4a. DECISION MAKING WITH INCOMPLETE DATA IN FOREST ADAPTATION TO CLIMATE CHANGE

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AM-Tools

Ecological and Legal tools for the assisted migration of forests.

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Adaptation of forests relies on:

- Migration
- Phenotypic plasticity inherent to each species
- Other fast local mechanism
- Smart decisions from ecosystem managers

Assisted migration is increasingly considered as a feasible adaptation option in northern temperate ecosystems, yet :

- Few long term observations of the outcomes of such programs exist.
- Experimental trials are expensive, long-term, international projects.

Is there enough evidence to justify the translocation of forest populations to compensate for climate change ?

Strands of evidence to be considered



AMTools project approach



Conclusion : a classical decision-making under uncertainty dilemna

Waiting for complete scientific understanding of forests adaptation to climate change risk *paralysis by analysis*.

Not changing management practices may lead many forests to *extinction by instinct*.

Let us discuss the match, or the gap, between scientific decision-making theories under uncertainty and actual practices about forest translocation !