

This article was downloaded by: [University of Calgary]
On: 06 February 2015, At: 01:39
Publisher: Taylor & Francis
Informa Ltd Registered in England and Wales Registered Number:
1072954 Registered office: Mortimer House, 37-41 Mortimer Street,
London W1T 3JH, UK



Transactions of the Botanical Society of Edinburgh

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/tped18>

The Alpine Flora And Rarer Plants Of The Glenshee District

William Young

Published online: 29 Nov 2010.

To cite this article: William Young (1908) The Alpine Flora And Rarer Plants Of The Glenshee District, Transactions of the Botanical Society of Edinburgh, 23:1-4, 83-92, DOI: [10.1080/03746600809469132](https://doi.org/10.1080/03746600809469132)

To link to this article: <http://dx.doi.org/10.1080/03746600809469132>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

MEETING OF THE SOCIETY,

Thursday, March 9, 1905.

Professor I. BAYLEY BALFOUR, President, in the Chair.

On the motion of the PRESIDENT, the Fellows of the Society recorded in the minutes their deep sense of the loss they have experienced through the death of Mr. PATRICK NEILL FRASER, who for a long period gave freely his services to the Society as its Treasurer, and throughout his life promoted its interest in many ways. They desire to express their sincere sympathy with Mrs. Neill Fraser and family in their bereavement. (A copy of the record in the minutes was sent to Mrs. Neill Fraser by the HONORARY ASSISTANT-SECRETARY.)

Mr. PERICLES JOANNIDES was duly elected a Resident Fellow of the Society.

Mr. WILLIAM YOUNG read a paper on the "Alpine Flora and Rarer Plants of Glenshee," and exhibited a series of dried specimens in illustration of the same.

THE ALPINE FLORA AND RARER PLANTS OF THE
GLENSHEE DISTRICT. By WILLIAM YOUNG.

Glenshee is situated in the extreme north-east corner of Perthshire—vice-county 89. It is best approached from Blairgowrie, from which it is distant about twenty miles. The hills on either side of the glen are of no great height—only from 2400 and 2600 feet above sea-level. The scenery is picturesque rather than grand. At the head of the glen is the Spittal, consisting of the inn, a few houses, and parish church. Here the glen branches; one arm—Glen Beag—striking due north, and through it runs the coach road to Braemar. The other branch is called Glen Lochaidh, which also gives off a branch parallel to Glen Beag, Glen Tatnich. There is no turnpike road through Glen Lochaidh, but a more or less well-marked footpath leads the pedestrian into Glen Tilt. There is also a footpath over the hills to

the west of Glenshee, leading to Pitlochry. The Spittal of Glenshee lies at an elevation of 1000 feet above sea-level; therefore the air is bracing and healthful—an ideal holiday resort, “far from the madding crowd.” It is quite among the mountains; yet the botanist, who does not care for climbing, will find plenty to interest him among the sub-alpine plants by the roadsides, by the margins of the streams, or among the marshes of the three glens which converge at the Spittal. The botanist who aspires may attain to the 3000 feet line without difficulty; or he who essays rock-climbing will find stiff bits in plenty in the Glens of Caenlochan or Corrie Ceanmor, and sufficient use for an alpenstock to warrant one being carried.

Generally speaking, the locality is dry. I suppose, because the rain clouds from the Atlantic have discharged themselves of a large portion of their moisture on the higher mountains of Argyllshire and west Perthshire before reaching this district. The nearer rocks are the metamorphic rocks of the Highlands, composed chiefly of graphitic mica-schist and black slate, and are quite dry; consequently on them the cryptogamic flora is meagre and deficient in species, and the phanerogamic restricted and stunted. Some marshy ground on Ben Gulabin, two deep ravines at the head of Glen Beag, branching off to east and west, are the only places worth visiting for mosses and hepatics. One has to get into Caenlochan in Forfarshire, or into Corrie Ceanmor in south Aberdeen, to botanise really good wet rocks. The marshes at the head of Caenlochan are very good for carices and hepatics. The rocks have flowering plants in abundance.

