

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) 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):

SquareFoot

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

Square Foot Project - Epochal changes of grassland diversity in Switzerland

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

Riedel, S., Widmer, S., Babbi, M., Buholzer, S., Grünig, A., Herzog, F., Richner, N., & Dengler, J. (2023). The Historic Square Foot Dataset – Outstanding small-scale richness in Swiss grasslands around the year 1900. *Journal of Vegetation Science*, 34(5), e13208. <https://doi.org/10.1111/jvs.13208>

Riedel, S., Widmer, S., Bringuier, O., & Dengler, J. (2024). Cover vs. Biomass sampling in grassland vegetation plots [Application/pdf]. *Tuexenia*, 44, 261–275. <https://doi.org/10.14471/2024.44.003>

Riedel, S., Widmer, S., Dengler, J., Herzog, F., Schneider, M. K., Wohlgemuth, T., & Kessler, M. (2025). Lasting legacies: Relicts of historical plant communities in Central European grasslands amid a century of biodiversity loss. *Biological Conservation*, 312, 111500. <https://doi.org/10.1016/j.biocon.2025.111500>

Widmer, S., Riedel, S., Babbi, M., Herzog, F., Wohlgemuth, T., Kessler, M., & Dengler, J. (2025). One Century of Change: Stronger Diversity Decline in Lowland Than in Mountain Grasslands in Central Europe. *Global Change Biology*, 31(10), e70529. <https://doi.org/10.1111/gcb.70529>

Widmer, S., Riedel, S., Babbi, M., Herzog, F., Wohlgemuth, T., Kessler, M., & Dengler, J. (2026). A century of change: Many losers vs. few winners among Swiss grassland plants. *Biological Conservation*, 315, 111679. <https://doi.org/10.1016/j.biocon.2025.111679>

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

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- METHODS (description of sampling design and methods):

Plot size: 0.09m²
Abundance proxy: 2021/2022 fractional (cover of species/sum of cover × 100).
estimated cover [%] / 1884-1931: fractional cover [%] (Originally (fractional) biomass, which was transformed to cover)
Historical plots: 1841-1931
Resurvey Plots: 2021-2022

For each historical plot, we defined a potential area where the historical plot was most likely located based on the description of the location in the old records. Historical vegetation-plot records with identical or very similar location information were assigned to the same potential area. In each potential area, we sampled 3–5 randomly distributed resurvey plots

- ENVIRONMENTAL DATA (list of environmental data measured):

Elevation [m a.s.l.]
Land use for historical 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)

None

Wädenswil, 13.03.2026

Stefan Widmer