

Kuressaare Castle Park

Dendrological Tour with Historical Facts and Folk Legends



Every park is a dream



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Introduction

The building of Kuressaare Castle Park was triggered by a widespread movement in Europe in the 19th century to turn former fortifications into green areas and parks. Kuressaare Castle was deleted from the list of military objects in 1934; hence its former role – to guarantee excellent view over the nearby territories – was replaced by an opportunity to plan a public recreational area.

Landscaping of the oldest section of the park began already in 1861 by the initiative of the then Mayor Hugo von der Borg according to the layout by Riga architect H. Göggingen. Before, there was a medieval cemetery on the plot. The year 1862 city plan already included a park area on the northern side of the castle.

The creation of the park stimulated the role of Kuressaare as a sea resort which, in its turn, created a need to further expand the park. In 1890 an alley was planted on the glacis around the castle and by 1890 the castle park had a nice open area with a bandstand, the Tivoli Café and the Resort Club. In the early 20th century the park was extended along the Allee Street to the eastern side of the castle.

The northern section of Kuressaare Castle Park is a typical informal park. Most paths take to the visitors' assembly area – an opening between the Resort Club and the bandstand. In other places the park follows the historical landscape – the glacis, the mote and the esplanade.

The external border of the park runs from the crossing of the Lossi and Pargi Streets along the south-eastern border of the Pargi Street up to the crossing with the Kalda Boulevard. From there on along the western and north-eastern side of the boulevard around the castle up to the Staadioni Street; along the north-western side of the street up to the crossing with the Allee Street and along the south-western side of the Allee Street to the crossing of the Lossi and Pargi Streets. The internal border of the park runs along the glacis bordering the external side of the mote.

Good to know:

The initial area of Kuressaare Castle Park, including the castle and the moats was 17.2 ha.

After adjustment of the borders in 2002 the park area was reduced to 5 ha.

The park is a nature conservation area from 1959.

The castle was taken under protection as an architectural monument in 1926.

The park belongs to the Kuressaare Old Town heritage conservation zone from 1973.

The park is rich in various species. 69 trees, 18 of which are native, were registered in the nature conservation section of the park in 2010.

Native species represented in the park (number of trees in brackets): Norway Maple (617), European Ash (79), Norway Spruce (59), Wych Elm (55), Little-leaf Linden (44), Swedish Whitebeam (20), English Oak (12) and European White Elm (8). Of introduced species Horse Chestnut (52), Large-leaf Linden (46), Northern Large-leaved Linden (21), European Larch (2) and Hedge Maple (6) are represented.

There are 12 aged trees in Kuressaare Castle Park that have reached or will soon reach remarkable dimensions (1 meter in breast height diameter, measured at the height of 1.3 meters), the majority of which are growing in the northern and north-western part of the park. The aged trees: Horse Chestnut (D = 90 cm), Large-leaf Linden (D = 91 cm), European Ash (D = 93 cm), Large-leaf Linden (D = 93 cm), Little-leaf Linden (D = 93 cm), European Beech (D = 97 cm), European Ash (D = 98 cm), Horse Chestnut (D = 100 cm), Wych Elm (D = 100 cm), European Ash (D = 101 cm), White Poplar (D = 108 cm) and the stoutest tree in the park – Berlin Poplar (D = 122 cm).

Among the dendrological rarities of the park belong: European Beech, two Copper Beeches 'Atropunicea', Amur Cork Tree, Crimean Linden, several Hedge Maples as well as Japanese and Common Yews.

Park's grove and buildings

A – Former cemetery

The memorial is erected of limestone and gravestones found at the time the park was built. The monument bears a German text and a quote from Fr. Schiller: "*Wirke Gutes, du nährest der Menschheit göttliche Pflanze*" (Do good, for you will feed the divine plant of mankind).

The town and the county joined efforts to build the park at the time of Mayor Hugo von Borg in 1861. It was then that the human remains were found in the ground. They were collected and buried under the memorial.

B – Resort Club

The historicist Resort Club was opened on June 11, 1889 with a grand inauguration party. The building housed a bar, a restaurant, a reading room, a room for playing cards, a private room for the ladies and a hall for theatrical presentations, concerts and dancing, an open veranda, an official apartment and a gazebo tower. The Resort Club belonged to the city and was let out for the summer periods. One could enjoy meals, concerts, theatrical performances, dance parties, exhibitions and other events there.

In the mid-1920's a large decorative vase was placed in the middle of the Park Square.

C – Bandstand and fountain

The bandstand is one of the oldest buildings in the park; the first bandstand was built in 1860. The present bandstand is the third one, built in 1922 by the blueprints of one of the best Finnish experts in the field Jursien. The fountain was constructed in 1938.

D. Grove of the Heads of State

By the initiative of Kuressaare municipality government the Grove of the Heads of State was created in the castle park on August 5, 2002 – a place where the heads of state visiting Kuressaare can plant a young oak tree.

2002 – President of the Republic of Estonia Arnold Rüütel
2002 – President of the Republic of Latvia Vaira-Viķe Freiberga
2005 – President of the Republic of Lithuania Valdas Adamkus
2005 – President of the Republic of Poland Aleksander Kwaśniewski
2007 – President of the Republic of Estonia Toomas-Hendrik Ilves
2008 – Her Majesty Beatrix, Queen of the Netherlands

The first Ambassador of the Kingdom of Sweden after reinstatement of sovereignty in the Republic of Estonia (1991–1995) Lars Arne Grundberg planted an oak outside the borders of the grove on June 26, 1992. The oak denotes the location of a medieval church. The church was destroyed during the Swedish campaign in 1612 when Saaremaa belonged under Danish jurisdiction.

