

Which areas to restore? Quantifying the biodiversity potential of different restoration efforts

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Reverting the loss of biodiversity requires protection and restoration of areas at large spatial scales. Preferably these areas should protect and restore multiple facets of biodiversity in a complementary manner. In many European countries this requires restoring large areas of degraded ecosystems and returning substantial areas under current production back to nature. To recover biodiversity, protection and restoration should target the areas with the largest biodiversity potential across scales, i.e., both locally, nationally, and beyond. In addition, the outcome will depend on the specific restoration efforts implemented at the local scale. We have developed a dynamic approach for quantifying the biodiversity potential of different local restoration efforts, as well as optimizing the restoration efforts at the landscape scale. In this talk, I will present the approach and how we have used it to quantify the biodiversity potential of agricultural fields across Denmark, if reverted to nature. The results can be used to guide local restoration efforts and quantify the potential biodiversity outcomes and their contribution to goals set at larger scales