

# The Rare and Scarce Plants of South Northumberland 2014

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## Introduction

The Vice-County Rare Plant Registers are an initiative of the Botanical Society of Britain and Ireland (BSBI) to summarise the status of rare and conservation-worthy plants in each vice-county. The intention is to create an up-to-date summary of the sites of rare plants and their status at these sites. Rare Plant Registers intend to identify gaps in our knowledge, aid conservation efforts and encourage monitoring of our rare plants.

## Changes from the 2013 register

We have updated the register with observations collected during 2014. Many species accounts have been improved with regard to their historical observations. Also, national threat statuses have been changed to those of the England red-list (Stroh *et al.*, 2015). During the review of the register the following taxa have been added, *Carum carvi*, *Cirsium eriophorum*, *Draba incana*, *Euphrasia micrantha*, *Galium boreale*, *Galium tricornutum*, *Gentianella amarella*, *Hieracium argutifolium*, *Hieracium auratiflorum*, *Hieracium piligerum*, *Melica nutans* and *Seriphidium maritima*. Native records of *Cicendia filiformis* and *Saxifraga hypnoides* are now considered to be errors.

## Criteria for Inclusion

The guidelines of the BSBI were followed in the production of this Rare Plant Register. All native vascular plants with a national status of “rare” (found in 1-15 hectads in Britain) or “scarce” (found in 16-100 hectads in Britain) are included even if that species is not native to South Northumberland. In addition, all native species locally rare or scarce in South Northumberland are included, as are extinct native species. These guidelines were occasionally relaxed to include some local specialities and hybrids of note.

We would have liked to restrict the list to current sites for each species. However, in many cases, there is too little up-to-date information to make this possible. The listed sites are those where the species might still exist or has existed recently. In most cases, a site is included if a species has been recorded there since 1970. Sites without detailed locality information or of dubious provenance are not included. Where possible, we have tried to show the known history of a site by noting the date of first and last record. However, it is not always clear how sites in old records match up with modern sites. The initials of the recorders were put next to the year of recording.

More information on the history, habitats and status of each species can be found in the Flora of Northumberland (Swan, 1993, 2003) and the Red Data Book for Northumberland (Lunn, 1998)

## Geographic Scope and Taxonomic Scope

The Register covers vascular plants and charophytes in the Watsonian vice-county of South Northumberland (VC67). The boundary of South Northumberland largely follows the modern boundaries of Northumberland, but includes Newcastle (the portion of Tyne and Wear north of the River Tyne) and excludes the vice-county of Cheviotland (the portion of Northumberland north of the River Coquet).

## Definitions

The England conservation statuses for vascular plants are taken from Stroh et al. (2014) and for the Characeae from Stewart (2004). Taxonomy and vernacular names follow Stace (2010) and nativeness to VC67 largely follows Swan (1993) though deviations from this are noted in the text.

Locally Extinct = not seen in the vice-county since 1971 or the only known site has been destroyed.

Locally Rare = Three or fewer sites since 1987

Highlighted in **red** are unprotected sites of native plants with an English red list status of either critically endangered, endangered or vulnerable (Stroh et al., 2014).

Locally Scarce = Ten or fewer sites since 1987

Locally vulnerable = More than ten sites, but apparently declining and close to scarce.

## Grid References

Where possible, sites have been located to a 100m × 100m Ordnance Survey grid reference. In those cases where either a site is large or our records are not detailed, we have given Ordnance Survey grid references to the monad (1km × 1km) or tetrad (2km × 2km). Grid references for tetrads use the DINTY format, where the letter refers to one of the 25 tetrads in a hectad (10km × 10km) (e.g. NY98i). Some records have only been located within a pentad (5km × 5km). These grid references use the compass point suffixes NW, NE, SW and SE to distinguish the four pentad grid squares in a hectad (e.g. NY98SE). When collecting new records, please record an accurate grid reference for all rare plants.

## Updating the Register

In writing this report, the gaps in our knowledge have become particularly obvious. Many locally rare plants are on the verge of extinction or in serious decline. We encourage people who visit sites of rare plants to let us know, **whether they find these rare species or not during their visit**.

We welcome new records of rare plants and corrections, particularly where they are accompanied by good locality information and estimates of either the numbers of plants or ground covered. This information is highly valuable for monitoring the health of rare plant populations, but is rarely collected.

Please send corrections and additions to [qgroom@botanicalkeys.co.uk](mailto:qgroom@botanicalkeys.co.uk) or Quentin Groom, Louis Pelserssquare 1, 3080 Tervuren, Belgium.

## Data Deficient Species

Known sites of these species are either few, not visited recently or both. In effect, we do not have enough data to categorise them. We suspect many are too common to be classified as scarce, but the records are insufficient to be certain. We list them here to encourage targeted surveys and more detailed recording.

*Agrostis gigantea*

*Bolboschoenus maritimus*

*Bromus benekenii*

*Callitriche hamulata*

*Callitriche platycarpa*

*Galium mollugo* subsp.

*erectum*

*Periscaria lapathifolia*

*Poa angustifolia*

*Ranunculus peltatus*

*Ranunculus fluitans*

*Rubus saxatilis*

*Stellaria pallida*

*Veronica agrestis*

## Analysis

South Northumberland is unremarkable amongst vice-counties for both its number of species and their rarity. However, its central position latitudinally and its mix of habitats makes it an exceptionally good case study for extrapolation to the rest of the UK. Few vice-counties cover such a large area and have a mix of coastal habitats; intensive agriculture; urban and industrial areas; woodland; moors; heaths and a variety of grasslands. One would expect that the causes of species decline and extinctions in South Northumberland reflect the situation in the rest of the country.

Almost one-third of the species of South Northumberland are now either scarce, rare or extinct by the definitions used here (Fig. 1). Of the 7% that have become extinct, only a few have become so recently. While this might give us some encouragement, the reality is that conservation measures conducted to

save the last remaining sites of a species often avoid the complete extinction of a species. Indeed, we see this effect in the large numbers of species categorised as locally rare (16%). Effectively, uncommon species are being excluded from the larger countryside and are restricted to fragmentary remains of their former habitat. While this does temporarily avoid extinction of a species, it is likely that the isolation and small population sizes will lead to the decline and extinction of many of those species in the future.

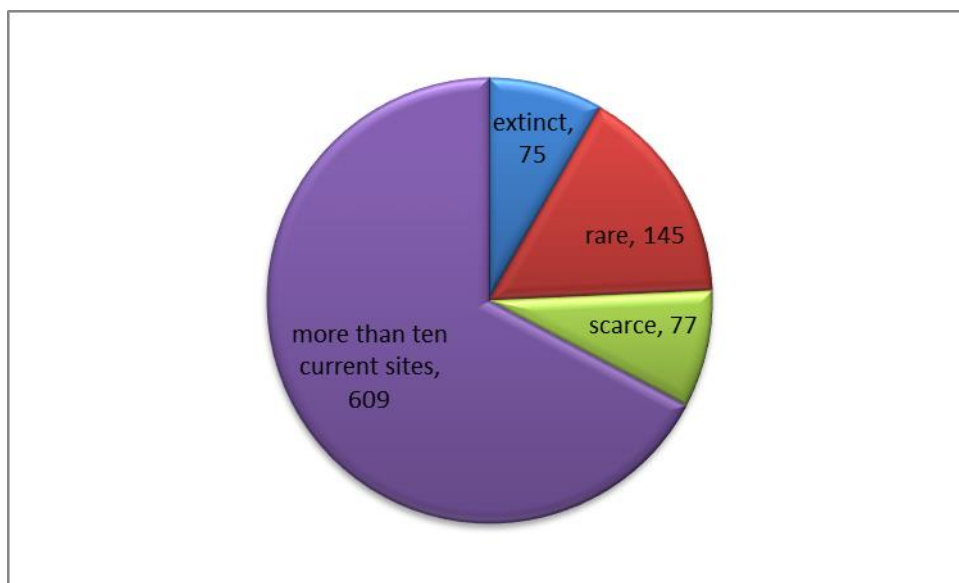


Figure 1. The proportions of scarce, rare and extinct species in the vice county of South Northumberland. Based on an estimated 906 native and archaeophyte species that have been recorded.

## Profiles of Important Habitats

### Ancient Woodland

The wild woods, which once covered much of Northumberland, were cut a long time ago. Their remains, along steep-sided denes, still hold many of their original species. *Festuca altissima* (Wood Fescue), *Gagea lutea* (Yellow Star-of-Bethlehem), *Hordelymus europaeus* (Wood Barley), *Neottia nidus-avis* (Bird's-nest Orchid), *Ribes spicatum* (Downy Current) and *Vicia sylvatica* (Wood Vetch) are just some of the nationally and locally important species of this habitat.

Their steep topography gives them physical protection, and some have legal protection, for example Briarwood Banks SSSI, Derwent Gorge NNR and the valleys of the Irving and Coquet SSSIs. These woodlands are not particularly threatened, but insensitive management can be a problem. In addition, the inadvertent introduction and planting of non-native species causes problems for native woodland species. *Gaultheria shallon* (Shallon), *Picea sitchensis* (Sitka Spruce), *Prunus laurocerasus* (Cherry Laurel) and *Rhododendron ponticum* (Rhododendron) are examples of common woodland aliens.

### The Coast

South Northumberland's coastal flora is not exceptional, particularly when compared to North Northumberland. Nevertheless, much of the coast has SSSI status i.e. Northumberland Shore SSSI, Tynemouth to Seaton Sluice SSSI, Cresswell & Newbiggin Shores SSSI and Hadston Links SSSI. However, these sites were largely established for their importance to bird life rather than their flora. The coast does hold populations of national rarities such as *Astragalus danicus* (Purple Milk-vetch) and *Salicornia fragilis* (Yellow Glasswort). These habitats are stable, though they are not in perfect health. The stretches of dune are very narrow and are managed primarily for coastal defence. Management for dune stability is not always suitable for species that need open areas and fresh dune slacks to colonise. The biggest threats are sand extraction and sea level rise.

The coast has probably lost more species than any other area of South Northumberland. Extinct species include *Beta vulgaris* subsp. *maritima* (Sea Beet), *Carex maritima* (Curved Sedge), *Centaureum littorale* (Seaside Centaury), *Juncus maritimus* (Sea Rush), *Oenanthe lachenalii* (Parsley Water-dropwort), *Polygonum oxyspermum* (Ray's Knotgrass) and *Samolus valerandi* (Brookweed).

## Bogs

The Border Mires are South Northumberland's hidden treasures. They are visually uninspiring and each bog is usually surrounded by monocultures of Sitka spruce, they do not even have a particularly diverse flora. However, they are probably the largest area of active blanket bogs outside Scotland. They are important for their bird life, bryophytes and their vascular plants. Nationally important plant species include *Drosera anglica* (Great Sundew) and *Carex magellanica* (Tall Bog-sedge).

The mires have been damaged in the past by drainage and the planting of conifers. More recently, the Northumberland Wildlife Trust has been active in damming old drains and removing trees. The mires have a good chance to recover though they will need continual protection from encroachment of Sitka spruce.

## Upland Grassland

The upland meadows of South Northumberland are rather overshadowed by the quality of those in County Durham; however, we do have some good examples. This habitat is important for *Alchemilla* spp. (Lady's Mantles), *Crepis mollis* (Northern Hawk's-beard), *Euphrasia* spp. (Eyebrights), orchids, particularly *Platanthera chlorantha* (Greater Butterfly-orchid) and *Pseudorchis albida* (Small-white Orchid), though the latter is probably extinct.

Agricultural improvement threatens this habitat, changing farming practices, drainage and abandonment. North Pennines AONB's Hay Time project is doing important work, restoring and recreating upland hay meadows, while simultaneously promoting the care of such grasslands with farmers and the local communities.

## The Whin Grasslands

The Whin Grasslands of Northumberland are one of the county's unique features. The habitat is characterised by heavily grazed nutrient-poor grassland over hard doleritic rock. Its rare plants include *Allium schoenoprasum* (Chives), *Dianthus deltoides* (Maiden Pink), *Geranium columbinum* (Long-stalked Crane's-bill), *Alchemilla micans* (Shining Lady's-Mantle) and *Sedum villosum* (Hairy Stonecrop) to name a few.

This habitat is probably the most threatened in South Northumberland. This document is littered with whin grassland sites where rare species have not been seen for a long time or have been lost. Species such as *Arabis hirsuta* (Hairy Rock-cress), *Cerastium diffusum* (Sea Mouse-ear), *Dianthus deltoides* (Maiden Pink), *Geranium columbinum* (Long-stalked Crane's-bill), *Saxifraga tridactylites* (Rue leaved Saxifrage), *Scleranthus annuus* (Annual Knawel) and *Trifolium striatum* (Knotted Clover) have only a few fragmented sites.

Threats to this habitat include agricultural improvement, atmospheric nitrogen deposition, habitat fragmentation, quarrying and either over or under grazing. Most sites have some formal protection though this has not halted their decline. One site, Riverhill Farm, has no protection, even though it is probably the last site for *Filipendula vulgaris* (Dropwort) and one of the last sites for *Viola canina* (Heath Dog-violet), *Orobancha rapum-genistae* (Greater Broomrape), *Campanula glomerata* (Clustered Bellflower) and *Blysmus compressus* (Flat-sedge).

For further information, the reader should read the two recent reports on the status of Whin grasslands in Northumberland (Beamsley 2006, Simkin 2008). Both give a bleak outlook for these grasslands with a slow but inexorable loss of botanical value.

