

East Perthshire Rare Plant Register

March 2015 version

M.C.Robinson



Veronica fruticans Rock Speedwell

1 INTRODUCTION

A Rare Plant Register for the Watsonian Vice-county of East Perthshire (vc89) appeared on-line and in print in April 2011. One of the benefits of collecting all the available records of the vice-county's rare, scarce and otherwise notable plants together in one place was to be able to see at a glance which sites needed an updating visit. This provided a focus for botanical field work in 2011 and 2012, resulting in a new edition in March 2013. This third edition includes the results from two further field seasons

A Register for the vice-county of West Perthshire (vc87) is near to completion and one for Mid Perthshire (vc88) will follow in due course. The work involved in the creation of these registers will enable a revision of the **Checklist of the Plants of Perthshire (Smith et al, 1992)** to be undertaken. In the longer term it is intended to produce a new Flora of Perthshire. The only existing one, **The Flora of Perthshire, by Francis Buchanan White**, was published in 1898, so a new one is long overdue.

No such register can ever be complete and this one must be considered a work in progress. Its two main objectives are

1. To provide information on the more 'special' plants of the vice-county for those needing it.
2. To stimulate botanists to provide more records.

In respect of objective 1, there are a number of reasons why people may need to know where scarce and potentially vulnerable plant species are growing. Various developments, planning issues or proposals for changes of management arise in which such information is sought. The ready provision of the data can in such cases be very much in the plants' best interest.

In respect of objective 2 there has been an encouraging response to the first edition, which appeared on-line in April 2011, but there must still be many records out there that would add to the Register and make it more complete. These would be gratefully received by the Recorder.

There is also a demand from botanists and people with a natural history interest to know where they might find particular plants. Better information will lead to greater interest in and respect for the county's plants. This higher level of awareness can only benefit the environment generally. In those cases, however, where it is felt that a plant may be put in danger by having its whereabouts disclosed the exact site is withheld.

In respect of objective 2, it is hoped that many of the gaps in our knowledge will be as conspicuous as the data itself. Many people who have visited the vice-county to botanise there will see that, by supplying their records, they can add to the sum of our knowledge and help to complete the picture. The Vice-county Recorder will welcome corrections to records as well as updates and new information. These should be sent to: **Martin Robinson, Dalreoch Farm, Enochdhu, Blairgowrie, Perthshire, PH10 7PF** or email **m.robinson888@btinternet.com**

The Register has been produced as an Excel spreadsheet held by the Vice-county Recorder based on data held in MapMate. It is therefore easy to update and it is planned that the on-line version will continue to be updated at least annually.

2 ACKNOWLEDGEMENTS

Thanks are due to Jim McIntosh, Scottish Officer of the BSBI, for his help in too many ways to mention but in particular for his detailed comments on the first draft and for his help with the production of the Register. Bob Ellis also helped with the production. The Register is a compilation of records that have been made by many recorders, be they members of the BSBI, Perth Society of Natural Science, SNH staff or contractors, or visiting botanists, and thanks are due to all. David McCosh went to considerable trouble over ensuring that the *Hieracium* section was correct and Bert Reid supplied the relevant section of the national *Taraxacum* database. Helen Taylor (SNH) allowed use of the data from the 2010 survey of Juniper in Perthshire. Certain people have greatly enhanced the Recorder's knowledge of plants in the Vice-county, prime among whom are Leslie Tucker (willows) and Nick Stewart (water plants). Margaret Bradshaw enabled us to record the genus *Alchemilla* more accurately. Andy Scobie and Theo Loizou kindly supplied datasets in response to the first edition and Andy Amphlett provided all the records held by NESBRec for the Cairngorms National Park part of the vice-county. Finally thanks are due to the many landowners, tenants, keepers and others who have welcomed botanists on to their ground.

3 WATSONIAN VICE-COUNTIES

These date from 1852, when they were set up "to provide a set of unit areas more equal in their dimensions than the counties, 'whose extreme inequality of size was most inconvenient and objectionable' "(Dandy, 1969). The system has long been adopted as standard for biological recording in this country. An important feature is that the boundaries are constant, not changing with the political whims of succeeding generations. Most of East Perth lies within what was originally Perthshire and is now Perth & Kinross, with political changes only affecting parts of the eastern boundary. The southern boundary is the Firth of Tay, the western boundary is the Tay – Tummel – Garry river system, and the northern boundary abuts on Inverness-shire and Aberdeenshire following Grampian watersheds. The eastern boundary, however, follows older lines in some areas: a bulge to the east includes Fowlis and Piper Dam, but to the north of this the Vice-county of Angus bulges westwards into Perth & Kinross to include a block around Gaskhill, Lintrose, Hallyburton and Kettins. There is another, smaller deviation from the modern political boundary to the north of the Forest of Alyth around Blacklunans.

4 PLANT RECORDING IN EAST PERTH

Records since 1970 only are included. In that year a decision was made by the Botanical section of the Perthshire Society of Natural Science to record plants on a 5x5 km (quadrant) basis with a view to eventually producing a new Flora of Perthshire. In 2006 this system was altered and tetrad (2x2 km) recording began. The change was made in order to comply with accepted biological recording methods over the wider UK and especially with practice that had been adopted by the BSBI nationwide. Prior to this the perception had been that it would be impracticable to cover Perthshire fully on a 2x2 km square basis, as there are too many remote areas and too few botanists. This remains the case and no complete tetrad map of every species will ever be produced in a reasonable time-scale. Even an incomplete tetrad map, however, conveys more useful information on habitat use and distribution than a complete quadrant one.

As far as possible, using knowledge of routes and sites, records on the quadrant recording cards have been reallocated to tetrads. The two systems are not entirely

compatible, however, as there are 9 tetrads in each 10x10 km square (hectad) which overlap with quadrants. In some cases therefore the quadrant record has to remain extant.

The species perceived to be more interesting for any reason, especially those that were Nationally Rare or Nationally Scarce were always recorded with more precision, usually a 6-figure grid reference. The change from quadrant to tetrad recording did not affect these.

5 SPECIES CATEGORISATION

Four types of categorisation have been used to decide which species should be included in the Register

- 1) The IUCN categories are as follows:

GB Threat Status	Regarded as threatened in GB?	Included in East Perth Rare Plant Register?
Extinct or Extinct in wild	No	Yes, if last seen in VC89
Critically Endangered	Yes	Yes, but none qualify
Endangered	Yes	Yes
Vulnerable	Yes	Yes
Near-threatened	No	Yes
Data Deficient	No	Yes
Least Concern	No	No
Waiting List	No	No

For an explanation of all these criteria see Cheffings & Farrell, 2005.

- 2) Taxa not regarded as threatened in Great Britain may be included in the Register if they are regarded as Rare or Scarce in GB. The list of such taxa, using current New Atlas (Preston et al, 2002) data, is given on the JNCC website (www.jncc.gov.uk). The following categories are included:

GB Rarity Status	Included in East Perth Rare Plant Register?
Nationally Rare (1-15 hectads in GB)	Yes
Nationally Scarce (16-100 hectads in GB)	Yes

Note: A hectad is a 10 x 10 km. square.

- 3) The Scottish Biodiversity List was published in 2005 to satisfy the requirement under Section 2(4) of The Nature Conservation (Scotland) Act 2004. It is a list of animals, plants and habitats that Scottish Ministers consider to be of principal importance for biodiversity conservation in Scotland. The list includes all species in the UK Biodiversity Priority List that are present in Scotland, alongside those that are rare or scarce, declining or endemic here.

All Scottish Biodiversity List species that occur in the Vice-county are included, although in the case of *Juniperus communis* (Juniper) only sites with 15 or more plants are listed.

- 4) The Local Rarity levels are as follows:

Local Rarity Status	Criteria
Locally Rare	Recorded from between 1 and 3 sites in East Perth
Locally Scarce	Recorded from between 4 and 15 sites in East Perth

Sites are 'Wells' sites, which can be defined as areas not exceeding that which can be enclosed by a notional 1 km square. In some cases, where it is clear that sites less than 1 km apart are in different management units, they are treated as separate sites.

When the IUCN-based Red Data List was published in 2005 many species appeared in it that had not been thought to be of particular interest before and were therefore not recorded more precisely than to quadrant level. These included, for example, many agricultural weeds that had been adversely affected by the intensification of farming methods. Conversely many montane species that had previously received the highest designation by virtue of their rarity were now judged to be at low risk and were downgraded, sometimes even to being plants of Least Concern.

The present Register is a hybrid of the earlier and the later designation systems, as both are thought to be important ways of defining the status and well-being of our plants. This results in a variety of ways in which grid references are presented in the tables. Where possible a 6-figure grid reference is shown. Very often this is not possible but accuracy can be shown to 1 km, 2 km or 5km level. *Kobresia simpliciuscula* (False Sedge), for example, is a Nationally Rare species that has always been recorded in some detail, mainly through monitoring of its populations by SNH. Of its 19 sites listed, 17 are 6-figure grid references and the remaining 2 are 1 km squares. *Viola tricolor* (Wild Pansy), on the other hand, is mainly an arable weed that has only recently come to botanists' notice as a plant to record accurately. It is a Near-threatened species in the Red List, which has a similar number of sites in the vice-county as *Kobresia*: 21. Of these, however, 6 are to 5km level only and only 12 are 6-figure grid references – the rest being something in between.

Certain more vulnerable species are shown at tetrad or 1 km level only.

The poor resolution of records in some species is also a product of the present attempt to show local rarity and scarcity. A plant that is very common and not designated in any way may yet have few sites in the vice-county. These may not have attracted much notice in the past and were simply recorded at 5 km level along with all the locally commoner species. *Veronica agrestis* (Green Field-speedwell), for example, has 7 sites in the Register, of which 6 are to 5 km level only.

Many older records that do have 6-figure grid-references have had them allocated later. This is especially true in the case of SNH records digitised by contract staff in order to supply them to the Biological Records Centre and to the BSBI. Many of these grid references are generic in nature, identifying the area of recording but not the precise site. It is not always possible to know to which of the records this treatment applies. The data presented are still a good indication of a plant's status and distribution, however, and will be refined over time.

6 SPECIES SELECTION

The register contains 289 taxa, including one stonewort (Charophyte). Although more closely allied with the algae than with vascular plants stoneworts appear superficially similar to vascular plants and are treated as 'honorary' ones by the BSBI for recording purposes.

All of the species included are classed as 'natives' or 'archaeophytes'. The latter refers to plants that, though not native, have been here since before 1500. Most of them are species associated with cultivation. Plants arriving or introduced later than that date are 'neophytes' and are excluded. Hybrids are also excluded, as their recording is so incomplete, as are 'microspecies' such as the dandelions (*Taraxacum* spp.), hawkweeds (*Hieracium* spp.) and brambles (*Rubus* spp.). The distribution of their sites reflects where their specialist recorders have been active more than it shows their true range and frequency. One dandelion and seven hawkweeds are included as they are Red Data List species.

Certain groups of plants, such as roses (*Rosa* spp.), which hybridise freely, have been poorly understood and inconsistently recorded in the vice-county. None, apart from *R. spinosissima*, are included. Willows (*Salix* spp.) also hybridise freely but they have received more attention over the years and pure, or virtually pure, species have been recognisable and are included where appropriate.

Other groups needing work to clarify their situation include the genus *Potentilla* and its hybrids and the aquatic *Ranunculus* species.

Some species included in the Register as locally rare or scarce are only there because their habitat is locally rare. A good example of this is provided by the saltmarsh plants, as saltmarsh only occurs in a tiny area in the south-east of the vice-county, from about Templehall to Invergowrie. This brings into the Register the following species:

<i>Aster tripolium</i> (Sea Aster)	Locally Rare
<i>Atriplex glabriuscula</i> (Babington's Orache)	Locally Rare
<i>Atriplex prostrata</i> (Spear-leaved Orache)	Locally Rare
<i>Leymus arenarius</i> (Lyme-grass)	Locally Rare
<i>Plantago coronopus</i> (Buck's-horn Plantain)	Locally Rare
<i>Puccinellia maritima</i> (Common Saltmarsh-grass)	Locally Rare
<i>Triglochin maritimum</i> (Sea Arrow-grass)	Locally Scarce

Many other species are only included because the number of records is insufficient to exclude them, even though they are almost certainly more frequent than suggested. Future recording will probably show that the following species are not Locally Rare:

<i>Cerastium semidecandrum</i> (Little Mouse-ear)
<i>Hordeum murinum</i> (Wall Barley)
<i>Poa compressa</i> (Flattened Meadow-grass)
<i>Polygonum boreale</i> (Northern Knotgrass)

The following species will probably be revealed not to be Locally Scarce:

<i>Agrostis gigantea</i> (Black Bent)
<i>Anagallis arvensis</i> (Scarlet Pimpernel)
<i>Artemisia vulgaris</i> (Mugwort)
<i>Convolvulus arvensis</i> (Field Bindweed)
<i>Euphorbia helioscopia</i> (Sun Spurge)
<i>Lamium amplexicaule</i> (Henbit Dead-nettle)
<i>Malva sylvestris</i> (Common Mallow)
<i>Myosotis ramosissima</i> (Early Forget-me-not)
<i>Rorippa microphylla</i> (Narrow-fruited Watercress)
<i>Urtica urens</i> (Small Nettle)

Viola canina (Heath Dog-violet)

Note that the majority of these are weeds, showing that the cultivated habitats have been under-recorded.

Another group of species is those about which there has been some confusion resulting in inconsistent recording. In the Register *Cochlearia micacea* (Mountain Scurvygrass) is listed as Locally Rare and *Cochlearia pyrenaica* ssp *alpina* (Pyrenean Scurvygrass) as Locally Scarce. It is doubtful whether they have been sufficiently consistently distinguished for these categorisations to be maintained.

Note that many of these species in the lists above would still qualify for the Register under other criteria.

7 THE UPDATE

Since the second edition 22 records have been updated and 80 have been added. The latter were either new discoveries or records from new sources that came to light.

Three new species appear in the Register for the first time, all new discoveries: *Callitriche palustris* (Narrow-fruited Water-starwort), *Dactylorhiza traunsteinerioides* (Narrow-leaved Marsh Orchid) and *Trifolium micranthum* (Slender Trefoil). None of these had any older, pre-1970 records.

Two taxa moved from Locally Rare down to Locally Scarce: *Calamagrostis epigejos* (Wood Small-reed) and *Dactylorhiza incarnata* subsp. *pulchella* (Early Marsh Orchid, having been now recorded at more than three sites.

Two species were removed from the Register, having exceeded the limit of 15 records which had classified them as Locally Scarce: *Hypericum humifusum* (Trailing St John's-wort) and *Ranunculus hederaceus* (Ivy-leaved Crowfoot). These species, particularly the latter, are actually quite common in the right habitat, and were expected to fall off the Register at an early stage. The latter is often found in shallow pools and muddy gateways in lowland areas, along with *Glyceria declinata* (Small Sweet-grass), which fell off the Register at the 2013 revision.

The species in the Register are as follows. Many are included under more than one criterion, but they are only listed once below under the main reasons for their inclusion:

Endangered and Nationally Rare (2)

Crepis mollis
Callitriche palustris

Endangered and Nationally Scarce (5)

Alchemilla wichurae
Hypopitys monotropa
Melampyrum sylvaticum
Sagina saginoides
Salix myrsinites

Endangered (3)

Astragalus danicus
Gnaphalium sylvaticum
Scleranthus annuus

Vulnerable and Nationally Rare (12)

Astragalus alpinus
Cystopteris dickieana
Hieracium carpathicum
Hieracium duriceps
Hieracium magniceps

Hieracium molybdochroum
Minuartia rubella
Oxytropis campestris
Phyllodoce caerulea
Polygonatum verticillatum
Salix lanata
Taraxacum cymbifolium

Vulnerable and Nationally Scarce (6)

Alchemilla glomerulans
Cerastium alpinum
Corallorhiza trifida
Juncus castaneus
Salix lapponum
Sibbaldia procumbens

Vulnerable (15)

Allium oleraceum
Chenopodium bonus-henricus
Coeloglossum viride
Euphrasia officinalis ssp. pratensis
Galeopsis speciosa
Gentianella campestris
Glebionis segetum
Oenanthe fistulosa
Papaver argemone
Persicaria minor
Platanthera bifolia
Polystichum lonchitis
Pseudorchis albida
Saxifraga hypnoides
Spergula arvensis

Near-threatened and Nationally Rare (1)

Hieracium subtenuifrons

Near-threatened and Nationally Scarce (9)

Asplenium septentrionale
Dianthus deltoides
Hieracium milesii
Meum athamanticum
Pyrola rotundifolia
Sedum villosum
Silene viscaria
Veronica fruticans
Vicia orobus

Near-threatened (21)

Carex diandra
Centunculus minimus
Cornus suecica
Drosera anglica
Filago vulgaris
Genista anglica
Gentianella amarella ssp. septentrionalis
Gnaphalium supinum
Hymenophyllum wilsonii
Imperatoria ostruthium
Neottia nidus-avis
Platanthera chlorantha
Potamogeton praelongus
Potentilla argentea
Radiola linoides
Stachys arvensis
Teesdalia nudicaulis
Veronica serpyllifolia ssp. humifusa
Viola canina
Viola tricolor

Chara rudis

Data-deficient and Nationally Rare (2)

Calamagrostis purpurea
Trichophorum cespitosum s.s.

Data-deficient (2)

Euphrasia frigida
Gymnadenia densiflora

Nationally Rare (8)

Carex rariflora
Cystopteris montana
Hieracium diaphanoides
Hieracium prenanthoides
Kobresia simpliciuscula
Oxytropis halleri
Potamogeton rutilus
Schoenus ferrugineus

Nationally Scarce (36)

Alopecurus magellanicus
Athyrium distentifolium
Betula nana
Bromopsis benekenii
Carex atrata

Carex capillaris
Carex rupestris
Carex saxatilis
Carex vaginata
Cochlearia micacea
Dactylorhiza traunsteinerioides
Dryas octopetala
Elatine hydropiper
Epipactis atrorubens
Equisetum pratense
Equisetum variegatum
Juncus alpinoarticulatus
Juncus biglumis
Limosella aquatica
Linnaea borealis
Lycopodium annotinum
Lysimachia thyrsoflora
Najas flexilis
Noccaea caerulescens
Nuphar pumila
Ornithopus perpusillus
Phleum alpinum
Poa alpina
Polygonum boreale
Potamogeton filiformis
Potentilla crantzii
Salix arbuscula
Saxifraga nivalis
Sorbus rupicola
Vaccinium microcarpum
Veronica alpina

**Scottish Biodiversity List
(but not in previous categories) (18)**

Anagallis arvensis
Carex elata
Centaurea scabiosa
Chelidonium majus
Cichorium intybus
Draba incana
Fallopia convolvulus
Geranium columbinum
Inula conyzae
Juniperus communis
Lepidium campestre
Mentha arvensis
Ranunculus sardous
Rumex alpinus
Rumex maritimus
Sherardia arvensis
Sinapis arvensis
Trifolium micranthum

Locally Rare (60)

Allium scorodoprasum
Anthriscus caucalis
Apium inundatum
Asplenium ceterach
Aster tripolium
Astragalus glycyphyllos
Atriplex glabriuscula
Atriplex prostrata
Ballota nigra
Callitriche platycarpa
Carex paniculata
Carex pendula
Carex spicata
Catabrosa aquatica
Centaureum erythraea
Cerastium semidecandrum
Conium maculatum
Descurainia sophia
Drosera intermedia
Eleogiton fluitans
Euphorbia lathyris
Fumaria bastardii
Geranium pusillum
Goodyera repens
Hammarbya paludosa
Hordeum murinum
Isoetes echinospora
Lamium confertum
Lathraea squamaria
Lemna trisulca
Leymus arenarius
Linaria repens
Lysimachia vulgaris
Myriophyllum spicatum
Ophioglossum vulgatum
Parietaria judaica
Plantago coronopus
Poa compressa
Polygonum boreale
Polystichum setiferum
Potamogeton pectinatus
Puccinellia maritima
Ranunculus trichophyllus
Raphanus raphanistrum
Rumex hydrolapathum
Salix cinerea ssp. cinerea
Salix triandra
Saxifraga tridactylites
Schoenus nigricans
Scrophularia auriculata
Silene acaulis
Silybum marianum
Sinapis alba

Smyrniolum olusatrum
Ulex gallii
Valerianella locusta
Veronica anagallis-aquatica
Vicia lathyroides
Viola hirta
Vulpia myuros

Locally Scarce (89)

Aethusa cynapium ssp *cynapium*
Agrimonia eupatoria
Agrimonia procera
Agrostis gigantea
Allium vineale
Anisantha sterilis
Artemisia vulgaris
Asplenium scolopendrium
Bidens cernua
Bidens tripartita
Bolboschoenus maritimus
Calamagrostis epigejos
Callitriche hermaphroditica
Carduus crispus
Carex acutiformis
Carex aquatilis
Carex laevigata
Carex limosa
Carex otrubae
Cerastium diffusum
Chaenorhinum minus
Chaerophyllum temulum
Cochlearia pyrenaica ssp *alpina*
Convallaria majalis
Convolvulus arvensis
Dactylorhiza incarnata ssp. *pulchella*
Dipsacus fullonum
Echium vulgare
Elatine hexandra
Eleocharis acicularis
Eleocharis multicaulis
Epilobium parviflorum
Epilobium roseum
Epipactis helleborine
Equisetum hyemale
Eupatorium cannabinum
Euphorbia helioscopia
Euphorbia peplus
Festuca altissima
Filago minima

Fumaria densiflora
Gagea lutea
Galium album
Geranium sanguineum
Glaux maritima
Isoetes lacustris
Juncus gerardii
Juncus inflexus
Lactuca virosa
Lamium amplexicaule
Linaria vulgaris
Lobelia dortmanna
Lythrum portula
Lythrum salicaria
Malus sylvestris
Myosotis ramosissima
Nymphaea alba
Papaver rhoeas
Paris quadrifolia
Persicaria lapathifolia
Potamogeton alpinus
Potamogeton obtusifolius
Potamogeton pusillus
Potentilla anglica
Potentilla reptans
Ranunculus circinatus
Ranunculus lingua
Ranunculus sceleratus
Rorippa microphylla
Rosa spinosissima
Sagina maritima
Salix pentandra
Schoenoplectus lacustris
Schoenoplectus tabernaemontani
Sedum anglicum
Sparganium natans
Subularia aquatica
Thalictrum minus
Trifolium arvense
Trifolium striatum
Triglochin maritimum
Trisetum flavescens
Urtica urens
Utricularia intermedia s.l.
Utricularia minor
Utricularia vulgaris s.l.
Veronica agrestis
Vulpia bromoides
Zannichellia palustris

7 LAYOUT OF THE REGISTER

Plants are listed in alphabetical order, using the scientific name (in bold) and the English name, both according to Stace, 2010.

Below the plant name is given its National and/or Local (Vice-county) rarity. On the first line the older, non-IUCN, category of Nationally Rare or Nationally Scarce is given first, followed by the newer IUCN category (if relevant). On the second line the local category is given. If there is no national designation then only the local category appears. In a small number of cases (e.g. *Betula nana*) there is a national designation but no local one as the number of sites exceeds 15.

After the English name of the plant appears either N for native, or A for archaeophyte

Below these lines the plant data are presented in a box with 6 columns:

- 1 Grid reference. A variety of resolutions up to 6 figures. See Section 5, above.
- 2 Date. The most recent year from which reliable data are held, from 1970 onwards.
- 3 Protection. Whether or not the site lies within a Site of Special Scientific Interest.
- 4 Site. These are, where possible, 'Wells sites', which can be defined as areas not exceeding that which can be enclosed by a notional 1 km square. In some cases, where it is clear that sites less than 1 km apart are in different management units, they are treated as separate sites. Failing this it may be a 1 km square, a tetrad, or, in the least satisfactory cases, a hectad.
- 5 Habitat. Data are frequently lacking here. Recording will improve from now on.
- 6 Abundance. Data are frequently lacking here. Usually the species is recorded at a site as one of a list. Only rarer species, or those being monitored, will have abundance data.
- 7 Recorder. The most recent recorder. In a few cases more complete data exist from a slightly older record, and these are then presented rather than the most recent one.

Below the list of records for each species is a (usually) one-line comment. The initials FBW in these comments refer to Francis Buchanan White.

8 REFERENCES

Cheffings, C. & Farrell, L. (eds.) 2005. *The Vascular Plant Red Data List for Great Britain*. Species Status No. 7. JNCC, Peterborough.

Dandy, J.E. 1969. *Watsonian Vice-counties of Great Britain*. The Ray Society. London.

Preston, C.D., Pearman, D.A. & Dines, T.D., 2002. *New Atlas of the British & Irish Flora*. Oxford University Press, Oxford.

Sell, P. & Murrell, G. 2006. *Flora of Great Britain and Ireland – Volume 4 Campanulaceae – Asteraceae*. Cambridge University Press, Cambridge.

Smith, R.A.H., Stewart, N.F., Taylor, N.W. & Thomas, R.E. 1992. *Checklist of the Plants of Perthshire*. Perthshire Society of Natural Science.

Stace, C.A. 2010. *New Flora of the British Isles*. Ed.3. Cambridge University Press. Cambridge.

Stewart, N.F. *Review of the Status of Charophytes (Stoneworts)*. Unpubl.

White, F.B. 1898. *Flora of Perthshire*. William Blackwood & Sons. Edinburgh.

Wigginton, M.J. (ed.). 1999. *British Red Data Books. 1. Vascular plants, edn.3*. JNCC, Peterborough.

Aethusa cynapium ssp. cynapium

Fool's Parsley

N or A

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 05A	2013		Tulliemet Road			F Anstey
NO12 SE	1987					anon
NO239281	1997		Flawcraigs	Outcrops		M Benstead
NO281287	1997		Inchture Church			M Benstead
NO3429	2008		Kingoodie			I Ford
NO324283	1988	SSSI	Monorgan			anon

Occurs in the Carse of Gowrie at the extreme northern limit of its natural range in the UK. FBW describes it as 'not uncommon' there, but it is scarce today.

Agrimonia eupatoria

Agrimony

N

Local rarity: Scarce N

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 1222	2003	SSSI	Kinnoull Hill			PSNS
NO 12 SE	1986		Northlees Farm, Kinfauns			PSNS
NO 15Q	1990	SSSI	Milton Wood			K Kirby
NO 200233	1990		Hole of Clien			A Mathers
NO 226222	1997	SSSI	Errol	Reedbeds		M Benstead
NO 22 SE	1987					anon
NO 204252	2007		Pitroddie Den	Grassland		PSNS
NO 232272	1986		Fingask Farm			R A H Smith
NO 242282	2011		Craighead Quarry	Grassland	Scattered	PSNS
NO 339295	2010		Kingoodie Quarry	Grassland		PSNS

A lowland plant of grassland, hedgerows and roadsides on basic and neutral soils occurring mainly in the southern part of the vice-county.

Agrimonia procera

Fragrant Agrimony

N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 159514	2014		Milton of Drimmie	Broadleaved woodland strip	One clump	M C Robinson, J McIntosh & L Tucker
NO 163512	1998	SSSI	Milton Wood			N W Taylor
NO 292519	2007	SSSI	Den of Airlie	Woodland edge	Single plant	M C Robinson

Found in similar situations to *A. eupatoria* but much scarcer.

Agrostis gigantea

Black Bent

A

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 054629	1986		Kindrogan	Generic grid-ref?		R Hamilton
NO 179456	1999		Blairgowrie/Ratray			A Showler
NO 2123	2008		Glendoick	Disturbed ground		M C Robinson & L Tucker
NO 2442	2011		Cronan	Arable field edge		M Tulley
NO 301278	1997		Broomhall Cottage			M Benstead

This arable weed species is likely to occur more widely than shown in the southern part of the vice-county

Alchemilla glomerulans

Clustered Lady's-mantle

N

National rarity: Scarce Vulnerable

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 982792	2010	SSSI	Glen Tilt	Limestone grassland	Single plant	M C Robinson
NN 990738	2012	SSSI	Loch Loch	Limestone grassland	Strong colony	M C Robinson & L Tucker
NN 999792	2012		Ruigh Mor, Fealar	Ungrazed pasture	Scattered	M E Bradshaw et al
NO 008775	2012	SSSI	Gleann Mor, Fealar	Calcareous grassland	Scattered	M E Bradshaw et al
NO 138734	2011		Creag Dubhaidh	Side of steep rivulet		M C Robinson
NO 1278	2011	SSSI	The Cairnwell	Calcareous grassland	Two sites	M C Robinson
NO 1477	2011		The Cairnwell	Limestone grassland	>4 sites	M C Robinson et al

Needs more investigation and will almost certainly prove to be less rare than suggested here. So far it has been found only in calcareous montane grassland

Alchemilla wichurae

A Lady's-mantle

N

National rarity: Scarce Endangered

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 78-77-	1995		Sron a' Chleirich	Bouldery gully		G P Rothero
NN 884701	2014		Glen Tilt	Calcareous grassland on slope	Scattered	M C Robinson & A Godfrey
NN 950630	2005	SSSI	Ben Vrackie	Calcareous cliffs	& NN 944628 (2000)	M C Robinson
NN 9662	2009	SSSI	Creag Tharsuinn	Wet slope		M C Robinson
NN 960693	2012	SSSI	Sron na-h Innearach	Flushed grassland		M C Robinson & L Tucker
NN 968685	2012	SSSI	Meall Breac	Calcareous flushed grassland	Several colonies	M C Robinson & L Tucker
NN 990737	2012	SSSI	Loch Loch	Calcareous grassland	Several colonies	M C Robinson & L Tucker
NN 992731	2012	SSSI	Sron nan Dias	Calcareous grassland	Extensive	M C Robinson & L Tucker
NN 999792	2012		Gleann Mor, Fealar	Ungrazed calcareous grassland	Scattered	M E Bradshaw et al

NO 005755	2013	SSSI	Fealar road	Flushed calcareous grassland	Sparse	M C Robinson & L Tucker
NO 008775	2012	SSSI	Gleann Mor, Fealar	Ungrazed calcareous grassland	Scattered (and on Meall na Spionaig (20	M E Bradshaw et al

Needs more investigation and will almost certainly prove to be less rare than suggested here. However it has not been recorded in the Glen Shee/Glean Beag area despite intensive searching in recent y

Allium oleraceum

Field Garlic N

National rarity: Vulnerable Scottish Biodiversity List

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 031642	1992		Straloch	Crag		J Muscott
NO 13NW	1978	SSSI	Meikleour area			R A H Smith
NO 1521	2006		Insherrit Island			A Godfrey
NO 271457	1986		Bridge of Crathies	Road verge		R A H Smith

The status is a bit uncertain on account of confusion with other species, but it appears always to have been very scarce in Perthshire

Allium scorodoprasum

Sand Leek N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 125328	1979	SSSI	Cambusmichael			A Robson
NO 1339	1984	SSSI	Delvine	River shingle		M McCallum Webster

A plant mainly of northern England and eastern Scotland, occurring in a variety of open lowland habitats but very rare in Perthshire

Allium vineale

Crow Garlic N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 9358	1971		Pitlochry			A McG Stirling
NO 1222	1995	SSSI	Kinnoull Hill			N W Taylor
NO 1521	2006		Insherrit Island			A Godfrey
NO 324283	1988	SSSI	Monorgan			anon
NO 335293	1997	SSSI	Kingoodie	Cliff		M Benstead

A plant of dry calcareous and neutral soils found so far only in the extreme south of the vice-county, where it has always been rare

Alopecurus magellanicus (borealis)

Alpine Foxtail

N

National rarity: Scarce

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 661788	2003	SSSI	A' Bhuidheanach Beag			D Rae
NN 917824	1989		Braigh Coire an Staic Ghuithais			N W Taylor
NN 938827	1989		An Sgarsoch		& NN938822	N W Taylor
NO 027776	1995		Carn an Righ			B S Brookes
NO 047766	1995	SSSI	Glas Tulaichean			R Fitzgerald
NO 17 NE	1970					anon

An arctic plant, that occurs in montane situations in the extreme north of the vice-county, usually associated with areas of late snow-lie.

