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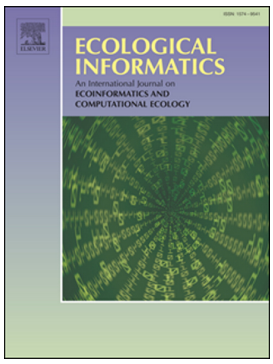

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R2MCDS: an R package for the analysis of multi-species datasets collected using distance sampling

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Abstract

We present `R2MCDS`, an R package that provides tools to call the multiple-covariate distance sampling (MCDS) engine from the Distance 6.2 software in the R environment. We built `R2MCDS` for the analysis of line transects data collected using distance intervals. Based on the user inputs, the package writes a command file, runs the MCDS engine and re-imports the resulting statistics file as an R object. The package is particularly useful when the user wants to repeat the same distance analysis, as in multi-species surveys. We demonstrate the applicability of the package for multi-species surveys using data from the Eastern Canada Seabirds at Sea (ECSAS) database.

Keywords

Distance sampling; Line transect R package; multi species surveys;

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