

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

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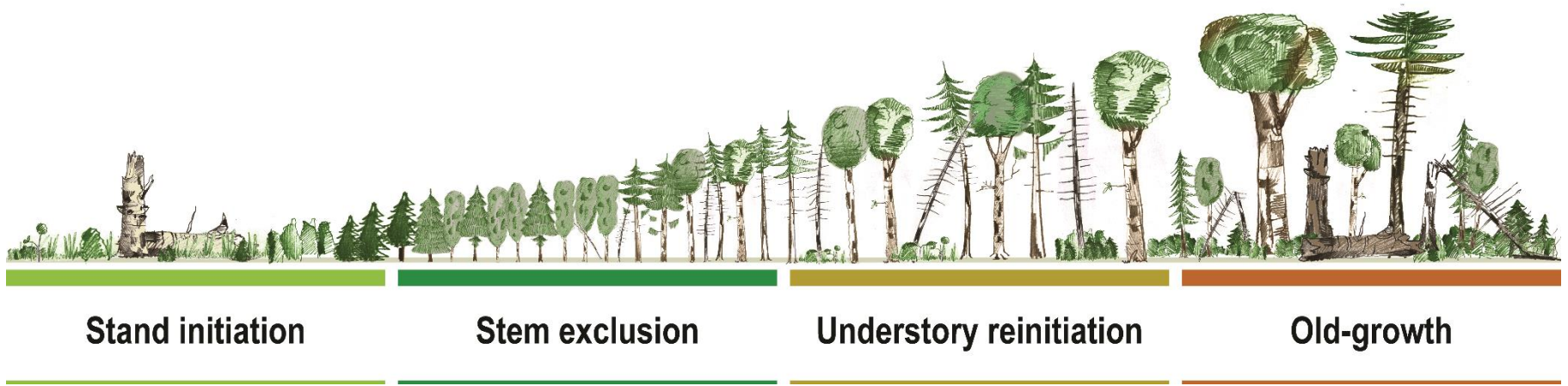


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Why large scale is the only way? ...for biodiversity

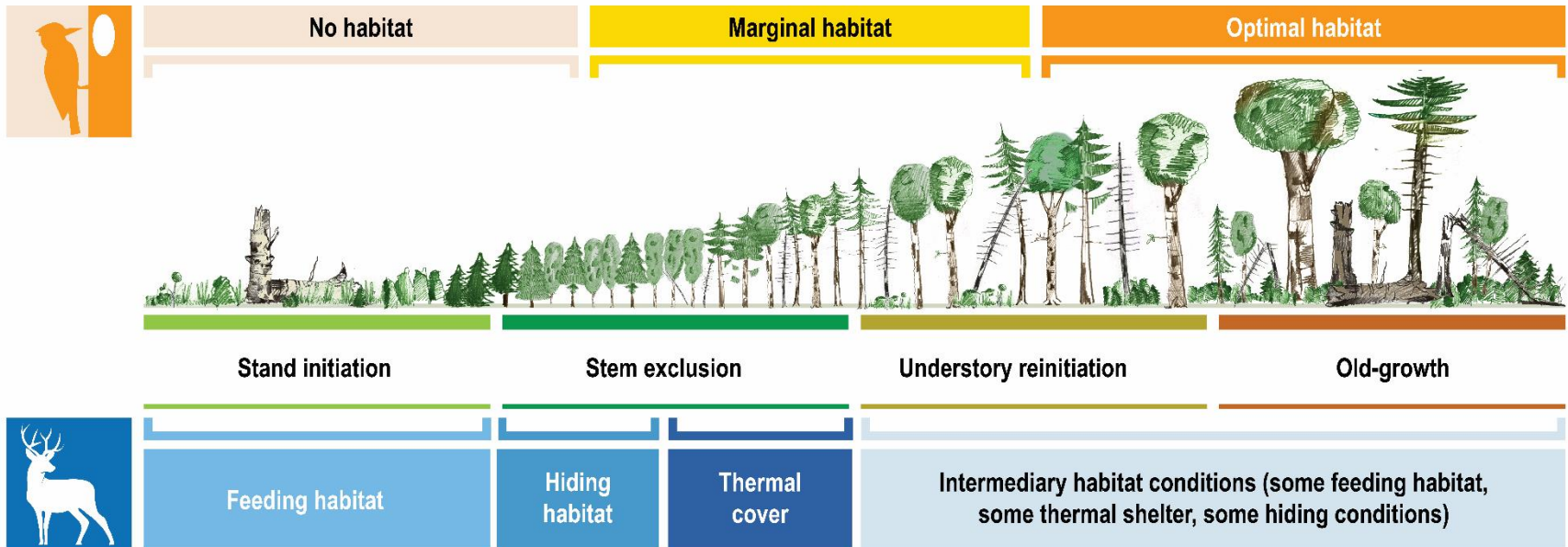
Forests are **dynamic!** They change in time with or without human intervention!...due to their internal processes but also due to natural disturbances



... 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).

