. An important part of managing the forest will therefore be development of a fire management plan that is closely integrated with the fire management plan of the community as a whole.

Reference: Forest Ecology by J.P. Kimmins

Forest Management

The topic of this discussion group was “Do the Minimum / Let the park heal”. This note argues the case that “the minimum” might not preclude doing something to “help the park heal”.

Most people are familiar with the concept of the recovery of a forest after a severe disturbance in a series of what are called seral stages. The severe disturbance we think of most often is clear-cutting, but there are others. For example, disturbance caused by severe weather, insects, disease, the introduction of new species, and the extirpation of others. A seral stage is a temporary stage in the recovery of a ecosystem that is characterized by a particular biotic community. Following the most severe disturbance, which includes disturbance to the soil, the usual starting seral stage is dominated by herbs and shrubs. Foresters identify as many as six of these stages—herbs & shrubs; pioneer hardwood; early conifer; mid conifer; late conifer; and climax shrub/byrphyte woodland. Each of these stages has its attractions and each offers in varying degrees opportunities for harvesting non-wood forest products such as berries, plants, game, and mushrooms, and each has its own kind of wildlife community.

Left to itself, a severely disturbed forest will go through a number of seral stages before reaching its climax phase, but this is often a slow process. What modern forestry and the new post-Clayoquot generation of foresters has learnt is how to accelerate or slow down the natural succession, how to prolong a chosen stage, how to revert to an earlier stage, how to skip a stage, and so on. The tools used to accomplish this include thinning, selective tree removal, planting or facilitating natural re-stocking, manipulation of species composition, mulching, and control of fires, animals, drainage, and soil conditions.

All of these techniques are labour intensive, expensive, and very likely not affordable except on a small scale with a plentiful supply of volunteer labour. However, this is not such a drawback as the purpose of such management techniques applie dto 707 would be to diversify the forest, not to make it all the same. The “park” is a “forest” and I think we should at least see what foresters have to offer in the way of planning, even if there is ultimately no will, or no resources to implement their suggestions.