Anagallis arvensis

Scarlet Pimpernel

N

Local rarity: Scarce

Scottish Biodiversity List

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 95P	2009		Kinnaird, Pitlochry			P D Hulme
NN 980511	1970	SSSI	Richard's Island			A Robson
NN 995492	1996		R Tay, Guay			PSNS
NO 131222	2014		Kinnoull Hill	Old track	Several places along track	F Anstey
NO 135222	1987		Walnut Grove			R A H Smith
NO 12G	1979	SSSI	Kinnoull Hill			R A H Smith
NO 14R	2008		White Loch	Arable field		M C Robinson
NO 2123	2008		Glendoick	Disturbed ground		M C Robinson & L Tucker
NO 238279	2011		Craighead Quarry	Bare track and roadside verge	Several sites	PSNS
NO 241281	1997		Kinnaird	Roadside	Dense patch	M Benstead
NO 22K	2009		Port Allen	Disturbed ground		PSNS
NO 3430	1987		Invergowrie			M Benstead

Further recording will probably show that this species of disturbed ground is not as scarce as suggested by the low number of records

Anisantha sterilis

Barren Brome

A

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 13E	2013		Braecock	Hedgerows and field edges	Two areas	M C Robinson
NO 1222	2000		Moncrieffe Island			PSNS
NO 14X	2005		R Ericht, Rattray			L Farrell & M C Robinson
NO 13NE	1970					anon

NO 128410	2011		Delvine	Edge of carrot field	A small amount	M C Robinson
NO 14NE	1970					anon
NO 22NE	1987					anon
NO 2442	2011		Cronan	Edge of farm track		M Tulley
NO 246445	1986		Bardmony, R Isla			PSNS
NO 259458	1977		Leitfie/Netherton			L Barron
NO 290312	1997		Knapp			M Benstead
NO 33A	2004					M C Robinson
NO 323281	2011		Monorgan	Edge of track		M C Robinson
NO 3429	1987		Invergowrie		And NO 3430	M Benstead
NO 34SW	1987		S E Fullarton			PSNS

A plant of roadsides, field edges and waste ground that is almost certainly under-recorded, although it has always been local, as suggested by FBW

Anthriscus caucalis

Bur Chervil

N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 338295	2011		Kingoodie Quarry	Vegetation at foot of quarry face	>100 plants	I Ford

Was once known on Kinnoull Hill (FBW), but this is the first modern record of this very lowland species

Apium inundatum

Lesser Marshwort

N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 1339	1984	SSSI				M McCallum Webster
NO 280488	1989		Silvie Plantation meadow	Small pond	& pond at NO 273485 (1987)	PSNS
NO 237501	2010		Hill of Alyth	Small pond		J Waddell & R Coope

A species of oligotrophic ponds and ditches that may be under-recorded

Artemisia vulgaris

Mugwort

A

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 95NW	1995					R Youngman
NN 963553	2013	SSSI	Tomdachoille Island	Stable river shingle	Rare	M C Robinson & L Tucker
NN 95SE	1989					anon
NN 9460	2006		Moulin			M C Robinson
NO 096277	1996		R Tay, Scone			anon
NO 127218	1981		Riverside walk, Perth			N F Stewart

NO 12F	2005		Friarton Bridge	Waste ground		M C Robinson
NO 12G	2013		Perth			F Anstey
NO 12K	2006		Insherrit Island			PSNS
NO 12Q	2006		Seggieden			PSNS
NO 13NW	1989					anon
NO 188195	1996		Cairnie - Inchyra			BSBI
NO 22SW	1987					anon
NO 3429	2009		Invergowrie			M C Robinson
NO 34SW	1987		Kirkinch			PSNS

Further recording, particularly of waste ground, will probably show that this lowland species is not Locally Scarce.

Asplenium ceterach (Ceterach officinarum)

Rustyback

N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 12G	1989	SSSI	Kinnoull Hill			V Howard
NO 207253	2007		Pitroddie	Quartz-dolerite outcrop		PSNS
NO 322334	1997		Fowlis	Wall of old building	50 plants	M Benstead

A calcicole fern at the northern end of its range. Extinct at the Fowlis site owing to building maintenance. Probably native at the other two sites

Asplenium scolopendrium (Phyllitis scolopendrium)

Hart's-tongue

N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 123253	1981		Quarrymill Den, Perth			N F Stewart
NO 180227	1979		Den of Balthayock			R A H Smith
NO 13SW	1989					anon
NO 146359	2013		Gladfield	Stone road bridge over burn	20-30 plants	M C Robinson
NO 14NE	1981	SSSI	Craighall Gorge			B S Brookes
NO 1746	2006		R Ericht, Blairgowrie		Two plants 150 metres apart	M C Robinson
NO 180453	2011		Blairgowrie	Inside of well	Single plant	M C Robinson & L Tucker
NO 185447	2012		Ratray	Mortared wall of lade	>40 plants	M C Robinson & L Tucker
NO 24J	2008	SSSI	Den of Alyth	On the west side		PSNS
NO 2448	2005		Alyth town centre	At side of Alyth Burn		R Nisbet & L Dron
NO 230257	1997		Kilspindie	In churchyard		M Benstead
NO 25SE	1987					anon
NO 327328	2011	SSSI	Den of Fowlis	Wooded den and castle tower	1 in den, colony on castle tower	PSNS

Not certainly native at all of these sites. Further recording along the sides of wooded burns should remove it from the Locally Scarce category.

Asplenium septentrionale

Forked Spleenwort N

National rarity: Scarce Near-threatened

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 0540	2007	SSSI	Craig Tronach	Cliff crevices	>79 clumps in 5 sub-colonies	L Farrell, S Pritchard & N McIntyre
NO 0640	2007		Stenton Rocks	Cliff crevices	9 clumps visible	L Farrell & M C Robinson

Has declined at least at Stenton, where 70 clumps were noted in 1961 (J H Penson). A x alternifolium (A. septentrionale x A. trichomanes) also occurs at Craig Tronach

Aster tripolium

Sea Aster N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 3227	2011	SSSI	Templehall	Saltmarsh, outer edge	Common	M C Robinson
NO 3228	2011	SSSI	Monorgan-Burnside	Saltmarsh, outer edge	Common	M C Robinson
NO 3429	2009	SSSI	Kingoodie-Invergowrie	Saltmarsh		M C Robinson

Only rare because the habitat is locally rare

Astragalus alpinus

Alpine Milk-vetch N

National rarity: Rare Vulnerable Scottish Biodiversity List

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 9563	2012	SSSI	Ben Vrackie	Eroded grassland	000's plants	M C Robinson
NN 9364	2008	SSSI	Meall an Daimh, Ben Vrackie	Thin soil on crags	>1850 plants	T Loizou & L Tucker
NO 1278	2011	SSSI	Cairnwell	Grassland	108 plants in main colony, + 6 others	M C Robinson and R G Payne

Three of the five UK sites, of which the Cairnwell is the smallest and is apparently decreasing.

Astragalus danicus

Purple Milk-vetch N

National rarity: Endangered

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 722707	2014		Dalnacardoch	Grass verge of track		M C Robinson
NN 891642	1997		R Garry, Essangal	Basic outcrop by river		P Cramb
NN 919598	1997		Loch Faskally			R Youngman
NN 905670	2011	SSSI	Glen Fender	Grassy bank		A Scobie, E Lavery & R Payne
NN 939640	2008	SSSI	Meall an Daimh	Calcareous crag		M C Robinson
NN 9066	2003		Loch Moraig	Wall and calcareous grassland	6 sites	R Youngman

NO 136227	2003	SSSI	Kinnoull Hill	Grassland		PSNS
NO 1622	1978		Binn Hill	Outcrop in grassland	2 patches	PSNS
NO 176261	2011		Arnbathie	Crag	Restricted area	M C Robinson
NO 1925	2007		Pole Hill	Top of crags		M C Robinson & L Tucker
NO 213316	2012		Dunsinane Hill	Short turf	Abundant along crags	PSNS
NO 280340	1984	SSSI	Redmyre			J Cook

Not found recently on Kinnoull Hill and probably extinct there, having been swamped by grasses. A species of short, herb-rich calcareous grassland.

Astragalus glycyphyllos

Wild Liquorice N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 13NW	1990	SSSI	Meikleour area			R A H Smith
NO 14SW	1987					anon
NO 204252	1982		Pitroddie Den			BSBI

A species of river and stream banks that is very rare in the whole of Perthshire and has become even more so since FBW.

Athyrium distentifolium

Alpine Lady-fern N

National rarity: Scarce

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 600736	2009	SSSI	Coire Creagach	Gully on crags	2 plants	M C Robinson
NN 684785	1980	SSSI	Cama' Choire			A G Payne
NN 8874	1995		Beinn Mheadonach			G P Rothero et al
NN 87NE	1975					N Sanderson
NO 065770	1991	SSSI	Glas Choire Bheag			N W Taylor
NO 17NE	1987					anon

A montane fern of block screes and cliff gullies, often in areas of late snow-lie

Atriplex glabriuscula

Babington's Orache N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 324283	1987	SSSI	Monorgan	Shore of estuary		M Benstead

Occurs exclusively near the strand line right round the GB coast, but this is the only area in VC89

Atriplex prostrata

Spear-leaved Orache N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 32J	2010	SSSI	Kingoodie	Estuary shore		M C Robinson

Mostly coastal in Scotland but apparently quite scarce on the inner Firth of Tay

Ballota nigra

Black Horehound A

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 3329	2008		Kingoodie			I Ford

Status at the site uncertain, maybe introduced

Betula nana

Dwarf Birch N

National rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 592698	2014		Allt Coire na Feithe Bige	Calluna heath on gentle slope	A patch 0.5 x 0.3m, prob all one plant	M C Robinson
NN 583730	1980	SSSI	Coire Dhomhain			D A Ratcliffe
NN 603691	2014		Meall Doire		>3 plants	M C Robinson
NN 67SW	1970					anon
NN 842730	1990		Meall Tionail	Wet heath		M C Robinson
NN 87NE	1970					anon
NN 856808	1977		Head of Tarf Water			B S Brookes
NN 875813	1975		Beinn Bhreac			N Sanderson
NN 883830	1977		Meall Tionail			B S Brookes
NN 888802	1995		Loch Mhairc		Also at NN 886808 (BSB 1977)	R Youngman
NN 96SE	1989					anon
NN 998737	2002	SSSI	Allt Feith Ghuibhsachain	Bog	>40,000 sq.m.	T Loizou & B G Hogarth
NN 998756	1995		Allt Feith Ghuibhsachain	Bog		B S Brookes
NN 991824	2009		Loch Tilt	Bog		M C Robinson & L Tucker
NO 016753	1995		Gleann Mor	Eroding blanket bog		B S Brookes
NO 106729	2010		Ben Gulabin	Eroding blanket bog		M C Robinson & L Tucker
NO 180579	1987	SSSI	Forest of Alyth			N W Taylor

Not uncommon in the north of the VC, especially in the extensive peatlands of the Forest of Atholl

Bidens cernua

Nodding Bur-marigold N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 106289	1983		Waulkmill			M McDonald
NO 14SE	1987					anon
NO 205431	1986		Rosemount/Maryfield Farm			R A H Smith
NO 209428	2012	SSSI	Monk Myre		Patch 50cm x 50cm, and scattered	M C Robinson
NO 250443	1995		Bankhead of Kinloch Oxbow			anon

An annual species that occurs in various damp habitats in the lowland belt

Bidens tripartita

Trifid Bur-marigold N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 118443	2006	SSSI	Loch Clunie	Draw-down zone of loch		N F Stewart et al
NO 14SW	1997	SSSI	Loch Marlee			SNH Loch Inventory
NO 1742	2005		Black Loch			PSNS
NO 197421	2010	SSSI	Stormont Loch	Carr		M C Robinson & A Godfrey
NO 207426	1991	SSSI	Monk Myre			P McPhail

An annual species of loch fringes occurring here at the extreme northern end of its UK range

Bolboschoenus maritimus

Sea Club-rush N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 22SE	1997	SSSI	Port Allen	Borrow-dyke		M C Robinson
NO 22NE	1970	SSSI	Powgavie	Edge of estuary		anon
NO 3228	2011	SSSI	Monorgan	Outer saltmarsh	All the way along	M C Robinson
NO 3429	2009	SSSI	Kingoodie	Saltmarsh		M C Robinson

A common plant of mainly brackish ground, but restricted here by the lack of habitat

Bromopsis benekenii

Lesser Hairy-brome N

National rarity: Scarce

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 912629	1975		Killiecrankie	Gorge woodland		R A H Smith
NO 176487	2014	SSSI	Craighall Gorge	Gorge woodland	100 clumps, and 29 at NO 174483	M C Robinson & J McIntosh

May be less rare than shown, but confusion with *B. ramosus* is often an issue. The record for the Pass of Killiecrankie may refer to Mid Perthshire VC88

Calamagrostis epigejos

Wood Small-reed N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 131392	2014		Delvine	Rough grassland by river	Patches 12mx12m and 4mx5m	M C Robinson, L Tucker & A.Godfrey
NO 1439	2006	SSSI	Meikleour	Damp hollow on island		M C Robinson & PSNS
NO 24B	1997	SSSI	Monk Myre			SNH Loch Inventory
NO 32J	2006		SCRI grounds			B G Hogarth

A species of ungrazed grassland habitats that seems always to have been rare in Perthshire

Calamagrostis purpurea

Scandinavian Small-reed N

National rarity: Rare Data-deficient Scottish Biodiversity List

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 1842	2012	SSSI	Stormont Loch	Swamp and carr	Hundreds of plants scattered	M C Robinson

A very rare plant that occurs here in clearings in willow carr

Callitriche hermaphroditica

Autumnal Water-starwort N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 980511	1979	SSSI	Richard's Island			A Robson
NO 04L	2003	SSSI	Loch of the Lowes	Oligo-mesotrophic loch		N F Stewart
NO 062450	1986	SSSI	Loch of Butterstone	Oligo-mesotrophic loch		N F Stewart
NO 14C	2006	SSSI	Loch of Clunie	Mesotrophic loch		N F Stewart et al
NO 1444	1997	SSSI	Loch Marlee	Mesotrophic loch		SNH Loch Inventory
NO 14R	2006		Fingask Loch			N F Stewart et al
NO 14R	2004		White Loch	Eutrophic loch		N F Stewart
NO 24B	2014	SSSI	Monk Myre	Eutrophic loch		N F Stewart et al
NO 163381	1997		Bridge of Isla			N F Stewart
NO 259357	2005	SSSI	Laird's Loch	Mesotrophic loch		D Bell
NO 280295	1997		Rossie Lake			SNH Loch Inventory

A northern species of mesotrophic lochs that is quite well distributed in the lowland belt, as well as Laird's Loch in the Sidlaws and Rossie Lake in the Carse of Gowrie

Callitriche palustris

Narrow-fruited Water-starwort N

National rarity: Endanger Rare Scottish Biodiversity List

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 135444	2014		Marlee Loch	Shallow seasonal pool in damp field		NF Stewart et al

The sixth recorded site for Scotland. This globally widespread species has only recently been identified in the UK, where there is a scatter of records in England, Wales and Ireland.

Callitriche platycarpa

Various-leaved Water-starwort N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 035635	1986		Brerachan Water	River		N F Stewart
NO 163381	2005		Bridge of Isla	River		N F Stewart
NO 227436	1997		Kitty Swanson's Bridge	River		N F Stewart

A difficult species, some records of which may have been subsumed within *C. stagnalis* agg.

Carduus crispus

Wetted Thistle N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 145445	1982	SSSI	Loch Marlee			N F Stewart
NO 204252	1982		Pitroddie Den			BSBI
NO 239279	2011		Craighead Quarry	Roadside grassy bank	In considerable quantity	PSNS
NO 246445	1986		Bardmony, R Isla		And NO 257447	PSNS
NO 271457	1986		Netherton, R Isla			PSNS
NO 294437	1970		South West Fullarton			PSNS

This species of marginal habitats occurs here at the extreme northern limit of its natural UK range and so is comparatively scarce

Carex acutiformis

Lesser Pond-sedge N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 953586	2005		Kinnaird Burn Den			R Youngman
NO 06SW	1989					
NO 14W	1977	SSSI	Stormont Loch			R A H Smith
NO 15Q	1990	SSSI	Milton Wood			K Kirby

A species of mesotrophic and eutrophic sites, tolerant of shade, apparently always scarce in the VC

Carex aquatilis

Water Sedge

N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 659773	1980	SSSI	A' Bhuidheanach Bheag	Montane flushes		A G Payne
NN 661788	1982	SSSI	A' Bhuidheanach	Montane flushes		R A H Smith
NN 661799	1980	SSSI	Meall Odhar Beag	Montane flushes		A G Payne
NN 665779	1981	SSSI	A' Bhuidheanach Mhor	Montane flushes		J Mackintosh
NN 681778	1980	SSSI	Glas Mheall Mor	Montane flushes		A G Payne
NN 87SW	1987		Bruar Lodge			N W Taylor
NN 975536	1983		Tynreich			M C Robinson
NO 135445	2005	SSSI	Loch Marlee	Fen	Extensive	PSNS
NO 141404	2003	SSSI	Dowie's Hole			C McGregor
NO 17N	1990	SSSI	Meall Odhar	Montane flushes		N W Taylor
NO 250441	1995		Bankhead of Kinloch Oxbow			N W Taylor

A northern species occurring in two different forms in distinct habitats: lake margins, swamps and clearings in carr on the one hand and high-altitude peaty flushes on the other

Carex atrata

Black Alpine-sedge

N

National rarity: Scarce

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 6878	2003	SSSI	Cama' Choire		Extends to NN 6979	D Rae
NN 8377	1988		Allt Beinn Losgarnaich			N W Taylor
NN 0176	1990		Gleann Mor			D C Wood
NN 054767	2010	SSSI	Glas Tulaichean	Calcareous ledges	Several sites over 100m x 100m	M C Robinson & L Tucker

A scarce plant of ungrazed ledges on calcareous montane cliffs, and so confined to comparatively few sites in the VC

Carex capillaris

Hair Sedge

N

National rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 612712	1998		Meallan Buidhe, Craiganour			B S Brookes
NN 6274	2006	SSSI	Sow of Atholl	Base-rich flushes		PSNS
NN 688782	2003	SSSI	Glas Meall Mhor			D Rae
NN 704791	2007	SSSI	Am Meadar	Base-rich flush		M C Robinson & L Tucker
NN 86NE	1989					anon
NN 87X	1995		Gleann Mhairc	Crags		G P Rothero et al
NN 899717	2008	SSSI	Marble Lodge	Flushed grassland	Large colony	M C Robinson

NN 920672	2014		Shinagag Road	Flushed grassland	Small colony, and NN929665	M C Robinson
NN 938608	1979	SSSI	Creag Chuinnlean			R A H Smith
NN 9364	2011	SSSI	Meall an Daimh	Grassy gullies and flushes	>11 sites, extensive in this area	M C Robinson, T Loizou & L Tucker
NN 951631	2005	SSSI	Ben Vrackie	Flushed, grassy gully	>300	T Loizou & L Tucker
NN 961638	1998	SSSI	Creag Tharsuinn	Flushed, grassy gullies	>1270, in several colonies to NE	T Loizou & L Tucker
NN 905676	2009	SSSI	Monzie	Calcareous mires	Extends to NN 904675	M C Robinson
NN 906663	2009	SSSI	Loch Moraig	Calcareous mire	2,300 plants over 500 sq m	M C Robinson
NN 907662	2009	SSSI	Loch Moraig	Calcareous mire	150 plants over area 10m x 6m	M C Robinson
NN 909719	1993	SSSI	Balaneasie, Glen Tilt			PSNS
NN 916681	2012	SSSI	Monzie	Limestone outcrop and flushes	Several large colonies	M C Robinson
NN 919689	1997	SSSI	Carn Liath			P Cramb
NN 924701	1993	SSSI	Creag-choinnich Lodge			J Pitt
NN 952673	1997	SSSI	Shinagag			M Clarkson
NN 968701	2002	SSSI	Sron na h-Innearach		Other colonies nearby	T Loizou & B G Hogarth
NN 934738	2002	SSSI	Carn Torcaidh	Limestone outcrop and flushes	>21000 plants over >20,250 sq.m.	T Loizou & B G Hogarth
NN 941745	2002	SSSI	Creag Mhor		>3000 plants along 150 metres	T Loizou & B G Hogarth
NN 958759	2002	SSSI	Allt Fheannach		>50,000 plants over >3,500 sq.m.	Royal Botanic Garden
NN 966674	2011	SSSI	Crochton	Limestone outcrops and grassland	>10,000, >6 sites in the 1 km square	M C Robinson & L Tucker
NN 964683	2012	SSSI	Meall Breac	Limestone outcrop	Several sites in general area	M C Robinson & L Tucker
NN 972668	2011		Cnoc Dubh	Grassland on limestone ridge	000's	M C Robinson & L Tucker
NN 975678	1975	SSSI	Crochton			R A H Smith
NN 986792	2002	SSSI	Ruigh Niall		>540 in 2 colonies	T Loizou & B G Hogarth
NN 986754	2005	SSSI	Loch Loch (North)		Other colonies nearby	M C Robinson & J Balfour
NN 990741	2010	SSSI	Loch Loch (South)		Common in this area	M C Robinson & L Tucker
NN 996764	2005	SSSI	Allt Feith Ghuibhsachain		Other colonies nearby	M C Robinson & J Balfour
NN 998788	2005	SSSI	Fealar	Calcareous flushes		M C Robinson & J Balfour
NN 997816	2009		Allt Garbh Bhuidhe			M C Robinson & L Tucker
NO 003824	1975		Sron a' Bhoididh			B S Brookes
NO 06SW	1989					anon
NO 095685	2008		Coire Lairige (West)			M C Robinson & BSBI
NO 106689	2008		Coire Lairige (East)			M C Robinson & BSBI
NO 06NE	1998		Coire a' Ghearraig			M C Robinson
NO 07SW	1989					anon
NO 076708	2005		Dalmunzie	Spring-head	Also at NO 07527065	M C Robinson & L Tucker
NO 0874	2008		Gleann Taitneach			J Muscott & BSBI
NO 089771	1979		Carn Bhinnein			BSBI

NO 099732	2010		Coire Shith		Big colony. Common in area	M C Robinson
NO 0077	2005	SSSI	Meall na Spionaig	Flushed grassland		M C Robinson
NO 011786	1995		Gleann Beag			B S Brookes
NO 030780	1995		Carn an Righ			B S Brookes
NO 006797	2005	SSSI	Fealar Gorge	Flushes	Also at several other sites	M C Robinson
NO 009776	1979	SSSI	Gleann Mor			R A H Smith
NO 012764	1975	SSSI	Gleann Mor			B S Brookes
NO 013803	2009		Fealar	Calcareous grassland	> 4 sites in area	M C Robinson & L Tucker
NO 014708	2010		Ben Vuirich	Base-rich flushes		M C Robinson & PSNS
NO 054766	2010	SSSI	Glas Tulaichean	Flushed grassland	Some very large colonies	M C Robinson & L Tucker
NO 069763	2010		Sron na Saobaidh	Flushed grassland	NO 06967624 and 06907641	M C Robinson & L Tucker
NO 079749	2010		Gleann Taitneach			M C Robinson
NO 0776	1977		Creag Easgaidh			J Pitt
NO 113681	2008		Meall Uaine	Base-rich flushes		MCR & J McIntosh
NO 114718	2014		Ben Gulabin	Flushes	And NO 113724	M C Robinson
NO 124743	1985		Allt Coolah			J Bevan
NO 124611	2013		Bleaton Hill	Base-rich flush		M C Robinson
NO 126748	1987		Creagan Dearg			N W Taylor
NO 1375	2005		Creag nan Eun		Patch above crags, 2m x 5m	L Tucker
NO 138752	2010		Creag an t-Suidhe	Flush system		M C Robinson
NO 130734	2011		Creag Dubhaidh	Top of steep grassy hollow		M C Robinson
NO 141730	2011		Carn Ait	Narrow limestone ridge	Colony 50m long, 225 sq.m.	M C Robinson
NO 1474	2008	SSSI	Coire a' Bhathaich	Wet, calcareous grass	>2 sites	M C Robinson & BSBI
NO 142773	2011		The Cairnwell	Base-rich grassy flushes	Common, on both sides of the road	PSNS
NO 128780	2011	SSSI	The Cairnwell	Limestone grassland	Abundant	M C Robinson & R G Payne
NO 132760	2008		Allt a' Choire Dhirich	Small limestone gorge	Also NO 137760 (1988)	J Muscott et al
NO 144778	1975		Meall Odhar			R W David
NO 155773	2008	SSSI	Meall Odhar	Narrow base-rich flush		M C Robinson & BSBI

Common throughout the Dalradian schists and limestones of the central highlands, occurring wherever there is damp calcareous grassland, sometimes in considerable quantity

Carex diandra

Lesser Tussock-sedge N

National rarity: Near-threatened

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 948619	2006	SSSI	Ben Vrackie	Upland mire	Good stand	M C Robinson
NO 117568	2006		Loch Mharaich		Stand at NW end of the loch	M C Robinson

NO 135446	1988	SSSI	Marlee Loch	Fen		C Jermy
NO 1644	2003	SSSI	Myreside Fen	Fen		C McGregor
NO 177260	1984		Arnbathie Mire		Also NO 172261	R A H Smith
NO 2128	2009		Franklyden	Mires	Stands throughout mire complex	M C Robinson
NO 226324	2012		Little Dunsinane	Carex rostrata mire	Good stand at head of the mire	M C Robinson & L Tucker
NO 223520	1985		Bamff Home Farm			FWAG
NO 259357	1997	SSSI	Laird's Loch			SNH Loch Inventory
NO 268348	2010	SSSI	Little Ballo	Fen		M C Robinson
NO 271351	2007	SSSI	Thrawparts Mire	Fen		M C Robinson
NO 279341	2006	SSSI	Redmyre			M C Robinson & L Farrell
NO 280345	2006	SSSI	Blacklaw Hill Mire			M C Robinson & L Farrell
NO 2042	1997	SSSI	Monk Myre	Fen		SNH Loch Inventory
NO 25SW	1970					anon
NO 3329	1997		Kingoodie			A Godfrey

Occurs usually as stands within tall-sedge mires in base-rich situations. The Ben Vrackie site, at 500m a.s.l. is the highest-known UK site of this generally lowland species

Carex elata

Tufted-sedge N

Local rarity: Rare Scottish Biodiversity List

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 164429	1998		Fingask Loch			N F Stewart

One of only about six recent sites in Scotland, and the only one in Perthshire

Carex laevigata

Smooth-stalked Sedge N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 045434	1980	SSSI	Loch of the Lowes			J Winham
NO 030454	1993		The Glack			N W Taylor
NO 063466	2013	SSSI	Den of Riechip	Damp area in woodland	One other site at top of wood (2003)	M C Robinson
NO 093460	1998		Croft Wood			SWT
NO 15Q	1990	SSSI	Milton Wood			K Kirby

A species of base-rich flushing in damp woodlands, rather scarce away from the west coast

Carex limosa

Bog-sedge

N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 6473	1999	SSSI	Dalnaspidal	Valley mire		M C Robinson
NO 020746	1988		Lochan Caol na Feuraich			N W Taylor
NO 172261	1980		Arnbathie Mire			R A H Smith
NO 191572	1987	SSSI	Culponach Moss	Lagg area of bog		N W Taylor
NO 279341	2006	SSSI	Redmyre	Basin fen		M C Robinson & L Farrell

Found in the wettest parts of bogs and muddy, open parts of mires, both in the Sidlaws and the Grampians

Carex otrubae

False Fox-sedge

N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 218200	1977	SSSI	Paddockmuir	Estuary shore		R A H Smith
NO 22SE	1987					anon
NO 22NE	1970					anon
NO 243282	2011		Craighead Quarry		A few tussocks	PSNS
NO 325284	2011	SSSI	Monorgan	Inner saltmarsh	Common	M C Robinson
NO32J	2010	SSSI	Kingoodie	Saltmarsh		M C Robinson
NO 339295	2010		Kingoodie Quarry	Edge of lochan		M C Robinson & PSNS

A mainly coastal species in Scotland, which is confined to the vicinity of the Firth of Tay in VC89

Carex paniculata

Greater Tussock-sedge

N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 1544	1997		Rae Loch	Fen		N F Stewart
NO 167445	2003	SSSI	Myreside Fen	Fen		C McGregor

A species mainly of open fen-carr, that seems always to have been very rare in Perthshire

Carex pendula

Pendulous Sedge

N ?

