Discovering alpine plants of Mount Hutt, Canterbury

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A visit to Mt Hutt provides an easy and accessible introduction to New Zealand's alpine flora.

Christchurch to Mount Hutt is a 1.5-hour drive on the main roads followed by a slower drive up the shingle road to the ski field. Here there are several places where you can get out to experience the alpine environment. We always go to the top first and work our way down.

Before going check with the Mt Hutt Ski Company to make sure the road is open and if a key is needed to get through the ski field gate. One of the most interesting places to stop is about 150 metres back from the gate (Rakaia Saddle) and there is a large car park about the same distance further back.

Visiting the ski field at the top is interesting but you will need to walk around quite a lot to find plants of interest. The open shingle screes are rather devoid of plants. Rocky outcrops provide opportunities to find species of *Haastia* and *Raoulia* (vegetable sheep). Damp and wet hollows are home to plants that enjoy that particular environment, such as *Caltha, Ranunculus* and others.

Rakaia Saddle is a good place to stop and spend time exploring both the settled scree areas and the moving scree. Settled scree provides home for many species. While the moving scree has interesting species, they are often well spaced and care needs to be taken. There is a visible track across the scree.

Other nearby tussock areas provide great opportunities to find more plants.

If vegetable sheep are on your botanical bucket list, then further down the road there is a short steep valley filled with vegetable sheep and the unusual *Ranunculus crithmifolius*.

Best times to visit are from beginning of December through to the end of March. It will take several trips at different times to fully appreciate the alpine flora, but well worth it, so take your time, watch the weather as it changes fast, drive slowly, and walk carefully.

Early flowering alpine plants

In November and December the following alpine species can be found in flower.

Euphrasia laingii (Fig. 1). The genus *Euphrasia* is semiparasitic growing on the roots or underground stems of other plants. *Euphrasia laingii* is quite common on Mt Hutt in the dryer areas and easily spotted. The flower stems with green leaves rise about 10 cm and are topped with wonderful white lobed flowers with a strong golden yellow centre.



Fig. 1 Euphrasia laingii.

Haastia recurva (Fig. 2). This grey-coloured plant can be difficult to spot but once observed is easily identified. Belonging to the daisy family it produces a somewhat scraggly appearance billowing over scree areas. Its small and unusual flower heads (called capitula) are partially hidden in a cluster of leaves at the tip of the stem.



Fig. 2 Haastia recurva var. recurva.

Kelleria dieffenbachii (alpine kelleria; Fig. 3). In November to December the first flowers appear, and it continues to flower for at least the next month. Easily identified by its many creeping rounded stems with pointed leaves closely hugging the stem, so the plant looks like a series of thin leafy stems. Creamy white flowers with yellow anthers appear near the tips of the stems.

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Fig. 3 Kelleria dieffenbachii.

Leptinella atrata subsp. atrata (black daisy; Fig. 4). Shooting up from buried rhizomes the finely divided, fern like, hairy leaves grow in tufts between the stones. Flower stems carry tight daisy like heads 1–1.5 cm across with many individual black flowers crammed together. The lovely yellow male anthers rise above the heads in beautiful contrast to the darker-coloured flower parts. This is often referred to overseas as a plant of great interest.



Fig. 4 Leptinella atrata subsp. atrata.

Leptinella pyrethrifolia var. pyrethrifolia (Fig. 5). Covering large areas it can form mats up to nearly 1 metre across. Its bright green foliage is very firm and tough, and its stems tend to travel over the ground sending down long roots. Even when not in flower it is easy to spot. When in flower it is covered with many light lemon coloured small button flowers making quite a spectacular show. It grows along stream and river banks, on scree slopes, on rocky ridges and over rock outcrops.



Fig. 5 Leptinella pyrethrifolia var. pyrethrifolia.

