

Additional notes for 'The lessons we can learn from plants in the wild' by Pete and Jackie Murray, published in *The Alpine Gardener*, December 3013.

Our snowmelt study was based in two main areas of the Dolomites. The first was in and around the **Val di Fassa**, where we visited 11 sites, and the second around **Lake Misurina**, where we visited 6 sites. In each of the two areas we selected study sites which covered the range of altitude, aspect and topography found in that area.

These sites have been divided into three alpine habitats.

1. **Low valley** – usually wooded, some of which is cleared pastures.
2. **High valley** – rough grazing above the tree line.
3. **High mountain** – stabilised screes, rocky scree and bare rock outcrops.

Area 1: Val di Fassa

1. Val di Fassa (1,300-1,450m)

A valley running downwards from north-east to south-west, containing a large river. The valley is flat-bottomed and used for hay meadows and grazing with mature *Picea* woodland on the valley sides. It is bounded to the south-east by the Marmolada range and to the NW by the Sella Group and Rosengarten. Limestone.

2. Sotto Guda - Serrai de Sotto Guda (1,350-1,400m)

The Serrai is a deep gorge cut in limestone by the outfall of the Marmolada glacier when it extended much further south. It is a shady gorge running east to west at least 300m deep and very narrow with a fast running torrent at the bottom. Now passable by a tarmac road – pedestrian only access. Well described by Reginald Farrer in *The Dolomites*, page 97.

3. Karer See (Lago di Carezza) (1,500-1,650m)

A high lake below the Karer Pass, surrounded by mature *Picea* forest. To the south the forest stops at the foot of the screes of the Latemar range at about 1,600m. Limestone.

4. Val di Dona (1,900-2,050m) and **5. Val Duron** (1,600-1,950m)

The Val di Dona is a high hanging valley curving north-west to south-south-east into the Val di Fassa, above Camestrin. Devoid of trees it is high pasture with rough grazing.

Limestone. The Val Duron runs parallel and to the north of the Dona. Lower at its southern end than the Val di Dona it is tree-lined to 1,750m and then becomes high improved meadows and then rough grazing. Limestone.

6. Valle dei Monzoni – Val de la Sele (2,000-2,300m)

At Pozza is the Val de San Nicolo. It runs north-north-west to south-south-east. Above the Taramelli hut a branch is the Val de la Sele, a high hanging valley above the tree line. The valley has rough pasture, then boulder fields and scree in its upper reaches. Limestone, marble and granite are found in distinct bands, with sharp changes in the associated flora as a result. Well described by Reginald Farrer in *The Dolomites*, page 109.

7. Val di Grepa (1,900-2,100m)

This is a high hanging valley to the south of Fontanazzo, accessed by a steep path through the woods on the south side of the Val di Fassa. On entering the Val di Grepa above the tree line, the U-shaped valley has rough open pasture with a permanent river in the bottom. Limestone.

8. Sella pass (2,100-2,200m)

The study extends from the Rifugio Passa Sella leading towards the Col Rodella. Behind the Riugio is a large area formed from an ancient landslide from the Sassolungo (Langkofel). Above this is a large basin running parallel to the Sassolungo with a wide range of habitats in a relatively small area including boulder field, "moorland" with some boggy areas, and rough grazed areas, and it is bounded by steep screes to the west. The area below the Sassolungo is limestone but there are areas of basalt towards the col, with corresponding changes in the flora. After crossing this area to the track leading to the Col Rodella, a descent at the Rif Valentini towards the south-east gives access to an area of high meadows, again on basalt.

9. Col Rodella – Pian de Sas (2,300-2,480m)

From the Col Rodella cable car station a contouring path leads to the west in front of the Sas Piat, a huge wall of Dolomitic limestone. The path itself crosses some bands of basalt and an area called the Pian de Sas. This is an area of rough grazing for cattle and goats above the tree line and also contains many huge limestone rock outcrops and large areas of loose scree.

10. Bindel-weg (2,300-2,400m)

A high footpath accessed from the Pordoi Pass. The path ascends to the south past the Sas da Ciapel on limestone, and then crosses the Padon chain to contour on the South side of this friable ridge of basalt. The Bindel-weg offers splendid views and on either side of the path on the southern side is steep, rough, south-facing grazing, with rock outcrops of volcanic rocks. Well described by Reginald Farrer in *The Dolomites*, page 83.

11. Pordoi pass (2,240m)

An easy tarmac track leads north-north-west from the Passo Pordoi to a Napoleonic fort (now a war memorial). There is rough pasture either side of the track, with many streamlets and wetter areas. Above the fort, a path leads north passing rock outcrops and screes towards the foot of the rock pedestal Piz Boe.

Area 2: Lake Misurina

12. Lago di Braies (Pragser Wildsee) (1,500m)

A large deep lake north-east of Misurina surrounded on all sides by mountains over 2,500m. The lakeside has mature *Picea*, with some clearings, and above the tree line is scree and sheer rock. The lake is accessed by a footpath at its northerly end, which then circumnavigates the lake. Limestone.

13. Lago di Landro (Durensee) (1,425m)

The study area was at the north end of the lake. This is a natural shingle dam, well drained but frequently flooded when the lake level rises. The area is covered in alder and willow scrub. High mountains flank the lake on the north, west and east sides. Limestone.

14. Pte de Marogna (1,515m)

A deep valley with a wide shingle flood plain runs to the west from the bridge between Misurina and Schludersbach. The valley is an amphitheatre of huge mountains all draining down to the river, which passes under this bridge. Mixed scrub, including *Pinus mugo*, *Amelanchier*, *Salix* and *Berberis*. Limestone "shingle". Well described by Reginald Farrer in *The Dolomites*, page 25.

15. Misurina (1,750m)

This is a high mountain lake lying between Monte Cristallo and The Gruppo dei Cadini. There are footpaths and tracks either side of the lake, which is surrounded by mature *Picea* woodland with clearings of grazed meadows. Well described by Reginald Farrer in *The Dolomites*, page 20.

16. Popena (2,300m)

A rugged limestone ridge on the western side of Lake Misurina. A path zigzags up the side of the ridge through *Picea* woodland and then emerges from a band of *Pinus mugo* out onto a ridge running north to south. There is a mixture of habitats on the summit ridge, including meadow species in the clearings, and woodland ground flora on the ascent, with rock and scree plants on the ridge. Noted for *Potentilla nitida* later in the season and mentioned as a good site in Farrer's writings.

17. Tre Cime (Drei Zinnen) (2,310m)

This study site to the north of Misurina consists of two locations. The first is along the track contouring between the Rif Auronzo and Rif Lavaredo at the base of Tre Cime. This high area is above the tree line and is dominated by screes and rock outcrops, sloping steeply south into the Auronzo valley.

The second area is due south of Rif Auronzo and is accessed by a path along a high shingle-covered col, the Forcella Longeres. Limestone. Well described by Reginald Farrer in *The Dolomites*, pages 38-39.

Methods

Each site visited was the subject of a simple qualitative observation. A list was made of the plant species seen to be **flowering** on the day of the visit. No quantitative measurements were made but the relative amounts of flowering were noted.

The "sample" involved several km of walking in the area concerned, not just areas adjacent to the footpath.

Many of the sites were visited on more than one occasion, to offer a better idea of the relative time of flowering of the species at that site.

For each study site a spreadsheet, which you can also download [here](#), lists the species found in family order, with a column for each date a site visit was made. In each column “Y” indicates plants found **in flower** on that date.

These sites are colour coded as follows:

1,250-1,600m: Low valley habitats

1,600-2,000m: High valley habitats

2,000m+: High mountain habitats