## Moors

The uplands of South Northumberland are extensive and often very species-poor, yet they contain some rare species. Some are close to their southernmost limit in Northumberland and are commoner further north. For example *Antennaria dioica* (Mountain Everlasting), *Betula nana* (Dwarf Birch), *Diphasiastrum complanatum* subsp. *issleri* (Issler's Clubmoss) and *Pyrola media* (Intermediate Wintergreen). Others are more widespread in the country and prefer a more heath-like vegetation, e.g. *Genista anglica* (Petty Whin) and *Juniperus communis* (Juniper). In streams and flushes draining these moors are found rare plants such as *Myosotis stolonifera* (Pale Forget-me-not). The moors are not particularly threatened, however, there have been changes in management practices that may influence rare plants, for example, changes in stocking densities, the decline of cattle farming and the burning of heather.

## Water plants

### *The Roman Wall Loughs*

The Roman Wall Loughs consist of the SSSIs Crag, Broomlee and Greenlee Loughs, plus the undesignated Halleypike Lough, Grindon Lough and Folly Lake. They are large mesotrophic lakes and are important sites for *Potamogeton* species and hybrids, notably *Potamogeton praelongus* (Long-stalked Pondweed), *Potamogeton* × *nitens* (Bright-leaved Pondweed) and *Potamogeton* × *lintonii* (Linton's Pondweed). They are also important sites for the Characeae (Stoneworts) and *Persicaria minor* (Small Water-pepper). The aquatic flora of these loughs requires clean, nutrient-poor conditions. Eutrophication of the water from agricultural run-off and atmospheric deposition could irreversibly change the character of these waters. Their SSSI status gives them some protection and some of the surrounding land is in environmental stewardship schemes to reduce the eutrophication that has already occurred. The status of these lakes is vulnerable and will require on-going conservation measures.

### *Reservoirs*

In general, reservoirs are not considered good habitat for aquatic plants. The fluctuating water levels and deep water are unsuitable for many species. Nevertheless, a few shoreline plants have actively colonised local reservoirs, for example, *Lythrum portula* (Water-purslane), *Eleocharis acicularis* (Needle Spike-rush) and *Eleocharis mamillata* subsp. *austriaca* (Northern Spike-rush). While these habitats are not actively conserved for the benefit of plants, they still benefit from the good water quality.

### *Lowland Ponds*

South-eastern Northumberland has an abundance of freshwater and brackish ponds. Although these ponds hold few national rarities, they are particularly rich in aquatic plants and contain many plants of local interest. Owing to their relatively young age, their floras are rather changeable and new species are often introduced to them. Several sites have a conservation status such as Big Waters SSSI and Cresswell Pond SSSI, though their management focuses on their value to wildfowl rather than plants. They are not particularly threatened habitats, though some of the smaller undesignated ponds are vulnerable to drainage and development, such as at the Royal Quays.

### *Others*

Chartner's Lough is one of a handful of English native sites for *Nuphar* × *spenneriana*.

## Metallophytes

Another habitat of national significance is the metallophyte floras of the South Tyne and West Allen valleys. The county has a large proportion of the national populations of *Noccaea caerulea* (Alpine Penny-cress), *Minuartia verna* (Spring Sandwort) and *Epipactis dunensis* (Dune Helleborine). Other important species of this habitat are *Cochlearia pyrenaica* (Pyrenean Scurvygrass), *Viola lutea* (Mountain Pansy) and *Armeria maritima* (Sea Thrift).

Many sites have no official conservation protection. However, they are protected by the marginal quality of their soil for agriculture. Apart from *Epipactis dunensis*, most species tolerate heavy grazing and are perhaps most threatened by a lack of grazing. *Epipactis dunensis*, on the other hand is a shade-loving plant that will colonise metal-polluted sites that become wooded.

All the grassland metalliferous species require nutrient-poor conditions and any enrichment of the soil will result in their loss from a site.

Some of the protected sites are Ninebanks River Shingle SSSI on the West Allen, Williamston River Shingle SSSI on the South Tyne and Close House (NWTR) on the Tyne.

The status of these species and their habitat is stable, even though little of it has official protection.

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## **Abbreviations**

AONB – Area of Outstanding Natural Beauty

LNR – Local Nature Reserve

NNR – National Nature Reserve

NWTR – Northumberland Wildlife Trust Reserve

SNCI – Site of Nature Conservation Interest

SSSI – Sites of Special Scientific Interest

## Species Accounts

### *Characeae*

The Characeae are a family of green algae loosely resembling some aquatic vascular plants such as *Myriophyllum* and *Ceratophyllum*. For this reason, vascular plant botanists record them, even though they are algae. Having said this, they are a rather neglected group and are not easy to identify.

*Chara aspera* Dethard. ex Willd.

Rough Stonewort

Native

Locally rare

NY8071	2011 JO		Folly Lake
NY670659	2008 CO & JO		Pool in the quarry south of Turret 45B.
NY792696	1839 TBo	2007 CO & JO	Broomlee Lough (part of the Roman Wall Loughs SSSI)

*Chara contraria* A.Braun ex Kütz.

Opposite Stonewort

Native

Locally extinct

There are also two 19<sup>th</sup> century records for the southeast of the Vice-county neither with an accurate grid reference nor with details of their recorder.

NY990929	1995 GSi	1999 GSi	Trackside gully in Harwood Forest. Survived for a few years but now gone.
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*Chara globularis* Thuill.

Fragile Stonewort

Native

Locally rare

NZ273724	2003 PN		Burradon Pond
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*Chara hispida* L.

Bristly Stonewort

Native

Locally rare

NU2700	2008 JSi		Druridge Bay Country Park
NY778730	2007 JO		Little Bellcrag, quarry pond area. The most northerly inland site in the UK.

*Chara virgata* Kütz.

Delicate Stonewort

Native

Locally scarce

The lack of old records seems to indicate that this species has recently colonised the county. It has certainly colonised the two manmade sites.

NY8071	2011 JO		Folly Lake
NZ3366 NZ3466	2011 QG		The wasteland of the former sewage works, near Percy Main. Common in shallow pools across the site.
NY647834	2010 JO & DF		Pond by Humble Burn
NZ075672	2007 CI		Whittle Dene Water Treatment Works
NY66S	2009 CO & JO		Walltown Crag and Greenhead LNR.
NY7969	2007 CO & JO	2009 QG	Broomlee Lough (Roman Wall Loughs SSSI)
NY770696	2007 ENSIS		Greenlee Lough NNR (Roman Wall Loughs SSSI)



*Nitella confervacea* (Bréb.) A.Braun ex Leonh.

## Least Stonewort

Native

Nationally near threatened; locally rare

NY770696	2007 ENSIS		Greenlee Lough NNR (Roman Wall Loughs SSSI). Only the 2nd record for England.
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*Nitella flexilis* (L.) C.Agardh

## Smooth Stonewort

Native

Nationally scarce; locally scarce

NY701699	2011 JO, PB & QG		Pudgement Sike. <i>N. flexilis sensu lato</i>
NY952628	2007 CI		Dukes House Pond. <i>N. flexilis sensu lato</i>
NY7969 NY7970	2009 QG		Broomlee Lough (Roman Wall Loughs SSSI). <i>N. flexilis sensu stricto</i>
NY66S	2009 CO & JO		Walltown Craggs and Greenhead <i>N. flexilis sensu lato</i>

*Nitella opaca* (Bruzellus) C.Agardh

Locally rare

Native

NY8994	2011 QG		Fawdon Hill. Only a small patch in an acidic stream on moor.
NY7776	2010 JO	2012 QG	White Hill. In pools formed by wheel ruts on a forest track.
NT783006	2008 QG		Blakehopeburnhaugh. Filling a drainage ditch near the River Rede.

*Nitella translucens* (Pers.) C.Agardh

## Translucent Stonewort

Native

Locally rare

NZ110928	1992 PH & CP		Rayburn Lake SNCI
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*Lycopodiaceae**Diphasiastrum alpinum* (L.) Holub

## Alpine Clubmoss

Native

Locally scarce

Not strictly within the criteria for scarce and it has perhaps increased in sites over the past century. Nevertheless, many of the sites are quarries or gravel tracks that are vulnerable to destruction. Only a few sites are in a natural setting, amongst *Calluna vulgaris* on shallow soils at altitude.

NZ024990 NZ024989 NZ022991 NZ025992	1991 GS	2014 WG	Simonside (partly within Simonside Hills SSSI)
NY812539 NY806536	1974 GS	2014 AJR	Dryburn Moor, 2 patches.
NY639990 NY639991	1988 GS	2012 BH & GY	William's Cleugh (part of Kielderhead & Emblehope Moors SSSI). "Two patches" FJR (2010).
NY648982	2012 BH & GY		Scaup Pikes, , disused quarry, one patch 50cm × 50cm.

NY824446 NY826446 NY829446 NY827445 NY827446 NY827447	1999 MS	2013 QG	Allendale Common (Allendale Moors SSSI). 36 plants in 2011.
NY944542 NY952541 NY953550	1942 RBC	2011 JBo & GSi	Ladycross Bank quarry (private reserve). Several populations have been recorded in the area of the quarry.
NY739772 NY736772	2005 EM	2011 JC	The Lakes, Wark Forest (part of Kielder Mires, SSSI, NNR).
NY641831	1992 GSi	2010 JO & DF	A disused quarry north of Smoothing Sike.
NY975938	2008 GSi		Forest road near Fallowlees Burn
NT739021	1932 RCr	2007 WG	Chattlehope quarry
NY762771	1994 GS		Quarry near to Harelaw.
NY654787	1993 GS		Whaup Craggs
NY725737 NY724733	1989 GS	1992 GS & GSi	Old quarry near to Grindon Green.
NY981539 NY982539	1992 GS		Sand-pit near Acton Burn.
NY9384 NY935851	1957 GS	1973 GS	Dismantled railway near Summit Cottages.
NY879794	1967 GS	1972 GS	Millknock quarry

*Diphasiastrum complanatum* subsp. *issleri* (Rouy) Jermy

## Issler's Clubmoss

Native

Critically endangered; locally rare

The exact identity of these plants is still under investigation. These plants may be hybrids between *D. alpinum* and *D. complanatum*.

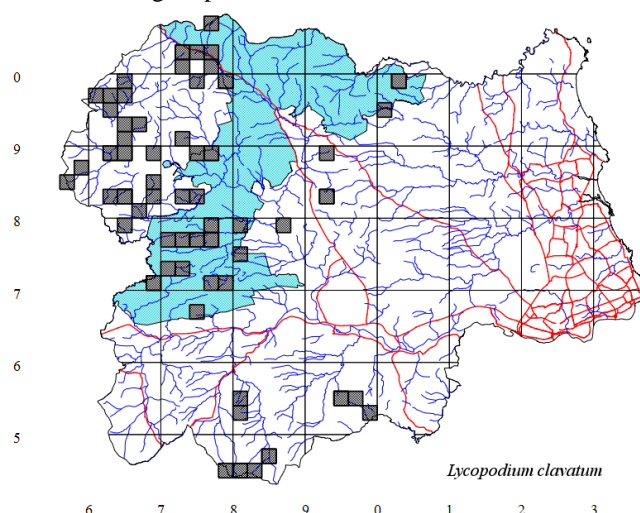
NY812539	2012 LF & GY	2014 AJR	Dryburn Moor (Allendale Moors SSSI).
NY827446	2011 GY	2012 GY	Allendale Common (Allendale Moors SSSI). Two plants, One plant, another plant has been lost due to heather burning.
NY639991	1988 GS	2012 BH & GY	Slope above William's Cleugh (part of Kielderhead & Emblehope Moors SSSI). One plant.
NY982539	1993 GS		Acton Burn
NY95M	1991 GS		Ladycross Quarry

*Lycopodium clavatum* L. Stag's-horn Clubmoss

Native

Vulnerable; locally least concern

Listed in annex V of the EC Habitats Directive. Only included due to its international status and while not common, it is sufficiently abundant not to be threatened locally. Indeed, it has probably increased along forestry tracks. The following map shows all tetrad located records since 1987.

*Isoetaceae**Isoetes lacustris* L.

Native

Quillwort

Locally extinct

*Isoetes lacustris* grew at Prestwick Carr during the 19<sup>th</sup> century before the Carr was drained.

*Equisetaceae**Equisetum pratense* Ehrh.

Native

Shady Horsetail

Near threatened; locally rare

NU196007	1965 CNP	2012 GY	South bank of River Coquet, east of Felton (River Coquet SSSI). Sixty-four plants in 2012 (GY), reduced to twenty-four in 2013 due to the erosion of the riverbank.
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*Equisetum variegatum* Schleich. ex. F.Weber & D.Mohr

Native

Variegated Horsetail

Locally scarce

Although there are no recent records for some of its old sites, there is also no reason to believe it has died out. It is not easy to find and we do not have accurate grid references for some of these sites.

NY640910 NY640911	2007 GSi, AY & GY	2014 QG	Bakethin Reservoir, slipway (NWTR). This site stretches over 80 m and encompasses more than 1000 stems.
NY633934	1960 GS	2014 QG	On the banks of Kielder Burn near Kielder Castle
NY648952	1990 GSi	2012 GSi	The north-west bank of Kielder Burn
NY635668 NY635669 NY634668	Circa 1831 JT	2011 GY & BH	River Irthing, north of Gilsland (SSSI). Three colonies (2010)
NT875027	1982 EN	1996 DW & LA	Ramsey's Burn woodland (SSSI)
NY644695 NY637693	1992 SM		Irthing Gorge SSSI, Crammel Linn area.

NY69NE	1964 GS	1972 GS	Kielder Burn and Scaup Burn
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*Equisetum* × *trachyodon* A.Braun

Mackay's Horsetail

Native

Locally rare

One of only a handful of sites in England.

