

THE HISTORY OF BOTANICAL DISCOVERIES AROUND BEN LAWERS

Dan Watson

The background

By the time botanists were beginning the earliest explorations of the Highlands in the late eighteenth century, the floras of the mountainous areas of England and Wales, in particular the Lake District and Snowdonia, had been explored over a century earlier. Why was this? To the well-travelled Thomas Pennant, Scotland in the 1760s 'was as little known to its southern brethren as Kamschatka' (the Kamchatka Peninsula, in the Russian Far East). Highland Scotland was a wild place even to lowland Scots as well as to those south of the border.

It was arguably the Hanoverian Government's counter-insurgency response to the Jacobite rebellions of 1715 and particularly of 1745 which helped open up the Highlands to adventurous travellers. After the rising of 1715, the construction of roads progressed rapidly under the direction of Major General George Wade. In 1724 he was sent to Scotland by George I and recommended the building of roads, bridges and barracks. Between 1725 and 1737 Wade directed the construction of some 250 miles of road, plus 40 bridges. These routes often followed ancient drove roads, but made travel by foot or horse much more efficient. The building continued after the '45, with the road from Stirling to Fort William completed by 1752. By the late eighteenth century Patrick Stuart, the minister of Killin, could write: *The military road from Stirling passes through a great part of the parish and the improvements made lately on that line of road, with the great order in which it is now kept, serve to render the communication of this country with the south of Scotland, and the west and south-west Highlands, easy and agreeable* (Stuart, 1796).

More local roads, for example along the north and south shores of Loch Tay, were also improved in the latter half of the eighteenth century. In 1774 Kenmore Bridge was built over the River Tay at the eastern end of the loch. This work was carried out through statute labour, in effect work in kind, by the tenants of the Earl of Breadalbane.

The earliest map showing Scotland in any detail was that created by Timothy Pont in the 1580s-90s. It was of little use by the eighteenth century, and following the '45, the Hanoverian commanders in Scotland found themselves in need of an updated survey of the country. As a result, in 1747 Lieutenant Colonel David Watson proposed the compilation of a map of the Scottish Highlands. In response, King George II commissioned a survey which resulted in the Duke of Cumberland's Map. This was largely the work of General William Roy, the resulting maps being compiled between 1747 and 1755. They mapped Scotland with a detail never before seen, although there is

a noticeable difference in detail between the glens and the mountains; after all, their primary purpose, as with the military roads, was, once again, to facilitate swift and accurate troop movements. On the map of Ben Lawers, for instance, the hill named as such is actually Beinn Ghlas, recognisable from the distinct corrie facing the loch.

James Robertson

There was also a desire to assess the agricultural and mineralogical potential of Highland Scotland. In 1767 Professor John Hope was the King's Botanist for Scotland and Superintendent of the Royal Botanic Gardens of Edinburgh as well as Joint Professor of Botany and Materia Medica at Edinburgh University. He managed to obtain a grant from the Commissioners of the Annexed Estates to pay an annual grant of £25 (later £50) towards the employment of an itinerant botanist to make a botanical survey of the distant parts of Scotland.

It appears that Hope could spot the potential in fledgling botanists. James Robertson had been an assistant gardener at Edinburgh Botanic Gardens. Hope recognised him as a young man of promising genius though then illiterate. He trained him to carry out surveys, and Robertson then spent the summers from 1767 to 1771 making a general survey of Scotland, not just confined to the annexed estates. He would collect plants in different regions from April or May until the end of October then spend the winter arranging specimens and writing reports. His journal gives some idea of the challenges facing a traveller at that time. It seems he usually relied on the hospitality of common people during his travels, and wrote of the Highlander that they possessed a *quality in which they are outdone by no people on earth ... During five summers I have travelled among them, I was never once used unkindly; on the contrary I have oftener than once received a portion of the last morsel of bread, even when my entertainer was ignorant how he could obtain any new supply.*

The loneliness of his travels in remote areas is summed up in the following passage, where he talks of his journey through Strath Oykel: *I wandered for three days all alone till night fell, scarcely knowing whither I went. The night, which I was obliged to pass in one of the miserable huts, ill compensated the fatigue of my lonely straying thro' the day... he who accompanied me could not speak English, so that I was obliged, without an interpreter, to live among people whose language I did not understand.*

He visited Killin in August 1771 and climbed Creag na Caillich with John Stuart, son of the minister. He described it as: *A high mountain which contains many rare plants. In examining this hill, I was much assisted by my companion, who was an ingenious gentleman, and an accurate botanist.* The implication is that Stuart already knew the hill well, and it seems he had been botanising the local hills for a few years before Robertson visited.