To celebrate the 5th anniversary of the Estonian Lions District, an oak was planted in the castle garden by Second President of Lions Club International Augustino Soliva and Lady Helena on June 5, 1995.

Dendrological Tour

1. European White Elm (*Ulmus laevis*)

D = 72 cm

Native to Europe and preferring predominantly river flood lands, European White Elm grows up to 35 m tall with an elliptic crown measuring up to 15 m in diameter. Trunk is covered with brown-grey bark. Sprouts are light brown and slim, hairy when young, later bare. Leaves are ovate-round, highly asymmetric and glossy green. Reddish-purple or greenish-purple flowers appear in clusters, before the leaves sprout. Ovate nuts are winged all-round, with a seed in the middle, aril slices from top to seed.

Grows in the alley in the western side of the park.

The impact of human activity has reduced the natural habitat of European White Elm. Its timber is strong and was therefore used for making carts and sleighs. The popular name 'bow tree' indicates that the best horse bows were made of European White Elm.

Due to poor reproduction conditions in our climate, European White Elm belongs to category III species under nature conservation in Estonia.

2. Wych Elm (*Ulmus glabra*)

D = 100 cm, aged tree

Native to most of Europe and Asia Minor. In Estonia the tree is found scattered in broad-leaved mixed forests. Wych Elm grows up to 40 m tall with a crown measuring up to 20 m in diameter, trunk measuring up to 7 m in diameter. Its pointed leaves are rough on top. The fine root system spreads quickly and expansively. It can live as long as 500 years. Trunk bark is dark grey with deep furrows.

Dark brown sprouts have bristles, leaf buds are dark and with bristles, flower buds are considerably larger and round in shape. Ovate entire leaves with double toothed edge have bristles and are 8–16 cm long, 4–7 cm wide; petiole is 0.3–0.6 cm long. Leaves are dark green above, plain green below.

Small brown-violet flowers appear in clusters. Blooms at the end of April, fruit – widely elliptical nut, winged all-round with a seed in the middle – ripens by mid-June.

The Germans considered the elm a witch tree; the elm was associated with death and mourning in Antique Greek, but not in Estonia.

In the past decades Witch Elms have been widely affected by a malicious parasitic fungus called the elm death. The drying of branches and offshoot is caused by another elm disease, where the spores of the fungus separate bark from tree and the tree appears as if burnt. The Wych Elms of the park also carry Dryad's saddle, which causes the rotting of the heart of the trunk.

3. Little-leaf Linden (*Tilia cordata*)

D = 93 cm, aged tree

Native to Europe, S.W. Siberia and Asia Minor, Estonia is its natural habitat.

Leaves are alternate, broadly cordate, with acuminate apex and deeply cordate base, finely serrate at margin, dark green, glossless or slightly glossy on top and blue-green from below. Sprouts are reddish and yellowish, without bristles, buds in alternate positions.

Latin name (*T. cordata*) means heart-shaped and no other native tree has similar leaf shape. The crown is broad and glossy, offering plenty of shade. Little-leaf Linden is the most shade-resistant native tree. Our oldest lindens are 500 years old.

It is quite common that the nutlets don't ripen and germinate in time; due to thick shell also ripe seeds don't germinate. Therefore the majority of lindens grow from stub sprouts.

One of the ancient roles of linden was to serve as a venue for trials, because linden was considered to represent compassion. The custom dates back to pre-Christian times, when tribes gathered under holy trees for trials.

Ancient Teutons and Scandinavians dedicated linden to Freya – the goddess of Earth and to Frigga – the goddess of child-bearing and fertility. The Estonians regarded linden as a holy tree already before Christianity.

4. Siberian Fir (*Abies sibirica*)

An evergreen tree with conical crown; attains height of 30 m and diameter of 50 cm. Native to E. Europe & Central & W. Siberia. Forests with dominance of Siberian fir form the “dark” taiga of Siberia.

Siberian Fir arrived in Estonia in the II half of the 19th century and is the most widely used fir in Estonian parks and green areas. W.M.A. Engelhardt, a noted landscapist, placed groups of Siberian Fir to the corners of Estonian manor parks, thus creating them a unique look.

Siberian Fir is easily recognizable by its forked top. Cones are cylindrical, bluish before maturation, seed scales are with dentate margin, bract scales are concealed. Cones spread seeds, leaving the upright stump on the tree. Wood is light and soft, has no heart or resin ducts, hence the trees live only 100 years. All firs planted at the time the park was built have been decayed.

Oil from fruit is used for the treatment of respiratory diseases. Slavonic legend has it that forest goddesses dwell in fir trees.

5. Amur cork-tree (*Phellodendron amurense*)

D = 31 cm, dendrological rarity

In natural habitats attains the height of 25 m; in Estonia attains the height up to 15 m and width up to 8 m. This deciduous tree with oval crown is native to N.E. China, Manchuria, and the Amur River region. It can grow as old as 300 years.

