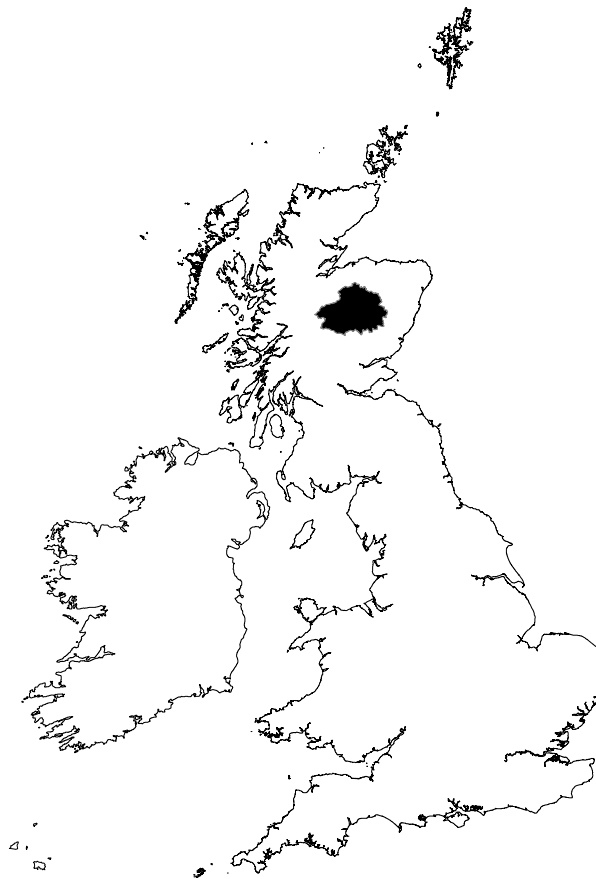


The Flora of the Cairngorms National Park

A Rare Plant Register

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May 2013



Scottish Natural Heritage
All of nature for all of Scotland

CAIRNGORMS
NATIONAL PARK AUTHORITY

ÙGH DARRAS PÀIRC NÀISEANTA A'
MHONAIDH RUAIDH

The Botanical Society of the British Isles

The BSBI is for everyone who is interested in the flora of Britain and Ireland. It is the largest and most active organisation devoted to the study of botany in the British Isles.

The BSBI produces national Atlases and county Floras of the distribution of plants, and guides to the identification of more difficult plant groups. It publishes a scientific journal, *The New Journal of Botany*, in which studies of British, Irish and NW European vascular plants are published. BSBI also organises field and indoor meetings as well as conferences on botany.

Members are kept informed by a newsletter (BSBI News) three times a year and are invited to make use of our system of county recorders and national referees who can help with the identification of plants.

An education programme supported by the society brings high quality botanical training within the reach of all, from school students to professional development and postgraduate courses.

Scientific research on British botany is supported through grants awarded by the Science & Research Committee and through the work of the Plant Unit.

The BSBI is a charity registered in England and Wales (212560) and in Scotland (SC038675).

For more information go to www.bsbi.org.uk

Frontispiece map shows the location of the Cairngorms National Park within the British Isles.

Introduction

The Cairngorms National Park (CNP), established in 2003 and extended to its present boundary in 2010, is the largest national park in the UK at 4528km². It lies at the centre of the eastern Highlands of Scotland, and encompasses the coldest and snowiest parts of the UK. It ranges in altitude from 100m AOD by the River Garry at Killiekrankie, to 1309m AOD on the summit of Ben Macdui, the second highest mountain in the UK.



Figure 1. The Cairngorms National Park. From <http://www.cairngorms.co.uk/>

Based on a dataset of mean altitudes in each 1km grid square, the overall mean altitude within the CNP is 529m (median 516m). Only 12% of the CNP lies below 300m AOD, while 43% is above 560m (the typical limit for tree growth in this area without obvious stunting or shaping by exposure). 27% of the CNP is above 650m AOD, and 9% above 800m.

Annual mean precipitation varies from c.800mm in the lower lying Straths to more than 1500mm on high ground. Western parts of the CNP tend to have higher rainfall and less sunshine than eastern areas. Large parts of the CNP have more than 100 days of air frost per year, and more than 150 days of ground frost. (See www.metoffice.gov.uk/climate/uk/averages).

Nine botanical vice-counties overlap the CNP, and within the CNP vice-county boundaries correspond with Local Authority boundaries. See Table 1.

VC	Vice - county	Area (km ²)	Percentage of CNP	Local Authority area	Percentage of CNP
88	Mid Perthshire	2.97	0.07	Perth & Kinross	15.7
89	East Perthshire	708.61	15.65		
90	Angus	324.00	7.16	Angus	7.2
92	South Aberdeenshire	1444.50	31.90	Aberdeenshire	32.0
93	North Aberdeenshire	4.36	0.10		
94	Banffshire	383.36	8.47	Moray	8.5
95	Moray	478.47	10.57	Highland	36.7
96	East Inverness-shire	1166.85	25.77		
97	West Inverness-shire	14.98	0.33		

Table 1. Botanical vice-counties and Local Authorities in the Cairngorms National Park.

The Checklist of the vascular plants of the CNP (Amphlett 2012) lists 1699 unique taxa, plus 34 aggregate taxa. It is made freely available as a download from the BSBI website.

The aims of the CNP Rare Plant Register (RPR)

The CNP RPR has 3 main aims.

1. By listing the most recent record at every recorded site, it provides a succinct summary of the state of knowledge of all the qualifying species within the CNP.
2. It is a guide and spur to future field survey:
 - a. If a species has not been recorded at a site for 30 years for example, or has no localised grid reference, that fact, now highlighted in the RPR, allows for targeted surveys to be undertaken.
 - b. Areas with few or no records of qualifying species can be targeted for new survey.
3. It is a tool in support of nature conservation.
 - a. If land managers, planners or those proposing developments know where important species occur they can give them consideration. If they don't know where a species occurs they can't.
 - b. Collecting or deliberate damage have, in the past, sometimes been given as reasons for keeping plant locations secret. This is not a significant risk today, and in most cases, BSBI is of the view that there is more risk to rare plants from people *not* knowing where they are than there might be from vandalism. Hence, for this reason, the BSBI encourages the production of Rare Plant Registers and their widespread dissemination.

Using the CNP Rare Plant Register

The RPR is in Excel format. Appendix 1 lists the Data fields. Any subset of the data can easily be extracted by use of filtering and pivot tables. So, for example, if you wanted to know how many RPR taxa (excluding hawkweeds) had been recorded in the vc96 part of the CNP, that were native, had site grid references at 100m precision or better (excluding centroid grid references), that had been recorded since 1990 and that were Red-listed above Least Concern, then this can easily be obtained from the Excel file. (The answer is 48 taxa).

The RPR can be searched for specific taxa or groups of taxa, and / or for taxa occurring in specific locations. Site name or grid reference can be searched. Site names are very inconsistently used by recorders, and not all records have a name listed. Therefore in many cases it will be best to search for one or more grid references.

Botanising in and access to the CNP

It is hoped that publication of the RPR will encourage more people to spend more time botanising in the field, recording the plants they find, and making those records available to BSBI and others. All recreational activity, including field botany, in the wider countryside in Scotland is covered by the Scottish Outdoor Access Code and its requirement for responsible access. Hence, access in Scotland is covered by entirely different rules to the rest of the UK.

The Land Reform (Scotland) Act 2003 gives everyone statutory access rights to most land and inland water, but people only have these rights if they exercise them responsibly by respecting the privacy, safety and livelihoods of others, as well as caring for the environment. Further details of the Scottish Outdoor Access Code are given in Appendix 2, and also see <http://www.outdooraccess-scotland.com/>.

Inevitably, in an area with such high wider biodiversity value, there will many instances where the location of a notable plant is also the location for other important wildlife. Such other species, may be susceptible to disturbance, and may have legal protection.

Rare plant register qualifying taxa

735 taxa are included in the Rare Plant Register. These meet one or more of the following criteria:

- Cairngorms, Scottish or GB Endemic
- Native or archaeophyte taxa that are red-listed (above Least Concern)
- Native taxa that are GB Nationally Rare or GB Nationally Scarce
- UKBAP
- Scottish Biodiversity List
- Legally protected under UK or international legislation.
- Native or archaeophyte taxa that are Rare in the CNP, defined as in the 25 year period 1987 – 2011, recorded in 1 – 10 tetrads, and in 1 – 10 monads, and in 1 – 10 hectads.
- Native or archaeophyte taxa that have not been recorded in the CNP post 1986.

Seventy archaeophyte taxa are included in the CNP RPR. These include 25 of national conservation concern, some of which are of considerable cultural interest. The remainder are included because of their rarity in the CNP. Sixteen archaeophyte taxa only recorded as recent casuals, in ex-garden sites, obviously planted, or occurring as relics of cultivation are excluded.

The 'CNP Rare' category corresponds to the categories 'County Rare' (1 -3 sites) and 'County Scarce' (4 – 10 sites) as defined by BSBI for use in County Rare Plant Registers (Lockton et al 2005). 1025 tetrads fall entirely within the CNP, with a further 226 tetrads overlapping the CNP boundary. The frequency category 'CNP Rare' therefore equates to presence in \leq c.1% of CNP tetrads.

Data collation

The CNP Checklist (Amphlett 2012) was based on a dataset, collated in November 2011, of c.281, 000 records. 90% of that data had been collected or collated by BSBI. This included a large dataset from RSPB, and site condition monitoring data from SNH. Additional data was supplied by the North East Scotland Biological Records Centre (NESBReC), National Trust for Scotland and Forest Enterprise Scotland. (See the Checklist for further details). To this dataset was added 2658 records made in 2012 within the CNP, and downloaded from the BSBI Distribution Database (DDb). In addition Andy Scobie (Cairngorms Rare Plant Project) provided the latest versions of the distribution data collected in the course of his project.

Data manipulation and analysis

The following steps were carried out in order to compile the CNP RPR.

1. Extracted all records for qualifying taxa from the dataset compiled for the Checklist. This amounted to 42,929 records.
2. Removed all records marked as doubtful on the BSBI DDb or otherwise known to be incorrect. This reduced the number of records to 42,733.
3. Extracted the record for the most recent year recorded for unique concatenated combinations of site name and grid reference. If there was more than one record in a year, and site name and grid reference were the same, the analysis run in Excel selected the first record in the file.
4. Limited editing of site names was then carried out, to correct obvious spelling inconsistencies and typos, and then the stage 3 analysis was re-run. This left 25,700 records.
5. All duplicate grid references for each taxa were examined, and only the most recent record retained, if the sites were considered to be the same.
6. All records where the site name was un-recorded were examined and the record removed if there were more detailed records for the same or a later date.
7. Records of qualifying taxa made in 2012 were added in, and stage 5 analysis repeated. (NB if any pre 2012 CNP records of RPR taxa were added to the BSBI DDb after November 2011, they will not have been included).
8. The latest version of the Cairngorms Rare Plant Project datasets for *Linnaea borealis*, *Melampyrum sylvaticum*, *Moneses uniflora*, *Platanthera bifolia*, *Pyrola media* and *P. rotundifolia* were incorporated into the dataset. Stage 5 analysis was then repeated in close consultation with Andy Scobie, the CRPP Officer.
9. A new download of *Hieracia* records for the CNP was obtained from the BSBI DDb on 23rd March 2013. Records of qualifying taxa were extracted and a new analysis of the data carried out (see below).

The CNP RPR has 19,724 records.

Hawkweeds in the CNP

Hawkweeds (*Hieracium*) are a taxonomically difficult genus, for which the CNP is exceptionally important. The RPR includes 125 species of hawkweed, of which 15 are Endemic to the CNP, a further 52 are Endemic to Scotland, and an additional 34 Endemic to Great Britain. Difficulty in their identification, and a recent major taxonomic revision of the genus, means that records cannot be

uncritically accepted. For other taxa in the RPR, records were accepted unless there were clear reasons to exclude them. With hawkweeds, the opposite approach was taken.