Large scale = not only size but also structure!

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)



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).

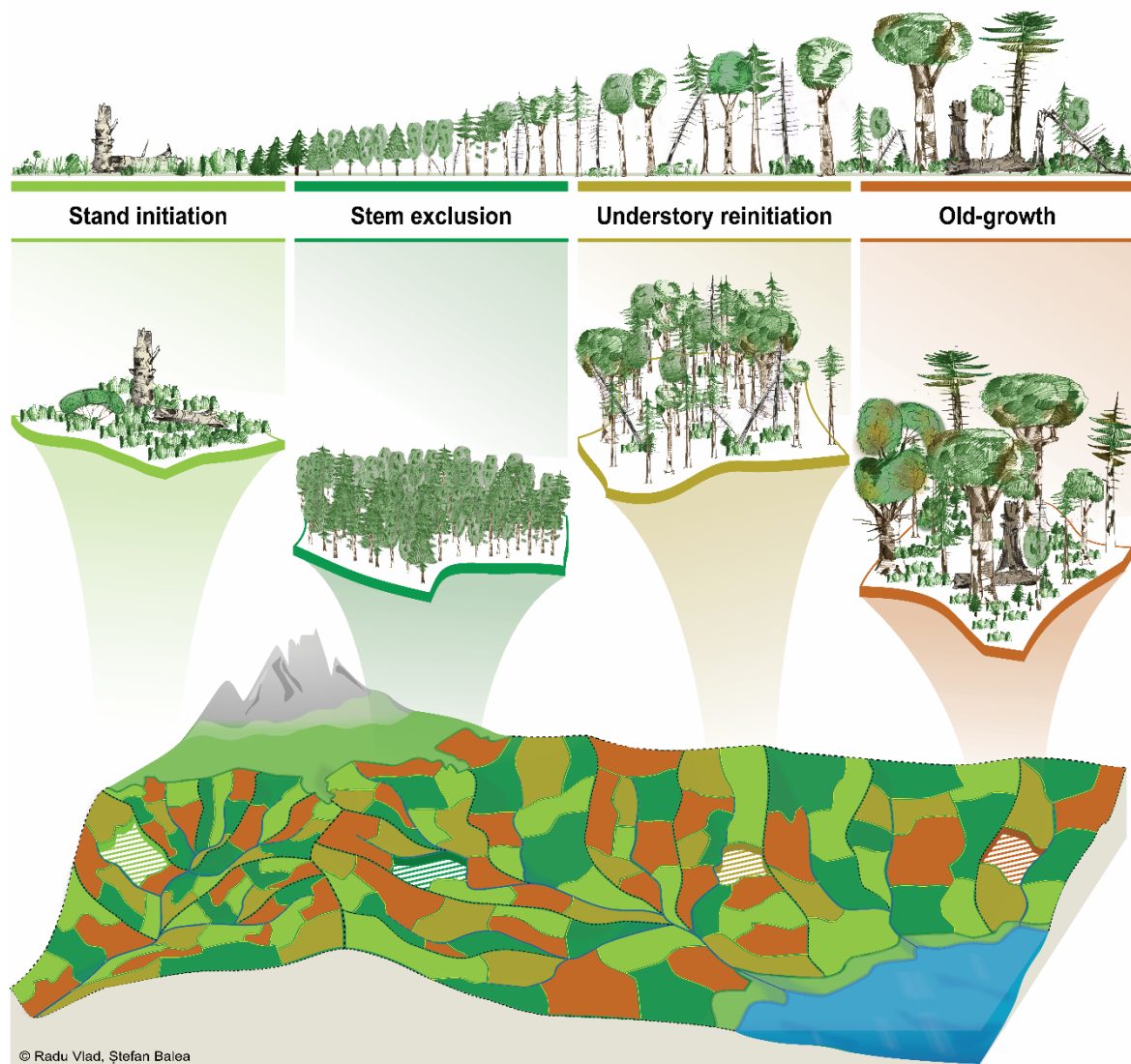
No stage has all species! Each stage is important! All stages are needed!



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)



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**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?



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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!)**



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 forestsfrom humans but **not from change!** Is an example of **dynamics without humans.**



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**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**



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