

ROLANDS AUZIŅŠ

# Giant Trees in Latvia



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*Zelmars Lancmanis, a school teacher, was the first in Latvia, who recognised the need for making an inventory of giant trees. In 1924, in the newspaper "Latvijas Vēstnesis" he published a list of giant trees, including data for more than 100 trees. He appealed to his readers to take care of these age old tree-monuments and send him data on other trees they might know of.*

*This is the noblest Latvian Oak, the stem girth at a height of 1.3m is 9.7m. There is a hollow inside its trunk and the tree crown has already started to reduce. (Photograph: R. Auziņš).*



Edwards Jansons, a biologist, in the period before World War II compiled the best list of giant trees. It was published in 1937 in the journal "Daba un zinātne". However, this list cannot be compared with present day inventories of tree-monuments. The trees were not described systematically. Some of them were not measured, but characterised as, for example, 'a huge, age-old oak tree that required five men, hands stretched out, to encircle it' etc...

The eminent Latvian forester Staņislavs Saliņš has been compiling an inventory of giant trees since 1968. He introduced the criterion of girth to describe these trees. He also worked out a special field recording sheet for the inventory work and distributed it among the foresters. The task was to inventory all the huge trees in a given forest district, and fill in the field recording sheet for those that met the criteria of a tree-monument.

At that time nobody had any idea that the number of giant trees would be so high. Initially, the criteria set for a tree-monument was lower, but in the course of the inventory it had to be raised because of the large number of trees falling into this category.

## CHANGES IN GIRTH CRITERIA SINCE 1960.

Tree species	Girth at a height of 1.30m from the ground (m)		
	1960	1974	1981
<b>Oak</b> ( <i>Quercus robur</i> L.)	4.0	4.0	5.0
<b>Ash</b> ( <i>Fraxinus excelsior</i> L.)	3.0	4.0	4.0
<b>Pine</b> ( <i>Pinus sylvestris</i> L.)	3.5	3.0	3.0
<b>Spruce</b> ( <i>Picea abies</i> (L.))	2.5	3.0	3.0
<b>Willow</b> ( <i>Salix</i> spp)	2.5	4.0	5.0
<b>Lime tree</b> ( <i>Tilia cordata</i> Mill.)	2.5	4.0	4.0
<b>Birch</b> ( <i>Betula pendula</i> Roth, <i>Betula pubescens</i> Ehrh.)	2.5	3.0	3.0
<b>Norway Maple</b> ( <i>Acer platanooides</i> L.)	2.5	3.5	3.5
<b>Common alder</b> ( <i>Alnus glutinosa</i> (L.))	2.5	3.5	3.5

In 1974 S. Saliņš published the first book on giant trees - "Latvijas dižkoki un retie koki" (Latvia's Giant and Rare Trees). The number of trees listed in the book is 626. Unfortunately, there are lots of inaccuracies and mistakes in the book, as the author relied on the data sent in by the recorders. The main benefit of the book was that the public became interested in giant trees and people started looking for them on their own. At present the Latvian Nature Heritage Fund is the organisation dealing with identifying and listing tree-monuments.

## GIANT TREES IN LATVIAN HISTORY

A tree can live such a long time and grow so wide but how did it happen that people let it grow and didn't cut it down? Why were more trees not felled in the more distant past? What was the purpose of retaining them? We have to look back in the history of the

nation to answer this. In the 13th century the Order of the Brethren of the Sword conquered the territory inhabited by the ancient Latvian tribes. They deprived the people of their land and property and turned them into serfs. Yet, the invaders failed to conquer their hearts and souls. The Latvian peasants were strong in their faith - their heathen idols, rites and beliefs. Our forefathers worshiped trees, mainly huge oak-trees. The tree was a sanctuary, something that was in opposition to the official church and the social order imposed by the invaders. It was at the trees that prayers were said to deities, sacrifices offered to the spirits of ancestors, flowers laid, fortunes told and the weather forecasted. This went on for centuries despite of the efforts of German barons and ministers, who often ordered the trees used for heathen rites to be chopped down.

Traditional tales have captured stories of what happened to those who dared to inflict damage to a sacred tree. It was rooted deep in the minds of the people that damaging a sacred tree would not go unpunished. One of the tales is this: In the vicinity of Zlekas (western Latvia) there was a sacred grove with a huge oak tree in the middle of it, 10 feet in girth. It was called the Thunder's oak. For hundreds of years nobody had ever caused it any harm. In 1802 an old man set fire to the tree in the hope of finding buried treasure, supposedly hidden under its roots. Soon afterwards he was struck blind. This was the punishment for setting fire to the oak. You can find tales like this in almost every locality in Latvia.

