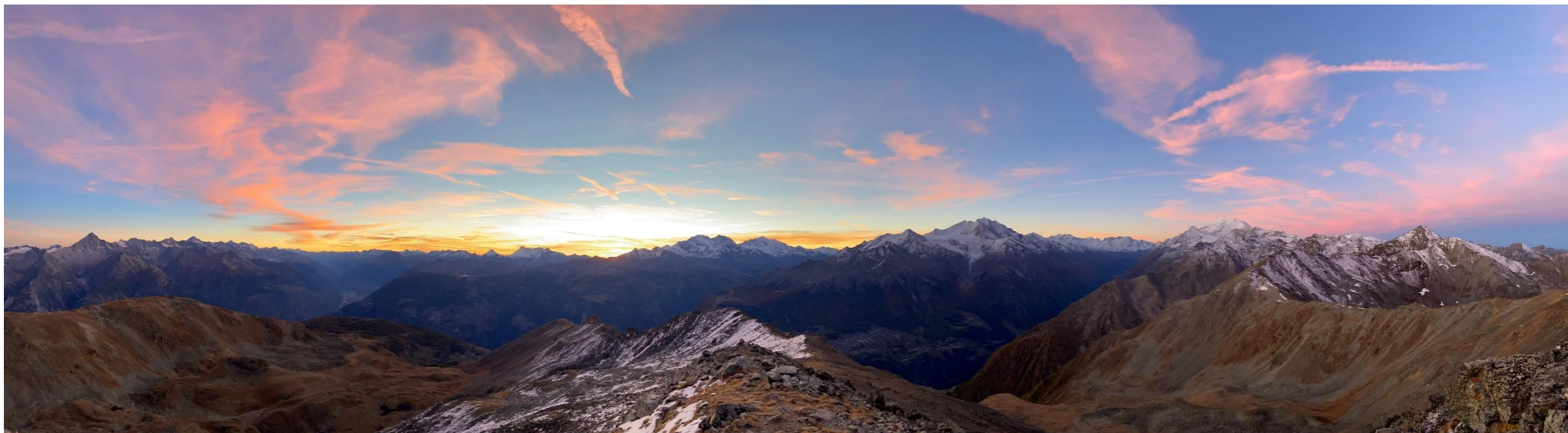


Presentations by countries: Switzerland «Broadening our horizons»

European Integrate Network

Robert Jenni, scientific collaborator FOEN



Annual Meeting – October 28th 2021, Neuchâtel



The questions are:



1. How are you preparing your forest to climate change also in terms of biodiversity and resilience?
2. What is your country's strategy until 2080?
3. What can be seen as specific for your country approach?