Lobelia roughii (scree lobelia; Fig. 6). Easily recognised whether in flower or not this is a specialised plant of alpine scree areas. The leaves are fleshy, dark green with orange pointed tips. The flower is white or pale cream with a light sweet scent. I have only seen this in the Rakaia Saddle area but it should be elsewhere on Mt Hutt.



Fig. 6 Lobelia roughii.

Ourisia caespitosa (creeping mountain fox glove; Fig. 7). When in full flower this is a lovely little plant to find on the mountain. Very low growing, its creeping rooting stems grow into broad flat patches of small green notched leaves. The flowers are held up to 10 cm high on thin strong stems bearing large, 2 cm wide lobed white flowers with a yellow throat. Depending upon location flowers can be found from October to February.



Fig. 7 Ourisia caespitosa.

Ranunculus crithmifolius (scree buttercup; Fig. 8). One of the best disguised alpine plants and easily overlooked when not in flower, so very rewarding if you manage to find it. On Mt Hutt it hides nicely in the loose rocky material as its grey leaves are almost the same colour as the stones. In a small valley near the road it grows along with a great number of vegetable sheep. The greyish brown dissected leaves lie flat to the ground and single, yellow flowers arise on short stems. After flowering, the interesting prickly looking seed head can be found hiding under the leaves.



Fig. 8 Ranunculus crithmifolius.

Ranunculus haastii (Haast's buttercup; Fig. 9). Often the most sought-after plant to see on Mt Hutt, it is quite spectacular when in full flower – however, it can still be hard to find as it is a small plant in a vast area. The large bright yellow perfectly formed single flowers are truly a sight to behold above bluish grey, deeply-cut foliage. Sometimes plants with up to three flowers appear where three individual shoots come up from the large strong underground stem. If you miss it in flower small but striking seed heads form held above the foliage. It grows on the moving scree slopes, requiring care to be taken in finding it.



Fig. 9 Ranunculus haastii.

Raoulia grandiflora (large-flowered mat daisy; Fig. 10). The largest flowering *Raoulia* species (hence the species name "grandiflora"). It can be found growing in a variety of places with rosettes of pointy leaves and large, white daisy flower heads about 2 cm across appearing on top of the foliage.



Fig. 10 Raoulia grandiflora.

Veronica pulvinaris (Fig. 11). A flat, moss-like, dense, and hairy cushion shrub with many branchlets near the tips enable masses of flowers to be produced. The white flowers, with purplish anthers, often touch each other so make a spectacular display. It is one of the earliest plants to flower as soon as the snow melts. Previously called *Pygmea pulvinaris* and later, *Chionohebe pulvinaris*.



Fig. 11 Veronica pulvinaris.

Later flowering alpine plants

The following are alpine plants to look for from January to March.

Celmisia angustifolia (strap-leaved daisy; Fig. 12). This is one of the flat, almost mat-growing celmisias which are quite plentiful in this area. Its light green, strap-like leaves are very tough with the upper surface sticky and underside with soft white hairs. Flower stems are about 15 cm high, thin and sticky, supporting a large flower head.



Fig. 12 Celmisia angustifolia.

Celmisia lyallii (false Spaniard; Fig. 13). Walking through the grassland areas *Celmisia lyallii*, which looks a bit like one of the wild Spaniards (*Aciphylla* spp.), can be found. Unfortunately, sometimes the ends of the leaves have been eaten by deer or hares. In flower the typical large daisy heads are highly visible and after flowering have a lovely round head of fluffy seeds.



Fig. 13 Celmisia lyallii.

Celmisia spectabilis subsp. *spectabilis* (pūharetāiko, common mountain daisy, cotton plant; Fig. 14). This is one of the most common and widespread species of *Celmisia* in New Zealand. It is easily recognised as it grows into a large group of rosettes with thick, shining yellow-green leaves grooved on top and heavily felted underneath with creamy-buff hairs on the underside. The strong flower stalks and solid buds are also thickly covered with hairs. In flower they make a great sight to behold in the landscape.