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 980511	2000	SSSI	Richard's Island			J Gardiner
NO 1621	2006		Seggieden			PSNS

Doubtfully native at these sites

Carex rariflora

Mountain Bog-sedge N

National rarity: Rare Scottish Biodiversity List

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 659773	1980	SSSI	A'Bhuidheanach Bheag	Montane, peaty flushes	>190 plants	A G Payne
NN 662792	1995	SSSI	Allt a' Chama' Choire north	Montane, peaty flushes	>3000 plants	D Rae
NN 674806	1995	SSSI	Allt Meall Odhar Mor	Montane, peaty flushes	1420 plants	G P Rothero
NN 6880-81	2010	SSSI	Allt Mhic an Righ	Montane, peaty flushes	Seven sites	M C Robinson
NN 688781	1980	SSSI	Allt a' Chama Choire south	Montane, peaty flushes	>3 sites in upper part of burn	A G Payne
NN 681778	1980	SSSI	Allt Glas Mheall	Montane, peaty flushes	2 sites 900 metres apart	A G Payne
NN 675785	1980	SSSI	Allt Bhuidheanach	Montane, peaty flushes		A G Payne
NN 67-76-	1979	SSSI	Allt Coire Mhic-sith	Montane, peaty flushes		R A H Smith
NN 810843	1979		Caochan Lub	Montane, peaty flushes	Also NN 816839 & NN 816843	R W David
NN 917828	1989		Braigh Coire an Stuiic Ghuithais	Montane, peaty flushes		N W Taylor
NO 157772	2007	SSSI	Meall Odhar	Montane, peaty flushes	And NO 158770. 1500 plants	M C Robinson
NO 159761	2008	SSSI	Bathach Beag	Montane, peaty flushes	Scattered plants	M C Robinson & BSBI

Occurs in peaty flushes in four main areas along the northern county boundary watershed

Carex rupestris

Rock Sedge N

National rarity: Scarce

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 951631	2005	SSSI	Ben Vrackie	Calcareous ledge	? Only 3 plants in 2002 (R Walls)	P Stanley et al
NN 965699	2002	SSSI	Sron na h-Innearach	Limestone ledge	400 over 6sq.m. also 100 over 4 sq.m.	T Loizou & B G Hogarth
NN 9874	1977	SSSI	Loch Loch			anon
NN 054767	2002	SSSI	Glas Tulaichean	Limestone ledge		T Loizou
NO 127780	2011	SSSI	The Cairnwell	Limestone grassland	>10,000 plants, none in flower/fruit	M C Robinson & R G Payne

Calcareous rock ledges, but sward-forming in one patch on Cairnwell SSSI, where it never seems to flower.

Carex saxatilis

Russet Sedge N

National rarity: Scarce

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 686781	1980	SSSI	Cama' Choire	Montane flush		A G Payne & C Geddes

The only site that has ever been known in the VC. The headquarters of the plant are to the west, in the Breadalbane area

Carex spicata

Spiked Sedge

N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 223250	2008		Myreside	Setaside	A single clump	M C Robinson & L Tucker

This was the first record for the vice-county of a species that appears to have been spreading northwards, so it may be a recent colonist

Carex vaginata

Sheathed Sedge

N

National rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 589698	1996		Allt Coire na Feithe Bige			B S Brookes
NN 587727	2014	SSSI	Sgairneach Mhor			J W McIntosh
And NN 585733	2014	SSSI	Upper Coire Dhomhain	On low cliffs	And NN 589738	JW McIntosh
NN 595685	2014		Allt Coire na Feithe Bige	Grass/heather mosaic	Extensive patch	M C Robinson
NN 599690	2014		Sron Leathad a'Mhadaidh	Grass/heather mosaic	Very extensive patch	M C Robinson
NN 605692	2014		Meall Doire		And NN 609681	M C Robinson
NN 612712	1996		Meallan Buidhe, Craiganour			B S Brookes
NN 67G	1989	SSSI	Sow of Atholl			D C Wood
NN 681727	1990		Creag Stalcair			N W Taylor
NN 708790	2008	SSSI	Am Meadar	Grass:heather mosaic	Extensive patch	M C Robinson & L Tucker
NN 87X	1995		Gleann Mhairc			G P Rothero et al
NN 87NE	1991		Allt Sheicheachan			M C Robinson
NN 938643	2011	SSSI	Meall an Daimh	Grassland/heather mosaic	Patch 3m x 4m	M C Robinson
NN 9563	1987	SSSI	Ben Vrackie			D C Wood
NN 97SE	1989					anon
NN 987757	2005	SSSI	Loch Loch	Flushes and crags		M C Robinson & J Balfour
NN 996714	2012		Ben Vuirich	Short, damp sedge turf		M C Robinson & L Tucker
NN 997764	1995	SSSI	Allt Feith Ghuibhsachain	Poor grassland		B S Brookes
NN 985790	1995	SSSI	Creag an Duibh	Limestone outcrop		B S Brookes
NN 999793	1995	SSSI	Fealar			B S Brookes
NN 98SE	1987					anon
NO 008704	2010		Ben Vuirich		And NO 00817043	M C Robinson & PSNS
NO 009775	1976	SSSI	Gleann Mor			A G Payne
NO 004659	2013		Ben Skievie	Springline Sedge/heather mosaic		M C Robinson
NO 022791	1978		Gleann Beag			R A H Smith
NO 027776	1995		Carn an Righ			B S Brookes
NO 015797	1995		Fealar			B S Brookes

NO 018788	1995		Gleann Beag	Herb-rich Nardus grassland		B S Brookes
NO 030788	1995		Carn an Righ	Small calcareous outcrop		B S Brookes
NO 036782	1995		Crom Allt	Old blanket bog		B S Brookes
NO 006756	1995		Carn an t-Sionnaich			B S Brookes
NO 028753	1995		Gleann Mor	Base-rich flushes		B S Brookes
NO 040764	1995		Upper Gleann Mor		NO 037760 to NO 042769	B S Brookes
NO 040807	1993		Carn Dearg ridge, Fealar			J Pitt
NO 054766	2010	SSSI	Glas Tulaichean	Floor of corrie	Abundant	M C Robinson & L Tucker
NO 072762	2010		Sron na Saobaidh		Two other sites	M C Robinson & L Tucker
NO 095688	2008		Coire Lairige		<10 plants in area 2m x 5m	M C Robinson & BSBI
NO 106726	2008		Ben Gulabin	Grassy flush system	Extensive patch	M C Robinson & BSBI
NO 100696	2006		Spittal of Glenshee	Calcareous grassland		M C Robinson
NO 1278	2011	SSSI	The Cairnwell	Grassy flushes	In >4 large colonies, abundant	M C Robinson & R G Payne
NO 143775	2010		Cairnwell Ski Centre	Grass/heather mix	Large colony, and NO144770 (PSNS)	M C Robinson
NO 157772	1990	SSSI	Meall Odhar			N W Taylor
NO 146747	2008	SSSI	Coire a'Bhathaich	Grassy flushes	Frequent colonies	M C Robinson & BSBI

Usually vegetative and therefore often overlooked, but quite easy to find in montane flushed grassland and grass/heather mosaics once the leaves are recognised

Catabrosa aquatica

Whorl-grass N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 96NE	1989					anon
NO 253213	2009		Port Allen	Along edge of flood		M C Robinson & PSNS
NO 273232	1993	SSSI	Errol			N W Taylor

Has always been known along the Firth of Tay. The NN96 record is anomalous and dubious

Centaurea scabiosa

Greater Knapweed N

Local rarity: Scarce Scottish Biodiversity List

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 2025	1997		Pitroddie Den			P Cramb
NO 258312	1997		Abernyte	At road junction		M Benstead
NO 324283	1988		Monorgan			anon
NO 3429	1987		Invergowrie			M Benstead

A species much more common south of the border, with occasional VC records in marginal habitats in the Sidlaws and on the Firth of Tay

Centaureum erythraea

Common Centaury N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 141227	2003	SSSI	Kinnoull Hill	Andesite cliff	A few plants	A Godfrey
NO 238279	2011		Craighead Quarry	Bare quarry track	A few plants here and at other sites	PSNS

Several more sites in the south of the VC are given in the Flora (FBW), so the species does seem to have decreased

Centunculus minimus (Anagallis minima)

Chaffweed N

National rarity: Near-threatened

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 1339	1984	SSSI	Meikleour Area SSSI			M McCallum Webster

An annual of damp, sandy sites. Small and insignificant, it may be under-recorded

Cerastium alpinum

Alpine Mouse-ear N

National rarity: Scarce Vulnerable

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 619735	2006	SSSI	Sow of Atholl	Loose, basic outcrops	Several colonies	M C Robinson & PSNS
NN 95-63-	2012	SSSI	Ben Vrackie	Loose calcareous soils	Several colonies	M C Robinson
NN 96	1977	SSSI	Creag Spardain			J Pitt
NO 054767	2010	SSSI	Glas Tulaichean	Loose calcareous soils	Several colonies	M C Robinson & L Tucker

Restricted to soft mica-schists and limestones, where it is vulnerable to erosion.

Cerastium diffusum

Sea Mouse-ear N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 12SW	1989					anon
NO 12X	2007		Pole Hill	Top of cliff		M C Robinson & L Tucker
NO 164227	1981		Kinfauns			N F Stewart
NO 183226	1977		Glencarse Hill			A Robson
NO 13NW	1990	SSSI	N side of R Tay			R A H Smith
NO 138401	1999		Little Fardle			PSNS

Probably overlooked. The VC89 'coastline' lacks suitable short, dry, open grassland and all of these sites are inland

Cerastium semidecandrum

Little Mouse-ear N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 12G	2003	SSSI	Kinnoull Hill			A Godfrey & PSNS
NO 12NE	1989					anon
NO 23SW	1987					anon

A small and insignificant plant, it is probably under-recorded in the well-drained, sandy or calcareous soils it requires. FBW records it as being common.

Chaenorhinum minus

Small Toadflax A

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 95S	1998	SSSI	Tomdachoille Island			R Youngman
NO 22SW	1987					anon
NO 204382	1992		Keithick			anon
NO 32NW	1987					anon
NO 3430	1987		Invergowrie			M Benstead

An archaeophyte species of dry, often calcareous waste places, walls etc, that is at the northern end of its range. It is not mentioned in the Flora (FBW).

Chaerophyllum temulum

Rough Chervil N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 86NW	1971		Struan - R Garry			PSNS
NN 921589	1974		Faskally			W French
NO 12G	1995	SSSI	Kinnoull Hill			N W Taylor
NO 140419	1970		Lethendy			anon
NO 162234	1986		Northlees Farm, Kinfauns			PSNS
NO 12NE	1989					anon
NO 22SW	1987					anon
NO 204252	1982		Pitroddie Den			BSBI
NO 324283	1988	SSSI	Monorgan			anon
NO 3429	2008		Kingoodie	Quarry		I Ford

This species of road verges and waste places largely lacks post-2000 records, and is more likely to be under-recorded than fast-declining

Chelidonium majus

Greater Celandine A

Local rarity: Rare Scottish Biodiversity List

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 149239	1990		Deuchny			A Mathers
NO 13NW	1989					anon
NO 179456	1999		Ratray			A Showler

A plant of waste places, roadsides, walls etc, usually close to habitation, that has always been scarce in the VC

Chenopodium bonus-henricus

Good-King-Henry A

National rarity: Vulnerable Scottish Biodiversity List

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 937668	2014		Tomnabroilach, Glen Girnaig	Croft ruins	One clump	M C Robinson
NO 054629	1982		Kindrogan			M McCallum Webster
NO 06SE	1989		Roadside at Enochdhu			G McDougall
NO 197254	2007		Pole Hill	Steep grassy slope	1 plant	M C Robinson & L Tucker
NO 2030	1993		Bandirran	Roadside		R A H Smith

Described as widely distributed in the county in the Flora(FBW) but now decidedly scarce. Occurs in a variety of habitats.

Cichorium intybus

Chicory A

Local rarity: Rare Scottish Biodiversity List

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 307300	1997		Longforgan			M Benstead
NO 3429	1997		Kingoodie			M Benstead

Probably a scarce relic of cultivation

Cochlearia micacea

Mountain Scurvygrass N

National rarity: Scarce

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 054767	1988	SSSI	Glas Tulaichean	Montane flushes		N F Stewart
NO 137727	2011		Creag Dubhaidh	Steep, mossy burn	Large colony. One other site nearby	M C Robinson
NO 158772	1994	SSSI	Meall Odhar	Montane flushes		T C G Rich
NO 161769	1990	SSSI	Glas Maol	Montane flushes		N W Taylor

A Global Red List endemic, this species is not easy to separate from *C. pyrenaica* subsp. *alpina* and its distribution in the VC is open to doubt

Cochlearia pyrenaica subsp alpina

Pyrenean Scurvygrass

N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 716801	2005		An Dun	Montane flushes		N Easterbee
NO 037824	1980		Carn a' Bhutha	Montane flushes		Kindrogan Field Centre
NO 064778	1988		Loch nan Eun	Montane flushes		K Fallowfield
NO 07M	2008	SSSI	Glas Tulaichean	Montane flushes		M C Robinson
NO 125780	2005	SSSI	The Cairnwell	Montane flushes		M C Robinson
NO 159756	2008	SSSI	Cul Riabhach	Montane flushes		M C Robinson

Identification of this species and of *C micacea* may have been inconsistent***Coeloglossum viride***

Frog Orchid

N

National rarity: Vulnerable

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 6274	1978	SSSI	Sow of Atholl			PSNS
NN 895672	1998	SSSI	Glen Fender	On west bank of burn		R A H Smith
NN 87I	2007		Allt Beinn Losgarnaich			M C Robinson & L Tucker
NN 87SE	1995		Gleann Mhairc			G P Rothero et al
NN 87V	2008		Glen Tilt			M C Robinson
NN 9067	2011	SSSI	Monzie	Herb-rich grassy bank		E Lavery
NN 905670	2009		Loch Moraig	On roadside bank		M C Robinson
NN 909719	1993	SSSI	Balaneasie, Glen Tilt			PSNS
NN 919680	2012	SSSI	Monzie	Calc. turf on limestone ridge	Scarce	M C Robinson
NN 9172	1976	SSSI	Glen Tilt	Limestone		Anon
NN 924665	2014		Glen Girnaig	Calcareous mire	A few	M C Robinson
NN 9669	1985	SSSI	Sron na h-Innearach			R A H Smith
NN 937740	1996	SSSI	Creag Mhor			R Youngman
NN 9574	1976	SSSI	Coire Buidhe Mor			PSNS
NN 972668	2011		Cnoc Dubh	Grassland on limestone outcrop	ca.20	M C Robinson & L Tucker
NN 9877	1995	SSSI	Glen Loch	Slopes of Creag Dhearg		B S Brookes
NN 9973	1995	SSSI	Braigh Feith Ghiubhsachain			B S Brookes
NN 996807	1995		Meall na Caillich Buidhe			J Pitt
NN 99817919	2012	SSSI	Ruigh Mor, Fealar	Ungrazed calcareous grassland	Occasional	M C Robinson et al
NO 004775	2005	SSSI	Meall na Spionaig	Flushes and outcrops	Several colonies	M C Robinson
NO 009776	1979	SSSI	Gleann Mor			R A H Smith
NO 054629	1987		Kindrogan			R Youngman

NO 096603	2009		Ashintully	Grassland		R Payne & M C Robinson
NO 096627	1987		Cnoc an Daimh			B S Brookes
NO 06NE	1998		Ben Earb			M C Robinson
NO 010795	1995		Miadan Mor, Fealar			B S Brookes
NO 025795	1995		Gleann Beag, Fealar	Flushed grassy area	& at NO 018786 and NO 022791	B S Brookes
NO 027754	1995		Gleann Mor	Small limestone outcrop		B S Brookes
NO 027776	1995		Carn an Righ			B S Brookes
NO 071716	2009		Coire Buidhe Mor	Damp, calcareous grass	15 plants in area 16m x 16m	MCR & R Youngman
NO 07 NE	1991	SSSI	Glas Tulaichean			N W Taylor
NO 08A	2009		Fealar			M C Robinson & L Tucker
NO 038818	1995		Carn Bhac	Flushes		B S Brookes
NO 040800	1995		Gleann Beag	Small limestone outcrop		B S Brookes
NO 1159	2008		Wester Bleaton	Calcareous grassland		M C Robinson & BSBI
NO 17B	2008		Ben Gulabin			MCR & BSBI
NO 134743	2010		Creag an t-Suidhe	Calcareous grassland		M C Robinson
NO 1375	2008		Creag nan Eun, Gleann Beag			M C Robinson
NO 1278	2011	SSSI	The Cairnwell	Calcareous grassland	Single spikes at two sites	M C Robinson & R G Payne
NO 133735	2011		Creag Dubhaidh	Calcareous grassland	Single spikes at two sites	M C Robinson
NO 142773	2011		The Cairnwell	Rocky slopes, dry grassy flushes	Scattered all around	PSNS
NO 1474	2008	SSSI	Creag Leacach	Calcareous flushes		M C Robinson & BSBI
NO 17N	2008		Meall Odhar	Calcareous flushes		M C Robinson & BSBI

This species of calcareous grasslands occurs exclusively north of the Highland Boundary Fault and is not uncommon in suitable habitat. It ranges from dry roadside banks to cold, damp, north-facing montane slopes

Conium maculatum

Hemlock

A

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 14W	1980	SSSI	Stormont Loch			N F Stewart
NO 188279	2013		Mill of Montague	Grassland at edge of roadside field	A few plants	M C Robinson
NO 212252	1997		Pitroddie	Quart-dolerite cliff		M Benstead

A lowland species of various habitats, wet and dry, that is at the northern edge of its UK range and has always been scarce in the VC.

Convallaria majalis

Lily-of-the-valley

N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 86NW	1980	SSSI	Glen Tilt	Broadleaf woodland		R A H Smith
NN 86NE	1970					anon
NN 931583	1996		Pitlochry	Broadleaf woodland		R Youngman
NN 951589	2003		Kinnaird Burn Den	Broadleaf woodland		M C Robinson
NN 9557	2008		Black Spout Wood	Broadleaf woodland		M C Robinson
NN 95SE	1970					anon
NN 96SW	1989			Broadleaf woodland		anon
NO 045440	1983	SSSI	Loch of the Lowes			anon
NO 148358	2013		Gladfield	Broadleaf woodland	12m x 7m	M C Robinson
NO 14NE	1980	SSSI	Craighall Gorge	Broadleaf woodland		J J Aitken
NO 230488	1979	SSSI	Den of Alyth	Broadleaf woodland		R A H Smith
NO 295512	2007	SSSI	Den of Airlie	Broadleaf woodland		M C Robinson

Most of these sites look natural and there is no reason to suppose that the species is always naturalised in the VC, though the origin of most colonies will remain unclear

Convolvulus arvensis

Field Bindweed

N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 171429	1996		White Loch			SWT
NO 224267	1997		Glen of Rait	Field gateway		M Benstead
NO 232272	1986		Fingask Farm			R A H Smith
NO 33SW	1970					anon

This weed species has always been scarce in the VC

Corallorhiza trifida

Coralroot Orchid

N

National rarity: Scarce Vulnerable

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 159446	1998		Rae Loch			R A H Smith
NO 164444	1976	SSSI	Ardblair Fen			R A H Smith
NO 168428	2014		White Loch	Damp edge of loch	8 spikes on the S side	M C Robinson
NO 175427	2011		Black Loch	Damp edge of loch	>30 spikes	M C Robinson
NO 194423	2004	SSSI	Stormont Loch	Damp edge of loch	1 spike on the east side	M C Robinson
NO 210426	2004	SSSI	Monk Myre	Carr	312 spikes	L Farrell et al

NO 279487	1989		Silvie Plantation			R A H Smith
NO 280341	1982	SSSI	Redmyre			D M Bayne

Very variable in its numbers from year to year, probably depending to some extent on the height of the water table.

Cornus suecica

Dwarf Cornel

N

National rarity: Near-threatened

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 5873	2014	SSSI	Upper Coire Dhomhain			J W McIntosh
NN 585699	2014		Sron Leathad a-Mhadaidh	Damp submontane heath		M C Robinson
NN 591748	1996	SSSI	Beinn Udlamain	Damp submontane heath		N W Taylor
NN 597721	1998	SSSI	Sgairneach Mhor (south)	Damp submontane heath		B S Brookes
NN 5973	2009	SSSI	Coire Creagach	Damp submontane heath		M C Robinson
NN 57NE	1989	SSSI	A' Mharconaich			anon
NN 605697	1978		Coire na Garidha	Damp submontane heath		L Mason
NN 609727	1978	SSSI	Sgairneach Mhor (east)	Damp submontane heath		B S Brookes
NN 609692	2014		Meall Doire	Damp submontane heath		M C Robinson
NN 6073	2009	SSSI	Coire Creagach	Damp submontane heath		M C Robinson
NN 6173	2006	SSSI	Coire Luidhearnaich	Damp submontane heath		M C Robinson & PSNS
NN 612744	1978	SSSI	Coire Dhomhain	Damp submontane heath		B S Brookes
NN 613703	1998		Meallan Buidhe, Craiganour	Damp submontane heath		B S Brookes
NN 67C	2007	SSSI	Coire Dhomhain	Damp submontane heath		M C Robinson
NN 67 G,H	2006	SSSI	Sow of Atholl	Damp submontane heath		M C Robinson & PSNS
NN 67N	2009	SSSI	Allt a' Chaorainn	Damp submontane heath		M C Robinson & L Tucker
NN 67 W,X	2009		Allt an Stalcair	Damp submontane heath		M C Robinson
NN 753776	1995		Sron Odhar, Dalnamein	Damp submontane heath		G P Rothero
NN 77E	2007	SSSI	Am Meadar	Damp submontane heath		M C Robinson & L Tucker
NN 77NE	1989					anon
NN 849739	1986		Beinn Dearg	Damp submontane heath		anon
NN 87NW	1988		Beinn Losgarnaich	Damp submontane heath		N W Taylor
NN 87SE	1995		Beinn Mheadonach	Damp submontane heath		G P Rothero et al
NN 87NE	1989					anon
NN 823804	1977		Allt a' Chuil	Damp submontane heath		S Bailey
NN 875813	1975		Beinn Bhreac	Damp submontane heath		N Sanderson
NN 917824	1989		Carn Ealar	Damp submontane heath		N W Taylor
NN 9275	1989		Grianan Mor	Damp submontane heath		D J McCosh
NN 923763	1993		Carn a' Chlamain	Damp submontane heath		PSNS

NN 925787	1975		Tarf Water Bothy	Damp submontane heath		N Sanderson
NN 925817	1975		Sron na Machranich	Damp submontane heath		N Sanderson
NN 9867	1995		Creag Chlacharnach	Damp submontane heath		R Youngman
NN 982704	1980	SSSI	Stac nam Bodach	Damp submontane heath		B S Brookes
NN 977761	1980	SSSI	Meall Gharran	Damp submontane heath		B S Brookes
NN 98SW	1987					anon
NN 992815	1975		Loch Tilt	Damp submontane heath		B S Brookes
NN 998675	1983		Head of Tarvie Burn	Damp submontane heath		M Hamilton
NO 07A	2010		Ben Vuirich	Damp submontane heath		M C Robinson & PSNS
NO 014757	1995		Carn an t-Sionnaich	Damp submontane heath		B S Brookes
NO 019759	1980		Gleann Mor	Damp submontane heath		D J Baker
NO 036782	1975		Crom Allt	Damp submontane heath		B S Brookes
NO 07Q	2005		Meall a' Choire Bhuidhe	Damp submontane heath		M C Robinson & L Tucker
NO 07R	2008		Creag Bhreac	Damp submontane heath		J Jones & A Wilson
NO 0576	2010	SSSI	Glas Tulaichean	Damp submontane heath		M C Robinson & L Tucker
NO 071752	1983		Glas Tulaichean	Damp submontane heath		L Borradaile
NO 0678	2014		Loch nan Eun	Damp submontane heath at side of loch		M C Robinson
NO 092775	1983		Carn Bhinnein	Damp submontane heath		C Lee
NO 08SW	1987					anon
NO 158724	2011		Black Hill	Damp submontane heath		M C Robinson
NO 17B	2008		Ben Gulabin	Damp submontane heath		M C Robinson & BSBI
NO 17C	2009		Carn Mor	Damp submontane heath		M C Robinson
NO 124743	1985		Allt Coolah	Damp submontane heath		J Bevan
NO 17M	2008	SSSI	Creag Leacach	Damp submontane heath		M C Robinson & BSBI
NO 17N	2008	SSSI	Meall Odhar	Damp submontane heath		M C Robinson & BSBI
NO 127781	1974	SSSI	The Cairnwell	Damp submontane heath		J G Roger

In the north of the VC can usually be found in heather communities on damp montane slopes, sometimes in areas of late snow-lie

Crepis mollis

Northern Hawk's-beard N

National rarity: Rare Endangered Scottish Biodiversity List

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 144547	1972		Kingseat		Not re-found in 2008	A L Newton

This rare and declining species of northern meadows has not been re-found recently at its only recorded site.

Cystopteris dickieana

Dickie's Bladder-fern N

National rarity: Rare Vulnerable Scottish Biodiversity List W&C Act 1981 Schedule 8

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 1648	2005	SSSI	Den of Riechip	Vertical rock face	<20 small plants	M C Robinson, det: F Rumsey

Identified only by the form of the spores, these plants were identical in outward appearance to *C. fragilis* and the species must be under-recorded.

Cystopteris montana

Mountain Bladder-fern N

National rarity: Rare Scottish Biodiversity List

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 9663	2011	SSSI	Creag Tharsuinn, Ben Vrackie	Wet rock crevices	30 fronds	F J Rumsey

Two small colonies in dripping wet crevices of a basic schistose crag, discovered in 1999

Dactylorhiza incarnata ssp pulchella

Early Marsh-orchid N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 931663	2014		Glen Girnaig	Calcareous mires	Several among ssp. incarnata	M C Robinson
NN 960596	2012	SSSI	Pitarrig	Peaty flushes	Strong colony	M C Robinson
NO 07SE	2005		Dalmunzie			M C Robinson & L Tucker
NO 127609	2013		Bleaton Hill	Base-rich flush	2 spikes	M C Robinson
NO 218244	2008		Myreside	Damp grassland		M C Robinson & L Tucker

The habitats here are not as acidic as sometimes stated for the subspecies, but it is readily identifiable by the purple colour of its flowers

Dactylorhiza traunsteinerioides

Narrow-leaved Marsh Orchid N

National rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 124611	2013		Bleaton Hill	Base-rich flush	2 flowering spikes	M C Robinson

This record extends the distribution of this western species by about 50 miles. The plants were in a highly base-rich closed flush, i.e. a continuous spongy sward, not open and stony.

Descurainia sophia

Flixweed A

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 115325	2004		Cambusmichael	Entrance to graveyard		L Farrell & PSNS
NO 195422	2010		Stormont Loch	Side of track		B G Hogarth

Probably always a scarce casual

Dianthus deltooides

Maiden Pink

N

National rarity: Scarce Near-threatened

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 874650	2009		Blair Atholl Golf-course	Grassy bank	<50 in area 3m x 2m	M C Robinson
NN 884649	2002	SSSI	Blair Atholl Meadow	Grassy bank		M C Robinson
NN 938602	1979		Creag Chuinnlean			R McKechnie
NN 980514	1988	SSSI	Richard's Island	Stable river shingle		R A H Smith
NO 126388	2004	SSSI	Delvine	Stable river shingle		M C Robinson & PSNS
NO 164227	1981		Kinfauns			N F Stewart
NO 239281	1997		Flawcraigs	Crag		M Benstead

Appears to be in decline, in one site at least on account of undergrazing resulting in swamping by grass. FBW records it as common along the Braes of the Carse, but only seen in two sites there in recent years

Dipsacus fullonum

Teasel

N ?

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 952580	1998		Pitlochry	On bank	One plant	R Youngman
NO 12G	1995	SSSI	Kinnoull Hill			N W Taylor
NO 238279	2011		Craighead Quarry	Stony track	A good colony	PSNS
NO 240281	1997		Flawcraigs			M Benstead
NO 3429	2009		Invergowrie			M C Robinson

May not be native at all of these sites.

Draba incana

Hoary Whitlowgrass

N

National status: Scottish Biodiversity List

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 6173	2006	SSSI	Sgairneach Mhor	Calcareous crags	One small area in steep gully	PSNS
NN 686781	1980	SSSI	Cama' Choire		And NN 689785	A G Payne & R A H Smith
NN 701791	1980	SSSI	Cama' Choire			R A H Smith
NN 916681	2000	SSSI	Monzie	Dolomitic limestone outcrop		R A H Smith
NN 924701	1993	SSSI	Carn Liath			J Pitt
NN 937740	1996	SSSI	Creag Mhor	Basic outcrops		R E Youngman
NN 975678	1975	SSSI	Crochton	Limestone crags and flushes		R A H Smith
NN 96U	2003	SSSI	Sron na h-Innearach	Limestone cliffs	Large quantities	M C Robinson

NN 993729	2012	SSSI	Loch Loch south			M C Robinson & L Tucker
NN 97X	2010	SSSI	Loch Loch north			M C Robinson & L Tucker
NN 9877	1995	SSSI	Creag Dhearg	On slopes below crags		B S Brookes
NN 998794	1990	SSSI	Fealar Gorge			K Kirby
NO 008798	1988	SSSI	Fealar Gorge			N F Stewart
NO 005776	2005	SSSI	Meall na Spionaig	Limestone outcrops		M C Robinson
NO 009775	1976	SSSI	Allt a' Ghlinne Mhoir		Up- and downstream of bridge	A G Payne & R A H Smith
NO 003743	1988		Braigh Feith Ghiubhsachain	On crags		N W Taylor
NO 027776	1995		Carn an Righ			B S Brookes
NN 949630	2012	SSSI	Ben Vrackie	On basic crag	<14 in small colony	M C Robinson
NN 96S	2003	SSSI	Cona Chreag			M C Robinson
NN 975648	1979	SSSI	Meall Breac			RBGE
NO 098699	2006		Dalmunzie	Basic crags in clearing		M C Robinson
NO 0874	1977		Creag Dhearg			J Pitt
NO 17H	2009		Creag nan Eun	Limestone outcrops		M C Robinson & L Tucker
NO 17H	2010		Creag an t-Suidhe	Limestone crags		M C Robinson
NO 126748	1987		Creagan Dhearg			N W Taylor
NO 127781	2005	SSSI	The Cairnwell	Sugar limestone patches	Common	M C Robinson et al

Not difficult to find on limestone and other basic crags, where it prefers thin, dry soils. A very dwarf form occurs at the exposed Cairnwell site

Drosera anglica

Great Sundew

N

National rarity: Near-threatened

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 618681	2014		Loch Garry	Open, stony flush	Also at NN 621682	M C Robinson
NN 638719	2009		Loch Garry	Open, stony flush	Also at NN 641723	M C Robinson & L Tucker
NN 631752	2006	SSSI	Sow of Atholl	Mossy runnel	16 plants	M C Robinson & PSNS
NN 723715	2014		Dalnacardoch	Mossy flush in bog	Few	M C Robinson
NO 044646	2009		Straloch	Open, stony flushes	Plentiful	M C Robinson
NO 080717	2009		Dalmunzie	Open flushes	A large colony	M C Robinson & L Tucker

A predominantly western species in Scotland, occurring here in scattered colonies along the south-eastern edge of its range. Can occur in some quantity in open stony flushes, but also in mossy flushes alongside *Drosera rotundifolia*.

