Universität Basel

Research Project

Ecological Restoration

Project funded by own resources

Project title Ecological Restoration
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Ecological restoration is the process of assisting the recovery of an ecosystem that has been degraded, damaged or destroyed. Given the large-scale anthropogenic alteration of natural habitats, ecological restoration is emerging as one of the most important disciplines in environmental science. In recent years, increasing efforts have been directed to the restoration of natural communities affected by human activities. We aim to assess the success of different restoration actions. For example, we evaluate the success of restored vineyards on terraced slopes in Southern Switzerland by examining various aspects of plant diversity. These vineyards have been abandoned for decades and were overgrown by forest. Success in restoring species diversity and ecosystem function is often reduced because of the lack of dispersal-limited species in the restored site. Numerous rare species are dispersal-limited, having low probabilities to re-colonize restored sites and to establish viable populations on their own, and restoration projects need to be adjusted accordingly. One possible approach is to reintroduce populations, but the long-term success of such reintroductions is rarely assessed. In a case study, we re-introduced the Blue-winged grasshopper (*Oedipoda caerulescens*) in restored gravel patches in a nature reserve and assessed the population dynamics over 21 years.

Keywords ecological restoration
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Other funds

Add publication

Published results

2674585, Baur, Bruno, Dispersal-limited species – A challenge for ecological restoration, 1439-1791, Basic and applied ecology, Publication: JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

3703923, Baur, Bruno; Thommen, G. H.; Coray, Armin, Dynamics of Reintroduced Populations of Oedipoda caerulescens (Orthoptera, Acrididae) over 21 Years, 1536-2442, Journal of Insect Science, Publication: JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

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