

Netherlands – Veluwe case study

Case study forest area: 8,246 ha

Ownership: 75% NGOs, 5% state, 20% private

Forest goods and services:

Main functions of the area nowadays are recreation, nature and landscape protection. Wood production is mostly a secondary goal, but the actual mix of goals depends on the owner.

Special local conditions:

Cultural history: 22% heath land and some open driftsands. Old broadleaved remnants. High grazing pressure, affecting tree regeneration. High recreational pressure.

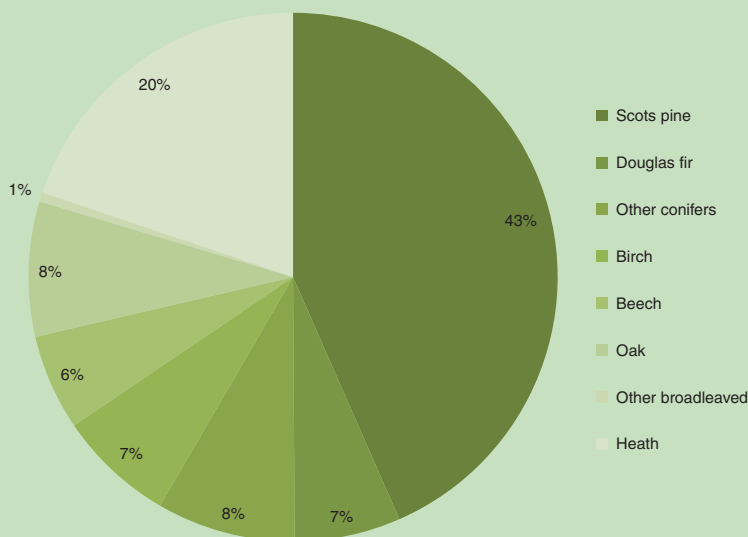
Stakeholders

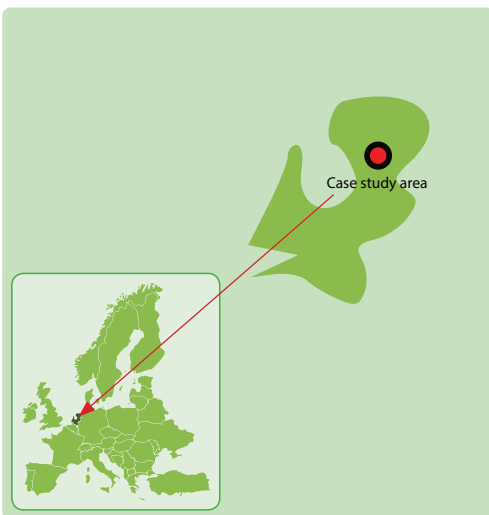
Forest owners/managers
Fire brigade
Recreational sector

Management and governance issues

Heath land, drift sand and old broadleaved forests are classified as Natura2000 core habitat areas and need to be maintained.