The treatment of hawkweeds in the RPR is largely based on the most recently available (2011) version of the Hieracium database compiled by David McCosh (1428 records in the RPR). These are largely records determined or re-determined by him, and mapped in McCosh and Rich (2011). Other records included in the RPR are additional records by David McCosh as recorder or determiner (31 records); records by David Tennant as recorder or determiner (86 records); records from Tim Rich - recorder or literature records (16 records). All other hawkweed records in the BSBI DDb were excluded apart from 186 records entered at BRC, usually where inclusion of the record gives an additional grid reference or a more detailed grid reference at a site given in one of the other reliable datasets. In cases where the only record is from this BRC dataset, then the record should be treated with some caution. Hawkweed records excluded from the RPR are those compiled for Atlas 2000, from the BSBI Maps Scheme, Mapmate, and BSBI Monitoring Scheme, and an SNH dataset of Perthshire records. An earlier version of David McCosh's database incorporated into the BSBI DDb was also excluded.

Data editing

The data were compiled from a large number of individual source datasets, and extensive tidying up of the RPR data was undertaken.

Site name, Recorder and Determiner:

These were made as consistent as possible, while both avoiding the risk of introducing errors into the data, and working within practical time constraints. Editing of these data fields was not exhaustive.

Comments Field

Irrelevant details were removed.

Many records contained more detailed site grid references in this field, than in the site grid reference field. If the site grid reference was at less than 100m precision, and a more detailed grid reference was given in the Comments field, this grid reference was moved to the site grid reference field. If the Comments field gave multiple detailed grid references, new records were created for each of these. If the site grid reference field was at 100m precision or better, any more detailed grid references were retained in the Comments field.

Some instances were noted where a 10 figure grid reference in the Comments field had been incorrectly shortened to an 8 figure grid reference by rounding, rather than truncating. These were corrected.

Count data was moved to the Abundance field.

Occasional comments on taxonomy or status of individual records was added to the Comments field.

Centroid grid references:

A little under 3% of included records are for centroids of sites. Where reference to this is included in the Site name or Comments fields, this is indicated in a separate field. It can rarely be

determined what site boundary these records are the centre of, and hence the grid reference may be substantially incorrect. These records should be used with caution or perhaps ignored.

Abundance:

Some datasets used the value '1' to mean present. Therefore all values of 1 in the Abundance field were deleted unless the Comments field made clear that the actual abundance value was 1, or where the record was known to refer to a single plant / clump / patch etc.

Qualifying comments on RPR data

With the exception of hawkweeds, records are included unless certainly erroneous or highly doubtful. With such a large dataset, collected by so many different recorders and over more than a century, some identification errors will inevitably be present in the data. This should be borne in mind, but not over-stated. For example, it is quite likely (though cannot be proved), that some old records for *Pyrola rotundifolia* (Round-leaved Wintergreen) are misidentifications of *Pyrola media* (Intermediate Wintergreen).

Taxa can occur as native and alien populations within the CNP. These are all listed as native in the Status field, but when a population of an otherwise native taxon is known to be alien, this is noted in the Comments field.

Site name. There remains considerable variation in spelling of site names, and a variety of different names have been used for what are probably the same site. This seems especially the case in 'classic' botanical sites with a long history of recording, eg. the Angus glens. 14% of records lack a site name.

Grid references. OS grid references did not appear on maps of Scotland until post 1945, with publication of the Popular Edition of the One inch to 1 mile scale maps. Therefore, all grid references prior to that date were not calculated at the time of the record, and in many cases will have been interpreted by someone else, not the actual recorder. Therefore, all older grid references should be treated with a degree of caution. It is virtually certain that some old records have been allocated to more than one hectad. This is especially apparent where a major geographic feature runs north – south, or east – west, eg. Glen Einich or Glen Avon. This has not been amended in the RPR, so be aware.

It is next to impossible to accurately and consistently estimate grid references from a map, and even with GPS some residual error rate remains. Post 2000, GPS have achieved a very high degree of accuracy, but prior to that, or in areas with poor satellite reception, or if using an older or lower specification GPS model, more frequent errors occur. One effect of this is that repeat records of the same population will often lead to slightly different, though closely juxtaposed grid references, leading to spurious duplication of sites. These are all treated as different in the RPR, but be aware that 'sites' listed as different may actually be the same. The only exception is twinflower; Andy Scobie has assessed all the records, and searched for most populations in the CNP. The RPR gives hectad, tetrad, monad and 100m grid references (depending on resolution of site grid reference) for all records. Sensible interpretation of site grid references by reference to these coarser resolution grid references is strongly advised.

There were a few instances where the site grid reference did not match the recorded vice-county. The vice-county was corrected or the record deleted as appropriate. 13 records could not be allocated to an individual vice-county, and so a list of possible options is given.

Taxonomic difficulties. *Hyacinthoides non-scripta* (Bluebell) is a Scottish Biodiversity List species, Rare in the CNP. Records prior to 1987, and perhaps some since, may have been confused with the alien *Hyacinthoides x massartiana* (Hybrid Bluebell (*H. non-scripta x hispanica*)). Older records of *H. non-scripta* are flagged in the comments field as being of uncertain identification. Several *Salix* hybrids have comments from determiners and others who have looked at the specimens.

Summary of the CNP RPR

Table 2 below, summarises the 736 taxa included in the CNP RPR. A list of taxa included in the RPR is given in Appendix 3. Definitions of Levels, see Appendix 1.

Level	Category	Number of taxa	TOTAL
Endemic		125	428
UK Red List	Extinct	1	
	Critically Endangered	7	
	Endangered	27	
	Vulnerable	53	
	Near Threatened	38	
	Data Deficient	20	
Nationally Rare	Nationally Rare	59	
	[Rare]	73	
Nationally Scarce	Nationally Scarce	85	
	[Scarce]	133	
UK BAP	Priority Species	53	
Scottish Biodiversity List		99	
European Protected Species		1	
Wildlife & Countryside Act	Schedule 8	11	
CNP Rare, native	Recorded 1987 - 2011	454	
	Last recorded pre-1987	141	
CNP Rare, archaeophyte	Recorded 1987 - 2011	51	
	Last recorded pre-1987	15	

Table 2. Summary of native and archaeophyte taxa of conservation concern in the CNP, and included in the CNP RPR.

Additional taxa of importance in the CNP

The CNP RPR details records of taxa that are threatened, nationally rare or scarce, UKBAP, Scottish Biodiversity List, endemic, legally protected, and those that are rare in the CNP. An additional measure of importance can be obtained by estimating the national importance of populations of each taxa in the CNP.

The CNP contains or overlaps with 65 hectads, 2.3% of the GB total. Therefore, taxa for which more than 4.6% of their GB hectad distribution overlaps the CNP are inferred to have nationally important populations within the CNP. A three-point scale was devised to describe the level of this national significance (Amphlett 2012):

- Moderate ≥ 4.6 and $\leq 10\%$ of GB hectads overlap the CNP
- High > 10 and $\leq 20\%$ of GB hectads overlap the CNP
- Very High $> 20\%$ of GB hectads overlap the CNP

The GB hectad distribution and CNP hectad distribution were calculated using all date classes of records. An additional 35 taxa whose populations in the CNP are of High or Very High national significance, and that are not otherwise included in the CNP RPR are listed in Appendix 4.

What to do with your plant records

If you find a species listed in the CNP RPR, please consider making a proper record and passing the information to the relevant BSBI vice-county recorder. For contact details email coordinator@bsbi.org.uk. You may wish to make your records available to others with an interest in the area, but please also make your data available to BSBI as well.

A plant record requires four items of information.

What?

- Name the species. If in doubt, don't name it!

Where?

- OS grid reference. The minimum preferred resolution for all records is a 6 figure grid reference (ideally taken with a hand held GPS). For most of the taxa included in the RPR, an 8 figure grid reference is preferred; these must be obtained using GPS. Remember, a grid reference refers to a square and the plants must have been seen within that square. Please do not use grid references for the centre of large sites, or combine species seen in adjacent squares into one list. Please do not record at lower precision than 100m, eg tetrads. If the population of a plant extends over more than one grid square, record as separate sites / records. Double check the grid reference!
- Give the site a name, based on place names or other features on the OS 1:50 000 or 1:25 000 maps. Site name can usefully include information that narrows down where the record was made. "Track behind Braes of Glenlivet Hall", "West bank of R. Spey, Boat of Garten", "Minor road, NE of Conglass Water", "Sgor an Lochain Uaine, NE ridge of", and "W. side of R. Avon (Na Tri Chaochain)", when combined with a suitably precise grid reference are perfectly satisfactory.

When?

- The full date: day, month and year.

Who?

- The name of the recorder(s). If someone else confirmed or made the identification, please give their name as well.

The four “Ws” – What? Where? When? and Who by? are the basic requirements of a plant record. In addition, a count of plants, or estimate of abundance or extent, would be very useful. Add anything else you might want to say about a record as a comment. If entering records into a spreadsheet or a database, keep the four key elements of the record as separate columns / fields, and don't put details into the comments field that belong in one of the other specific fields.

Acknowledgements

This RPR could never have been compiled if it were not for the efforts of past and present BSBI vice-county recorders, who have collected, collated and computerised over 250,000 botanical records for the Cairngorms National Park. Nor could the checklist have been created if it were not for BSBI's investment in its Distribution Database, the source of the bulk of the data for this project. Vice-county recorders also helped, by checking earlier drafts of the Checklist and RPR and answering many queries.

The North-East Scotland Biological Records Centre (NESBReC) provided a copy of the species records they held for the CNP area, as did National Trust for Scotland (for their Mar Lodge Estate), and Forest Enterprise Scotland. RSPB provided records for the Abernethy and Insh Marshes NNRs. Andy Scobie and Stewart Taylor provided copies of their personal records from within the CNP. Tim Rich provided files giving the latest names and red-list status for Hieracium species and distribution data used in the hawkweed atlas. Bert Reid provided records from the national *Taraxacum* database. Mark Hill provided a file of monad altitudes for the CNP. Mark Hancock (RSPB) provided assistance with data analysis techniques.

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Glossary

Monad	a 1 × 1km square of the Ordnance Survey grid.
Tetrad	a 2 × 2km square of the Ordnance Survey grid. Comprising 4 monads.
Hectad	a 10 × 10km square of the Ordnance Survey grid. Comprising 25 tetrads or 100 monads.
Native	a taxon which arrived in the area without intervention from man, whether intentional or unintentional, having come from an area in which it is native.
Archaeophyte	an introduced taxon that became established in the wild in Great Britain before 1500.
Neophyte	an introduced taxon that became established in the wild in Great Britain after 1500.

Appendix 1.

List of data Fields in Excel spreadsheet version of the CNP Rare Plant Register. Available to download from the BSBI website www.bsbi.org.uk.

