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Building resilient forest: Management practices to control climate change caused forest disturbances

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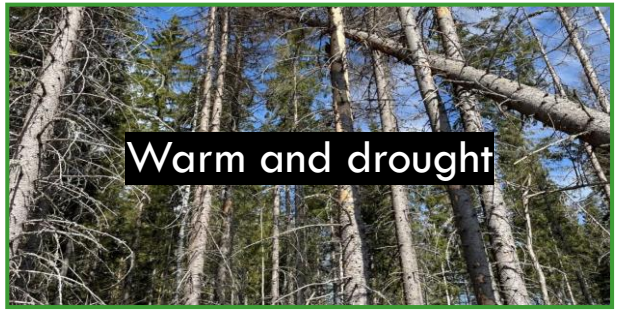
The Climate will change, and it will have affects to our forests

- It is shown that the weather conditions will change, and extreme weather events will occur in the future



What can these changes cause in the forest?

- Drought ➡ weakens forest, attract insects, wildfires are more common
- Snow and wind ➡ cuts and fells trees, weakens the forest
- New species ➡ Changing conditions will make new species possible to spread
- Changing crowing conditions ➡ In some cases growth increase, while for certain species it declines

➡ All these together can cause stress which leads to increasing risk of forest damages such as wildfires and insect infestations

Practical example

- Due to climate change, conditions have changed in Finland, enabling the spread of the bark beetle
  - The development of the bark beetle quikens during warm summers
  - Previously, there was usually only one generation, but now, in warm areas, there can be multiple generations which leads to increased infestations

We have the power to make sure our forests have resilience against the climate change caused forest damages

- We already have a certain ways to manage our forest right
  - Properly timed management practices – eg. tending of seedling stand
  - Diverse of tree species – the more tree species the more resilience

➡ Resilient forest

  - Preventing known risks – eg. root-rot disease, removing of harvested trees
  - Monitoring – bark beetle damage risk / infestations

➡ Quick response to potential damage

Aspects to consider

- These methods requires commitment from forest owners, professionals, and decision-makers
  - Management practices must be done at the right time
  - Various opportunities must be kept open
  - Forest use must be guided in a sustainable manner
- We need resilient and diverse forests
  - The more diversity there is in the forest, the more resilient it is in times of crisis

Thank you!

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