Drosera intermedia

Oblong-leaved Sundew N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 616674	1998		Allt Shallainn			B S Brookes
NN 638727	1997	SSSI	Sow of Atholl			P Cramb

Another western species in Scotland, only just occurring in the north-west of the VC.

Dryas octopetala

Mountain Avens N

National rarity: Scarce

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 962698	2003	SSSI	Sron na h-Innearach	Limestone grassland	Sheets of it	M C Robinson
NN 937741	2002	SSSI	Carn Torcaidh	Calcareous outcrops	4000 plants over 20,000 sq.m.	T Loizou & B G Hogarth
NN 941745	2002	SSSI	Creag Mhor	Outcrops above the crags	240 plants over 3000 sq.m.	T Loizou & B G Hogarth
NN 9879	1990	SSSI	Falls of Tarf			A McG Stirling
NN 996794	1993	SSSI	Fealar Gorge			J Pitt
NO 004783	2002	SSSI	Gleann Mor		14 plants over 10 sq.m.	T Loizou & B G Hogarth
NO 081740	1997		Creag Dhearg			BSBI
NO 128780	2011	SSSI	The Cairnwell	Limestone grassland	000's of plants	M C Robinson & R G Payne

Stable populations in some of the best calcareous crag sites, with probably few left to discover

Echium vulgare

Viper's-bugloss N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 12G	2008	SSSI	Kinnoull Hill	Grassland		M C Robinson
NO 158225	1978		Binn Hill			PSNS
NO 200233	1990		Hole o'Clean			A Mathers
NO 207278	2014		Swirlhead	Volcanic crags	<20 plants	M C Robinson
NO 203254	2007		Pitroddie Den	Grassland at top of crag		PSNS
NO 239281	1997		Flawcraigs	Outcrops		M Benstead

Rather scarce in thin soils along the south-facing slope of the Sidlaw range

Elatine hexandra

Six-stamened Waterwort N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 0544	2003	SSSI	Loch of the Lowes	Shallow water and mud		N F Stewart
NO 0645	2005	SSSI	Loch of Butterstone	Shallow water and mud		V James
NO 118443	2002	SSSI	Loch Clunie	Shallow water and mud		N F Stewart
NO 1344	2002	SSSI	Loch Marlee	Shallow water and mud		N F Stewart

Found in some of the Dunkeld-Blairgowrie lochs and may be present in all of them

Elatine hydropiper

Eight-stamened Waterwort N

National rarity: Scarce

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 055440	2005	SSSI	Loch of the Lowes	Shallow water and mud	Large amount	N F Stewart et al

Occurs in some quantity at the eastern end of the loch, forming carpets in the shallow water and on the mud. Has never been recorded from any other sites

Eleocharis acicularis

Needle Spike-rush N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 042442	1997	SSSI	Loch of Craiglush			SNH Loch Inventory
NO 055442	2005	SSSI	Loch of the Lowes			N F Stewart et al
NO 060450	1996	SSSI	Loch of Butterstone			V James
NO 118443	2010	SSSI	Loch of Clunie			M C Robinson, A Godfrey, W Hay
NO 14SW	2002	SSSI	Loch Marlee			N F Stewart
NO 164429	2005		Fingask Loch			N F Stewart et al
NO 168428	1988		White Loch			N F Stewart
NO 190422	1998	SSSI	Stormont loch			N F Stewart
NO 211427	2004	SSSI	Monk Myre			N F Stewart
NO 12F	2006		Friarton Bridge			M C Robinson
NO 13E	2003		The Inch			M Lawley
NO 16P	2005		Loch Beanie			M C Robinson & L Farrell

Occurs usually exposed at the edge of shallow water mostly in lowland sites, with the exception of the upland Loch Beanie

Eleocharis multicaulis

Many-stalked Spike-rush N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 87I	2007		Glen Bruar	Bog		M C Robinson & L Tucker
NO 0444	1987	SSSI	Loch of the Lowes	Poor-fen		I Bonner
NO 06A	2003		Blath Bhalg			L Farrell & R Youngman
NO 14SE	1970					anon
NO 16P	2005		Loch Beanie area			L Farrell & M C Robinson

A western species. Some of these records may not be 100% reliable

Eleogiton fluitans

Floating Club-rush

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 014493	2011	SSSI	Sloggan Burn, Guay	Edge of peaty lochan	Several places along dam	P Batty & R Youngman

Two sites recorded in FBW (1898), both in the Sidlaw Hills, but none since until this discovery

Epilobium parviflorum

Hoary Willowherb N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 12X	2007		Pole Hill	Marshy grassland		M C Robinson & L Tucker
NO 167329	1977		Dunsinnan House			A Robson
NO 22C	2008		Myreside			M C Robinson & L Tucker
NO 23M	2007		Northballo Hill			M C Robinson & L Tucker
NO 24B	2005	SSSI	Monk Myre			N F Stewart et al
NO 249508	2009		Hill Of Loyal			M C Robinson
NO 263507	2007		Barry Hill			M C Robinson

Absent north of the Highland Boundary Fault but may be under-recorded south of it. Usually found in damp places

Epilobium roseum

Pale Willowherb N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 13SW	1970					anon
NO 14NE	1981	SSSI	Craighall Gorge			B S Brookes
NO 178457	1981		Blairgowrie	By riverside road		O M Stewart
NO 331293	2010		Kingoodie	Edge of field.		M C Robinson

Absent north of the Highland Boundary Fault and apparently very scarce south of it. Usually found in quite damp places but at least one of these sites is dry

Epipactis atrorubens

Dark-red Helleborine N

National rarity: Scarce

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 129754	2010		Creag nan Eun	Limestone outcrop		M Tulley

This colony does not flower freely and is subject to rabbit-grazing. It is scattered around steep, dry, eroded limestone slopes and rock-faces. 50-100 in 2009.

Epipactis helleborine

Broad-leaved Helleborine N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 1222	2000		Moncrieffe Island			R A H Smith & PSNS
NO 12F	2006		Friarton Bridge			M C Robinson
NO 12G	2003		Kinnoull Hill	Broadleaved woodland		PSNS
NO 12E	1989					anon
NO 1521	2008		Insherrit Island	In woodland	On 'island' and along railway line	M C Robinson
NO 14NE	1980	SSSI	Craighall Gorge		Poss. NO 174484	J J Aitken

Known only in the vicinity of the R Tay below Perth. FBW records it as 'not common', and it still isn't.

Equisetum hyemale

Rough Horsetail N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 917680	1978	SSSI	Monzie	Calcareous flushes		R A H Smith
NN 999790	2012	SSSI	Ruigh Mor, Fealar	Calcareous flush		L Tucker
NO 048688	2010		Glenfermate	Narrow calcareous flush		M C Robinson
NO 009776	1979	SSSI	Gleann Mor			R A H Smith
NO 08F	1995		Upper Allt Feith Lair			B S Brookes
NN 956616	2005		Allt na Cachaleith			M C Robinson
NN 980511	1988	SSSI	Richard's Island			R A H Smith
NO 027776	1995		Carn an Righ			B S Brookes
NO 223324	1983		Little Dunsinane			R A H Smith
NO 277487	1995		Silvie plantation bog			anon

Usually occurs in a prostrate form in upland calcareous flushes, whereas FBW records it as being rare at low levels in damp places in woods.

Equisetum pratense

Shady Horsetail

N

National rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 67SW	1989					anon
NN 661789	2003	SSSI	A' Bhuidheanach			D Rae
NN 6878	1980	SSSI	Cama' Choire			R A H Smith
NN 701791	1980	SSSI	Am Meadar			R A H Smith
NN 979682	2005		Blairuachdar	Roadside		M C Robinson & L Tucker
NN 87Z	2008		Glen Tilt			M C Robinson
NN 828769	2007		Glen Bruar	Runnel in shingle		M C Robinson & L Tucker
NN 941613	2014	SSSI	Ben Vrackie	Burn gully	Linear colony	T Loizou & BSBI
NN 9563	1999	SSSI	Ben Vrackie	Base-rich flush		M C Robinson
NN 96NE	1989					anon
NO 004624	2014	SSSI	Dalnacarn	Grass and heather at side of burn	>270 plants in colony extending up burn	M C Robinson
NN 999793	1995	SSSI	Fealar Gorge, lower			B S Brookes
NO 008798	1981	SSSI	Fealar Gorge, upper			R A H Smith
NO 0078	1979	SSSI	Gleann Mor, lower			R A H Smith
NO 009775	1976	SSSI	Gleann Mor		Also NO 012764	AG Payne
NO 011764	2010	SSSI	Gleann Mor		Large colony beside burn	M C Robinson
NO 015796	1995		Fealar	Stony flushes		B S Brookes
NO 030780	1995		Carn an Righ			B S Brookes
NO 066713	2006		Coire Buidhe Mor	Colony extending up burn		M C Robinson
NO 091543	1983		Woodhill			A McG Stirling
NO 089771	1979		Carn Bhinnein			BSBI
NO 07R	2008		Glenlochsie			J Jones & A Wilson
NO 078747	2010		Gleann Taitneach		Also at NO 083746	M C Robinson
NO 094726	2008		Ben Gulabin	Wooded gully	Also at NO 099729	M C Robinson & BSBI
NO 17B	2008		Ben Gulabin			M C Robinson & BSBI
NO 07NE	1991	SSSI	Glas Tulaichean			N W Taylor
NO 128609	2013		Bleaton Hill	Grassy bank above burn	Strong, continuous colony	M C Robinson
NO 139455	1985		Wester Kinloch			R A H Smith
NO 176486	2014	SSSI	Craighall Gorge	Wooded river bank on west side	183 plants, 15m x 6m	M C Robinson, J McIntosh & L Tucker
NO 141557	1981		Persie Meadow			R A H Smith
NO 141716	2011		Allt an Daimh	Spring-head	A few stems only.	M C Robinson
NO 16E	2008		Spittal of Glenshee			M C Robinson & BSBI
NO 1375	2008		Creag nan Eun			J Muscott et al

NO 1376	2008		Allt a 'Choire Dhirich			J Muscott et al
NO 128780	2011	SSSI	The Cairnwell	Grassy flushes	Two colonies	M C Robinson & R G Payne
NO 140774	2010		The Cairnwell	Grassy flushes	Plentiful up narrow flushes	M C Robinson
NO 141750	2008	SSSI	Coire a 'Bhathaich		Two sites along the burn	M C Robinson & BSBI
NO 143763	2011	SSSI	Devil's Elbow	Grassy flushes	Two sites	PSNS
NO 135728	2011		Carn Aig Mhala	Grassland beside burn		M C Robinson
NO 1323	2011		Carn Ait	Around spring-heads	Two sites	M C Robinson
NO 193270	2013		Dalreichmoor	Roadside grass verge	Colony extending 11 metres	M C Robinson

Despite its national status this is quite a common plant in East Perth, especially in the Glenshee area. Usually beside flushes or streams and can be extensive where it occurs

Equisetum variegatum

Variegated Horsetail

N

National rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 620750	2007	SSSI	Coire Dhomhain	Stony flush		M C Robinson
NN 905672	2011	SSSI	Monzie	Open stony flushes		A Scobie, E Lavery & R Payne
NN 920681	2012	SSSI	Carn Liath flushes	Open stony flushes	Scarce	M C Robinson
NN 951687	2004	SSSI	Allt Coire Lagain			H McHaffie
NN 963673	2011	SSSI	Crochton			M C Robinson & L Tucker
NN 970694	2012	SSSI	Loch Valigan	Calcareous flushes	Two colonies	M C Robinson & L Tucker
NN 979683	1985	SSSI	Allt na Leacainn Mhoire			H McHaffie
NN 96SE	2003	SSSI	Eastern Ben Vrackie area			M C Robinson
NN 97	1980		Ben Vuirich			B S Brookes
NN 97SW	1970					anon
NN 98SE	1987					anon
NN 998794	1981	SSSI	Fealar Gorge		And NO 008798 (RAHS, 1981)	I Bolt
NO 0076	1976	SSSI	Gleann Mor			A G Payne
NO 0078	1979	SSSI	Gleann Mor			R A H Smith
NO 015796	1995		Fealar	Stony flushes		B S Brookes
NO 027776	1995		Carn an Righ			B S Brookes
NO 037760	1995		Gleann Mor	Large stony flush		B S Brookes
NO 066712	2005		Coire Buidhe Mor			M C Robinson & L Tucker
NO 068771	2014		Allt Easgaidh	Stony flush	A few stems only	M C Robinson
NO 084747	2012		Allt Ghlinn Taitneich	River shingle at mouth of burn	Strong colony	B G Hogarth
NO 094759	1993		Carn Bhinnein			N W Taylor
NO 099729	2008		Ben Gulabin			M C Robinson & BSBI

NO 07NE	1989					anon
NO 045804	1995		Gleann Beag, Fealar			B S Brookes
NO 114711	2014		Spittal of Glenshee	Shallow pool in burn		M C Robinson
NO 124743	1985		Allt Coolah			J Bevan
NO 132750	2011		Gleann Beag, Glenshee			B Brown, A Evans & F McGavigan
NO 142762	2011		Devil's Elbow flushes	Wet, stony flush	22 shoots	A Godfrey

Almost entirely confined to the 'Blair Atholl' Dalradian limestone exposures, where it occurs in calcareous flushes, never in great quantity

Eupatorium cannabinum

Hemp-agrimony N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 953586	1998		Kinnaird Burn Den	Damp woodland		R Youngman
NN 9557	2008		Black Spout Wood			M C Robinson
NO 117322	1980		Cambusmichael			N F Stewart
NO 125328	1978	SSSI	Campsie			R A H Smith
NO 14U	2007	SSSI	Craighall Gorge			PSNS

A lowland plant, scarce as far north as Perthshire, usually found in base-enriched ground near or beside streams

Euphorbia helioscopia

Sun Spurge A

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 95NW	1989		Pitlochry			anon
NN 950585	2008		Pitlochry			M C Robinson
NN 981540	1999		Tulliemet			R Youngman
NO 026637	2011		Ceanghline	Edge of rape field	Small amount	M C Robinson
NO 129246	1987		Gannochy Farm			R A H Smith
NO 12NW	1989					anon
NO 166428	2010		Fingask Loch	Edges of potato fields		M C Robinson
NO 169427	2010		White Loch	Edges of potato fields	Abundant	M C Robinson
NO 179456	1999		Blairgowrie/Ratray			A Showler
NO 188195	1996	SSSI	Cairnie - Inchyra			BSBI
NO 22NE	1987					anon
NO 232272	1986		Fingask Farm			R A H Smith
NO 324283	1988		Monorgan			anon
NO 3430	1997		Invergowrie			M Benstead

This species is almost certainly more frequent than indicated here

Euphorbia lathyris

Caper Spurge

A

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 054629	1989		Kindrogan			R Youngman
NO 165222	2011		Kinfauns	Bank	Big population'	C McLeod
NO 310305	2005		Huntly Wood	Waste ground		MCR

Can be casual, but also occurs in good, apparently established populations. Towards the northern end of its British range. Absent from the rest of Perthshire.

Euphorbia peplus

Petty Spurge

A

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 03NE	1987		Caputh			anon
NO 14A	2013		Spittalfield			F Anstey
NO 015489	1990	SSSI	Dowally - L.Ordie			PSNS
NO 121230	2014		Moncrieffe Island allotments	Cultivated ground	Frequent	B Ballinger
NO 22NE	1987					anon
NO 259458	1977		Leitfie - Netherton			L Barron
NO 324283	1988	SSSI	Monorgan			anon
NO 3429	2008		Kingoodie			I Ford

A southern plant of cultivated soil, usually gardens. More information required

Euphrasia frigida

Upright Eyebright

N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 9461	1979	SSSI	Creag Bhreac			RBG Edinburgh
NN 9763	1979	SSSI	Carn Geal			RBG Edinburgh
NN 96NW	1970					anon
NN 96NE	1970					anon
NN 97SE	2002	SSSI	Sron na h-Innearach	Cliff ledges	500 plants over 1000 sq.m.	T Loizou & B G Hogarth
NO 054766	2010	SSSI	Glas Tulaichean north corrie	Cliff ledges	Quite common	M C Robinson & L Tucker
NO 07M	2008	SSSI	Glas Tulaichean south corrie	South corrie		M C Robinson
NO 129781	1975	SSSI	The Cairnwell			R W David

A species of damp mountain ledges, usually north- or east-facing, probably much under-recorded

***Euphrasia officinalis* ssp. *pratensis* (*rostkoviana* subsp. *rostkoviana*)**

Rostkov's Eyebright

N

National rarity: Vulnerable

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 057627	1982		Kindrogan		Generic grid-ref?	A J Silverside

A species more widespread in NW England and Wales, but very scarce in Scotland. Status very uncertain and this may not be the precise grid reference

Fallopia convolvulus

Black-bindweed

A

National status: Scottish Biodiversity List

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 86S	2009		Blair Atholl	Waste ground		M C Robinson
NN 953586	1998		Kinnaird Burn			RE Youngman
NN 9948	2014		Dowally Farm	Neap field	Common	M C Robinson
NN 95Q	2007	SSSI	Ballinluig & Richard's Island	Waste ground		M C Robinson
NO 04E	2013		Ballyintuim			F Anstey
NO 075403	2011		R Tay, Thornton	Corner of arable field		M C Robinson
NO 129246	1987		Gannochy Farm			R A H Smith
NO 12NW	1989					anon
NO 12NE	1989					anon
NO 109396	2013		Braecock	Edge of potato field		M C Robinson
NO 130418	1976		Kirkton of Lethendy			F H Perring
NO 1339	1984	SSSI	Meikleour area			M McCallum Webster
NO 135222	1987		Walnut Grove			R A H Smith
NO 157319	1993		St Martins-Wolfhill			PSNS
NO 165427	2010		Fingask Loch	Edge of potato field		M C Robinson
NO 169431	2008		White Loch	Edge of potato field		M C Robinson
NO 176463	2012		R Ericht, Blairgowrie	Cleared area beside river		PSNS
NO 179456	1999		Ratray			A Showler
NO 192421	2012		Stormont Loch	Edge of carrot field		M C Robinson
NO 210426	2012		Monk Myre	Edge of cereal field		M C Robinson
NO 24C	2007		R Ericht, Ratray	Edge of raspberry field		M C Robinson & L Tucker
NO 232272	1986		Fingask Farm			R A H Smith
NO 22C	2007		Pitroddie			M C Robinson & L Tucker
NO 23NW	1987					anon
NO2442	2011		Cronan	Edge of arable field		M Tulley
NO 294437	1970		South-west Fullarton			PSNS

NO 324283	1988		Monorgan			anon
NO 33A	2004		Longforgan	Waste ground		M C Robinson
NO 3430	1987		Invergowrie			M Benstead
NO 34SW	1987					anon

Quite a common species of disturbed ground, usually field edges or gardens, but also waste ground

Festuca altissima

Wood Fescue

N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 86S	1980		Blair Atholl			R A H Smith
NN 917635	1989		Allt Girnaig	Gorge woodland		N W Taylor
NN 9261	1998		Pass of Killiecrankie	Old landslip above A9		A Godfrey
NN 95NW	1989					anon
NN 952585	1995		Kinnaird Burn Den	Gorge woodland		N W Taylor
NO 04T	1995	SSSI	Den of Riechip	Gorge woodland		R A H Smith
NO 141523	1995	SSSI	Romadie Wood	Gorge woodland		V Howard
NO 14U	2014	SSSI	Craighall Gorge	Gorge woodland	On both banks, abundant in some places	M C Robinson & J McIntosh
NO 177460	2012		R Erich woods, Blairgowrie	Broadleaved woodland	Beside Lade	PSNS

Usually found in quite damp wooded ravines, often on steep slopes

Filago minima

Small Cudweed

N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 8666	??		Blair Atholl, Games Park Knoll			A Robson
NN 95N	2007		R Tummel, Pitlochry	Riverside shingle		M C Robinson
NN 95M	2007		R Tummel, East Haugh	Riverside shingle		M C Robinson
NN 969543	2006		R Tummel, Moulinearn	Riverside shingle		M C Robinson
NN 95Q	2007	SSSI	Richard's Island	Riverside shingle		M C Robinson
NN 991496	2013		R Tay, Guay	Riverside shingle and track	Extensive	M C Robinson
NO 101393	2013		Braecock	Riverside shingle	Good colony	M C Robinson
NO 1238	2004	SSSI	Delvine	Riverside shingle		M C Robinson
NO 138401	1999		Little Fardle			PSNS
NO 1439	2006	SSSI	Kercock	Riverside shingle		PSNS
NO 012765	1975		Allt a'Ghlinne Mhoir			B S Brookes
NO 339295	2010		Kingoodie Quarry	Bare ground	Thousands	M C Robinson & PSNS

Nearly all the sites are on rather bare, sandy ground beside the River Tummel-Tay, but the large colony at the top of Kingoodie Quarry stands out as being different.

Filago vulgaris

Common Cudweed N

National rarity: Near-threatened Scottish Biodiversity List

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 045440	1983	SSSI	Loch of the Lowes			anon
NO 097571	1995		Stylemouth			P R McPhail
NO 200233	1990		Hole o'Clean			A Mathers
NO 215233	2008		Glendoick	Disturbed ground.	A single plant	M C Robinson & L Tucker
NO 206252	2007		Pitroddie	Thin soils	Scattered	M C Robinson & L Tucker
NO 2244	2008		Aberbothrie	North bank of river		A Godfrey & PSNS
NO 339295	2010		Kingoodie Quarry	Bare ground	Thousands	M C Robinson & PSNS

Most of the sites are in the Sidlaws or Carse of Gowrie. It was described as 'common' there by FBW, but this does not seem appropriate today

Fumaria bastardii

Tall Ramping-fumitory N ?

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 960590	2005		Edradour, Pitlochry	Kale field		H McHaffie

A western species which is rare in Scotland, though it is possibly under-recorded

Fumaria densiflora

Dense-flowered Fumitory A

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 129246	1987		Gannochy, Perth	Arable field		R A H Smith
NO 200233	1990		Hole o'Clean			A Mathers
NO 309299	1997		Longforgan	Around church		M Benstead
NO 3249	2008		Kingoodie	Disturbed soil	A few	I Ford

Like all *Fumaria* species this more eastern one is possibly unrecorded

Gagea lutea

Yellow Star-of-Bethlehem N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 911628	1988	SSSI	Killiecrankie	Riverside rocks	Not seen recently	M C Robinson
NO 105623	2005		Woody Island, Muirton	Woodland	Several large colonies	M C Robinson
NO 1028	2005		R Tay, Waulkmill	Riverside grass	Small colony	M C Robinson
NO 159375	2012		R Tay, Mains of Cargill	Riverside grass	Colony 16m long	M C Robinson

NO 13A	2004		R Tay, Stormontfield	Riverside grass		PSNS
NO 120326	2008		R Tay, Campsie	Grassy riverside haugh	>15 plants	M C Robinson
NO 199446	2012		R Tay, Rattray West Mill	Riverside grass	A small patch	M C Robinson & L Tucker
NO 216448	2012		R Tay, Rattray East Mill	Riverside grass	A small patch	M C Robinson & L Tucker
NO 225438	2011		R Ericht east of Rattray	Grassy river bank	10 plants	A Godfrey

Although mainly a woodland species it is only known from East Perths today along the main rivers, especially the Tay. It may have been washed down the river in alluvium and spread

Galeopsis speciosa

Large-flowered Hemp-nettle A

National rarity: Vulnerable Scottish Biodiversity List

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 86NW	1971		River Garry at Calvine			PSNS
NN 86SE	1970					anon
NN 980511	1988	SSSI	Richard's Island			R A H Smith
NN 9458	2008		Pitlochry	Disturbed ground		M C Robinson
NO 026637	2011		Ceanghline	Edge of rape field		M C Robinson
NO 045440	1983	SSSI	Loch of the Lowes			anon
NO 055630	1998		Kindrogan			anon
NO 129246	1987		Gannochy Farm			R A H Smith
NO 12NW	1989					anon
NO 13NW	1989					anon
NO 149433	1972	SSSI	Marlee Loch			anon
NO 157319	1993		St Martin's - Wolfhill			PSNS
NO 130418	1976		Kirkton of Lethendy			F H Perring
NO 166429	1995		Fingask Loch	Edge of arable field		M C Robinson & SWT
NO 192421	2012		Stormont loch	Edge of carrot field		M C Robinson
NO 232272	1986		Fingask Farm			R A H Smith
NO 23A	2009		Bandirran	Disturbed ground		M C Robinson
NO 204382	1992		Keithick			anon
NO 252321	1997		Abernyte	In unspecified crop		M Benstead
NO 2044	2007		West Mill, Rattray			M C Robinson & L Tucker
NO 294437	1970		South West Fullarton			PSNS

Occurs quite commonly in cultivated ground, though always in much lower quantity than *G. tetrahit* agg

Galium album (mollugo)

Hedge Bedstraw

N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 86SE	1970					anon
NN 919598	1997		Loch Faskally	Grassland		R Youngman
NN 9160	2008		Faskally	Roadside verge	Good colony	M C Robinson
NN 95N	1995		Pitlochry			R Youngman
NN 95SE	1989					anon
NN 952579	1996		Black Spout Wood, Pitlochry			Scottish Wildlife Trust
NN 995491	2012		R Tay, Guay	River shingle		R Youngman & L Borradaile
NO 157319	1993		St Martin's - Wolfhill			PSNS
NO 239278	2011		Craighead Quarry	Grassy roadside verge	Very large colony all along verge	PSNS

Worth looking for especially on roadside verges, as it probably should not be listed as Locally Scarce. Can occur in quantity, as at Craighead Quarry

Genista anglica

Petty Whin

N

National rarity: Near-threatened

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
			Throughout	Dry heath	32 5kmx5km squares	Many

Quite common in dry heathland and co-ordinates not usually recorded. Favours banks on moorland often with *Erica cinerea* (Bell Heather), where the heather cover is not too dense

Gentianella amarella ssp septentrionalis

Autumn Gentian

N

National rarity: Near-threatened

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 632755	2009	SSSI	Pass of Drumochter	In gateway		M C Robinson
NN 890670	1997	SSSI	Glen Fender	Calcareous meadow	Also above road at NN 893668	N W Taylor
NN 919680	1978	SSSI	Monzie	Limestone ridge.	Scarce	M C Robinson
NN 924701	1997	SSSI	Carn Liath	Limestone pavement		P Cramb
NN 939640	2008	SSSI	Meall an Daimh	Calcareous outcrop		M C Robinson
NN 962665	2011		Shinagag pools	Bank of stream	40-50	M C Robinson & L Tucker
NN 972672	2011	SSSI	Crochton	Limestone scree	Large colony	M C Robinson & L Tucker
NN 968685	2012	SSSI	Meall Breac	Limestone outcrops	Frequent	M C Robinson & L Tucker
NN 987748	2010	SSSI	Glen Loch	Limestone grassland		M C Robinson & L Tucker
NN 993728	2010	SSSI	Loch Loch (south)	Limestone grassland		M C Robinson & L Tucker
NO 078767	1997		Creag Easgaidh			BSBI
NO 131734	2011		Creag Dubhaidh	Limestone grassland	Two sites	M C Robinson

NO 137760	1998		The Cairnwell			P Cramb
-----------	------	--	---------------	--	--	---------

This subspecies is known from very few other areas in northern Britain. Always in well-drained calcareous soils, often quite loose and shaley. Apart from a gateway site at Drumochter it is confined to the Blair Atholl limestone areas

Gentianella campestris

Field Gentian N

National rarity: Vulnerable

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
			Mostly in northern half	Calcareous soils	36 5kmx5km squares	Many

Nationally it has declined markedly, but in Perthshire it is still quite common, especially at the sides of hill tracks where there is some calcareous influence

Geranium columbinum

Long-stalked Crane's-bill N

Local rarity: Rare Scottish Biodiversity List

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 22NW	1987					anon

Being unattributed this record must remain questionable, though FBW mentions it in two places in the lowland part of the vice-county. Much declined in the north of its range

Geranium pusillum

Small-flowered Crane's-bill N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 2025	1997		Pitroddie Den			P Cramb
NO 339295	2010		Kingoodie Quarry	Open ground, thin soil	Small amount	M C Robinson & PSNS

FBW knew it as a casual in Perthshire but not in vc89. Only one recent record in vc88 (Mid-Perthshire) so obviously very scarce, but may be overlooked sometimes

Geranium sanguineum

Bloody Crane's-bill N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 86NE	1989					anon
NO 067406	1997		Stenton Rocks	Crags		P Cramb
NO 125328	1979	SSSI	Campsie			A Robson
NO 12G	1995	SSSI	Kinnoull Hill			N W Taylor
NO 13NW	2002	SSSI	Delvine			D Reed
NO 179456	1999		Ratray/Blairgowrie			A Showler
NO 188446	1981		R Ericht, Ratray			N F Stewart
NO 1822	1979		Glencarse Hill	Crags		R A H Smith

Status a bit uncertain now as there is only one record since 2000. Seems to be absent from the Blair Atholl limestones, despite their apparent suitability. Further information needed

Glaux maritima

Sea-milkwort

N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 117722	2009		Gleann Beag	Edge of road		M C Robinson & L Tucker
NO 22SE	1970					anon
NO 22NE	1970					anon
NO 3227	2011	SSSI	Templehall	Saltmarsh	Throughout	M C Robinson
NO 3228	2011	SSSI	Monorgan	Saltmarsh	Throughout	M C Robinson
NO 334293	2010	SSSI	Kingoodie	Saltmarsh		M C Robinson
NO 3429	2005	SSSI	Invergowrie	Saltmarsh		M C Robinson

Present on the vice-county's only, comparatively short, stretch of saltmarsh. Found once as a roadside halophyte and likely to be in other sites in this capacity

Glebionis (Chrysanthemum) segetum

Corn Marigold

A

National rarity: Vulnerable

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 952579	1996		Pitlochry			SWT
NN 957587	2011		Edradour, Pitlochry			M C Robinson
NN 980511	1979	SSSI	Richard's Island			A Robson
NO 045440	1983	SSSI	Loch of the Lowes			anon
NO 085401	2010		Caputh	Edge of a potato field		L Tucker
NO 096277	1996		River Tay, Scone			anon
NO 002507	2013		Mains of Kilmorich			F Anstey
NO 13NW	1989					anon
NO 123435	2011		Gourdie	Edge of potato field	Very small amount	M C Robinson
NO 14SW	2002		Drumbeltie Farm, Meikleour	Arable field		L Farrell
NO 1942	2010		Stormont Loch	Arable field		B G Hogarth
NO 165427	2010		Fingask Loch	Edges of potato fields		M C Robinson
NO 170429	1979		White Loch			J Pitt
NO 175467	2010		Ratray	Waste ground		M C Robinson
NO 174482	1976	SSSI	Craighall Gorge	Bank of river		R A H Smith
NO 2124	2008		Myreside	Spoil-heap		M C Robinson & L Tucker
NO 23NW	1987					anon
NO 2442	2011		Cronan	Arable field edge		M Tulley
NO 294437	1970		South West Fullarton			PSNS
NO 271457	1986		River Isla, Balmyle			PSNS
NO 317302	1997		Invergowrie	Strip on N side of A85		M Benstead

NO 34SW	1987					PSNS
---------	------	--	--	--	--	------

Known to have declined owing to changed farming methods but can still occur in very considerable quantity, often along unsprayed field edges

Gnaphalium supinum

Dwarf Cudweed N

National rarity: Near-threatened

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 5873	2014	SSSI	Upper Coire Dhomhain			J W McIntosh
NN 591748	1996	SSSI	Beinn Udlamain			N W Taylor
NN 57W	2009	SSSI	Coire Creagach	Scree		M C Robinson
NN 614675	1998		Duinish Bridge	Rocky gorge		B S Brookes
NN 626744	2006	SSSI	Sow of Atholl	Both sides of the hill		M C Robinson & PSNS
NN 67C	2006	SSSI	Coire Dhomhain			M C Robinson & PSNS
NN 67N	2009	SSSI	Allt a'Chaorainn			M C Robinson & L Tucker
NN 67T	2009	SSSI	A'Bhuidheanach Bheag	Montane scree		M C Robinson & L Tucker
NN 77E	2007	SSSI	Cama' Choire	Am Meadar		M C Robinson & L Tucker
NN 7377	1975		Edendon Water			N Sanderson
NN 7577	1995		Sron Odhar, Dalnamein	Bouldery gully		G P Rothero et al
NN 78SW	1989					anon
NN 87SE	1990		Allt Slanaidh			M C Robinson
NN 87SE	1995		Beinn Mheadonach			G P Rothero et al
NN 87NE	1989		Allt Mhairc			D Erroll
NN 872805	1991		Upper Tarf Water			N W Taylor
NN 875813	1975		Beinn Bhreac			N Sanderson
NN 96SE	1970					anon
NN 923763	1993		Carn a'Chlamain			PSNS
NN 925787	1975		Tarf Water			N Sanderson
NN 9873	1978	SSSI	Coire Cas Eagallach			B Mackechnie
NN 97NE	1970					anon
NN 917824	1989		An Sgorsach - Carn Ealar			N W Taylor
NO 012764	1975		Gleann Mor	Eastwards from this GR		B S Brookes
NO 027776	1995		Carn an Righ			B S Brookes
NO 030757	1988		Faire Ghlinne Mhoir			N F Stewart
NO 0479	1997		Beinn Iutharn Mhor			K Bland
NO 054766	2002	SSSI	Glas Tulaicheann	Top of corrie		T Loizou
NO 07T	2010	SSSI	Sron na Saobhaidh			M C Robinson & L Tucker
NO 120770	2004		Carn nan Sac			J Waddell

NO 127781	2005	SSSI	The Cairnwell	Bare soil		M C Robinson et al
NO 131775	1971		The Cairnwell			anon
NO 17M	1999	SSSI	Creag Leacach	Scree		M C Robinson
NO 17N	2008	SSSI	Meall Odhar	Scree		M C Robinson & BSBI

This montane species is easily found in bare or stony places, especially screes, and late-snow patches.