NY753823 NY747814	1961 GS	2011 PJ & QG	Along Chirdon Burn, near Allerybanks. At least several hundred stems over 20 metres at the upstream site and just 6 stems at the lower. However, earlier records suggest there is another site between these two sites, though it is difficult to reach.
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***Osmundaceae****Osmunda regalis* L.

Royal Fern

Native

Extinct as a native

The one, presumable, native site was at Chevington Wood where it grew in the 19<sup>th</sup> century. It was almost certainly introduced to the following sites when the gardens were laid out. During the 19<sup>th</sup> century, royal fern was harvested from the wild for planting in gardens, so there is a chance that these plantings come from a local source.

NZ0255	1959 NNU	2010 GSi	Minsteracres Monastery Grounds
NZ0878	1970 GS	2005 JD	Belsay Hall
NZ033843	1987 AJR		Wallington, now lost when the pond was drained.
NY8774	1970 GS	1985 GS	Nunwick

***Hymenophyllaceae****Hymenophyllum tunbrigense* (L.) Sm.

Tunbridge Filmy-fern

Native

Locally Scarce

NY668862	1987 MOH	2014 QG	Bull Crag
NY649787 NY650787	2012 PB	2013 PB	Paddaburn Crag
NY658778 NY657779 NY658779	2012 PB		Johnny's Crag
NY625798	2012 PB		Jamie's Lodge
NY689756 NY688757 NY688758	2011 FJR	2012 JA & GY	Spy Crag (part of Lampert Mosses SSSI). Eleven groups of plants scattered along the length of these crags.
NY732836	1990 GS	2012 WG	Roughside Moor

*Hymenophyllum wilsonii* Hook.

Wilson's Filmy-fern

Native

Locally scarce.

At the eastern edge of its British distribution.

NT740021	1929 RBC	2014 RP	Cave to the east of Chattlehope Crag. "4 patches 75x55 cm, 130x20 cm, 100x30 cm, 30x30 cm" (GY, 2007).
NY951957	1985 JSt	2008 BH & GY	High Cove, Carrow Rigg. "Approximately 2 square metres in area." GY (2008).
NY615838	1985 CMO	2007 WG	Gill Pike (Kielder Mires SSSI unit 5, NNR)

NY687802	1995 APo	2007 WG	Seven Linns on Chirdon Burn. "A very small patch at Seven Linns (approx. 10×10 cm)" GY (2007).
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*Trichomanes speciosum* Willd.

## Killarney Fern

Native

Internationally rare; locally rare

*Trichomanes speciosum* is listed in annex II and annex IV of the European Union Habitats Directive, (1992) and appendix I of the Bern Convention (1979). Only present as the gametophyte.

NY733837 NY733838	1994 AJ & GS	2012 WG	Roughside, Cragshield Hope.
NY840847 NY841851	2012 BPS	2014 AJR	Hareshaw Linn (SSSI)
NY688758	2011 FJR		Spy Craggs (part of Lampert Mosses SSSI).

*Marsileaceae**Pilularia globulifera* L.

## Pillwort

Native

Vulnerable; locally extinct

Only ever known from two sites and was last seen in 1963 by AJR at a site mentioned in Baker & Tate (1868). However, this site was destroyed soon after its rediscovery as part of the development of Newcastle airport.

*Aspleniaceae**Asplenium ceterach* L.

## Rustyback

Colonist

Locally rare

NY973577	2014 JBo		Slaley Post Office. Noticeably more abundant on the north side of the mortared stone wall.
NY985620	2010 JA & CI		Temperley Grange. Six clumps growing on a wall.
NZ348686 NZ348687	2006 AY & GY	2014 AY & GY	North Shields. 23 plants in 2006; 42 in 2011; 39 in 2012 and 51 in 2013 and 46 plants in 2014.

*Asplenium marinum* L.

## Sea Spleenwort

Native

Locally rare

NZ343761	1868 BT	2011 GY	Crag Point (Northumberland Shore SSSI). 46 plants in 2001.
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*Asplenium septentrionale* (L.) Hoffm.

## Forked Spleenwort

Native

Vulnerable; locally rare

Threatened by collectors

NY929496	1892 WF	2010 AJR	Beldon Shield mine (Hexhamshire Moors SSSI). Twelve plants in 2007 (WG) & 2010 (AJR).
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*Asplenium trichomanes* subsp. *pachyrachis* (Christ) Lovis & Reichst.

## Lobed Maidenhair Spleenwort

Native

Near threatened; locally rare

NY841854	1992 JI	2014 AJR	Hareshaw Dene SSSI. About 15 plants in 2010. Over 250 plants counted in 2012.
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*Asplenium viride* Huds.

## Green Spleenwort

Native

Locally scarce

If all of these sites still exist, then this species should not be classified as scarce. However, further research is necessary to confirm whether it still exists at all of these sites. It has never been common in the county, being at the eastern boundary of its British distribution. Its sites are not particularly threatened.

NY955928 NY953925 NY954921	1964 GS	2013 BH & GY	Mill Burn, Whiskershiel (NWTR). The population at NY953925 was looked for in 2013, but not found (BH & GY), but on the same occasion, two plants were found at NY954921 outside the reserve.
NY842855 NY841854 NY842846	1925 GWT	2013 BH & GY	Hareshaw Dene SSSI.
NY717661 NY720663	1980 HSJL & SP	2012 JBo	near the Milecastle Inn
NY635689 NY635692 NY637693 NY638695 NY633695 NY640696 NY641696 NY644695	c. 1819 NJW	2014 AJR	River Irthing, near Wardew (Irthing Gorge SSSI)
NY639501 NY639502	1975 GS	2012 AL	Gelt Burn
NY778482 NY778483 NY779482	1964 GS	2010 AJR	Yew Crag on Wellhope Burn (Allendale Moors SSSI). Six plants in 2010.
NY926834	2008 KC, AY & GY		Little Wanney Crag
NY784672	1996 HSJL & SP		East Crindledykes Quarry (Roman Wall Escarpments, geological SSSI, NWTR)
NY752703	1995 SP		Chatley Crag
NY64NE	1966 GS	1994 GS	Highshield Crag, Gilderdale
NY685668 NY681667 NY687668	1980 HSJL & SP	1992 SM	East of Arthur's Well & Walltown (Allolee To Walltown SSSI)
NT798055 NT796053	1939 RCr	1987 GS	Cottonshope Burn
NY679679	1980 HSJL & SP		Tipalt Burn below Low Tipalt (Tipalt Burn, geological SSSI). Searched for in 2012 but not found (JBo).
NY7367	1980 HSJL & SP		Caw Gap (Roman Wall Escarpments, geological SSSI)
NY758676	1980 HSJL & SP		Milecastle 39 (Roman Wall Escarpments, geological SSSI)

***Dryopteridaceae******Dryopteris expansa*** (C.Presl) Fraser-Jenk. & Jermy

Northern Buckler-Fern

Native

Locally rare

This species is easily overlooked and when not fertile it is difficult to distinguish from *D. dilatata*. No obvious threats.

NY689756	2012 WG		Spy Crag
NY6297 NY6296	1988 GS	2010 FJR, AJR	Deadwater Fell (Kielderhead & Emblehope Moors SSSI). "...quantities ... of <i>Dryopteris expansa</i> growing below the scarp" (FJR, 2010). "Six plants on the scarp next to the <i>Salix herbacea</i> (AJR, 2010)

***Dryopteris oreades*** Fomin

Mountain Male-fern

Native

Locally scarce

NY684668 NY686668	1967 GS	2014 AJR	Walltown
NY762676 NY758678	1986 KH	2012 AJR	Peel Crag & Highshields Crag
NY799699 NY806702 NY800700	1980 HSJL & SP	2011 AJR	Sewingshield Crag
NY87SE	2006 DH & TH		Low Teppermoor
NY929496	2002 AJR		Beldon Shield mine
NY84NW	1988 GS		Carr Shield
NY95NW	1988 GS		Steelcrag
NY95A	1987 AJR		Harwood Shield
NY786688 NY785688	1976 anon.	1980 HSJL & SP	Housesteads Crag north
NY75SE	1975 GS		Sandyford Sike
NY962813	1972 GS		Sweethope Crag
NY639533	1968 GS	1972 GS	Hazely Crag

***Dryopteris* × *ambroseae*** (C.Presl) Fraser-Jenk. & Jermy***D. dilatata* × *D. expansa***

Native

Locally rare

NY69NW	1997 KT		Deadwater Fell (Kielderhead & Emblehope Moors SSSI).
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***Polystichum setiferum*** (Forssk.) T. Moore ex Woyn.

Soft Shield-fern

Native

Locally vulnerable

Increasing in the county. The Swan (1993) mentions only one site. It appears rather scattered and only ever in small numbers, mostly single plants. Perhaps, some plants are introductions or garden escapes. Not threatened.

NY939677	2014 NW & AJR		Fallowfield Dene. One plant.
NY938632	2014 AJR		South Park, Hexham
NZ346738	2011 AY & GY	2013 AY & GY	Brierdene, south-facing bank. Two plants.

NZ139985	2012 QG		The embankment of the A1 near Weldon. Only a single large plant.
NY928635	2011 AJR		Hexham, introduced.
NZ248838	2008 JD		Choppington Woods. One plant.
NY929610	2000 QG	2006 JD	West Dipton Burn. One plant.
NZ0878	1993 DM	2006 JD	Belsay Hall
NZ230862	2002 JD		River Wansbeck, north bank. One plant.
NZ2579 NZ2680	2002 JD		River Blyth, Bedlington
NZ221860	2002 JD		Morpeth, Lady's Well. Three large plants.
NZ093549	2002 JD		Mere Burn Wood. One plant.
NT945024	1997 GS		Dovecrag Burn
NY814852	1992 DW & LA		Closehill Wood. Requires confirmation.
NY816833	1992 DW & LA		Hesleyside Park SSSI, Requires confirmation.
NU218037	1971 GS	1973 GS	Morwick Banks

## *Pinaceae*

### *Pinus sylvestris* L.

### Scots Pine

Native

Nationally scarce (as a native)

*Pinus sylvestris* is included in the register because of its national status. It is undoubtedly native to the region, as there is plenty of evidence of preserved pollen and wood. Yet it has been so widely planted, it is impossible to know if any original Northumberland stock still exists. Edlin (1961) reviewed whether some pines in the county are native. In places, old trees exist in a fairly natural setting, but little natural regeneration occurs. See Swan (1993) and Manning *et al.* (2010) who summarise the current position.



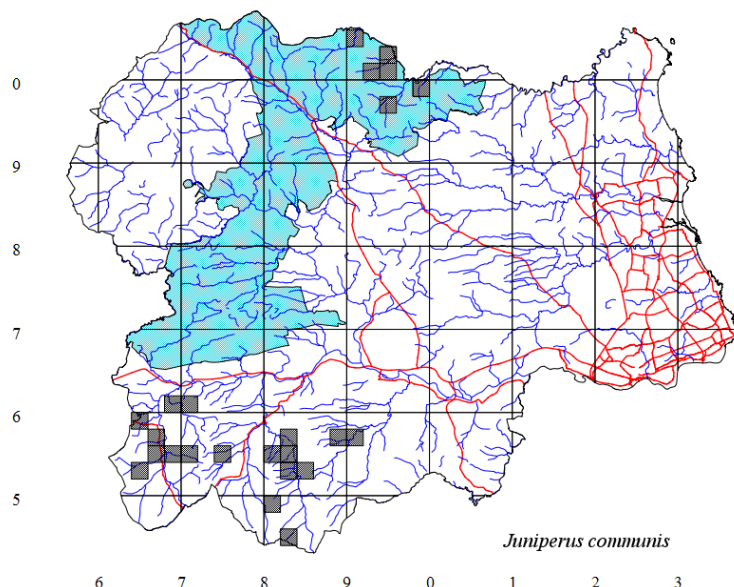
**Cupressaceae***Juniperus communis* L.

## Common Juniper

Native

Near threatened; locally vulnerable

Disappearing from its former sites and at the remaining sites it rarely regenerates from seed. Now highly threatened by a newly described fungal disease *Phytophthora austrocedri* Gresl. & E.M. Hansen (<http://www.ndrs.org.uk/article.php?id=026002>). The following map shows all records localised to tetrads since 1987, except planted individuals.

**Nymphaeaceae***Nuphar × spenneriana* Gaudin

## Hybrid Water-lily

Native

Locally rare

NZ009958	c. 1819 NJW	2006 JA & CI	Chartners Lough
NZ030843	1804 JTr	2013 WG	Wallington Hall, China Pond. It was introduced into a pond at this site during the 19 <sup>th</sup> century, presumably from the site at Chartner's Lough. Approx. 2 × 2 m

*Nymphaea alba* L.

## White Water-lily

Native &amp; introduced

Locally rare (as native)

This species is widely planted in lakes and ponds; however, it is included here because of its possibly native sites. Swan (1993) considered Greenlee, Broomlee and Grindon Loughs to be Native sites, though there are few records.

NY7669	1769 JW	2010 AJR	Greenlee Lough NNR (Roman Wall Loughs SSSI)
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**Ceratophyllaceae***Ceratophyllum demersum* L.

## Rigid Hornwort

Native

Locally rare

Recently re-found, this species was at one time thought to be locally extinct.