1771 was Robertson's last year botanising in the Highlands. He left the job in debt and went on to join the British Navy. After what must have been a

successful career, he settled near Cupar in Fife in 1789, building a mansion house costing £14,000. He died in 1796.

At the time of Robertson's visit to Killin, it appears that Breadalbane was one of the more 'civilised' areas of the Highlands, which is perhaps not surprising owing to its relatively close proximity to lowland Scotland. Robertson remarked on this, speaking favourably about Killin as being *a small village pleasantly situated at the head of Loch Tay. This village is adorned with wood and cornfields which are more highly cultivated than any that I have yet seen in the North. The common people have decent houses and furniture.*

Social change was proceeding apace. Going back to the First Statistical Account, Patrick Stuart stated that *towards the beginning of the present century, the people of the country were rather averse to industry...: the man who could best handle his sword and his gun was deemed the prettiest fellow; and the attentive industrious man was a character held in a degree of contempt... The people of Breadalbane are now sober, regular and industrious.*

Gaelic was still the first language of the majority of inhabitants of Highland Scotland, but many could also converse in English. Around Breadalbane, it had become common for families to send their sons to the low country for several years to work on farms there, both to pick up new agricultural skills and also to learn English. Of course, not all of them returned.

John Stuart

Compared to the start of the century, by the time the first lowland botanists were exploring Ben Lawers, there was a road network, the country was mapped, conversation with locals was possible to non-gaelic speakers without an interpreter and travel was safer than it had ever been. With all that in mind, it is somewhat gratifying to know that the earliest botanist of the Breadalbanes was a local resident. This was John Stuart (1743-1821), already mentioned as having accompanied James Robertson on Creag na Caillich. Stuart had studied for the ministry in Edinburgh, and it seems likely that he had attended the botany classes of Professor Hope. There is no direct evidence for this, but it seems likely, especially as the first record for a plant on Ben Lawers came from Hope's note-book catalogue of his now lost herbarium. From the note it appears that Stuart sent him a specimen of Alpine saxifrage *Saxifraga nivalis* (Plate 1) during or just before 1768. Unfortunately Stuart never published any records himself, so his contribution to the knowledge of Scotland's montane flora has been pieced together from surviving correspondence with and herbarium notes of contemporary botanists.

In 1772 Stuart accompanied Thomas Pennant (1726-98) on his tour of Scotland. Pennant, a wealthy Welsh landowner, had first toured Scotland in 1769. He was an antiquary, geologist and zoologist rather than a botanist, but his companion was the Reverend John Lightfoot (1735-88), an Anglican curate

and a keen botanist and conchologist. Professor Hope introduced Stuart to Lightfoot, and he travelled with them, ostensibly as a translator. In *A Tour of Scotland* (1774), Pennant acknowledged Stuart for a variety of hints, relating to customs of the natives of the Highlands, which by reason of my ignorance of the Erse or Gaelic language, must have escaped my notice. However, Lightfoot used the trip to explore the flora of Scotland, and in the resultant *Flora Scotica* (1778), he wrote to the Rev Mr Stuart, late of Killin in Breadalbane, now of Luss ... I am indebted for every assistance ... The young gentleman, a most accurate observer of Nature's works ... I had the good fortune to share as a fellow traveller.

Along with Moses Griffiths, Pennant's illustrator, the party travelled widely through Highland Scotland. It seems that Pennant, being of a higher social class than Robertson had been, was able to arrange accommodation with the local gentry. When staying at Arnisdale in Invernesshire, their hostess plied them with several glasses of rum cordialized with blaeberreries, with the effect (as Pennant observed) that Lightfoot and Stuart sallied forth to botanise Beinn Sgritheall in high spirits. *Flora Scotica* also revealed Stuart as having made the first recorded probable ascent of Bidean nam Bian in Glencoe during the course of his botanising. If so, this is the most impressive ascent of any Scottish mountain until that of An Teallach some half a century later.

