

Metadata form of Silva Fennica

This form is designed for writing the elements of metadata, which are used in the description of research materials such as data and codes. The form is based on the work done in the Work Group “Description of research materials” under the Finnish Open Science Coordination.

Item	Description	Responsible
<i>Name of the data / code</i>	Data for “Forest Development and financial outcomes under shelterwood and clearcut regimes in mixed stands”	Author
<i>Author & ORCID</i>	Strömvall Nyberg, Therese, 0009-0007-0280-6023 Lula, Mikolaj, 0000-0003-3313-8164 Adekunle, Hammed, Nilsson, Urban, 0000-0002-7624-4031 Örlander, Göran, Holmström, Emma, 0000-0003-2025-1942	Author
<i>Authors' affiliation(s)</i>	Swedish University of Agricultural Sciences, https://ror.org/02yy8x990	Author
<i>Owner of the material</i>	Swedish University of Agricultural Sciences, https://ror.org/02yy8x990	Author
<i>Publisher</i>	Swedish University of Agricultural Sciences, https://ror.org/02yy8x990	Author
<i>Funder</i>	Swedish University of Agricultural Sciences, https://ror.org/02yy8x990 Södra Skogsägarna, https://ror.org/04xh4sy96	Author
<i>Description</i>	Collected field measurements in Sweden during year 2022 and 2023 was used to assess stand development (growth and yield). The objective was to assess if the stands had turned into mixed species forests and if there were any differences in growth and yield between treatments.	Author
<i>Methods</i>	Two to four circle plots per treatment and site (block) was laid out, with a radius of 5.64 meters. In each circle plot for every tree above 1.3 meters, tree species and dbh (cross calipered) was noted. Furthermore, for every tree species present in the circle plot, height of the two largest trees and the three closest to the plot centre was measured. The field data was then used as the baseline for the simulations in StandWise, Heureka. The instruments used for collecting field data were a Vertex 5 (for height measurements) and a calliper (for breast height diameters). Linear mixed-effects models were fitted in R, version 2023.9.1.494, to analyse the data.	Author
<i>Variables</i>	CS – clearcut without mechanical site preparation CS _{MSP} – clearcut with mechanical site preparation SW – shelterwood without mechanical site preparation SW _{MSP} – shelterwood with mechanical site preparation MSP – mechanical site preparation LEV – land expectation value (EUR ha ⁻¹) CF – cash flow (EUR ha ⁻¹ year ¹) IR – interest rate (%) DBH – diameter at breast height (dm) H _L – Lorrey’s mean height (m) QMD – quadratic mean diameter (cm) Cont – containerized seedling BA – basal area (m ²)	Author
<i>Author keywords</i>	Picea abies; Pinus sylvestris; combination method; Drettinge method; land expectation value	Author
<i>Vocabulary keywords (community standard)</i>	Keywords from controlled vocabularies and ontologies (general or disciplinary) that improve the findability of the material. Provide links to the vocabularies used e.g., the taxonomic database used for nomenclature.	Author
<i>Discipline</i>	Field(s) of study to which the material is related. This is generally given by the repository as they use specific classifications.	Archive/Repository/Publisher

Type of material	Field data for each circle plot per treatment and site (block) in an xlsx-format	Author
Language	eng	Author
Time range covered	2022-11-01 – 2024-06-30	Author
Geographic region	Sweden (SE)	Author
Version	Only one version exists	Author
File format(s)	The data will be available in .xlsx format	Author
Availability of the materials (open, embargo, registration, limited, registration required)	The authors will add this later, in the paper there is now a DOI for the data set. It has been reserved, but is not yet published	Author
Justification for access restrictions	It will be at time of publishing, for now, reviewers will get it upon request	Author
Licence	CC BY-SA	Author
Connections with other research materials	3) Other materials are connected to the material (HasPart)	Author
Access to the connected research materials	Study 1: https://doi.org/10.1016/j.foreco.2006.09.053 Forest Ecology and Management, Elsevier, https://ror.org/013fhv752 Study 2: https://doi.org/10.1016/j.foreco.2004.10.046 Forest Ecology and Management, Elsevier, https://ror.org/013fhv752	Author
Codes only: hardware/ software requirements for running the code	R version 2023.9.1.494 was used for running the code and analysis. Open access to RStudio can be found here: https://posit.co/downloads/ StandWise, Heureka was used for running the simulations. Open access to Heureka can be found here: https://www.heurekaslu.se/wiki/Heureka_Wiki/sv	Author
Connections to other products of research	No, not yet. The study will however be part of a PhD dissertation	Author
Personal data	No	Author
Confidential or secret data	No	Author
Publication date	Date of publication in an archive or repository.	Archive/Repository/Publisher
Preservation policy	The data will be stored in a repository	Author
Permanent identifier (PID)	Unambiguous, permanent identifier of the material. The identifier may be DOI, URN or accession number.	Archive/Repository/Publisher