Taxon (Stace 2nd edition)	Taxon name from Stace, C.A. (1997). New Flora of the British Isles. 2nd Edition. Cambridge University Press. Hieracia names follow McCosh, D.J. & Rich, T.C.G. (2011). Atlas of British and Irish Hawkweeds. BSBI. London.
Taxon (Stace 3rd edition - where name different)	Taxon name from Stace, C.A. (2010). New Flora of the British Isles. 3rd Edition. Cambridge University Press. Where name different to Stace 2nd edition.
Vernacular name	Vernacular name (as given in MapMate database). Hieracia names from McCosh & Rich (2011).
Status	Status in Cairngorms National Park. Categories are: Cairngorms Endemic, Scottish Endemic; Endemic (GB), Native, Archaeophyte (non-native, first recorded in the wild pre 1500 AD). Some taxa occur as native and alien, these are listed as native. Status is mainly derived from Preston et al (2002), with additional checking with VCRs. For the large critical groups <i>Hieracium</i> and <i>Taraxacum</i> , status is taken from McCosh & Rich (2011) and Dudman & Richards (1997). Some additional information on endemics was taken from Stace (2010).
vc	Vice-county. Where record cannot be allocated to a single vc, a list of possibilities is given.
Site name	Site name.
Gridref	OS grid reference of record in alpha-numeric format. Tetrads are in DINTY format. Quadrants are signified NW, NE, SE or SW.
Precision	Spatial precision of grid reference (1 - 10,000 metres).
Centroid Gridref	Records for which the grid reference is a site centroid. The 'site' boundaries are typically not known, and hence the grid reference has an unknown degree or error. Use these records with caution.
Hectad	Calculated from site grid reference.
Tetrad	Calculated from site grid reference.
Monad	Calculated from site grid reference.
100m GR	Calculated from site grid reference.
Most recent year	The most recent year that the taxon has been recorded at that grid reference.
Comment	Miscellaneous comments (for 4878 records).
Abundance	Numeric values. Units or other clarifying notes given in Comments field.
Recorder	Original recorder of record.
Determiner	Determiner of record.
UK Red List (Hieracia status from McCosh & Rich 2011)	Status in UK red list. Status of Hieracia from McCosh & Rich (2011).

GB Rare and Scarce species	Rare = recorded in 1 - 15 hectads post 1987. Scarce = recorded in 16 - 100 hectads post 1987. From the JNCC conservation designations spreadsheet, version current in December 2011. The categories of Nationally Rare and Nationally Scarce were applied to all native and archaeophyte taxa. The JNCC list omits many hybrids and critical taxa. For these taxa the main source was Preston et al (2002), using hectad totals for the period 1987 – 1999. For Hieracium species, post 1960 hectad totals were obtained from McCosh and Rich (2011). For taxa not included in the above, hectad totals were obtained from the BSBI Maps Scheme website. Nationally Rare and Nationally Scarce (from JNCC) are distinguished from [Rare] and [Scarce] (derived from other sources).
UK BAP 2007	Listed in the UK BAP.
Scottish Biodiversity List	Listed in the Scottish Biodiversity List.
Legal protection (GB) & European Protected Species	Legally protected under GB or European legislation.
National Conservation Concern	Cairngorms, Scottish or GB Endemic; native or archaeophyte taxa that are red-listed (above Least Concern); GB Nationally Rare or GB Nationally Scarce; UKBAP; Scottish Biodiversity List; or legally protected.
Frequency (Cairngorms National Park)	A quantitative assessment based on data for the 25 year period 1987 - 2011. Rare: 1 - 10 tetrads (if >10 monads, or >10 hectads = Scarce). Scarce: 11 - 30 tetrads (if >30 monads = Near Scarce, if >30 hectads = Local). Near Scarce: 31 - 50 tetrads (if >50 monads = Local). Local: 51 - 75 tetrads. Frequent: 76 - 150 tetrads. Common: 151 - 300 tetrads. Very Common: >300 tetrads. If taxon not recorded since 1987, year most recently recorded is given.
Datasets & Reference (Hieracia)	Source of Hieracium records (all records are from the BSBI Distribution Database): 'Hieracium David McCosh' (1428 records) - database of records compiled and confirmed by David McCosh. This is the most recent version of this dataset provided to BSBI; Additional records by David McCosh as recorder or determiner (31 records); Records by David Tennant as recorder or determiner (86 records); Records from Tim Rich - recorder or literature records (16 records); 'Hieracium data entered at BRC' (186 records) - an older dataset, mainly used where the record gives an additional location at site contained in other datasets. In cases where the only record is from this dataset, then the record should be treated with some caution.
Check	Formula to check that records have not been corrupted through sorting etc.. True = record correct.

Appendix 2.

The Scottish Outdoor Code.

Simplified from <http://www.outdooraccess-scotland.com/outdoors-responsibly/your-access-rights/>

Your access rights

Everyone can enjoy Scotland's outdoor access rights. In summary, some of the main features of the Land Reform (Scotland) Act 2003 are:

- Everyone has the statutory right of access
- Access rights apply to all land and inland waters, unless excluded (as below)
- Access rights are for outdoor recreation, for crossing land and water, and for some educational and commercial purposes
- Exercising access rights, and managing access land, must be done responsibly.

Where access rights do not apply

- Houses and gardens, and non-residential buildings and associated land
- Farm buildings and yards
- Land in which crops have been sown or are growing (although please note that the headrigs, endrigs and other margins of fields where crops are growing are not defined as crops, whether sown or unsown, and are therefore within access rights).
- Land next to a school and used by the school
- Sports or playing fields when these are in use and where the exercise of access rights would interfere with such use
- Land developed and in use for recreation and where the exercise of access rights would interfere with such use
- Golf courses (but you can cross a golf course provided you don't interfere with any games of golf)
- Places like airfields, railways, telecommunication sites, working quarries and construction sites, and
- Visitor attractions or other places which charge for entry.

Which activities are excluded from access rights?

Access rights don't extend to:

- Being on or crossing land for the purpose of doing anything which is an offence, such as theft, breach of the peace, nuisance, poaching, allowing a dog to worry livestock, dropping litter, polluting water or disturbing certain wild birds, animals and plants
- Hunting, shooting, fishing
- Any form of motorised recreation or passage (except by people with a disability using a vehicle or vessel adapted for their use)
- Anyone responsible for a dog which is not under proper control, or
- Anyone taking away anything from the land for a commercial purpose.

Other related legislation supporting access to the countryside:

- Public rights of way continue to exist and are unaffected by the Act

Appendix 3.

Summary of taxa included in the CNP RPR.

Taxon (Stace 2nd edition)	Vernacular name	Status	National Conservation Concern	Frequency (Cairngorms National Park)
<i>Aethusa cynapium</i>	Fool's Parsley	Native or neophyte		Rare
<i>Agrimonia eupatoria</i>	Agrimony	Native		Rare
<i>Agrimonia procera</i>	Fragrant Agrimony	Native		Rare
<i>Agrostemma githago</i>	Corncockle	Archaeophyte		Rare
<i>Agrostis gigantea</i>	Black Bent	Archaeophyte		Rare
<i>Alchemilla glaucescens</i>		Native	YES	Rare
<i>Alchemilla glomerulans</i>		Native	YES	Scarce
<i>Alchemilla wichurae</i>		Native	YES	Rare
<i>Alisma plantago-aquatica</i>	Water-plantain	Native		Rare
<i>Allium oleraceum</i>	Field Garlic	Native	YES	Rare
<i>Allium ursinum</i>	Ramsons	Native		Rare
<i>Alopecurus borealis</i>	Alpine Foxtail	Native	YES	Scarce
<i>Alopecurus myosuroides</i>	Black-grass	Archaeophyte	YES	Rare
<i>Anagallis arvensis</i>	Scarlet Pimpernel	Native	YES	Rare
<i>Anagallis arvensis</i> subsp. <i>arvensis</i>	Scarlet Pimpernel	Native		Rare
<i>Anagallis tenella</i>	Bog Pimpernel	Native		Rare
<i>Anchusa arvensis</i>	Bugloss	Archaeophyte		Rare
<i>Anisantha sterilis</i>	Barren Brome	Archaeophyte		Rare
<i>Anthemis arvensis</i>	Corn Chamomile	Archaeophyte	YES	Not seen since 1974
<i>Anthriscus caucalis</i>	Bur Chervil	Native		Rare
<i>Anthyllis vulneraria</i> subsp. <i>lapponica</i>		Native		Rare
<i>Apera spica-venti</i>	Loose Silky-bent	Archaeophyte	YES	Rare
<i>Apium inundatum</i>	Lesser Marshwort	Native		Rare
<i>Arabis petraea</i>	Northern Rock-cress	Native	YES	Near scarce
<i>Arctium nemorosum</i>	Wood Burdock	Native		Rare

Arctostaphylos alpinus	Alpine Bearberry	Native	YES	Rare
Armoracia rusticana	Horse-radish	Archaeophyte		Rare
Arrhenatherum elatius var. bulbosum	False Oat-Grass	Native		Rare
Artemisia vulgaris	Mugwort	Archaeophyte		Rare
Asplenium septentrionale	Forked Spleenwort	Native	YES	Rare
Asplenium trichomanes subsp. trichomanes	Maidenhair Spleenwort	Native		Rare
Asplenium x lusaticum	A. trichomanes ssp. quadrivalens x ssp. trichomanes	Native	YES	Rare
Astragalus alpinus	Alpine Milk-vetch	Native	YES	Rare
Astragalus danicus	Purple Milk-vetch	Native	YES	Rare
Astragalus glycyphyllos	Wild Liquorice	Native		Not seen since 1977
Athyrium distentifolium	Alpine Lady-fern	Native	YES	Local
Athyrium flexile	Newman's Lady-fern	Scottish endemic	YES	Rare
Avena fatua	Wild-oat	Archaeophyte		Rare
Barbarea vulgaris	Winter-cress	Native		Rare
Betula nana	Dwarf Birch	Native	YES	Local
Betula x intermedia	B. nana x pubescens	Native	YES	Rare
Bidens cernua	Nodding Bur-marigold	Native		Rare
Brachypodium pinnatum	Heath False-brome	Native		Rare
Brachypodium pinnatum agg.	Tor-grass	Native		Rare
Bromopsis benekenii	Lesser Hairy-brome	Native	YES	Rare
Bromopsis ramosa	Hairy-brome	Native		Rare
Calamagrostis epigejos	Wood Small-reed	Native		Rare
Calamagrostis purpurea	Scandinavian Small-reed	Native	YES	Rare
Calamagrostis stricta	Narrow Small-reed	Native	YES	Rare
Callitriche hermaphroditica	Autumnal Water-starwort	Native		Rare
Callitriche platycarpa	Various-leaved Water-starwort	Native		Rare
Calystegia sepium	Hedge Bindweed	Native		Rare
Calystegia sepium subsp. sepium	Hedge Bindweed	Native		Rare
Campanula rapunculus	Rampion Bellflower	Archaeophyte	YES	Not seen since 1972
Cardamine amara	Large Bitter-cress	Native		Rare
Carduus crispus	Wetted Thistle	Native		Rare

<i>Carduus tenuiflorus</i>	Slender Thistle	Native		Rare
<i>Carex acutiformis</i>	Lesser Pond-sedge	Native		Rare
<i>Carex atrata</i>	Black Alpine-sedge	Native	YES	Scarce
<i>Carex capillaris</i>	Hair Sedge	Native	YES	Local
<i>Carex chordorrhiza</i>	String Sedge	Native	YES	Rare
<i>Carex diandra</i>	Lesser Tussock-sedge	Native	YES	Rare
<i>Carex disticha</i>	Brown Sedge	Native		Rare
<i>Carex elata</i>	Tufted-sedge	Native	YES	Not seen since 1856
<i>Carex hirta</i>	Hairy Sedge	Native		Rare
<i>Carex lachenalii</i>	Hare's-foot Sedge	Native	YES	Scarce
<i>Carex laevigata</i>	Smooth-stalked Sedge	Native		Rare
<i>Carex magellanica</i>	Tall Bog-sedge	Native	YES	Not seen since 1981
<i>Carex muricata</i> subsp. <i>lamprocarpa</i>	Prickly Sedge	Native		Rare
<i>Carex norvegica</i>	Close-headed Alpine-sedge	Native	YES	Rare
<i>Carex pendula</i>	Pendulous Sedge	Native		Not seen since 1983
<i>Carex rariflora</i>	Mountain Bog-sedge	Native	YES	Near scarce
<i>Carex remota</i>	Remote Sedge	Native		Rare
<i>Carex riparia</i>	Greater Pond-sedge	Native		Rare
<i>Carex rupestris</i>	Rock Sedge	Native	YES	Scarce
<i>Carex saxatilis</i>	Russet Sedge	Native	YES	Rare
<i>Carex spicata</i>	Spiked Sedge	Native		Rare
<i>Carex sylvatica</i>	Wood-sedge	Native		Rare
<i>Carex vaginata</i>	Sheathed Sedge	Native	YES	Local
<i>Carex viridula</i> subsp. <i>brachyrrhyncha</i> var. <i>scotica</i>		Native		Not seen since 1983
<i>Carex viridula</i> subsp. <i>viridula</i>	Small-fruited Yellow-sedge	Native		Rare
<i>Carex</i> x <i>biharica</i>	<i>C. curta</i> x <i>echinata</i>	Native	YES	Rare
<i>Carex</i> x <i>boenninghausiana</i>	<i>C. paniculata</i> x <i>remota</i>	Native		Rare
<i>Carex</i> x <i>corstorphinei</i>	<i>C. binervis</i> x <i>viridula</i>	Native	YES	Not seen since 1915
<i>Carex</i> x <i>decolorans</i>	<i>C. bigelowii</i> x <i>nigra</i>	Native	YES	Rare
<i>Carex</i> x <i>grahamii</i>	<i>C. saxatilis</i> x <i>vesicaria</i>	Native	YES	Rare
<i>Carex</i> x <i>helvola</i>	<i>C. curta</i> x <i>lachenalii</i>	Native	YES	Rare
<i>Carex</i> x <i>hibernica</i>	<i>C. aquatilis</i> x <i>nigra</i>	Native	YES	Rare