Gnaphalium sylvaticum

Heath Cudweed

N

National rarity: Endangered Scottish Biodiversity List

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 755698	1995		Dalnamein			R A H Smith
NN 76Y	2009		Clunes	Bare ground		M C Robinson
NN 709707	2007		Dalnacardoch		>3 plants at side of old A9	M C Robinson
NN 711709	2007		Dalnacardoch	Side of track	1 plant	M C Robinson
NN 77F	2014		Dalnacardoch	Beside plantation track		M C Robinson
NN 77SE	1989					anon
NN 877689	2005		Rifle Range, Glen Tilt		2 plants	M C Robinson & L Tucker
NN 882688	1987		Croftmore, Glen Tilt			N W Taylor
NN 873746	1990		Glen Diridh			N W Taylor
NN 87NE	1995		Upper Gleann Mhairc			BSBI
NN 921589	1974		Faskally			W French
NN 96	1988	SSSI	Pass of Killiecrankie			J Poingdestre
NN 980511	1979	SSSI	Richard's Island			A Robson
NO 015489	1990	SSSI	Dowally Burn			PSNS
NO 05P	2008		Glenderby	Side of track		M C Robinson
NO 039686	2009		Glenferdate		13 plants along 109 metres	M C Robinson & R Youngman
NO 054625	2007		Kindrogan	Entrance to graveyard	Large colony, & NO055625	M C Robinson
NO 062624	2009		Enochdhu	Side of track	86 plants	M C Robinson
NO 063622	2010		Dalreoch			M C Robinson
NO 13SE	1989					anon
NO 157398	1990		Meikleour	Road junction		N W Taylor
NO 120523	1983		Ballintuim - Bridge of Cally			R Pankhurst
NO 119564	2008		Loch Mharaich	At side of track		M C Robinson
NO 16SW	1987					anon
NO 133757	2008		Creag nan Eun	At side of tarmac track		J Muscott et al
NO 195404	1972		Isla Bridges			PSNS
NO 22NW	1987					anon

NO 2435	2007		Northballo Hill	Forest plantation track		M C Robinson & L Tucker
NO 23NE	1987					anon

Nationally much declined but still fairly common in Perthshire in bare or sparsely vegetated, well-drained places. Most easy to find along forestry tracks

Goodyera repens

Creeping Lady's-tresses (N)

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 176427	2010		Black Loch	Scots Pine plantation	One patch 30cm x 30cm	M C Robinson et al
NO 186423	2012	SSSI	Stormont Loch	Scots Pine plantation	16,900 plants	M C Robinson

Although this is a native species it is likely to have been introduced to this site incidentally when the plantation was established

Gymnadenia densiflora (conopsea subsp. densiflora)

Marsh Fragrant-orchid N

National rarity: Data-deficient

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 9067	2012	SSSI	Monzie	Calcareous flushes		M C Robinson
NN 999791	2012	SSSI	Fealar	Calcareous flushes	Occasional	M C Robinson & L Tucker
NO 131604	2014		Bleaton Hill	Calcareous mires	Occasional in two areas	M C Robinson

Only recently considered to be a species, this plant's distribution is not yet fully understood

Hammarbya paludosa

Bog Orchid N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 617677	2009		Meall Doire	Slightly base-rich runnel	3 spikes	L Tucker & M C Robinson
NO 006706	2010		Ben Vuirich	Base-rich flushes	8 spikes in two flushes	M C Robinson & PSNS
NO 107727	2009		Ben Gulabin	Beside bog runnels	20-30 plants	L Tucker

This insignificant plant is likely to be much under-recorded. The Ben Gulabin record was the first for the vice-county. Usually in slightly base-enriched flushes rather than bogs

Hieracium carpathicum

National rarity: Rare Vulnerable

Perth Hawkweed N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 0971	2005		Lochsie Burn	Steep bank with birch		D J McCosh

This species is only known from two sites along this burn and from the Tatra mountains of east-central Europe

Hieracium diaphanoides

Diaphanous Hawkweed N

National rarity: Rare

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 6175	1999	SSSI	Allt Coire Dhomhain			V Jones
NN 0871	1994		Glenlochsie Burn			D McCosh

Riverside rocks and shingles. Scattered localities in Scotland, Wales and Northern England

Hieracium duriceps

Hard-headed Hawkweed N

National rarity: Rare Vulnerable

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 9879	1990	SSSI	Falls of Tarf			D McCosh
NO 07E	1990	SSSI	Fealar Gorge			D McCosh
NO 094726	1989		Allt Coire Shith			P Hackney et al

One of the commonest species of *Hieracium* in Scotland, probably under-recorded in vc89***Hieracium magniceps***

Large-headed Hawkweed N

National rarity: Rare Vulnerable

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 17A	1989		Spittal of Glenshee	Shingle	Prob NO 105703 (PD Sell, 1977)	J Bevan
NO 140665	1977		Finegand	By Shee Water		P D Sell

Known only from the Shee Water. Endemic

Hieracium milesii

Miles's Hawkweed N

National rarity: carce Near-threatened Scottish Biodiversity List

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 055769	1994	SSSI	Glas Tulaichean			D McCosh & D J Tennant

Endemic to the eastern Grampians

Hieracium molybdochroum

Mountain Hawkweed

National rarity: Rare Vulnerable

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 0572	1998		Lochsie Burn	Bank of burn		D J Tennant
NO 0672	1994		Glenlochsie Lodge	Bank of burn		D McCosh & D J Tennant

Restricted in the UK to the Grampians/Cairngorms

Hieracium prenanthoides

Rough-leaved Hawkweed N

National rarity: Rare

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 9162	1989		Killiecrankie	On bank of R Garry		D McCosh
NN 97B	1989		Sron a'Chro, Glen Tilt			P Hackney et al
NN 9978	2005	SSSI	Allt a'Ghlinne Mhoir	Dryish cliffs on right bank	3 colonies	D McCosh
NO 037696	1988		Allt Ruigh nan Eas	Gorge of burn		N W Taylor
NO 061626	1989		Enochdhu	Bank of river		P Hackney et al
NO 07NW	1989					anon

One of the leafy *Hieracium* species, found in several sites in England, and in South and Central Scotland north to Braemar***Hieracium subtenuifrons***

Highland Hawkweed N

National rarity: Rare Near-threatened

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 055769	1994	SSSI	Glas Tulaichean			D McCosh & D J Tennant
NO 07X	1981		Creag Lamhaich			A McG Stirling

Our plants belong to the central race, which grows mostly on schists and limestone in Breadalbane and East Perth, with one site in Westerness (vc97)

Hordeum murinum

Wall Barley A

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 079569	1994		Pitcarmick			R A H Smith

An archaeophyte towards the northern end of its range. Fairly conspicuous and therefore probably not much overlooked. Only known to FBW in one site

Hymenophyllum wilsonii

Wilson's Filmy-fern

N

National rarity: Near-threatened

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 975647	2003	SSSI	Creag Spardain			M C Robinson
NO 049628	2009		Kindrogan Forest	N facing mica-schist cliff	One patch, 30cm x 25cm	M C Robinson
NO 076697	2003		Ben Earb	N facing mica-schist cliff		G P Rothero et al

A western species, only just extending this far east in a few very small, scattered colonies in wet, N- or NE-facing gullies

Hypopitys monotropa (Monotropa hypopitys)

Yellow Bird's-nest

N

National rarity: Scarce Endangered Scottish Biodiversity List

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 880685	1985	SSSI	Glen Tilt	Broadleaved woodland	Not seen in recent years	M C Robinson

This epiparasite gets its nutrients from the roots of trees/shrubs and grows in dense woodland, with no requirement for sunlight. It seems to have disappeared from this site

Imperatoria (Peucedanum) ostruthium

Masterwort

A

National rarity: Near-threatened

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 96SW	1989					anon
NO 12SW	1989					anon

Damp grassy areas in northern Britain, persisting since its use as a pot-herb for veterinary purposes. Unknown to FBW in East Perth. Any information would be welcome

Inula conyzae

Ploughman's-spikenard

N

Local rarity: Rare Scottish Biodiversity List

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 12SW	1989	SSSI	Kinnoull Hill	Eastern end of crags		anon

As this is the only recent site in Scotland it needs to be re-found. It was recorded there in 1962 by Alan Robson, so the record is reliable

Isoetes echinospora

Spring Quillwort N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 77NW	1989			Must be Loch an Duin		anon
NO 0444	1996	SSSI	Loch of Craiglush	Oligo-mesotrophic loch		V James
NO 04SE	1989					anon

Northern and western distribution in the UK. Unknown to FBW in East Perths. The NO04SE site is likely to be Loch of the Lowes

Isoetes lacustris

Quillwort N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 77NW	1995		Loch an Duin			SNH Loch Inventory
NN 97X	1995	SSSI	Loch Loch			B S Brookes
NO 014580	1989	SSSI	Loch Broom			N W Taylor
NO 05F	1997	SSSI	Loch Ordie			SNH Loch Inventory
NO 031545	1989	SSSI	Loch Oisinneach Mor			N W Taylor
NO 0444	1997	SSSI	Loch of Craiglush	Oligo-mesotrophic loch		SNH Loch Inventory
NO 04L	2005	SSSI	Loch of the Lowes	Oligo-mesotrophic loch		N F Stewart et al
NO 062450	1986	SSSI	Loch of Butterstone	Oligo-mesotrophic loch		Kindrogan Field Centre
NO 118443	2005	SSSI	Loch of Clunie	Mesotrophic loch		N F Stewart et al
NO 14SW	2002	SSSI	Marlee Loch	Mesotrophic loch		N F Stewart
NO 14R	2001		Fingask Loch	Mesotrophic loch		N F Stewart
NO 063780	1988		Loch nan Eun			N F Stewart

Deccribed by FBW as 'not uncommon' and it may turn out not to be locally scarce

Juncus alpinoarticulatus

Alpine Rush N

National rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 891701	2014		Glen Tilt	Base-rich mire		M C Robinson
NN 929597	1980		Moulin	Base-rich flush		R A H Smith
NN 95NE	1985	SSSI	Pitarrig	Base-rich flush		R A H Smith
NN 905676	2009	SSSI	Monzie	Base-rich flush		M C Robinson
NN 904668	2009	SSSI	Loch Moraig	Base-rich flushes	1000-10,000 >2000 at NN906663	M C Robinson
NN 941612	2007	SSSI	Ben Vrackie	Base-rich flush		J Waddell & B Averis
NN 915681	2012	SSSI	Carn Liath flushes	Base-rich flush		M C Robinson
NN 96NE	1970					anon

NN 957762	1972	SSSI	Allt Fheannach, Glen Tilt			M Briggs
NN 964683	2012	SSSI	Meall Breac	Calcareous flush		M C Robinson & L Tucker
NN 967662	2011		Shinagag pools	Top of flush		M C Robinson & L Tucker
NN 970694	2012	SSSI	Loch Valigan	Calcareous flush		M C Robinson & L Tucker
NN 988730	2010	SSSI	Allt Glen Loch	Mires and flushes	Several colonies	M C Robinson & L Tucker
NN 996716	2012		Ben Vuirich	Calcareous flushes		M C Robinson
NN 998794	1981	SSSI	Fealar Gorge			I Bolt
NO 008798	1981	SSSI	Fealar Gorge			R A H Smith
NO 0078	1979	SSSI	Gleann Mor			R A H Smith
NO 011801	2009		Fealar	Calcareous flushes	Also NO 013803	M C Robinson & L Tucker
NO 014708	2010		Ben Vuirich	Base-rich flush		M C Robinson & PSNS
NO 036782	1975		Crom Allt			B S Brookes
NO 066773	1998		Allt Easgaidh			K Fallowfield
NO 079749	2010		Gleann Taitneach	Calcareous flushes		M C Robinson
NO 105731	2009		Allt a'Charnaich	Calcareous flushes	and at NO 111725	M C Robinson
NO 119740	2009		Carn Mor			M C Robinson
NO 126755	2003		Allt Coolah	Base-rich flush		M C Robinson
NO 128736	2003		Creag Dubhaidh	Flush at base of crags	Large colony. Also at NO 130736	M C Robinson
NO 131756	1979		Creag nan Eun		And NO 134759 (PM Batty, 1970)	R A H Smith
NO 138752	2010		Creag an t-Suidhe	Large flush system		M C Robinson
NO 143765	1979		Devil's Elbow flushes	Large flush system		R A H Smith
NO 17NE	1970					anon

Seems to form a morphological continuum with *J. articulatus* but clear examples can be identified at the time of fruiting

Juncus biglumis

Two-flowered Rush

N

National rarity: Scarce

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 661799	2003	SSSI	A'Bhuidheanach	Montane flush	Not found in 2010 (MCR)	D Rae
NN 688782	2003	SSSI	Cama' Choire			D Rae

This species badly needs to be re-found.

Juncus castaneus

Chestnut Rush N

National rarity: Scarce Vulnerable

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 025757	1999		Gleann Mor		E to NO 037760 (R Fitzgerald)	B S Brookes & J Teacher
NO 054766	2005	SSSI	Glas Tulaichean			T Loizou

Appears to be restricted to this one small area of the vice-county, with its other nearest sites in Angus, the Cairngorms and Breadalbane. Damp, calcareous, species-rich upland habitats

Juncus gerardii

Saltmarsh Rush N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 22SE	1970	SSSI	Errol	Saltmarsh		anon
NO 22NE	1970	SSSI	Powgavie	Saltmarsh		anon
NO 3227	2011	SSSI	Templehall	Saltmarsh	Throughout	M C Robinson
NO 3228	2011	SSSI	Monorgan	Saltmarsh	Throughout	M C Robinson
NO 3329	2010	SSSI	Kingoodie	Saltmarsh		PSNS
NO 3429	2009	SSSI	Invergowrie	Saltmarsh		M C Robinson

Scarce only on account of the scarcity of its habitat. Confined to the comparatively short stretch of saltmarsh in the vice-county

Juncus inflexus

Hard Rush N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 204252	1982		Pitroddie Den			BSBI
NO 22NE	1987					anon
NO 237234	1998		Errol Pond			R A H Smith
NO 2328	2011		Craighead Quarry			PSNS
NO 280335	1972		Redmyre Loch			anon
NO 323281	1988	SSSI	Monorgan	Back of inner saltmarsh	Common	M C Robinson
NO 339295	2010		Kingoodie Quarry	Edge of pool		M C Robinson & PSNS

The southern end of the vice-county is at the northern end of this species' UK range, so it is not surprising that it is Locally Scarce

Juniperus communis

Juniper

N

National Rarity

Scottish Biodiversity List

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
					37 5kmx5km squares	
Colonies of more than 15 plants are as follows:						
NN 62036872	2010		Allt Coire Easan	Steep section of burn	25 plants	M C Robinson
NN 967569	2004	SSSI	Ballyoukan Juniper Wood	Grassland & woodland	11 ha.	Plantlife survey
NO 028467	2010		Mill Dam	Sides of track, crags	15 plants	L Lavery
NO 0245, 0345	2010		The Glack	Grassland and heathland	225 plants, over 300m x 200m	L Lavery
NO 032427	2004		Craig Wood, Dunkeld	Broadleaved woodland	>100 plants	Plantlife survey
NO 045427	2004	SSSI	Fungarth Juniper Wood	Dense juniper woodland	24.75 ha.	Plantlife survey
NO 044454	2010	SSSI	Cardney	Woodland and grassland	2000-4000 + 150	L Lavery
NO 058470	2010	SSSI (part)	Macmaridge	Open hillside, woodland	180	L Lavery
NO 126519	2010		Steps of Cally	Grassland	170 plants, over 300m x 85m	M C Robinson
NO 1462, 1463	2010		Blackhall	Birch woodland	16 plants, very scattered	M C Robinson

All records are of the typical subspecies subsp. *communis*. Most populations, including nearly all the relict ones up hill burns, have no regeneration

Kobresia simpliciuscula

False Sedge

N

National rarity:

Rare

Scottish Biodiversity List

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 902675	1996	SSSI	Glen Fender	Calcareous flushes	ca.100	D Rae
NN 905675	2009	SSSI	Monzie	Calcareous flushes	2 sites: 167 spikes in 71 clumps	M C Robinson
NN 903668	2009	SSSI	Loch Moraig	Calcareous flushes	3 sites, 123 plants, W & S of loch	M C Robinson
NN 919682	2012	SSSI	Carn Liath flushes	Calcareous mires	Frequent (>1000 in 1995)	M C Robinson
NN 941682	1995	SSSI	Shinagag track 2	Calcareous flushes	>300 plants (>150 spikes).	G P Rothero
NN 949675	1995	SSSI	Shinagag	Calcareous flushes	>500 plants (>250 spikes)	G P Rothero
NN 950687	1995	SSSI	Allt Girnaig	Calcareous flushes	>200 plants (>100 spikes)	G P Rothero
NN 954678	1995	SSSI	Carn Breac	Calcareous flushes	>6000 plants (>3000 spikes)	G P Rothero
NN 955694	1995	SSSI	Allt Coire Lagain	Calcareous flushes	>10,000 plants (>5000 spikes)	G P Rothero
NN 965674	2011	SSSI	Crochton	Side of burn	Extends for 10 metres	M C Robinson & L Tucker
NN 965693	1995	SSSI	Upper Allt Loch Valigan	Calcareous flushes	to NO 970695 >6000 plants	G P Rothero
NN 981699	1996	SSSI	Upper Allt Nead an Eoin	Calcareous flushes	3 sites: 1277 plants (2550 plants)	G P Rothero
NN 986730	2010	SSSI	Allt Glen Loch	Calcareous flushes	2 sites (>250 spikes)	M C Robinson & L Tucker
NN 9971	1996	SSSI	Ben Vuirich	Calcareous flushes	ca.1000 flowering/seeding plants	D Rae
NN 974706	1995	SSSI	Stac nam Bodach	Calcareous flushes	>110 plants (>55 spikes)	G P Rothero
NN 979710	1996	SSSI	Glen Loch Burn	Calcareous flushes	>1000 flowering/seeding plants	D Rae

NO 014708	2010		Ben Vuirich	Calcareous flushes	000's of spikes over>200 sq.m.	M C Robinson & PSNS
NO 075701	2003		Coire a'Ghearraig	Calcareous flushes	to NO 076699	M C Robinson & G P Rothero
NO 077708	2005		Coire SE of Coire Buidhe Beag	Calcareous flushes	100-1000 plants	M C Robinson & L Tucker
NO 0771	2005		Coire Buidhe Beag	Calcareous flushes		L Tucker

Apart from in Teesdale it occurs only on the limestones and calcareous mica-schists of the central highlands

Lactuca virosa

Great Lettuce N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 100395	2013		Braecock	Riverside bank, and track	One small colony	M C Robinson
NO 131217	2006		Friarton Bridge	Beneath the bridge		M C Robinson
NO 165220	1979		Kinfauns			R A H Smith
NO 203252	2007		Pitroddie Den	Quartz-dolerite crag	Also at NO 201252	PSNS
NO 240281	2011		Craighead Quarry	Shaley bank	Also at NO 23792788	PSNS
NO 3329	2010		Kingoodie Quarry	Quarry bottom	>2 plants	M C Robinson & PSNS

Some crags and quarries in the Sidlaws remain to be recorded, but it is unlikely that this species, at the northern limit of its UK range, will turn out to be anything other than Locally Scarce

Lamium amplexicaule

Henbit Dead-nettle A

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 054629	1982		Kindrogan			M McCallum Webster
NO 1222	2000		Moncrieffe Island			PSNS
NO 13SW	1989					anon
NO 14W	1980		Stormont Loch			N F Stewart
NO 14SE	2005		Blairgowrie			M C Robinson & L Farrell
NO 22C	2007		Pitroddie Den			M C Robinson & L Tucker
NO 22C	2008		Myreside			M C Robinson & L Tucker
NO 312457	1989		Langlogie			N W Taylor
NO 324283	1988		Monorgan			anon
NO 346302	1997		Invergowrie			M Benstead

Described as 'common' by FBW in both lowland and upland habitats, ascending to 460m in Atholl, so it has clearly declined. No records in the other Perthshire vice-counties

Lamium confertum

Northern Dead-nettle N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 24SE	1987					anon

On account of the poor status of the one existing record this species badly needs investigation in the vice-county

Lathraea squamaria

Toothwort N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 176477	2010	SSSI	Craighall Gorge	By roadside	2 spikes	M Tulley
NO 187446	2012		Rattray	In Salix thicket by R Ericht	130 spikes	M C Robinson & L Tucker
NO 141523	1982	SSSI	Romadie Wood			PSNS
NO 15Q	1981	SSSI	Milton Wood			R A H Smith

A parasite, usually on the roots of hazel, not requiring any sunlight. This species is possibly under-recorded in the vice-county

Lemna trisulca

Ivy-leaved Duckweed N ?

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 2521	2011		Port Allen	Flooded field		M Simmons
NO 338295	2010		Kingoodie Quarry	Quarry pool		M C Robinson & PSNS

The origin of this species in a man-made quarry pond is likely to remain uncertain. It will have appeared naturally at Port Allen, perhaps transported by wildfowl

Lepidium campestre

Field Pepperwort A

Local rarity: Rare Scottish Biodiversity List

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 14SW	1999		Meikleour			PSNS

On account of the poor status of the one existing record this species badly needs investigation in the vice-county

Leymus arenarius

Lyme-grass N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 341293	1997	SSSI	Kingoodie	Grassland on old pier		M Benstead

This coastal species has a very tenuous hold on the vice-county unsurprisingly

Limosella aquatica

Mudwort

N

National rarity: Scarce

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 118443	2002	SSSI	Loch of Clunie	NE corner of the loch		N F Stewart
NO 120388	2003		Delvine	Dried-up seasonal pool		M C Robinson
NO 130418	1976		Kirkton of Lethendy			F H Perring
NO 134347	2002		Stobhall	Pond		R A H Smith
NO 135444	2014		Marlee Loch	Seasonal pool in damp pasture		N F Stewart, C.Fergusson-Smyth et al
NO 163381	2003		Bridge of Isla			N F Stewart
NO 136407	1984	SSSI	Dowie's Hole			F H Perring
NO 218413	1997		Bendochy			N F Stewart
NO 240446	2005		Boat of Bardmony	Mud at edge of river		N F Stewart et al

A comparatively good list of records for this scarce species. Needs the muddy edges of rivers, ponds, lochs etc and so has decreased in much of the UK

Linaria repens

Pale Toadflax

A

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 944581	1994		Pitlochry			R Youngman
NN 963554	2014	SSSI	Tomdachoille	Ridge of stable shingle	Large quantity	M C Robinson
NO 1919	1997		Cairnie Pier		Most of it was sprayed in 1987	R T McLeod

No longer at Cairnie Pier and the Pitlochry site was probably of garden origin, so Tomdachoille Island may be the only remaining site, though it may also be naturalised there.

Linaria vulgaris

Common Toadflax

N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 86M	2008		Woodend	Roadside verge		M C Robinson
NN 86X	2008		Blair Atholl	Roadside verge		M C Robinson
NO 12SW	1989					anon
NO 1940	1999		Stormont Loch			A Showler
NO 22SW	1987					anon
NO 232272	1986		Fingask Farm			R A H Smith
NO 32NW	1987					anon
NO 3430	1987		Invergowrie			M Benstead
NO 34SW	1987					anon

Very scattered and most records have poor resolution. Needs some investigation and better recording.