We still find people in the countryside who are superstitious about cutting down any old tree in the vicinity of the farmstead. If it is done, it is a sign of ill fate. It is a deep in tradition in Latvia to leave the existing

trees or plant new ones as soon as a farmhouse is built. The trees were believed to safeguard the house, and it is a testimony of love for the trees - a part and parcel of the Latvian lifestyle.

The fact that the age old trees are mostly found outside the forest - next to the farmsteads, in parks, avenues, ravines, on slopes and riverbanks only supports the above idea. There is almost no Latvian farmstead that is completely treeless. Even in the ancient system of slash and burn cultivation seed trees were left in the clearings. No written evidence has yet been found that trees were pollarded. However, the photographs prove that tree pollarding was practised in Latvia.

#### GIANT TREES TODAY AND THEIR PROTECTION

Oak is the most important giant tree species in Latvia. Of 817 giant trees under protection in 1977 60% were oak trees. Unfortunately, the last oak stands were lost to slash and burn cultivation several hundred years ago or they were felled for shipbuilding. At present, there are virtually no oak forest stands in Latvia, only individual groups of trees in the vicinity of farmsteads, amidst fields or in avenues.

Until recently, gross injury was done to many oak trees in Latvia: age old trees full of hollows and damaged tree crowns were felled during drainage work or the widening and straightening of highways, etc. People responsible for these jobs didn't see any special value in trees like these. There still prevails an opinion that age-old trees, partly damaged, with broken, decaying branches and rotten stems should be removed as unsightly.



*Willow (Salix alba) the stem girth at 1.3m is 8.3m.  
(Photograph: G. Eniņš).*

Willow (*Salix alba*) the stem girth at 1.3m is 8.3m.

(Photograph: G. Eniņš).

At present giant trees are under legal protection. Tree-monuments are included in the protection category of **natural monuments**.

There exist specific parameters, following which a giant tree is included in the protection category. Depending on the tree species, and whether it is an indigenous or exotic tree, its girth should be no less than tabulated below :

#### SPECIFIC PARAMETERS FOR NATURAL MONUMENT TREES.

Tree species	Girth at a height of 1.3 m from the ground	Height (m)
<b>Oak</b> ( <i>Quercus robur</i> )	5,0	32
<b>Ash</b> ( <i>Fraxinus excelsior</i> )	4,0	34
<b>Pine</b> ( <i>Pinus sylvestris</i> )	3,0	38
<b>Spruce</b> ( <i>Picea abies</i> )	3,0	37
<b>Willow</b> ( <i>Salix</i> spp)	5,0	20
<b>Lime tree</b> ( <i>Tilia cordata</i> )	4,0	33
<b>Birch</b> ( <i>Betula pendula</i> , <i>Betula pubescens</i> )	3,0	30
<b>Maple</b> ( <i>Acer platanoides</i> )	3,5	27
<b>Common alder</b> ( <i>Alnus glutinosa</i> )	3,5	30
<b>Juniper</b> ( <i>Juniperus communis</i> L.)	0,8	11

Felling of protected tree-monuments under protection is only possible in cases where it endangers nearby by structures, (roads, electric power lines, etc.), or poses a danger to human safety or health.

Lime tree (*Tilia cordata*), the stem girth at a height of 1.3m is 8.8m.



In 1977, the number of giant trees protected by law was 817. In 1986 the figure was 1,530. The members of the Latvian Nature Heritage believe that after a careful inventory the number of tree-monuments in Latvia could be around 3,000 - 10,000 ●

#### LIST OF GIANT TREES IN LATVIA

Tree species	Girth at a height of 1.3 m from the ground	Height (m)
<b>Oak</b> ( <i>Quercus robur</i> )	9.3	16
<b>Ash</b> ( <i>Fraxinus excelsior</i> )	5.5	18
<b>Pine</b> ( <i>Pinus sylvestris</i> )	4.4	20
<b>Spruce</b> ( <i>Picea abies</i> )	3.5	30
<b>Willow</b> ( <i>Salix</i> spp)	8.3	23
<b>Lime tree</b> ( <i>Tilia cordata</i> )	8.8	22
<b>Birch</b> ( <i>Betula pendula</i> )	3.7	21
<b>Maple</b> ( <i>Acer platanoides</i> )	5.0	26
<b>Common alder</b> ( <i>Alnus glutinosa</i> )	3.9	18
<b>Juniper</b> ( <i>Juniperus communis</i> )	2.5	9

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