NZ311784	2013 AY & GY		Newsham South Farm pond
NZ225733 NZ229733	2010 GD		Small ponds at Big Waters nature reserve (NWTR, SNCI)

NZ268798	2010 VA		A small pond within Cramlington Sewage Treatment Works. Abundant within the pond.
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### *Papaveraceae*

#### *Papaver argemone* L.

#### Prickly Poppy

Introduced

Endangered; locally rare

Until 2012 it had not been recorded since the 1960s. In Winch's Northumberland flora (1831) it is described as "In corn fields", but there is no description of its abundance. However, it is described as "frequent" in Baker and Tate (1868).

NZ238856	2012 QG		A total of 23 plants in a field of barley north of Paddock Hall Farm east of Morpeth
NZ238855			

### *Ranunculaceae*

#### *Helleborus foetidus* L.

#### Stinking Hellebore

Native? and introduced

Locally rare

There are at least six other sites where this plant has been introduced or escaped from gardens, but the site below is the only one that might be native.

NY9066	Circa 1831	2012 JBo	Bridge End. In 2010 there were probably more than 50 plants. It is perhaps now absent from NY9166.
NY9166	AHa		

#### *Myosurus minimus* L.

#### Mousetail

Native and casual

Vulnerable; locally probably extinct

It was known on Newcastle Town Moor during the 19<sup>th</sup> century and was briefly rediscovered in 1982 when the ground was disturbed during the creation of a new experimental bed at Moorbank Garden. The cattle grazed moor could be good habitat, but the grazing has been "improved" and is now a monoculture of *Lolium perenne*.

NZ233658	1831 RBB	1982 NSc	Newcastle Town Moor
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#### *Ranunculus arvensis* L.

#### Corn Buttercup

Introduced

Endangered; locally extinct

Last recorded in 1953, though at one time it was not uncommon as an arable weed (Winch 1831; Baker & Tate 1868).

#### *Ranunculus baudotii* Godr.

#### Brackish Water-crowfoot

Native

Locally scarce

Well surveyed in the 1980s, but lacking recent records.

NZ288940	1982 JL	2012 AJR	Cresswell ponds SSSI
NZ282949			
NZ286946			
NZ282945			
NU2700	1985 GS	1988 CD	Hadston Links north (SSSI)
NZ28SW	1987 GS		Willow Burn
NU20SE	1985 GS		Hadston Links south (SSSI)
NZ27SW	1984 GS	1985 GS	Big Waters (NWTR, SNCI)
NZ2486	1983 GS		Pond near Bothal Barns
NZ38E	1974 AJR	1983 GS	Newbiggin Moor

*Thalictrum flavum* L.

## Common Meadow-rue

Native

Locally rare

NY900868	2010 AJR		Between West and East Woodburn
NY856793	1967 GS		West bank of the River North Tyne near The Green

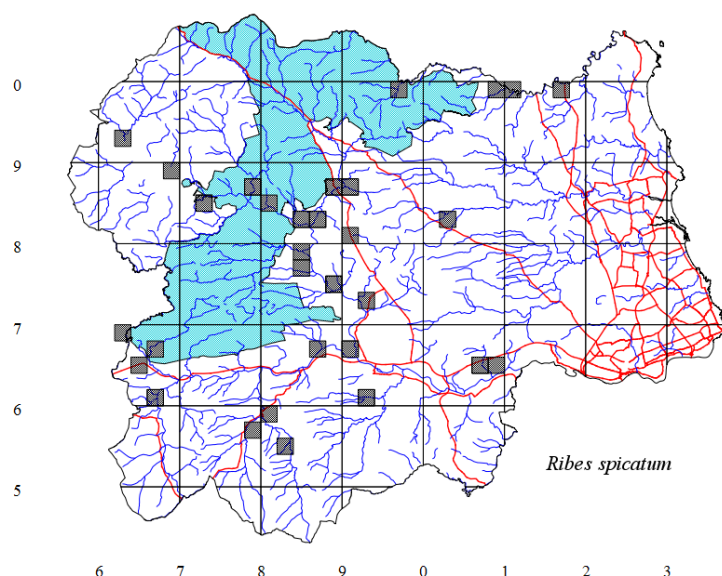
*Grossulariaceae**Ribes spicatum* E. Robson

## Downy Current

Native

Nationally scarce

The following map shows all records since 1987. Many of these sites are not legally protected, though there are not any particular threats to these sites and they are often steep wooded riverbanks, which affords some physical protection.

*Saxifragaceae**Saxifraga aizoides* L.

## Yellow Saxifrage

Native

Locally rare

This is a large population of an uncommon species. The population is well isolated from the next nearest populations in Durham and Cumbria and, as such, is quite an important site. It is not particularly threatened and is protected by the cliffs it grows on.

NY640696	1769 JW	2014 AJR	Near Wardre on the River Irthing) (SSSI). In large numbers on cliffs along the River Irthing. Mostly from upstream of Crammel Linn, but it has also downstream.
NY641696			
NY644695			
NY644696			
NY643696			
NY645695			
NY645696			
NY637693			
NY638695			

*Saxifraga hypnoides* L.

## Mossy Saxifrage

This species was included in the register in previous years due to a supposed native record from Crag Lough. However, further investigation of this record showed that it was from J.E. Heslop-Harrison whose records are known to be suspect. Swan (1993) states that the record comes from R.B. Cooke, but

this appears to be an error. Details can be found in the *Vasculum* (1916) volume 2, number 3, page 93. All other records of this species are of casual occurrences or escapes from cultivation.

*Saxifraga stellaris* L.

Starry Saxifrage

Native

Locally scarce

This species is at the eastern limits of its UK distribution in South Northumberland. All sites are small and confined to streams at altitude. Though populations appear stable, they are likely to be vulnerable to even small changes in their habitat or the climate.

NY801449 NY807448	2012 BH & GY	2013 BH & GY	Whetstone Mea, Coalcleugh Moor, three patches.
NY629557	2012 PB		Glendue Fell
NY797468	2012 BH & GY		Smallburns Moor (Allendale Moors SSSI).
NY636528	2012 PB		Thinhope Burn (Geltsdale & Glendue Fells SSSI), 1000+ rosettes
NY668476 NY656474 NY651486 NY656474	1975 GS	2010 PB	Woldgill Scar, Grey Nag, Wolf Cleugh, Thornhope Burn & Knar Burn. Along streams draining Grey Nag.
NY94E	1965 GS	2009 AJR	Beldon Burn, near Heatheryburn (Hexhamshire Moors SSSI). Less than 25 plants (AJR 2009).
NY837454	1991 GS		Hefty Well (Allendale Moors SSSI)
NY84NW (NY801466)	1975 GS		Black Hill (Allendale Moors SSSI)
NY84SW	1805 NJW	1978 GS	Coalcleugh area (Allendale Moors SSSI)

*Saxifraga tridactylites* L.

Rue-leaved Saxifrage

Native

Locally rare

Extinct from native habitats, but recently rediscovered as a colonist.

NY989635	2011 JBo	2013 JBo	Corbridge Station
NY8972	1976 MB	1986 GS	The Scroggs SSSI. The original Scroggs SSSI was destroyed and a "New Scroggs" SSSI was established next to it. However, this species has never been recorded from the new site.
NY97SW	<1900	1985 GS	Gunnerton crags (Gunnerton Nick SSSI)
NY680665	1831 NJW	1980 JB	Walltown SSSI
NY7667	1974 AJR		Above Crag Lough (Roman Wall Escarpments, geological SSSI)

*Crassulaceae*

*Sedum telephium* L.

Orpine

Native

Locally scarce

This species has been widely grown in gardens from where it has escaped. This means that the limits of its natural distribution are difficult to know. Nevertheless, it is clear that it has a westerly distribution in northern England and has always been uncommon in Northumberland.

NY67N	2008 CO & JO		Windy Hill
NZ2163	2007 AY & GY		Benwell Nature Park

NY740787 NY737780	1979 GS	1996 NB	Green Bothy
NY97NE	1988 GS		near Bavington Hall
NZ08SE	1982 GS	1985 GS	Bolam
NY66NW	1972 GS	1979 GS	A roadside near Irthing House.

*Sedum villosum* L.

## Hairy Stonecrop

Native

Vulnerable; locally rare

Declining rapidly, both in Northumberland and nationally. It is close to extinction in South Northumberland and is threatened by agricultural improvement. Probably its last remaining site is protected as a SSSI and is monitored by English Nature.

NY818456	1979 GS	2013 BH & GY	White Mere (Allendale Moors SSSI). Only one plant in fruit in 2013.
NY9880	1805 NJW	2010 AJR	Great Bavington, exposed whin NW of farm (Bavington Craggs SSSI). "...becoming less common here and needs monitoring. Still occurs over an area of about 120 × 40 m" (AJR, 2010).
NY7946	1974 GS	1983 GS	Carr Shield, Coalcleugh & Smallburns. (Allendale Moors SSSI). Several sub-sites in this area.

*Haloragaceae**Myriophyllum verticillatum* L.

## Whorled Water-milfoil

Native

Near threatened; locally rare

NZ148658	1985 GS	2009 AY & GY	Throckley Reeth Pond SNCI. The most northerly site in Britain.
NZ217637	1996 AY & GY		Benwell Nature Park. Introduced.

*Fabaceae**Astragalus danicus* Retz.

## Purple Milk-vetch

Native

Endangered; locally scarce

The lack of recent records might suggest a gradual decline, but it can be difficult to find in short turf, so a targeted survey is required to confirm its status at some of these sites.

NZ323785 NZ325780 NZ326779 NZ326780 NZ327776 NZ328775 NZ328776 NZ329775	1937 GS	2013 AY & GY	Seaton Sluice dunes (Northumberland Shore SSSI).
NZ308896 NZ308897 NZ305899 NZ307899	1972 AJR	2012 QG	South of Lynemouth Power Station

NZ301911 NZ301912 NZ301913 NZ302909 NZ302910 NZ302911	2012 QG		North of Lynemouth Power Station. Perhaps the best site in South Northumberland. The short turf that this species needs is maintained by grazing of horses and rabbits. The site is threatened by coastal erosion.
NU281036	1987 RFS	2012 GY	Amble Dunes, one patch 1m × 1m.
NZ3474 NZ3475	1991 NTBC	c. 2000 AY & GY	Curry's Point and St. Mary's Island (Tynemouth to Seaton Sluice SSSI; St Mary's Island LNR).
NU2700 NZ2799	1962 GS	1988 CD	Hadston Links SSSI
NZ275969	1982 JL	1988 CD	Druridge Bay (Northumberland Shore SSSI)
NZ2894	1988 GR		Cresswell Dunes (Northumberland Shore SSSI)
NZ299855	1972 AJR		Sandy Bay
NZ317893	1972 AJR		Beacon Point

*Astragalus glycyphyllos* L.

Wild Liquorice

Native

Locally rare

NY907661	1974 GS	2012 JBo & AJR	Bridge End, near Warden. Two plants.
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*Genista anglica* L.

Petty Whin

Native

Vulnerable; locally scarce

*Genista anglica* has disappeared from large areas of lowland England and the reasons for this are not entirely clear. Land use changes are likely to be a factor, though it has also disappeared from some sites where no obvious changes have occurred.

NY875568 NY876568 NY878569 NY879569 NY887566 NY887567 NY887568 NY888565 NY888566 NY889566 NY889570	2011 JBo	2013 & JBo AJR	Whapweasel Burn (Hexhamshire Moors SSSI). 346 plants counted in 2013 (JBo).
NY787664 NY7766	1993 GS	2011 QG	Thorngrifton Common, Barcombe Hill. 24 plants in 2011.
NT949020 NT949019 NT950020 NT950021	1959 GS	2011 MWR & RCR	West of Five Barrows, Holystone (Holystone Burn Woods SSSI). A total of 125 plants found in 2011.
NT937014	1959 GS	2011 MWR & RCR	Cat Law, Harbottle (Holystone Burn Woods SSSI). Five plants.

NY961996	2011 JA & MR		Harehaughhill
NY870555	2009 ND		Burntridg Moor, Allendale (Hexhamshire Moors SSSI)
NY9696 NY9697	1973 GS	2008 WG	Darden Burn and the crags below Key Heugh (Simonside Hills SSSI). At several places in this area.
NY9853	1993 GS		Acton Burn Area
NY9555	1978 GS	1991 GS	Potter Burn
NY99NE	1988 GS		Rimpside Hill
NY65SE	1984 GS		Cow Burn
NY97NW	1868 BT	1978 GS	Gunnerton Crag (Gunnerton Nick SSSI). This site has been visited many times since 1978, but <i>G. anglica</i> has not been recorded. It is likely that it has become extinct here.

*Ornithopus perpusillus* L.

Bird's-foot

Native

Locally extinct

Only ever recorded in 1911 at Seaton Sluice. It is considered native in Northumberland and Durham by Swan (1993) and Graham (1988). However, all its known sites are manmade and it is perhaps more likely to have been an introduction.

*Trifolium fragiferum* L.

Strawberry Clover

Colonist

Vulnerable; Locally rare

Perhaps only casual, but it is easily overlooked. First mentioned by Winch, Thornhill & Waugh (1805).

NZ26SE	1990 GS		St Anthony's
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*Trifolium micranthum* Viv.

Slender Trefoil

Native

Locally rare

NY960805	2008 MM		Great Bavington
NY982804	2008 AY & GY		West of Great Bavington (Bavington Crag SSSI)

*Trifolium scabrum* L.

Rough Clover

Native

Locally extinct

Last recorded in the 19<sup>th</sup> century.

*Trifolium striatum* L.

Knotted Clover

Native

Locally scarce

NY891727	1981 GS	2009 AJR	The Scroggs. This species was successfully translocated from the old Scroggs SSSI, to the New Scroggs SSSI.
NY913749 NY914749 NY9175	1937 GS	2011 BH & GY	Gunnerton Crag (Gunnerton Nick SSSI). Two populations in 2007 (JSi). One small patch in 2011 (GY).
NY97NW	1985 GS		Reaver Crag quarry
NZ08SE	1977 GS		Harnham

*Ulex gallii* Planch.