There are comparatively few trees in the glens above the Spittal. Fir, birch, oak, and hazel are the chief, and they are much scattered. Above 1200 feet there are no trees at all, except in the gorges. In Caenlochan, at 1600 feet, there is a dense fir wood. The trunks are quite bare of mosses and hepatics, even foliaceous lichens are conspicuous by their absence — another indication of the comparatively dry climate. But you must not think it rains but seldom. I have lived there for a week, and it rained every day. Sleet and hail are not uncommon events in the middle of July. Then it is bitterly cold, and botanising is not a pleasure.

My experience of Glenshee as a botanical centre was

gained in the course of four visits. First in 1889, which was my first introduction to Alpine botany after meetings of the East of Scotland Union of Naturalists' Societies held in Alford. Three of us walked from Ballater by Loch Muick, Dhù Loch, Carn Bannock, Glen Callater, Glen Clunie, and Glen Beag, arriving at the hotel in the small hours of the morning. The plants I gathered on this visit were named for me by Dr. John Macfarlane, a fellow townsman, once a prominent fellow of this Society, and now of Philadelphia, U.S.A. On that occasion we met Mr. William West of Bradford, and had several outings with him. Then in 1890, after the Montrose meetings of the Union, we were accompanied by Mr. Barclay and Mr. Meldrum of the Perthshire Naturalists' Society. Next in 1897, Mr. Ewing, F.L.S., President of the Glasgow Natural History Society and I explored the district for grasses and carices. In 1904 we were back again, accompanied by Mrs. Ewing, who is a splendid hill-climber and an enthusiastic botanist. This last visit was almost wholly occupied with searching for hepatics, assisting Mr. Macvicar in his records of their distribution in Scotland. As I had no idea, on any of these occasions, of making a record list of the flowering plants of the district, this paper cannot claim to be anything like complete in that respect. I have therefore made it more of the descriptive and less of the catalogue type, which I trust will not offend any of the traditions of this venerable Society.

I propose taking you, in imagination, first to Caenlochan (a tramp of about ten miles), the richest in Alpine plants in the district. Starting from the hotel at 8 A.M. we walk up Glen Beag, which is shut in at its upper end by the conical-shaped mass of the Cairnwell. A gradual rise of 1000 feet takes place in six miles, the summit of the mountain rising 1060 feet higher. The pass is very narrow; practically room only for the burn at the bottom of the "V," made by the hills on either side. By the roadside we notice abundance of our native edelweiss—*Gnaphalium supinum*. Near the summit of the road, and on the steepest part of it, there are two awkward acute angles in the road, forming the letter Z, called the Devil's Elbow—a most difficult place to negotiate with a coach and four. A little further on and we are standing on the watershed between Tay and Dee. Leaving

the road we begin to ascend Meal Odhar, lying to the east. There is a steady rise of 1000 feet to the top of the ridge connecting it with Glas Maol. On the slopes and knolls there is any quantity of *Loiseleuria procumbens*; and among the heather the cloudberry, *Rubus Chamaemorus*, is plentiful, as also *Melampyrum sylvaticum*, var. *montanum*, and *Hypericum pulchrum*. Cushions of *Silene acaulis* overhang the rocks and boulders. At the summit is the cairn in which the boundary lines of the three counties of Perth, Forfar, and Aberdeen meet. By the side of the fence, and on the Perthshire side of it, is a marsh in which these plants of *Carex rariflora* were gathered. This station, the only one in the county, was first discovered by Mr. Ewing. Crossing the ridge a well-marked sheep-track leads round the Corrie of Glas Maol, where the Alpine species of the grasses *Phleum* and *Alopecurus* used to be plentiful, but very few were visible last year. Near a spring *Cochlearia Grænländica* was gathered, and very fine clumps of the lovely blue *Veronica alpina* were seen. In July last there were two large patches of snow in the Corrie. We walked this way six times, and on each occasion saw numbers of ptarmigan. In one covey there were twenty-two full-grown birds—a most unusual sight, as one seldom meets with more than two or four in the mountains. Climbing up the eastern side of the Corrie the ground is seen to be covered with *Salix herbacea* and *Potentilla Sibbaldi*. In a few minutes the bogs at the head of the famous glen are reached. Here carices are plentiful. Among them some curious forms of *curta* and *echinata* occur. *Carex approximata* was found here by Mr. Ewing some years ago. He also found a curious form of *aquatilis*. I have also seen it *in situ*. When growing, the stem has the appearance of a corkscrew. He named it “*spiralis*,” but it has not yet been admitted by the authorities. From the edge of the rocks a view of the whole glen can be had, with its amphitheatre of precipices rising several hundred feet from the stream, which is the river Isla at its source. On the grassy places the herd of deer may generally be seen browsing, sometimes as many as 200 of them.

