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RESTORATION TRAJECTORY OF CARABID ASSEMBLAGES & FUNCTIONAL TRAITS IN AFFORESTED BLANKET BOG

Drainage for agriculture or afforestation is a prevalent land-use change in peatlands, affecting ecosystem services such as biodiversity and carbon sequestration. Peatland restoration is a cost-effective conservation tool to preserve unique wildlife assemblages and combat climate change. Biodiversity is intrinsically linked to ecosystem functionality, whereby species functional traits influence ecosystem functioning and species ability to respond to environmental changes. Fluctuations in ecosystem processes could be predicted on the basis of community composition changes. We compared a chronosequence of forest to blanket bog restoration sites to examine the restoration trajectory of: 1) carabid assemblages, and 2) carabid functional traits. Results suggest that restoration "age" might not be a reliable indicator of restoration progress for invertebrates. We attributed this to rapid colonisation of fast dispersing, habitat/resource generalist carabid species. Our research also highlighted that restoration sites displayed higher species richness and diversity, particularly at intermediate age classes, whilst blanket bog displayed more specialised and unique carabids.