Review of the Status of the Montane Flora of the Irish Uplands

PART 2: KILLARNEY NATIONAL PARK, MACGILLYCUDDY'S REEKS AND CARAGH RIVER CATCHMENT

Dwarf Willow (*Salix herbacea*) on Tomies

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Fig. 1 : Mountain Male-fern (*Dryopteris oreades*)

The Macgillycuddy's Reeks and associated mountain ranges

The Macgillycuddy's Reeks, located on the Iveragh Peninsula in Co. Kerry, are Ireland's highest mountain range, reaching an altitude of 1041m on Carrauntuohil. Apart from the Reeks themselves, the broader SAC also covers many other peaks and ridges, many over 600m in altitude, which occupy the remote interior of the Iveragh Peninsula and stretch to the east across the Killarney National Park and into the northern part of West Cork.

These mountains are mainly made up of Devonian Sandstone and were heavily glaciated, forming many corries and deep valleys, as well as some narrow ridges. This provides a range of habitats for interesting plants to grow in, including extensive cliffs, with damp shady niches, and exposed stony ridges at higher altitudes. However, the specialist montane vascular plant flora is not as rich as some other mountain areas of Ireland, including Mount Brandon, which is located only 30km to the northwest, on the Dingle Peninsula. This is likely due to geology, as only small bands of somewhat basic rock occur within the Reeks and associated ranges, with much of the rock present being more acidic in character. The majority of montane species of cliffs and screes found in Ireland show a preference for rocks with some basic influence, or at least require flushing with base-rich water, so are restricted in where they will grow.

The following specialist montane species are found within the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC:

English name	Latin name	Date of last record
Alpine Lady's-mantle	*Alchemilla alpina*	2019
Green Spleenwort	*Asplenium viride*	2021
Stiff Sedge	*Carex bigelowii*	2020
Alpine Hair-grass	*Deschampsia cespitosa* subsp. *alpina*	2019
Alpine Clubmoss	*Diphasiastrum alpinum*	2017
Hoary Whitlowgrass	*Draba incana*	2019
Mountain Male-fern	*Dryopteris oreades*	2019
Stag's-horn Clubmoss	*Lycopodium clavatum*	1901
Starry Saxifrage	*Micranthes stellaris*	2023
Mountain Sorrel	*Oxyria digyna*	2023
Holly-fern	*Polystichum lonchitis*	2020
Roseroot	*Rhodiola rosea*	2023
Dwarf Willow	*Salix herbacea*	2021
Alpine Saw-wort	*Saussurea alpina*	1986
Irish Saxifrage	*Saxifraga rosacea* subsp. *rosacea*	2023
Cowberry	*Vaccinium vitis-idaea*	2009

Records of these species were extracted from the BSBI Distributional Database and assigned to the SAC as outlined in Part 1 of this report, and the date of the last records from within the SAC was obtained. Records of these species from within the SAC were grouped by 10km square and assigned to specific sites based on expert judgment and locality details contained within the records. For species that were last recorded at a site prior to 1916, further details were checked in Scully's Flora of Kerry (Scully. R.W. (1916) Flora of County Kerry. Hodges, Figgis and Co., Dublin), as it is the source of most older plant records from the county.

Important areas for montane plants within the SAC

Coomloughra (V78)

This large corrie in the western Reeks is ringed by Ireland's three highest peaks and contains three lakes. The cliffs around the head of the corrie and damp slopes below the cliffs support a range of montane species including Irish Saxifrage (*Saxifraga rosacea* subsp. *rosacea*) and Mountain Sorrel (*Oxyria digyna*), with Alpine Hair-grass (*Deschampsia cespitosa* subsp. *alpina*) not recorded since 1996. As would be expected for the highest peaks in Ireland, the surrounding ridges support montane vegetation containing Stiff Sedge (*Carex bigelowii*) and Cowberry (Vaccinium vitis-idaea) which is at one of its few sites in Southwest Ireland.