Linnaea borealis

Twinflower

N

National rarity: Scarce Scottish Biodiversity List

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 963622	2003		Ben Vrackie	One patch in heather	7m x 5m	L Tucker
NO 184422	2012	SSSI	Hare Myre	Scots Pine plantation	Colony 25m x 9m	M C Robinson

The Hare Myre site may be an accidental introduction but the Ben Vrackie one will be native. The Hare Myre colony appears to be spreading

Lobelia dortmanna

Water Lobelia

N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 98SE	1970		(Must be) Loch Tilt	Oligotrophic loch	Not seen there in 2009	anon
NO 014580	1989	SSSI	Loch Broom			N W Taylor
NO 0354	1989	SSSI	Loch Oisinneach Mor		Both ends of the loch	N W Taylor
NO 04J	1997	SSSI	Loch Ordie		And NO 05F	SNH Loch Inventory
NO 030587	1983	SSSI	Glen Derby			D J McCosh
NO 04D	2010		Dowally Loch			M C Robinson & L Tucker
NO 025471	2008		Rotmell Loch			J Muscott et al
NO 0444	1997	SSSI	Loch of Craiglush	Oligo-mesotrophic loch		SNH Loch Inventory
NO 050440	1996	SSSI	Loch of the Lowes	Oligo-mesotrophic loch		V James
NO 060450	1986	SSSI	Loch of Butterstone	Oligo-mesotrophic loch		Kindrogan Field Centre
NO 14C	2004	SSSI	Loch of Clunie	Mesotrophic loch		N F Stewart
NO 141442	1997	SSSI	Marlee Loch	Mesotrophic loch		SNH Loch Inventory
NO 16NE	2005		Loch Beanie			M C Robinson & L Farrell
NO 259357	2004	SSSI	Laird's Loch	Mesotrophic loch		I Gunn

This is probably the full extent of the species' distribution in the vice-county, so it is likely to remain Locally Scarce, mainly on account of the status of its habitat

Lycopodium annotinum

Interrupted Clubmoss

N

National rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 5969	2014		Allt Coire na Feithe Bige	Heathery slope	At least 4 extensive areas	M C Robinson
NN 599690	2014		Sron Leathad a'Mhadaidh	Heathery slope	A very extensive area	M C Robinson
NN 57W	2009	SSSI	Coire Creagach	Heathery slope		M C Robinson
NN 57X	2009	SSSI	Coire Dhomhain	Heathery slope		M C Robinson
NN 607692	2014		Meall Doire	Heathery slope	Also at NN 611692	M C Robinson

NN 605733	1995	SSSI	Sgairneach Mhor		Also NN 607731 (RBGE, 1981)	M Macdonald
NN 602745	2007	SSSI	Coire Dhomhain			M C Robinson
NN 6174	2000	SSSI	Coire Dhomhain			P Wortham
NN 67B	2005	SSSI	Coire Luidhearnaidh		Several other sites in the area	M C Robinson
NN 6274	2006	SSSI	Sow of Atholl			M C Robinson & PSNS
NN 67Z	2003	SSSI	Cama' Choire		Patches scattered throughout	M C Robinson
NN 77E	2007	SSSI	Am Meadar	In heather	Many patches	M C Robinson & L Tucker
NN 687730	2009		Allt an Stalcair	In heather	Common in the area	M C Robinson
NN 806808	1977		Feith Ghorm Ailleag			S Bailey
NN 823804	1977		Allt a'Chuil			S Bailey
NN 839818	1977		Druim na Feitheachan Odhar			S Bailey
NN 866823	1977		Beinn Bhreac			S Bailey
NN 835772	2007		Allt Beinn Losgarnaich			M C Robinson & L Tucker
NN 87SE	1991		Beinn a'Chait			M C Robinson
NN 87SE	1990		Allt Slanaidh			M C Robinson
NN 947621	2007	SSSI	Ben Vrackie			J Waddell & B Averis
NN 945742	2005	SSSI	Carn Torcaidh			N F Stewart
NN 924701	1993	SSSI	Carn Liath			J Pitt
NN 979757	1980	SSSI	Glen Loch			B S Brookes
NN 987747	1995	SSSI	Loch Loch			B S Brookes
NN 992765	2005	SSSI	Allt Feith Ghuibhsachain (lower)	Peat moorland		M C Robinson & J Balfour
NN 992748	1995	SSSI	Allt Feith Ghuibhsachain (upper)			B S Brookes
NN 956715	2008	SSSI	Coire Chruinn Bhalgain		Area 5m x 5m by path	A Godfrey
NO 005760	1995	SSSI	Cnapan Liath			B S Brookes
NO 008706	2010		Ben Vuirich	Heathery slope	Very large colony	M C Robinson & PSNS
NN 917824	1989		Carn Ealar			N W Taylor
NO 012625	2014	SSSI	Blath Bhalg	In heather beside burn		M C Robinson
NO 019588	2014	SSSI	Glen Derby	In tall heather	Small patch	M C Robinson
NO 029545	1989	SSSI	Loch Oisinneach Mor			N W Taylor
NO 025683	2007	SSSI	Meall Daimheidh	Heathery slope	2 small patches	M C Robinson
NO 013692	2004	SSSI	Carn Dubh		Strong colony	M C Robinson
NO 012764	1975		Gleann Mor			B S Brookes
NO 027776	1995		Carn an Righ			B S Brookes
NO 030757	1988		Gleann Mor			N F Stewart
NO 0460	2009		Loch Curran	In heather		M C Robinson
NO 036782	1995		Crom Allt	Old blanket bog		B S Brookes

NO 061778	1988		Loch nan Eun			N F Stewart
NO 066765	2010	SSSI	Glas Tulaichean			M C Robinson & L Tucker
NO 105724	2008		Ben Gulabin		2 patches in this area	M C Robinson & BSBI

Common in the Grampian hills, often occurring in extensive spreading patches in long, damp heather

Lysimachia thysiflora

Tufted Loosestrife N

National rarity: Scarce

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 166429	1995		Fingask Loch	Swamp at loch edge	A single vegetative plant	M C Robinson
NO 169430	2010		White Loch	Swamp at loch edge	On the N side of the loch	M C Robinson
NO 1644	1989	SSSI	Myreside Fen	Swamp		D Pearman
NO 184442	2008	SSSI	Hare Myre	Swamp at loch edge		PSNS
NO 186421	2012	SSSI	Stormont Loch	Swamp, edge of willow carr	Main site 100 m x 5 m	M C Robinson
NO 207427	2012	SSSI	Monk Myre	Swamp	Narrow, zonal band 35 metres long	M C Robinson
NO 174426	2010		Black Loch	Swamp at loch edge		M C Robinson

Nearly all UK sites are in the central lowlands of Scotland, and within East Perthshire it is confined to the Blairgowrie lochs. At the main site, Stormont Loch, it favours swamp around the edges of willow carr stands

Lysimachia vulgaris

Yellow Loosestrife ?

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 12SE	1989					anon
NO 13NW	1991	SSSI	Delvine			P R McPhail
NO 280295	1997		Rossie Lake			SNH Loch Inventory

Its status in the vice-county is uncertain and needs further investigation

Lythrum portula

Water-purslane N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 070613	2011		Easter Tullochcurran Lochan	Shallow edge of small pool	Abundant	M C Robinson
NO 091543	1983	SSSI	Loch Charles			anon
NO 04J	1997	SSSI	Loch Ordie		And NO 05F	SNH Loch Inventory
NO 13SW	2005					anon
NO 13J	2004	SSSI	Delvine	Seasonal pool		PSNS
NO 1144	2010	SSSI	Loch of Clunie	Shallow edge of loch		M Robinson, A Godfrey, W Hay

NO 141442	1997	SSSI	Marlee Loch			SNH Loch Inventory
NO 250441	1995		Bankhead of Kinloch Oxbow			N W Taylor
NO 262504	1999		Barry Hill	Small seasonal pool		M C Robinson

Damp, calcium-deficient places, often in shallow water. It can occur in rutted tracks, and so could easily be overlooked. Appears to be scarce in the vice-county however

Lythrum salicaria

Purple Loosestrife N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 95NW	1989					anon
NO 12F	2006		Friarton Bridge			M C Robinson
NO 1222	2000		Moncrieffe Island			PSNS
NO 12K	2006		Insherrit Island			PSNS
NO 12SE	1989					anon
NO 14NE	1981	SSSI	Craighall Gorge			B S Brookes
NO 14M	1986		Rae Loch			N F Stewart
NO 265482	1970		Alyth Golf-course			anon

Not common in Scotland away from the south-west. It may be naturalised at some of the Perthshire sites, so its status is somewhat uncertain

Malus sylvestris agg.

Crab Apple A

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 86NW	1971		Calvine - Bruar area			PSNS
NN 930587	1996		Pitlochry			R Youngman
NN 952585	1995		Kinnaird Burn Den			R Youngman
NO 015489	1990		Dowally-L.Ordie			PSNS
NO 045440	1983	SSSI	Loch of the Lowes			anon
NO 045452	1991	SSSI	Cardney Wood			P R McPhail
NO 06NW	1989					anon
NO 12G	1981	SSSI	Kinnoull Hill			H E Stace
NO 22K	2007		Port Allen			M C Robinson

Includes crab-apples and domestic apples gone wild. It is unlikely that any are truly native in the vice-county

Malva sylvestris

Common Mallow

A

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 86NW	1971		Calvine-Bruar area			PSNS
NN 86SE	1989					anon
NN 980511	1988	SSSI	Richard's Island			R A H Smith
NO 045440	1983	SSSI	Loch of the Lowes			anon
NO 067406	1997		Stenton Rocks			P Cramb
NO 06SE	1989					anon
NO 13SW	1989					anon
NO 200233	1990		Hole of Clean			A Mathers
NO 22NW	1987					anon
NO 32NW	1987					anon

Definitely a scarce plant in Perthshire. An archaeophyte, and in some sites it may have become naturalised more recently. Poor resolution for some of the records, so needs recording more precisely

Melampyrum sylvaticum

Small Cow-wheat

N

National rarity: Endangered Scottish Biodiversity List

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 880694	2011		Crombie Wood, Glen Tilt	Steep slope with hazels	13m x 11.5m, 800-1000 plants	A Scobie & P Freeman
NN 880690	2010	SSSI	Glen Tilt	Riverside woodland strip	Dense stand 24m x 8.5m, >10,000	A Scobie & S Dalrymple

These two colonies represent the strongest populations in Scotland of this much-declined species. A previous site, by the R. Garry at Struan, has not been recorded since 1949

Mentha arvensis

Corn Mint

N

National status: Scottish Biodiversity List

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 86NW	1971		Calvine-Bruar area			PSNS
NN 920630	1995		Old Faskally Meadow			P Cramb
NN 980511	1988	SSSI	Richard's Island			R A H Smith
NO 033635	1997		Glen Brerachan			N F Stewart et al
NO 045633	1997		Kindrogan curling pond			N F Stewart et al
NO 045440	1983	SSSI	Loch of the Lowes			anon
NO 102310	1975		Stormontfield			PSNS
NO 12SW	1989					anon

NO 13J	2004		Delvine			PSNS
NO167329	1977		Dunsinnan House			A Robson
NO14SW	1987					anon
NO 204252	1982		Pitroddie Den			BSBI
NO 292501	1981		Dryloch Wood			D M Bayne

A much-declined species, probably owing to changed agricultural practices. FBW recorded it as common. The virtual lack of records this century may reflect a lack of recording in suitable habitat or it may be more significant. More information needed

Meum athamanticum

Spignel

N

National rarity: Near-threatened

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 008638	2012		Clunsklea	Grassy bank beside track	Colony extending for 12 metres	M C Robinson
NO 015638	2002	SSSI	Brerachan Meadow (West)	Tall-herb grassland		M C Robinson
NO 022634	2012	SSSI	Brerachan Meadow (East)	Grassy river bank	A single plant	M C Robinson
NO 031639	1979	SSSI	Straloch			R A H Smith
NO 048642	2010		Bridgend	Grassy bank		M C Robinson
NO 063622	2010		Dalreoch	Grassy drumlins	Large colony	M C Robinson
NO 082649	1999		Dirnanean	Grassy bank		M C Robinson
NO 008798	2005	SSSI	Fealar	Grassland	10mx10m Also at NO 007798	M C Robinson
NO 079749	1996		Gleann Taitneach		Not found in 2010	BSBI
NO 076721	2008		Dalmunzie	Grassland		J Jones & A Wilson
NO 092710	2006		Dalmunzie Golf-course	Grassland	Large colonies	M C Robinson
NO 104702	2013		Spittal of Glenshee	Riverbank grassland	Colonies of 12 and 8	M C Robinson
NO 105493	1983		Ranageig, Laighwood		Not found in 2010	M Hamilton
NO 117605	1983		Bleaton Hill			BSBI
NO 141557	1978		Persie Meadow			R A H Smith
NO 141632	1983		Lair			anon
NO 140653	2011		Balnoe	Edge of grass field, outside fence	35 clumps in 9 metre stretch	M C Robinson
NO 142611	2011		Glenkilrie	Steep grassy bank	00's along 75 metre stretch	M C Robinson
NO 145633	2012		Cray	Grassy river bank	10 plants	M C Robinson
NO 146562	2011		Blackhall	Road verge	Some on both sides of road	M C Robinson
NO 157557	2011		Corb	Roadside verge	2-300 plants along 23 metres	M C Robinson
NO 16SW	1983		Soilzarie	On ridge above Soilzarie		R A H Smith
NO 130678	1979		Glenshee Hut			R A H Smith
NO 115695	2008		Spittal of Glenshee	Field by roadside	30 metre long colony	M C Robinson & J McIntosh
NO 107703	1996		Spittal of Glenshee			Scottish Wildlife Trust

NO 134667	1975		Corrydon Meadow			Kindrogan Field Centre
NO 136667	2012		Broughdearg	Grassy river bank	Colony extending 180 metres	M C Robinson
NO 142645	2009		Tigh an Eilean	Unimproved grassland	Abundant	M C Robinson
NO 142662	2008		Dunmay		In profusion	J Muscott et al
NO 164685	2005		Loch Beanie	Grassy shore of loch		M C Robinson & L Farrell
NO 1070	1989		Dalmunzie	Roadside		R A H Smith
NO 1375	2003		Creag nan Eun	Grassland below Crag	A small patch	M C Robinson

Particularly common in Strathardle and the Glen Shee area, where it is found on grassy banks, particularly road verges, riverbanks and drumlins.

Minuartia rubella

Mountain Sandwort N

National rarity: Vulnerable Scottish Biodiversity List

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO17J	2011	SSSI	The Cairwell	Sugar limestone	103 plants in three sites	M C Robinson et al

One of only five sites in the UK, all in the Scottish highlands. Restricted to open, stony sugar-limestone patches where it has no competition

Myosotis ramosissima

Early Forget-me-not N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 12G	1995	SSSI	Kinnoull Hill			N W Taylor
NO 164227	1981		Kinfauns			N F Stewart
NO 12Q	2006		Seggieden			PSNS
NO 22C	2007		Pitroddie	Top of crags		PSNS
NO 22E	2009		Whitemyre	Top of crags		M C Robinson
NO 219317	2012		Black Hill	Skeletal soils in thin grassland	Scattered	PSNS

This lowland plant is almost certainly overlooked on account of its small size. Most of the vc89 sites are south-facing crags in the Sidlaws

Myriophyllum spicatum

Spiked Water-milfoil N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 9066	1977	SSSI	Loch Moraig	Mesotrophic loch		R A H Smith
NO 050435	1977	SSSI	Loch of the Lowes	Oligo-mesotrophic loch		C Newbould

A plant mainly of the eutrophic lowlands, so not common in Perthshire. Some uncertainty about its status since it has not been recorded recently

Najas flexilis

Slender Naiad

N

National rarity: Scarce Scottish Biodiversity List W&C Act 1981 Schedule 8

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 044444	2005	SSSI	Loch of Craiglush	Oligo-mesotrophic loch		V James
NO 0443	2005	SSSI	Loch of the Lowes	Oligo-mesotrophic loch	Washed up at E end of loch.	N F Stewart
NO 0644, 0645	1996	SSSI	Loch of Butterstone	Oligo-mesotrophic loch		V James
NO 1144	1998	SSSI	Loch Clunie	Mesotrophic loch		A Godfrey
NO 1414	2002	SSSI	Loch Marlee	Mesotrophic loch		N F Stewart
NO 166429	2006		Fingask Loch	Loch	A single stem found	M C Robinson & J Long
NO 170429	2008		White Loch	Eutrophic loch		N F Stewart

These sites in the Dunkeld-Blairgowrie chain of lochs are the only ones east of the Lake of Menteith.

Neottia nidus-avis

Bird's-nest Orchid

N

National rarity: Near-threatened

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 8766	1998		Blair Atholl			K Bland
NN 953575	1979		Black Spout Wood, Pitlochry			R A H Smith
NN 953586	2005		Kinnaird Burn, Pitlochry	Deciduous woodland		M C Robinson
NN 914612	2014	SSSI	Pass of Killiecrankie	Deciduous woodland	9 spikes	BSBI
NO 16SW	1989					anon
NO 130232	1989		Kinnoull Hill	Just outside SSSI		A Godfrey
NO 1323	2003	SSSI	Kinnoull Hill	Deciduous woodland		PSNS
NO 122267	2003		Scone Wood	Spruce plantation	>40 plants	D MacMillan
NO 15Q	1986	SSSI	Milton Wood			J Lunn
NO 176485	2014	SSSI	Craighall Gorge	Oak/birch/hazel woodland	2 plants	M C Robinson & J McIntosh
NO 218200	1977		Paddockmuir			R A H Smith
NO 22NW	1987					anon
NO 24NW	1974	SSSI	Den of Alyth			R A H Smith
NO 288521	1991	SSSI	Den of Airlie			D Elliott

The Scone Wood site was felled in 2012 and destroyed, though there is suitable woodland adjoining it. Many suitable beech woods have been searched without result

Noccaea (Thlaspi) caerulea

Alpine Penny-cress N

National rarity: Scarce Scottish Biodiversity List

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 094714	1992		Ben Gulabin	Grassland on steep slope	4 plants only	D Lloyd-Thomas & M Sutton

Has not been seen recently at this site

Nuphar pumila

Least Water-lily N

National rarity: Scarce

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 0544	1983	SSSI	Loch of Butterstone	Oligo-mesotrophic loch		C Newbould, M Palmer & RAHS

A scarce northern species, not recorded recently. FBW knew it at this site and also recorded it as having been introduced into a small pool in the Sidlaws (Muir of Durdie)

Nymphaea alba

White Water-lily N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 921592	2005		Loch Dunmore			M C Robinson
NO 0364	2005		Straloch Loch			Kindrogan Field Centre
NO 021473	1984		Rotmell or Dowally Loch			R A H Smith
NO 0243	2008		Cally Loch			J Muscott et al
NO 0346	2008		Mill Dam			J Muscott et al
NO 04M	1991	SSSI	Cardney Wood			P R McPhail
NO 0444	1997	SSSI	Loch of Craiglush	Oligo-mesotrophic loch		SNH Loch Inventory
NO 04L	1986	SSSI	Loch of the Lowes	Oligo-mesotrophic loch		N F Stewart
NO 060450	1986	SSSI	Loch of Butterstone	Oligo-mesotrophic loch		N F Stewart
NO 14C	1986	SSSI	Loch of Clunie	Mesotrophic loch		N F Stewart
NO 14SW	1978	SSSI	Marlee Loch	Mesotrophic loch		R A H Smith
NO 14R	2002		Black Loch			N F Stewart
NO 14W	1974	SSSI	Stormont Loch	Mesotrophic loch		R A H Smith

Many private lochans around large houses and in policy woodlands have not been surveyed, so this is undoubtedly an understatement of the species' status

Oenanthe fistulosa

Tubular Water-dropwort N

National rarity: Vulnerable Scottish Biodiversity List

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 164214	2006		Seggieden	Marshy grassland	A large patch	PSNS

A mainly south-eastern species, very rare in Scotland. This site is known to the owner and managed by him

Ophioglossum vulgatum

Adder's-tongue N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 032469	1998		Mill Dam	In bracken		N Dadds
NO 136234	1989	SSSI	Corsiehill Quarry	At back of quarry		A Godfrey

Unaccountably very rare in the vice-county or else overlooked.

Ornithopus perpusillus

Bird's-foot N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 03NE	1987					anon
NO 12G	1974	SSSI	Kinnoull Hill			A Robson
NO 100394	2013		Braecock	Sandy track	Many square metres	M C Robinson
NO 156398	1988		Meikleour	Road junction		N W Taylor
NO 176261	1996		Arnbathie Moor			Scottish Wildlife Trust
NO 217201	1972		Paddockmuir Wood			PSNS

A lowland plant of open habitats, which has possibly declined and needs further investigation. The very strong colony at Braecock is the only one seen this century.

Oxytropis campestris

Yellow Oxytropis N

National rarity: Rare Vulnerable Scottish Biodiversity List

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN97X	2010	SSSI	Loch Loch cliffs	Limestone crags	Extends to N. Also NN 991741	M C Robinson & L Tucker

One of only three sites in Great Britain and Ireland, all of which are in Scotland. It occurs in considerable quantity on these cliffs. 2,500 clumps counted in 1995

Oxytropis halleri

Purple Oxytropis N

National rarity: Rare Scottish Biodiversity List

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 939640	2002	SSSI	Meall an Daimh	Basic crags	30 plants	R Walls
NN 952632	2012	SSSI	Ben Vrackie	Basic crags	Frequent, also at NN 950631	M C Robinson

An anonymous record from the 1980's also exists for the upper Edendon/Sronphadruig area

Papaver argemone

Prickly Poppy A

National rarity: Vulnerable Scottish Biodiversity List

Local rarity: Rare Extinct?

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 349299	1987		Invergowrie Station	Waste ground	Gone by 1997	M Benstead

Was possibly only ever casual at this site

Papaver rhoeas

Common Poppy A

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 876648	1983		Blair Atholl Golf-course			R A H Smith
NO 149239	1990		Deuchny			A Mathers
NO 156260	1998		Murrayshall			R A H Smith
NO 171429	1996		White Loch			Scottish Wildlife Trust
NO 232272	1986		Fingask Farm			R A H Smith
NO 22SW	1970					anon
NO 277285	1997		Inchture			M Benstead
NO 32NW	1987					anon

No records this century, so it may be overlooked or dismissed as the common *P. dubium*. FBW described it as rare apart from in Gowrie (which includes the Carse and the south-facing side of the Sidlaws)***Parietaria judaica***

Pellitory-of-the-wall N ?

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 346298	1997		Invergowrie	On a garden wall	A few plants	M Benstead

Its occurrence at this site must be of uncertain origin

Paris quadrifolia

Herb-Paris

N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 878666	1990	SSSI	Old Bridge of Tilt	Broadleaved woodland		K Bland
NN 914630	1987		Allt Girnaig	Broadleaved woodland		N W Taylor
NN 95P	2006		Kinnaird Burn Den	Broadleaved woodland		P D Hulme
NO 13NW	1989					anon
NO 178491	1993	SSSI	Craighall Gorge	Broadleaved woodland		N W Taylor
NO 15Q	2002		Drimmie	Broadleaved woodland		TD Merrie
NO 292519	2013	SSSI	Den of Airlie	Broadleaved woodland	72 plants on slope, large colony below	M C Robinson

FBW gives it as local and its status has probably not changed

Persicaria lapathifolia

Pale Persicaria

N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 065624	2014		Enochdhu	Field of turnips and rape	Occasional	M C Robinson
NO 0444	1983	SSSI	Loch of the Lowes			anon
NO 12SE	1989					anon
NO 14SE	1987					anon
NO 177488	2014	SSSI	Craighall Gorge	Gorge woodland	1 site. Also recorded in gorge in 1981	J McIntosh
NO 22C	2008		Myreside	Damp setaside		M C Robinson & L Tucker
NO 24B	1997	SSSI	Monk Myre			SNH Loch Inventory
NO 3329	1998		Kingoodie		500m west of Kingoodie	A Godfrey

Described by FBW as common, so it is likely to have decreased, as have many other weeds of cultivation

Persicaria minor

Small Water-pepper

N

National rarity: Vulnerable

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 053466	2005	SSSI	Loch of the Lowes	Muddy shingle		N F Stewart et al
NO 118443	2006	SSSI	Loch Clunie	Muddy shingle		M C Robinson
NO 1339	1984	SSSI	Delvine			M McCallum Webster

Not found at Loch Clunie in 2012. A scarce species at the northern extremity of its UK range. FBW gives it as 'very local and rare'

Phleum alpinum

Alpine Cat's-tail N

National rarity: Scarce

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 648768	2003	SSSI	Allt a'Chaorainn		Also at NN 649771	D Rae
NN 97NW	2005		Carn a'Chalamain			N W Taylor & PSNS
NN 925817	1975		Sron na Machranaich		Also Leachdann Feith Seasgachain, NN	N Sanderson
NO 159770	1993	SSSI	Meall Odhar			N W Taylor

Probably overlooked in sites where there is heavy grazing. Not known in the vice-county by FBW

Phyllodoce caerulea

Blue Heath N

National rarity: Rare Vulnerable Scottish Biodiversity List W&C Act 1981 Schedule 8

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 6274	2006	SSSI	Sow of Atholl	Around tops of screes	Colonies in >4 areas	PSNS
NN 606736	1983	SSSI	Sgairneach Mhor A		&NN597737 (Boths ends of coire)	M McCallum Webster
NN 617736	1983	SSSI	Sgairneach Mhor B		&NN619743 (Both ends of slope)	M McCallum Webster
NN 663750	1995		Coire Mhic-sith			I Brodie

Known here since 1810, and otherwise only Ben Alder. The Sgairneach Mhor sites have been searched several times without success

Plantago coronopus

Buck's-horn Plantain N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 348294	1999		Invergowrie	Stonework of old pier	One clump	A Godfrey

Only rare on account of the rarity of its coastal habitats in the vice-county

Platanthera bifolia

Lesser Butterfly Orchid N

National rarity: Vulnerable Scottish Biodiversity List

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 895672	1998	SSSI	Glen Fender			R A H Smith
NN 882708	1992		Glen Tilt	Steep, heathy slope	Very few	M C Robinson
NO 268348	2010	SSSI	Little Ballo	Fen	A single flowering spike	M C Robinson

'Not uncommon' in FBW but very rare in the vice-county now. Reflects a considerable national decline

Platanthera chlorantha

Greater Butterfly Orchid N

National rarity: Near-threatened Scottish Biodiversity List

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 998792	2012	SSSI	Ruigh Mor, Fealar	Ungrazed calcareous grassland	2 spikes together	M C Robinson et al
NO 092711	2006		Dalmunzie	Riverside mire	3 spikes	M C Robinson & L Tucker
NO 147362	2006		Balholmie House	Grassland	524 spikes	L Farrell & G Logan

'Not uncommon' in FBW but very rare in the vice-county now. Unlikely to be Locally Rare in reality however.

Poa alpina

Alpine Meadow-grass N

National rarity: Scarce

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 054766	2010	SSSI	Glas Tulaichean	Base-rich ledges	4 sites in a small area	M C Robinson & L Tucker

'Not uncommon' in FBW and almost certainly under-recorded, especially when non-proliferous

Poa compressa

Flattened Meadow-grass N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 026428	2010		Dunkeld	Pavement	A small amount	J McIntosh

FBW gives it as 'rare or overlooked', a description that still stands. It is at the northern end of its UK range, however, so may truly be rare

Polygonatum verticillatum

Whorled Solomon's-seal N

National rarity: Rare Vulnerable Scottish Biodiversity List W&C Act 1981 Schedule 8

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 04T	2005	SSSI	Den of Riechip	Riverside woodland	ca.200 shoots in 3 colonies	M C Robinson & L Farrell
NO 15L	1993	SSSI	Romadie Wood	Riverside woodland	14 shoots (2 fl.)	J Wright
NO 15L	2006		Netherton	Riverside woodland	6 non-flowering shoots	T Macdonald
NO 15K	2004		Bridge of Cally	Riverside woodland	50 shoots in 3 groups	T Macdonald
NO 15Q	2008	SSSI	Milton Wood	Riverside woodland	71 plants in 3 groups	M C Robinson & PSNS
NN 95P	2005		Kinnaird Den	Riverside woodland	>74 plants in 4 sites	L Farrell et al
NN 86T	1992	SSSI	Glen Tilt	Riverside woodland	9 shoots (+10 planted in 2007)	J Wright
NN 86T	2006	SSSI	Glen Tilt	Riverside woodland	23 non-flowering plants	T Macdonald & I Green
NO 14U	2014	SSSI	Craighall Gorge	Riverside woodland	117 shoots in 2 sub-colonies	M C Robinson & J McIntosh
NO 25V	2007	SSSI	Den of Airlie	Riverside woodland	<200 shoots (no fl.)	M C Robinson

This is the entire population of the British Isles, apart from two colonies in vc 88. It can be vulnerable in some sites on steep, wet slopes

Polygonum boreale

Northern Knotgrass N

National rarity: Scarce

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 1942	2010		Stormont Loch	Arable field		B G Hogarth

This species has almost certainly been overlooked

Polystichum lonchitis

Holly-fern N

National rarity: Vulnerable Scottish Biodiversity List

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 6073	2009	SSSI	Coire Creagach	Base-rich crags		M C Robinson
NN 6878	1980	SSSI	Cama' Choire			R A H Smith
NN 76NE	1989					anon
NN 716714	1989		Edendon Water			N W Taylor
NN 753776	1995		Sron Odhar, Dalnamein			G P Rothero
NN 86NE	1970					anon
NN 87SE	1995		Gleann Mhairc			G P Rothero et al
NN 891757	1977		Gleann Mhairc			B S Brookes
NN 8080	1987		Feith Gorm Ailleag			N W Taylor
NN 901669	1982	SSSI	Glen Fender	Top of roadside wall		R A H Smith

NN 940639	1979	SSSI	Meall an Daimh			RBGE
NN 96L	2005	SSSI	Ben Vrackie	Base-rich crags	Several sites	PSNS
NN 961637	2010	SSSI	Creag Tharsuinn	Base-rich crags	NN 959631 in 1979 (RBGE)	A Godfrey
NN 96S	1977	SSSI	Creag Spardain			J Pitt
NN 967673	1976	SSSI	Crochton			R A H Smith
NN 968685	1975	SSSI	Meall Breac			R A H Smith
NN 974628	1979	SSSI	Carn Geal		And NN 978638	RBGE
NN 937740	1998	SSSI	Carn Torcaidh			P Cramb
NN 988747	2010	SSSI	Loch Loch	Limestone crags	Other sites along the crags 2010	M C Robinson & L Tucker
NN 996794	1993	SSSI	Fealar Gorge	Bottom part of the gorge		J Pitt
NN 996807	1995		Meall na Caillich Buidhe			J Pitt
NN 003738	1970		Braigh Feith Ghiubhsachain			Kindrogan Field Centre
NO 003824	1975		Sron a'Bhoididh			B S Brookes
NO 0077	2005	SSSI	Meall na Spionaig	Limestone crags		M C Robinson
NO 0077	1979	SSSI	Gleann Mor			R A H Smith
NO 012765	1975		Gleann Mor			B S Brookes
NO 0180	2009		Fealar			M C Robinson & L Tucker
NO 021692	2003		Creag Uisge, Glenfernate		2 plants under boulders	M C Robinson
NO 031719	1983		Creag Dhubh, Glenfernate			HE Stace
NO 0969	2006		Dalmunzie	Crags in plantation clearing		M C Robinson
NO 07SE	2005		Meall a'Choire Bhuidhe			M C Robinson & L Tucker
NO 054766	2010	SSSI	Glas Tulaichean	Limestone crags	Several sites	M C Robinson & L Tucker
NO 076768	1996		Creag Easgaidh			BSBI
NO 0874	2008		Creag Dhearg		And on rocks above (RY, 1988)	J Muscott et al
NO 089771	1979		Carn Bhinnein			BSBI
NO 096727	1976		Coire Shith			BSBI
NO 1374	2010		Creag an t-Suidhe	Limestone crags	>14 clumps	M C Robinson
NO 130762	2004		Allt a'Choire Dhirich		2 plants	J Waddell
NO 127781	1978	SSSI	The Cairnwel			R A H Smith
NO 123753	2011		Creag nan Eun			B Brown, A Evans & F McGavigan
NO 137760	1998		Creagan nan Carn		Also NO 132758 (NWT, 1987)	P Cramb
NO 143762	2011	SSSI	Devil's Elbow	Under boulder	A single frond	PSNS
NO 143771	2011		The Cairnwel	Base of steep limestone slope	2 plants	PSNS

Common in the hills where basic rocks are exposed, often in clefts, recesses or under rocks,

Polystichum setiferum

Soft Shield-fern

N?

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 17814564	2011		Blairgowrie	Steep wooded den	3 var <i>divisilobum</i>	A Godfrey

Although these three plants were of cultivated origin, at least two others looking like wild plants were found in the same den in October

Potamogeton alpinus

Red Pondweed

N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 963664	2011		Shinagag pools			M C Robinson & L Tucker
NN 9769	2012	SSSI	Loch Valigan			M C Robinson
NN 906666	2011	SSSI	Loch Moraig	Mesotrophic loch		N F Stewart et al
NO 033635	1997		Brerachan Water		Also NO 026632 & NO 035635	N F Stewart
NO 032591	1991	SSSI	Glen Derby			B S Brookes
NO 053460	1988		Knowehead Farm			N W Taylor
NO 108622	1986		Ashintully lochan			N F Stewart
NO 085714	2006		Dalmunzie	Pool at side of track	Pool at side of track	M C Robinson
NO 042442	1997	SSSI	Loch of Craiglush	Oligo-mesotrophic loch		SNH Loch Inventory
NO 0444	1983	SSSI	Loch of the Lowes	Oligo-mesotrophic loch		anon
NO 118443	2010	SSSI	Loch of Clunie	Mesotrophic loch		MCR, A Godfrey & W Hay
NO 14SW	2002	SSSI	Loch Marlee	Mesotrophic loch		N F Stewart

Most *Potamogeta*, especially in smaller water bodies, are almost certainly under-recorded, and that is almost certainly the case here.

