Silvicultural management of curly birch has to be done with great care, starting from plantation establishment, through branch pruning and correctly timed selective thinnings to final cutting at the age of 35–45 years. Successful curly birch management requires special expertise, significant effort, and economic investments from the forest owner.



*Photo: Erkki Oksanen/Luke*

The Finnish Curly Birch Society (Visaseura ry) was established in 1956 to serve as a link between curly birch growers, enthusiasts, and professionals. It promotes the cultivation, management, research, utilization, and marketing of curly birch through information, guidance and consulting. Excursions are organized annually to points of interest, and they have been very popular among the members in recent decades.



*Photo: Erkki Oksanen/Luke*

Contact information of curly birch wood suppliers, artisans and sellers of curly birch wood products can be found on the web pages of the Finnish Curly Birch Society:

**www.curlybirch.com**

VISASEURA in co-operation with Luke NATURAL RESOURCES INSTITUTE FINLAND

# Curly birch

## – wooden marble from Finland

**Brown-figured curly birch contains extremely beautiful wood, now cultivated in Finland. Its supply will increase rapidly in the near future. Today it is possible to design new products based on this wooden treasure and capture the market.**

*Photos above and below: Risto Hagqvist/Luke*





*Photo: Erkki Oksanen/Luke*

*Photo: Erkki Oksanen/Luke*





Photo: Erkki Oksanen/Luke

**Curly birch** (*Betula pendula* var. *carelica* (Mercklin) Hämet-Ahti) is a special variety of silver birch, known for its hereditary and unique, highly-decorative curly-grained and brown-figured wood. It is the most highly-prized variant of native tree species in the Nordic countries.

Curly birch occurs naturally, but it is rare, growing only in Northern Europe and some parts of Eastern and Central Europe. In Finland its natural distribution area covers the southern part of the country.

Curly birch wood is the result of abnormality in the functioning of the cambium, which in turn is caused by a hereditary mutation. As a result, the annual rings and the orientation of woody tissues become wavy in appearance and the pith rays become dilated.

Curly birches display a wide range of morphological variation from crooked multi-stemmed bush-like trees to straight and single-stemmed individuals. Single-stemmed trees with abundant protuberance formation and rich curly wood configuration with brown figures are suitable for turning and therefore commercially the most valuable.

Curly birch wood can be highly decorative due to its curly-grained and brown-figured pattern, in the best cases including hologram-like white reflections. The cross-section of a curly-grained birch stem shows V-shaped patterns, which can form a pronounced and closed “curly flower” configuration.

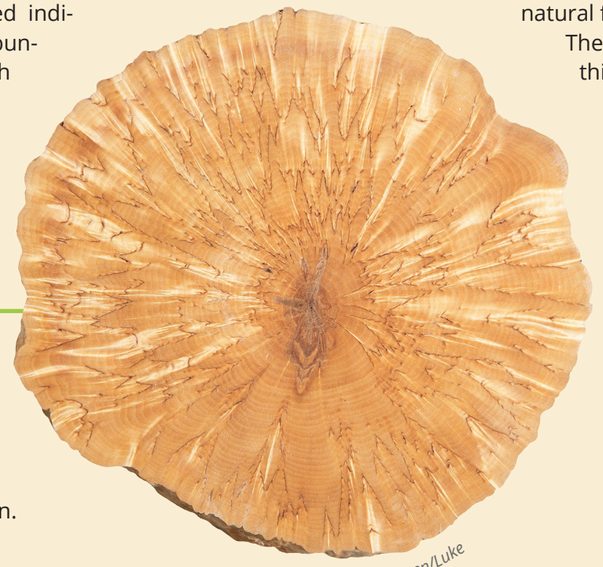


Photo: Erkki Oksanen/Luke



Photo: Ilkka Snellman

When the bark is peeled off, the surface of the stem has a decorative granulated appearance with small oblong swellings and depressions. A longitudinal tangential cut shows a lens-like configuration as seen in veneers (see front page).

The wood density and hardness of the wood of curly birch are greater than those of normal silver birch. Curly birch is well suited for turning, but long pieces of this wood tend to bend and twist as massive items.

Logs and veneers of curly birch have traditionally been used in interior decoration, furnishing and paneling, e.g. banks, offices, luxury homes, ships, and high-end cars. Wood of smaller dimensions is used by artisans when making highly valued products such as gifts, souvenirs, tools and furniture.

Cultivation of curly birch has a long tradition in Finland. Interest in commercial cultivation of curly birch has, however, increased significantly during the past 25 years with some 6 500 hectares having been planted by 2017. These stands will soon start reaching the end of their rotation. Small-dimension wood from thinnings is already now available in abundance. Harvesting curly birch timber from cultivated, certified stands does not endanger the rare individuals in natural forests.

The significantly increasing availability of this exceptionally beautiful wood resource makes it possible to develop new products based on this, now cultivated, variant. The wood is suitable also for use in premium products of high-class design. Earlier the poor availability of curly birch wood prevented the development of such products. Now this unique wood will soon be available regularly in larger quantities than today, enough for both domestic use and export markets.



Photo: Erkki Oksanen/Luke



Photo: Leo Holopainen/Metsänjalostussäätiö



Photo: Risto Hagqvist/Luke



Photo: Ilkka Snellman