



# Light & Fire LIFE

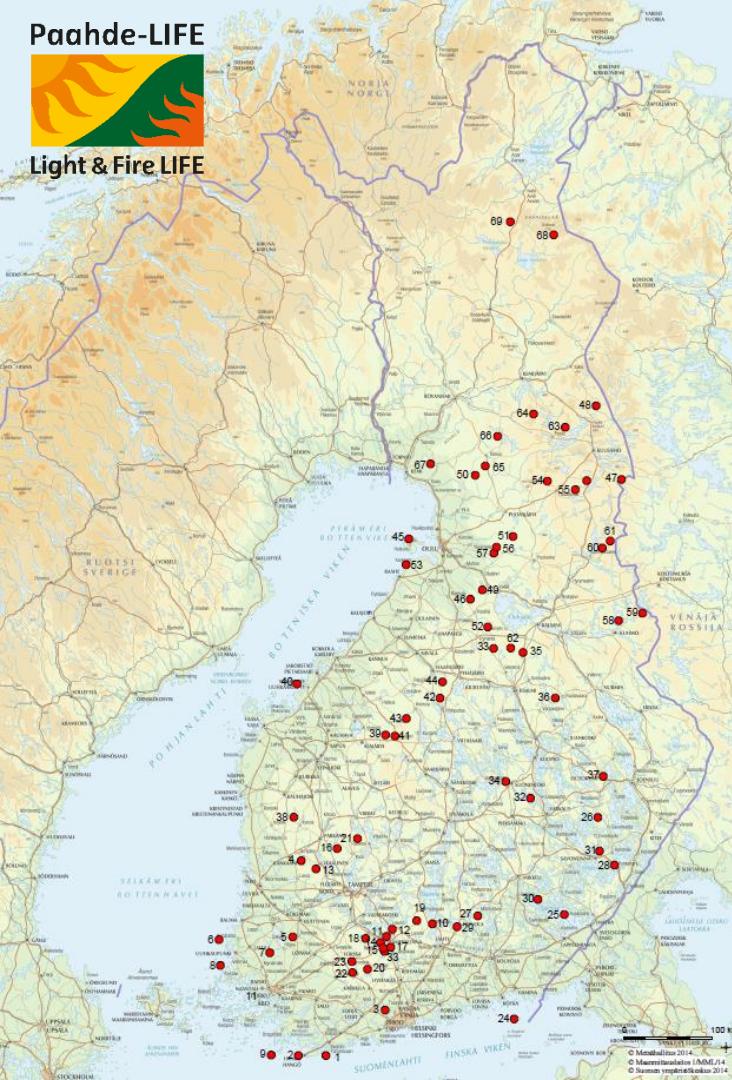
Tuomas Haapalehto, Project Manager

FIRE FOR LIFE workshop

25th April 2017



METSÄHALLITUS



# Project in a nut shell

- LIFE+ Nature
- CoB: Metsähallitus
- ABs: Hämé Univ. for Applied Sciences, ELY Centre for North Savo, Finnish Forest Centre, UPM-Kymmene Corp., WWF Finland, Metsähallitus Forestry
- 6 years (1.8.2014 - 31.7.2020)
- 4,06 million €
- EC contribution 50 %
  - Co-financing from the MoE (50 000€)
- Nation-wide - 69 Natura2000 areas



# Objectives I

- Improve quality of fire-born and sunlit habitats
  - controlled burnings, removal of trees, bushes and litter layer
  - species translocations, removal of alien species
  - targeting 19 HD Annex I habitats, e.g.
    - Western Taiga (9010\*)
    - Esker forests (9060)
    - Coastal meadows (1630\*)
    - Fixed coastal dunes (2130\*)
    - Dry heaths (4030)

Photo: Jani Hakola

# Objectives II

- Increasing awareness on the values of nature





What do we do -  
Preparatory actions

# Planning, inventories & surveys

- 34 Restoration plans to 31 N2000 areas
- 11 fire continuum plans
- 2 MPs
- *Pulsatilla patens* translocation & restoration plan
- Inventories & surveys
  - species AV, AR, CO, FUk, LE, HE, HY, VA
  - Biotope
  - cultural heritage