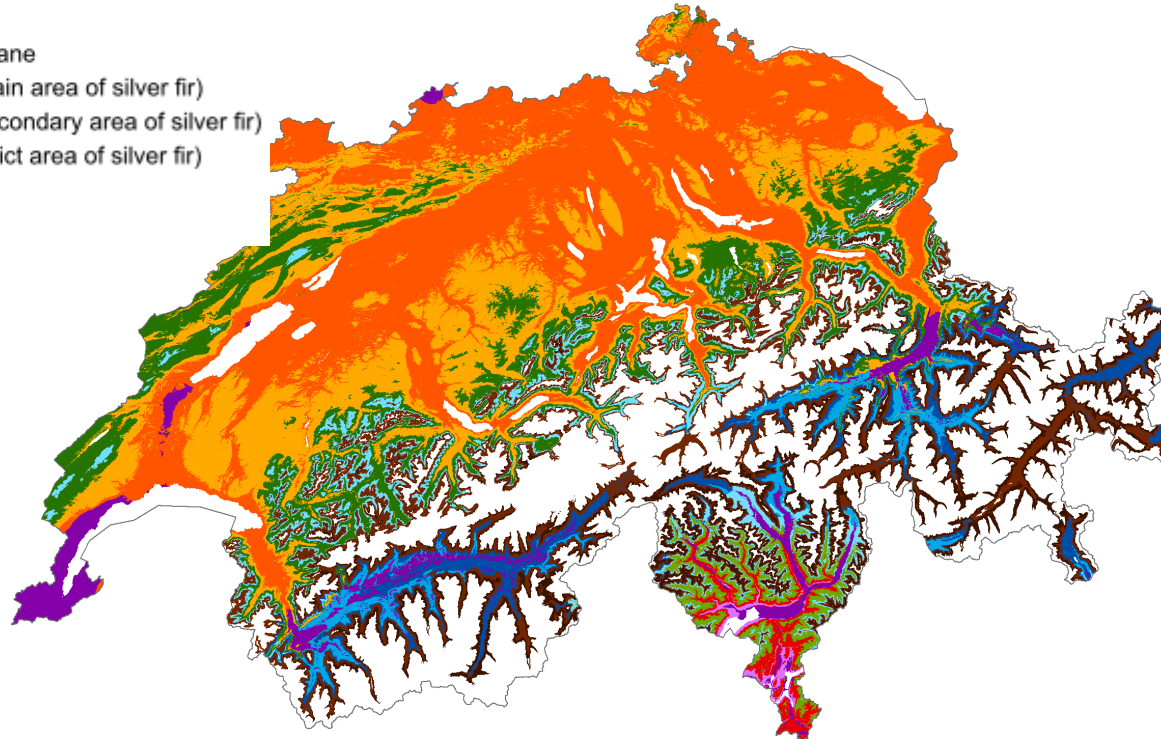


The 1st answer is: anticipating!

Modell of altitudinal zones

- hyperinsubric
- colline
- colline with beech
- submontane
- lower montane
- upper montane
- lower/upper montane
- high-montane (main area of silver fir)
- high-montane (secondary area of silver fir)
- high-montane (relict area of silver fir)
- subalpine
- upper subalpine

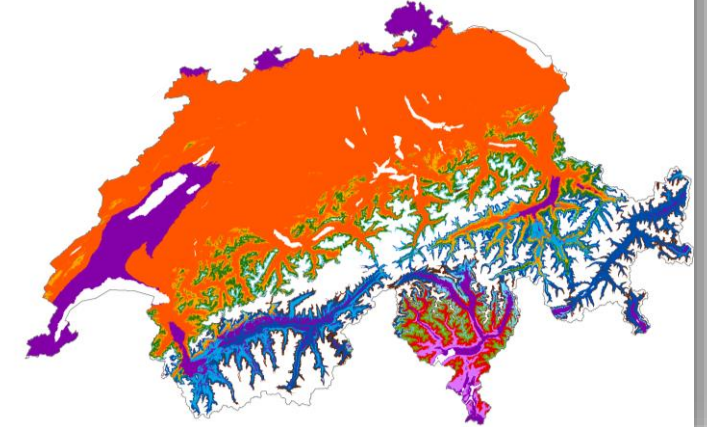
1981-2010



Source: Huber & Frehner 2019

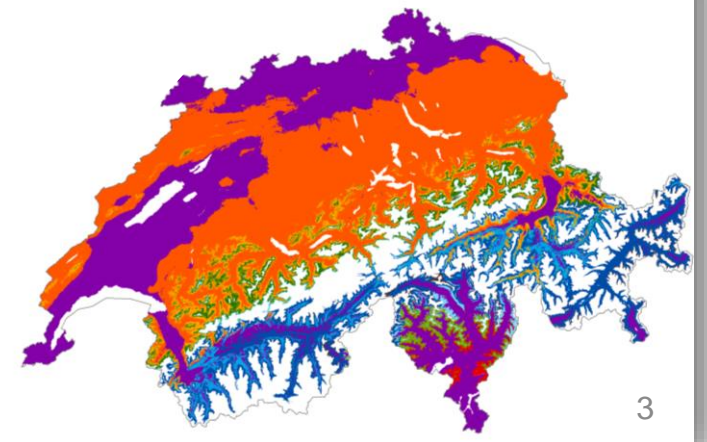
«Moderate» climate change / +3.1 °C, -2% N