English name	Latin name	Date of last record
Green Spleenwort	*Asplenium viride*	2024
Stiff Sedge	*Carex bigelowii*	2022
Alpine Hair-grass	*Deschampsia cespitosa* subsp. *alpina*	1996
Starry Saxifrage	*Micranthes stellaris*	2024
Mountain Sorrel	*Oxyria digyna*	2006
Roseroot	*Rhodiola rosea*	2019
Irish Saxifrage	*Saxifraga rosacea* subsp. *rosacea*	2024
Cowberry	*Vaccinium vitis-idaea*	2009

Coimín na gCaorach (V78/V88)

This north-facing corrie is located on the northern side of Beenkeeragh west of the Hag's Glen. It is less well-explored than many parts of the main Reeks range but the typical species of damp cliffs in the Reeks are found here, including Mountain Sorrel (*Oxyria digyna*) and Irish Saxifrage (*Saxifraga rosacea* subsp. *rosacea*). Dwarf Willow (*Salix herbacea*), which is uncommon on the Reeks, grows on a shoulder above this corrie.

English name	Latin name	Date of last record
Starry Saxifrage	*Micranthes stellaris*	2023
Mountain Sorrel	*Oxyria digyna*	2023
Roseroot	*Rhodiola rosea*	2023
Dwarf Willow	*Salix herbacea*	2008
Irish Saxifrage	*Saxifraga rosacea* subsp. *rosacea*	2023

The Hag's Glen (V88)

The Hag's Glen lies at the heart of the Reeks, with Carrauntuohil and Beenkeeragh to its west and the Eastern Reeks Ridge to the east. Extensive montane habitat occurs around this valley, with the multi-level corrie of Cumeenoughter lying below the summit of Carrauntuohil and three corries along the eastern side of the valley, as well as a number of smaller valleys. Much of the ridge around the top of the valley reach over 900m in altitude. Green Spleenwort (*Asplenium viride*), Mountain Sorrel (*Oxyria digyna*), Irish Saxifrage (*Saxifraga rosacea* subsp. *rosacea*) and a number of other species occur in a number of locations in the glen. Alpine Hair-grass (*Deschampsia cespitosa* subsp. *alpina*) is known only from Cliffs in Cumeenoughter. The most base-rich rocks occur in Coimín Grin in the Eastern Reeks, where Holly-fern (*Polystichum lonchitis*) and Hoary Whitlowgrass (*Draba incana*) grow. Dwarf Willow (*Salix herbacea*) grows on the upper slopes of

Carrauntuohil. An 1898 record for Alpine Saw-wort (*Saussurea alpina*) may be from here, but is likely an error, as it has not otherwise been recorded from the main part of the Reeks.

English name	Latin name	Date of last record
Green Spleenwort	*Asplenium viride*	2019
Stiff Sedge	*Carex bigelowii*	2020
Alpine Hair-grass	*Deschampsia cespitosa* subsp. *alpina*	2019
Hoary Whitlowgrass	*Draba incana*	2019
Starry Saxifrage	*Micranthes stellaris*	2019
Mountain Sorrel	*Oxyria digyna*	2019
Holly-fern	*Polystichum lonchitis*	2020
Roseroot	*Rhodiola rosea*	2020
Dwarf Willow	*Salix herbacea*	2020
Alpine Saw-wort	*Saussurea alpina*	1898
Irish Saxifrage	*Saxifraga rosacea* subsp. *rosacea*	2020

The Black Valley (V77/V78/V88)

The Black Valley is surrounded by high peaks and ridges, with the Eastern Reeks flanking it to the north. The richest ground botanically is the cliffs above Lough Googh, which are calcareous in nature and support populations of Holly-fern (*Polystichum lonchitis*) and Hoary Whitlowgrass (*Draba incana*). Cowberry (Vaccinium vitis-idaea) grows on a ridge at the head of the valley and Alpine Clubmoss (*Diphasiastrum alpinum*) was recorded on Curraghmore, below Caher, in 1874, but has not been seen there since.