# Preparatory training

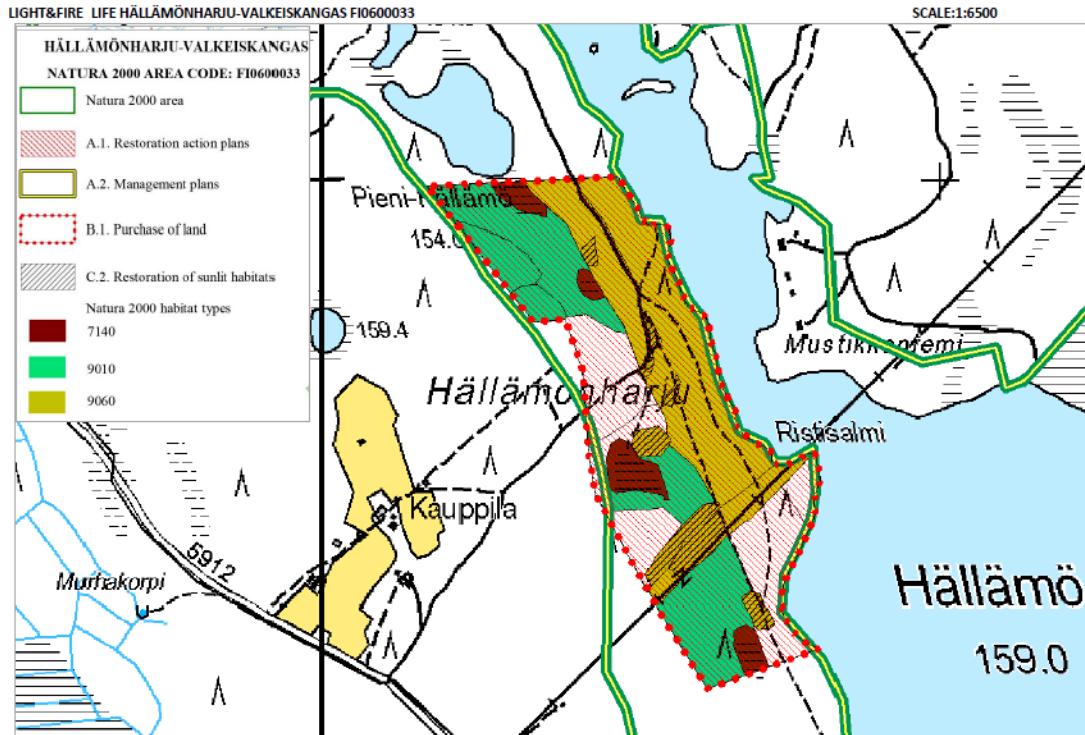


- 2-day workshop for practitioners
- International workshop on using fire in restoration
- Smaller training events



# Land purchase

- One-off compensation payment
- 1 site, 20 ha





What do we do -  
**Concrete conservation actions**



# Restoration by controlled burning

- Re-initiating natural succession
- Resources for fire-dependent & saprophytic species
- 38 sites, app. 470 ha
- Careful planning & execution

# Tree removal

- Decreasing unnaturally thick tree cover & improving work safety during controlled burnings
- 147 ha
- income to finance other measures



Photo: Juhu-Matti Valonen

# Restoration of sunlit habitats I

- Esker forests
- Creating barren conditions: removal of raw humus layer and revealing mineral soil
  - Controlled burnings
  - Increasing solar radiation and heat: removal of trees, bushes and other biomass
  - Translocation of *Thymus serpyllum*
- 34 sites, 345 ha



Photo: Matti Seppäälä



Photo: Harri Tukia

# Restoration of sunlit habitats II

## Restoration of dunes and heaths

- Removal of trees, bushes and common reed, controlled burning
- Translocation of *Thymus serpyllum*

