

Recent work by the P.E.I. Department of Agriculture and Forestry's Forestry Division has determined that the forest area of the province has decreased from an estimated 1,378,000 acres prior to European settlement to 440,000 acres by circa 1900, or from 97% forest to 31%. The remaining forest had been subject to heavy harvesting pressure by the large population of 100,000+. The efforts of Father Burke and others resulted in the Royal Commission being set up and a "Report of Forestry Commissioners" was tabled in the Legislature in 1904. Unfortunately, nothing happened. The major recommendation of the Commissioners was the planting of trees but the 1935/36 aerial photography showed only one plantation.

What was the remaining forest of 1900 like? Unfortunately, there is very little documentation to rely on but the 1935/36 aerial photography shows what the situation was three decades later. Using this photography, it is evident that much of the remaining forest was on the poorer/wetter soils as most of the better land had been converted to agriculture. The remaining forest was a result of selective harvesting. A good analogy is if one puts a package of mixed cookies in a cookie jar, we all know what happens. The jam ones go first, followed by the cream ones, then chocolate and finally what is left are the plain and broken ones. This is what happened to our forest, cookie jar forestry! The large white pine were gone first, the good spruce, red and white, next certain hardwood species, etc. We were left with the plain and broken trees which have subsequently produced the forest we have today.

We do have a reasonable picture of the forest in 1935/36. The most notable finding from the photography is that almost 18% of the forest was classified as clearcut (this is in contrast to the 1990 figure of 3.6%). The forest had little remaining volume and even in 1967 only 34% of the forest of the Province was considered to be merchantable. Did Father Burke overstate the situation in 1902? I don't think so.

What we have today

Today's forests are the result of past harvesting combined with land clearing for agriculture and subsequent abandonment. This has resulted in two major types of forest, areas that have been farmed and those which have not. All areas have been subject to harvesting at least once and in almost all cases many times. Each successive harvest has removed the best trees and left poorer ones to regenerate. The forest we have today does not reflect the quality of the forests of the past.

Unfarmed - never ploughed:

The unfarmed forest land (it certainly has been harvested) is also of two major types, lowland and upland. The lowland forest is usually composed of black spruce, red maple, and sometimes cedar and usually regenerates to the same species. The upland forest is dominated by hardwood species, maples, birches, and beech, with a mixture of conifers (i.e. pines, spruce, fir). The upland forest regenerates to similar species but each time it is harvested the proportions change. The amount and species of conifer is influenced by the development stage of the stand when harvested and the presence of seed sources (i.e. had the fir died out, are there mature white or red spruce in the stand or were they previously harvested?). These sites rapidly regenerate. The maples in particular sprout from the stump and a new stand is quickly established. The regenerating stand species mixture can be modified by thinning to reduce the less desirable species. Of note is that the hardwood cover types have continued to increase over the past 60 years from 6.6% in 1935 to 27.9% in 1990. The softwood increased to a high in 1974 and are now decreasing rapidly as the old field white spruce stands mature and are harvested or collapse. The softwood area in this unfarmed forest land is expected to drop to about 55,000 acres by the year 2010, mostly lowland black spruce.

Farmed - previously ploughed:

The farmed forest sites are very different in their species composition and regeneration pattern. These sites have been cleared from the forest over the past 150 years and have returned to forest through natural regeneration (succession) when the farming activity stopped. Depending on a variety of factors (soil types, site wetness, location, etc.)