



Conference Abstract

# Carabid beetles in Short Rotation Coppices (SRC): Comparing the importance of stand age versus plantation age for forest species through a meta study from Central Europe

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## Abstract

Because of their monoculture and even-aged plantation character, often highly mechanized harvesting methods and very short rotation cycles for a woody plant crop, the functions of short rotation coppices (SRC) with regard to biodiversity are often thought to be limited. The surprisingly large number studies conducted yielded varying, in some aspects inconclusive results. Most studies and reviews conducted so far concluded that only SRC in the establishment phase after planting are of particular value for biodiversity and nature conservation. In order to achieve a better understanding of biodiversity functions of SRC with the potential to be generalized, we conducted a meta study combining existing ground

beetle data from 14 projects with a total of 73 plots from SRC in West Central Europe (Germany) and Czechia.

The results show that SRC not only have benefits for biodiversity by providing endangered pioneer species an ephemeral pioneer habitat (particularly during the establishment phase of the SRC), but also do so at the fringes like their edges and in clearings where trees failed to properly establish. A second function for biodiversity conservation is that of providing strict forest species of limited dispersal ability with habitat corridors, which is the case particularly in older, long-existing SRC. The age of the plantation is much more important for this function than the length of the rotation intervals.

The two conservation benefits which SRC can have are completely different, but can complement each other. In multifunctional landscapes which aim to maintain open field biodiversity and cultivate forest biodiversity at the same time, a stronger consideration of SRC need not be a threat but can be a valuable ingredient in the land use mix.

## **Keywords**

Short rotation coppice, SRC, energy forests, biodiversity, ground beetles, Carabidae, meta study, corridors, endangered species, pioneer species

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