## Western Gorse

Native

Locally rare

At the north-western limits of its English distribution. One specimen has also been planted at Hauxley nature reserve (AJR, 2009).

NY642638	1975 GS	2010 PB	A tributary of Poltross Burn near Shawfield. Eleven bushes (2010, PB)
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*Vicia lathyroides* L.

## Spring Vetch

Native

Locally rare

NZ272998 NZ273995	1997 AJR	2014 WG	Druridge Bay, +/- opposite main bird-hide.
NY9175	1985 GS	1989 AJR	Gunnerton Nick SSSI. Searched for, but not found in 2011 (AJR).
NU274001 NZ274999	1988 CD		Hadston Links North SSSI

*Vicia sylvatica* L.

## Wood Vetch

Native

Locally scarce

The lack of recent records suggests a decline in this species. None of the sites appears to have any legal protection. Nevertheless, there is no obvious explanation for a loss of sites.

NZ238795	1974 GS	2007 JHa & BH	Plessey Woods SNCI. Probably still frequent, as it used to be abundant here.
NT80NW	1987 GS		Ridles Burn
NY874673	1978 JDS & TB		Settlingstones Burn. Looked for in 2012 but not found (AJR).
NY75SE	1975 GS		Blackett Bridge to Taylorburn
NY76SE	1959 GS	1974 GS	Kingswood Burn to Plankey
NU20SW	1971 GS	1973 GS	Morwick Banks
NY97SW	1974 GS		North bank of River North Tyne near Barrasford

**Rosaceae***Alchemilla acutiloba* Opiz

## Starry Lady's-Mantle

Native

Vulnerable; locally rare

NY957501 NY956503	1976 GS	2007 JO	Baybridge. In 2007 the recorder noted "a few plants surviving".
NY951550	2007 AJR		Ladycross (private reserve).
NZ056490	2005 KC	2006 KC	Derwent Gorge NNR, Combe Bridges. 20-40 plants.

*Alchemilla filicaulis* subsp. *filicaulis* Jacquet

## Slender Lady's-Mantle

Native

Data deficient; Locally extinct

As it requires some expertise to recognise this subspecies it may have been overlooked elsewhere.

NY933760	1978 GS		North of Great Swinburne. It was looked for in 2010, but not found. Its survival seems unlikely as the site has been subjected to agricultural improvement. (AJR).
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*Alchemilla glomerulans* Buser

Native

## Clustered Lady's-Mantle

Endangered; locally rare

NY708654	1982 FJR	2012 AJR & NW	Haltwhistle Burn Four plants in 2010; In 2011, only one plant remained and was found falling into the Burn by AH and AJR. Part was removed and is now thriving in a pot with AJR. This yielded lots of good seed which has been sown and some sent to KC. The remaining plant was propped on a tree root and was still in position in October 2011. The plan is to reintroduce seedlings, probably to more open streamside sites upburn.
NT750030	2012 SH		Haugh grassland below Catcleugh.
NY668658	1981 FJR	2010 AH, MBr & LC	Greenhead

*Alchemilla micans* Buser

Native

## Shining Lady's-Mantle

Endangered; locally scarce

NY905729 NY905731 NY904733 NY904730 NY910730	1985 GS	2010 IDe	Near to Coldwell. Several small populations. Where the vegetation has grown long, some patches have disappeared, however other new populations have been found.
NY892727 NY892728 NY893724 NY891727	1976 GS	2011 JO	The Scroggs SSSI. The site was destroyed in 1999 but the owners moved the vegetation and soil to a nearby site that has now been included in the SSSI boundary. Estimated to be about 500 plants in 2009.
NY879721 NY879720 NY878727 NY878722 NY878721	1985 GS	2009 MM, AY & GY	Road verge south of Sharpley. Several small populations amounting to about 60 plants in 2007. Though the grass is becoming overgrown.
NZ226963	1998 GS		Roadside verge near to Ned's Whin. Far from the main populations and not seen since, even though it has been looked for. This site is close to a quarry, so it may have been carried on quarrying equipment from the Scroggs site.

*Alchemilla subcrenata* Buser

Native

## Large-toothed Lady's-mantle

Endangered; locally rare

NY831552 NY832553	2007 JO	2008 FC	Wooley Park
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*Filipendula vulgaris* Moench

Native

## Dropwort

Locally rare

The sites for this species have been reduced to smaller and smaller areas due to quarrying and agricultural improvement. It probably only exists at the Riverhill site where it has no official protection. This site is small, ungrazed and probably also suffers from eutrophication from neighbouring farmland. Its long-term prospects are poor.

NY905732 NY906732 NY907731	1978 MB	2014 RBo & JBo	Riverhill Farm. "Abundant for at least 50 m of bank" (AJR).
NY9175	1960 GS	1982 GS	Gunnerton Nick SSSI. Intensively surveyed by JSi in 2006-2007, but not found.

*Potentilla anglica* Laichard.

## Trailing Tormentil

Native

Probably extinct

Apparently, close to extinction in the vice-county. It has a western distribution in the British Isles and is declining nationally.

NZ09SE	1977 GS		Nunnykirk
NZ082838	1976 GS		Old quarry, Millgreens. Searched for in 2013, but not found (AJR).
NZ28SE	1974 GS		North bank of River Blyth, near Mount Pleasant.
NZ19NW	1970 GS		South bank of River Coquet Woodbine Cottage to Weldon Bridge.

*Rosa arvensis* Huds.

## Field Rose

Native

Data deficient

Various unreliable records exist for this species in the south-east of the vice-county, but records really need to be checked by an expert.

*Rosa caesia* subsp. *caesia* Sm.

## Hairy Dog-rose

Native

Locally rare

NZ0162	2011 AJR		Styford Hall
NY85NW	1999 GS		Catton
NZ17NW	1998 GS		Kirkley
NY681518	1962 GS		River South Tyne, near Williamston

*Sorbus rupicola* (Syme) Hedl.

## Rock Whitebeam

Native

Nationally scarce; locally rare

This is a remote outlier from the larger populations in Durham; it is limited by the lack of suitable habitat in South Northumberland. The presence of a single specimen makes it is vulnerable to loss.

NY682517	1988 AJR	2014 AJR & QG	Williamston river shingle (NWTR, SSSI). A single tree, though a seedling was found in 2009, but has since disappeared (AJR).
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*Myricaceae**Myrica gale* L.

## Bog-myrtle

Native

Near threatened; locally vulnerable

This species is more common nationally, but it is restricted to a small area of North-East England, remote from other populations. It is declining nationally at lowland sites. The area around Billsmoor Park contains a good quantity of plants. Some sites are well known and are visited regularly, such as Holystone Burn. Recent recording has shown that the population is healthy and stable.

NY962971 NY963971 NY9696 NY958977 NY957977	1961 GS	2012 MR	Area to the east of Grasslees, along Darden Burn (Simonside Hills SSSI)
NT921054	2012 AJR		Angryhaugh

NY9699 NY9599 NY99NW	1957 GS	2012 QG	Keenshaw Burn. A large population containing several thousands of plants.
NY9697	1973 GS	2012 QG	Darden Lough & Darden Burn (Simonside Hills SSSI)
NT919058	1939 GS	2011 QG	Barrow Burn (NWTR, LNR, Harbottle Moors SSSI). More than 30 plants in 2011.
NT937033 NT937037 NT936034 NT936035 NT941038	<1900	2012 TD	Seal Burn, Harbottle (NWTR). Rare at the site, which is within a conifer plantation.
NT940020 NT942021 NT944021 NT948017 NT948016	1769 JW	2011 RCR & MWR	Holystone Burn (NWTR, SSSI). A large population of plants.
NT910035 NT911034	1967 GS	1998 DW	Crane Moss (Harbottle Moss SSSI)
NT80SE	1960 GS	1972 GS	Ramsey's Burn, Whitelee Sike & Linshiels Lake SSSI.
NY99NW	1974 GS		Billsmoor Park
NY9899	1961 GS		Stream near Hepple Whitefield.

### *Betulaceae*

*Betula nana* L.

Native

Dwarf Birch

Critically endangered; locally rare

Apparently relic plants, which are almost 200km from large populations in Scotland.

NY751721	2014 GSi		Wark Forest (Burlton et al, 2014)
NY694945	1973 ALH	2010 RM	Buck Lake Sike (Kielderhead & Emblehope Moors SSSI. Estimated to cover about 50m <sup>2</sup> in 2008. Another estimate in 2010 was 30' across.

*Betula pubescens* subsp. *tortuosa* (Ledeb.) Nyman

Native

Downy Birch

Waiting list; data deficient

Swan (1993) suggests that this subspecies is widespread in the hills; however, there are no detailed records and further work is required to separate the distribution of this subspecies from subsp.

*pubescens*.

NZ09NW	1989 GS		near Simonside
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### *Cucurbitaceae*

*Bryonia dioica* Jacq.

Perhaps native, but it has also been introduced in the past.

White Bryony

Locally extinct

NZ0561	1936 GWT		Stocksfield station railway embankment. Searched for in 2010 without success (JBo).
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***Celastraceae******Euonymus europaeus* L.****Spindle**

Native

Locally scarce

At the northern limits of its natural distribution, but also introduced. Historically it was planted for its wood, but in recent years, it has been planted in amenity woodland. Obviously planted sites are not listed.

NZ002633	2014 NW & AJR		Thornbrough Wood. One large bush, apparently native.
NZ054622	2012 AM		Riverbank of Tyne at Bywell Bridge
NZ080641	1976 GS	2011 AY & GY	Whittle Dene. Four trees.
NY835642	2010 JBo		Haydon Bridge B6319. Six small saplings, apparently self-sown, though there are no mature trees nearby.
NY920662	2010 AJR		Hexham Golf Club. Two trees, one large and ancient.
NY914749	2006 CI & LS	2007 JSi	Gunnerton Crags (Gunnerton Nick SSSI)
NZ18NE	1983 GS	1990 GS	River Wansbeck, north bank
NZ17SE	1987 GS		Prestwick Carr
NZ106648	1977 GS		Wylam

***Euphorbiaceae******Euphorbia amygdaloides* L.****Wood Spurge**

Native

Locally extinct

This species is considered native by Swan (1993), but it is extinct as such. Now increasingly found as a garden escape as subspecies *robbiae*, rather than the native subsp. *amygdaloides*.

***Euphorbia exigua* L.****Dwarf Spurge**

Introduced

Vulnerable; locally rare

Perhaps only ever casual, however, arable fields are not popular sites for botanical recording and this species is easily overlooked.

NZ265745	1984 GS		A barley field near Annitsford.
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***Mercurialis annua* L.****Annual Mercury**

Archaeophyte

Locally scarce

NZ336767	2004 AY & GY	2013 AY & GY	Seaton Sluice harbour.
NZ19NE	1981 GS	1992 GS	Morpeth. Garden weed.
NZ2465	1935 AB	c. 1982 AJR	near Armstrong building, Newcastle. On waste ground.
NU271047	1971 GS	1973 GS	Amble
NZ2466	1973 GS		Newcastle, Highbury allotments.

**Salicaceae***Populus nigra* subsp. *betulifolia* (Pursh) Dippel

Black-poplar

Native?

Locally rare

The Humshaugh tree is of considerable girth (>3.5 m dbh) and apparent antiquity and lies on an ancient field boundary associated with a small stream about 600 m north of the village. About three-quarters of the tree was lost in a gale during 2011-12. However, material collected in 2011 was DNA fingerprinted by Stuart A'Hara and found to be the female clone 32 of the National Register, suggesting that it was originally planted.

NY917717	2010 AJR		Humshaugh. A single female tree.
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*Salix herbacea* L.

Dwarf Willow

Native

Locally rare

NY625975	1863 JHB	2011 GY & MM	Deadwater Fell (Kielderhead & Emblehope Moors SSSI). At one time, there were one male and one female plant at this site. The male plant was first to be found, but in 1991 RC reported that the male plant had gone, nevertheless, he managed to find a female plant, which still survives.
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*Salix triandra* L.

Almond Willow

Native (archaeophyte) &amp; hortal

Locally scarce

Like most willows, this species is under-recorded due to inexperience and misidentification. Although, there have been few recent records, it may still exist at its former sites.

NZ064866	1984 GS		near to Hartburn Grange
NZ162674	1977 GS		Throckley Dene (SNCI)
NY97NE	1973 GS		Hallington
NY89SE	1970 GS		Otterburn

**Violaceae***Viola canina* L.

Heath Dog-violet

Native

Vulnerable; locally scarce

It is particularly vulnerable to agricultural improvement at its inland populations.

NY944763 NY953766	c. 1959 JHH	2014 AJR	Colwell
NY97SW	1985 GS	2011 BH & GY	Gunnerton (Gunnerton Nick SSSI). On a ledge at the north-east end of the crag, less than 10 plants (2007, AJR). Searched for in 2012 and 2013, but not found (AJR).
NY905732	2007 WG		Riverhill Farm
NZ2799	1988 GR		Hadston Links SSSI
NU2700	1985 GS	1988 GR	Hadston Links SSSI
NZ2894	1982 JL	1988 GR	Hemscotthill Links
NZ2796	1982 JL	1988 GR	Druridge Links
NZ17SE	c. 1939 JHH	1987 GS	Prestwick Carr
NY9882	1985 GS		Northside

*Viola reichenbachiana* Jord. ex Boreau

Early Dog-violet

Native

Locally rare

At the northern limit of its range in the British Isles.

