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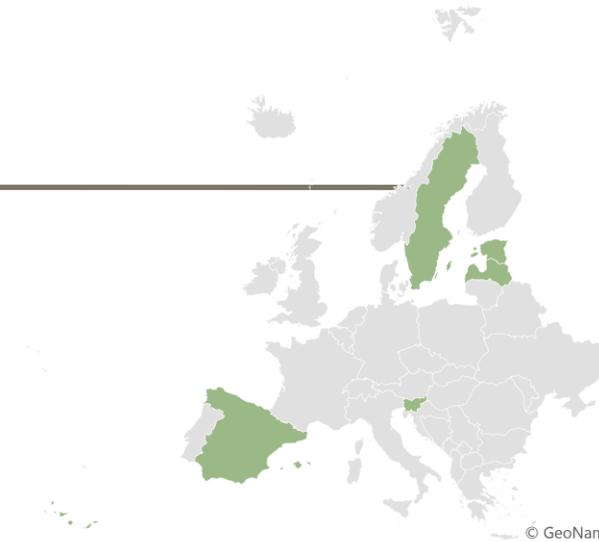
Net4Forest - Network of knowledge for efficient private forests

dr. Nike Krajnc, Tina Jemec

28.10.2021



Project consortium



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- ✓ Slovenian forestry institute (SFI);
- ✓ Foundation Centre for Support of Forest Owner Cooperation (Latvia),
- ✓ Estonian Private Forest Centre (Estonia),
- ✓ Swedish University of Agricultural Sciences (Sweden),
- ✓ Forest Science and Technology Centre of Catalonia (Spain).



Project idea

Improving of forest management decisions in private forestry has proved to be a challenge, as holdings are small, forest owners in most cases are not professionals and forestry incomes are not their main incomes.

Joining forces and experiences from several countries would enable better understanding about the best ways and methods to get the desired knowledge to those who need it.

1st step:
Understanding the forest owner's needs and identification of specific barriers

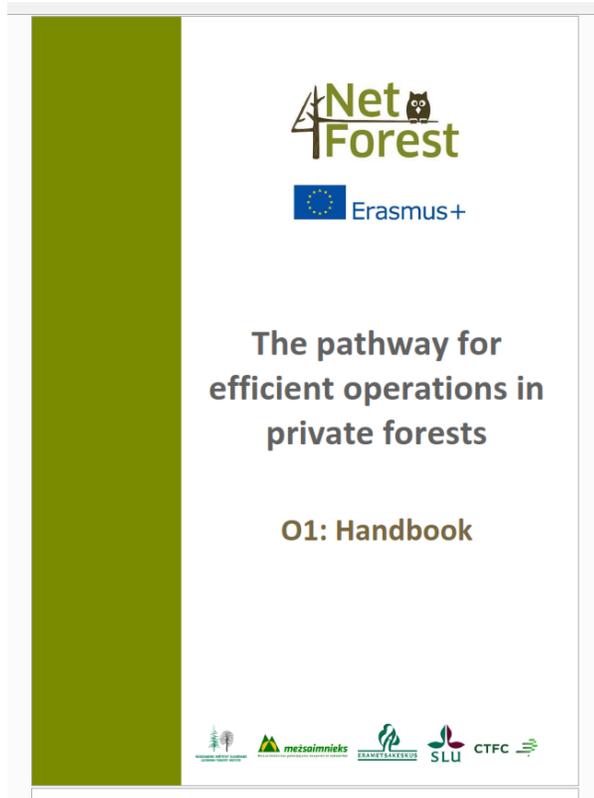


2nd step: looking for solutions and preparation of guidelines to support forest owners in overcoming this barriers



3rd step:
Development of practical tools and collecting of feedbacks from possible users

O1 - Handbook “The pathway for efficient operations in private forests”



Net4Forest – O1: Handbook: The pathway for efficient operations in private forests

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O2 - Hands -on Guidelines

HANDS-ON GUIDELINES FOR PRIVATE WOODLOT OWNERS IN SLOVENIA, LATVIA, ESTONIA, SWEDEN AND SPAIN

Introduction

This publication compiles English summaries of (and internet links to) guidelines aimed at non-industrial private forest owners (NIFs) in Estonia, Latvia, Slovenia, Spain, and Sweden.

These guidelines are written/published in national languages, and provide practical knowledge that can help private forest owners to increase the economic and ecological sustainability of their forest/woodlot ownership. The knowledge concerns a broad array of themes: from drone use and log classification, to wildfire prevention and reducing ground impact during forest operations.

