

SFM  VR

Sustainable Forest Management
through Virtual Reality



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Co-funded by
the European Union

Learning nature management and continuous-cover forestry via 360° pictures and simulators

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Pilot course on nature management and continuous-cover forestry

- We organized a nature management and continuous-cover forestry course to some 20 experienced harvester machine operators
- State-of-the-art training concept, developed by TTS and partners
- A combination of e-learning and classroom teaching
 - Reading assignments, podcasts, 360° pictures and videos
 - Simulator exercises and field trips



Ministry of Agriculture and Forestry of Finland



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What topics were covered?

1. Preservation of biodiversity and habitats of special importance
2. Creating structural diversity and mixed stands
3. Buffer zones for habitats and protection of water bodies
4. Forest management at the landscape level and game-friendly forestry
5. **Continuous-cover forestry**
6. Forestry and nature management in peatlands

How it was done

- Four pilot groups in different regions in Finland – in cooperation with local forestry schools – approx. 3–6 work days over a period of 2 months
 - Info session, instructions
 - Online studies
 - Day 1 of classroom teaching and field trips
 - Online studies
 - Day 2 of classroom teaching and field trips
 - Online studies
 - Feedback
- All material was found at TTS' e-learning platform ["Boost Site"](#)



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kohde tullaan jatkossa
rakkuulla oli merkittävä rooli.
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Suoritettu: 20%



LISÄÄ VIDEOITA

Conclusions

- 360° pictures and exercises
 - Students liked the format – “better than reading or regular pictures”
 - Allows direct feedback and individual pace
 - Questions and examples must be pedagogically well-thought → time-consuming and challenging
 - High-quality pictures needed
- Simulators
 - Students felt that it takes too much time and effort to get accustomed to, not like real harvester etc. → maybe the instructor could demonstrate e.g. harvesting techniques via the simulator?
 - VR headset was often found useful
 - Students favored videos



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Sustainable Forest Management through Virtual Reality

- 29 November 2022: Online webinar – “Other sustainability aspects of forestry”
- 15 February 2023: Hybrid seminar, Finland – “SFM VR final seminar”