During the course of their travels for the tour, it seems that little time was spent in the Breadalbanes. Studying their itinerary it appears that, once again, Creag na Caillich was the only hill visited. This was on 16 August 1772. Pennant apparently chose to climb the slopes of Sron a Clachain to get a view down Loch Tay, while from the records in *Flora Scotica* it seems that Lightfoot and Stuart made a swift ascent of Creag na Caillich, this being the closest hill to Killin with a good flora, as had been noted by Robertson the previous year. This was a Sunday, so the lure of a good day's botanising must have been strong to draw two men of the cloth away from attending church. Strangely, Ben Lawers is never mentioned by name in *Flora Scotica*, although many other hills in the Breadalbanes are. Apart from Creag na Caillich, these include Meall nan Tarmachan, Meall Ghaordie and Ben Heasgarnich. Stuart must have supplied records for these locations to Lightfoot in time for the publication of *Flora Scotica*.

It seems that Stuart had been at liberty to spend the summer of 1772 travelling, as although he had been licensed by the presbytery of Edinburgh in 1771, he had yet to be given charge of a parish. In 1773 he was appointed as Assistant Minister in the parish of Arrochar in Dunbartonshire, transferring to Weem in Perthshire in 1776. In 1777 he moved back to Dunbartonshire to the parish of Luss where he remained for the rest of his life. Stuart continued to botanise the Scottish mountains into his sixties. He also established a fine collection of arctic-alpines in the manse garden, and his home became a regular stopping off point for scientifically minded travellers on the military road on the west side of Loch Lomond. Apparently the local inn-keeper threatened to hang his sign over the manse door in protest against the amount of trade he

was losing. Another achievement of Stuart's was the first Gaelic version of the Old Testament. He also revised his father's New Testament of 1767. A successor of Stuart's at Luss, the Rev. Duncan Campbell, collected memories from older members of the congregation when he began at the parish in 1852, thirty one years after the death of Stuart. They spoke affectionately of their previous minister as the absent-minded old scholar. In 1977 members of the British Lichen Society visited Stuart's grave in Luss in recognition of his contribution to the knowledge of Scotland's lichen flora. He is credited with having discovered the beautiful *Solorina crocea* for the first time on Ben Lawers.

James Dickson

Following on from Stuart, it was the turn of the nursery men to explore Ben Lawers, particularly John Dickson (c.1738-1822) and George Don (1764-1814). Dickson was the son of a gardener, born in Traquair in Peeblesshire. By 1772 he had set up as a nurseryman and seedsman with his own shop in Covent Garden. In 1788 he became a founding member of the Linnean Society. In 1804 he attended the foundation of what became the Royal Horticultural Society, later becoming the society's vice-president.

Dickson visited Ben Lawers twice, the first time in 1789 with his 18 year old brother-in-law Mungo Park who later gained fame as an African explorer, and the second time in 1792. He listed the plants which he discovered on these two



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trips in the 1794 volume of *Transactions of the Linnean Society*, along with records from Ben Nevis and elsewhere. Undoubtedly this did much to bring Ben Lawers to the attention of contemporary botanists.

A major incentive for Dickson's visits to the Highlands was, of course, to collect specimens of arctic-alpines for his nursery, leading Raven and Walters (1956) to comment that *not only the owners of private herbaria have impoverished Ben Lawers; the owners of private rock-gardens are a greater threat still. They can unfortunately claim for their predatory practices the spurious respectability of a long lineage.* We can but wonder at the damage such collectors inflicted. In 1841 a professional botanical collector from Dundee, William Gardiner, wrote a letter to his wife from Lawers Inn, telling her that *I have already collected between seven and eight thousand specimens and hope to double that number if all goes well.*

Dickson was also a keen bryologist, and in 1785 published the first of four parts of *Fascicularis plantarum cryptogamaricum Britanniae* (1785-1801), many of the bryophytes described being new to Britain. He collected bryophytes from Ben Lawers, presumably the first person to do so. He died a wealthy man, leaving £3,500 to his wife, £2,000 to each of two daughters and his half of the business in Covent Garden to his son.

George Don

In the preface to Don's *Herbarium Britannicum* he wrote of himself: *Since the editor first began his botanical excursions into the Highlands of Scotland, in the year 1779, he is confident (and he hopes he may mention it without the imputation of vanity) that he has traversed more of the Caledonian Alps than any other botanist has ever done.* This was no idle boast. He made many botanical discoveries in the Cairngorms, Clova, Ben Nevis, Ben Lomond, Ben Vorlich, Schiehallion and Lochnagar, as well as Ben Lawers and more widely in the Breadalbanes.