As an ornamental plant, *Phellodendron* is a tree for all seasons. In spring it has yellow flowers, in summer it provides foliage and shade, in autumn the leaves turn bright yellow and the textured bark and winding branches add interest in the winter.

Flowers are small and greenish yellow in colour, gathered in inflorescence; blooms in June. Fruit are black round berries. Amur cork-tree is widely used in landscaping, as it grows quickly and is resistant to drought and winds.

The bark is used for commercial cork production.

The tree was planted in 1988 to commemorate the 100th birth anniversary of Viktor Kingissepp.

6. Swedish Whitebeam (*Sorbus x intermedia*)

W. Estonia – the continental part and islands – make up the easternmost border of the natural habitat of Swedish Whitebeam, native to S. Scandinavia & W. Baltics. The growth span of this deciduous tree with oval to round crown and stout trunk is 300 years. The tallest whitebeams measured in Saaremaa are 18 m with trunk diameter reaching over 4 m. The largest specimen, usually planted, grow in gardens and on roadside verges.

The outer bark is brown or grey-brown and smooth, with shallow furrows and horizontal lenticular rings. Branches are silvery, olive-brown or red-brown. Leaves are glossy dark green above, pale grey-green tomentose below with

tough leathery surface. Blooms in June with monoecious white blossoms, 5 petals in each.

Edible red apple fruit with yellow flesh was added to bread flour in the times of hunger. This may be the reason why whitebeam are considered as holy at Sõrve, Saaremaa. Several N. Estonian folk names of the tree also make references to connection with bread: 'flourberry', 'bread-berry tree', 'bread-berry shrub', 'bread-tree'. The official Estonian name is of Saaremaa origin.

Fungal infection may cause trunk rot. The appearing of fungi caps on bigger branches indicate that the tree is dangerously rotten from inside.

7. Hoary Mock Orange (*Philadelphus pubescens*)

h = 4.5 m

Cultivar found in parks and gardens in temperate zones. The family got its name after Egyptian king Ptolemaeus Philadelphos (285–247 B.C.), who married his sister (*philadelphos* = loving one's sister or brother). The 2–3 m high deciduous ornamental shrub is widespread all over the world, it is grown from the 16th century.

Leaves are opposite, simple, oblong to ovate, coarsely serrated, green above and gray fuzzy below. White petal clusters have a weaker scent than the wild jasmine. Being a frost-hardy ornamental shrub, Hoary Mock Orange is common in Estonian parks and green areas. Grows together with wild jasmine in Kuressaare Castle Park and has reached exceptional height – 4.5 m.

8. Tatarian Honeysuckle (*Lonicera tatarica*)

Tatarian honeysuckle is a multi-stemmed, upright, deciduous shrub, growing up to 3 m tall. The bark is light gray and often peels in vertical strips. The leaves are opposite, ovate and blue-green. Flowers develop in pairs in the axils of the leaves; flowers are tubular and white to pink to red. Blooms in early summer. Native to S.E. Europe, W. and E. Siberia

The abundant berries ripen to an orange to red colour and often stay on the shrub throughout winter. They look delicious, but are poisonous, sometimes even dangerously! And yet this tree is appealing not to the eye only – its timber is hard as bone. People used to make shuttles, rake teeth, crochet-hooks, walking-sticks and other durable utility items of honeysuckle.

9. Horse Chestnut (*Aesculus hippocastanum*)

Horse chestnut is native to the Balkans. It is a medium to large deciduous tree that typically grows 25–30 m tall and 200–300 years old with an upright oval-rounded crown.

Was introduced to Estonia in the 17th century, one of the most common non-native species, used widely as a park and alley tree. Due to warmer climate the Horse Chestnuts of Saaremaa grow more lush than the specimen in continental Estonia.

Trunk bark is grey-brown, with deep furrows. Thick brown branches have large leaf-buds. Light green palmate compound leaves emerge in spring, each

with 7 (less frequently 5) spreading ovate-oblong leaflets. Showy white flowers with red or yellow markings appear in upright terminal panicles in mid-spring, making the tree look like a Christmas tree with candles. Fruit is a globular dehiscent capsule consisting of 1–2 horse chestnut(s) encased by a leathery light brown husk covered with sharp spines.

Fruit was used as fodder, also for making soap. Raw chestnuts and husks are poisonous for man. Flower-buds can substitute hop in brewing. Turkish cavalrymen fed the fruit to their horses. Hence the name of the tree – horse chestnut. After the falling of leaves small horse shoe-shaped scars remain on the sprouts.

Some Horse Chestnuts grow in the park from the very beginning, this huge and aged tree with 90 cm breast height diameter among them.

10. Common Hawthorn (*Crataegus monogyna*)

A shrub or small tree, 8–10 m tall, native to the mountains of Central Europe. Pale grey bark turns brown after peeling; dark orange-brown when young, turns grey-green with deep furrows or peels off when old; sprouts have 1.5 cm spines. Leaves are dark green, palmate fissured, with 3 or 5 lobes, 3–5cm long, leaf stem 1.5–2.5cm long, roughly toothed edge. Blooms richly in June with pungently smelling white umbels. Its pea-sized, pale to purple-pink apple-like fruit is edible, but tasteless. Its hard, thick and beautiful reddish timber is used for woodcarving and turning.

The abundance of hawthorn's flowers symbolize physical, moral and spiritual purity, always aspired to by man. Common Hawthorn has played an important role in English spring festivities, fertility rituals and wedding ceremonies for thousands of years.

