NOVEL ECOSYSTEMS: IT'S TIME TO GET REAL

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WE ARE TRAPPED!

• **Restoration**
  • An ecosystem can be returned to some previous state
  • “Original/pre-existing” condition

• **The World**
  • Will continue to change at an ever-increasing and unprecedented rate.
  • Ignoring prior and future human impact

• **Struggle**
  • With defining the goal
  • Trapped in a model of restoring to a previous static state

• **Tremendous Paradox**
  • Focus on an uncertain past and future – Stalled.
  • Readjust our definition of the goal of ecosystem restoration to include how humans intervene in ecosystems
NOVEL ECOSYSTEMS
WHAT IS IT?
INTERVENTION

• Intervene with an eye towards the future
• Can our interventions be planned and guided in a way that is beneficial both to humanity and to other organisms?
• Reactive, Active, Proactive Intervention
• Local, Regional and Global Scales
• Changing rules and governance approaches may have more of a profound impact than tinkering with ecosystem restoration
CASE STUDIES
OF NOVEL ECOSYSTEMS
LESSONS LEARNED
THOUGHTFUL INTERVENTION: ARROGANCE VERSUS HUMILITY

- Need to decide which interventions are feasible, desirable, and likely to result in positive outcomes for humanity and biodiversity.
- When do you declare targets as non-attainable?
- Are we actively adapting to disturbances?
- Should novel ecosystems be restored and safeguarded?
CHALLENGES OF APPLYING
THE NOVEL ECOSYSTEM
APPROACH
Novel Ecosystems: An Analysis of the Influence, Usefulness and State of the Concept

The Concept of Novel Ecosystems

- What is its origin?
- Distinctness?
- Relation to other concepts?

- How well-known is it?
- Scientist/practitioner?
- Does this differ per region?

- Novel Ecosystems in NL?
- Practical Use?
- Future of the concept?
WASSEN’S FINDINGS
• There is no consensus on the definition.
• Practitioners seem to be somewhat less familiar with the concept than scientists.

IUCN – BEST PRACTICES IN ECOLOGICAL RESTORATION – PRINCIPLES AND GUIDELINES
• Multiple benefits for people and nature from conservation and restoration actions that recognize the role of novel ecosystems

Is this a concept the NCER practitioner community wants to explore further and potentially promote?
PATH FORWARD

OPEN DISCUSSION
THANK YOU!

CONTINUE TO DO GREAT THINGS FOR THE PLANET!
Is target ecosystem altered because of anthropogenic forcing?

No  ->  Historical ecosystem

Yes  ->  Are changes reversible?

Yes  ->  Hybrid ecosystem

No  ->  Time without intervention

No  ->  Novel ecosystem