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Haastia sinclairii lives among stable alpine debris heaps in north-west Nelson and is a close relative of the vegetable sheep, *Haastia pulvinaris*.

Hebe endemic to north-west Nelson. Rock bluffs that spawned the boulders from above are festooned with layers of bluish *Dracophyllum pubescens*, another endemic, and dark clusters of *Helichrysum intermedium* shrubs. Should water seep down the face all sorts of plants will appear, including the densely flowered and glossy-leaved *Celmisia bellidioides*, or the long-stalked *Forstera mackayi*. On drier rocky sites masses of edelweiss with yellow and white furry flowers appear.

Tall tussocks, some 100 years or older, are the main cover of the high mountains although carpet grass – with shiny and tightly rolled leaves to reduce moisture loss – often creeps out onto the shallow soils of exposed ridges. Mid-ribbed snow tussock is the most abundant of the tall tussocks, while broad-leaved snow tussock, favoured by deer, prefers sunny fertile sites. Red tussock defines the wet sites more accurately than any hydrologic instrument. Amongst the tussocks are alpine herbs, many occurring only in north-west Nelson.

Larger plants include the north-west Nelson endemic *Astelia skottsbergii*, with its flax-like, yellow-green leaves, and *Astelia nervosa* whose clustered silver leaves guard bunches of bright orange fruit. No sight in the mountain grasslands rivals, however, the pale orange and green heads of female wild speargrasses in a flowering

year. In late summer they stand a full two metres tall with thousands of plump carrot-flavoured seeds bursting forth from between the wicked spines. Only the giant weevil dares penetrate the bases of these plants to suck at the sap.

The true scree plants of the eastern South Island are rare in north-west Nelson due to the paucity of active scree here. Only around the drier eastern margins of the Arthur and Wangapeka districts are screes developed enough to support scree species such as *Stellaria roughii* and *Lobelia roughii*. Coloured grey-green or purplish they huddle amongst the rocks, sheltering not from the searing sun but apparently from the searchings of alpine grasshoppers. Beneath the stones may be found the giant scree weta, the most spectacular of our native insects, while keas, falcons, gulls, pipits and the occasional rock wrens frequent the tops.

On flatter sites, where drainage is slowed by impermeable rock, the remains of innumerable plants accumulate to form peat. Small tarns often form on the bogs, their shimmering black faces reflecting the dark peat beneath the water. Grasshoppers scull the surface in search of safety. Between the tarns are mounds of comb sedge and compact cushions of *Donatia* and *Phyllachne* starred with small, white flowers. Between them are the larger blue flowers of the lily, *Herpolirion novae-*

zealandiae, and creeping plants of *Nertera* and *Coprosma* bearing orange berries, a favourite food of the kea. The kakapo, too, was fond of these. This unique ground parrot was thought to survive in the most remote parts of north-west Nelson until very recently.

THE FULL DIVERSITY of the landscapes and flora of the north-west Nelson mountains can only be understood with reference to the underlying rocks which run north-south in four wide contrasting belts. Their different chemistry and modes of weathering contribute to the diversity of habitat that makes the region so rich in plant species.

In the west, and again in the south-east above the Buller, are grey granite mountains that leach to an infertile soil. Many plants that grow there reflect the infertility by their small harsh leaves, while plants from more fertile regions are absent. Because granite does not shatter readily, huge boulders and outcrops survive for long periods of time, heaped like blocks in a giant's playground. Their cracks and fissures offer refuges for plants from browsing goats and deer.

Alongside and east of the main area of granite, and stretching from Golden Bay to the Buller, lies a 20-kilometre-wide