The legend has it that Welsh “white way goddess” once walked over the empty sky, leaving behind a trail of hawthorn flowers that became the Milky Way.

11. European Ash (*Fraxinus excelsior*)

D = 101 cm, aged tree

Taller and stouter among other varieties of the family, European Ash is native to all Europe. It is a deciduous tree up to 45 m tall, with a straight trunk and growth span of 250 years. Estonia makes the northernmost border of the natural habitat of European Ash, therefore it “only” grows as tall as 30 m here.

Trunk bark is grey and smooth, slightly fissured on older trees. Buds are large, velvety-black. Compound leaves are opposite, imparipinnate, leaflets – usually 7–15 in number, are subsessile, oblong, narrow-elliptic or lanceolate, unequally finely serrate at margins, glabrous or sparsely pilous beneath along mid-rib.

Flowers are aggregated in panicles and are located on last year's sprouts. Winter-buds are in opposite position, roundish and almost black. Blooms in May, the winged-fruit ripens in September.

Often damaged by late spring frost due to low frost resistance. Hence the popular name of late spring frost – ash tree chill. However, European Ash is relatively common in parks, green areas and farm yards.

In old times, the leaves were used to get green and black dye and the branches were used as fodder. Plane wood and wheel spokes were also made of ash timber. Due to stretchability, horse bows and sledge runners were ashen, too.

The legend has it that Achilles killed Hector with an ashen spear. Ash was dedicated to the god of the sea Poseidon and pieces of ash were taken on board as good luck charms.

12. European Spindletree (*Euonymus europaea*)

h = 5 m

Given by Theophrastus, the Greek name *euonoma* denotes “with good name”. Native to all Europe, the Balkans, the Crimea and the Caucasus.

Estonia is the natural habitat of European Spindletree. It grows up to 5 m tall, as an upright shrub or small tree in S.E. Estonia, on the Koiva River flood plain, that is the northernmost border of the habitat.

All spindletrees are characterized by quadrangular sprouts, covered with corky slats. Trunk is grey or brown, young sprouts are brownish green or reddish brown, buds are green. The leaves are opposite single, with sharp top, serrate.

Small, almost unnoticeable green-white flowers appear in May, by threes to fives under leaf arms. The true beauty of a spindletree manifests in autumn, when the red fruit, resembling a cardinal’s hat, appear with orange seeds inside.

In the old days the aril was used to get orange dye and Indian women draw their forehead dot with it until today.

The leaves and fruit of a spindletree are extremely poisonous!

13. Quebec Hawthorn (*Crataegus submollis*)

Hawthorns belong to a family with over 1000 different species. Quebec Hawthorn is native to N.E. North America – Canada, growing in underwood and forest edges. Quebec Hawthorn is one of the most common hawthorns in Estonia, growing here has a 5–8 m low deciduous shrub or tree. Young sprouts are pilous, later becoming bold and zigzag. Brown slightly bent thorns are 4–6 cm in length. Wide ovoid leaves, 4–8 cm long, unevenly serrated, yellowish green and pilous from above, rough from below.

Hawthorns belong among the most strong and adaptable trees. Thanks to long thorns, hawthorns make impassable hedges for both men and animals.

In old days hawthorn hedges were typical to manor gardens and parks but not to farmsteads. The popular names of hawthorn are 'flourberry tree' and 'bread tree', as the fruit is edible.

14. Common Privet (*Ligustrum vulgare*)

Native to Central & S. Europe, Asia Minor and N. Africa. The Latin family name *Ligustrum* can be translated as 'Growing in Liguria' or 'used for basketry'.

The height of a Common Privet is 5–7 m, spread of crown 3 m. It is dense, bushy and upright. Being a common ornamental shrub in parks and hedges, it is also widely used at cemeteries, in private and public gardens.

Lance-like, elliptical leaves are 3–9 cm long and 1–4 cm wide, petiole 0.1–0.5 cm, with a hard surface. Leaves are dark green above, pale green below. Leaf edges roll slightly downwards. Common Privet often sheds its leaves while they're still green.

Blooms in June–July. Its small white panicles are app. 8 cm long and have an unpleasant scent. Pea-sized black berries are app. 0.5 cm in diameter, particularly decorative and persistent. They ripen in September–October and are mildly toxic.

Privet is frost-hardy. In colder winters the sprouts may freeze to the ground, but the plant recovers well from stump sprouts.

15. White Poplar (*Populus alba*)

D = 108 cm, aged tree, planted at the time the park was created.

The name is probably derived from a Greek word *paipallo*, meaning 'trembling' and 'quivering'.

It is a medium-sized deciduous tree, growing 25–30 m tall, the crown is light, and the tree has a relatively short growth span –150 years at the most. Poplar is native from S. Europe and N. Africa to China and Siberia.

Now a popular park tree, it was introduced to Estonia at the late 18th century.

The young sprouts are covered with whitish-grey down, including the small buds. The leaves are 4–15 cm long, five-lobed, with a thick covering of white scurfy down on both sides but thicker underneath; this layer wears off the upper side but not the lower, which stays white until autumn leaf fall. Larger, deeply lobed leaves are produced on fast-growing young trees, and smaller, less deeply lobed leaves on older, slow-growing trees.

