



Introduced tree species

the perspective of a (public) forest enterprise

A practical example



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Thesis: Introduced tree species are essential for multifunctional forest management in a globalized world

Initial position: Dealing with a irresistable disease introduced by an alien fungus (*Hymenoscyphus pseudoalbidus*). Longterm forest risk-managment caused by a massy ash-dieback in the riparian forests of the Rhein-Valley.

Basic factors of success: Broad diversification of future forest risks and chances. Promising troubleshooting encloses introduced tree species.



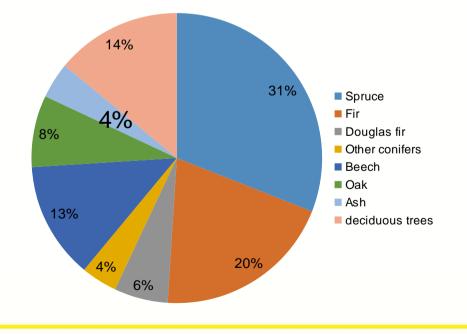




A quick overview - the forest department in the Ortenau county

The public forest administration of the Ortenau county

- is managing the state forest assets in the county (about 9.000 ha)
- provides forest consulting and forest management for private and municipal forest owners located in the county (about 80.000 ha)
- is forest-laws supervising authority



Ashes endangered by fungus covering 4% of forest stands.

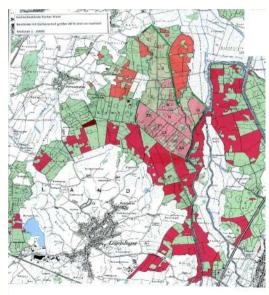
So what is the significant problem?

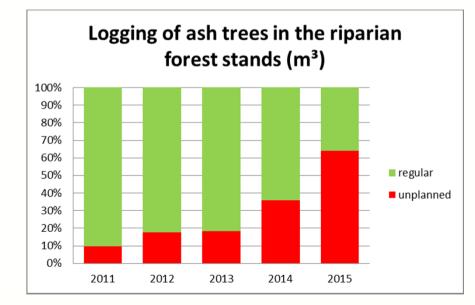




The significant situation in our Rhein-valley forest stands

- 12% of the forest stands are located in the Rhein-valley (11.000 ha)
- 25% is ash (Fraxinus excelsior) in this forest stands (2.700 ha)
- all forest stands are all public owned (90% municipal forests)
- most forest stands are high-potential for nature conservation, recreation, water protection (including flood control) and timber production

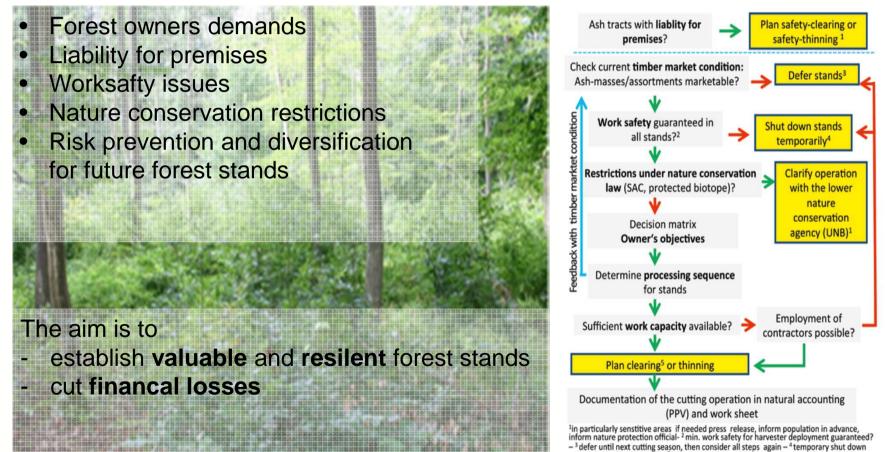








Target-oriented forest disaster and risk mangement

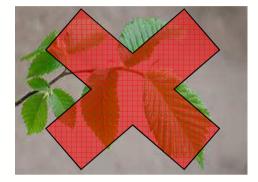


- "deter until next cutting season, then consider all steps again – "temporary shut down until collapse (ca. 15 years) – ⁵ before clearing consider decision tree :,,reforestation"





The needs for introduced tree species







We're running out of adapted native tree species for riparien forest sites!







No long-term risk diversification without a broad based portfolio of hardwood!



Moderate input – the way it can work

Poor site quality

Common oak Hybrid poplar European black alder native scubs Black poplar

European white elm Small-leaved elm (Ash)





Good site quality Common oak Sycamore maple Common walnut Black walnut Hybrid walnut Hybrid walnut Tulip tree Wych elm London plane Turkish hazel (Ash)





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Final position:

In this practical case a moderate quantity of introduced tree species

- reduces long-term natural risks
- reduces short-term financal risks
- increases diverstiy of replanted forest stands
- increases financal portfolio

But there's still a lot we have learn about long-term characteristics of introduced tree species in our forest ecosystems!