The rocks at the head of the Corrie are composed of a slaty-black schist, which weathers very rapidly, and becomes like clay, resembling very closely the blaze from coal-pits.

They are dripping-wet rocks, rising in shelves or narrow ledges, on which the rare Alpine plants grow. *Gentiana nivalis* is the most noteworthy. It is scarce, but *Dryas octopetala* and *Erigeron alpinum* are plentiful, likewise *Saxifraga oppositifolia*, *Veronica alpina*, *Potentilla rubens*, *Sedum roseum*, *Cerastium alpinum*, with the Alpine form of *trivialis* and *Luzula spicata*, together with several rare species of *Hieracium* and *Salix* in abundance. Of carices, *atrata*, *vaginata*, *capillaris*, *rigida*, and *pulla* are the most frequent. Between this clay or slaty-black schist and an adjoining mass of chlorite schist there is a narrow dyke of red granitic friable rock, which is much weathered, and forms a large scree, through which a small stream percolates. In this gravelly bed *Thlaspi alpestre* and *Veronica fruticans*, as well as the *Epilobia*, *alsinefolium*, and *anagallidifolium*, flourish. *Saxifraga nivalis* is found on the chlorite schist on the other side of the gully. In this glen, at an elevation of 3000 feet, in moist, sheltered places, some of our lowland plants find a congenial home. *Lychnis dioica*, *Geranium sylvaticum*, *Angelica sylvestris*, and *Geum rivale* are the most conspicuous. The campion has very bright pink petals, and the geranium very dark purple, both much more vivid than in the same low-country plants. The plants themselves are strong, even rank. Alpine plants, in general, have brightly coloured and relatively large flowers. Their period of blooming is short, consequently the vegetative part is small, so that the energy of the plant is put into the flower. They are adapted to their environment, for dwarf plants are less liable to injury from storms of wind. They are more easily protected by a covering of snow, and they can better utilise the heat of the earth. Alpine plants are mostly perennials, so that the ripening of seed is not of so much importance. One notable exception is *Gentiana nivalis*, which is an annual. This may account for its scarcity in some seasons. Few plants may have had time to ripen their seed the autumn before. I have seen it several times in Ben Lawers. In some seasons one could count them by dozens; in others it took some searching to find one or two plants, and they were poor things, with a single bloom, and only one inch high. A few species of plants perpetuate themselves by means of bulbils or by becoming viviparous. Of the former the best example is *Saxifraga*

cernua, found in this country only on the top of Ben Lawers ; of the latter method, *Polygonum viviparum* is a common example. *Poa alpina*, a rare grass, is generally viviparous.

Canness Glen is a branch of Caenlochan. Their united streams form the river Isla. *Lactuca alpina* has been recorded from Canness, but I have never visited it. A mile or two farther east is the knoll called Little Culrannoch, at the head of Glen Doll, where the rare *Lychnis alpina* is associated with the sea-side plants, *Armeria maritima* and *Cochlearia officinalis*.