Carex x involuta	C. rostrata x vesicaria	Native	YES	Rare
Carex x limula	C. aquatilis x bigelowii	Native	YES	Rare
Carum carvi	Caraway	Archaeophyte	YES	Rare
Carum verticillatum	Whorled Caraway	Native		Rare
Catabrosa aquatica	Whorl-grass	Native		Rare
Centaurea cyanus	Cornflower	Archaeophyte	YES	Rare
Cerastium alpinum	Alpine Mouse-ear	Native	YES	Scarce
Cerastium arcticum	Arctic Mouse-ear	Native	YES	Scarce
Cerastium cerastoides	Starwort Mouse-ear	Native	YES	Scarce
Cerastium diffusum	Sea Mouse-ear	Native		Rare
Cerastium fontanum subsp. scoticum	Common Mouse-ear	Cairngorms endemic	YES	Rare
Cerastium x richardsonii	C. arcticum x fontanum	Native	YES	Not seen since 1887
Cerastium x symei	C. alpinum x fontanum	Native	YES	Rare
Ceratocapnos claviculata	Climbing Corydalis	Native		Rare
Chaenorhinum minus	Small Toadflax	Archaeophyte		Rare
Chaerophyllum temulum	Rough Chervil	Native		Rare
Chelidonium majus	Greater Celandine	Archaeophyte	YES	Rare
Chenopodium bonus-henricus	Good-King-Henry	Archaeophyte	YES	Rare
Chenopodium rubrum	Red Goosefoot	Native		Rare
Chrysanthemum segetum	Corn Marigold	Archaeophyte	YES	Rare
Cicerbita alpina	Alpine Blue-sow-thistle	Native	YES	Rare
Cicuta virosa	Cowbane	Native	YES	Scarce
Circaea alpina	Alpine Enchanter's-nightshade	Native	YES	Not seen since 1973
Circaea lutetiana	Enchanter's-nightshade	Native		Rare
Circaea x intermedia	C. alpina x lutetiana	Native		Rare
Cirsium x wankelii	C. heterophyllum x palustre	Native	YES	Rare
Clinopodium vulgare	Wild Basil	Native		Rare
Cochlearia micacea	Mountain Scurvygrass	Scottish endemic	YES	Scarce
Cochlearia pyrenaica subsp. alpina		Native	YES	Scarce
Coeloglossum viride	Frog Orchid	Native	YES	Local
Conium maculatum	Hemlock	Archaeophyte		Rare

<i>Convallaria majalis</i>	Lily-of-the-valley	Native		Rare
<i>Convolvulus arvensis</i>	Field Bindweed	Native		Rare
<i>Corallorhiza trifida</i>	Coralroot Orchid	Native	YES	Rare
<i>Cornus suecica</i>	Dwarf Cornel	Native	YES	Frequent
<i>Crepis mollis</i>	Northern Hawk's-beard	Native	YES	Rare
<i>Cruciata laevipes</i>	Crosswort	Native		Rare
<i>Cystopteris dickieana</i>	Dickie's Bladder-fern	Native	YES	Rare
<i>Cystopteris montana</i>	Mountain Bladder-fern	Native	YES	Rare
<i>Dactylorhiza incarnata</i> subsp. <i>pulchella</i>	Early Marsh-orchid	Native		Rare
<i>Dactylorhiza</i> x <i>formosa</i>	<i>D. maculata</i> x <i>purpurella</i>	Native		Rare
<i>Dactylorhiza</i> x <i>transiens</i>	<i>D. fuchsii</i> x <i>maculata</i>	Native		Rare
<i>Dactylorhiza</i> x <i>venusta</i>	<i>D. fuchsii</i> x <i>purpurella</i>	Native		Rare
<i>Daucus carota</i> subsp. <i>carota</i>	Wild Carrot	Native		Rare
<i>Deschampsia cespitosa</i> subsp. <i>alpina</i>	Alpine Hair-grass	Native	YES	Scarce
<i>Deschampsia cespitosa</i> subsp. <i>parviflora</i>	Small-flowered Hair-grass	Native		Rare
<i>Deschampsia setacea</i>	Bog Hair-grass	Native	YES	Rare
<i>Descurainia sophia</i>	Flixweed	Archaeophyte		Rare
<i>Dianthus deltoides</i>	Maiden Pink	Native	YES	Rare
<i>Diphasiastrum complanatum</i>	Issler's Clubmoss	Native	YES	Rare
<i>Dipsacus fullonum</i>	Wild Teasel	Native		Rare
<i>Draba incana</i>	Hoary Whitlowgrass	Native	YES	Near scarce
<i>Draba norvegica</i>	Rock Whitlowgrass	Native	YES	Rare
<i>Drosera anglica</i>	Great Sundew	Native	YES	Scarce
<i>Drosera intermedia</i>	Oblong-leaved Sundew	Native		Rare
<i>Drosera</i> x <i>obovata</i>	Obovate Sundew (<i>D. rotundifolia</i> x <i>anglica</i>)	Native		Rare
<i>Dryas octopetala</i>	Mountain Avens	Native	YES	Scarce
<i>Dryopteris aemula</i>	Hay-scented Buckler-fern	Native		Not seen since pre 1969
<i>Dryopteris affinis</i> subsp. <i>affinis</i>	Scaly Male-fern	Native		Rare
<i>Dryopteris affinis</i> subsp. <i>borreri</i>	Scaly Male-fern	Native		Rare
<i>Dryopteris affinis</i> subsp. <i>cambrensis</i>	Scaly Male-fern	Native		Rare
<i>Dryopteris</i> x <i>complexa</i>	<i>D. affinis</i> x <i>filix-mas</i>	Native		Rare

Dryopteris x deweveri	D. carthusiana x dilatata	Native		Not seen since 1975
Elatine hexandra	Six-stamened Waterwort	Native		Rare
Eleocharis acicularis	Needle Spike-rush	Native		Rare
Elymus caninus var. donianus		Native	YES	Rare
Epilobium ciliatum x obscurum		Native		Rare
Epilobium hirsutum	Great Willowherb	Native		Rare
Epilobium parviflorum	Hoary Willowherb	Native		Rare
Epilobium roseum	Pale Willowherb	Native		Rare
Epilobium x aggregatum	E. montanum x obscurum	Native	YES	Rare
Epilobium x boissieri	E. alsinifolium x anagallidifolium	Native	YES	Not seen since 1892
Epilobium x dacicum	E. obscurum x parviflorum	Native		Not seen since 1955
Epilobium x dasycarpum	E. palustre x anagallidifolium	Native	YES	Rare
Epilobium x facchinii	E. alsinifolium x montanum	Native	YES	Rare
Epilobium x haynaldianum	E. alsinifolium x palustre	Native	YES	Not seen since 1983
Epilobium x marshallianum	E. anagallidifolium x obscurum	Native	YES	Not seen since 1906
Epilobium x rivulicola	E. alsinifolium x obscurum	Native	YES	Not seen since 1905
Epilobium x schmidtianum	E. obscurum x palustre	Native	YES	Not seen since 1983
Epipactis atrorubens	Dark-red Helleborine	Native	YES	Rare
Epipactis helleborine	Broad-leaved Helleborine	Native		Rare
Equisetum hyemale	Rough Horsetail	Native		Rare
Equisetum pratense	Shady Horsetail	Native	YES	Local
Equisetum variegatum	Variiegated Horsetail	Native	YES	Near scarce
Equisetum x litorale	Shore Horsetail (E. arvense x fluviatile)	Native		Rare
Equisetum x mildeanum	E. pratense x sylvaticum	Native	YES	Rare
Equisetum x rothmaleri	E. arvense x palustre	Native	YES	Rare
Equisetum x trachyodon	Mackay's Horsetail (E. hyemale x variegatum)	Native	YES	Rare
Erigeron acer	Blue Fleabane	Native or neophyte		Rare
Erigeron borealis	Alpine Fleabane	Native	YES	Rare
Erodium cicutarium	Common Stork's-bill	Native		Rare
Erophila glabrescens	Glabrous Whitlowgrass	Native		Not seen since 1961
Eupatorium cannabinum	Hemp-agrimony	Native		Rare

Euphorbia helioscopia	Sun Spurge	Archaeophyte	YES	Scarce
Euphorbia peplus	Petty Spurge	Archaeophyte		Not seen since 1975
Euphrasia arctica		Native		Rare
Euphrasia arctica subsp. arctica		Native	YES	Not seen since 1983
Euphrasia arctica subsp. borealis		Native	YES	Near scarce
Euphrasia confusa		Native	YES	Rare
Euphrasia confusa x scottica		Native	YES	Not seen since 1974
Euphrasia frigida		Native	YES	Scarce
Euphrasia frigida x scottica		Native	YES	Not seen since 1980
Euphrasia micrantha		Native	YES	Near scarce
Euphrasia nemorosa		Native		Rare
Euphrasia ostenfeldii		Native	YES	Rare
Euphrasia ostenfeldii x scottica		Native	YES	Not seen since 1973
Euphrasia rostkoviana		Native		Not seen since 1890
Euphrasia stricta		Native	YES	Rare
Euphrasia x difformis	E. arctica x micrantha	Native	YES	Not seen since 1983
Euphrasia x electa	E. micrantha x scottica	Native	YES	Not seen since 1983
Euphrasia x venusta	E. arctica subsp. borealis x scottica	Native	YES	Not seen since 1983
Fallopia convolvulus	Black-bindweed	Archaeophyte	YES	Scarce
Festuca altissima	Wood Fescue	Native		Rare
Festuca arundinacea	Tall Fescue	Native		Rare
Festuca gigantea	Giant Fescue	Native		Rare
Festuca ovina subsp. hirtula	Sheep's-fescue	Native		Not seen since 1983
Festuca pratensis	Meadow Fescue	Native		Rare
Festuca rubra subsp. arctica		Native	YES	Rare
Filago vulgaris	Common Cudweed	Native	YES	Not seen since pre 1860
Fumaria densiflora	Dense-flowered Fumitory	Archaeophyte		Not seen since 1986
Fumaria muralis	Common Ramping-fumitory	Native		Rare
Fumaria parviflora	Fine-leaved Fumitory	Archaeophyte	YES	Not seen since pre 1986
Fumaria purpurea	Purple Ramping-fumitory	Endemic	YES	Not seen since 1981