English name	Latin name	Date of last record
Green Spleenwort	*Asplenium viride*	2007
Stiff Sedge	*Carex bigelowii*	1972
Alpine Clubmoss	*Diphasiastrum alpinum*	1874
Hoary Whitlowgrass	*Draba incana*	2007
Starry Saxifrage	*Micranthes stellaris*	1998
Mountain Sorrel	*Oxyria digyna*	2007
Holly-fern	*Polystichum lonchitis*	2014
Roseroot	*Rhodiola rosea*	2006
Irish Saxifrage	*Saxifraga rosacea* subsp. *rosacea*	2007
Cowberry	*Vaccinium vitis-idaea*	2007

Purple Range (V88)

Unlike the Reeks across the Gap of Dunloe, Purple and its attendant peaks are mostly rounded and heather-covered, with few cliffs across most of the range. Therefore, most botanical interest is to be found on the exposed ridge-tops. Alpine Clubmoss (*Diphasiastrum alpinum*) was relatively recently discovered on Shehy, while Dwarf Willow (*Salix herbacea*) occurs on Tomies.

English name	Latin name	Date of last record
Alpine Clubmoss	*Diphasiastrum alpinum*	2017
Dwarf Willow	*Salix herbacea*	2017

Mangerton (V98)

Mangerton forms a large whaleback plateau above the Killarney Valley and is incised on its northern side by the deep valley of the Horse's Glen, which contains three lakes. A rich montane flora occurs on the cliffs at the head of the Horse's Glen, with Starry Saxifrage (*Micranthes stellaris*), Roseroot (*Rhodiola rosea*) and Mountain Sorrel (*Oxyria digyna*) recorded there recently, although Alpine Saw-wort (*Saussurea alpina*), Holly-fern (*Polystichum lonchitis*) and other specialist species have not been recorded there recently despite searching. Stiff Sedge (*Carex bigelowii*) and Dwarf Willow (*Salix herbacea*) occur on the extensive summit ridges, although Alpine Clubmoss (*Diphasiastrum alpinum*) and Stag's-horn Clubmoss (*Lycopodium clavatum*) may now be extinct here, having not been seen in over 100 years. Mountain Male-fern (*Dryopteris oreades*) grows on Dromderalough, to the west of the main summit.

English name	Latin name	Date of last record
Green Spleenwort	*Asplenium viride*	1969
Stiff Sedge	*Carex bigelowii*	2009
Alpine Hair-grass	*Deschampsia cespitosa* subsp. *alpina*	1972
Alpine Clubmoss	*Diphasiastrum alpinum*	1901
Mountain Male-fern	*Dryopteris oreades*	2019
Stag's-horn Clubmoss	*Lycopodium clavatum*	1886
Starry Saxifrage	*Micranthes stellaris*	2019
Mountain Sorrel	*Oxyria digyna*	2019
Holly-fern	*Polystichum lonchitis*	1999
Roseroot	*Rhodiola rosea*	2019
Dwarf Willow	*Salix herbacea*	2008
Alpine Saw-wort	*Saussurea alpina*	1973

Fig. 2 Holly-fern (*Polystichum lonchitis*)

Boughil (V87)

This unassuming peak rises in an extensive broken rocky slope above Lough Barfinnihy. Alpine Lady's-mantle (*Alchemilla alpina*) grows in a few locations on this slope, in one of only three Irish sites for this species, while Dwarf Willow (*Salix herbacea*) grows at the top of the slope. Starry Saxifrage (*Micranthes stellaris*) has been recorded here in the past.

English name	Latin name	Date of last record
Alpine Lady's-mantle	*Alchemilla alpina*	2019
Starry Saxifrage	*Micranthes stellaris*	1964
Dwarf Willow	*Salix herbacea*	2019

Coomcallee (V56)

This rugged peak towards the end of the Iveragh Peninsula has no recent records of notable montane species, but Dwarf Willow (*Salix herbacea*) was recorded here in 1892 and Irish Saxifrage (*Saxifraga rosacea* subsp. *rosacea*) in 1947. There is no reason to presume that these species are not still present and a targeted search is likely to refind them.

English name	Latin name	Date of last record
Dwarf Willow	*Salix herbacea*	1892
Irish Saxifrage	*Saxifraga rosacea* subsp. *rosacea*	1947

Knocknadobar (V58)

Despite the presence of a reasonable amount of habitat on this coastal mountain, only Starry Saxifrage (*Micranthes stellaris*) has previously been recorded here, in 1985.