Don grew up in Forfar but went to Dunblane to learn the trade of horology. He developed an interest in botany, and gave up watch-making in 1779 to take a position as a gardener at Dupplin Castle near Perth. From here he began to explore the Ochil hills and the Grampian mountains on his days off, a passion which was to continue for the rest of his life. He moved south of the border in 1780, gardening at several large houses before returning to Scotland in 1788. By 1797 he had leased two acres of land at Doo Hillock near Forfar and established a nursery, finding a home for the rarities he collected on his still frequent excursions to the Scottish hills. A brief stint as head gardener at the Royal Botanic Garden followed from 1802-1806, whilst Don left his elderly father in charge of the nursery. It seems the restrictions of such employment did not suit Don, as he left the job to return to his nursery and the freedom that gave.

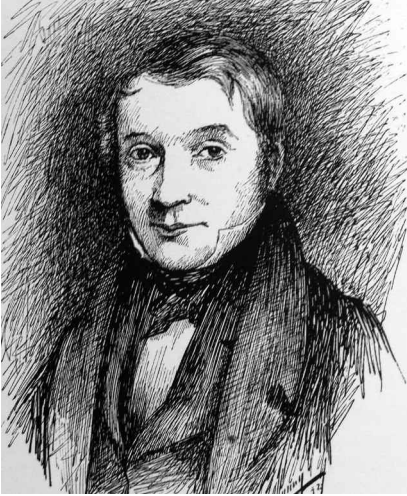
He must have looked peculiar stomping the hills wrapped in a plaid with a vasculum slung over one shoulder and carrying a strange tool in the other hand. This was an ash rod, fifteen feet in length, with a notched iron spaddle, which served as a hook, to pull down plants from inaccessible crevices in rocks.

Don was a hardy individual: *He occasionally absented himself for a week a time, his plaid, and a bag of oatmeal or some bread and cheese, sufficing him for shelter and sustenance; and he lost count of the days in these toilsome expeditions ... For these long rambles he was especially fitted, being stalwart and blessed with great powers of endurance, often journeying thirty or more miles without breaking fast.* (Druce, 1904). Apparently he would often take employees from his nursery along on these expeditions. Most were far less up to the task than was Don, and it seems some left his employ shortly thereafter.

A Dr. Patrick Neill visited the nursery at Doo Hillock and wrote: *On reaching Forfar towards evening I soon found Don's garden and on entering enquired of a very rough looking person with a spade in his hand whom I took for a workman, whether Mr.*

Don was at home. The answer was Why sir, I am all that you will get for him (Luscombe, 2007).

Don visited Ben Lawers numerous times, possibly as early as 1784 but certainly from 1793 until 1809, adding several plants to the Ben Lawers list. In 1793 he was accompanied by his friend John Mackay (1772-1802), the brother of James Townsend Mackay, a distinguished botanist whose name will always



be associated with the flora of Ireland. Don and Mackay spent several days in exploring the great mountain of Ben Lawers in Breadalbane. Here Mr Dickson of London had already found the acrostichum ilvense, [*Woodsia alpina*, Plate 2] lichen croceus [*Solorina crocea*] and fuscoluteus [*Brigantiaea fuscolutea*] & c, all of which occurred to our travellers. They likewise picked up *Carex rigida* [*C. bigelowii*] ... They found, also, several plants of the very rare gentian nivalis [*Gentiana nivalis*, Plate 3]; and the arenaria saxatilis [*Minuartia rubella*] and cerastium alpinum were for the first time added to the British Flora by this expedition. On this occasion, also, Mr. Don discovered a new species of grass, which has not yet been scientifically

described: it seems to rank under the genus *elymus*, and he has given it the trivial name of *alpinus*. Of this rarity he could find only two plants. This grass later came to be known as Don's twitch *Agropyron donianum*, and was one of the species which visiting botanists would seek out. However, it has since been 'demoted' to a variety of bearded couch *Elymus caninus* var. *doniana*, and accordingly it seems far fewer botanists are now interested in it.

Mackay became the Principal Gardener of the Royal Botanic Garden of Edinburgh in 1800 but his health deteriorated and he died in 1802 at the age of 30, cutting short what could have been a botanical career as illustrious as that of his brother. Apparently Don often visited Mackay on his death-bed, bringing bryophytes which he would spread out in reach of his ailing friend in an attempt to revive his spirits. Following Mackay's death Don began his short-lived occupancy of the Principal Gardener post.