<i>Gagea lutea</i>	Yellow Star-of-Bethlehem	Native		Rare
<i>Galeopsis bifida</i>	Bifid Hemp-nettle	Native		Rare
<i>Galeopsis speciosa</i>	Large-flowered Hemp-nettle	Archaeophyte	YES	Rare
<i>Galium mollugo</i>	Hedge Bedstraw	Native		Rare
<i>Galium mollugo</i> subsp. <i>erectum</i>	Upright Hedge-bedstraw	Native		Not seen since 1983
<i>Galium mollugo</i> subsp. <i>mollugo</i>	Hedge Bedstraw	Native		Rare
<i>Galium x pomeranicum</i>	<i>G. mollugo</i> x <i>verum</i>	Native		Rare
<i>Genista anglica</i>	Petty whin	Native	YES	Common
<i>Gentiana nivalis</i>	Alpine Gentian	Native	YES	Rare
<i>Gentianella amarella</i> subsp. <i>amarella</i>	Autumn Gentian	Native		Rare
<i>Gentianella amarella</i> subsp. <i>septentrionalis</i>		Native	YES	Scarce
<i>Gentianella campestris</i>	Field Gentian	Native	YES	Frequent
<i>Geranium columbinum</i>	Long-stalked Crane's-bill	Native	YES	Rare
<i>Geranium pusillum</i>	Small-flowered Crane's-bill	Native		Rare
<i>Geranium sanguineum</i>	Bloody Crane's-bill	Native		Rare
<i>Geum x intermedium</i>	<i>G. rivale</i> x <i>urbanum</i>	Native		Rare
<i>Glyceria maxima</i>	Reed Sweet-grass	Native		Rare
<i>Glyceria notata</i>	Plicate Sweet-grass	Native		Rare
<i>Glyceria x pedicellata</i>	<i>G. fluitans</i> x <i>notata</i>	Native		Not seen since 1961
<i>Gnaphalium norvegicum</i>	Highland Cudweed	Native	YES	Rare
<i>Gnaphalium supinum</i>	Dwarf Cudweed	Native	YES	Local
<i>Gnaphalium sylvaticum</i>	Heath Cudweed	Native	YES	Frequent
<i>Gymnadenia borealis</i> x <i>Dactylorhiza incarnata</i>		Native	YES	Rare
<i>Gymnadenia conopsea</i> ssp. <i>conopsea</i>	Chalk Fragrant-orchid	Native		Rare
<i>Gymnadenia conopsea</i> ssp. <i>densiflora</i>	Marsh Fragrant-orchid	Native		Rare
<i>Hieracium acroleucum</i>	Pale-headed Hawkweed	Native	YES	Not seen since 1890
<i>Hieracium aggregatum</i>	Aggregate-headed Hawkweed	Scottish endemic	YES	Rare
<i>Hieracium alpinum</i>	Alpine Hawkweed	Native	YES	Rare
<i>Hieracium ampliatum</i>	Shaggy-stalked Hawkweed	Endemic	YES	Rare
<i>Hieracium amydrostictum</i>	Pale-spotted Hawkweed	Scottish endemic	YES	Rare
<i>Hieracium anfractiforme</i>	Jagged-toothed Hawkweed	Scottish endemic	YES	Not seen since 1974
<i>Hieracium anglicum</i>	English Hawkweed	Endemic	YES	Rare

Hieracium aphyllopodioides	Broad-leaved Hawkweed	Scottish endemic	YES	Not seen since 1895
Hieracium argenteum	Silvery Hawkweed	Native		Rare
Hieracium atriglandulosum	Black-glandular Hawkweed	Scottish endemic	YES	Rare
Hieracium backhousei	Backhouse's Hawkweed	Cairngorms endemic	YES	Rare
Hieracium beebyanum	Beeby's Hawkweed	Endemic	YES	Not seen since 1950
Hieracium breadalbanense	Breadalbane Hawkweed	Scottish endemic	YES	Not seen since 1905
Hieracium caesiomurorum	Long-stalked Hawkweed	Native	YES	Rare
Hieracium caledonicum	Caledonian Hawkweed	Scottish endemic	YES	Not seen since 1973
Hieracium calenduliflorum	Marigold Hawkweed	Scottish endemic	YES	Rare
Hieracium callistophyllum	Beautiful-leaved Hawkweed	Scottish endemic	YES	Rare
Hieracium calvum	Bald-leaved Hawkweed	Cairngorms endemic	YES	Rare
Hieracium carpathicum	Perth Hawkweed	Cairngorms endemic	YES	Rare
Hieracium centripetale	Velvet-headed Hawkweed	Scottish endemic	YES	Rare
Hieracium cerinthiforme	Clasping-leaved Hawkweed	Endemic	YES	Rare
Hieracium chloranthum	Green-flowered Hawkweed	Scottish endemic	YES	Rare
Hieracium clovense	Clova Hawkweed	Scottish endemic	YES	Rare
Hieracium completum	Complete Hawkweed	Cairngorms endemic	YES	Rare
Hieracium cravoniense	Craven Hawkweed	Endemic	YES	Rare
Hieracium cremnanthes	Cliff Hawkweed	Scottish endemic	YES	Rare
Hieracium crinellum	Blunt-leaved Hawkweed	Native	YES	Not seen since 1969
Hieracium cuspidens	Cusped-toothed Hawkweed	Scottish endemic	YES	Rare
Hieracium dasythrix	Dense-haired Hawkweed	Scottish endemic	YES	Not seen since 1977
Hieracium deganwyense	Deganwy Hawkweed	Endemic	YES	Rare
Hieracium dewari	Dewar's Hawkweed	Scottish Endemic	YES	Not seen since 1914
Hieracium diaphanoides	Diaphanous Hawkweed	Native	YES	Rare
Hieracium dipteroides	Aberfeldy Hawkweed	Scottish endemic	YES	Rare
Hieracium duriceps	Hard-headed Hawkweed	Endemic	YES	Rare
Hieracium einichense	Glen Einich Hawkweed	Cairngorms endemic	YES	Rare

Hieracium elongatifolium	Elongate-leaved Hawkweed	Scottish endemic	YES	Rare
Hieracium eximium	Hirsute Hawkweed	Scottish endemic	YES	Rare
Hieracium eximium var. eximium	Hirsute Hawkweed	Scottish endemic	YES	Rare
Hieracium eximium var. tenellum	Hirsute Hawkweed	Scottish endemic	YES	Rare
Hieracium flocculipubens	Floccose Hawkweed	Endemic	YES	Rare
Hieracium flocculosiforme	Small-toothed Hawkweed	Endemic	YES	Not seen since 1967
Hieracium flocculosum	Stellate-haired Hawkweed	Endemic	YES	Rare
Hieracium fratrum	Shale Hawkweed	Endemic	YES	Not seen since 1961
Hieracium fucatifolium	Painted-leaved Hawkweed	Scottish endemic	YES	Not seen since 1983
Hieracium glandulidens	Glandular-toothed Hawkweed	Endemic	YES	Not seen since 1977
Hieracium globosiflorum	Round-headed Hawkweed	Cairngorms endemic	YES	Rare
Hieracium gothicoides	Broad-headed Hawkweed	Scottish endemic	YES	Rare
Hieracium gracilifolium	Slender-leaved Hawkweed	Scottish endemic	YES	Rare
Hieracium grampianum	Grampian Hawkweed	Scottish endemic	YES	Rare
Hieracium graniticola	Granite Hawkweed	Cairngorms endemic	YES	Rare
Hieracium grovesii	Groves's Hawkweed	Cairngorms endemic	YES	Rare
Hieracium hanburyi	Hanbury's Hawkweed	Scottish endemic	YES	Rare
Hieracium hanburyi f. atraticeps	Hanbury's Hawkweed	Scottish endemic	YES	Not seen since 1981
Hieracium hanburyi f. hanburyi	Hanbury's Hawkweed	Scottish endemic	YES	Rare
Hieracium hanburyi f. pusillum	Hanbury's Hawkweed	Scottish endemic	YES	Not seen since 1982
Hieracium hebridense	Hebridean Hawkweed	Endemic	YES	Rare
Hieracium holosericeum	Shaggy Hawkweed	Endemic	YES	Rare
Hieracium insigne	Noble Hawkweed	Scottish endemic	YES	Rare
Hieracium iricum	Erin Hawkweed	Native	YES	Rare
Hieracium irregularidens	Blunt-toothed Hawkweed	Scottish endemic	YES	Rare
Hieracium isabellae	Isabel's Hawkweed	Scottish endemic	YES	Rare
Hieracium laetificum	Black-headed Hawkweed	Scottish endemic	YES	Rare
Hieracium lagganense	Laggan Hawkweed	Scottish endemic	YES	Rare
Hieracium lanceolatum	Braemar Hawkweed	Cairngorms endemic	YES	Rare

Hieracium langwellense	Langwell Hawkweed	Endemic	YES	Rare
Hieracium larigense	Lairig Hawkweed	Cairngorms endemic	YES	Rare
Hieracium lasiophyllum	Stiff-haired Hawkweed	Native	YES	Rare
Hieracium latobrigorum	Yellow-styled Hawkweed	Native		Rare
Hieracium lingulatum	Oblong-leaved Hawkweed	Scottish endemic	YES	Rare
Hieracium macrocarpum	Large-fruited Hawkweed	Scottish endemic	YES	Not seen since 1980
Hieracium magniceps	Large-headed Hawkweed	Cairngorms endemic	YES	Rare
Hieracium maritimum	Maritime Hawkweed	Endemic	YES	Not seen since 1953
Hieracium marshallii	Marshall's Hawkweed	Scottish endemic	YES	Rare
Hieracium melanochloricephalum	Sombre-headed Hawkweed	Cairngorms endemic	YES	Rare
Hieracium melanoglochin	Dark-headed Hawkweed	Scottish endemic	YES	Not seen since 1975
Hieracium memorabile	Memorable Hawkweed	Scottish endemic	YES	Rare
Hieracium milesii	Miles's Hawkweed	Cairngorms endemic	YES	Rare
Hieracium molybdochroum	Mountain Hawkweed	Native	YES	Rare
Hieracium nigrifactum	Dusky-headed Hawkweed	Scottish endemic	YES	Rare
Hieracium nitidum	Shining-leaved Hawkweed	Scottish endemic	YES	Rare
Hieracium oistophyllum	Sagittate-leaved Hawkweed	Native	YES	Rare
Hieracium orcadense	Orkney Hawkweed	Native	YES	Rare
Hieracium orimeles	Pale Hawkweed	Endemic	YES	Rare
Hieracium orithales	Short-stemmed Hawkweed	Scottish endemic	YES	Rare
Hieracium oxybeles	Pointed-leaved Hawkweed	Endemic	YES	Rare
Hieracium petrocharis	Crag Hawkweed	Scottish endemic	YES	Rare
Hieracium pictorum	Picts Hawkweed	Scottish endemic	YES	Rare
Hieracium piligerum	Brindled Hawkweed	Endemic	YES	Rare
Hieracium prenanthoides	Rough-leaved Hawkweed	Native	YES	Rare
Hieracium pruinae	Pruinose Hawkweed	Scottish endemic	YES	Rare
Hieracium pseudanglicoides	Entire-leaved Hawkweed	Scottish endemic	YES	Rare
Hieracium pseudanglicum	Upland Hawkweed	Scottish endemic	YES	Rare
Hieracium pseudocurvatum	Cairngorm Hawkweed	Cairngorms	YES	Not seen since 1979