The flowers are catkins up to 8 cm long, produced in early spring; they are dioecious, with male and female catkins on separate trees; the male catkins are grey with conspicuous dark red stamens, the female catkins are greyish-green. White Poplar also propagates by means of root suckers growing from the lateral roots, those trees often stand slant.

Ancient Romans honoured and respected White Poplar and the tree was extensively cultivated in public areas.

16. & 36. European Beech (*Fagus sylvatica*)

One of the largest European Beeches in Estonia: D = 97 cm, h = 24 m. The stoutest European Beech in Estonia with breast height diameter 109.5 cm grows in the Kuressaare Castle yard.

Deciduous trees with leaves being alternate, simple, and entire or with a slightly crenate margin, 5–10 cm long and 3–7 cm broad, with 6–7 veins on

each side of the leaf belong to the family. European Beech starts to bloom when 30–80 years old. The tree usually grows up to 45 m with a growth span of 500 years. Its seeds, called beechnuts, are small triangular nuts.

Native to Central & W. Europe, its natural habitat does not reach Estonia. As an ornamental tree, beech was first planted in Estonian parks in the II half of the 19th century. The beeches in Kuressaare city park were planted most probably at the time the park was established. Its long, slender light-gray trunk and spring buds have inspired people to call the tree “an elephant in silk gown”.

In old times people used to eat roasted beechnuts; raw nuts are not edible, as they contain an alkaloid harmful to man, that dissolves at heating and roasting. However, only a few specimens produce fruit in Estonian climate.

Its name has been derived from the name 'book' in many languages (Buche (beech) and Buch (book) in German); in Europe beech is associated with the development of the art of writing. In 1450 Johannes Gutenberg invented the printing press thanks to an imprint left on paper by a matrix carved of beech bark.

17. Common Boxwood (*Buxus sempervirens*)

In its native habitats – S. Europe, N. Africa and Asia Minor, boxwood grows as 6–8 m tall evergreen shrub or tree with the growth span of 700 years.

Common Boxwood is grown as an ornamental and hedge shrub in Estonia, here its height reaches only one meter. It prefers warm and shady locations.

Alternate evergreen leaves on short petioles and are ovate to oblong-elliptical, with cochlear arcuate edge, 1.5–3 cm long, dark green above, paler below, sprouts are tetrahedral, grey or green. In May yellowish hermaphrodite flowers appear in axillary clusters, 2 mm long.

Boxwood is sometimes mixed up with cowberry, as young boxwood indeed resembles a cowberry bush. But beware, since Common Boxwood is extremely poisonous and its fresh juice can cause skin inflammation.

Its thick and hard timber is used to make pipe bowls, chessmen and musical instruments.

18. English Oak (*Quercus robur*)

Latin name *Quercus robur* means 'gorgeous, hard timber'. English Oak is the only member of the oak family with a natural habitat in Estonia. It is a long-lived (500 years and more) big and sturdy tree with a large widespread crown of rugged branches. A deciduous tree with strong roots and stout trunk. The roots of a tiny oak are three times as long as the tree itself; the roots of a large oak may reach as deep as 10 m.

Native to Europe, Asia Minor, Estonia makes the northernmost border of the natural habitat of the oak, our climate is severe and cold for oaks. Despite of it, the majestic and gorgeous tree fits the 'king of the trees' title equally well in Estonia as it does elsewhere. Our short vegetation period causes the leaves to freeze and wither on the tree.

English oak is the symbol of Estonian nature conservation; of all old trees under protection, the number of oaks is the largest. 5000 years ago half of the local forests were oak forests. With the tilling of arable land large oak forests were destroyed.

Oak was called the peasant's iron – the most durable windmill details were oaken. Shipbuilding consumed large quantities of oak wood.

In the 17th century people began to limit the mass cutting of oak forests. When Estonia was part of the Swedish Kingdom, a peasant was entitled to cut an oak on his land, provided he planted two oaks in place of it. Peter the Great enforced capital punishment for unlicensed felling of oaks.

Oaks have been worshiped as holy trees by many nations since antiquity; according to folk legends of many European countries, oak is the tree of the god of thunder. Old oaks often stand alone on the landscape with their roots reaching the ground water. This is why such trees act like natural lightning rods.

19. Hedge Maple (*Acer campestre*)

h = 6.5 m, dendrological rarity. This 17 m tree was the tallest Hedge Maple in Estonia.

A deciduous tree, 15–25 m tall, with a trunk up to 1 m in diameter. Its bark is finely fissured, often somewhat corky. In unfavourable regions of the natural habitat Hedge Maple grows as a shrub. Native to Central Europe and W. Asia, this tree can grow 400 years old.

Leaves are in opposite pairs, 5–16 cm long and 5–10 cm wide, with five blunt, rounded lobes with a smooth margin, green in summer and golden in autumn. Hedge Maples can be found in some public parks, but are poorly represented in Estonia due to low resistance to frost.

A Trier manuscript, dating back to the 15th century and telling about plants as symbols of love, says that when going abroad and leaving your sweetheart at home, one must wear branches of Hedge Maple on the lapel. Maple leaf, strongly attached to the tree with a long petiole, symbolises connection with the source.

20. Green Ash (*Fraxinus pennsylvanica*)

A medium-sized deciduous tree with uneven crown, reaching 12–25 m in height, native to Eastern North-America. Naturally a moist bottom land or stream bank tree, it is hardy to climatic extremes. One of the most common introduced ash species in Estonia. It is resistant to urban conditions and plant diseases. Widely represented in manor parks all over Estonia.