Due north from this, and on the other side of the watershed, lies Corrie Ceanmor, whose loch drains into Loch Callater and thence into the Dee. It is impossible to do this Glen and Caenlochan in one day—to Corrie Ceanmor and back is about twenty-four miles. We are now in Aberdeenshire, and the rocks are granitic. They are very precipitous. Flowering plants are scarce. *Saussurea alpina* grows luxuriantly on some of the ledges. *Thalictrum alpinum* and *Rubus saxatilis* are plentiful, and there are a number of willows—*myrsinites*, *reticulata*, and *lapponum*, *lanata* perhaps being the most noteworthy. The Cyperaceæ are more common, as *Carex vaginata*, *atrata*, *panicea*, *capillaris*, and *rupestris*, the rarest of all. Many years ago Sadler found *Carex frigida*, and I suppose it has been found by no one else. Last year we spent an hour or two looking for it, without success. I have seen Sadler's specimen in the Botanic Garden herbarium here. I am not in a position to say whether it is a good species or not ; but I have gathered plants of *binervis*, which very closely resemble it in general appearance. *Juncus bi-* and *tri-glumis* frequently occur ; *castaneus* has also been recorded, but I have not come across it here. There is a large quantity of the parsley fern growing among the debris of one of the screes. The holly fern and the green spleenwort are plentiful everywhere ; and on many of the grassy ledges the moonwort may be seen, as well as *Athyrium alpestre*, on the slopes. *Saxifraga hypnoides*—a common plant on our rockeries—has its home high up on the rocks ; and festoons of *oppositifolia* are on every hand, though blooms are generally scarce in the month of July. The variety *Drummond-Hayi* of *Rhinanthus Crista-galli*, named by Dr. Buchanan White after his friend, is also found here.

Lochnagar can scarcely be considered in the Glenshee district, as it is about fifteen miles distant on the map. To walk there from Glenshee is a good twenty miles stretch. In July 1897, Mr. Ewing and I left the Spittal at eight o'clock one morning, and drove to the foot of the Cairnwell. We ascended Meal Odhar, and walked round the Corrie as I have described going to Caenlochan. On the east side we kept to the left hand, and ascended to the ridge, where we struck a stony footpath over the top of Carn-na-Glasba. Great screes run down into the Corrie, and extensive snow-drifts are usually lying there as late as July. Following the ridge passing close to the edge of Corrie Ceanmor we next ascended the Tolmount, then on to Fafernle, where we could see down Glen Callater, with the houses of Braemar in the distance. From Carn Bannock, the next hill, a magnificent view can be had to every point of the compass. Perhaps the grandest piece of scenery in the whole district is from this point eastwards. At our feet lies the tiny Dù Loch, its waters looking as black as ink, with a silver edging of white sand all round it. Frowning down upon it on both sides are precipitous crags, the one to the north being the White Mount—a spur of Lochnagar. Further on, Loch Muick lies shimmering in the summer sun. We soon reached the pony-track up the side of Lochnagar. We searched in vain for *Carex approximata* in the well-known station. Passing over the summit the great ravine was descended and the rocks in it were explored. Some fine plants of *Saxifraga rivularis* were gathered, as also *Gnaphalium norvegicum*. *Lactuca alpina* was also growing vigorously on the same slope. When we regained the summit we were enveloped in dense mist and the day was gone. It was about 6 p.m. We had these twenty miles of hill country to traverse. While daylight lasted, in spite of the mist, we made good progress, guided by compass and map. With the fall of darkness a gale sprang up, bringing heavy showers of rain and sleet, making us decidedly uncomfortable when exposed to its full force on the ridges. We clung closely to the deer-fence for guidance, thus making the journey much longer, as we had to follow its windings from hill-top to hill-top. It led through bogs occasionally, where the going was somewhat heavy. Scatheless we descended rocky places, of which we had

been afraid to attempt the ascent in broad daylight. About eleven o'clock there was a lull in the storm, and we were delighted to discern the straight line of the fence by the roadside at the foot of the Cairnwell. The remainder of our journey (six miles) was performed in a terrific thunderstorm. Rain came down in torrents, making the road ankle-deep in liquid mud which raced down the steeper parts with great force. The lightning flashed in the darkness with dazzling brilliancy, and the loud crashes of thunder overhead reverberated among the hills in an awe-inspiring manner. About half-past one we reached the hotel, finding the inmates and visitors in a great state of excitement over our delayed return. They were arranging a search party, when, fortunately for them, we walked in. Next day, when we showed them what we had gone for—these plants of *Gnaphalium norvegicum*—I have no doubt they considered it a great waste of energy. The landlord declared the plants grew in plenty by the dyke-side, a few yards from the hotel. He referred to the species *sylvaticum*; similar, but quite distinct from *norvegicum*.