Hieracium pseudopetiolatum	Narrow-leaved Hawkweed	endemic Cairngorms	YES	Rare
Hieracium reayense	Reay Hawkweed	endemic Endemic	YES	Rare
Hieracium reticulatiforme	Reticulate-leaved Hawkweed	Endemic	YES	Not seen since 1984
Hieracium rhomboides	Rhombic-leaved Hawkweed	Native	YES	Not seen since 1953
Hieracium rubicundiforme	Rubicund Hawkweed	Endemic	YES	Rare
Hieracium rubiginosum	Rusty-red Hawkweed	Endemic	YES	Rare
Hieracium sabaudum	Autumn Hawkweed	Native		Rare
Hieracium saxorum	Rock Hawkweed	Endemic	YES	Rare
Hieracium scabrisetum	Scabrous Hawkweed	Endemic	YES	Not seen since 1959
Hieracium schmidtii	Schmidt's Hawkweed	Native	YES	Not seen since 1964
Hieracium scoticum	Scottish Hawkweed	Native	Yes	Not seen since 1892
Hieracium senescens	Tufted-hair Hawkweed	Endemic	YES	Rare
Hieracium shoobredii	Shoobred's Hawkweed	Endemic	YES	Rare
Hieracium silvaticoides	Wood Hawkweed	Endemic	YES	Rare
Hieracium sinuans	Wavy-leaved Hawkweed	Scottish endemic	YES	Rare
Hieracium sommerfeltii	Sommerfelt's Hawkweed	Endemic	YES	Not seen since 1949
Hieracium sparsifolium	Sparse-leaved Hawkweed	Native		Not seen since 1916
Hieracium stenopholidium	Western Hawkweed	Native	YES	Rare
Hieracium stewartii	Stewart's Hawkweed	Endemic	YES	Rare
Hieracium strictiforme	Strict Hawkweed	Native		Rare
Hieracium subcrocatum	Dark-styled Hawkweed	Endemic?	YES	Not seen since 1914
Hieracium subhirtum	Hairy-headed Hawkweed	Scottish endemic	YES	Rare
Hieracium sublasiophyllum	Slender-bracted Hawkweed	Native	YES	Not seen since 1953
Hieracium subrubicundum	Large-leaved Hawkweed	Native	YES	Not seen since 1975
Hieracium substrigosum	Long-haired Hawkweed	Endemic	YES	Not seen since 1906
Hieracium subtenuae	Dark-bracted Hawkweed	Scottish endemic	YES	Rare
Hieracium subtenuifrons	Highland Hawkweed	Scottish Endemic	YES	Rare
Hieracium subumbellatiforme	Slender Hawkweed	Scottish endemic	YES	Rare
Hieracium triviale	Grey-headed Hawkweed	Native	YES	Not seen since 1905
Hieracium uiginskyense	Uig Hawkweed	Endemic	YES	Rare

Hieracium umbellatum	Umbellate Hawkweed	Native		Rare
Hieracium vennicontium	Vennicontes' Hawkweed	Endemic	YES	Rare
Homogyne alpina	Purple Colt's-foot	Native or neophyte	YES	Rare
Hyacinthoides non-scripta	Bluebell	Native	YES	Rare
Hymenophyllum wilsonii	Wilson's Filmy-fern	Native	YES	Rare
Hypericum hirsutum	Hairy St John's-wort	Native	YES	Rare
Hypericum humifusum	Trailing St John's-wort	Native		Rare
Hypericum maculatum subsp. maculatum	Imperforate St John's-wort	Native		Not seen since 1968
Hypericum tetrapterum	Square-stalked St John's-wort	Native		Rare
Hypericum x desetangsii	H. maculatum x perforatum	Native		Rare
Hypericum x desetangsii nothosubsp. carinthiacum	H. maculatum ssp. maculatum x perforatum	Native		Not seen since 1978
Inula helenium	Elecampane	Archaeophyte		Not seen since 1950
Isoetes echinospora	Spring Quillwort	Native		Rare
Juncus alpinoarticulatus	Alpine Rush	Native	YES	Near scarce
Juncus alpinoarticulatus subsp. nodulosus	Alpine Rush	Native	YES	Rare
Juncus balticus	Baltic Rush	Native	YES	Rare
Juncus biglumis	Two-flowered Rush	Native	YES	Rare
Juncus castaneus	Chestnut Rush	Native	YES	Scarce
Juncus x kern-reichgeltii	J. conglomeratus x effusus	Native		Rare
Juncus x surrejanus	J. acutiflorus x articulatus	Native		Rare
Juniperus communis	Juniper	Native	YES	Very common
Juniperus communis subsp. communis	Common Juniper	Native	YES	Frequent
Juniperus communis subsp. nana	Dwarf Juniper	Native	YES	Rare
Knautia arvensis	Field Scabious	Native		Rare
Kobresia simpliciuscula	False Sedge	Native	YES	Scarce
Lamium amplexicaule	Henbit Dead-nettle	Archaeophyte		Rare
Lamium confertum	Northern Dead-nettle	Archaeophyte		Rare
Lamium hybridum	Cut-leaved Dead-nettle	Archaeophyte		Rare
Lathraea squamaria	Toothwort	Native		Not seen since pre 1986
Lepidium campestre	Field Pepperwort	Archaeophyte	YES	Rare

<i>Linaria repens</i>	Pale Toadflax	Archaeophyte		Rare
<i>Linnaea borealis</i>	Twinflower	Native	YES	Local
<i>Linum bienne</i>	Pale Flax	Native		Rare
<i>Listera ovata</i>	Common Twayblade	Native		Rare
<i>Lithospermum arvense</i>	Field Gromwell	Archaeophyte	YES	Not seen since 1955
<i>Lithospermum officinale</i>	Common Gromwell	Native	YES	Not seen since 1834
<i>Luzula arcuata</i>	Curved Wood-rush	Native	YES	Scarce
<i>Lychnis alpina</i>	Alpine Catchfly	Native	YES	Rare
<i>Lycopodiella inundata</i>	Marsh Clubmoss	Native	YES	Rare
<i>Lycopodium annotinum</i>	Interrupted Clubmoss	Native	YES	Frequent
<i>Lycopodium lagopus</i>	One-cone Clubmoss	Native	YES	Rare
<i>Lycopus europaeus</i>	Gypsywort	Native		Not seen since 1971
<i>Lysimachia thyrsoflora</i>	Tufted Loosestrife	Native	YES	Rare
<i>Lysimachia vulgaris</i>	Yellow Loosestrife	Native		Rare
<i>Lythrum portula</i>	Water-purslane	Native		Rare
<i>Lythrum salicaria</i>	Purple-loosestrife	Native		Rare
<i>Malus sylvestris</i>	Crab Apple	Native		Rare
<i>Malva sylvestris</i>	Common Mallow	Archaeophyte		Rare
<i>Matricaria recutita</i>	Scented Mayweed	Archaeophyte		Rare
<i>Medicago lupulina</i>	Black Medick	Native		Rare
<i>Melampyrum sylvaticum</i>	Small Cow-wheat	Native	YES	Rare
<i>Melica uniflora</i>	Wood Melick	Native		Rare
<i>Mentha arvensis</i>	Corn Mint	Native	YES	Rare
<i>Mentha suaveolens</i>	Round-leaved Mint	Native	YES	Rare
<i>Mentha x verticillata</i>	Whorled Mint (<i>M. aquatica</i> x <i>arvensis</i>)	Native		Rare
<i>Meum athamanticum</i>	Spignel	Native	YES	Near scarce
<i>Milium effusum</i>	Wood Millet	Native		Rare
<i>Minuartia rubella</i>	Mountain Sandwort	Native	YES	Rare
<i>Minuartia sedoides</i>	Cyphel	Native	YES	Rare
<i>Minuartia verna</i>	Spring Sandwort	Native	YES	Rare
<i>Moneses uniflora</i>	One-flowered Wintergreen	Native	YES	Rare

<i>Monotropa hypopitys</i>	Yellow Bird's-nest	Native	YES	Rare
<i>Montia fontana</i> subsp. <i>amporitana</i>	Blinks	Native		Not seen since 1912
<i>Montia fontana</i> subsp. <i>variabilis</i>	Blinks	Native		Not seen since 1983
<i>Mycelis muralis</i>	Wall Lettuce	Native		Rare
<i>Myosotis ramosissima</i>	Early Forget-me-not	Native		Rare
<i>Myriophyllum spicatum</i>	Spiked Water-milfoil	Native		Rare
<i>Neottia nidus-avis</i>	Bird's-nest Orchid	Native	YES	Rare
<i>Nuphar lutea</i>	Yellow Water-lily	Native		Rare
<i>Nuphar pumila</i>	Least Water-lily	Native	YES	Scarce
<i>Nymphaea alba</i> subsp. <i>occidentalis</i>	White Water-lily	Native	YES	Not seen since 1973
<i>Ononis repens</i>	Common Restharrow	Native		Rare
<i>Ophioglossum vulgatum</i>	Adder's-tongue	Native		Not seen since 1980
<i>Orchis morio</i>	Green-winged Orchid	Native	YES	Not seen since 1958
<i>Origanum vulgare</i>	Wild Marjoram	Native		Rare
<i>Oxytropis campestris</i>	Yellow Oxytropis	Native	YES	Rare
<i>Papaver argemone</i>	Prickly Poppy	Archaeophyte	YES	Rare
<i>Papaver rhoeas</i>	Common Poppy	Archaeophyte		Rare
<i>Paris quadrifolia</i>	Herb-paris	Native		Rare
<i>Persicaria amphibia</i>	Amphibious Bistort	Native		Rare
<i>Persicaria hydropiper</i>	Water-pepper	Native		Rare
<i>Persicaria lapathifolia</i>	Pale Persicaria	Native		Rare
<i>Petasites hybridus</i>	Butterbur	Native		Rare
<i>Peucedanum ostruthium</i>	Masterwort	Archaeophyte	YES	Rare
<i>Phleum alpinum</i>	Alpine Cat's-tail	Native	YES	Scarce
<i>Phleum bertolonii</i>	Smaller Cat's-tail	Native		Rare
<i>Phyllitis scolopendrium</i>	Hart's-tongue	Native		Rare
<i>Phyllodoce caerulea</i>	Blue Heath	Native	YES	Rare
<i>Pilosella x stoloniflora</i>	<i>P. aurantiaca x officinarum</i>	Native or neophyte	YES	Not seen since 1968
<i>Pilularia globulifera</i>	Pillwort	Native	YES	Rare
<i>Pinus sylvestris</i>	Scots Pine	Native	YES	Very common
<i>Pinus sylvestris</i> subsp. <i>scotica</i>	Scots Pine	Native	YES	Near scarce

Plantago major subsp. intermedia	Greater Plantain	Native		Not seen since pre 1986
Platanthera bifolia	Lesser Butterfly-orchid	Native	YES	Scarce
Platanthera chlorantha	Greater Butterfly-orchid	Native	YES	Rare
Poa alpina	Alpine Meadow-grass	Native	YES	Scarce
Poa angustifolia	Narrow-leaved Meadow-grass	Native		Rare
Poa flexuosa	Wavy Meadow-grass	Native	YES	Rare
Poa glauca	Glaucous Meadow-grass	Native	YES	Scarce
Poa x jemtlandica	P. alpina x flexuosa	Native	YES	Not seen since 1950
Polygala vulgaris subsp. collina	Common Milkwort	Native	YES	Not seen since 1951
Polygonatum verticillatum	Whorled Solomon's-seal	Native	YES	Rare
Polygonum arenastrum	Equal-leaved Knotgrass	Archaeophyte		Rare
Polygonum rurivagum	Cornfield Knotgrass	Archaeophyte	YES	Not seen since 1890
Polypodium interjectum	Intermediate Polypody	Native		Rare
Polypodium x mantoniae	P. interjectum x vulgare	Native		Rare
Polystichum lonchitis	Holly-fern	Native	YES	Local
Polystichum x illyricum	P. aculeatum x lonchitis	Native	YES	Rare
Potamogeton alpinus	Red Pondweed	Native		Rare
Potamogeton crispus	Curled Pondweed	Native		Rare
Potamogeton filiformis	Slender-leaved Pondweed	Native	YES	Rare
Potamogeton pectinatus	Fennel Pondweed	Native		Rare
Potamogeton praelongus	Long-stalked Pondweed	Native	YES	Rare
Potamogeton pusillus	Lesser Pondweed	Native		Rare
Potamogeton x nitens	P. gramineus x perfoliatus	Native		Rare
Potamogeton x sparganiifolius	P. gramineus x natans	Native	YES	Rare
Potamogeton x zizii	P. gramineus x lucens	Native	YES	Rare
Potentilla anglica	Trailing Tormentil	Native		Rare
Potentilla crantzii	Alpine Cinquefoil	Native	YES	Near scarce
Potentilla neumanniana	Spring Cinquefoil	Native	YES	Not seen since 1958
Potentilla reptans	Creeping Cinquefoil	Native		Rare
Potentilla x beckii	P. crantzii x neumanniana	Native	YES	Not seen since 1953
Primula x polyantha	False Oxlip (P. veris x vulgaris)	Native		Rare

