

Hughie Jones - February 2015

Monarch Birch
***Betula maximowicziana* - Betulaceae**

This is the only monarch birch in the garden and according to Gerry the seed was collected by Peter Wharton. It was planted in 1978 and is in bed 123. This is a bed with some outstanding trees - the coffin tree is on the north facing end (*Taiwania cryptomerioides*), the monarch birch beside it, and the Himalayan ash (*Fraxinus griffithii*) at the other end of the bed.



winter root of monarch birch at VanDusen



VanDusen monarch birch in winter rain

When you look at the form of the VanDusen monarch birch in February, you can see it is well named, a truly regal tree. And the bark of burnt browns mixed with white fits its winter silhouette. This tree also has strong and colourful bark on its roots. One of my favourite views is looking up at these exposed roots from the path below. This birch can reach up to 35 metres in height and its large heart shaped leaves turn clear yellow in the autumn. The leaves are the biggest of all the birch family, sometimes attaining over 12 cm in length.

The name *maximowicziana* honours Carl Johann Maximovich. He was a Russian botanist who introduced many plants from the Far East into horticulture. He worked at the Saint Petersburg Botanical Gardens. The native range of the monarch birch includes the Kuril Islands in the Russian Far East and Hokkaido and Honshu in Japan.

Birch are distributed throughout cool regions of the Northern Hemisphere. Birch were among the first trees to become established after the glaciers receded. They are hardy and quick growing, which makes them useful in reforestation. Birch woods support many different species of insects and mites. This in turn attracts a variety of birds. The fly agaric mushroom is associated with it and a variety of bracket fungi too. Birch have smooth resinous, tricoloured or white bark. The bark is marked by horizontal pores (lenticels), which usually peels horizontally in thin sheets, especially on young trees. On older trunks the thick, deeply furrowed bark breaks into irregular plates.

The monarch birch is a fast growing and long lived pioneer tree species. It occurs in mixed cool temperate forests at low altitude and is often dominant. In Japan it is a major timber producing tree and is commonly cultivated as an ornamental tree. This birch appears to be more drought tolerant than many other birches. Natural regeneration depends mainly on the previous year's seed production, but monarch birch has been shown to have a persistent seed bank with over 16% of buried seed being viable after six years. This means that there is always seed present in the soil, even in years when no seeds are produced. These seeds are ready to take advantage of any disturbance that provides favourable conditions for germination.

We need more than one monarch birch in VanDusen. It is not an easy tree to get. It is rare in North America. But luckily we have a healthy mature one whose seeds could start off some young ones.

Sources - <http://www.iucnredlist.org/details/194578/0>; www.glasgowbotanicgardens.com
www.britannica.com