In contrast to Dickson, Don died in poverty, apparently neglecting his business in favour of a passion for finding plants. He died in January 1814, having returned from an expedition the previous autumn suffering from a heavy cold. Through necessity he continued working, but his health deteriorated and he died aged 49 from a "putrid sore throat". Don's friends raised money to help his widow and family, and five surviving sons went on

to work as gardeners, two of them graduating to distinguished botanical careers.

Controversy has since surrounded some of Don's records, with the list of his 'reputed discoveries' at the end of Hooker's *Students' Flora* (1870) doing much to tarnish his reputation. Some of his disputed finds were later rediscovered. For example, scorched Alpine-sedge *Carex atrofusca* was not seen again on Ben Lawers for eighty years. Others of his most controversial 'reputed discoveries' have since been fully substantiated, including purple colt's-foot *Homogyne alpina*, which was rediscovered in Glen Clova in 1951. Others do seem unlikely, such as *Ranunculus alpestris* and *Potentilla tridentata*, but there may be other explanations than that Don was being deliberately duplicitous. Possibly he was a better botanist than he was a recorder, and that after returning to his nursery with a vasculum full of plants, these may have been planted out and mixed up with plants from other parts of the world, leading to confusion when the records were published. Maybe there is even the slim possibility that some more of these plants are waiting to be rediscovered. In 1912 George Druce said of Don that *his discoveries of new plants are probably larger and more important than those made by any other British botanist*.

After the pioneers

By the turn of the century most of the plants for which Ben Lawers is renowned today had been discovered. The coming of the railway during the second half of the nineteenth century facilitated far easier access than had ever been available. Despite increasing numbers of botanists visiting the hills few new finds were made, although one of Ben Lawers' rarest plants, snow pearlwort *Sagina nivalis* remained undiscovered until 1863 when it was found by John Hutton Balfour. One of the most exciting late discoveries was that of bristle sedge *Carex microglochis* (Plate 4), found in July 1923 by Lady Davy and Gertrude Bacon during a visit by the Botanical Society and Exchange Club of the British Isles, the forerunner of the BSBI. *On this excursion two members of the party, Lady Davy and Miss Gertrude Bacon, became separated from the others and each found in a different boggy place a sedge which resembled C. pauciflora, but which Lady Davy felt was not that species. On returning home she compared her specimens with the figures in Coste's Flore de France and in Blytt's Norges Flora, and concluded that the sedge was not pauciflora but microglochis* (G.C. Druce, 1924). Although this sedge can be quite extensive in some of the flushes where it occurs, it has still not been found anywhere else in Britain.

By the late twentieth century Ben Lawers and its surrounding hills had been so well botanised that it seems remarkable that some species still awaited discovery. One of these was Arctic mouse-ear *Cerastium nigrescens*, which can be tricky to separate from the slightly more common Alpine mouse-ear *C. alpinum*. This was discovered by Sandy Payne in 1981 during a detailed survey of Ben Lawers' rarer plants. The most recent native plant to have been added to the list is tall bog-sedge *Carex magellanica*, found in 1984 by David

Mardon near Lochan na Lairige. Since then, the only additions have been the non-native plants prickly heath *Gaultheria mucronata* and slender rush *Juncus tenuis*. Thankfully, neither of these poses a threat to the magnificent flora of Ben Lawers, which has been in the care of the National Trust for Scotland since 1950.

Appendix 1

First records of the nationally rare and nationally scarce plants of Ben Lawers

Alpine saxifrage *Saxifraga nivalis* John Stuart, c.1768
Prof. Hope's herbarium catalogue showed that Stuart had collected this from the 'Hill of Lars'.

The following nine species are mentioned in *Flora Scotica*. As mentioned above, it seems probable that only Creag na Caillich was visited by both Stuart and Lightfoot during the course of the tour, therefore some of the records may have been shared between the two. Others were attributed solely to Stuart, as mentioned below. The date is given as c.1772 as this was the date of the tour. However, some records may have been sent from Stuart to Lightfoot after this date, and some may have been recorded previously, so the only certainty is that they were made before the publication of *Flora Scotica* in 1778:

Northern rock-cress *Arabis petraea* John Stuart, c.1772
Upon moist rocks and by the sides of rivulets, near the summits of the highland mountains in many places, as upon Creag-Cailleach, in Breadalbane.