Prunus cerasus	Dwarf Cherry	Archaeophyte		Rare
Prunus domestica	Wild Plum	Archaeophyte		Rare
Prunus domestica subsp. domestica	Plum	Archaeophyte		Rare
Prunus domestica subsp. insititia	Damson / Bullace	Archaeophyte		Not seen since 1975
Pseudorchis albida	Small-white Orchid	Native	YES	Scarce
Pseudorchis albida x Gymnadenia borealis		Native	YES	Rare
Pteridium pinetorum subsp. pinetorum		Native	YES	Not seen since 1983
Pyrola media	Intermediate Wintergreen	Native	YES	Frequent
Pyrola rotundifolia subsp. rotundifolia	Round-leaved Wintergreen	Native	YES	Scarce
Quercus x rosacea	Q. petraea x robur	Native		Rare
Ranunculus acris var. pumilus		Native	YES	Rare
Ranunculus aquatilis	Common Water-crowfoot	Native		Rare
Ranunculus auricomus	Goldilocks Buttercup	Native		Rare
Ranunculus flammula subsp. scoticus		Native	YES	Rare
Ranunculus fluitans	River Water-crowfoot	Native		Rare
Ranunculus lingua	Greater Spearwort	Native		Rare
Ranunculus peltatus	Pond Water-crowfoot	Native		Rare
Ranunculus penicillatus	Stream Water-crowfoot	Native		Rare
Ranunculus trichophyllus	Thread-leaved Water-crowfoot	Native		Rare
Ranunculus x levenensis	R. flammula x reptans	Native	YES	Rare
Raphanus raphanistrum	Radish	Archaeophyte		Rare
Raphanus raphanistrum subsp. raphanistrum	Wild Radish	Archaeophyte		Rare
Raphanus raphanistrum subsp. raphanistrum var. aureus		Archaeophyte		Not seen since 1981
Raphanus raphanistrum subsp. raphanistrum var. flavus		Archaeophyte		Not seen since 1973
Raphanus raphanistrum subsp. raphanistrum var. raphanistrum		Archaeophyte		Not seen since 1955
Reseda luteola	Weld	Archaeophyte		Rare
Rhinanthus minor subsp. borealis	Yellow-rattle	Native	YES	Rare
Rhinanthus minor subsp. lintonii	Yellow-rattle	Native	YES	Rare
Rhinanthus minor subsp. monticola	Yellow-rattle	Native	YES	Rare
Rhinanthus minor subsp. stenophyllus	Yellow-rattle	Native		Rare
Rhynchospora alba	White Beak-sedge	Native		Rare

<i>Ribes spicatum</i>	Downy Currant	Native	YES	Scarce
<i>Rorippa islandica</i>	Northern Yellow-cress	Native	YES	Rare
<i>Rorippa microphylla</i>	Narrow-fruited Water-cress	Native		Rare
<i>Rorippa nasturtium-aquaticum</i>	Water-cress	Native		Rare
<i>Rorippa palustris</i>	Marsh Yellow-cress	Native		Not seen since 1985
<i>Rorippa sylvestris</i>	Creeping Yellow-cress	Native		Rare
<i>Rorippa x sterilis</i>	<i>R. microphylla x nasturtium-aquaticum</i>	Native		Rare
<i>Rosa caesia sens. lat. x rubiginosa</i>	(fxm or mxf)	Native	YES	Not seen since 1887
<i>Rosa caesia sens. lat. x sherardii</i>	(fxm or mxf)	Native		Rare
<i>Rosa caesia subsp. caesia</i>	Hairy Dog-rose	Native		Rare
<i>Rosa caesia subsp. caesia x canina</i>	(fxm or mxf)	Native		Rare
<i>Rosa caesia subsp. caesia x sherardii</i>	(fxm or mxf)	Native		Rare
<i>Rosa caesia subsp. glauca x canina</i>	(fxm or mxf)	Native		Rare
<i>Rosa caesia subsp. glauca x mollis</i>	(fxm or mxf)	Native		Rare
<i>Rosa caesia subsp. glauca x rubiginosa</i>	(fxm or mxf)	Native		Not seen since 1901
<i>Rosa caesia subsp. glauca x sherardii</i>	(fxm or mxf)	Native		Rare
<i>Rosa mollis x caesia subsp. caesia</i>	female x male	Native		Rare
<i>Rosa rubiginosa</i>	Sweet-briar	Native		Rare
<i>Rosa tomentosa</i>	Harsh Downy-rose	Native	YES	Rare
<i>Rosa x biturigenensis</i>	<i>Rosa pimpinellifolia x rubiginosa (fxm or mxf)</i>	Native	YES	Not seen since 1975
<i>Rosa x glaucoides</i>	<i>Rosa caesia sens. lat. x mollis (fxm or mxf)</i>	Native		Not seen since 1976
<i>Rosa x involuta</i>	<i>Rosa pimpinellifolia x sherardii (fxm or mxf)</i>	Native	YES	Not seen since 1905
<i>Rosa x molletorum</i>	<i>Rosa canina x mollis (fxm or mxf)</i>	Native		Not seen since 1895
<i>Rosa x molliformis</i>	<i>Rosa mollis x rubiginosa (fxm or mxf)</i>	Native	YES	Rare
<i>Rosa x sabinii</i>	<i>Rosa mollis x pimpinellifolia (mxf or fxm)</i>	Native	YES	Not seen since 1924
<i>Rosa x shoobredii</i>	<i>Rosa mollis x sherardii (fxm or mxf)</i>	Native	YES	Rare
<i>Rosa x suberecta</i>	<i>Rosa rubiginosa x sherardii (fxm or mxf)</i>	Native	YES	Rare
<i>Rubus arcticus</i>	Arctic Bramble	Native	YES	Not seen since 1898
<i>Rubus caesius</i>	Dewberry	Native	YES	Rare
<i>Rubus echinatoides</i>		Endemic	YES	Not seen since pre 1988
<i>Rubus fissus</i>		Endemic	YES	Not seen since pre

Rubus furvicolor		Scottish endemic	YES	1988 Not seen since pre 1988
Rubus latifolius		Endemic	YES	Not seen since pre 1988
Rubus leptothyrsos		Native		Rare
Rubus mucronulatus		Native		Rare
Rubus plicatus		Native		Not seen since pre 1988
Rubus radula		Native		Not seen since pre 1988
Rubus scissus		Native		Rare
Rubus septentrionalis		Native		Rare
Rumex acetosella subsp. acetosella var. tenuifolius	Sheep's Sorrel	Native		Rare
Rumex conglomeratus	Clustered Dock	Native		Rare
Rumex pseudoalpinus	Monk's-rhubarb	Archaeophyte	YES	Rare
Rumex sanguineus	Wood Dock	Native		Rare
Rumex sanguineus var. viridis	Wood Dock	Native		Not seen since 1912
Rumex x pratensis	R. crispus x obtusifolius	Native		Rare
Rumex x propinquus	R. crispus x longifolius	Native		Rare
Sagina apetala subsp. apetala	Annual Pearlwort	Native		Rare
Sagina saginoides	Alpine Pearlwort	Native	YES	Scarce
Sagina x normaniana	S. procumbens x saginoides	Native	YES	Scarce
Salix alba	White Willow	Archaeophyte		Rare
Salix arbuscula	Mountain Willow	Native	YES	Rare
Salix aurita x herbacea x lapponum		Cairngorms endemic	YES	Rare
Salix aurita x lapponum x repens		Native	YES	Rare
Salix aurita x myrsinites		Native	YES	Not seen since 1900
Salix caprea subsp. sphacelata		Native	YES	Rare
Salix caprea x myrsinifolia x phyllicifolia		Endemic	YES	Rare
Salix caprea x phyllicifolia		Native	YES	Rare
Salix cinerea subsp. cinerea	Grey Willow	Native		Not seen since 1973

Salix cinerea x myrsinifolia		Native	YES	Rare
Salix herbacea x lanata x myrsinites		Native	YES	Rare
Salix herbacea x myrsinites		Native	YES	Rare
Salix lanata	Woolly Willow	Native	YES	Scarce
Salix lanata x lapponum		Cairngorms endemic	YES	Rare
Salix lapponum	Downy Willow	Native	YES	Local
Salix lapponum x myrsinifolia		Cairngorms endemic	YES	Rare
Salix lapponum x myrsinifolia x phylicifolia		Native	YES	Rare
Salix lapponum x myrsinites		Native	YES	Rare
Salix myrsinifolia x myrsinites x phylicifolia		Scottish endemic	YES	Rare
Salix myrsinifolia x phylicifolia x repens		Endemic	YES	Rare
Salix myrsinites	Whortle-leaved Willow	Native	YES	Scarce
Salix pentandra	Bay Willow	Native		Rare
Salix phylicifolia x repens		Scottish endemic	YES	Rare
Salix purpurea	Purple Willow	Native		Rare
Salix repens var. argentea		Native		Not seen since 1974
Salix reticulata	Net-leaved Willow	Native	YES	Rare
Salix viminalis	Osier	Archaeophyte		Rare
Salix x capreola	S. aurita x caprea	Native	YES	Not seen since 1933
Salix x cernua	S. herbacea x repens	Native	YES	Rare
Salix x coriacea	S. aurita x myrsinifolia	Native	YES	Rare
Salix x felina	S. myrsinifolia x repens	Native	YES	Rare
Salix x fruticosa	S. aurita x viminalis	Native	YES	Rare
Salix x laestadiana	S. caprea x lapponum	Native	YES	Rare
Salix x laschiana	S. caprea x repens	Native	YES	Rare
Salix x latifolia	S. caprea x myrsinifolia	Native	YES	Rare
Salix x laurina	S. cinerea x phylicifolia	Native	YES	Rare
Salix x ludificans	S. aurita x phylicifolia	Native	YES	Rare
Salix x margarita	S. aurita x herbacea	Native	YES	Rare
Salix x obtusifolia	S. aurita x lapponum	Native	YES	Rare
Salix x pithoensis	S. lapponum x repens	Native	YES	Rare