The bark is smooth and gray on young trees, becoming thick and fissured with age. Winter buds are reddish-brown, with a velvety texture. The leaves are 15–30 cm long, pinnately compound with seven to nine leaflets with serrated margins and have short but distinct, downy petiolules a few millimetres long. The fruit is a samara, comprising a single seed with an elongated apical wing.

Green Ash is shorter than Common Ash, its timber being brittle and therefore less valuable.

21. European Beech 'Atropunicea', Copper Beech (*Fagus sylvatica 'Atropunicea*)

The tallest red-leaved beech in Estonia: D = 66 cm; h = 26.5 m. Cultivar found in parks and gardens in temperate zones, common in Estonian parks, mostly on islands and the seaside regions of continental Estonia.

Planted to Kuressaare Castle Park during the establishment of the oldest section of the park; the second specimen was planted in the early 20th century.

The cultivar looks spectacular in full sun, particularly after a sunny and frosty winter. Our climate won't allow Copper Beech display its full autumn colours: all of a sudden the foliage just turns brown. Withered leaves remain on trees until the first snows.

Grey trunk and dainty shiny sprouts make the tree easily recognizable also when bare, as its shiny brown pointed long buds are very showy.

22. Butternut (*Juglans cinerea*)

D = 38 cm

Cinerea denotes 'ashen' in Latin. The deciduous tree, growing 25 m tall, with a wide crown, is native to Eastern North-American broad-leaved mixed forests, often growing on stream banks. The growth span reaches 200 years. In Estonia, one can see Butternut in several old manor parks, but also in public town parks.

Light grey bark, with deep furrows when old. Young sprouts are pilous, top buds are large and pilous. The leaves are pinnate, up to 70 cm long, with 11–19 ovoid leaflets. The whole leaf is downy-pubescent, and a somewhat brighter yellow-green than many other tree leaves. The flowers are inconspicuous yellow-green catkins produced in spring at the same time as the new leaves appear. Male flowers are slender catkins that develop from auxiliary buds and female flowers are short terminal spikes on current year's sprouts.

Blooms in May–June, depending on the location, edible nuts ripen in September–October. Butternut wood is light in weight and takes polish well, is highly rot-resistant, with fine texture and lovely colour.

Indian tribes built houses and furniture of the timber; the dye from nutshells was used to dye hair and textiles. The Confederation soldiers were nicknamed as *butternuts* in the American Civil War, because of the peculiar colour of their uniforms. It is possible that the uniforms were dyed with pigment from the Butternut shells.

23. Common Yew (*Taxus baccata*)

Common Yews evolved in the Tertiary era. Today, they are one of the relicts of the northern hemisphere, belonging among the eldest tree species in Eurasia.

Native to W. Europe to as far as the Western parts of Estonia, the Caucasus, Asia Minor and N. Africa.

It is a small to medium-sized 20–29 m tall evergreen dioecious tree or shrub with an expansive crown and often several trunks. It is an atypical conifer, since its seed cones are surrounded by a modified scale that develops into a soft, bright red berry-like structure called an aril; the tree does not contain resin.

It is relatively slow-growing, but can be very long-lived, with the maximum recorded trunk diameter of 4 metres probably only being reached in about 2500 years. Common Yew is the most shade tolerant conifer in Estonia and Europe.

The bark is thin, scaly brown, coming off in small flakes aligned with the stem. The leaves are lanceolate, flat, dark green, arranged spirally on the stem, but with the leaf bases twisted to align the leaves in two flat rows either side of the stem, except on erect leading sprouts, where the spiral arrangement is more obvious.

The landlords of Saaremaa had the habit of letting their servants cut cartloads of yew branches and intertwine those into chaplets for larger festivities. Common people decorated mounds with yew wreaths. This extensive usage has destroyed Common Yews from many places.

All parts of Common Yew, except the berry-like aril, are extremely poisonous.

Common Yew belongs to category II species under nature conservation in Estonia.

24. European Linden (*Tilia x vulgaris*)

D = 93 cm

European Linden is found in parks and as a street tree in temperate zones especially in Europe. It is a natural hybrid of Little-leaf Linden (*T. cordata*) and Large-leaf Linden (*T. plathypyllos*). The cultivar is particularly common in Europe. Extremely enduring and longevous tree, up to 40 m tall, with wide cone like crown.

Young sprouts are from pilous to glabrous, leaves are broadly ovate and sparsely pilous, with down on vein axils; leaves are obliquely cordate or somewhat truncate at the base, serrate, abruptly acuminate-acute; petiole densely pilous.

In autumn, *Tilia x vulgaris* stays green longer than other members of the Linden family. Its trunk bears characteristic knurs, occurring from the proliferation of dormant buds.

First European Linden reached Estonia over 300 years ago. One of the oldest – 390 years old – is standing on the hill of the Great Coast Gate in Tallinn. The old specimen growing in the castle garden were planted at the time the park was established.

In the Ancient World and old European cultures, linden was associated with femininity. The essence of the tree is soft and tender, its timber is easy to

carve, its bast flexible and pliant, and its flowers are rich in nectar and smell sweet.