English name	Latin name	Date of last record
Starry Saxifrage	*Micranthes stellaris*	1985

Knocknagantee and Finnararagh (V67)

This area is in the heart of the Iveragh mountains, with numerous rocky peaks and cliff-lined slopes. Due to the remoteness and of these peaks, they have been little explored, especially in recent years. Despite this, a number of montane species have been recorded here, the most interesting of which is Holly-fern (*Polystichum lonchitis*), last seen in 1979 above Lough Reagh. Further explorations would likely uncover other population of notable montane species.

English name	Latin name	Date of last record
Starry Saxifrage	*Micranthes stellaris*	1998
Holly-fern	*Polystichum lonchitis*	1979
Roseroot	*Rhodiola rosea*	2019
Irish Saxifrage	*Saxifraga rosacea* subsp. *rosacea*	1948

Mullaghanttin (V77)

This striking peak has many rocky niches for interesting plants to grow in. A band of calcareous rock close to the summit is botanically rich, with Holly-fern (*Polystichum lonchitis*), Green Spleenwort (*Asplenium viride*) and Mountain Sorrel (*Oxyria digyna*) present. Dwarf Willow (*Salix herbacea*) grows close to the summit. Alpine Saw-wort (*Saussurea alpina*) was last recorded here in 1886 and may still be present on one of the many unexplored cliffs on this mountain. An intriguing record of Dark-leaved Willow (*Salix myrsinifolia*) exists from 1973, from the NW side of Mullaghanattin. This would be one of only two records for this mainly northern species in the southern part of Ireland, and the only Irish record for it in montane habitat, a situation it is known to occur in in Scotland. However, this requires refinding to verify the record.

English name	Latin name	Date of last record
Green Spleenwort	*Asplenium viride*	2021
Starry Saxifrage	*Micranthes stellaris*	2006
Mountain Sorrel	*Oxyria digyna*	2021
Holly-fern	*Polystichum lonchitis*	2013
Roseroot	*Rhodiola rosea*	2013
Dwarf Willow	*Salix herbacea*	2021
Alpine Saw-wort	*Saussurea alpina*	1886
Irish Saxifrage	*Saxifraga rosacea* subsp. *rosacea*	1986

Glenbeigh Horseshoe (V68)

This long, high ridge, with substantial cliffs falling to a series of large lakes, has much potentially botanically interesting ground. The best ground is located above Coomasaharn Lake, where damp, flushed cliffs support Green Spleenwort (*Asplenium viride*), Mountain Sorrel (*Oxyria digyna*) and other species. Alpine Saw-wort (*Saussurea alpina*) was last seen here in 1882 and has not been refound despite searching. A curious record of Hoary Whitlowgrass (*Draba incana*) was made from the low peak of Seefin at the northern end of the horseshoe above Glenbeigh in 1887, but has not been refound.

English name	Latin name	Date of last record
Green Spleenwort	*Asplenium viride*	2018
Hoary Whitlowgrass	*Draba incana*	1887
Starry Saxifrage	*Micranthes stellaris*	2018
Mountain Sorrel	*Oxyria digyna*	2018
Roseroot	*Rhodiola rosea*	2018
Alpine Saw-wort	*Saussurea alpina*	1892

The Paps (W18)

Starry Saxifrage (*Micranthes stellaris*) and Roseroot (*Rhodiola rosea*) were recorded from a gully on the north side of this distinctive mountain to the east of Killarney in 1996, and are likely still present.

English name	Latin name	Date of last record
Starry Saxifrage	*Micranthes stellaris*	1996
Roseroot	*Rhodiola rosea*	1996

Caherbarnagh (W28)

Corries on the north side of this mountain at the far eastern end of the SAC, in Co. Cork, have some base-rich rocks which support Green Spleenwort (*Asplenium viride*), which was last seen in 1996. A very old record for Stag's-horn Clubmoss (*Lycopodium clavatum*) exists from 1901, but is not precisely localised.

English name	Latin name	Date of last record
Green Spleenwort	*Asplenium viride*	1996
Stag's-horn Clubmoss	*Lycopodium clavatum*	1901

Fig. 3 Irish Saxifrage (*Saxifraga rosacea* subsp. *rosacea*)

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