Black Alpine-sedge *Carex atrata* John Stuart, c.1772
A number of locations are mentioned for this in *Flora Scotica* including Meall Ghaordie and Meall nan Tarmachan. The records are unacknowledged, but given the locations they are almost certainly from Stuart.

Hair sedge *Carex capillaris* John Stuart, c.1772
Upon the highland mountains, as on Benteskerny, Craigneulicht, and Malghyrdy, in Breadlabane. Mr Stuart.

Mountain avens *Dryas octopetala* John Stuart, c.1772
Upon the highland mountains in many places ... in Breadalbane.

Alpine meadow-grass *Poa alpina* John Stuart, c.1772
On the sides of Craig-challeach, above Finlarig, in Breadalbane. Mr Stuart.

Mountain willow *Salix arbuscula* John Stuart, c.1772
Upon the Highland mountains, as upon ... Mal-ghyrdy, in Breadalbane and on Craig-vore, a high projecting rock on the west side of Loch-Laraig-an-lochain, a small lake between Loch-Tay and Glen-Lyon, Mr Stuart. In Flora Scotica these records are referred to S. myrsinites. However, doubt has been cast upon Stuarts' identification of this species by Meikle (1984), where the author suggests that all Stuart's records for S. myrsinites should be referred to S. arbuscula. Stuart did certainly find S. myrsinites on Schiehallion in Sept 1776 and according to Mitchell (1987) he had both plants established in his garden at Luss by the turn of the century.

Net-leaved willow *Salix reticulata* John Stuart, c.1772
It grows upon many of the Highland mountains, in a talky soil, as upon Creg-chailleach, Malghyrdy, and Mal-grea mountains, in Breadalbane. Again, given the locations, it can be assumed that the records were made by Stuart.

- Downy willow** *Salix lapponum* John Stuart, c.1772
On the Highland mountains, as on Creg-chailleach and Mal-ghyrdy, in Breadalbane, &c. Mr. Stuart.
- Sibbaldia** *Sibbaldia procumbens* John Stuart, c.1772
Upon many of the highland mountains, as on Ben-mor in Breadalbane &c.
- Alpine fleabane** *Erigeron borealis* John Stuart, 1787
This was found in the clefts of a high rock on the east side of Ben-Lawers by Mr Stuart, who communicated fair specimens 1787 (annotation in Lightfoot's personal copy of Flora Scotica). This predates Dickson's Ben Lawers record by 2 years.
- Rock speedwell** *Veronica fruticans* James Dickson and Mungo Park, 1789
- Rock Whitlowgrass** *Draba norvegica* James Dickson and Mungo Park, 1789
- Drooping saxifrage** *Saxifraga cernua* Dr. Robert Townson, 1790
- Highland saxifrage** *Saxifraga rivularis* Dr. Robert Townson, 1790
- Alpine gentian** *Gentiana nivalis* James Dickson, 1792
Dickson described this as concealing its eye of blue in the ledges of the steep crags.
- Alpine woodsia** *Woodsia alpina* James Dickson, 1792
This plant has been made a new Acrostichum by my friend Mr. Bolton, under the name of A. alpinum. I believe it is a Polypodium, but at the same time I am confident it is no other than the Linnean A. ilvense: I compared it both at Sir Joseph Banks's and at Dr. Smith's, and can find no difference but in size, the Scotch plant being somewhat the smaller; but those who are acquainted with ferns will be sensible how different they appear, according to their age or places of growth. I have no doubt, therefore, but the Linnean A. ilvense (Hudson's) and that I found in Scotland are one and the same (Dickson, 1794). What was once called Acrostichum is now known as Woodsia. Of the two species, alpina and ilvense, only the former occurs on Ben Lawers, so Dickson's friend, Mr. Bolton, was correct.
- Alpine mouse-ear** *Cerastium alpinum* George Don and John Mackay, 1793
- Mountain sandwort** *Minuartia rubella* George Don and John Mackay, 1793
- Alpine pearlwort** *Sagina saginoides* George Don, 1794
- Russet sedge** *Carex saxatilis* George Don, 1798
I first discovered this plant on Ben Lomond in 1789, and on Ben Lawers in 1798, and on Ben Nevis in 1794. I sent specimens of this plant to Mr. Dickson of Covent Garden in 1794; and I have a letter of that date in which Mr. Dickson acknowledges it to be a non descript. How he afterwards considered himself to be the discoverer of this plant I cannot explain. If Mr Brown's information be correct, the Rev. Mr Stuart of Luss had been acquainted with this plant some time before.
- Alpine forget-me-not** *Myosotis alpestris* George Don, 1804
Considering botanists had been visiting Ben Lawers for over three decades, this seems like a very late date for the discovery of this noticeable species.
- Scorched Alpine-sedge** *Carex atrofusca* George Don, 1812
Between 1812 and 1892 C. atrofusca was not seen, leading some to doubt whether Don had ever seen it. However, in the latter year it was rediscovered by the Very Rev. Dr. David Paul, ex-Moderator of the Church of Scotland.
- Alpine bartsia** *Bartsia alpina* William Gourlie, 19th July 1842
Recorded on a mountain near Killin; Proceedings of the Botanical Society of Edinburgh, Vols. 4 & 5, p.62. A herbarium specimen collected by Wm. Gourlie and dated 19/7/1842 in the

