

## 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):

Ecocline Arpette-Belalp

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

Alpine plots, Centre alpien de Phytogéographie

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

no

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

Jean-Paul Theurillat, Centre alpien de Phytogéographie

- CONTACT E-MAIL:

jean-paul.theurillat@flore-alpe.ch

- METHODS (description of sampling design and methods):

Purpose of the study: long-term monitoring of the vegetation dynamic along an elevation gradient (vascular plants).  
Type of vegetation: subalpine and alpine grasslands, dwarf heaths, coniferous scrub and forest, fens, subnival vegetation (Nardion strictae, Caricion curvulae, Festucion variaae, Rhododendro-Vaccinion, Juniperion nanae, Loiseleurio-Vaccinion, Piceion excelsae, Pinion mugo, Caricion davallianae, Androsacion alpinae).  
Research area: Two elevation transects on siliceous substrate in two separate areas in the Swiss Alps (Valais). Area 1: subalpine-alpine transect Val d'Arpette, 1840 and 2615 m asl (Valais, Switzerland, European Alps, eastern part of the Mont-Blanc massive). Area 2: subalpine-nival transect Belalp, 2086 and 3275 m asl (Valais, Switzerland, European Alps, southern part of the Aar massive).  
Type of plots: A total of 22 permanent plots (marked in the field), dimensions mainly 4x4 m, up to 10x 11 m; Arpette: 7 plots; Belalp: 15 plots.  
Cover scale: The cover of the species corresponds to the refined Braun-Blanquet scale proposed by Barkman & al. (1964), yet with a modification for the cover category 2. In 2014 onwards, a second modification has been introduced for the cover category 1. Parentheses () indicate an occurrence just outside of the limits of the plot.  
Barkman, J. J., H. Doing & S. Segal (1964), Kritische Bemerkungen und Vorschläge zur quantitativen Vegetationsanalyse, Acta Botanica Neerlandica 13: 394-419.

**Cover before 2014:**

- r = << 1%, 1 individual
- +p = < 1%, few individuals
- + = < 1% more than a few individuals
- +m = < 1% numerous individuals
- 1m = < 1% but with very numerous individuals
- 1 = 1-5% (1p = 1-5%, few individuals)
- 2m = 1-5% with very numerous individuals [= modification of the Barkmann scale]
- 2a = 5-12,5%
- 2b = 12,5-25%
- 3a = 25-37,5%
- 3b = 37,5-50%
- 4a = 50-62,5%
- 4b = 62,5-75%
- 5a = 75-87,5%
- 5b = 87,5-100%)

**Sociability**

The numbers 1 through 5 right after the dot or the + correspond to the five categories of sociability according to the Braun-Blanquet scale.

**Vitality**

In addition, the degree (°) indicates a reduced vitality.

**Examples:**

- +2p° = cover <1% (+), sociability = category 2, a few individuals (p) with a reduced vitality (°)
- +2m = cover <1% (+), sociability = category 2, numerous individuals (m)
- 1.2m = cover <1% but with very numerous individuals (1m), sociability = category 2
- 1.2 = cover 1-5% (1), sociability = category 2
- 2.2a = cover 5-12,5% (2a), sociability = category 2
- 3.3b = cover 37,5-50% (3a), sociability = category 3

**2014 onwards:**

For the cover, 1 always indicates a cover 1-5%, with p and m indicating the number of individuals (p = only a few, m = (very) numerous. Otherwise no change.

**Example:**

1.2 m = cover 1-5%, sociability = category 2, very numerous individuals (m).

- ENVIRONMENTAL DATA (list of environmental data measured):

elevation, aspect, slope

- 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)

no

[place, date] Champex-Lac, 27 June 2022

[owner's name] Jean-Paul Theurillat