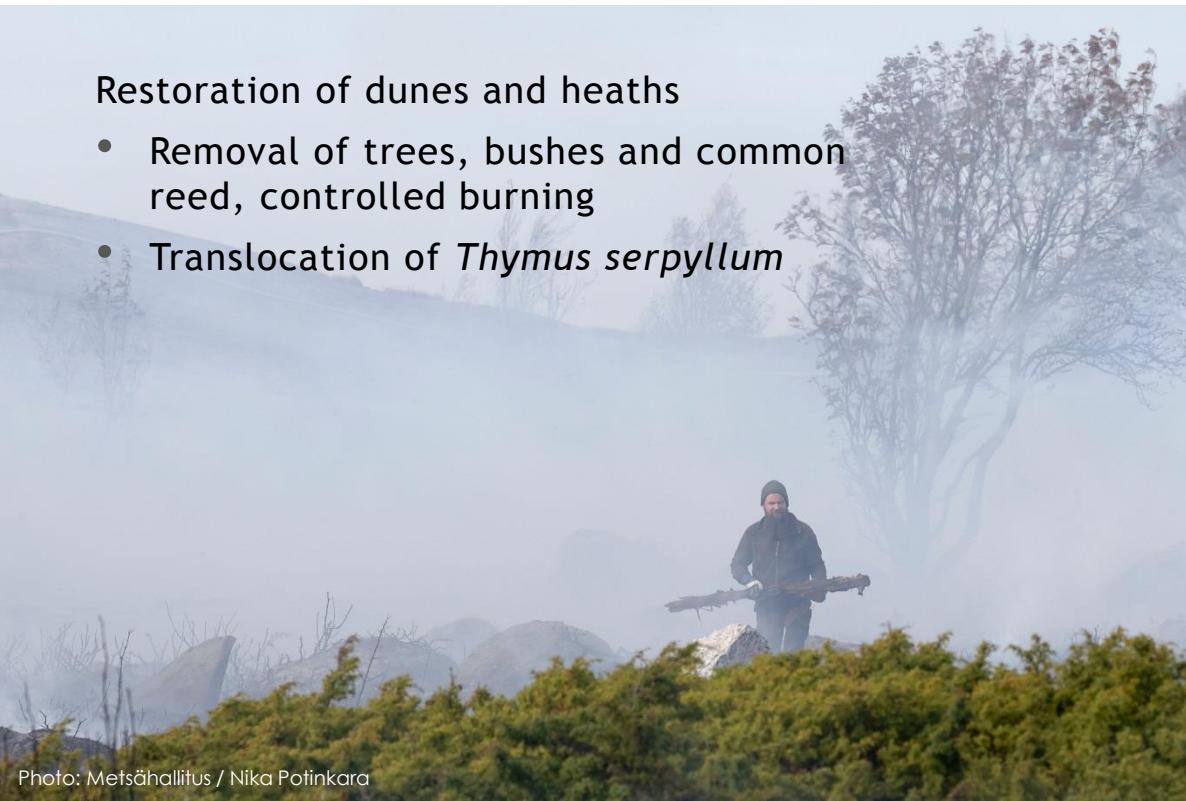


Photo: Metsähallitus / Nika Potinkara



Photo: Metsähallitus / Maija Mussaari



Photo: Metsähallitus / Maija Mussaari

# Restoration of Baltic sandy beaches

- Removal of trees, bushes, common reed and algal masses
- Eradication of *Rosa rugosa*
- 5 sites



# Habitat restoration and translocation of *Pulsatilla patens*

- “Beauty of Eskers”, One of the most vulnerable species in Europe
- removal of humus layer and revealing mineral soil → Creating barren conditions
- Collecting seed material for propagation in a nursery
- Planting seedlings and sowing seeds
- 7 sites



# Restoration camps for volunteers



Photo: Maija Mussaari

- Eradication of *Rosa rugosa*, removal of trees, bushes etc. as part of C2 and C4
- Increasing of awareness on the values of nature
- 10 camps (á 3-8 days) at 6 sites