Proportion of species of Veluwe

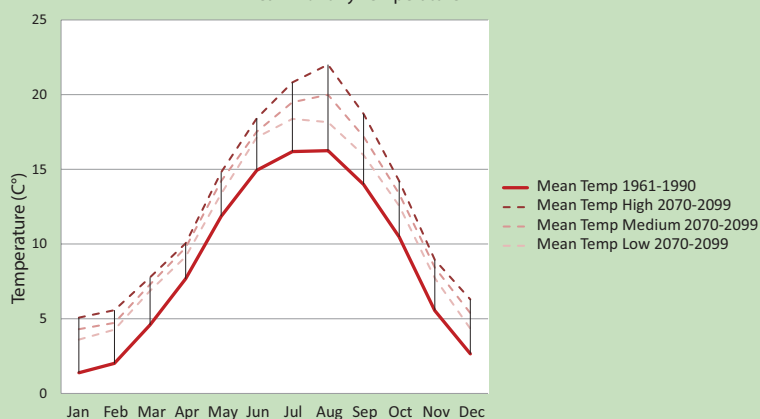




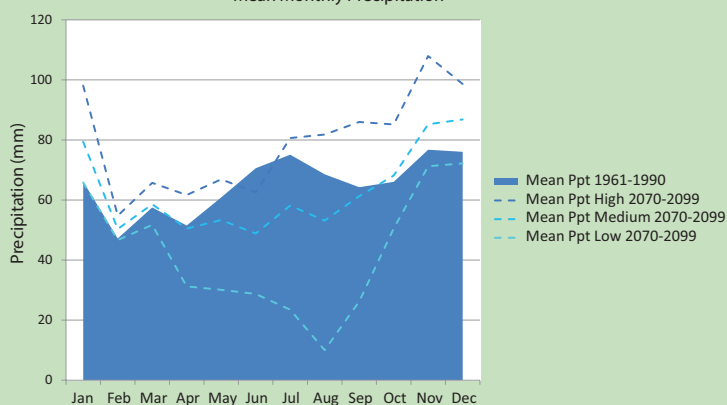
Climate change challenge

Moderate changes in climate are not expected to lead to major problems or changes in the area. Drier and hotter summers are expected to lead to a decline in oak and beech forests and increased dominance of coniferous species like Scots pine and Douglas fir.

Mean Monthly Temperature



Mean Monthly Precipitation



Increased future fire risk due to more extreme fire weather and more conifers under climate change conditions?



Photo: Mathijs Schuijn.



Regeneration is affected by the high grazing pressure. Photo: Mart-Jan Schelhaas.



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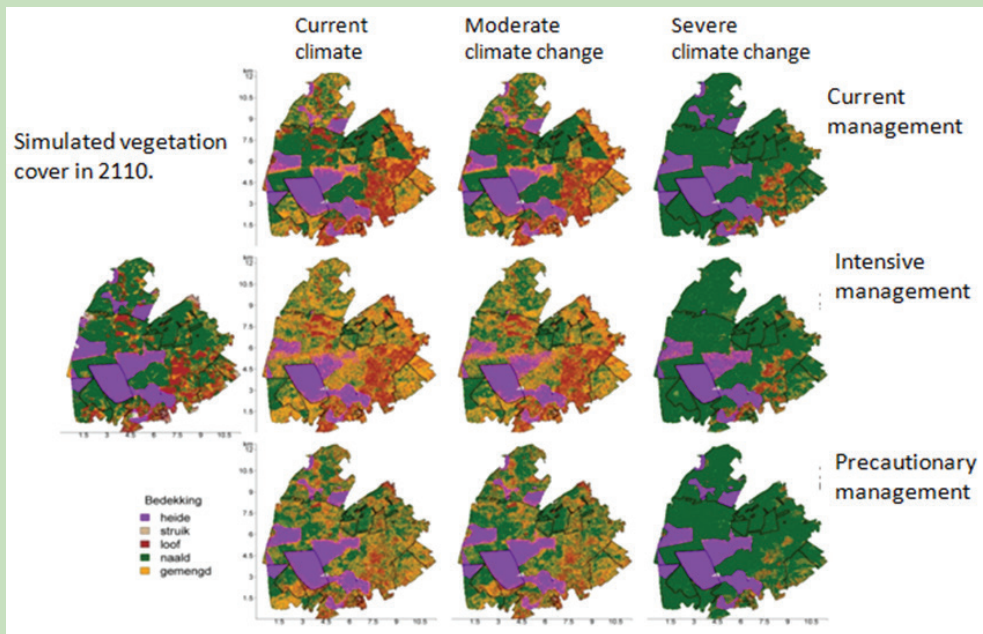
Will these young beech trees survive under drier and warmer climate?

Current management and moderate climate change will lead to a more intimate mixture of tree species



Photo: Mart-Jan Schelhaas.

Current management is already well adapted to the sites and climatic conditions, and already takes into account natural developments. A mild climate change scenario can be easily dealt with in the current management schedules. More severe climate change leads to a loss of biodiversity due to replacement of oak and beech by more drought-tolerant species like Scots pine and Douglas fir. These developments will probably become visible in the medium term only. Adaptive management will not be sufficient to curb these developments.



Conclusion

Continuation of current management is the best option to maintain the current levels of service provisioning. However, the development of forest and climate should be monitored closely to be able to adapt the management if necessary. However, individual owners may decide differently for their own properties, based on different preferences.