



DEFINITIONS AND TYPOLOGY (legal frame)

Work group 1

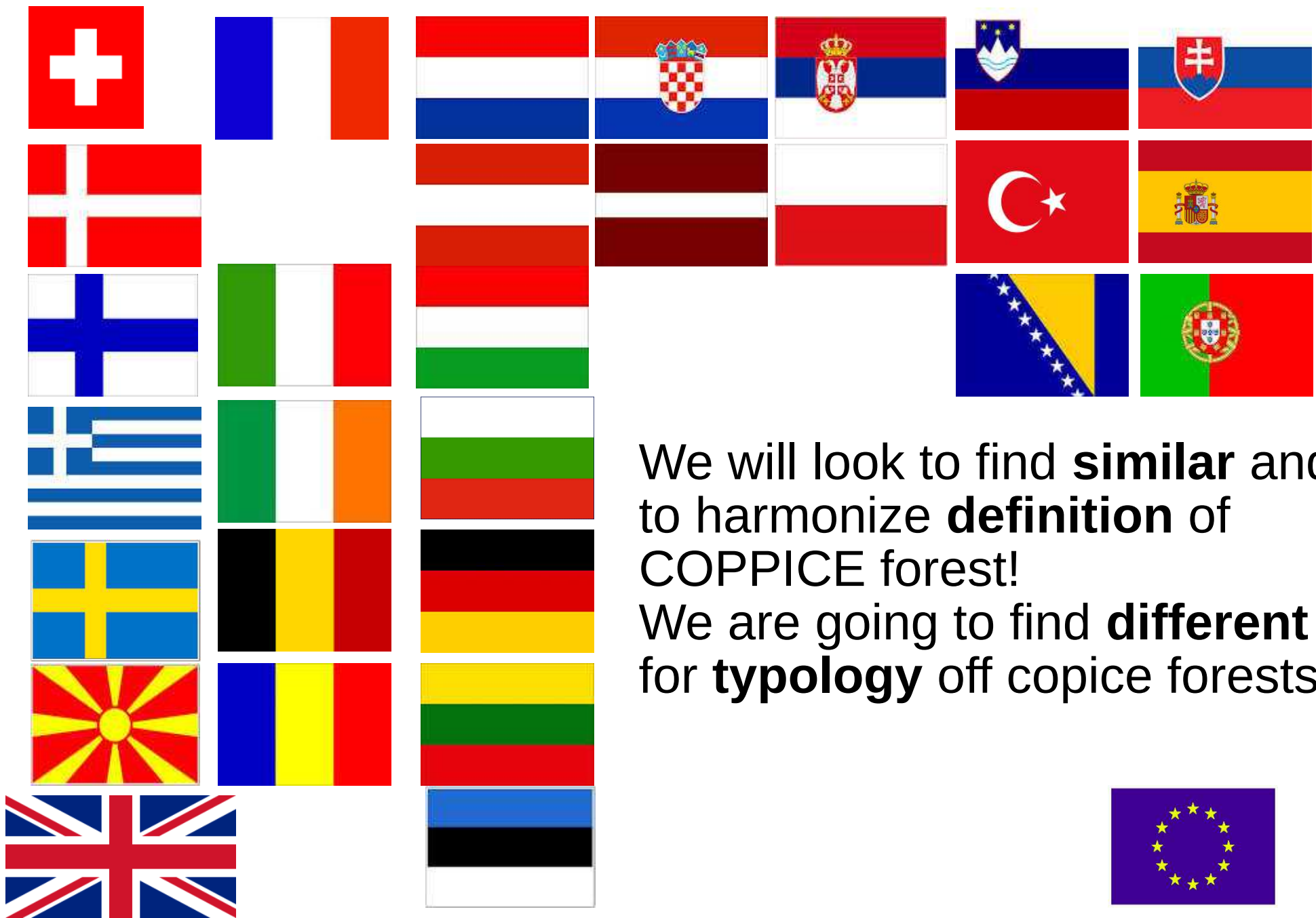
Dr.silv. Dagnija Lazdina

Latvian State Forest Research Institute “Silava”
LATVIA



Countries involved in action 30

<u>Austria</u>	Finland	<u>Italy</u>	<u>Serbia</u>	<u>United Kingdom</u>
Belgium	France	<u>Latvia</u>	Slovakia	Europe
Bosnia and Herzegovina	<u>Fyr Macedonia</u>	Lithuania	<u>Slovenia</u>	<u>Albania</u>
Bulgaria	Germany	Netherlands	Spain	
<u>Croatia</u>	<u>Greece</u>	Poland	Sweden	
<u>Denmark</u>	<u>Hungary</u>	<u>Portugal</u>	Switzerland	
Estonia	Ireland	<u>Romania</u>	<u>Turkey</u>	



We will look to find **similar** and to harmonize **definition** of COPPICE forest!
 We are going to find **different** for **typology** off copice forests!



