

Discussion group on the effects of global change and land abandonment on services to humans

Preamble

From the outset our group decided that the discussion would focus on (1) land use change (rather than land abandonment); and (2) animal diversity. We also decided that it would be necessary to classify, list and prioritize the different ways that services would be affected. It became apparent that all of the services that would need to be discussed would need measurable indicators, and that many would have negative as well as positive implications for humankind. Thresholds and trade-offs between these different types of effects would therefore need to be taken into account in developing them further.

We classified the services into three main categories, but acknowledged that there would be overlap and redundancy between these:

(1) Economic services

- game hunting (e.g. both native and non-native ungulates)
- tourism
- protected areas
- hunting (e.g. roe deer and wild boar ranges may move north)
- real estate prices (uncertain how these would be affected)
- compensation payments to farmers
- water quality
- new types of food
- regulating disease and pests

(2) Social services

- cultural identity
- wildlife tourism
- education
- traffic accidents involving wildlife (negative)
- human health (e.g. Lyme's disease – negative)

(3) Environmental services

These services fell into two broad categories associated with (a) ecosystem level and (b) species level issues:

- air, water and soil conservation
- general ecosystem processes
- natural medicines
- minimum/maximum levels of biodiversity needed
- stability versus dynamism in ecological systems

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