# LAPIN AMK

Lapland University of Applied Sciences

## Virtual Forest

New Digital Tool for Forest and Landscape Planning

Anne-Mari Väisänen, April 26th, 2018

- Problem:
  - Growing demand of wood
  - Sustainable wood mobilization
  - Passive forest owners



- Innovative solution:
  - 3D-visualization of forest environment
    - Based on real forest data
    - Combines game technology, GIS and forest simulation







- Implementation of forestry actions
- Observation of results
- Planning tool for:
  - Foresters
  - Land use designers
  - Forest owners
  - Students



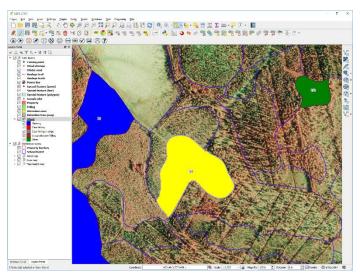




## New Digital Tool for Forest and Landscape Planning

#### **Enables:**

- Landscape planning
- Logging planning
- Silvicultural planning
- Forest ecology observasion
- Education









## New Digital Tool for Forest and Landscape Planning

 Aerial and ground view of forest and landscape

- Possibilility
  - To examine the area at present and in the future
  - To examine the landscape after forestry operations
  - To compare the effects of silvicultural operations



















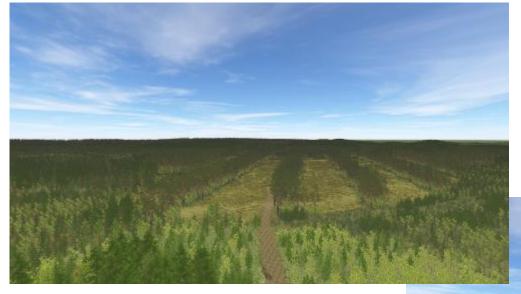


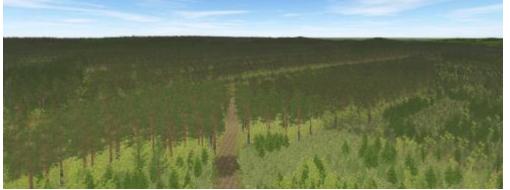


















## New Digital Tool for Forest and Landscape Planning

Private and state forest planning

Combining interests of different livelihoods

Supporting decission making process

THE VIRTUAL
FOREST
Opportunities
for
implementation

Landscape planning

Land use planning

Education of forestry students and experts

Boosting wood mobilization

Avoiding and solving conflicts of land use in rural areas

Guidance and activation of forest owners







## New Digital Tool for Forest and Landscape Planning

Video: <a href="https://drive.google.com/file/d/1PZ1gxx-1vhG7ie2yo7gnCvKsQasTu2yh/view?usp=sharing">https://drive.google.com/file/d/1PZ1gxx-1vhG7ie2yo7gnCvKsQasTu2yh/view?usp=sharing</a>







## THE NORTHERN FACTOR

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