Coppicing - Wikipedia, the free encyclopedia

en.wikipedia.org/wiki/Coppicing ▼ Tulkot šo lapu

Coppicing is a traditional method of woodland management which takes advantage of the fact that many trees make new growth from the stump or roots if cut ...

[History](#) - [Current practice](#) - [Wildlife](#) - [Natural coppicing](#)

Šo lapu esat apmeklējis šādā datumā: 14.16.2.

Coppicing is a traditional method of woodland management which takes advantage of the fact that many trees make new growth from the stump or roots if cut down. In a coppiced wood, young tree stems are repeatedly cut down to near ground level. In subsequent growth years, many new shoots will emerge, and, after a number of years the coppiced tree, or stool, is ready to be harvested, and the cycle begins again.






COST | Innovative management and multifunctional utilization of ...


www.cost.eu/domains_actions/fps/Actions/FP1301 ▼ Tulkot šo lapu


2013. gada 28. maijs - FPS COST Action FP1301 Innovative management and multifunctional utilization of traditional **coppice** forests - an answer to future ecological, ...

Šo lapu esat apmeklējis 5 reizi(-es). Pēdējā apmeklējuma datums: 14.6.1

FP1301 definition will be elaborated at 2018

Google  +Dagnija    

Timeklis Maps **Attēli** Video Iepirkšanās Vēl ▼ Meklēšanas rīki Droša meklēšana 



The collage consists of 20 images arranged in a grid. The top row includes a diagram with four stages: 'Tree to be coppiced', 'Cut close to base in winter', 'Shoots rapidly regrow from stool the following spring', and 'Coppice ready for harvest between 7-20 years'. The subsequent rows show various photographs of coppiced forests, including close-ups of tree stumps, young shoots, and mature coppiced trees with dense foliage. A person is visible in one of the images, working in the forest.

Albanian - Cungishte, Korie, Zabel

Coppice is a forest that has sprout origin/background and who is destined to be regenerated by sprout, from which is derived wood material small and medium size.

Forest - "is the area of land with a dense group of forest trees, with area greater than 0.1 ha, with large coverage scale not less than 30% of area and with the potential to reach a height greater than 3 m, when forest has reached maturity in situ conditions"



Austria -

(1) Coppice: **Even-aged stand** consisting of trees and shrubs, which **regenerate wholly** or mainly **vegetatively** (sprout or root shoot).

(2) **Short rotation coppice: Plantation of fast-growing trees or shrubs**, with the aim to produce in a short rotation period wood as a renewable resource.

(1) Short rotation coppices with a rotation period of **up to 30 years are not** classified as **forests** (www.ris.bka.gv.at).

(2) Dibbling of forest plants and cuttings **on previously agricultural land is not considered as afforestation**, if the owner of this land reports within one year after planting the district administrative authority that he uses this forest plants in the short term with a rotation period of up to 30 years(www.ris.bka.gv.at).

Croatian – šikara, panjače

Coppice are **low growing form of forests**, caused by intentional or unintentional degradation processes of high forests.

Rotation is determined by Regulation for Forest Management Plans:

- ✓Oaks (*Quercus pubescens*, *Quercus ilex*, *Quercus petraea*) 80 years;
- ✓Beech (*Fagus sylvatica*) 80 years;
- ✓European hornbeam (*Carpinus betulus*) 40 years;
- ✓False acacia (*Robinia pseudoacacia*) 30 years;
- ✓Soft deciduous (*Populus*, *Salix*, *Alnus*) 30 years.
- ✓Short rotation forests are defined by management objectives and their rotation could be from 1-40 years.

Denmark

Coppice , forestry form where the regeneration is **vegetative as the shoots** comes from the roots and forms the new forest. The **rotation** cycle is low , usually **1-40 years**, which means that the trees never reach their full height. In coppice forestry tree species with good ability to root shot formation is used, for example, **willow, oak, hazel and alder**. In Denmark coppice forestry is **not very widespread**.

Formerly **was** a **common silvicultural system** in alder, oak and ash. The system was particularly widespread in Funen and among small forest owners, what allows for a continuous, steady production of firewood, poles, fencing and similar assortments from even a small piece of forest.

Energy forest is **a plantation of hardwoods** with rapid juvenile growth, harvested for use as wood fuel. Willows is the most used species and the rotation is commonly three years. Energy Forests has mostly been planted on former agricultural land. The production is approximately 7 tonnes dry matter per ha.