25. Siberian Peashrub (*Caragana arborescens*)

Siberian Peashrub is an introduced, deciduous shrub or a small tree, 6–8 m tall. It is native to S. W. and E. Siberia. The sprouts are veined, young bark is smooth and olive green and becomes less vivid in colour with age. The leaves are alternate, each composed of 8–14 oval leaflets.

The flowers are yellow and appear early in the season, forming pods in late June or early July. As the pods ripen, they crack and burst, spreading the seeds.

Timber is used for carving and turning. Siberian Peashrub is a common blooming ornamental shrub widely used in town parks and green areas; also a very valuable honey plant.

26. European Larch (*Larix decidua*)

D = 63 cm; h = 23 m

Native to the Alpine regions of Central Europe & S. Poland, its crown is irregularly pyramidal. The conifer is longeuous (980 years) and grows 30–50 m tall. Introduced to Estonia in the mid-18th century,

European Larch is very common to old Estonian manor parks and gardens, it has even naturalized in some places. Planted to the castle park at the time of establishment. Compared to Siberian Larch also growing in the park, European Larch sheds leaves later in autumn, as it requires a longer vegetation period.

Timber is resinous, fire and rot resistant. Larch used to be one of the most common shipbuilding timbers; cobbler's wax and turpentine is made of larch resin.

The strength of larch timber was discovered by Julius Caesar (100–44 B.C.), when he besieged a castle in the Alps, built of larch logs. The logs didn't catch fire from the burning of faggots. Later on he named the castle as Larignum.

27. Berlin Poplar (*Populus x berolinensis*)

The stoutest tree in the park: D = 122 cm, h = 27 m

Hybrid found in parks and planted as a street tree in temperate zones. App. 35 species of dioecious trees belong to the Poplar family. Berlin Poplar is a young cultivar – a hybrid of Laurel Poplar (*P. laurifolia*) and Pyramid Poplar (*P. nigra ,Italica*) that evolved in Berlin in the II half of the 19th century.

Berlin Poplar is also a fast-growing tree, therefore it's possible to meet those giants with narrow crowns in many parks and green areas.

Our specimen were plated most probably during the replenishment of the northern section of the castle park in the early 20th century.

Catkins appear before leaves and resinous buds release a characteristic smell when opening. Female flowers produce capsules, mature capsules release

billions of seeds with long down. Leaves are alternate, rarely subopposite, ovoid, with pointed top, shiny on the upper side, with slightly wavy edges.

In the Middle Ages poplar was used as building material, since its timber is fire resistant. Today it makes a fine raw material for veneer and paper industry. Thread reels, clogs and matches are also made of poplar timber.

28. Lemoine deutzia (*Deutzia x lemoinei*)

Cultivar found in parks and gardens in the temperate zone. The tree family got its name after an alderman of Amsterdam van der Deutz. The family includes app. 50 species native to E. Asia, the Himalayas, the Philippines and Mexico. A well-known French gardener Lemoine developed many hybrids.

The parent species of Lemoine deutzia are Graceful deutzia (*D. gracilis*) and Amur deutzia (*D. Parviflora*), both cultivars.

Lemoine deutzia is an erect branched deciduous shrub with the height and width of 1 m. It has opposite compound medium-green leaves, coarse, with finely serrate edges and short petioles.

White flowers stand on panicles. Blooms lushly in June. Round capsules often stay on shrubs overwinter. People often want to have Lemoine deutzia in their garden once they've seen the shrub in full bloom.

Those undemanding shrubs are extremely popular in the gardens and green areas of W. Europe. Lemoine deutzia has proved relatively frost hardy on Estonian islands and coastal areas and is the most shade-enduring species in Estonia, blooming more lushly in shade than any other ornamental shrub.

29. Norway Maple (*Acer platanoides*)

The Romans were the first to call the Maple family *Acer*. Native to Central & N. Europe, the Balkans, Asia Minor & Iran, Norway Maple is a tall tree, growing up to 30 m, with a short trunk with diameter up to 1 m, a large round crown and upward-reaching branches. It looks more gorgeous as a park and alley tree than it does when growing in forests.

Pale grey or greenish grey bark with deep furrows when old. Branches are dark brown, sometimes green-brown or pale brown and smooth. Leaves are 5–7 lobed, with full green colour, turning yellow-orange or occasionally red in autumn. Long petioles contain white latex.

Blooms in April, flowers are lemon-coloured umbels and appear before the leaves sprout. The umbels are particularly decorative. Fruit is a pendent schizocarp in clusters, elliptical, with spreading wings. The structure of wings allows them to be glued on a nose, which is why the tree is also called a 'long-nose tree' in the Tartu County. Long sunny autumns turn maple leaves particularly colourful.

Maple timber is easy to process. In old times people made sieves to winnow grain from maple shingles. Today, the bodies of stringed instruments are made of maple wood. Maple syrup is made of sweet maple juice.

The round alley of Norway Maples was planted in 1887.

30. Common Lilac (*Syringa vulgaris*)

The Common Lilac is a slow-growing deciduous shrub, 5–6 m tall with virgate branches, native to S.E. Europe. It was one of the first exots introduced in Estonia. A common ornamental shrub in parks, green areas and old farmstead gardens.

Rough grey-brown bark, later fissures lengthwise and peels off in thin flakes. Heart-shaped to widely ovate leaves, stalked, 5–12 cm long, with a tough surface. Leaves are glossy green above and pale green below. The flowers are lilac-coloured, blue or white strongly scented panicles, 10–20 cm long. Common Lilac glooms in late May and early June.