NY950662	2011 WG		Oakwood
NY904616	1996 AJR	2009 AJR	West Dipton Burn
NY913750	1987 AJR	1988 GS	Gunnerton (Gunnerton Nick SSSI)

*Viola tricolor* subsp. *curtisii* (E.Forst.) Syme

Seaside Pansy

Native

Near threatened; locally rare

NZ3090	1985 GS		Swan's Hill
NZ285946	1972 AJR		Cresswell Dunes (LNR)

*Viola tricolor* subsp. *tricolor* L.

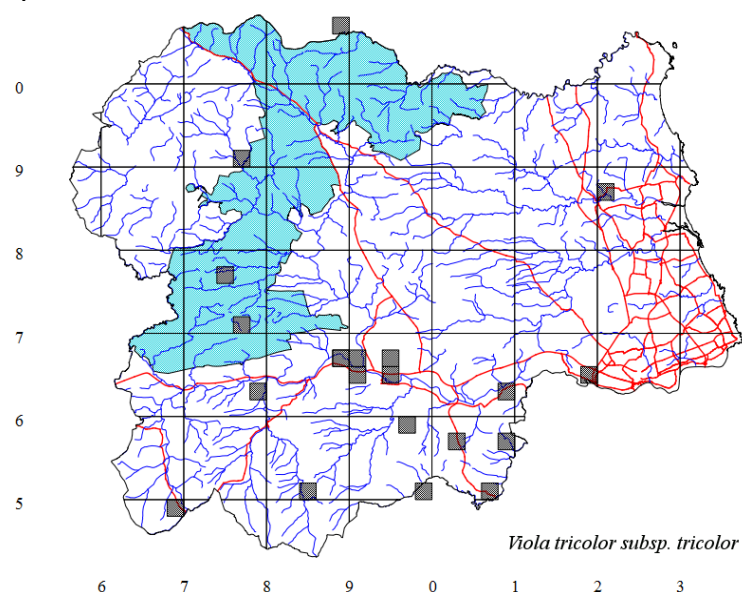
Wild Pansy

Native

Near threatened; locally vulnerable

This species was included due to its national status, it is scattered across the vice-county as a weed of agriculture and is perhaps under-recorded.

The following map shows all tetrad records since 1987.

**Linaceae***Radiola linoides* Roth

Allseed

Native

Vulnerable; locally extinct

Only ever known from the Town Moor in Newcastle and very doubtfully native there (Winch, Thornhill & Waugh 1805).

**Geraniaceae***Geranium columbinum* L.

Long-stalked Crane's-bill

Native

Locally scarce

Borderline rare. Largely restricted to whin sites and threatened by quarrying. The remaining sites have some protection, but it continues to decline.

NY917747	1831 NJW	2013 AY & GY	Gunnerton Nick, SSSI. Five plants in 1980, one plant in 2007. More than 25 plants in 2012
NY913749			
NY914749			
NY914750			

NY891727	1976 MB	2009 AJR	The Scroggs, SSSI. "20+ plants" (JSi 2007).
NY677666 NY679665 NY680666 NY680665 NY683665 NY686665 NY683664	1831 NJW	2014 AJR	Walltown SSSI. 120+ in 2008.
NY685848	1990 GS		Memorial Cairn, Little Whick Hope. One large plant.
NY99NE	1979 GS		Grasslees (Simonside Hills SSSI, LNR). It is not clear whether this site is within the SSSI and LNR.

### *Lythraceae*

*Lythrum portula* (L.) D.A.Webb

Water-purslane

Native

Locally scarce

NZ025525	2011 JBo		Derwent Reservoir. "literally millions" AJR. Known from the Durham side of the reservoir since 2008.
NY942788 NY934779 NY924783 NY926783 NY936786 NY937779 NY938777 NY938779	2009 CO & JO	2013 AM	Folly Moss and Colt Crag Reservoir. "all along the reservoir margin between NY938777 and NY934779 and another population at NY938779".
NZ055821 NZ055822	1872 JCo & ER	2011 AJR	Pond at Shaftoe (SNCI)
NY701621	1897 JEH	2005 CI & WP	Broomhouse Common (Whitfield Moor, Plenmeller & Ashholme Commons, SSSI)
NZ05SW	1997 GS GS		Millshield
NZ007852	1978 GS		near Fawns

### *Onagraceae*

*Circaea × intermedia* Ehrh.

Upland Enchanter's-nightshade

Native

Data deficient

Few recent records, though it is probably overlooked rather than declining. Found in woodland close to rivers and streams.

NY949592	2014 NW & AJR		Ordley
NY6851 NY65SE	1974 GS	2014 QG	Williamston to Barhaugh Burn
NY802598 NY804597	1963 GS	2013 GY	Stawardpeel Wood
NY683567	2011 PB		Towsbank

NY941645	2003 MH & AJR		Hexham, R Tyne gravels, S side E of Bridge
NZ05NE	1985 GS		Hindley Hall, near to
NZ28NW	1980 GS		Northstead Banks to Morpeth
NZ149866	1969 MSw & GS	1980 GS	River Font, opposite Broomy Banks
NZ28SE	1979 GS		Humford Mill
NY65SE	1975 GS		Thornhope Burn
NY86SW	1974 GS		Langley
NZ06SE	1974 GS		South bank, east of Bywell Bridge
NY74NE	1972 GS		Limestone Brae
NY86SW	1971 GS		old railway near Glen Dhu
NY782573 NY782566	1969 GS	1971 GS	Monk Wood area
NZ143876	1969 GS		Pigdon Banks
NZ05NE	1968 GS		Mill Burn, to W of road
NZ06SE	1967 GS		Stocksfield Burn near Old Ridley
NY675583	1966 GS		Lambley
NY797641	1964 MSw & GS		Near Ridley Hall
NY686552	1964 GS		Snope Burn
NY798635	1963 GS		Allen Banks

*Epilobium alsinifolium* Vill.

Chickweed Willowherb

Native

Locally rare

NY807448	2012 BH & GY	2013 BH & GY	Whetstone Mea, Coalcleugh Moor . Only a few plants.
NY831457	1969 GS	2012 BH & GY	Todd's Sike at 495 m (Allendale Moors SSSI). It grows in one of two small flushes that drain into Todd's Syke. An estimated 500+ stems grow in an area 10 × 1m.
NY84NW	1989 AS		Near Middlehope Burn

*Epilobium* × *haynaldianum* Hausskn.*Epilobium alsinifolium* × *palustre*

Native

Locally rare

First confirmed English site.

NY807448	2012 BH & GY	2013 BH & GY	Whetstone Mea, Coalcleugh Moor. First confirmed English site.
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*Malvaceae**Malva neglecta* Wallr.

Dwarf Mallow

Native (Archaeophyte)

Locally scarce

NZ317879 NZ315880 NZ316881	1999 HE & CE	2012 AY & GY	Newbiggin-by-the-Sea
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NZ307899	2011 BA, TA, JHa, BH, AY & GY		Lynemouth Power Station
NZ2263	2010 JBo		Elswick. One plant.
NZ319796	1937 GS	2005 AY & GY	Blyth, South Beach (Blyth to Seaton Sluice Dunes LNR). These sites have now been built upon.
NZ38SW	1983 GS		North Blyth
NZ38NW	1974 GS		Newbiggin golf-links

### ***Brassicaceae***

*Arabis hirsuta* (L.) Scop.

Hairy Rock-cress

Native

Near threatened; locally scarce

There are at least 10 pre-1987 sites but it is unlikely that *Arabis hirsuta* still occurs at these sites.

NY784672	1982 GS	2014 WG	Crindledykes quarry (NWTR). 200 plants.
NY914751 NY915751	1960 GS	2013 AY & GY	Gunnerton Nick SSSI. Embankment near old quarry. Small group of five plants.
NY6862	2012 JA & JSu		On the wall by Wydon Eals Farm, just after small paddock.
NT958027	2011 QG		River Coquet at Holystone (River Coquet & Coquet Valley Woodlands SSSI). One plant.
NY6665	2008 AY & GY		Walltown Quarry. A Public recreation site owned by Northumberland National Park Authority. "One rosette in 2008 but not found in 2010" (GY).
NZ023888	1996 DHu		Gallows Hill

*Cochlearia anglica* L.

English Scurvygrass

Native

Locally rare

NZ314667	1989 GS	2011 AY &GY	Willington Gut
NZ2985	1972 AJR	1989 GS	Saltmarsh on North bank of River Wansbeck

*Crambe maritima* L.

Sea-kale

Native

Locally rare

Sea kale is very rare and scattered on the north-east coasts of England and the coast of Scotland. It has been planted on St Mary's Island, near Whitley Bay and these wild plants may have originated from there.

NZ373692 NZ373693	1948 BF	2014 BH, AY &GY	Two plants on the foreshore near Tynemouth Priory.
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*Draba incana* L.

Hoary Whitlowgrass

Native

Locally extinct

Recorded at two sites in the 1920s by George Bolam (Swan 1993). Give that this species has never been record by anyone else, before or since; these records have to be treated with some suspicion.

*Erophila majuscula* Jord.

## Hairy Whitlowgrass

Native

Locally rare

This seems rather doubtfully native, given that its only site is artificial. The quarry is increasingly overgrown.

NY8868	1988 GS		Fourstones, old limestone quarry
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*Lepidium coronopus* (L.) Al-Shehbaz

## Swinecress

Archaeophyte

Locally rare

NZ1780	2014 QG		Saltwick
NZ328777	1975 GS	2001 AY & GY	Seaton Sluice, links north of car-park
NZ289825	2013 AJR		Blyth estuary

*Lepidium campestre* (L.) W.T. Aiton

## Field Pepperwort

Native

Near threatened; locally rare

This species has declined since the 19<sup>th</sup> century when Winch (1831) and Baker and Tate (1968) described its abundance as “not rare” and “not uncommon”. It was a weed of cultivated ground, but all recent records have been from waste places.

NZ328685 NZ327685 NZ322693	2000 AY & GY	2012 AY & GY	Dismantled railway at North Shields. Eleven plants in 2009, none in 2010, nine in 2011 & 3 in 2012. None in 2013, AY & GY.
NZ336693	2012 AY & GY	2013 AY & GY	Billy Mill, garden weed.
NZ0764	1991 DH		Whittle Dene. One plant.

*Lepidium didymum* L.

## Lesser Swine-cress

Colonist

locally rare

Perhaps only ever casual in the vice-county.

NZ2373	1989 DM		Seaton Burn waggon way
NY942639	2013 AJR		Hexham hospital

*Lepidium heterophyllum* Benth.

## Smith's Pepperwort

Native

Locally scarce

NY621945	1985 GS	2010 QG	Chubbies Knowe, Kielder. On a disused railway.
NZ1764	2003 JO		Newburn Riverside
NZ148659 NZ149658	1970 GS	2000 AY & GY	Waste ground near Reeth Pond, Throckley (SNCI).
NZ093562	1972 GS	1988 GS	Broom Hill sandpit.
NZ1056	1985 GS		Broad Oak Farm

*Lepidium latifolium* L.  
Native?

Dittander  
Locally extinct

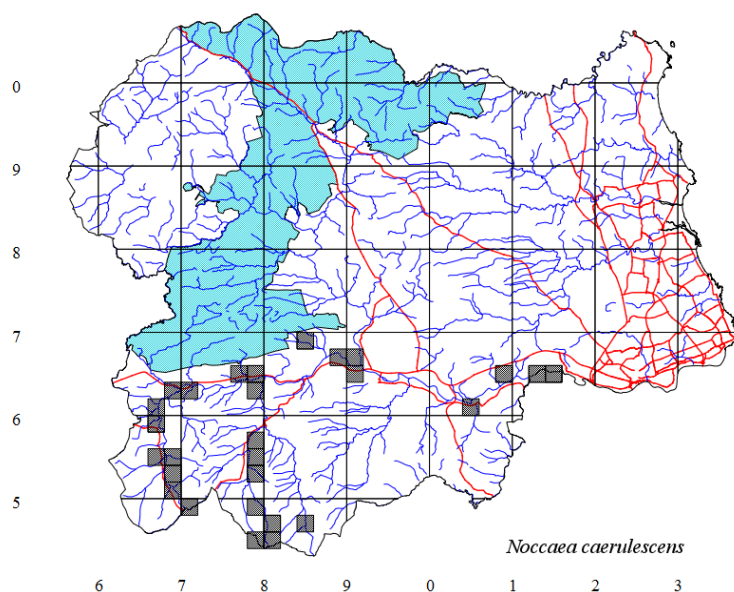
*Noccaea caerulescens* (J.Presl & C.Presl) F.K.Mey

## Alpine Penny-cress

Native

Locally vulnerable

It is found mainly along the South Tyne and its tributaries on soil polluted with heavy metals. South Northumberland holds a significant number of all the sites in Britain and although this species is not locally scarce its sites are threatened by riverbank erosion, eutrophication and under-grazing. Nevertheless, it does seem to be able to colonise new sites. The following map shows all tetrad located records since 1987.

*Teesdalia nudicaulis* (L.) W.T.Aiton

## Shepherd's Cress

Native

Near threatened; locally extinct

Not uncommon in North Northumberland, but there is little suitable habitat in South Northumberland and it is not known since the 19<sup>th</sup> century. Nevertheless, where there is habitat, such as in the upper Coquet valley, there is a chance it may crop up.

*Turritis glabra* L.

## Tower Mustard

Native

Endangered; locally extinct

Known at several sites in South Northumberland in the 19<sup>th</sup> century and last seen in 1934. Swan (1993) considered it as native, but the habitats it occupied, such as walls and waste places, suggest it was introduced.

