Rare Species Monitoring

*Diapensia lapponica* (*Diapensia*) is a long-lived Arctic plant first discovered in Britain in 1951 on a windswept hill, Fraoch-bheinn (790m altitude), near Glenfinnan. It is abundant there, scattered over about 2 ha around the summit. Since that discovery, various reports of new sites have been made but have usually been disproved. But in 2005 Angus MacIntyre, Highland Council’s ranger based at Mallaig, photographed this species (without realising what it was) near the summit of Sithean Mor, 10 miles west of Fraoch-bheinn. His photograph is of a mature flowering clump, eroding on one side. Unfortunately, not realising the significance of the find at the time, he did not take a grid reference. Since then various searches by Angus and by me (IS) (most thoroughly in 2015) have failed to find it.

Various attempts at mapping and monitoring this species on Fraoch-bheinn have been made over recent decades. Counting individual plants is difficult because, although it can form distinct ‘cushions’, these can become diffuse, merge and erode. In 2009 I tried to map the distribution by 10m grid squares using GPS, with the DAFOR scale. This gave a good overall view of distribution but is not ideal for monitoring change.

Photographic monitoring plots (2m x 1m) were set up in 1994 by SNH at five locations and repeated subsequently, most recently in 2001. In June 2015, with help from Iain MacGowan and Iain Macdonald, the plots were relocated and photographed again. Although the earlier photographs could be used to relocate the quadrats fairly accurately, comparison of photographs between years is not easy. Initial comparison by eye suggests that only relatively small changes have taken place.

By complete contrast, *Corynephorus canescens* (*Grey Hair-grass*) is a densely tufted perennial of dry, sandy places. It has been known from the dunes near Morar since it was first reported in 1895. I visited a large ‘blow-out’ north of Camusdarach in July to map what is now a flourishing population, with thousands of plants. It grows there with an abundance of *Teesdalia nudicaulis* (*Shepherd’s Cress*) (right) at one of that species’ few sites in Westerness. The grass was apparently introduced here in the 19th century, though why and by whom is unclear. It is generally thought to be native in East Anglia - on the coast and inland - and on Jersey, but its status elsewhere is uncertain. In Scotland it also occurs at coastal sites near Dunbar, Culbin and Lossiemouth but is not considered to be native there.
Ben Nevis North Face survey

In August the second year of the North Face project turned up more interesting finds on Ben Nevis, including new sites for *Saxifraga rivularis* (Highland Saxifrage), *Cerastium nigrescens* and *C. cerastoides* (Arctic and Starwort Mouse-ear), *Poa alpina* (Alpine Meadow-grass) and *Veronica alpina* (Alpine Speedwell).

This three-year project aims to survey the spectacular cliffs and gullies of the North Face of Ben Nevis using a team of professional climbers to help botanists reach the places they can’t usually get to! In 2015 the botanical team of Ian Strachan and Gordon Rothero were helped by Dan Watson and Jim McIntosh.

The star finds were large new populations of *Carex lachenalii* (Hare’s-foot Sedge) on Tower Ridge (right) and *Luzula arcuata* (Curved Woodrush) (below) on crags in Coire Leis. Abseiling from the plateau near the summit produced new British altitudinal records for various species including *S. rivularis, C. nigrescens, C. cerastoides, P. alpina* and *Oxyria digyna* (Mountain Sorrel), all at nearly 1300m. More details of the project can be found on the Nevis Partnership website.

Cerastium nigrescens  Luzula arcuata

**Helleborines at Nevis Range!**

*Epipactis helleborine* (Broad-leaved Helleborine) is a rare species in Westernness and elsewhere in the Highlands. In Westernness it is restricted to the south-west, with recent records from Drimnin, Loch Aline and Ardgour only. It was quite a surprise then this summer to find it just a few miles from Ben Nevis - scattered around the Nevis Range ski centre car park! It was growing on ‘islands’ between parking bays, typically in rather bare ground beneath various planted trees, mostly exotic conifers. At least 15 spikes were recorded. Where has it come from?

The car park has been surfaced with material which may well have originated from the adjacent limestone quarry. My favoured option is that it has colonised from the quarry area – it has not been recorded there, but survey has been limited because it is an active quarry. Other calcicoles occur commonly near the quarry such as *Mercurialis perennis* (Dog’s Mercury) and *Bromopsis ramosa* (Hairy-brome). It might also have come in with young trees planted round the car park, or could it have arrived on car tyres from Glasgow, where it is apparently flourishing?
Other surprises in semi-natural woodland nearby included *Carex pendula* (Pendulous Sedge), a very rare species in Westernness which is often grown in gardens so may well be introduced, and *Solanum dulcamara* (Bittersweet), also very rare and coastal in Westernness – could this be an introduction too?

**Atlas 2020 and other recording**

Ian Bonner spent a week recording for Atlas 2020 based at Kingairloch and Strontian (20-29 June), focusing on poorly recorded hectads in Morvern (NM85 & 95), also Ardnamurchan, Sunart and Moidart. With help from Richard Marriott, Liz MacDonald and IS, around 2,500 records were made – a great boost for Atlas progress. His star find was the Nationally Scarce *Ophioglossum azoricum* (Small Adder’s-tongue) north of Corran, a new VC record, confirmed by DNA analysis at RBGE.

Atlas recording by IS in 2015 covered various squares across the VC included the remote, rocky oakwood at Garbh Shlios, Glen Beasdale, Glen Loy, Creag Meagaidh, and the cliffs at the top of Loch Aline ashwood, where *Polystichum setiferum* (Soft Shield-fern) and *Melica uniflora* (Wood Melick) were plentiful. At Mucomir near the south end of Loch Laggan, abundant *Lythrum portula* (Water Purslane) at only its third site in Westernness was a surprise. Survey of a monad (1 km square) at Murlaggan near the west end of Loch Arkaig produced an impressive 196 species, including 230 spikes of *Platanthera bifolia* (Lesser Butterfly-orchid) and the attractive flower below, in a deep ravine, which appears to be a natural ‘double’ form of *Geum rivale* (Water Avens).

About 2,700 records were collected, in 15 hectads (10-km squares). Plenty of records were collected by other botanists too, including ~1000 records for Locheil Estate (Adam Fraser and Gary Servant). Many thanks to all contributors, please don’t forget to send in your records!

Other finds of note included *Carex aquatilis* (Water Sedge) on Sgurr Choinnich Mor, thought to be the first montane record in the vice-county for this locally scarce, usually lowland species; *Dryas octopetala* (Mountain Avens) on Stob Coire a’ Chearcaill (Jim McIntosh), the first Ardgour record; and over 50 rosettes of *Pyrola media* (Intermediate Wintergreen) at Ardechive (Loch Arkaig).

I (IS) have taken on a 1 km square for the UK National Plant Monitoring Scheme (NPMS) at Moy in Glen Spean (NN4282). Monitoring plots have been set up including wet heath in Creag Meagaidh NNR, blanket bog at the head of the Laggan reservoir, and grassland on the reservoir banks, where I was delighted to discover an abundance of *Viola lutea* (Mountain Pansy), a species which is surprisingly rare in the west and north Highlands. There are plenty of other squares in Westernness to do - visit the NPMS website [www.npms.org.uk](http://www.npms.org.uk) to find out.

Work has commenced on a Rare Plant Register, axiophyte list and checklist for VC97, using the BSBI’s amazing Distribution Database (DDb). To gain access to the DDb, which is a great resource, visit the [BSBI website](http://www.bsbi.org.uk).