Denmark



Finnish - vesakko



Woodland which has been **regenerated from shoots** formed at the stumps of the previous crop trees, root suckers, or both, i.e., **by vegetative** means. **Normally** grown on **a short rotation** for **small** material, but sometimes, to a substantial size.

Law of forest are under changes....



Macedonian - Нискостеблена шума

Coppice forest – a forest originating by vegetative means i.e. basal or root suckers or both. On legal frame no other restrictions.

In practice:

1. Forest land more than 20% cover and
2. Volume density more than 0,3 (30% of normal stands)

Regulation for Forest Management Plans (<http://www.mzsv.gov.mk>).

Netherlands

Closed forest with vegetative regeneration by regrowth of the stools of deciduous species (not willow) with **good regrowth capacity**.

Traditional coppice is seen as forest in our forest law. The **minimum area is bigger than 0,1 hectare and have to have a canopy cover of at least 60%.**

Short rotation coppice is seen as agriculture in the new Nature Law, which still has to be put in place. It is defined as: Woody biomass plantation of willow, poplar, ash or alder with the aim to produce woody biomass. it is harvested at least every 10 years and contains at least 10.000 stools per hectare per unit. The short rotation coppice needs to be established after januari 1 2013.

Greek - λόχμη, αλσύλλιο, δασύλλιο, θάμνος

Forests that resprout after felling. Coppice forest or **paravlastogenes forest** is the forest where regeneration is done by **suckers**. The **oak forests** are state owned and the most (1,105,339 ha) are coppice forests. The **management** of these coppice oak forests is **intensive**, with a clear cutting **cycle** ranging from **20 to 30** years.



Hungarian -Sarjerdő

Coppice: from stump- or root sprout renewed forest.

Legal frame.....



www.ecomark.lv

Italian - ceduo

- 1) **Simple coppice**: coppices without standards. At each rotation age (about 8 years) all shoots are removed by clear cut. Simple coppice is permitted **for some species only (e.g., Black locust, Poplar, Salix, Common Hazel)** depending on local (regional) **forest law**. In this type of coppice are also included the “short rotation coppice”;
- 2) **Coppice with standards**: At each coppice rotation, the coppice is clear felled leaving a minimum number of standards per hectare depending on local (regional) forest law (e.g., *60 standards per hectare in case of quercus coppices and beech coppices; 30 standards per hectare in case of chestnut coppices*);
- 3) **Uneven-aged coppices**: coppice with **shoots of different ages on the same stump** (usually three age classes). It is based on coppice selection system, i.e. the oldest (i.e. the biggest) shoots are cut every 6-8 years and a light thinning of the smaller shoots is also done;
- 4) **Compound Coppice**: forest managed with the aim **to obtain a stand formed by a coppice and a high forest**. It is characterized by the coexistence on the same area of a coppice and a high forest formed by trees of different age classes. The high forest component is usually formed by standards left for three or more rotations and therefore are classified in three or more age classes.

Italian - ceduo

There are **several** definition of Forest depending on **local (regional) forest law. Restrictions for coppice forests are based mainly on: size of cutting area; rotation period; number of standards.**

The National Forest Inventory has adopted the FAO-FRA definition of forest: Land spanning more than 0.5 hectares with trees higher than 5 metres and a canopy cover of more than 10 percent, or trees able to reach these thresholds in situ.

In Tuscany region forest is defined as:

land spanning more tha 0.2 hectares with a tree canopy cover of more than 20 percent;

maximum cutting area = 20 hectares;

minimum rotation period: 8 years for Chestnut, Black locust, Poplar, Salix, Alder, Common Hazel; 24 years for Beech; 18 years for Quercus and other species; maximum rotation period: **coppice forests older than 50 years must be converted to high forest;**

number of standard: in case of coppices with standards a minimum of 60 standards per hectare must be left in the forest (a minimum of 30 standards can be left in case of chestnut forest); in case of compound coppice a minimum of 150 standards per hectares must be left in the forest, with at least 75 standards older than two times the rotation period.



Latvian - atvasāji

Coppice - no defined in forest law. **Forest** is an **ecosystem** in all stages of its development, dominated by trees the height of which at the particular location may reach at least **five metres** and the present or potential projection of the crown of which is at least **20 per cent of the area** occupied by the forest stand.

1.Short rotation coppice - as agriculture land if planted *Salix spp.*, *Populus spp.* *Alnus incana*, rotation no more than 5 years, no restriction for density.

2.Forest land - more than 20% cover up to 5 m height.