These topics were previously explored in a Net4Forest handbook named "The pathway for efficient operations in private forests". That handbook presented the private forest owner context in the participating countries through insight into the countries' NIF sectors and their main innovation needs.

Fully implemented, this knowledge will help increase the sustainability of forestry on privately owned, European forestland/forest estates.

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MIRKO BAŠA

MERJENJE IN SORTIMENTACIJA

Priručnik za pravilno merjenje in razvrščanje okroglega lesa

Merjenje dimenzij, pravila računanja volumna in razvrščanje okroglega lesa po kakovostnih razredih

Zaradi pogosto pomanjkljivega znanja o krojenju in kakovostnem razvrščanju gozdnih lesnih sortimentov je lahko razlika med doseganjem in močnim dobovnikom od prodaje lesa zelo velika. Znanje o metodah merjenja ter napakah, ki vplivajo na kakovost, je pomembno za med samimi posejanci. Napačno krojenje ter neustrezna mesta pretagovanja lahko hitro privedejo do razvrščilnega lesnih sortimentov. Prav tako je potrebno znanje, se koliko bolj pomembno pri prodaji lesnih sortimentov na kakovostni ceni. To so pravila o razvrščanju sortimentov po kakovostnih razredih ključna za prodajalca in kupca.

V tem priručniku se seznanimo s smernicami pravilnega merjenja dimenzij in pravil računanja volumna okroglega lesa. Sledi razvrščanje blodovine smere, glave in kakovosti kakovostnih razredih. Predstavljene so dimenzijske zahteve ter napake sortimentov, na podlagi katerih poteka razvrščanje po kakovostnih razredih.

Za vsak kakovostni razred so predstavljeni dimenzijske zahteve ter dovoljene napake lesa. Napake ovalnosti, zavrtosti, sinja, trankle, razpoke les in sinjotni grepi pri posameznem kakovostnem razredu niso dovoljene. Te so skrajni dogovor med prodajalcem in kupcem. Opis teh napak in računanje kvarnega vpliva je opredeljen v priručniku "Napake lesa".

Priručnik je izdelan v sklopu Erasmus+ projekta Network of Knowledge for Efficient Private Forests, katerega vodilni partner je Gozdarski inštitut Slovenije.

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MIRKO BAŠA

NAPAKE LESA

Priručnik za prepoznavanje napak okroglega lesa

Opisi najpomembnejših napak lesa, njihovo merjenje in določanje kvarnega vpliva na kakovost

V priručniku so predstavljene osnovne napake lesa pri iglavcih in listavcih. Te moramo poznati pri samem krojenju lesa, prav tako pa predstavljajo ključne temeljne vhode pri razvrščanju blodovine po kakovostnih razredih. Posamezne napake so opisane in prikazane na grafikon način. Prav tako je k vsaki napaki dodana formula za izračun kvarnega vpliva.

Napake so povzete po Furlan in Košir (2006) in Lipoglavšek (1988), dodatno pa so usklajene s standardom SIST EN 1309-3 (2018) in smernicami RVR (2015).

Priručnik je izdelan v sklopu Erasmus+ projekta Network of Knowledge for Efficient Private Forests, katerega vodilni partner je Gozdarski inštitut Slovenije.

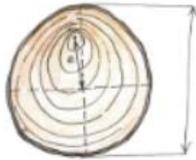
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5 different Toolkits

SLOVENIA

Online tool for quality classification of round-wood
net4forest.gozdis.si



The online tool for quality classification of round-wood is intended for all users who want to conveniently determine the quality of round-wood and at the same time gain knowledge about the evaluation of round-wood assortments.

SPAIN

Forestry Management Joint Plan managing tool
<https://www.gozdis.si/f/docs/projekti/Toolkit-PTGMFc-CTFC.pdf>



Brief tool to set and apply for a FMJP which are funded by the Catalan Government and conducted by the Catalan Forestry Ownership, aiming at implementing jointly actions beyond private land limits to low profitability forest. Fire prevention and forestry management techniques need to be aligned with orography, type of forest, accesses and uses for an entire region beyond property limits. These plans help owners to manage their forests wisely against threats by saving management expenses at the same time.

SWEDEN

Calculation model for a forest vehicle's average ground pressure
www.slu.se/institutioner/skogsmastarskolan/forskning/net4forest/



This calculation model for a forest vehicle's average ground pressure is based on rough assumptions, but is nevertheless a useful tool for gaining insight into a forest vehicle's impact on the ground. The model calculates the ground pressure separately for the front and rear section of a vehicle. This calculation tool is designed for forwarders, but can also be applied sensibly to other forest vehicles.