Fig. 14 Celmisia spectabilis subsp. spectabilis.

Gaultheria crassa (scarlet snowberry; Fig. 15). A nice lateflowering, leathery-leaved shrub growing to about 1 metre tall. Clusters of spikes of small white lily-of-the-valley like flowers grow from near the tip of each stem. With many plants growing together they make a great display.



Fig. 15 Gaultheria crassa.

Gentianella corymbifera (Fig. 16; previously *Gentiana corymbifera*). One of the most striking of our native gentians it has a rosette of leaves at ground level and produces a tall, up to 50 cm, purple-stained flower stem carrying a large head of white flowers. When many plants are in flower it makes a great sight in the tussock grasslands. It needs to set a lot of seed as unfortunately it dies after flowering.



Fig. 16 Gentianella corymbifera.

Helichrysum intermedium (Fig. 17). Also quite common is this lovely hardy small shrub with its densely packed leaves seeming to form a round stem. The green leaves are edged with white hairs giving it an interesting patterned look. Creamy white flower heads appear on the tips of branches, followed by typical daisy-like seeds. It is an attractive shrub for the dry garden and is offered for sale in good garden centres.



Fig. 17 Helichrysum intermedium.

Leucogenes grandiceps (South Island edelweiss; Fig. 18). On rock outcrops, with its roots penetrating down through cracks, this hardy silver-leaved plant sprawls around and over rocks producing upright stems holding a lovely dense cluster of flower heads about 2 cm across. The florets are yellow to yellowish-green in colour surrounded by densely packed silvery leaves covered in dense white hairs. It is quite common and easy to find in summer.



Fig. 18 Leucogenes grandiceps.

Styphelia nesophila (pātōtara; Fig. 19; syn. Cyathodes and Leucopogon fraseri). This species name has recently been reinstated from its placement in Leucopogon. You can't miss this plant in summer with its 1 cm long white tubular flowers, hairy on the inside and with brown anthers. In autumn its rounded bright orange fruit retains the remains of the flower. It only grows to about 15 cm tall with strong springy branches, and hard bronze edged, upright, green leaves with a long sharp point. This species is widespread and not confined to the alpine environment.



Fig. 19 Styphelia nesophila.

Veronica epacridea (Fig. 20; previously known as *Hebe* and *Leonohebe epacridea*). Also growing in the area, this shrub has upright stems with a regular leaf pattern consisting of small leaves closely spaced, and when topped with white flowers is an attractive find.



Fig. 20 Veronica epacridea.

Veronica haastii (Fig. 21; syn. Hebe and Leonohebe haastii). A true alpine subshrub growing in rocky areas and scree slopes, its wonderful leaf colour of red and green and its tightly packed leaf arrangement make it very attractive in this landscape. In full flower its masses of white flowers are a great sight.



Fig. 21 Veronica haastii.

This list of 21 plants is not the end of the story. There are many other interesting species on Mt Hutt to see. Always respect the conservation values of the alpine environment – take photos only and don't collect any of the plants which can be difficult to grow outside of their natural environment. Enjoy the trip for the day and take care.

Useful resources

A great place to share your photos, get help with identifications, and to contribute to citizen science is on the iNaturalist NZ – Mātaki Taiao platform (https://inaturalist.nz/). My field trips to Mt Hutt and other places are documented with photos at https:// artandscienceofhorticulture.weebly.com/mount-hutt-mid-canterbury-nz.html. The NZ Plant Conservation Network (www.nzpcn.org.nz/flora/species/?native=1) has profiles of native plants including alpine species.

Allan Mark's *Above the Treeline: A nature guide to alpine New Zealand* are useful guidebooks. His 2012 edition is a compact format and easy to take with you. His 2021 book is more up to date but a larger format and heavier.

The late Lawrie Metcalf's (2007) *A photographic guide to alpine plants of New Zealand* is also useful but an earlier work.