Active or passive conservation – which path to follow for high biodiversity at large scales?

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**Why large scale is the only way? ...for biodiversity**

*Forests are dynamic!* They change in time with or without human intervention!...due to their internal processes but also due to natural disturbances

... forests are continuously changing in time = therefore the **habitat** for species in a certain place **will change**
... different species = different needs (no place will have all species, in the same time).

**Biodiversity changes in time. No place has all species. How to deal with these challenges?**
Reality = Many species are dependent on other stages of development and on various levels of disturbance (especially the light demanding plants and all associated animal species).

Myth = all species are dependent on old and/or untouched / undisturbed forests! Therefore, other stages are No-habitat and management is always bad (especially regeneration harvesting)

Large scale = not only size but also structure!

No stage has all species! Each stage is important! All stages are needed!
How to conserve the highest biodiversity?

1. Obtain and maintain **all** different structures (stages of development) which provide **continuously** different habitat conditions for **species** with **different needs**

2. Offer good connectivity (=abundance & viability on long term)

One solution = the shifting steady-state mosaic at (large scale) landscape level
The shifting steady-state mosaic at large scale …implications

For **large size** = including **managed** forestland is not optional but mandatory!

**Coexistence is the only way!** … and represents the natural way in most of Europe

For **diverse structure** = various types of disturbances with regular frequency are needed!

**Is active conservation just optional?**

Which way to go – active or passive conservation?
Active conservation

Nature with us (controlled management) = manage and control change to fulfill needs of society (including biodiversity!); humans together with nature (something “natural” in Europe).

Key outcomes:
- The only chance for large scale as allows for coexistence with humans
- The only chance for appropriate connectivity
- The only chance for careful planning and control of disturbances (type, intensity, frequency, spatial distribution) = control over the landscape structure (the goal!)

Better chances for a balanced shifting steady-state landscape mosaic!
Passive conservation

Nature without us = no control over the change; humans expelled from nature (not something “natural” in Europe); not always the nice-looking scenery and not remaining unchanged!!

Key outcomes:
- No chance for large scale
- No chance for appropriate connectivity
- Reduces coexistence = places the burden on the rest of the area
- No chance for careful planning and control of disturbances (type, intensity, frequency, spatial distribution) = rely 100% on natural disturbances
- Protects primary and true old-growth forests ....from humans but not from change! Is an example of dynamics without humans.

Low chances for a balanced shifting steady-state landscape mosaic!
What to do?
A combination of both is probably better, but the proportion of each becomes important for practical implementation!

We will be more efficient and effective if we will invest our efforts more into doing the right thing (ACTIVE CONSERVATION) rather than doing nothing (PASIVE CONSERVATION)

THANK YOU FOR YOUR ATTENTION