

WELCOME

**FOREST TRAIL** 

During a short walk in the forest,

you will feel your senses open and

**TO OUR** 

your mind clear.

As you follow the two-kilometre trail, you will experience the power of well-managed forests. You can explore forests at different stages of growth and natural sites that are valuable for diversity and will also get an idea of how we at UPM manage our forests.

By following the guided trail, you'll learn more details about each different stage of the forest. You'll gain an understanding of how we appreciate forests and the principles of modern, sustainable forestry.

Responsibly managed forests and the wood-based products derived from them play an important role in mitigating climate change and thus securing our future.

Enjoy using all your senses along the trail. Admire the diverse vegetation, listen to the soothing sounds of nature and enjoy its enchanting scents.

We wish you enjoyable, inspiring and relaxing moments in Verla and on the forest trail!



The Verla Mill Museum Verlantie 295, 47850 Verla 020 415 2170 museum.verla@upm.com verla.fi

# **UPM** in brief

UPM is a global forest industry company whose main raw material is sustainably managed, renewable and recyclable wood. We have been manufacturing renewable and responsible products for decades because we believe in a future beyond fossil fuels.

We are building a sustainable future by providing renewable and responsible solutions to the challenges posed by global megatrends. The circular economy is important to us, which is why we reuse or recycle waste, materials, and products generated in production, and we are constantly developing new intelligent solutions.

Verla Mill Museum is owned and maintained by UPM. We preserve this valuable historical site so that future generations can also enjoy it. Verla Groundwood and Board Mill is a UNESCO World Heritage Site.



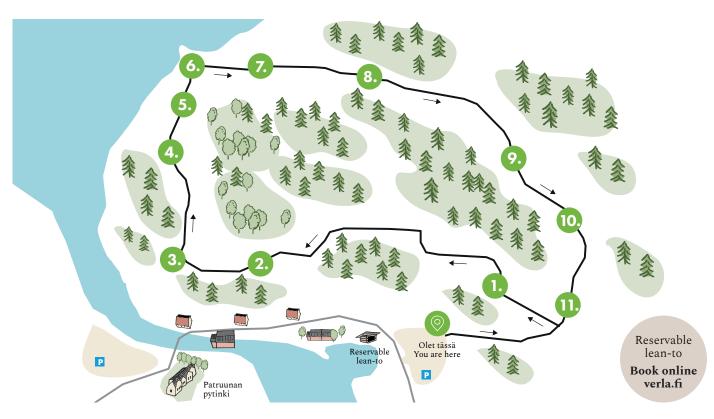
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upm.com

You can also listen to the destination descriptions at **verla.fi/metsapolku** or in **Youtube**.



## A young thinning stand – mitigating climate change This birch-dominated forest began in 1990. Although the majority of the trees are birches, you can also admire spruce, arev alder, and aspen, as well as the goat willow. The seedlings have been thinned once to ensure the growth of the trees, and now the trees in the forest are growing at a fast rate. The purpose of the next thinning is to free up space for the strongest trees. In this way, the trees will be able to grow even faster and, at the same time, they will be able to sequester more and more carbon dioxide, which in turn will help in the fight against climate change.

# 2 Spruce seedling stand – a new generation

These spruce trees began their life here in 2009 when they were planted as seedlings. Thanks to favourable growing conditions, the seedlings have grown and strengthened rapidly. Although most of the mature trees were removed to make way for them, some trees were permanently preserved in the forest. While a few of these retention trees have already fallen, many still stand tall and both support forest diversity. The seedling stand management has been done twice, most recently in the spring of 2020. In addition to spruces, deciduous trees have also been left to grow to support forest growth and diversity.

# 3 Protected forest – a history of swishing leaves

Sturdy shield bark pines adorn the top of this hill. Shield bark begins to form on the surface of the pine only when the tree has crossed the 100year mark – so the pines in this area are not young at all. The oldest of the shield bark pines we see here are over 150 years old! These trees have been witnessing life in Verla since the area was founded. In the past, this forest provided the inhabitants of Verla not only with food but also with forest therapy. We consider this forest to be an important natural site and a place to calm down, so we do not use it at all for forestry purposes.