Potamogeton filiformis

Slender-leaved Pondweed

N

National rarity: Scarce

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 9066, 9067	2011	SSSI	Loch Moraig	Mesotrophic loch		N F Stewart et al
NO 0544	1993	SSSI	Loch of the Lowes	Oligo-mesotrophic loch		N F Stewart
NO 1144	1981	SSSI	Loch Clunie	Mesotrophic loch		U K Duncan
NO 166429	1998		Fingask Loch			N F Stewart
NO 170429	1996		White Loch	Eutrophic loch		Scottish Wildlife Trust

Not known in the vice-county by FBW, so it may well have increased and spread, as all these lochs were well-known and visited by FBW and his contemporaries

Potamogeton obtusifolius

Blunt-leaved Pondweed

N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 9066	1998	SSSI	Loch Moraig	Mesotrophic loch		P R McPhail
NN 921592	2005		Loch Dunmore			M C Robinson
NN 972693	2012	SSSI	Loch Valigan			M C Robinson
NO 044638	1977		Straloch Loch			anon
NO 0444	1983	SSSI	Loch of the Lowes	Oligo-mesotrophic loch		A J Silverside
NO 062450	1986	SSSI	Loch of Butterstone	Oligo-mesotrophic loch		Kindrogan Field Centre
NO 108622	1986		Ashintully lochan			N F Stewart
NO 118443	2010	SSSI	Loch of Clunie	Mesotrophic loch		M Robinson, A Godfrey, W Hay
NO 14SW	2002	SSSI	Marlee Loch	Mesotrophic loch		N F Stewart
NO 117568	2006		Loch Mharaich			M C Robinson
NO 159445	1986		Rae Loch			anon
NO 164429	1997		Fingask Loch			N F Stewart
NO 168428	1997		White Loch	Eutrophic loch		N F Stewart

Should probably not be listed as Locally Scarce. Many lochans have still not been recorded.

Potamogeton pectinatus

Fennel Pondweed

N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 163381	1997		Bridge of Isla	River		N F Stewart
NO 208407	2005		Couttie, R Isla	River		Kindrogan Field Centre
NO 218413	1997		Knowehead, R Isla	River		N F Stewart

Not known in Perthshire by FBW and now only known from these three sites in the River Isla. Further survey of the R Isla would probably extend its distribution

Potamogeton praelongus

Long-stalked Pondweed

N

Local rarity: Rare Near-threatened

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 045440	1983	SSSI	Loch of the Lowes	Oligo-mesotrophic loch		anon

Not found in shallow water, so easy to overlook, but surprising that it has not been recorded since 1983. FBW mentions it in Loch na Chat, but this loch is not identifiable

Potamogeton pusillus

Lesser Pondweed

N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 9066	2005	SSSI	Loch Moraig	Mesotrophic loch		N F Stewart
NO 0444	2003	SSSI	Loch of the Lowes	Oligo-mesotrophic loch		N F Stewart
NO 060450	1983	SSSI	Loch of Butterstone	Oligo-mesotrophic loch		C Newbould
NO 14C	2004	SSSI	Loch of Clunie	Mesotrophic loch		N F Stewart
NO 145443	1986	SSSI	Marlee Loch	Mesotrophic loch		Kindrogan Field Centre
NO 159445	1997		Rae Loch			N F Stewart
NO 14R	2004		Fingask Loch			N F Stewart
NO 14R	2001		White Loch	Eutrophic loch		N F Stewart
NO 24B	2004	SSSI	Monk Myre	Eutrophic loch		N F Stewart
NO 259357	1970	SSSI	Laird's Loch	Mesotrophic Loch		U K Duncan

Mostly in the Dunkeld-Blaigowrie lochs, which have been well surveyed, and probably overlooked elsewhere or confused with *P. berchtoldii*.

Potamogeton rutilus

Shetland Pondweed

N

National rarity: Rare

Scottish Biodiversity List

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 164429	2006		Fingask Loch			M C Robinson

Discovered by Nick Stewart in 1997. Usually requires some base-enrichment and lack of pollution, of which this loch has a mixed history

Potentilla anglica

Trailing Cinquefoil

N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 95NW	2005					anon
NN 95Q	2007	SSSI	Richard's Island	River shingle		M C Robinson
NO 06L	2007		Kindrogan	Forest track		M C Robinson
NO 200233	1990		Hole of Clie			A Mathers

Hybrids involving *P. anglica*, *P. reptans* and *P. erecta* have probably been overlooked

Potentilla argentea

Hoary Cinquefoil

N

National rarity: Near-threatened Scottish Biodiversity List

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 138401	1999		Little Fardle			PSNS visit
NO 121388	2004		Delvine	Permanent grassland		PSNS visit

This species is at the northern extremity of its natural UK range, and its Locally Rare status is probably a true reflection.

Potentilla crantzii

Alpine Cinquefoil

N

National rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 87X	1995		Gleann Mhairc	Crags at head of glen		G P Rothero et al
NN 916680	2000	SSSI	Monzie	Limestone outcrop		R A H Smith & PSNS
NN 938638	2008	SSSI	Meall an Daimh	Calcareous grassland	1 plant	M C Robinson
NN 949630	2012	SSSI	Ben Vrackie	Basic crags	Several sites E to NN 951631	M C Robinson
NN 975648	1979	SSSI	Creag na h-Iolaire			RBGE
NN 9373	1987	SSSI	Creag Mhor			I R Bonner
NN 9574	1976	SSSI	Glen Tilt			PSNS
NN 966674	2011	SSSI	Crochton	Limestone pavement	Two sites in same area	M C Robinson & L Tucker
NN 965683	2012	SSSI	Meall Breac	Limestone outcrops	Several sites in general area	M C Robinson & L Tucker
NN 9669	1985	SSSI	Sron na h-Innearach		And NN 967703 & NN 968702	R A H Smith
NN 979705	1980	SSSI	Stac nam Bodach		And NN 980703	B S Brookes
NN 990717	1980	SSSI	Allt Glen Loch		1	B S Brookes
NN 990737	2010	SSSI	Loch Loch	Limestone grassland		M C Robinson & L Tucker
NN 988658	1976	SSSI	Crungie Clach			R A H Smith
NN 987717	1980	SSSI	Glen Loch		And NN 989717	B S Brookes
NN 996711	1980		Ben Vuirich			B S Brookes
NN 97NE	1970					anon
NO 004775	2005	SSSI	Meall na Spionaig	Limestone outcrops	Extensive	M C Robinson
NO 027776	1995		Carn an Righ			B S Brookes
NO 031719	1983		Creag Dhubh, Glenfernate			H E Stace
NO 071719	2005		Glenlochsie	Calcareous grassland	A single plant	M C Robinson & L Tucker
NO 076698	2004		Coire a'Ghearraig			L Tucker
NO 0874	2008		Creag Dhearg			J Muscott et al
NO 0974	1981		Creag Lamhaich			B S Brookes
NO 073760	1997		Glas Choire Mhor	And NO 075757		BSBI

NO 075764	1997		Creag Easgaidh			BSBI
NO 129755	2005		Creag nan Eun, Gleann Beag	Calcareous grassland	Small patch of <10 plants	L Tucker
NO 1277	2011	SSSI	The Cairnwell	Calcareous grassland	Many colonies, some extensive	M C Robinson & R G Payne
NO 141729	2011		Carn Ait	Calcareous grassland	Two sites on narrow ridge	M C Robinson
NO 134759	1970		Allt a'Choire Dhirich			P M Batty
NO 142773	2011		The Cairnwell	Grassy flushes and rocky slopes	Frequent	M C Robinson et al

Can usually be found easily enough on limestone and basic schist exposures, especially on the Blair Atholl limestones. Often non-flowering in well-grazed areas.

Potentilla reptans

Creeping Cinquefoil N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 980511	1988	SSSI	Richard's Island			R A H Smith
NO 055630	1998		Kindrogan			anon
NO 12Q	2006		Seggieden			PSNS
NO 16SW	1987					anon
NO 200233	1990		Hole of Clien			A Mathers
NO 22H	2008		Myreside	Farm track		M C Robinson & L Tucker
NO 22SE	1970					anon
NO 22NE	1987					anon
NO 32NW	1987					anon

Hybrids involving *P. anglica*, *P. reptans* and *P. erecta* have probably been overlooked

Pseudorchis albida

Small-white Orchid N

National rarity: Vulnerable

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 882708	2011		Glen Tilt	Heathy ridge	5 plants, including 3 in flower	A Scobie & P Freeman
NN 885727	2000		Gleann Mhairc		And NN 886717	P Cramb
NN 853680	2011		Glen Banvie	Calcareous heath/grassland	5 spikes	M C Robinson
NN 95NE	1992	SSSI	Pitarrig Meadow			P R McPhail
NN 891671	2011	SSSI	Glen Fender	Short heathland	2 spikes 130 metres apart	E Lavery, A Scobie & R Payne
NN 901669	1982	SSSI	Glen Fender	Top of roadside wall		R A H Smith
NN 952600	1987		Balnakeilly Meadow			N W Taylor
NN 962766	1984	SSSI	Upper Glen Tilt		And NN 972774	R Marriott
NO 034636	2010	SSSI	Straloch	Herb-rich heath	270 spikes	M C Robinson et al
NO 088710	1989		Dalmunzie			A Primavesi

NO 141557	1981		Persie Meadow			R A H Smith
NO 1464	2010		Finegand	Moraine grassland	Common	M C Robinson

Almost certainly new colonies still to be found in the many areas of heathy grassland. The Finegand colony is now grazed by sheep and has no chance of flowering.

Puccinellia maritima

Common Saltmarsh-grass N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 22NE	1970					anon
NO 3429	2009	SSSI	Invergowrie	Saltmarsh		M C Robinson

Confined to the only short stretch of saltmarsh in the vice-county.

Pyrola media

Intermediate Wintergreen N

National rarity: Scarce Vulnerable Scottish Biodiversity List

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 691720	2009		Allt an Stalcair	Heathland	3 plants on lip of burn ravine	M C Robinson
NN793675	2009		Clunes	Sparse heathland	4 plants on lip of burn ravine	M C Robinson
NN 843697	2010		Glen Banvie	Along lip of ravine		M C Robinson
NN 879681	2011		Glen Tilt	Heathy bank	20 plants, including 5 flowering	A Scobie
NN 882708	2011		Glen Tilt	Herb-rich heathy ridge	300-500 plants, many in flower	A Scobie & P Freeman
NN 885718	2000		Gleann Mhairc			P Cramb
NN 9669	1985	SSSI	Sron na h-Innearach			R A H Smith
NN 996794	1993	SSSI	Fealar Gorge	Lowest part of the gorge		J Pitt
NO 004624	2014	SSSI	Dalnacarn	In heather at side of burn	Nine small rosettes, not thriving	M C Robinson
NO 055630	1998		Kindrogan			P Cramb
NO 05SE	1983		Ballintuim			P Macpherson
NO 072765	2014		Gleann Taitneach	Heather/grass mosaic by burn	>6 rosettes	M C Robinson
NO 079569	1994		Pitcarmick			R A H Smith
NO 032639	2010	SSSI	Straloch	Herb-rich heathland	Several colonies	M C Robinson
NO 0862	1987		Whitefield Hill			B S Brookes
NO 091543	1983		Woodhill			anon
NO 149239	1979		Deuchny Wood			J J Aitken
NO 2535	1997	SSSI	Laird's Loch			SNH Loch Inventory
NO 2042	2004	SSSI	Monk Myre			L Farrell

Not uncommon in the uplands but seems to have disappeared from most of its lowland sites.

Pyrola rotundifolia

Round-leaved Wintergreen N

National rarity: Scarce Near-threatened

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 924701	1993	SSSI	Creag-choinnich Lodge			J Pitt
NN 9474	1974	SSSI	Glen Tilt			PSNS
NN 999794	2005	SSSI	Fealar Gorge	Wet cliffs in gorge	>28 plants in 3 groups	M C Robinson & D McCosh
NO 07D	1976	SSSI	Allt a'Ghlinne Mhoir			A G Payne
NO 105724	2008		Ben Gulabin	Flushed area in heath	Large colony, with <i>P. minor</i>	M C Robinson & BSBI

Another non-flowering colony, also mixed with *P. minor*, at the Cairnwell is also probably this species

Radiola linoides

Allseed N

National rarity: Near-threatened

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 026465	1999		Mill Dam	Bare ground on track		H & R Ingram
NO 0249	1997	SSSI	Loch Ordie	At side of track		SNH Loch Inventory

FBW lists a number of sites and states that the species is local, yet these are the only recent records in Perthshire

Ranunculus circinatus

Fan-leaved Water-crowfoot N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 13NW	1990	SSSI	Meikleour			R A H Smith
NO 14SW	1987					anon
NO 1642	2004		Fingask Loch			N F Stewart
NO 1642	2004		White Loch	Eutrophic loch		N F Stewart

Another species at the northern limit of its UK range and so likely to be rare, and apparently always has been.

Ranunculus lingua

Greater Spearwort N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 1244	2005	SSSI	Marlee Loch	Swamp	End of loch and 'Snipe Bog'	PSNS
NO 13NW	1991	SSSI	Meikleour			P R McPhail
NO 191425	2010	SSSI	Stormont Loch	Lochside swamp		M C Robinson & A Godfrey
NO 237234	1998		Errol Pond			R A H Smith

Has always been rather rare in Perthshire. Stops at the Highland Boundary Fault.

Ranunculus sardous

Hairy Buttercup N ?

Local rarity: Rare Scottish Biodiversity List

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 242282	1997		Flawcraigs	Roadside		M Benstead
NO22SE	1997		Seaside		Just west of Seaside	A Godfrey
NO 349298	1970		Invergowrie Station		Extinct by 1997	M Benstead

Status uncertain. May only be casual

Ranunculus sceleratus

Celery-leaved Buttercup N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 140447	1978	SSSI	Marlee Loch			R A H Smith
NO 14W	2004	SSSI	Stormont Loch	Loch shore		M C Robinson
NO 212427	1998	SSSI	Monk Myre			N F Stewart
NO 22H	2008		Myreside	Damp setaside		M C Robinson & L Tucker
NO 22NE	1970					anon
NO 282346	1980	SSSI	Blacklaw Mire			D M Bayne
NO 250441	1995		Bankhead of Kinloch Oxbow			N W Taylor
NO 22K	2009		Port Allen			PSNS
NO 325283	2011	SSSI	Monorgan	Inner saltmarsh	Common	M C Robinson
NO 3429	2008		Kingoodie Quarry			I Ford

Scattered lowland sites in damp habitats, but quite frequent along the Firth of Tay at the back of the marsh, especially where fresh water runs in

Ranunculus trichophyllus

Thread-leaved Water-crowfoot N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 0543	1990	SSSI	Loch of the Lowes			S J Marrs
NO 24C	2005		R Ericht, Rattray			L Farrell & M C Robinson
NO 259357	1990	SSSI	Laird's Loch	Mesotrophic loch		R B Ninnes

FBW gives it as 'local' and records it at several lochs where it is no longer known

Raphanus raphanistrum

Wild Radish A

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 980511	1988	SSSI	Richard's Island			R A H Smith
NO1238	2008	SSSI	Delvine	River shingle	A single plant	M C Robinson

FBW records it as 'common' and it is undoubtedly much rarer today, even though arable fields are generally under-recorded.

Rorippa microphylla

Narrow-fruited Water-cress N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 143645	1997		Tigh an Eilean, Glenshee			M C Robinson
NO 1732	1999		Dunsinnan			E Lavery & J Thomas
NO 184234	1999		Balthayock Loch			M Benstead
NO 314325	1980		Balruddery Glen			D M Bayne
NO 324283	1988	SSSI	Monorgan			anon

Almost certainly under-recorded, needs further investigation.

Rosa spinosissima

Burnet Rose N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 049436	1971	SSSI	Loch of the Lowes			PSNS
NO 162234	1986		Northlees Farm, Kinfauns			PSNS
NO 22C	2007		Pitroddie Den			PSNS
NO 2030	1998		Bandirran	Hedgebank	Naturalised	R A H Smith
NO 23A	2012		Dunsinane Hill	Top of crags	Quite frequent	PSNS

It appears to have disappeared from some sites, though it was never anything other than uncommon.

Rumex hydrolapathum

Water Dock N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 1244	2002	SSSI	Marlee Loch			N F Stewart
NO 158217	1981		Insherrit Island			R A H Smith
NO 1621	2006		Seggieden	Swamp		A Godfrey

Only known from two areas by FBW, one of which is the Insherrit-Seggieden area, so possibly its status has not altered very much and it was never anything other than rare, being at the northern limit of its UK distribution.

Rumex alpinus

Monks' Rhubarb

A

National status: Scottish Biodiversity List

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 026632	1977		Brerachan Water			anon
NO 044642	2007		Straloch	Clump at side of track		M C Robinson
NO 054629	1987		Kindrogan			R E Youngman
NO 069616	2011		Dalreoch	Clump by river		M C Robinson
NO 072613	1986		Milton of Balvarran			N F Stewart
NO 04NE	2003		Den of Riechip			M C Robinson
NO 15E	2008		Wester Bleaton	Clump at roadside		M C Robinson & BSBI
NO 125531	1983		Hill of Cally			R Pankhurst
NO 132674	1975		Dalhenzean Lodge, Glenshee			Kindrogan Field Centre
NO 145563	1983		Blackhall			A A P Slack
NO 16SW	1970					anon
NO 14R	2008		White Loch			M C Robinson
NO 14U	2007	SSSI	Craighall Gorge			PSNS
NO 14X	2007		Ratray	N side of R Erich		M C Robinson & L Tucker
NO 185279	2013		Dalreichmoor	Roadside	A few plants	M C Robinson
NO 195404	1972		Isla Bridges		GR may be generic	PSNS
NO 1931	1993		Clockmaden			R A H Smith
NO 197466	2014		Linkholms, NE of Ratray	Road verge	Extends 180 metres along roadside	M C Robinson & R Payne
NO 209477	2014		St Fink	Road verge	Two clumps	M C Robinson & R Payne
NO 214489	2014		Tullyfergus	Road verge	Remnant of a patch	M C Robinson & R Payne
NO 245296	2011		Pitmiddle	Tall grassland in deserted village	10m x 15m, and 2m x 2m	M C Robinson & L Tucker
NO 211427	2012	SSSI	Monk Myre	Edge of woodland	A large patch	M C Robinson
NO 24NW	1985	SSSI	Den of Alyth			R A H Smith
NO 280455	1972		Crathes Bridge			PSNS
NO 280497	1982		Dryloch Oakwood			D M Bayne
NO 323334	2011		Fowlis	Rough ground at edge of track	Two clumps	M C Robinson

Mostly long-established clumps associated with habitation. It easily washes down watercourses, resulting in meta-populations. FBW states that its leaves are used for wrapping up butter.

Rumex maritimus

Golden Dock

N

Local rarity: Rare Scottish Biodiversity List

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 241446	2005		Boat of Bardmony	Muddy edge of river	A small amount	N F Stewart et al

Probably native at this site, but on account of the instability of this habitat it has a very tenuous hold on Perthshire.

Sagina maritima

Sea Pearlwort N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 674719	1999		Dalnacardoch	A9 roadside		I Green
NO 1321	2006		Friarton Bridge	Waste ground beside R Tay		A Godfrey
NO 32NW	1988	SSSI	Tay estuary			anon

The last site is typical and at Dalnacardoch it appears as a roadside halophyte, but the waste-ground site at Friarton had no salt influence.

Sagina saginoides

Alpine Pearlwort N

National rarity: Scarce Endangered Scottish Biodiversity List

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 753776	1995		Sron Odhar, Dalnamein			G P Rothero
NN 96	2005	SSSI	Ben Vrackie		A few plants	P Stanley et al
NO 089771	2005		Carn Bhinnein			BSBI
NO 158756	2005	SSSI	Cul Riabhach	Around springs	Small quantities	M C Robinson
NO 159771	2008	SSSI	Meall Odhar			N W Taylor
NO 1278	2011	SSSI	The Cairnwell	Mostly on bare sugar limestone	>25, >12, 7 at three sites + others	M C Robinson & R G Payne

Almost certainly under-recorded. A montane species that likes base-rich, well-drained, open ground where there is little competition

Salix arbuscula

Mountain Willow N

National rarity: Scarce

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 626742	1995	SSSI	Sow of Atholl			R A H Smith
NN 87NE	1995		Upper Gleann Mhairc			BSBI
NN 945630	1979	SSSI	Meall an Daimh			RBGE
NN 945630	1979	SSSI	Ben Vrackie			RBGE
NN 9373	1987	SSSI	Creag Mhor			I R Bonner
NO 143762	2011	SSSI	Devil's Elbow	Calcareous burn side	At least one, possibly a few	L Tucker

Past mis-identification is suspected in some cases. A species primarily of Breadalbane, extending eastwards with a scatter along the limestones of the southern Grampians

Salix cinerea ssp. cinerea

Grey Willow

N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 1238	2004	SSSI	Delvine	River shingle		L Tucker & PSNS
NO 14H	2005		New Mill, Drumellie	Willow carr		L Tucker & PSNS

These plants bear a close resemblance to *ssp. cinerea*, the form in eastern England, but they are well separated geographically. More work is required to resolve the situation.

Salix lanata

Woolly Willow

N

National rarity: Rare Vulnerable Scottish Biodiversity List

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 054767	2007	SSSI	Glas Tulaichean	Limestone cliff ledge	A single female plant	H McHaffie, D Mardon & R Marriott

28 plants were established at the site by RBGE in 1999. Seven of these were still present in 2007. Only 12 other sites in the British Isles

Salix lapponum

Downy Willow

N

National rarity: Vulnerable Scottish Biodiversity List

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 585733	2014	SSSI	Upper Coire Dhomhain	Low cliffs	29 clumps. And NN 593737 (2003)	JW McIntosh
NN 599732	2009	SSSI	Coire Creagach	The top of an outcrop	4 m x 30 m.	M C Robinson
NN 599745	2009	SSSI	Coire Dhomhain	Side of burn	2 bushes	M C Robinson
NN 6172	1978	SSSI	Allt Coire Luidhearnaigh			R A H Smith
NN 6274	1978	SSSI	Sow of Atholl			R A H Smith
NN 637756	2008	SSSI	Allt a'Chaorainn	Side of burn	Two main colonies	M C Robinson & L Tucker
NN 645764	1981	SSSI	Allt a'Chaorainn			P Pitkin
NN 685785	2003	SSSI	Cama' Choire		Also 3 other sites (AGP, 1980)	D Rae
NN 701791	1980	SSSI	Am Meadar			R A H Smith
NN 702801	1980	SSSI	Vinegar Hill			R A H Smith
NN 709796	1980		Cama' Choire			A G Payne & C Geddes
NN 77NW	1995		Loch an Duin			SNH Loch Inventory
NN 77NW	1975		Edendon Water			N Sanderson
NN 8377	2007		Allt Beinn Losgarnaich	Side of burn	All the way up from NN 836773	M C Robinson & L Tucker
NN 8575	1991		Allt Sheicheachan	Side of burn		M C Robinson
NN 888758	1995		Upper Gleann Mhairc	Crags at head of the glen		G P Rothero et al
NN 814804	1998		Feith Ghorm Ailleag	Falls		A Godfrey
NN 988747	1988	SSSI	Loch Loch cliffs			D F Chamberlain
NO 0076	1998	SSSI	Gleann Mhor Bridge		Both upstream and downstream	K Bland

NO 065770	2002		Glas Tulaichean		And NO 066770	T Loizou
NO 0672	2009		Glenlochsie	Side of burn	Right down to golf course and beyond	L Tucker
NO 105724	2008		Ben Gulabin		3 small plants	M C Robinson, L Tucker & BSBI
NO 143752	2008	SSSI	Coire a'Bhathaich	On bank above burn	Single small plant	M C Robinson, L Tucker & BSBI

These are mostly relict populations, surviving in places where they can escape browsing by deer. Quite widespread on account of a greater acid tolerance than the other montane willows

Salix myrsinites

Whortle-leaved Willow N

National rarity: Scarce Endangered

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 6575	1983	SSSI	Allt Coire Mhic-Sith			R McBeath
NN 67	2003	SSSI	Cama' Choire		Recorded in 4 1km squares	D Rae
NN 9363	1987	SSSI	Meall an Daimh			D C Wood
NN 961637	2010	SSSI	Creag Tharsuinn	Calcareous crag	50 plants in 2008 (T Loizou, L Tucker)	M C Robinson & PSNS
NN 9373	1986	SSSI	Creag Mhor, Glen Tilt			B S Brookes & R A H Smith
NN 988747	1988	SSSI	Loch Loch cliffs			D F Chamberlain
NN 002776	2013	SSSI	Meall na Spionaig	Rocky, flushed calcareous grassland	And at NO 004775. >20 plants in total	M C Robinson & L Tucker
NO 008798	1988	SSSI	Fealar Gorge			N F Stewart
NO 027776	1995		Carn an Righ			B S Brookes
NO 058755	2008	SSSI	Glas Tulaichean	On the side of a rock	A single plant	M C Robinson
NO 065770	2002		Glas Tulaichean		Also NO 066770	T Loizou
NO 1277	??	SSSI	The Cairnwell	Calcareous flush		L Tucker
NO 134759	1970		Coire Dhirich			P M Batty
NO 140772	2010		The Cairnwell	Flushes		L Tucker
NO 144748	2009	SSSI	Coire a'Bhathaich	Calcareous flush		M C Robinson, L Tucker & BSBI

Some of these are probably not 100% pure. Hybridisation with *S. myrsinifolia* is suspected in some cases

Salix pentandra

Bay Willow N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 980511	2000	SSSI	Richard's Island			J Gardiner
NO 13NW	1989					anon
NO 224329	2012		King's Seat	Moorland	A single, isolated small tree	M C Robinson
NO 246445	1986		Bardmony, R Isla			PSNS
NO 295516	1987	SSSI	Den of Airlie			R Tidswell

FBW only knew it from one site in East Perths, where it was probably planted. He made a special study of willows, so it seems certain that it was rare at that time, and is still scarce.

Salix triandra

Almond Willow

A

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 1521	2006		Insherrit Island			L Tucker
NO 1637	2009		Bridge of Isla	River bank	A few	L Tucker

FBW described it as local and not abundant, and mentioned the R Tay at Meikleour, which is very close to the Bridge of Isla site.

Saxifraga hypnoides

Mossy Saxifrage

N

National rarity: Vulnerable Scottish Biodiversity List

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 67B	2006	SSSI	Sow of Atholl	Thin calcareous soils		PSNS
NN 6978	1980	SSSI	Cama' Choire		NN 684785 to NN 701791	R A H Smith
NN 720795	1995		Loch an Duin			SNH Loch Inventory
NN 8377	2007		Allt Beinn Losgarnaich			M C Robinson & L Tucker
NN 87NE	1995		Gleann Mhairc			BSBI
NN 938643	2011	SSSI	Meall an Daimh	Side of wet rock among crags	One small patch	M C Robinson
NN 949630	2012	SSSI	Ben Vrackie		A large clump	M C Robinson
NN 961637	2003	SSSI	Creag Tharsuinn			M C Robinson & L Tucker
NN 9669	1985	SSSI	Sron na h-Innearach		And NN 967703	R A H Smith
NN 975678	1975	SSSI	Crochton			R A H Smith
NN 9574	1976	SSSI	Glen Tilt		Probably NN 9373	PSNS
NN 960764	1988	SSSI	Dail Fheannach, Glen Tilt			RBGE
NN 979705	1980		Stac nam Bodach			B S Brookes
NN 996807	1995		Meall na Caillich Buidhe			J Pitt
NO 06NE	1998		Ben Earb			M C Robinson
NO 054766	2010	SSSI	Glas Tulaichean	Calcareous ledge	And NO 05407664	M C Robinson & L Tucker
NO 0575	2008	SSSI	Glas Tulaichean			M C Robinson
NO 07Q	2005		Dalmunzie			M C Robinson & L Tucker
NO 0874	1977		Creag Dhearg			J Pitt
NO 126736	1987		Gleann Beag			K Fallowfield
NO 1277	2011	SSSI	The Cairwell	Calcareous flush	A small patch at head of flush	M C Robinson & R G Payne
NO 141772	2010		The Cairwell			M C Robinson et al
NO 1474	1999	SSSI	Creag Leacach			M C Robinson

Scattered throughout the highland part of the vice-county, almost always in base-rich situations. In FBW's day it was also recorded in the lowland hills, which must mean the Sidlaws.

Saxifraga nivalis

Alpine Saxifrage N

National rarity: Scarce

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 696799	2003	SSSI	Cama' Choire			D Rae
NO 066710	2005		Meall a'Choire Bhuidhe	Small rock outcrops	21 plants	M C Robinson & L Tucker

Seems to have always been rare in the vice-county. The Meall a'Choire Bhuidhe site was not discovered until 2003, so its not impossible that further sites await discovery

Saxifraga tridactylites

Rue-leaved Saxifrage N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 890647	2004		R Garry, Essangal	Limestone outcrop	Area 45cm x 30cm	M C Robinson

This site was known to FBW. It is absent from all the Blair Atholl limestone apart from this site and one in Mid Perthshire. The area must be climatically unsuitable.

Schoenoplectus lacustris

Common Club-rush N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 060450	1986	SSSI	Loch of Butterstone			Kindrogan Field Centre
NO 14SW	1997	SSSI	Loch of Clunie			SNH Loch Inventory
NO 140447	2002	SSSI	Loch Marlee			N F Stewart
NO 159445	1997		Rae Loch			N F Stewart
NO 14R	2005		Black Loch			PSNS
NO 188195	1996		Cairnie-Inchyra			BSBI
NO 250441	1987		R Isla oxbows		And NO 257447 (1986), PSNS	N W Taylor
NO 294437	1970		SW Fullarton			PSNS

Mainly known from the Dunkeld-Blairgowrie chain of lochs and the River Isla. FBW knew it from the same areas.

