



Network of knowledge for efficient private forests

O4: Good practice examples in optimization of forest operations Latvia

Identification of Forest Habitats

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Forest management can be focused on various targets. This has to be kept in mind, as forest farming strategies of forestry measures depend on particular goals. This refers to choice of tree species, thinning, intensity of harvesting and the methods used.

Some owners see their forest as a producer of wood and economic value, in the first place. For them, land is no more than an economic resource that must be used to make the most of it. Here we see monocultures of one species, intensive thinning and larger clearcuttings. The requirements of nature protection stipulated by the law are followed at a minimal level, here. Most of the Latvian private forest-owners today fall under this category. And it is normal.

The other category is characterized by owners who live or stay frequently in their estate. Besides the economic use, these owners appreciate a nice forest landscape. To make their estate more attractive, they do not mind giving up some part of economic profit. In forests owned by this category, we see a greater versatility of tree species, smaller clearcuttings with a larger count of trees to be kept, compartments of smaller sizes that form mosaics. Ecologic value of such forests is usually higher.



Photo: There are few forest owners who choose the sole purpose of forest use nature protection. Author: Grigorijs Rozentāls

In very rare occasions, there can be some owners found in Latvia that highly prioritize nature protection in forestry. And all their forest-farming actions (or inaction) are focused on this target. These people usually are very wealthy and own a private forest for hunting and leisure purposes. They do not care for gaining profit from the forest. Genuine green-oriented townspeople, who do not live in their estate, often fall under this category. They are few, though. Real promoters of green ideas do not own their own land usually.



Photo: It is necessary to help forest owners to see the values of nature in their own forests. Author: Grigorijs Rozentāls

One of the reasons, Latvian owners today are hesitant to prioritize biological versatility in forestry, is the state policy to turn such forest compartments of biological diversity into protected areas, where any owner's action is prohibited entirely or restricted substantially. Moreover, such restrictions are enforced disregarding the owner's wishes, while offering hardly any compensation.

Meanwhile, almost each of the forest-owners in Latvia would like to see not only values brought by economic management and beautiful landscape, but also those of nature, in their estate. Such desire is natural in its essence. Natural diversity in all its expressions is welcomed by forest-owners as value added, as long as it does not convert parts of their estate into protected areas.

Here, though, owners are stopped by lack of information on activities of forestry to promote presence of natural values. Furthermore, there is no information on how to measure in simple steps such natural value of particular compartment by a non-specialist, in order to understand its degree – high, moderate or low.



Photo: Only then will nature conservation goals be achieved if forest owners will be involved in the process. Author: Grigorijs Rozentāls

Professional experts of species and habitats appraise natural value by the means of various survey systems. These tools are made for use by professionals only, though, and usually they are not suitable for use by regular forest-owners, unless they are educated in forest ecology and have corresponding basis of competence and experience. To help solving this issue, “Meža īpašnieku kooperācijas atbalsta centrs” association has created a simple user-friendly tool, available online, on the basis of simplified surveys of habitat experts, suitable for every forest-owner who is willing to improve his/her understanding of signs regarding a biologically valuable forest and to measure the natural value of his/her forest compartment by counting score points.

The tool contains the main signs of ecologically valuable forests, and their presence in the particular compartment is measured by a scoring system. Besides, different signs provide different score points depending on their relevance. If the total sum of score

number is lower than 10, the biological value of the compartment is minor. If the score number is between 10 and 15, the value is moderate. The compartments of score over 15 are considered of high-value. The forest-owner should see the particular qualities these score points stand for. This helps the owner to understand which activities could raise ecological value of the estate.

If not stated otherwise, for each sign, when the answer entails 1–3 samples per ha, we add 1 point, if more than 3 samples per ha – add 2 points. If there is no such sign at the compartment, this gives no points (0). The score points are inserted into the yellow cells.

Sign	Score	Notes
The forest stand is formed by trees of various age (for example, some of the trees are older than the majority).		Count such different trees.
There are trees of huge dimensions (wider than 50 cm).		Count such trees.
There are very old (branched) trees that grow slowly.		Count such trees.
The forest stand contains some small group-type sections of new stands (for example, groups of small firs).		Count such groups.
There are dried standing trees or cultas in the stand, of diameter exceeding 20 cm in swampy forests and over 25 cm in other types of forests.		Count the dried trees or cultas.
There are windfallen trees (lying on the ground), diameter of which exceed 20 cm in swampy forests and 30 cm in other types of forests.		Count the windfallen trees.
There are large trees fallen with their roots out (for instance, firs).		Count the trees.
There are growing or dried trees with holes pecked by birds.		Count such dried trees.
There are growing (alive) trees with polypores on them.		Count such trees.
There is green moss, growing on tree trunks, higher than a metre above the ground.		Count such trees.
There are spring outlets, groundwater outlets, delves with springs.		Count such places.
There are some fields that tend to overflow on a temporary or permanent basis.		Count such places.
There are signs showing that in the past 20 years the stand has been on fire.		If so, add one point.
The compartment is bordering on or crossed by a stream or small river.		If so, add one point.
The ground vegetation contains a lot of bog-moss (more than a half of the area).		If so, add one point.
The compartment is bordering on a river or lake.		If so, add one point.
The compartment is situated in a lowland by seaside.		If so, add one point.
There is a very large nest (of diameter over 50 cm) in the forest.		If so, add 10 points.
There is a protected species living in the forest.		If so, add 10 points.
The forest type of the compartment is swamp forest, and its prevailing species is black alder.		If so, add 10 points.
The forest type of the compartment is poor pine swamp with cotton-grass growing in it.		If so, add 10 points.
The compartment contains a ravine, where broad-leaved trees are growing.		If so, add 10 points.
The age of the compartment trees exceeds the age of trees eligible for cutting stipulated by the laws and regulations (more than 20 years).		If so, add 10 points.
TOTAL SCORE	0	

Clearly, this tool helps a forest-owner to obtain some approximate conception, which he/she can be provided with online, by opening the tool and inserting the data output. Rare plants, birds and insects can be identified solely by a professional ecologist with respective level of education, competence and experience. However, owner can use help of such ecologist to appraise ecological value of the estate.

The greatest benefit from using the tool created by the association is an opportunity for a forest-owner to look at his/her estate from a different angle, by noticing not only the regular trees and landscape, but also its natural diversity and ecological values.