## *Polygonaceae*

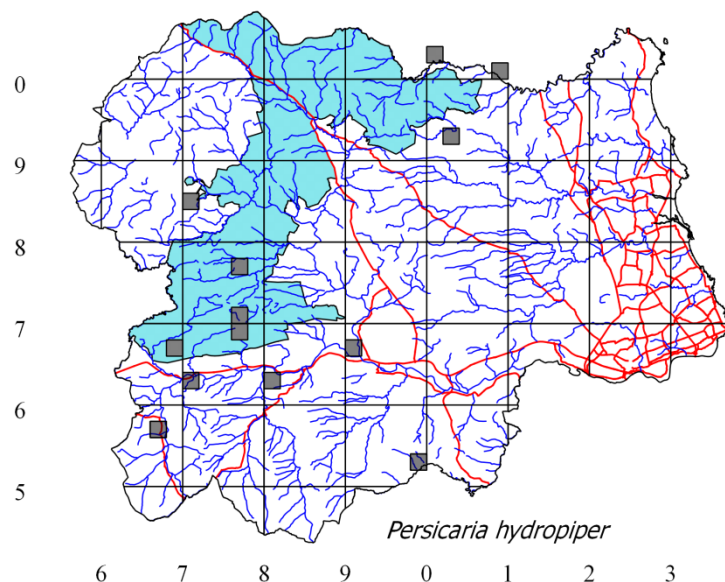
*Persicaria hydropiper* (L.) Delarbre

Water-pepper

Native

Data deficient

Only nineteen records since 1970, it might be increasing or is more common than sightings suggest. Nationally, it tends to be more common in the west, particularly in the north of its range. Swan (1993) states that it is “localised and occasional”, but it is not mapped. It is included here to encourage more detailed recording. The following map shows all records since 1987.



*Persicaria minor* (Huds.) Opiz

Small Water-pepper

Native

Locally rare

NY795698	1968 GS	2008 WG	Broomlee Lough (Roman Wall Loughs SSSI). Nine plants in 2008 (AJR, 2008).
NY769698 NY773699 NY772695 NY772693 NY776701	1992 GS	2010 SH	Greenlee Lough (Roman Wall Loughs SSSI and NNR). Common and widespread on the southern and eastern shores (AJR, 2009).
NY930652	1992 GS		Tyne gravels in Hexham, apparently only casual.

*Persicaria mitis* (Schrank) Assenov

Tasteless Water-pepper

Native

Vulnerable; locally rare

NT70SW	1959 GS	1983 GS	Ramshope Burn
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*Persicaria vivipara* (L.) Ronse Decr.

Alpine Bistort

Native

Locally rare

Between 1961 and 1992 GS found it at various places along the South Tyne between Kirkhaugh and Featherstone (Swan, 1993). However, there are few recent records, nor old records with exact localities.

NY9049	1966 GS	2008 AJR	Heatheryburn (Hexhamshire Moors SSSI). “A small amount” AJR. 2008.
NY6949 NY6950	c. 1923 GB	1991 GS	Kirkhaugh and near Lintley. JO searched this site in 2008 and 2010, but could not find it.

*Polygonum oxyspermum* C.A. Mey. & Bunge

## Ray's Knotgrass

Native

Locally extinct

The occurrence of this species is rather erratic and it could probably crop up on any of the Vice-county's sandy beaches, though it has not been found since the early 1970s. Records exist for Amble, Cresswell, Lynemouth and Newbiggin-by-the-Sea.

***Droseraceae****Drosera anglica* Huds.

## Great Sundew

Native

Endangered; locally rare

These sites are all part of the Kielder Mires SSSI and NNR.

NY7071 NY7072	1966 AL	2007 WG	Hummel Knowe (Kielder Mires SSSI unit 26). Estimated to be 1000 plants in 2007.
NY7174 NY7175	1956 BHT	2004 JS, DH & TH	Haining Head Moss (Kielder Mires SSSI unit 22). Estimated to be 500 plants.
NY7377	1968 AL	1993 GS	Felecia Moss (Kielder Mires SSSI, unit 18).

*Drosera* × *obovata* Mert. & W.D.J.Koch*D. rotundifolia* × *D. anglica*

Native

Locally rare

NY703714	2007 WG		Hummel Knowe (Kielder Mires SSSI unit 26)
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***Caryophyllaceae****Cerastium arvense* L.

## Field Mouse-ear

Native

Near threatened; locally scarce

NZ3278 NZ322787 NZ322786 NZ325780 NZ329773	1937 GS	2013 AY & GY	Seaton Sluice Dunes & Meggie's Burn outflow (Blyth to Seaton Sluice Dunes LNR). Widespread.
NU277043	2012 GY		Amble dunes, one patch 1m × 1m.
NZ3085	2012 AY & GY		Sandy Bay. "Several good patches" (GY).
NU283018	1982 GS	1988 CD	Togston Links (Druridge Bay Country Park)
NZ38SW	1978 GS	1983 GS	North Blyth
NZ38NW	1973 GS	1975 GS	Newbiggin to and north of Cambois

*Cerastium diffusum* Pers.

## Sea Mouse-ear

Native

Locally scarce

Nationally, this species is stable on its coastal sites. However, it is threatened at its inland sites by eutrophication and changes in land use.

NZ273995 NZ274999	1988 GR	2014 WG	Druridge Bay Country Park (Hadston Links SSSI)
NZ3769 NZ371693	2000 AY & GY	2014 AY & GY	Tynemouth Priory

NZ329773 NZ3278	2008 AY & GY	2012 AY & GY	Seaton Sluice dunes, near Gloucester Lodge Farm and Astley Arms (Northumberland Shore SSSI and Blyth to Seaton Sluice Dunes LNR)
NZ337767 NZ335768 NZ333769 NZ333779	1998 AY & GY	2012 AY & GY	Seaton Sluice
NU278041	2012 GY		Amble dunes
NY982805	2008 WG		Bavington Crag SSSI
NY76NW	1999 DH & TH		Cawfield, 1/2mile from (Roman Wall)
NU2405	1995 RF		Warkworth Castle
NU2904	1991 GS		Coquet Island SSSI
NZ28NE	1987 GS		River Wansbeck, south bank at Stakeford Bridge (Wansbeck Riverside Park).
NY6766	1980 HSJL & SP		Walltown Crag

*Dianthus deltoides* L.

## Maiden Pink

Native

Vulnerable; locally rare

Occasionally planted or escaped from gardens. Threatened by eutrophication and changes in land use.

NY913749 NY915749	1807 FS	2009 AJR	Gunnerton Crag (Gunnerton Nick SSSI). Five plants found in 2009 (AJR).
NY9476	1978 GS	1991 GS	Colwell Quarry
NY9879	1981 GS	1985 GS	Divethill, Clay Walls
NY9780 NY979797	1831 NJW	2014 NW	Great Bavington
NT80SE	1963 GS		Linshiels (Harbottle Moors SSSI). Known in North Northumberland just across the border where it grows next to the Coquet.

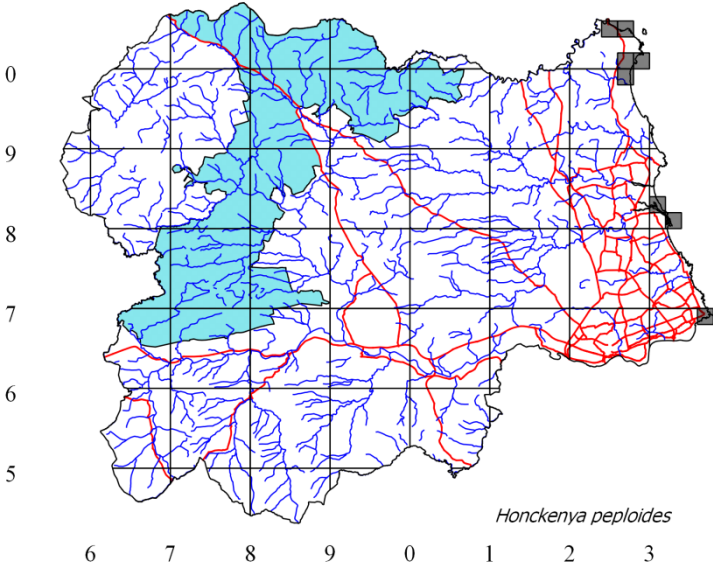
*Honckenya peploides* (L.) Ehrh.

Sea Sandwort

Native

Locally scarce (data deficient)

Only sixteen records since 1970, but perhaps under-recorded. It is not threatened, but it would be useful to have more detailed records. The following map shows all records since 1987.



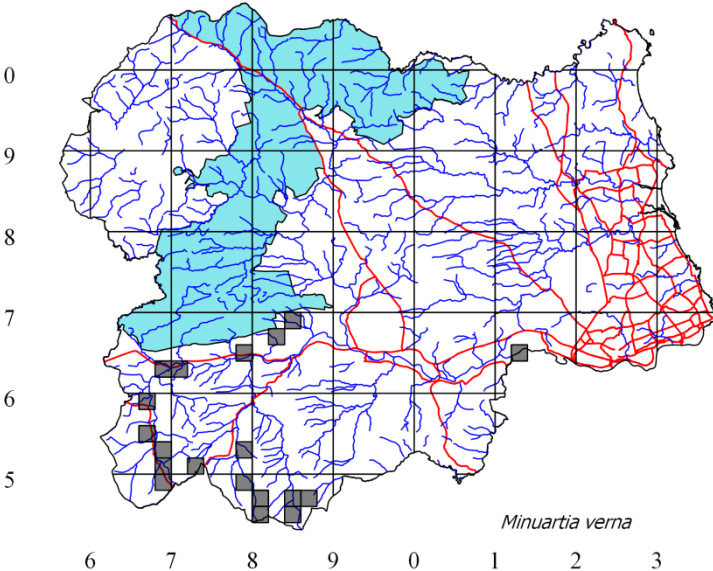
*Minuartia verna* (L.) Hiern

Spring Sandwort

Native

Locally vulnerable

*Minuartia verna* has been lost from its former sites on whin outcrops and from many of its low elevation sites. It is now borderline scarce in the vice-county. The causes for this decline are perhaps related to eutrophication. The following map shows all records since 1987.



*Sagina maritima*

Sea Pearlwort

Native

Locally rare

Few precise localities or recent records, but it is easily overlooked.

NZ320790	2012 AY & GY		A193 roadside near South Beach.
NZ318880	2012 AY & GY		Newbiggin
NZ319880			
NU20SE	1997 GS		Amble
NZ36NE	1984 GS		Tynemouth



NZ3376	1971 GS		Seaton Sluice Harbour
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*Scleranthus annuus* L.

## Annual Knawel

Native

Endangered; locally scarce

It is likely that only the first three of these sites still exist, which means that the status of this species should perhaps be locally rare. It is declining nationally and suffering from eutrophication and land use changes.

NY679665 NY680665 NY682665	1972 GS	2012 AJR	King Arthur's Well & Walltown (Allotee To Walltown, SSSI). Estimated to be about 100 plants in 2008 (AJR). "a few only" (2011 GY), "Many hundreds, probably thousands in 2012" (AJR).
NY982794 NY984794	1977 GS	2008 AY & GY	Clay Walls crags, Divethill.
NY771679 to NY773680	1981 GS	2008 AJR	Hotbank (Roman Wall Escarpments, geological SSSI). More than 120 plants in 2008 (AJR).
NY76NW	1988 GS		Winshields
NZ093562	1972 GS	1988 GS	Broom Hill sandpit
NY894726	1976 GS	1984 GS	The Scroggs (SSSI). Lost when quarrying took place circa 1999.
NY9780	1958 GS	1981 GS	Holm Crag (Bavington)

*Silene gallica* L.

## Small-flowered Catchfly

Casual

Endangered; locally rare

*Silene gallica* has never been any more than a casual in South Northumberland and was only included due to its national status. The following record is apparently only the third for the vice-county.

NY836638	2009 JBo		Haydon Bridge by-pass. One plant.
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*Silene noctiflora* L.

## Night-flowering Catchfly

Colonist

Vulnerable; locally rare

Only casual in the vice-county.

NY97SW	1981 GS		River North Tyne, west bank near Humshaugh.
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*Silene uniflora* Roth

## Sea Campion

Native

Locally rare

*Silene uniflora* is common on practically the whole coast of the UK, except along the north-east coast of England from South Northumberland to South-East Yorkshire. It does however appear to be native as it was recorded in the 19<sup>th</sup> century (Winch 1831). It may occur on Coquet Island, but the island is rarely surveyed and only a handful of records exist.

NZ317880 NZ317879	2013 AJR	2014 AJR	Newbiggin Point. More than 30 plants.
NZ364712 NZ363713	2013 JA	2014 AJR	Cullercoats. Perhaps introduced to this site.

*Stellaria neglecta* Weihe

## Greater Chickweed

Native

Locally rare

No obvious threats but at the northern limits of its range in the UK.

NZ0255	2006 WG		Minsteracres
NZ2890	1983 GS		Wooded banks of the River Lyne "plentiful" (Swan, 1993)

NZ1398 NZ1599	1983 GS		South bank of the River Coquet at Weldon Bridge (River Coquet & Coquet Valley Woodlands SSSI). These are doubtful sites, see Swan, 1993.
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*Stellaria palustris* Ehrh. ex Hoffm.

Native

Formally, at Prestwick Carr before it was drained (Baker & Tate 1868).

Marsh Stichwort

Vulnerable; locally extinct

### *Amaranthaceae*

*Atriplex glabriuscula* Edmondston

Native

Populations appears healthy, particularly in Druridge bay.