LATVIA

Felling value calculation model
www.mezsaimnieks.lv/jaunumi/erasmus-projekts-network-of-knowledge-for-efficient-private-forests/



To help forest owners make decisions about starting economic activity on their properties, they have developed a simplified felling value calculation model. In it, the plot number, area, stock per hectare and its distribution by tree species must be entered as input data from the plot description. In addition, in the model must be entered the percentage distribution of the stock by assortments (according to the visual assessment in nature), the price of delivered assortments (at the buyer), sawing, delivery and average export costs (timber truck service).

ESTONIA

Tutorial videos about using drones and miniharvesters in forestry
Videos are in Estonian language with English subtitles.



Miniharvesters
youtu.be/_DOo1uFD9I8



Drones
youtu.be/6TbpZhY1K8g

GOOD PRACTICE EXAMPLES

In this project, we prepared several interesting examples in optimization of forest operations, including:

- Fully mechanized thinning in small diameter stands
- Joint sale of wood
- Mechanized Direct Seeding
- Co-operation of Forest-owners ...

All good practice examples are available here:
www.gozdis.si/projekti/net4forest



O4 - Good practice examples in optimization of forest operations



Introduction of NetForest

On September 1, 2020, we started with the NetForest project focused on knowledge for efficient private forest management which will last 2021.

The lead partners in the Erasmus+ team are: (1) The Swedish University of Agricultural Sciences (SLU) with project partners: (2) Latvia Forestry Centre for Support of Forest Owner (LFCO), (3) Spanish Forestry Centre for Support of Forest Owner (CFCO), (4) Estonian Forestry Centre for Support of Forest Owner (EFCO), (5) Slovenian Forestry Centre for Support of Forest Owner (SFCO).

The main purpose of the project is to exchange experiences, knowledge, good practice examples, and to disseminate and publicly available materials, which will enable forest owners to acquire relevant knowledge for efficient forest management.

The main results of the project (handbook, handbook, guidelines, toolkits, good practice examples) will be disseminated to the project partners and will be published on the website of project partners and other relevant communication channels.

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Total budget: 2,000,000 EUR
No. of partners: 5
Lead partner: Customer Initial Support (CIS) (https://www.cis.se/)
Website: https://www.netforest.eu/

Net Forest
 Network of knowledge for efficient private forests

Erasmus+
 European Union

**Farm Visið
 FROM FORESTS TO END PRODUCT**

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Predizativne projekcije NetForest

1.1. Izdelava projekcije 2020 in 2021 za državo Slovenija, ki vsebuje mrežo znanja za učinkovito upravljanje zasebnih gozdov in vključuje vsebino: (1) Latvija Forestry Centre for Support of Forest Owner (LFCO), (2) Estonian Forestry Centre for Support of Forest Owner (EFCO), (3) Slovenian Forestry Centre for Support of Forest Owner (SFCO), (4) Latvian Forestry Centre for Support of Forest Owner (LFCO), (5) Estonian Forestry Centre for Support of Forest Owner (EFCO).

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Partnerji: Customer Initial Support (CIS) (https://www.cis.se/)
Website: https://www.netforest.eu/

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 Network of knowledge for efficient private forests

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 European Union

**Primer dobre prakse
 STROJNO REDČENJE MLAJŠIH STOJTEV**

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PRACTIC CASE – JOINT FOREST MANAGEMENT PLAN

Net Forest
 Network of knowledge for efficient private forests

PRACTIC CASES OF CTFC NETAFOREST TOOL-KIT

For the practice study cases, we'll show two different forest sites that complimented the Joint Forest Management Plan.

Can Mas Fuirosos, Sant Celoni (Barcelona) **Mas d'en Bosc Orpi i Can Vilella (Tarragona)**

CTFC
 Centre for Technical Forest Care

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O4: Good practice examples in optimization of forestry

**Vätteskogen, Sweden
 -implementing
 Continuous Cover Forestry
 in a Boreal Forest**

Author:
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 PhD in Forest Management
SLU Skogsmästarskolan
 (Swedish University of Agricultural Sciences,
 School of Forest Management)
 June 2021

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O4: Good practice examples in optimization of forest operations

**Mechanized
 Direct Seeding**

Author:
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 April 2021

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**Joint sale of wood – an example
 of a good practice in Estonian
 forestry**

Estonia 2020

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**Advisory system as part of the
 forest association system**

Estonia 2020

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for
 rests

Organized local events





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Thank you!

<https://www.gozdis.si/projekti/net4forest/>