

## ReSurveyEurope

### Project Metadata Form

When contributing data to ReSurveyEurope, please fill in this form for each resurvey project and send it to Ilona Knollová ([ikuzel@sci.muni.cz](mailto:ikuzel@sci.muni.cz)) together with the database. A resurvey project is understood as repeated sampling of a certain type of vegetation in a certain study area using specific methods.

- PROJECT NAME (identical with the Resurvey Project name given in the database):

North Ostrobothia boreal forest and heathlands

- FULL PROJECT NAME (use if the full project name is longer than used in the database):

North Ostrobothia boreal forest and heathlands (field and ground layer)

- REFERENCE (publication or URL or DOI of the dataset if published online):

Maliniemi, T. & Virtanen, R. (2021). Anthropogenic disturbance modifies long-term responses of boreal mountain vegetation to contemporary climate warming. (in review)

(Original survey data from: Mikkonen-Keränen, S. (1982). Riisitunturin ja Iso-Syötteen kasvillisuudesta. [On vegetation of Riisitunturi and Iso-Syöte]. Master's Thesis, Department of Botany, University of Oulu, Finland.)

- DATA OWNER: person(s), institution(s):

Tuija Maliniemi, Univeristy of Oulu; Risto Virtanen, University of Oulu

- CONTACT E-MAIL:

tuija.maliniemi@oulu.fi

- METHODS (description of sampling design and methods):

Plots are located along elevational gradients and on a top of boreal mountains Iso-Syöte and Riisitunturi. Original gradients were drawn on a base map that was used for relocation. Each separate plot had information on vegetation type, elevation and aspect allowing relatively precise relocation. All vascular plant, bryophyte and lichen species were identified from 1 x 1 m plot and all were given percentage cover using the scale 0.25, 0.5, 1, 2, 3, 5, 7, 10, 15, 20, ... 80, 85, 90, 95, 100. Species not found from the 1 x 1 m plot but present within a 5 m radius from the plot centre were recorded and given percentage cover of 0.25. Some bryophyte and lichen (non-crustaceous) species were treated collectively. Original and resurveyed species data are taxonomically harmonized. Cladonia arbuscula includes Cladonia mitis and Cladonia sp. includes all cup-and horn-forming Cladonia species. More detailed information from the data owner. Tree and shrub species recorded on 1 x 1 m plots are saplings.

- ENVIRONMENTAL DATA (list of environmental data measured):

Elevation, aspect (gradient), soil humus pH (top 5 cm) for resurveyed plots

- MANIPULATED PLOTS (description of the treatment if the plots were manipulated, e.g. mowing twice a year, fertilizing by NPK once a year, post-fire succession)

Site Iso-Syöte: After the original survey half of the gradients and all plots on mountain top were subjected to land use disturbance due to ski resort building and continuous maintenance. The other half of the plots remained nearly undisturbed.

Bergen, 29.1.2021

Tuija Maliniemi

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North Ostrobothia boreal forest and heathlands

- FULL PROJECT NAME (use if the full project name is longer than used in the database):

North Ostrobothia boreal forest and heathlands (tree and shrub layer)

- REFERENCE (publication or URL or DOI of the dataset if published online):

Maliniemi, T. & Virtanen, R. (2021). Anthropogenic disturbance modifies long-term responses of boreal mountain vegetation to contemporary climate warming. (in review)

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- METHODS (description of sampling design and methods):

Plots are located along elevational gradients and on a top of boreal mountains Iso-Syöte and Riisitunturi. Original gradients were drawn on a base map that was used for relocation. Each separate plot had information on vegetation type, elevation and aspect allowing relatively precise relocation. All trees (more than 2 m) and shrubs (less than 2 m) were identified from 30 x 30 m plot surrounding the 1 x 1 m plots (for vascular plants, bryophytes and lichens) and all were given percentage cover using the scale 0.25, 0.5, 1, 2, 3, 5, 7, 10, 15, 20, ... 80, 85, 90, 95, 100. Original and resurveyed species data are taxonomically harmonized. The number of 1x1m and 30 x 30m is not equal as in some cases two plots were so close to each other that 30 x 30 m plot was not made.

- ENVIRONMENTAL DATA (list of environmental data measured):

Elevation, aspect (gradient)

- MANIPULATED PLOTS (description of the treatment if the plots were manipulated, e.g. mowing twice a year, fertilizing by NPK once a year, post-fire succession)

Site Iso-Syöte: After the original survey half of the gradients and all plots on mountain top were subjected to land use disturbance due to ski resort building and continuous maintenance. The other half of the plots remained nearly undisturbed.

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