Salix x pseudospuria	S. arbuscula x lapponum	Native	YES	Rare
Salix x punctata	S. myrsinifolia x myrsinites	Native	YES	Rare
Salix x reichardtii	S. caprea x cinerea	Native		Rare
Salix x sadleri	S. herbacea x lanata	Native	YES	Rare
Salix x saxetana	S. aurita x myrsinifolia x phylicifolia	Native	YES	Rare
Salix x sericans	S. caprea x viminalis	Native		Rare
Salix x smithiana	S. cinerea x viminalis	Native		Rare
Salix x sobrina	S. herbacea x lapponum	Native	YES	Rare
Salix x subsericea	S. cinerea x repens	Native	YES	Rare
Salix x tetrapla	S. myrsinifolia x phylicifolia	Native	YES	Scarce
Sambucus ebulus	Dwarf Elder	Archaeophyte	YES	Rare
Sanguisorba officinalis	Great Burnet	Native or neophyte		Rare
Saponaria officinalis	Soapwort	Archaeophyte		Rare
Saxifraga cespitosa	Tufted Saxifrage	Native	YES	Rare
Saxifraga granulata	Meadow Saxifrage	Native		Rare
Saxifraga hirculus	Marsh Saxifrage	Native	YES	Rare
Saxifraga hypnoides	Mossy Saxifrage	Native	YES	Scarce
Saxifraga nivalis	Alpine Saxifrage	Native	YES	Rare
Saxifraga rivularis	Highland Saxifrage	Native	YES	Rare
Saxifraga tridactylites	Rue-leaved Saxifrage	Native		Rare
Scandix pecten-veneris	Shepherd's-needle	Archaeophyte	YES	Not seen since 1891
Schoenoplectus lacustris	Common Club-rush	Native		Rare
Schoenus ferrugineus	Brown Bog-rush	Native	YES	Rare
Schoenus nigricans	Black Bog-rush	Native		Rare
Scleranthus annuus	Annual Knawel	Native	YES	Rare
Sedum album	White Stonecrop	Archaeophyte		Rare
Sedum telephium	Orpine	Native		Rare
Sedum telephium subsp. fabaria		Native		Not seen since 1975
Sedum villosum	Hairy Stonecrop	Native	YES	Rare
Senecio erucifolius	Hoary Ragwort	Native		Not seen since 1956
Senecio x ostenfeldii	S. jacobea x aquaticus	Native		Rare

Sherardia arvensis	Field Madder	Native	YES	Rare
Sibbaldia procumbens	Sibbaldia	Native	YES	Near scarce
Silene gallica	Small-flowered Catchfly	Archaeophyte	YES	Rare
Silene uniflora	Sea Campion	Native		Rare
Silene vulgaris	Bladder Campion	Native		Rare
Silene vulgaris subsp. vulgaris	Bladder Campion	Native		Rare
Silene x hampeana	Pink Campion (<i>S. dioica</i> x <i>latifolia</i>)	Native		Rare
Sinapis arvensis	Charlock	Archaeophyte	YES	Scarce
Smyrniolum olusatrum	Alexanders	Archaeophyte		Rare
Solanum dulcamara	Bittersweet	Native		Rare
Sonchus arvensis	Perennial Sow-thistle	Native		Rare
Sorbus rupicola	Rock Whitebeam	Native	YES	Rare
Sparganium emersum	Unbranched Bur-reed	Native		Rare
Spergula arvensis	Corn Spurrey	Archaeophyte	YES	Near scarce
Spergula arvensis var. sativa		Archaeophyte		Not seen since 1888
Stachys arvensis	Field Woundwort	Archaeophyte	YES	Rare
Stachys x ambigua	Hybrid Woundwort (<i>S. palustris</i> x <i>sylvatica</i>)	Native		Rare
Stellaria nemorum	Wood Stitchwort	Native		Rare
Stellaria pallida	Lesser Chickweed	Native		Rare
Symphytum officinale	Common Comfrey	Native		Rare
Taraxacum argutum		Native		Rare
Taraxacum brachyglossum		Native		Not seen since 1978
Taraxacum bracteatum		Native		Not seen since 1983
Taraxacum caledonicum		Scottish endemic	YES	Not seen since 1982
Taraxacum ceratolobum		Native	YES	Not seen since 1984
Taraxacum clovense		Scottish endemic	YES	Not seen since 1984
Taraxacum craspedotum		Native	YES	Not seen since 1978
Taraxacum cyanolepis		Native		Not seen since 1980
Taraxacum duplidentifrons		Native		Not seen since 1982
Taraxacum ekmanii		Native or neophyte		Not seen since 1982
Taraxacum euryphyllum		Native		Not seen since 1982

Taraxacum fasciatum		Native or neophyte		Not seen since 1982
Taraxacum fulvicarpum		Endemic	YES	Not seen since 1983
Taraxacum gotlandicum		Native	YES	Not seen since 1969
Taraxacum hamatiforme		Native		Not seen since 1982
Taraxacum hamatum		Native		Not seen since 1980
Taraxacum hamiferum		Native or neophyte		Not seen since 1983
Taraxacum haworthianum		Endemic	YES	Not seen since 1982
Taraxacum inane		Endemic	YES	Not seen since 1983
Taraxacum insigne		Native		Not seen since 1982
Taraxacum lacistophyllum		Native		Not seen since 1979
Taraxacum limbatum		Native	YES	Not seen since 1982
Taraxacum luteum		Endemic	YES	Not seen since 1982
Taraxacum maculosum		Native		Rare
Taraxacum naevosiforme		Native		Not seen since 1983
Taraxacum naevosum		Native	YES	Not seen since 1983
Taraxacum nordstedtii		Native		Not seen since 1982
Taraxacum ostenfeldii		Native	YES	Not seen since 1970
Taraxacum polyodon		Native		Not seen since 1983
Taraxacum proximiforme		Native	YES	Not seen since 1979
Taraxacum pseudolarssonii		Native		Not seen since 1982
Taraxacum pycnostictum		Native	YES	Not seen since 1978
Taraxacum scoticum		Endemic	YES	Not seen since 1982
Taraxacum stictophyllum		Native	YES	Not seen since 1967
Taraxacum subbracteatum		Endemic	YES	Not seen since 1982
Taraxacum sublaeticolor		Native	YES	Not seen since (undated)
Taraxacum subnaevosum		Endemic	YES	Not seen since 1982
Taraxacum unguilobum		Native		Not seen since 1983
Teesdalia nudicaulis	Shepherd's Cress	Native	YES	Rare
Thalictrum minus	Lesser Meadow-rue	Native		Rare
Thelypteris palustris	Marsh Fern	Native	YES	Not seen since 1967

Thlaspi arvense	Field Penny-cress	Archaeophyte		Rare
Thlaspi caerulescens	Alpine Penny-cress	Native	YES	Rare
Torilis japonica	Upright Hedge-parsley	Native		Rare
Tragopogon pratensis	Goat's-beard	Native		Rare
Tragopogon pratensis subsp. minor	Goat's-beard	Native		Rare
Trichophorum cespitosum subsp. cespitosum	Deergrass	Native	YES	Scarce
Trisetum flavescens	Yellow Oat-grass	Native		Rare
Typha latifolia	Bulrush	Native		Rare
Ulex gallii	Western Gorse	Native		Rare
Ulmus procera	English Elm	Native or neophyte		Rare
Utricularia australis	Bladderwort	Native		Rare
Utricularia intermedia sens. str.	Intermediate Bladderwort	Native	YES	Rare
Utricularia stygia	Nordic Bladderwort	Native	YES	Rare
Vaccinium microcarpum	Small Cranberry	Native	YES	Local
Vaccinium x intermedium	V. myrtillus x vitis-idaea	Native	YES	Rare
Veronica agrestis	Green Field-speedwell	Archaeophyte		Rare
Veronica alpina	Alpine Speedwell	Native	YES	Near scarce
Veronica anagallis-aquatica	Blue Water-speedwell	Native		Rare
Veronica fruticans	Rock Speedwell	Native	YES	Scarce
Veronica hederifolia	Ivy-leaved Speedwell	Archaeophyte		Rare
Veronica hederifolia subsp. hederifolia	Ivy-leaved Speedwell	Archaeophyte		Rare
Veronica hederifolia subsp. lucorum	Ivy-leaved Speedwell	Archaeophyte		Rare
Veronica montana	Wood Speedwell	Native		Rare
Veronica serpyllifolia subsp. humifusa		Native	YES	Scarce
Viburnum opulus	Guelder-rose	Native		Rare
Vicia orobus	Wood Bitter-vetch	Native	YES	Rare
Vicia sativa subsp. sativa	Common Vetch	Archaeophyte		Not seen since 1963
Vinca minor	Lesser Periwinkle	Archaeophyte		Rare
Viola canina	Heath Dog-violet	Native	YES	Local
Viola hirta	Hairy Violet	Native		Not seen since 1980
Viola lutea x tricolor		Native	YES	Not seen since 1959

Viola tricolor	Wild Pansy	Native	YES	Near scarce
Viola x intersita	V. canina x riviniana	Native	YES	Rare
Vulpia bromoides	Squirreltail Fescue	Native		Rare
Vulpia myuros	Rat's-tail Fescue	Archaeophyte		Rare
Woodsia alpina	Alpine Woodsia	Native	YES	Rare
Woodsia ilvensis	Oblong Woodsia	Native	YES	Rare
X Dactyloдения legrandiana	Gymnadenia conopsea x Dactylorhiza maculata	Native	YES	Not seen since 1949
X Dactyloдения st-quintinii	Gymnadenia borealis x Dactylorhiza fuchsii	Native	YES	Rare
X Festulolium loliaceum	Festuca pratensis x Lolium perenne	Native		Not seen since 1970
Zannichellia palustris	Horned Pondweed	Native		Rare

Appendix 4.

Additional taxa with populations in the CNP of High or Very High GB significance.

Taxon	Vernacular name	Frequency (Cairngorms National Park)	Significance of CNP distribution cf GB
<i>Alchemilla alpina</i>	Alpine Lady's-mantle	Common	High
<i>Alchemilla filicaulis</i> subsp. <i>filicaulis</i>		Near scarce	High
<i>Arctostaphylos uva-ursi</i>	Bearberry	Common	High
<i>Callitriche brutia</i>	Pedunculate Water-starwort	Local	Very high
<i>Carex aquatilis</i>	Water Sedge	Near scarce	High
<i>Carex bigelowii</i>	Stiff Sedge	Frequent	High
<i>Carex pauciflora</i>	Few-flowered Sedge	Frequent	High
<i>Diphasiastrum alpinum</i>	Alpine Clubmoss	Frequent	High
<i>Dryopteris expansa</i>	Northern Buckler-fern	Scarce	High
<i>Empetrum nigrum</i> subsp. <i>hermaphroditum</i>	Mountain Crowberry	Frequent	High
<i>Epilobium alsinifolium</i>	Chickweed Willowherb	Local	High
<i>Epilobium anagallidifolium</i>	Alpine Willowherb	Frequent	Very high
<i>Galium sternerii</i>	Limestone Bedstraw	Local	High
<i>Goodyera repens</i>	Creeping Lady's-tresses	Local	High
<i>Juncus trifidus</i>	Three-leaved Rush	Local	High
<i>Juncus triglumis</i>	Three-flowered Rush	Local	High
<i>Loiseleuria procumbens</i>	Trailing Azalea	Frequent	High
<i>Luzula spicata</i>	Spiked Wood-Rush	Local	High
<i>Melica nutans</i>	Mountain Melick	Near scarce	High
<i>Orthilia secunda</i>	Serrated Wintergreen	Frequent	Very high
<i>Oxyria digyna</i>	Mountain Sorrel	Local	High
<i>Persicaria vivipara</i>	Alpine Bistort	Common	High
<i>Potentilla erecta</i> subsp. <i>strictissima</i>	Tormentil	Near scarce	High
<i>Rosa mollis</i>	Soft Downy-rose	Near scarce	High
<i>Rubus chamaemorus</i>	Cloudberry	Common	High
<i>Salix myrsinifolia</i>	Dark-leaved Willow	Near scarce	High
<i>Salix phylicifolia</i>	Tea-leaved Willow	Near scarce	High

Salix x ambigua	S. aurita x repens	Scarce	High
Saussurea alpina	Alpine Saw-wort	Local	High
Saxifraga aizoides	Yellow Saxifrage	Common	High
Saxifraga oppositifolia	Purple Saxifrage	Frequent	High
Saxifraga stellaris	Starry Saxifrage	Common	High
Tofieldia pusilla	Scottish Asphodel	Frequent	Very high
Trientalis europaea	Chickweed-wintergreen	Common	High
Vaccinium uliginosum	Bog Bilberry	Frequent	High