### 4 Pine-dominated seedling stand – regeneration in progress

When felling was carried out in this forest in 2009, seed trees were left to support natural regeneration. We also sowed pine seeds in the area and created favourable growing conditions for the seeds by screefing - removing the topsoil and exposing the mineral soil. The maintenance of the seedlings was continued in 2019 when the deciduous coppice which hindered their growth was further thinned. In this way, the pine seedlings were given the space they needed to grow strong. Other tree species were also left standing to provide biodiversity to the area.

# 5 Mature thinning stand – from raw material to everyday life

These pines have stood here since 1950. Over the years, the growth of the forest has been taken care of by two thinning operations, the wood of which has been used in the production of pulp, paper, and sawn timber. In the thinnings, we have ensured that the best quality trees have been left. Once mature, these trees are used to get top-quality logwood. The pine trees and other trees closest to the shore help protect the water body from runoff and safeauard biodiversity. That is why we have excluded the waterfront forest, which enriches the landscape, from forestry activities.

#### 6 Peninsula – breathe in peace

Back in the day, this headland along the waterway was a very important place for log driving. Logs were transported by rafting them along waterways to the sawmills and factories along the River Kymi. These days, the peninsula is a place of relaxation and recreation. For that reason, we have excluded it from forestry use. When viewing the headland, you can admire, for example, shield bark pines that are rarely seen in southern Finland and which play an important role in preserving biodiversity.

## Aspen – the whispering tree of life

The aspen is not an economically important tree species, but it has a special value for forest biodiversity. The aspen's companion species includes an exceptionally large number of fungi, mosses, lichens, and insects, for which they provide ideal living conditions. Aspens are also popular with many animal species that nest in holes because they can easily make nest holes in them. The old cavities made by woodpeckers are suitable as a nest for a boreal owl, a common goldeneye duck or even a stock dove. The flying squirrel also uses robust hollow aspens as its nesting tree.

#### 8 Deadwood – significant for biodiversity

Decaying wood plays an important role in preserving forest biodiversity and thousands of animal and plant species living in Finnish forests are dependent on them. For example, fungi, lichens, and mosses live on deadwood, which also provides a favourable habitat for many insects. Birds, in turn, then feed on these insects. Decaying trees do not spread diseases or insect pests, but in fact, have a positive effect on forest health. For this reason, we leave them in the forests during the felling.

### Oliff – a unique natural habitat

The cliff and the forest growing below it form a unique natural site with conditions differing from the surrounding area: the place is shady, cool and moist and the soil is very nutrient rich. These factors have a great effect on the tree species and surface vegetation found here. Tree species composition under the cliff is diverse, and there are also sturdy deadwood trunks. In this protected site, you can spot small-leaved lime, mezereon and other plant species such as baneberry and spring vetchling.

### Rapakivi granite – one of the youngest types of stone

The Finnish name of the rapakivi granite, the provincial stone of Kymenlaakso, can be a bit misleading. This is by no means a muddy or crushed rock, but a type of granite stone that gets its name from the fact that it easily erodes into aravel. Although rapakivi is already about 1.7 billion years old, it is one of the voungest rock types in the Finnish bedrock. As you move through the forests of Kymenlaakso, you can see numerous small mounds covered with moss, which have formed when the rapakivi has slowly disintegrated. Easily crumbling rapakivi has traditionally been used, for example, in road construction.

# A mature forest – a new beginning

The high-volume and rugged spruce stand in the area has been planted as early as 1945. Over the years, the forest has been managed through two thinning operations, which have allowed the remaining trees to grow strong. As they have arown, the trees have sequestered carbon dioxide from the atmosphere. Forests are important for human and global well-being in many ways and also play a major role in mitigating climate change. When products are made from wood, the carbon bound to the wood remains stored in the products during their life cycle. The next step for this spruce forest is regeneration-felling. In this case, the old trees are removed to give the new ones a chance to grow. Regeneration felling mainly yields logs, which can be utilised in construction and furniture manufacturing, for example.