Schoenoplectus tabernaemontani

Grey Club-rush N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 166428	2006		Fingask Loch	Edge of loch		M C Robinson
NO 22K	2009	SSSI	Port Allen			M C Robinson
NO 320277	2011	SSSI	Templehall	Saltmarsh		M C Robinson
NO 341293	1997	SSSI	Kingoodie	Edge of estuary		M Benstead

FBW states that it was known along the Firth of Tay as far upstream as Sleepless Island, and did not know it from inland lochs.

Schoenus ferrugineus

Brown Bog-rush N

National rarity: Rare Scottish Biodiversity List

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 96D	2005	SSSI	Monzie	Calcareous flushes	ca. 7,520 plants	M C Robinson
NN 9461	2009	SSSI	Ben Vrackie A	Calcareous flush	<25 clumps, transplant	M C Robinson & PSNS
NN 9461	2009	SSSI	Ben Vrackie B	Calcareous flush	Transplant doing well, spreading	M C Robinson

The Ben Vrackie colonies are the only survivors of plants moved from L Tummel in 1950 to avoid the raised water level resulting from the new hydro-electric scheme

Schoenus nigricans

Black Bog-rush N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 928597	2009		Craigower	Calcareous flushes	Two areas, north-east to NN931600	MCR, R Youngman & L Borradaile

This site lies within an FC plantation and is the only site known in the whole of Perthshire, lying to the east of the main Scottish populations. Not known there by FBW.

Scleranthus annuus

Annual Knawel N

National rarity: Endangered Scottish Biodiversity List

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 980511	1988	SSSI	Richard's Island			R A H Smith
NO 136228	2008	SSSI	Kinnoull Hill	Dry summit of hill	<50 clumps	M C Robinson
NO 138401	1999		Little Fardle			PSNS
NO 13NW	1990	SSSI	Meikleour			R A H Smith
NO 171429	1996		White Loch			Scottish Wildlife Trust
NO 717109	2009		Barry Hill	Bare soil on cattle paths	>62 plants	M C Robinson

FBW recorded it as common in fields and on rocky banks, so it has undoubtedly declined. Many sites in the Sidlaws appear to be entirely suitable for it, but Kinnoull Hill is currently the only site known there.

Scrophularia auriculata

Water Figwort N?

Local rarity: Rare

NO 059621	2012		Kindrogan Forest	Grass verge at edge of track	10 clumps or plants	M C Robinson
-----------	------	--	------------------	------------------------------	---------------------	--------------

At the side of a forestry road, this colony may have been accidentally introduced

Sedum anglicum

English Stonecrop N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 12G	1995	SSSI	Kinnoull Hill			N W Taylor
NO 1238	2008	SSSI	Delvine	River shingle		M C Robinson
NO 164227	1981		Kinfauns			N F Stewart
NO 184228	1980		Glencarse Hill			N F Stewart
NO 22C	2007		Pitroddie Den	Crags		M C Robinson & L Tucker

A plant mainly of the western Sidlaws, yet it was unknown to FBW there. As this is not an easily overlooked species one may assume that it has arrived since his time.

Sedum villosum

Hairy Stonecrop N

National rarity: Scarce Near-threatened

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 039623	1978		Kindrogan Forest	Ditch by forest track	Not found recently	B S Brookes

Not known at present anywhere in the vice-county, though its total absence seems very unlikely

Sherardia arvensis

Field Madder N

Local rarity: Scarce Scottish Biodiversity List

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN95SE	1989					anon
NO 131222	2014		Kinnoull Hill	Old track	Several places along track	F Anstey
NO12NW	1989					anon
NO198254	1984		Goddens Farm			R A H Smith
NO201254	2007		Pitroddie Den	Grassland above crags		M C Robinson & L Tucker
NO 207278	2014		Swirlhead	Base of volcanic crags	Several places, but strong at this GR	M C Robinson
NO 241281	2011		Craighead Quarry	On track	Also at NO 23852790	PSNS

A Sidlaws plant given by FBW as common in fields, but clearly no longer common anywhere in Perthshire, where it is towards the northern end of its UK range

Sibbaldia procumbens

Sibbaldia N

National rarity: Scarce Vulnerable

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 589738	2014	SSSI	Allt Coire Dhomhain	Stony terraces on river bank		J W McIntosh
NN 591726	2014	SSSI	Sgairneach Mhor	Edge of scree	Large patch	J W McIntosh
NN 598732	2009	SSSI	Coire Creagach	Linear, grassy flush	Abundant	M C Robinson
NN 6173	1978	SSSI	Coire Luidhearnaidh			R A H Smith

NN 617710	1978		Meallan Buidhe, Craiganour		And NN 612712	B S Brookes
NN 626739	2006	SSSI	Sow of Atholl		5 sites in the area	M C Robinson & PSNS
NN 650771	2009	SSSI	Allt a'Chaorainn		And NN 648762	M C Robinson & L Tucker
NN 661764	2009	SSSI	Allt Coire Mhic-Sith	Flushed grassland	Abundant up burn to NN 662765	M C Robinson & L Tucker
NN 6878	1988	SSSI	Cama' Choire			D C Wood
NN 705792	2007	SSSI	Cama' Choire	Am Meadar		M C Robinson & L Tucker
NN 753776	1995		Sron Odhar, Dalnamein			G P Rothero et al
NN 77Y	1995		Sron a'Chleirich			G P Rothero et al
NN 88SE	1991		Upper Tarf Water			N W Taylor
NN 9563	1999	SSSI	Ben Vrackie			P Cramb
NN 993695	1980		Ben Vuirich			R A H Smith
NN 976745	1980	SSSI	Coire Mearach			B S Brookes
NN 9873	1978	SSSI	Coire Cas Eagallach			R Mackechnie
NN 917824	1988		Carn Ealar			N W Taylor
NN 925817	1975		Sron na Machranaich			N Sanderson
NO 027754	1995		Gleann Mhor	Small limestone outcrop		B S Brookes
NO 072707	2005		Meall a'Choire Bhuidhe	Outcrop	3 small clumps	M C Robinson & L Tucker
NO 054766	2010	SSSI	Glas Tulaichean	North corrie		M C Robinson & L Tucker
NO 0575	2008	SSSI	Glas Tulaichean	South corrie		M C Robinson
NO 126780	2011	SSSI	The Cairnwell	Narrow grassy flush	>80 plants + 1 other site	M C Robinson & R G Payne
NO 155773	2003	SSSI	Meall Odhar		And NO 159769	M C Robinson & BSBI

Scattered throughout the higher hills, often in linear colonies running down flushed grassland, sometimes in considerable quantity.

Silene acaulis

Moss Champion

N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 0576	1978	SSSI	Glas Tulaichean		North corrie	R A H Smith
NO 127781	2009	SSSI	The Cairnwell		Several patches in one small area	M C Robinson & L Tucker

Surprisingly rare, much more a plant of Breadalbane in Perthshire terms. Status may reflect a scarcity of basic rock at high levels in the vice-county.

Silene (Lychnis) viscaria

Sticky Catchfly

N

National rarity: Scarce Near-threatened

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 178231	1979		Balthayock Burn		>100 plants. Not found in 1992	R A H Smith
NO 179227	1987, 1979		Glencarse Hill		2 colonies, >100 & 15 plants	G Wilson, P Lusby
NN 935599	1987		Creag Glunaidh		>33 clumps	P Lusby
NN 937604	1972		Creag Chuinnlean		Not found in 1993 (P.Lusby)	J Martin
NN 176485	2007		Craighall Gorge		>11 plants. 100 plants in 1996.	M C Robinson & PSNS

Much reduced, probably owing to its crag sites becoming overgrown

Silybum marianum

Milk Thistle

A

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 86X	2004		Essangal			M C Robinson
NO 256223	1990		Errol			M Benstead

An archaeophyte, probably casual. Not known to FBW.

Sinapis alba

White Mustard

A

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 064622	2011		Dalreoch, Enochdhu	Field of rape and turnips	Common towards edge of crop	M C Robinson
NO 110390	2013		Braecock	Edge of oilseed rape field	Common	M C Robinson

This archaeophyte is probably far more common than the single record suggests, especially in the standard seed mix of fodder rape and stubble turnips.

Sinapis arvensis

Charlock

A

National status: Scottish Biodiversity List

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 9160	2008		Faskally	Waste ground		M C Robinson
NN 980511	1988	SSSI	Richard's Island			R A H Smith
NO 045440	1983	SSSI	Loch of the Lowes			anon
NO NO 075403	2011		R Tay, Thornton	Corner of arable field		M C Robinson
NO 11NE	1987		Cairnie area			anon
NO 12G	2013		Perth			F Anstey
NO 129246	1987		Gannochy Farm			R A H Smith
NO 135222	1987		Walnut Grove			R A H Smith

NO 12Q	2006		Seggieden			PSNS
NO 12NE	1989					anon
NO 13J	2004		Delvine			PSNS
NO 14NW	2003		Stormont Loch	Edge of crop		M C Robinson
NO 14R	2008		White Loch area	Edge of crop		M C Robinson
NO 14NE	1981	SSSI	Craighall Gorge			B S Brookes
NO 22SW	1987					anon
NO 22C	2007		Pitroddie	Edge of crop		M C Robinson & L Tucker
NO 22NE	1987					anon
NO 23A	2009		Bandirran	Edge of crop		M C Robinson
NO 23NW	1987					anon
NO 23SE	1987					anon
NO 265482	1970		Alyth Golf-course			anon
NO 324283	1988		Monorgan			anon
NO 33A	2004		Castle Huntly	Edge of crop		M C Robinson
NO 3430	1987		Invergowrie			M Benstead

A common arable weed included here on account of its Scottish Biodiversity List status. Under-recorded, like most arable weeds.

Smyrniolum olusatrum

Alexanders

A

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 135235	2008	SSSI	Corsiehill Quarry	Disused quarry	Strong colony	M C Robinson et al

An archaeophyte, unlikely to have found its own way to this, its only East Perths site. The quarry was worked until 1932 so the plant was not known there in FBW's day.

Sorbus rupicola

Rock Whitebeam

N

National rarity: Scarce

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 9359	1981		Moulin			A McG Stirling
NO 009496	2010	SSSI	Creag na h-Eighe	Mica-schist crag	6 plants	T MacDonald
NO 0190439	2011		Dunkeld	Mica-schist crag	2 saplings from old (cut) boles	T MacDonald

The Moulin plant(s) appear(s) to have gone, probably shaded out by forestry. The other two sites have been only recently discovered, on otherwise unremarkable-looking crags, so more populations may await discovery.

Sparganium natans

Least Bur-reed

N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 875813	1975		Beinn Bhreac			N Sanderson
NN 921592	2005		Loch Dunmore			M C Robinson
NN 961665	2011		Shinagag pools	Edge of pool		M C Robinson & L Tucker
NO 0444	1997	SSSI	Loch of Craiglush	Oligo-mesotrophic loch		SNH Loch Inventory
NO 016650	1992		Tarvie Loch			J Muscott
NO 123337	1986		Campsie			R E Thomas

FBW gives it as 'not uncommon', but perhaps it would now be better described as 'local'. Almost certainly more sites to be found.

Spergula arvensis

Corn Spurrey

A

National rarity: Vulnerable

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
			Mostly in southern half	Disturbed ground	39 5kmx5km squares	Many

A common arable weed included here on account of its Vulnerable status. Under-recorded, like most arable weeds.

Stachys arvensis

Field Woundwort

A

National rarity: Near-threatened Scottish Biodiversity List

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 064405	2013		Stenton	Setaside field		F Anstey
NO 328296	2008		Pilmore	Arable fields	Small numbers	I Ford

FBW says 'here and there in the lower and warmer parts of the districts, most frequent in Gowrie'. This indicates that, like lots of other arable weeds, it has declined considerably.

Subularia aquatica

Awlwort

N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 7279	1995		Loch an Duin			SNH
NN 954618	2005		Ben Vrackie reservoir			M C Robinson
NO 0544	2003	SSSI	Loch of the Lowes	Oligo-mesotrophic loch		N F Stewart
NO 060450	1996	SSSI	Loch of Butterstone	Oligo-mesotrophic loch		V James
NO 1144	2010	SSSI	Loch of Clunie	Mesotrophic loch		A Godfrey, W Hay, M C Robinson
NO 1344	2010	SSSI	Marlee Loch	Mesotrophic loch		A Godfrey, W Hay, M C Robinson
NO 1642	2003		Fingask Loch			N F Stewart
NO 1339	1984	SSSI	Meikleour			M McCallum-Webster

Only known by FBW in Loch of Clunie, where it is still to be found. Strange that it was missed in all these other lochs, or perhaps it has increased and spread.

Taraxacum cymbifolium

Ben Lawers Dandelion

National rarity: Rare Vulnerable Scottish Biodiversity List

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 950629	2008	SSSI	Ben Vrackie	Calcareous grassland		M Usher

Only previously known from Ben Lawers

Teesdalia nudicaulis

Shepherd's Cress

N

National rarity: Near-threatened Scottish Biodiversity List

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 9947	2007		Dowally	River shingle		M C Robinson
NN 9751	2007	SSSI	Richard's Island	River shingle		M C Robinson
NN 9654	2011		Moulinearn	River shingle		M C Robinson
NO 101393	2013		Braecock	River shingle	Good quantity	M C Robinson
NO 13J	2004	SSSI	Delvine	River shingle		M C Robinson & PSNS
NO 138401	1999		Little Fardle			PSNS

No records away from the River Tay, where it can be found on sand or sandy shingle.

Thalictrum minus

Lesser Meadow-rue

N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 96SW	1989					anon
NN 980511	2000	SSSI	Richard's Island			Mrs J Gardiner
NO 031719	1983		Creag Dubh, Glenfernate			H E Stace
NO 06SW	1989					anon
NO 079749	1996		Gleann Taitneach			BSBI
NO 12F	2006		Friarton Bridge			M C Robinson
NO 12SE	1989					anon
NO 13SW	1989					anon
NO 13J	2004	SSSI	Delvine			PSNS

Native. Usually found along the River Tay on sand/shingle, apart from the records in Glenfernate and Gleann Taitneach, about which there is little information

Trichophorum cespitosum s.s.

Northern Deergrass

N

National rarity: Rare Data-deficient

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 905676	2012	SSSI	Monzie	Calcareous flushes	Quite common	M C Robinson & W Hay
NN 921680	2012	SSSI	Carn Liath flushes	Boggy area within flush complex	Group of several clumps	M C Robinson
NN 954676	2012	SSSI	Shinagag	Calcareous flush	Several clumps	M C Robinson & L Tucker
NO 008774	2012	SSSI	Gleann Mor, Fealar	Calcareous flush	Unknown	L Robinson & M E Bradshaw

T. x foersteri (*T. cespitosum* x *T. germanicum*) has been found more widely, but these are the only known colonies of pure *T. cespitosum*

Trifolium arvense

Hare's-foot Clover

N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 86NE	1989					anon
NN 874647	1998		Blair Atholl Golf-course			A Wilson
NO 050429	1997		Letter Hill			anon
NO 12G	1985	SSSI	Kinnoull Hill	Top of cliffs		L Farrell
NO 157739	1990		Meikleour			N W Taylor
NO 14X	2007		Rattray	Stable river shingle		M C Robinson & L Tucker
NO 22SW	1987					anon

A scarce plant of the lowland areas of Perthshire, usually found in open rocky or sandy habitats. The only highland site is Blair Atholl, where FBW also knew of it.

Trifolium micranthum

Slender Trefoil

A

National rarity: Scottish Biodiversity List

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 339295	2013		Kingoodie Quarry	Open ground, skeletal soil	>20 patches	I Ford

Probably an archaeophyte in this area. Unknown to FBW as a Perthshire plant. Very much a lowland plant, occurring on open ground where there is little competition

Trifolium striatum

Knotted Clover

N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 12G	1981	SSSI	Kinnoull Hill			N F Stewart
NO 162234	1986		Northlees Farm, Kinfauns			PSNS
NO 12X	2007		Pole Hill	Eroded soil around cliffs		M C Robinson & L Tucker
NO 12NE	1989					anon
NO 22NW	1987					anon
NO 220317	2012		Black Hill	Thin soil at base of basalt face		PSNS
NO 340293	2008		Kingoodie			I Ford
NO 339295	2013		Kingoodie Quarry	Open ground at top of quarry	Patch 5m x 5m	I Ford

Apart from one area of the Moray Firth it is at the northern limit of its UK range here, and confined to the Sidlaws, where it grows on open, skeletal basaltic soils on the various crags

Triglochin maritimum

Sea Arrow-grass

N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 22SE	1970	SSSI				
NO 22 NE	1970	SSSI				
NO 3227	2011	SSSI	Templehall	Saltmarsh	One stand at back of saltmarsh	M C Robinson
NO 3228	2011	SSSI	Monorgan	Saltmarsh	All along outer saltmarsh	M C Robinson
NO 32J	2010	SSSI	Kingoodie	Saltmarsh		M C Robinson
NO 3429	2009	SSSI	Invergowrie	Saltmarsh		M C Robinson

Only scarce on account of the rarity of its habitat in the vice-county

Trisetum flavescens

Yellow Oat-grass

N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 882651	2005	SSSI	Blair Atholl	Grassy bank		M C Robinson
NO 12G	2003	SSSI	Kinnoull Hill			PSNS
NO 232272	1986		Fingask Farm			R A H Smith
NO 3429	2010	SSSI	Kingoodie	Grassland on old pier		PSNS

A scarce plant throughout Perthshire. FBW suspected it was always a casual in Perthshire, usually being near gardens, but the sites known today do not really support that theory.

Ulex gallii

Western Gorse

N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 138663	2004		Finegand, Glenshee	Grassy bank	Two bushes	R W M Corner

The only known site in Perthshire, discovered on account of its being in full flower in October. It is not thought to be native anywhere in Scotland.

Urtica urens

Small Nettle

A

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 160216	1995		Insherrit Island			SWT
NO 14W	1980	SSSI	Stormont Loch			N F Stewart
NO 189447	2007		Ratray	Edge of raspberry field		M C Robinson & L Tucker
NO 14NE	1970					anon
NO 204382	1992		Keithick			anon
NO 232272	1986		Fingask Farm			R A H Smith
NO 22NE	1987					anon
NO 324283	1988	SSSI	Monorgan			anon
NO 33SW	1987					anon
NO 34SW	1987					PSNS

Undoubtedly scarcer than it was in FBW's day, but it comes within the category of weeds of cultivation that are almost certainly under-recorded. Probably not Locally Scarce at all.

Utricularia intermedia s.l.

Bladderwort N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 67NW	1989					anon
NN 77SE	1989					anon
NO 045440	1987	SSSI	Loch of the Lowes			I Bonner
NO 280488	1989		Silvie plantation meadow			PSNS

The distribution of all *Utricularia* species is unclear on account of identification difficulties. Both *U. stygia* and *U. ochroleuca* are involved.

Utricularia minor

Lesser Bladderwort N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 88SE	1970					anon
NN 907663	2009	SSSI	Loch Moraig	Flush		M C Robinson
NN 961665	2011		Shinagag pools	Edge of small lochan		M C Robinson & L Tucker
NN 96	1991	SSSI	Ben Vrackie (east)			N F Stewart

Almost certainly under-recorded, as are all the *Utricularia* species. FBW refers to it as being local but probably overlooked.

Utricularia vulgaris s.l.

Greater Bladderwort N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 875813	1975		Beinn Bhreac			N Sanderson
NN 946626	2006	SSSI	Ben Vrackie	Loch and mire runnels		M C Robinson
NN 9877	1995	SSSI	An Lochain			B S Brookes
NN 98W	2009		Loch Tilt	Loch outflow channel		M C Robinson
NO 280340	2005	SSSI	Redmyre	Nutrient-poor fen pools		D M Bayne

Probably under-recorded like the other *Utricularia* species.

Vaccinium microcarpum

Small Cranberry N

National rarity: Scarce

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 67SW	1978		Allt Coire Luidhearnaidh			A McG Stirling
NN 67NE	1992	SSSI	Allt Coire Bhuidheanach			A McG Stirling
NN 98SE	1978		Upper Glen Tilt			R A H Smith
NN 987747	1995	SSSI	Loch Loch		And NN 989756	B S Brookes

NN 9877	1995	SSSI	Creag Dhearg			B S Brookes
NN 996760	1973	SSSI	Meall Reamhar	Grassland		B S Brookes
NO 005611	2003		Blath Balg			R Youngman & L Farrell
NO 028758	1995		Gleann Mhor			B S Brookes
NO 056775	1995		Gleann Mhor			B S Brookes
NO 100732	1976		Coire Shith			Botanical Society of Edinburgh
NO 1654	1995	SSSI	Dun Moss			B S Brookes

May be under-recorded in some of the remoter peatlands of the north of the vice-county. Not separated from *V. oxycoccos* in FBW's day.

Valerianella locusta

Common Cornsalad N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 9359	1998		Creag Glunaidh			T D H Merrie
NO12SW	1970					anon
NO 3329	2008		Kingoodie Quarry			I Ford

Described as local by FBW, who also knew it at Kingoodie. The NO12SW site may be Kinnoull Hill, where he also knew it.

Veronica agrestis

Green Field-speedwell A

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 95SE	1989					anon
NN 96NE	1970					anon
NO 22SE	1987					anon
NO 23NE	1987					anon
NO 32NW	1987					anon
NO 34SW	1987		Drumkilbo area			PSNS
NO 324283	1988		Monorgan			anon

This arable weed, known to FBW as a common plant, has certainly declined, but the extent of its decrease may be obscured by under-recording, as in many weeds of cultivation.

Veronica alpina

Alpine Speedwell N

National rarity: Scarce

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 560732	2009	SSSI	Coire Creagach		A few straggly plants	M C Robinson
NN 97NE	1974		Upper Glen Tilt			B S Brookes
NN 97NE	1978		Gleann Mhor			R A H Smith

NO 07NW	1976		Gleann Mhor			A G Payne
NO 027754	1975		Gleann Mhor	Small limestone outcrop		B S Brookes
NO 07P	1978		Lochan Uaine			R A H Smith
NO 054766	2010	SSSI	Glas Tulaichean	Calcareous grassland	Common in small area	M C Robinson & L Tucker
NO 066710	1978		Meall a'Choire Bhuidhe	Calcareous grassland		M C Robinson & L Tucker
NO 127780	2011	SSSI	The Cairnwell	Calcareous grassland	242 plants in 4 colonies	M C Robinson & R G Payne
NO 148773 to NO 1	2005	SSSI	Meall Odhar	Wet spring heads	3 colonies	M C Robinson & BSBI

A plant exclusively of the central highlands in UK terms, that has probably not changed much in its distribution.

Veronica anagallis-aquatica

Blue Water-speedwell N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 217243	2009		Myreside	In ditches		M C Robinson & L Tucker
NO 237234	1998		Errol Pond			R A H Smith
NO 246445	1986		Bardmony, R Isla			PSNS

Very much a lowland plant that seems to have been quite common in the south of the vice-county in FBW's time. Probably a real decline on account of drainage rather than under-recording

Veronica fruticans

Rock Speedwell N

National rarity: Near-threatened

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 895714	1976		A'Chreag			BSBI
NN 940740	1998	SSSI	Carn Torcaidh - Creag Mhor		Also NN 939742 and NN 940738	P Cramb
NN 990744	2005	SSSI	Loch Loch	Limestone crags	4 sites along 700 metres of cliff	M C Robinson & J Balfour
NN 996734	1998	SSSI	Sron nan Dias			P Cramb
NO 078766	1996		Creag Easgaidh		& NO 078766. 32 plants in all	D Rae
NN 949631	1998	SSSI	Ben Vrackie			P Cramb

Another plant exclusively of the central highlands and, in East Perths, confined to crags of the Blair Atholl limestone, through to the head of Gleann Taitneach

Veronica serpyllifolia ssp.humifusa

Thyme-leaved Speedwell N

National rarity: Near-threatened

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 5973	2009	SSSI	Coire Creagach			M C Robinson
NN 67C	2007	SSSI	Coire Dhomhain			M C Robinson
NN 621744	2005	SSSI	Sow of Atholl	Grassy flush		M C Robinson
NN 663774	1998	SSSI	A'Bhuidheanach Bheag			P Cramb

NN 68SE	1989					anon
NN 716714	1989		Edendon Water			N W Taylor
NN 8575	1990		Allt Sheicheachan			M C Robinson
NN 87NE	1995		Gleann Mhairc			BSBI
NN 872805	1991		Upper Tarf Water			N W Taylor
NN 9460	2006	SSSI	Ben Vrackie			M C Robinson
NN 968685	1975	SSSI	Meall Breac			R A H Smith
NN 917824	1989		Carn Ealar			N W Taylor
NO 008798	1981	SSSI	Fealar Gorge			R A H Smith
NO 027776	1995		Carn an Righ			B S Brookes
NO 030754	1995		Gleann Mor			R Fitzgerald
NO 07SE	2005		Dalmunzie			M C Robinson & L Tucker
NO 066773	1998		Allt Easgaidh			K Fallowfield
NO 127781	1974	SSSI	The Cairnwell			J G Roger
NO 17M	2008	SSSI	Creag Leacach			M C Robinson & BSBI

Not always differentiated from the nominate subspecies and so its distribution is unclear.

Vicia lathyroides

Spring Vetch

N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 12G	1981	SSSI	Kinnoull Hill			H E Stace
NO 219317	2012		Black Hill	Basalt earth scree below cliff	Scarce	PSNS

Certainly very rare in the whole of Perthshire but possibly overlooked on account of its small size and early flowering. Both of these sites are on basalt scree in the Sidlaws

Vicia orobus

Wood Bitter-vetch

N

National rarity: Near-threatened Scottish Biodiversity List

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 042638	2009		Straloch	Grassy roadside bank	3 clumps along 9 metre stretch	M C Robinson

Has apparently disappeared from some sites, as it is mentioned in the New Statistical Accounts in the parish of Alyth and FBW saw it in Glen Tilt. Has a western tendency in the UK.

Viola canina

Heath Dog-violet

N

National rarity: Near-threatened

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 841641	2006	SSSI	Aldclune Meadow	River shingle		M C Robinson
NN 991495	2013		Big Island	River shingle	Many clumps, extending to south	M C Robinson
NN 95Q	2007	SSSI	Richard's Island	River shingle		M C Robinson
NO 067406	1997		Stenton Rocks			P Cramb
NO 06SW	1976	SSSI	Brerachan Meadow			R A H Smith
NO 07SE	1989					A Primavesi
NO 103392	2013		The Inch	River shingle		M C Robinson
NO 13J	2004	SSSI	Delvine	River shingle		PSNS
NO 1439	2006	SSSI	Kercock	Higher river shingle banks	Frequent clumps	M C Robinson
NO 141523	1982	SSSI	Romadie Wood			PSNS
NO 160686	1970		Loch Beanie			PSNS
NO 141773	2010		The Cairnwell	Limestone exposure		BSBI Alchemilla workshop
NO 23NW	1987					anon
NO 259357	1980	SSSI	Laird's Loch			D M Bayne

May be under-recorded in the upland areas. Characteristic of the river shingles of the Tay, but maybe sometimes overlooked on leached soils overlying basic rocks in the hills

Viola hirta

Hairy Violet

N

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 1222	2000		Moncrieffe Island			PSNS
NO 204252	2007		Pitroddie Den	Grassland on den floor		PSNS
NO 34SW	1987					PSNS

Right at the northern extremity of its UK range. It may have declined a bit, as FBW knew it 'here and there' in the 'trap hills' of Gowrie (= the Sidlaws)

Viola tricolor

Wild Pansy

N

National rarity: Near-threatened Scottish Biodiversity List

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 87NE	1993		Marble Lodge area, Glen Tilt			PSNS
NN 995492	1996		R Tay, Guay			PSNS
NN 95S	2006		Moulinearn	River shingle		M C Robinson
NN 980511	1988	SSSI	Richard's Island			R A H Smith
NN 96NW	1989					anon

NO 04E	2013		Ballyintuim			F Anstey
NO 045440	1983	SSSI	Loch of the Lowes			anon
NO 13E	2013		Braecock	Trackside, field edges	Quite common in tetrad	M C Robinson
NO 015489	1990		Dowally - Loch Ordie			PSNS
NO 149239	1990		Deuchny			A Mathers
NO 13J	2004	SSSI	Delvine			PSNS
NO 14NW	1970					anon
NO 166429	1995		Fingask			M C Robinson & SWT
NO 130690	1997		Westerton of Runavey			H Lindsay
NO 107703	1996		Spittal of Glenshee	Meadow		Scottish Wildlife Trust
NO 204382	1992		Keithick			anon
NO 2442	2011		Cronan	Arable field edge		M Tulley
NO 257447	1986		Bardmony, R Isla			PSNS
NO 294437	1970		South West Fullarton			PSNS
NO 24NE	1987					anon
NO 221514	1998		Bamff			A Wilson
NO 25SE	1987					anon
NO 34 SW	1987					PSNS

It is suspected that there may be some confusion with *V. lutea* in some of these records, resulting from an assumption that upland plants are all that species.

Vulpia bromoides

Squirreltail Fescue N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 13SW	1989					anon
NO 179459	1999		Rattray			A Showler
NO 2025	2007		Pitroddie	Thin soils on upper crags		M C Robinson & L Tucker
NO 339295	2010		Kingoodie Quarry	Open ground at the top		M C Robinson & PSNS

It does seem genuinely to be scarce, but is worth looking out for on dry, open soil, particularly in the southern part of the vice-county.

Vulpia myuros

Rat's-tail Fescue A

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 937581	2009		Pitlochry	Waste ground	Pitlochry Station	J Allinson
NO 349298	1987		Invergowrie Station		Gone by 1997. Site built over.	M Benstead

An archaeophyte, it may only be a casual

Zannichellia palustris

Horned Pondweed

N

Local rarity: Scarce

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NO 118443	2004	SSSI	Loch of Clunie	Mesotrophic loch		N F Stewart
NO 14R	2004		Fingask Loch			N F Stewart
NO 24B	2004	SSSI	Monk Myre	Eutrophic loch	Both ends of the loch	N F Stewart
NO 280295	1997		Rossie Lake			SNH Loch Inventory

Not known by FBW in the vice-county, and described by him as 'very rare' in Perthshire generally. It could probably be found in more sites however.

Chara rudis

Rugged Stonewort

N

National rarity: Near-threatened Scottish Biodiversity List

Local rarity: Rare

Grid ref.	Date	Protection	Site	Habitat	Abundance	Recorder
NN 9066	2005	SSSI	Loch Moraig	Mesotrophic loch		N F Stewart
NO 170429	2005		White Loch	Eutrophic loch		N F Stewart

A distinctive, very large species, living in deep water and not likely to be found from the edge of a loch.