2070 - 2099



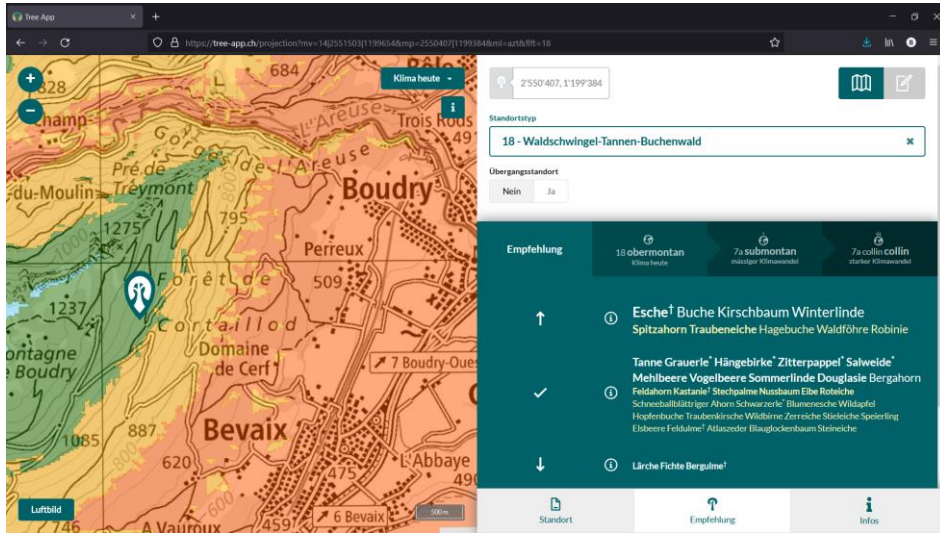
«Marked» climate change / +4.3 °C, -19% N

2070 - 2099



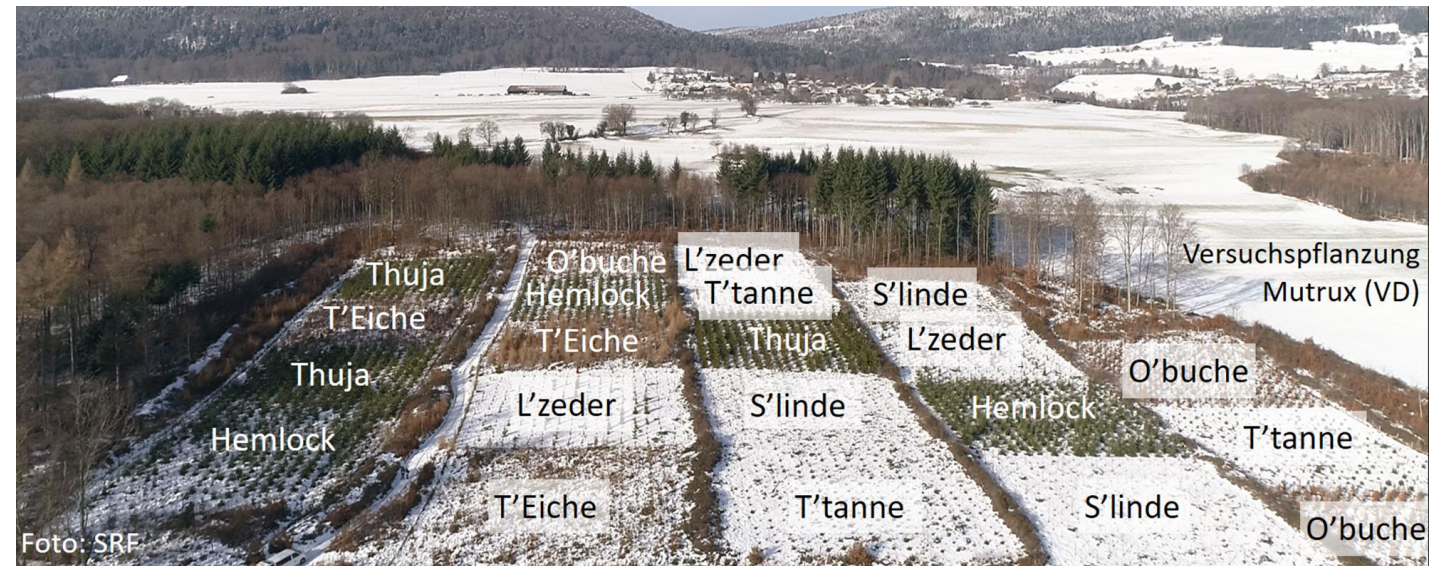


The 2nd answer is: developing new tools!