2.1. Plantation forests - no restriction for felling age, Pine at least 1000 plants initially; others 800; oak, ash 500.

2.2.Forest - defined felling by age or dimensions, initial density 3000 ha pine, others 2000 initial. (www.likumi.lv)



Portugese - Talhadia

Coppice is a system where trees are originated from vegetative or **asexual reproduction**.

Rotation is between 2 – 5 years. Short rotation coppices is niglecenciabile / not common.

Common coppice forests in the country involves **Eucalyptus** (*E. globulus*) plantations for **pulpwood production**, and is grown in rotations of **10 – 12 years**.

Most of **coppice forests have been converted into high-forest** since the last decades. This has involved oaks (*Quercus faginea*, *Q. pyrenaica*, *Q. robur*, *Q. ilex*) and chestnut (*Castanea sativa*). The aim is **to produce better timber quality** and because of conservation purposes. In the case of holm-oak (*Q. ilex*) many areas have been managed as a sylvopastoral system known as **montado**.



The Forest Inventory considers **forest** when: area **over 0,5 ha** minima **cover 10%** width larger than **20 m**. Plantation forest - are no restrictions on clear felling and on harvesting age. (Cork-oak (*Quercus suber*) and holm-oak (*Q. ilex*) cannot be pruned or harvested without permission from the official authority (Institute for Nature Conservation and Forestry). Afforestation density - pine and other conifers 1000 /ha; Pinus pinea (fruit) 200/ha; broadleaves 600 – 800 /ha; cork-oak and holm-oak (sylvopastoral system) 250 /ha.

Romanian - crâng

1. Coppice regime (regeneration method) is the general way of managing a forest, based on **vegetative propagation** (Forest Law, 2008).
2. **Simple coppice (low coppice)**: silvicultural system in which the old stand is exploited at young ages (under 30-40 years) by clear-felling, and the regeneration is accomplished by stump stools or root suckers.
3. **Pollarding**: cuts by which the tree trunks are shortened at 2-3 m height from the ground, to avoid the death by asphyxiation of the cut trees during flooding.
4. **Coppice-with-standards**: intermediate regeneration method, between the two fundamental ones (coppice and high forest), in which the regeneration is accomplished **by both seed and stools**.

In all forests, the only regeneration method (regime) **legally allowed** is **high forest**.

The only forests where **coppice regime is allowed** consist of native **poplars** (black and white), **willows**, **black locust**, as well as **alluvial forests** (pure or mixed willow and/or poplar stands).

Serbian - šume

Coppice forest is a traditional silvicultural form, that involves **repetitive felling on the same stump**, near to ground level, and **allowing** the shoots to **regrow** from that main stump or roots.

1. Serbian forest development strategy define optimally use the available measures of economic policy and ensure the permanent and long-term financial means for the stimulation of private forest owners, to ensure the protection and improvement of the state of private forest resources.
2. State obligate to financially support this action.
3. Law on Forest define financial mechanism for conversion of coppice into high forest by special forest fund.
4. There is no legal consideration related to rotation and other silvicultural measures in coppice forests.
5. Main instrument to implementing forest policy into coppice forest is forest management plans where rotation and other management strategy are defined based on existing silvicultural and forest management planing literature.
6. All management strategy are approved by responsible ministry and such management plans after approval become legally binding documents.

Spanish - monte bajo

1. Management system applied to hardwood forests where **regeneration is due to sprout up from roots or stumps** after clear cutting.
 2. Forest formed by small softwood trees and shrubs
-
1. 20-30 year rotation coppice of Quercus ilex, faginea or pyrenaica oak with 1.500-3.500 trees per ha density, and 10 to 20 m height.
 2. 12-16 years eucaliptus plantations, 600 tres/ha, three rotations before planting again.
 3. Chesnut forest, several thinnings before clearcutting at 80 years.

Turkish - Baltalık Ormanı

United Kingdom - English

Any tree that is cut at - or near - ground level so that it regrows with multiple stems. These trees would then be described as 'coppiced'. Coppice woodland is woodland where this management technique has occurred and this may be carried out repeatedly, and so called rotational (or in rotation) coppice.

▪ **There is not legal framework.** In fact we have some problems defining woodland Short Rotation Coppice is usually *Salix spp.* although chestnut can be managed on a wide range of rotations depending on end use, for example 3 years for walking sticks.



United Kingdom – chestnut processing



Final Conclusions will come at 2017

In all countries coppice are defined as vegetative regrowth from stump or stool.

Small forms of coppice on former agriculture land legal frame is agriculture, but rotation periods are different.

Plantation forests are high forests with short rotation period or no limitation for harvesting age.

Main coppice species families are *Salicaceae*, *Betulaceae* and *Corylus*.

In some countries also robinias, chesnut, oaks and eucaliptus.