British Museum gives no further information. The record could therefore refer to Ben Lawers or Meall na Samnha.

Mountain bladder-fern *Cystopteris montana* J.M. Balfour, 1855

Snow pearlwort *Sagina nivalis* J.M. Balfour, 1863

The difficulty in identifying this species led to it having been collected at least twice before it was positively identified. H.H. Harvey collected three specimens in 1825 but it was misidentified as *Minuartia rubella*. In 1847 Prof. J. H. Balfour collected some good and some peculiar specimens of *Minuartia rubella* from Ben Lawers. The latter were later recognised as *Sagina nivalis* and in 1863 this was announced as a species new to Britain in an article by H.C. Watson in *The Journal of Botany*.

Scottish pearlwort *Sagina x normaniana* George Claridge Druce et al. 1910

This was discovered during a visit to Ben Lawers by an international party of botanists who ascended by way of the Allt Tuira Bhric. Immediately debate raged as to its status as a full species or a hybrid, of which there is a detailed account in Payne (1983). It is currently regarded as the hybrid between *Sagina procumbens* and *S. saginoides*.

Bristle sedge *Carex microglochis* Lady Davy and Gertrude Bacon, 1923

Close-headed Alpine-sedge *Carex norvegica* M. McCallum Webster, 1954

Arctic mouse-ear *Cerastium nigrescens* Sandy Payne, 1981

Tall bog-sedge *Carex magellanica* David Mardon, 1984

I am still trying to find first records for the following and would be grateful for any assistance:

False sedge	<i>Kobresia simpliciuscula</i>
Mountain scurvygrass	<i>Cochlearia micacea</i>
Dickie's bladder-fern	<i>Cystopteris dickieana</i>
Woolly willow	<i>Salix lanata</i>
Ben Lawers dandelion	<i>Taraxacum cymbifolium</i>
A Lady's-mantle	<i>Alchemilla glomerulans</i>
A Lady's-mantle	<i>Alchemilla wichurae</i>
Mountain Lady-fern	<i>Athyrium distentifolium</i>
Water sedge	<i>Carex aquatilis</i>
Rock sedge	<i>Carex rupestris</i>
Sheathed sedge	<i>Carex vaginata</i>
Alpine tufted hair-grass	<i>Deschampsia cespitosa</i> subsp. <i>alpina</i>
Shade horsetail	<i>Equisetum pratense</i>
Variiegated horsetail	<i>Equisetum variegatum</i>
An eyebright	<i>Euphrasia frigida</i>
Alpine rush	<i>Juncus alpinoarticulatus</i>
Two-flowered rush	<i>Juncus biglumis</i>
Chestnut rush	<i>Juncus castaneus</i>
Interrupted clubmoss	<i>Lycopodium annotinum</i>
Cyphel	<i>Minuartia sedoides</i>
Alpine cat's-tail	<i>Phleum alpinum</i>
Glaucous meadow-grass	<i>Poa glauca</i>
Alpine cinquefoil	<i>Potentilla crantzii</i>
Whortle-leaved willow	<i>Salix myrsinites</i>
Hairy stonecrop	<i>Sedum villosum</i>
Blue moor-grass	<i>Sesleria caerulea</i>
Alpine speedwell	<i>Veronica alpina</i>

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