www.tree-app.ch

Experimental plantations of tree species adapted to future climates





The 3rd answer is: observing, testing, discussing





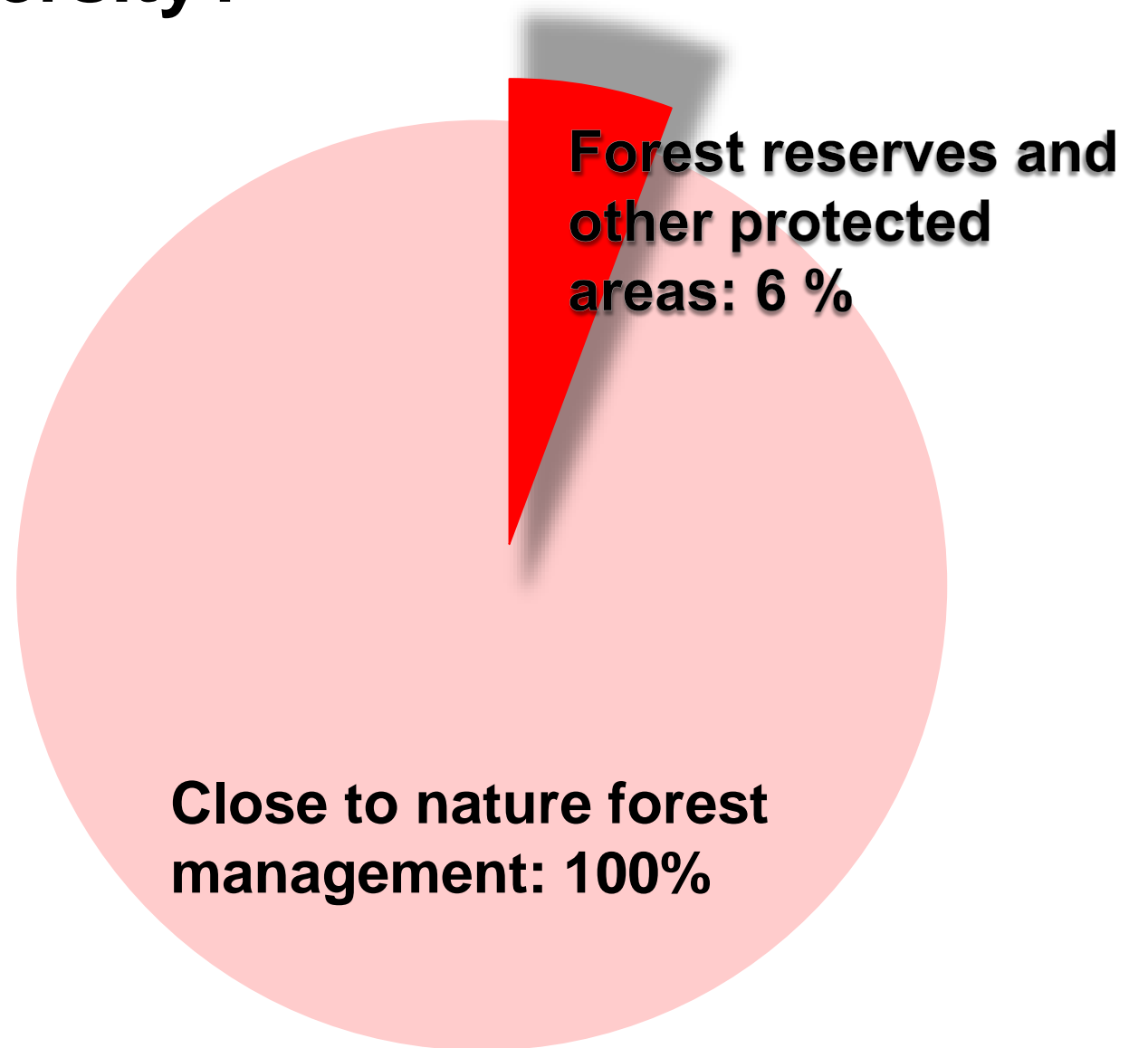
The 4th answer is: increasing diversity

The 5 principles of forest adaptation:

- Increasing species diversity
- Increasing structural diversity
- Increasing genetic diversity
- Increasing the disturbance resistance of individual trees
- Reducing the rotation or target diameter



And what about biodiversity?





Biodiversity and climate change in forest

Chances	Risks
More dead wood	Creation of large planting areas, some with exotic species
Emergence of new habitats	Loss of valuable habitats
Dieback of unsuitable stands (e.g. spruce plantations)	dieback of very old trees
Part of the forests will naturally evolve towards their new composition thanks to their resilience	Some forests will need to be actively converted using large conversion cuts



Thank you for your attention