Profuse blooming of lilac flowers marks the beginning of summer. The blossoms with more than 4 petals are considered lucky and people look for them from the panicles.

Common Lilac is found in 1500 common and compound blossom varieties. The varieties developed by a long-standing teacher of Räpina Gardening School Adolf Vaigla have been entered the international plant variety rights register.

Castle Park planting includes Common Lilac and its white blossom variety – one of the basic varieties in the shrub front. Hungarian Lilac and Ruan Lilac are also represented.

Lilac is also called ‘*pipe tree*’ in English, since its timber is fireproof and was used for making pipes.

31. Northern Large-leave Linden (*Tilia platyphyllos ssp. cordifolia*)

Northern Large-leave Linden is a deciduous tree with a wide ovoid crown, it grows 40 m tall and is native to Central & W. Europe. Popular in parks all over Europe and N. America. Very long-lived tree, can grow over 1000 years.

Young sprouts very pilous, leaves broadly ovate, pilous below and above when young, only below when old, petiole and leave edges pilous. First year branches are light brown and pilous. Blooms earlier than other linden varieties.

One of the first non-native tree species in Estonia; was introduced in manor parks in the 16th century, the first specimen coming most probably from Germany.

Linden honey is of high quality. In a warm summer day one can locate a linden with ears – its crown is humming with bees.

In Germany, linden was celebrated as the heart and soul of village life. People used to sit on benches placed in the shade of lindens; the “dance linden” was the centre of village dances.

32. Crimean Linden (*Tilia x euchlora*)

h = 24 m

Crimean Linden is a natural hybrid of Small-leave Linden (*T. cordata*) and Caucasian Linden (*T. dasystyla*) from the mountain forests. Being a valuable

ornamental tree, the hybrid cultivar is found in parks and as a street tree in Middle and W. Europe.

Up to 20 m tall deciduous tree with arcuate shiny yellow sprouts reaching the ground and with an oval crown; simple dark-green shiny leaves. One of the latest bloomers among other linden varieties. In Estonia the tree blooms at the end of July. An excellent honey plant, but with a narcotic effect on bees. Fruit does not ripen in Estonia.

The tree planted in Kuressaare Castle Park at the beginning of the 20th century has reached majestic dimensions and surpasses all its counterparts in continental Estonia.

33. Pacific Slope Snowberry (*Symporicarpos albus* var. *laevigatus*)

Native to Western North America, introduced in Estonia in the II half of the 19th century. A common ornamental park shrub. Height 1–2 m.

Blooms from June to September and is a good honey plant. Its real beauty reveals itself in early winter, when the shrub becomes covered with white berry-like fruits that stay on the shrub until mid-winter. Watch out, the berry-like fruit is poisonous!

Shade-resistant, grows also on poor soil. Practically disease-free.

34. Japanese Yew (*Taxus cuspidata*)

Native to Russia, Japan and the Far East, Japanese Yew puts up with continental climate better than our native Common Yew.

Its bark is reddish brown, with shallow fissures and yellow white spots, the leaves are lanceolate, flat, dark green, 1–3 cm long and 2–3 mm broad, arranged spirally on the stem, but with the leaf bases twisted to align the leaves in two flattish rows either side of the stem except on erect leading sprouts where the spiral arrangement is more obvious.

Old German legend has it that yews have the power to fight demons. The popular name 'witchcraft tree' indicates two possible ways the tree was used for: with good intentions it offered remedy for illnesses but with bad intentions in mind a person was poisoned with wine offered from a cup made of yew.

Bows and crossbows were made of yew all over Europe because of the tough timber. They say that Robin Hood's bow was also made of yew. The reddish colour of timber was the reason why yew was appreciated by noblemen as furniture material.

35. Norway Spruce (*Picea abies*)

Norway Spruce is a tall coniferous tree with a wide to narrow cone-like crown; there exist 40 varieties in the family.

Norway Spruce is the only native spruce variety in Estonia. The tree is native to all Eurasia with the exception of most of German territory.

Norway Spruce has app. one hundred varieties (snake spruce, funnel spruce) and is the tallest native species in Estonia, growing 30–50 m. Spruces gain height as long as the live i.e. 250–400 years.

Estonian weather conditions are very favourable to Norway Spruce.

The most common popular tradition related to spruce is revering it as a Christmas Tree. Even before the spread of Christianity, people used to decorate rooms with branches of spruce on the winter solstice. Spruce is also a traditional funeral tree, which is why it is also called a 'death tree' in Saaremaa.

Spruce timber has always been a valuable construction material. In addition to building log houses in old times, spruce was also used to make various farming tools.

Thanks to the pleasant resounding quality of the timber, spruce is widely used for making musical instruments.

Regrettably the Norway Spruces planted in the castle park in 1912 are now perishing due to unfavourable growing conditions.

Summary

Kuressaare is an authentic island city and Kuressaare Castle Park is one of the favourite city areas of the local people and tourists, offering pleasant walks, birdsong and soothing murmur of the trees. The main priority of upgrading the park is sustainable development of the pleasant historical environment that would guarantee preservation of its permanent values.

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Used symbols

D = trunk diameter measured at the height of 1.3 m from root collar;

h = height;

H – repetitive species epithet "common" abbreviated in text as "H".

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