For those who do not care for these long excursions, there is plenty of sub-alpine plants on the low ground to interest the botanist, and with less hard work. As I have already said, the rocks close by are very dry, so there is nothing to be found on them. Behind Ben Gulabin, *Betula nana* grows in marshy ground in considerable quantity; and on the rising ground near at hand, *Rubus Chamæmorus* in splendid and abundant fruit was noticed last July, also a few plants of *Pyrola secunda* and *Cornus suecica*. In 1885, Mr. Ewing gathered in the neighbourhood *Epipactis atro-rubens*, but the station has been lost. *Galium sylvestre*, recorded by Dr. Buchanan White in 1886, we also failed to meet with. By the road-side, both above and below the hotel, *Alchemilla alpina* is common, as also some of the grasses, as *Avena pratensis*, var. *alpina*, *Sieglingia decumbens*, and *Deschampsia cespitosa*, var. *alpina*.

Glen Lochaidh once contained a plant now extinct—*Thlaspi alpestre*. Dr. B. White records having seen it here in August 1886—only a few plants; and he adds, "As it appears to be very scarce, it is to be hoped that botanists will give it a chance of becoming more abundant." Whether botanists have despised that hope I know not. It is certain

the plant has vanished from Glen Lochaidh. As it grew on a scree, it may have been overwhelmed by a fall of rock after severe frost.

Cnicus heterophyllus, the melancholy thistle, with its tall, solitary purple heads, is a striking feature on the river banks. *Carex ovalis*, var. *bracteata*, occurs in large tufts mixed with stems of the normal form. *Saxifraga aizoides* and *Oxyria digyna* may be found by the margins of the streams among the gravel. In Glen Tatnich, *Habenaria alba* occurs in the meadows. In the marshes, *Veronica scutellata* is not uncommon. In a deep gorge, in one of the hill-sides, *Vicia sylvatica* was overhanging the torrent in magnificent clumps. Here, also, I gathered very fine specimens of *Saussurea alpina*.

By the road-side, near the hotel, *Meum athamanticum* attracts one by its powerful aroma. In marshy ground *Tofieldia palustris* and *Triglochin palustre* may be seen. The common rock-rose is very plentiful on the dry banks. *Trientalis Europæa*, *Trollius Europæa*, *Genista anglica*, *Potentilla sylvestris*, and *Antennaria dioica* are also worthy of mention. The usual species of *Vaccinium* and *Erica* are to be found all over the hill-sides. There is one Alpine conspicuous by its absence, *Linnaea borealis*. *Lycopodium annotinum* is also absent, though *clavatum* and *alpinum* are very frequent.

Many of these plants are found in all the localities I have mentioned; but, for obvious reasons, I have, with few exceptions, only recorded them here as from one. Some others, such as critical species of *Hieracium* and of *Salix*, I have not referred to, because many of them, although I have specimens in my herbarium, I have not gathered myself.

MR. YOUNG received the very cordial thanks of the meeting for his interesting communication.

DR. R. STEWART MACDOUGALL gave an account of the Woodpecker in its relation to Forestry, and exhibited specimens of wood which had suffered from the attack of this bird. An interesting discussion followed.

THE PRESIDENT contributed a note on *Erica Tetralix*, L., subsp. *Mackayi*, Hook., *flore pleno*, Crawford's Heath.

Mr. R. N. RUDMOSE BROWN exhibited two plants from Gough Island, *Lomaria boryana* and *Spartina arundinacea*, collected during the voyage of the Scottish Antarctic Expedition, 1902-4.

Mr. F. C. CRAWFORD showed *Carex binervis*, var. *Sadleri*;

Mr. H. F. TAGG, a large sclerotium of *Polyporus Mylittæ* (Blackfellows' Bread);

And Dr. BORTHWICK, a large collection of the Cones of the Abietineæ.

The cordial thanks of the meeting were tendered to the above gentlemen for their exhibitions.