**What will we achieve -  
Monitoring the impacts**

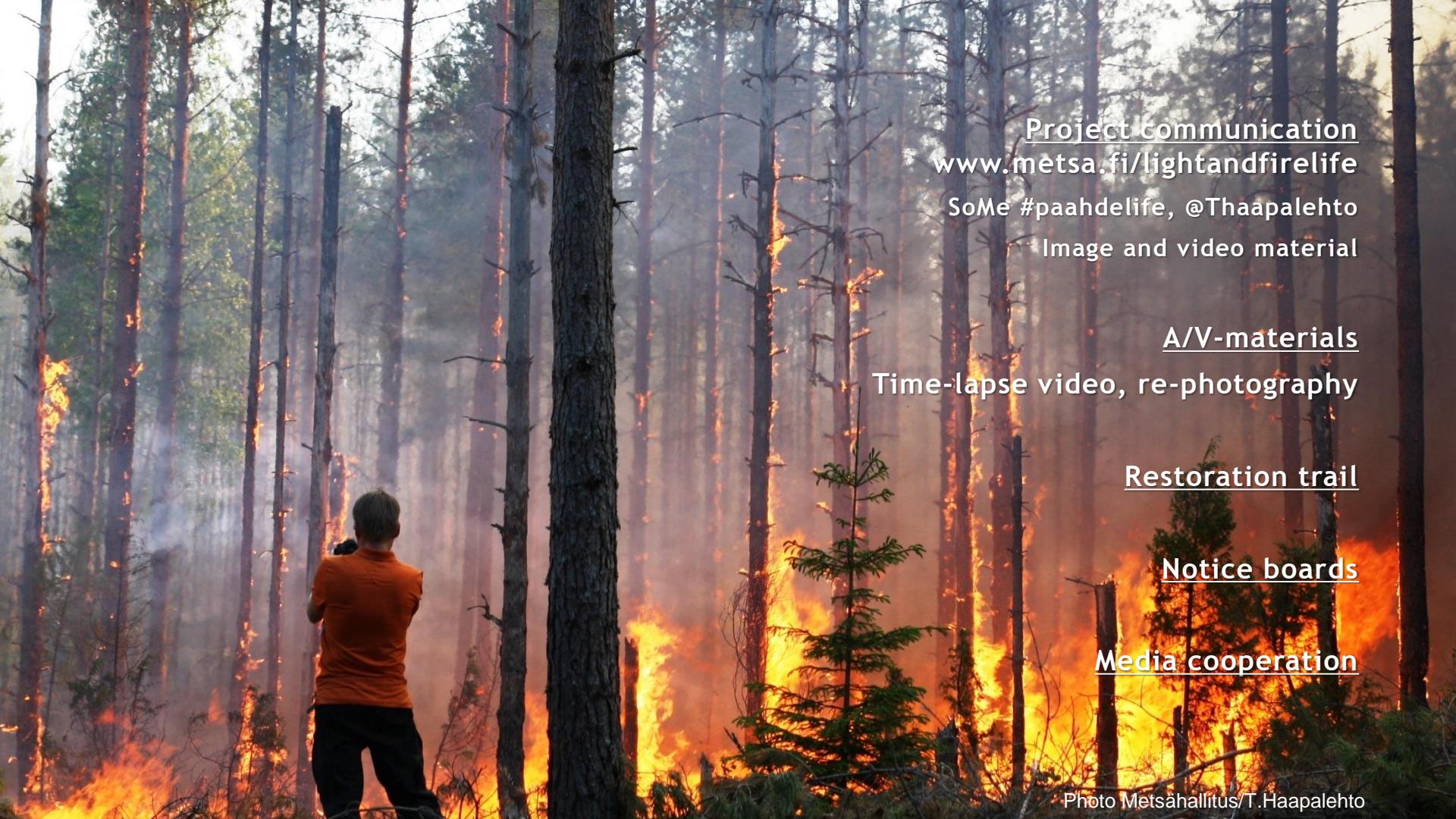
# Monitoring the success of restoration

- Controlled burning:
  - Change in key structural components: Tree mortality & amount of burned wood
  - Controlled set-up
- Management of sun-lit habitats
  - Ecosystem structural features
  - Target species / non-wanted species
- *Pulsatilla patens*
  - Counting of individuals
- Assessment of the impact on local socio-economy and ecosystem functions





How does public know -  
Public awareness and dissemination of  
results



Project communication  
[www.metsa.fi/lightandfirelife](http://www.metsa.fi/lightandfirelife)  
SoMe #paahdelife, @Thaapalehto  
Image and video material

A/V-materials  
Time-lapse video, re-photography

Restoration trail

Notice boards

Media cooperation



Thanks!

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