

Slow Species in Fast Landscapes

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Abstract

Semi-natural grasslands across the world have exceptionally high small-scale species richness where centuries of extensive disturbance such as grazing or mowing have created unique habitats for many organisms. This biodiversity is threatened today due to habitat destruction and fragmentation, where 24% red listed species across the world is associated to agricultural landscapes. Despite being two of the largest terrestrial biomes on Earth only 1.8% cropland and pastures are protected. Small remnant semi-natural habitats in agricultural landscapes are important for plants and animals, and also essential for many ecosystem services, such as pollination and pest control. These small remnants may be significant as stepping stones for species in a changing environment. However, current conservation management in agricultural landscapes will have difficulties to mitigate future biodiversity loss, particularly in an era of climate change.

Producing food and fibre of good quality but still protecting biodiversity and ecosystem services within agricultural landscapes is a major challenge. Proactive conservation management should identify and protect small habitat remnants and to acknowledge abandoned agricultural land as potential sources of biodiversity. Protection of biodiversity should not be concentrated to restricted areas only, but also within ordinary agricultural landscape where multiple ecosystems services can be maintained simultaneously.