Babington's Orache

Locally vulnerable

NZ272980 NZ273981 NZ273987	1966 GS	2014 AJR	Chibburn Mouth (Druridge Bay Country Park & Hadston Links SSSI)
NZ337768	2014 AJR		Sandy Island
NZ3092	2012 NF		Cresswell shore, several clumps
NZ2263	2012 QG		Riverbank at Elswick
NZ284946 NZ2893	2012 AJR		Cresswell Dunes
NZ373692	2012 AY & GY		Seashore at Tynemouth
NZ2985 NZ301855 NZ302854	2010 QG	2013 AJR	Banks of the Wansbeck at North Seaton Colliery
NZ319880	2011 AY & GY		Newbiggin Point (Cresswell & Newbiggin Shores, SSSI)
NU270047 NU270048	2011 AJR	2012 GY	Amble Beach SSSI
NZ321789	2011 AY, GY & AJR		Meggie's Burn (Blyth to Seaton Sluice Dunes LNR & Northumberland Shore SSSI)
NZ273990 NZ273991 NZ273993 NZ273995	1988 CD	2011 AJR	Hadston Links South (Druridge Bay Country Park & Hadston Links SSSI)
NZ2993	1988 GS	2002 GS	Cresswell
NU2700	1988 CD		Hadston Links North (Druridge Bay Country Park & Hadston Links SSSI)
NZ3090	1988 GS		River Lyne (Cresswell Dunes, LNR)
NU2801	1988 CD		Togston Links (Druridge Bay Country Park & Low Hauxley Shore SSSI)
NU2505	1987 JP		Mouth of the River Coquet (River Coquet & Coquet Valley Woodlands SSSI)

*Atriplex laciniata* L.

Native

Frosted Orache

Locally vulnerable

NZ2798 NZ272981	1966 GS	2014 WG	Mouth of Chevington Burn and Chibburn Mouth (Druridge Bay Country Park & Hadston Links SSSI)
NZ302854 NZ301854 NZ301855	1982 GS	2013 AJR	Sandy Bay (Cresswell & Newbiggin Shores SSSI)
NZ2993 NZ284946	1986 GS	2012 AJR	Cresswell Dunes
NU270047 NU270048 NU275044	2011 AJR	2012 GY	Amble Beach
NZ327777	2001 AY & GY	2011 GY	Hartley Links (Blyth to Seaton Sluice Dunes LNR). One plant.
NZ321789	2011 AJR, AY & GY		Meggie's Burn (Blyth To Seaton Sluice Dunes LNR & Northumberland Shore SSSI)
NU2801	1988 CD	1989 GS	Low Hauxley & Togston Links (Druridge Bay country park & Low Hauxley Shore SSSI)
NU2700	1988 CD		Hadston Links North (Druridge Bay country park & Hadston Links SSSI)
NZ2799	1988 CD		Hadston Links South (Druridge Bay country park & Hadston Links SSSI)
NU2505	1987 JP		River Coquet (River Coquet & Coquet Valley Woodlands SSSI)

*Atriplex longipes* Drejer

Native

Long-stalked Orache

Nationally scarce; locally rare

NZ272979	2011 AJR		East Chevington (Druridge Bay Country Park & Hadston Links SSSI)
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*Atriplex praecox* Hülpf

Native

Early Orache

Critically endangered; locally rare

NZ273987 NZ273991 NZ273995	2011 AJR		East Chevington. A total of nine plants (Druridge Bay Country Park & Hadston Links SSSI).
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*Atriplex portulacoides* L.

Native

Sea-purslane

Locally scarce

At the north limits of its British range. It is not abundant at any of its sites and is rather poorly recorded, probably because it is not considered uncommon.

NZ302853 NZ294854 NZ295854 NZ296854 NZ297854	1972 AJR	2012 AJR & NW	Sandy Bay, North Seaton Colliery
NU2604	1985 GS	2012 QG	The Braid, Amble

NZ320817	2002 QG		North Blyth
NZ28W	1999 AY & GY		Sleekburn
NZ287939 NZ2893	1974 GS	1995 NCC	Croft Letch & mouth of Blakemoor Burn (Cresswell Ponds SSSI)
NZ273975 NZ2798	1988 CD	NCC 1995	Chibburn Mouth, Chibburn (Druridge Bay country park & Hadston Links SSSI)
NZ304908	1972 AJR		Lynemouth

*Beta vulgaris* subsp. *maritima* (L.) Arcang.

## Sea Beet

Native and colonist

Locally extinct

Towards the north-eastern limits of its distribution in the British Isles. Found as a casual in 1971 by George Swan, but previously only known from 19<sup>th</sup>-century records.

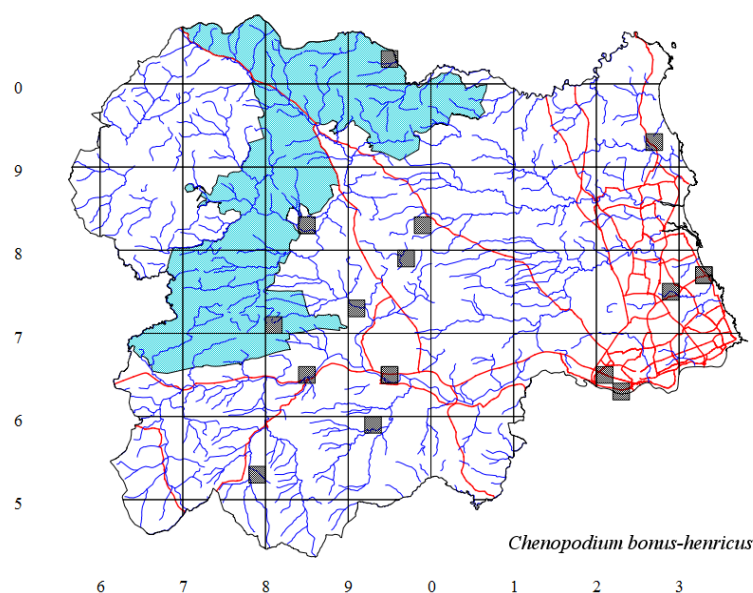
*Chenopodium bonus-henricus* L.

## Good-King-Henry

Naturalised hortal

Vulnerable; locally vulnerable

Included due to its national status. However there are at least 15 sites recorded since 1987 and it is not considered threatened in South Northumberland. It is often found near houses and farms as a relic of cultivation.

*Chenopodium glaucum* L.

## Oak-leaved Goosefoot

Colonist

Vulnerable; locally extinct

Included owing to its national status, only casual in South Northumberland, last recorded in 1929 (BEC).

*Chenopodium rubrum* L.

## Red Goosefoot

Native

Locally scarce

Probably under recorded, it grows in ruderal locations in the east of the vice-county.

NY924783 NY936786 NY937779 NY942788	2013 AM		Colt Crag Reservoir
NZ0672	2011 AJR		How Burn, Fenwick

NZ291854	2010 QG		North Seaton Colliery (Wansbeck Riverside Country Park). Scattered plants, particularly on bare ground near rabbit burrows.
NY941642	2010 AJR		Hexham railway station yard.
NZ363685	2008 WG		Low Lights quayside
NY7885	1999 GS		Chirdonburn Bridge
NZ2894	1983 MW	1988 GS	Cresswell ponds SSSI
NY98A	1988 AJR		The Waterfalls area.

### *Salicornia*

*Salicornia* are difficult species to identify, further complicated by historic changes in the species concepts. Nevertheless, it is clear that taxa from both the *S. europaea* agg. and the *S. procumbens* agg. grow in the vice-county. Indeed, *Salicornia* is abundant along the shore of the Blyth estuary, perhaps more so than formally. Nevertheless, all are threatened by coastal developments such as the construction of sea defences and dredging.

#### *Salicornia dolichostachya* Moss

#### Long-spiked Glasswort

Native

Locally rare

NZ28SW NZ2982	1999 AY & GY	2013 AJR	Sleekburn and Blyth Estuary SSSI
NU2604	1983 GS		The Braid

#### *Salicornia europaea* L.

#### Common Glasswort

Native

Locally rare

NZ2982 NZ2983	1983 GS	2011 JO & QG	Sleekburn and Blyth Estuary SSSI
NU2604	1983 GS		The Braid

#### *Salicornia fragilis* P.W.Ball & Tutin

#### Yellow Glasswort

Native

Locally rare

NZ2982 NZ2983 NZ3083	1987 GS	2011 JO & QG	Sleekburn and Blyth Estuary SSSI
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#### *Salicornia ramosissima* J.Woods

#### Purple Glasswort

Native

Locally rare

Taxonomic authorities differ in the boundaries between *Salicornia ramosissima* and *Salicornia europaea*. It might be that the records for these species refer to the same taxon.

NZ2982	1999 AY & GY		Sleekburn and Blyth Estuary SSSI
NZ3376	2009 WG		Holywell Dene LNR

#### *Salsola kali* subsp. *kali* L.

#### Saltwort

Native

Locally scarce

NU2803	2009 AJR		Hauxley NWTR (Amble Dunes LNR & Northumberland Shore SSSI)
NZ2798	1983 GS	2003 WG	Mouth of Chevington Burn and Chibburn Mouth (Druridge Bay country park & Hadston Links SSSI)

NZ38NW	1998 GS		unknown
NZ2799	1983 GS	1992 GS	Hadston Links (Druridge Bay country park & Hadston Links SSSI)

*Suaeda maritima* (L.) Dumort.

Annual Sea-blite

Native

Locally scarce

NZ2985	2010 QG		Mouth of the River Wansbeck. Scattered over a small area of saltmarsh.
NZ28W	1999 GS	2010 QG	River Blyth Estuary & Sleekburn (Northumberland Shore SSSI). Common along the shore of the estuary.
NZ334765	1990 AY & GY	2011 AY & GY	Seaton Sluice saltmarsh (Holywell Dene LNR). Four plants in 2011.
NZ320817	2002 QG		North Blyth
NZ2798	1988 CD		Chibburn Mouth (Druridge Bay country park & Hadston Links SSSI)

***Cornaceae****Cornus suecica* L.

Dwarf Cornel

Native

Near threatened; locally rare

NZ023987	1976 EE	2014 WG	Simonside, north of summit (Simonside Hills SSSI). "Best flowering/fruited site in VC67 & VC68" (GY)
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***Balsaminaceae****Impatiens noli-tangere* L.

Touch-me-not Balsam

Native or naturalised hortal

Locally rare (perhaps extinct)

NY9262	1996 JA & CI		Hexham, Cockshaw Burn. "long gone" (CI, 2010)
NZ087819	1986 CC	1987 GS	Wood near Bolam

***Primulaceae****Anagallis tenella* (L.) L.

Bog Pimpernel

Native

Locally rare

NY927609	2012 AJR	2013 WG	Dipton Mill, a patch about 2.5 m across in each direction.
NY971868	1977 AJR	2011 AJR	Chesters Burn. "not very much; two patches" AJR (2011).
NU2700	1965 GS	2002 GS	Hadston Links SSSI

*Primula farinosa* L.

Bird's-eye Primrose

Native

Near threatened; locally rare (perhaps extinct)

NZ077665	1846 JFB	1987 AJR & GS	Spital. This site was visited in 2009, but <i>P. farinosa</i> could not be found (AJR).
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*Samolus valerandi* L. Brookweed

Native

Locally extinct

Last recorded in 1972 by AJR, but Swan (1993) thought it probably extinct and it has not been recorded since.

***Ericaceae****Arctostaphylos uva-ursi* (L.) Spreng.

Bearberry

Native

Near threatened; locally rare

While widespread in Scotland, this species is rare in England where there are only a few isolated populations.

NY967532 NY969532 NY969531 NY970532	1807 WR	2014 TC	Ravens Crag and Potter Burn (Muggleswick, Stanhope & Edmundbyers Commons & Blanchland Moors SSSI)
NY966969 NY966968 NY966971 NY966970 NY969970	1839 Anon.	2008 WG	Crag below Key Heugh and near Darden Burn (Simonside Hills SSSI)

*Hypopitys monotropa* subsp. *monotropa* Crantz

Yellow Bird's-nest

Native

Endangered; locally rare

Found once in the 19<sup>th</sup> century and then considered extinct, but now apparently resurgent.

NY8468	2008 AJR	2012 AJR & NW	Stonecroft mine on the Settlingstones mine SSSI. Nine plants in 2008, at least 20 in 2010 & at least 100 in 2011 (AJR).
NY825659 NY826660 NY827660	1996 LCC	2011 JBo	Honeycrook Burn. Originally, 17 spikes were found, but this has since increased. 68 spikes in 2007 (WG); 35 in 2011 (JBo).

*Pyrola media* Sw.

Intermediate Wintergreen

Native

Endangered; locally rare

NY966968	1991 GS	2008 WG	Darden Burn (Simonside Hills SSSI). Six flowering spikes seen in 1993 (Swan, 2001).
NY7266	1969 LCC	1991 GS	Thorny Doors, Cawfield Crag (Roman Wall Escarpments, geological SSSI)
NZ055493	1918 KB	1984 GS	The Sneap (Derwent Gorge And Muggleswick Woods NNR & SSSI)

*Pyrola minor* Sw.

Common Wintergreen

Native

Near threatened; locally scarce

This species is probably more common than records suggest. It is able to colonise conifer plantations and is tolerant of heavy metal pollution. Targeted surveys may rediscover this species at its former sites.

NY796629	2014 BH & GY		Allen Banks
NY853687 NY854688	1974 GS	2014 WG	Settlingstones SSSI
NY927778	2013 AM		Next to Colt Crag Reservoir
NZ05V	2011 KC		West bank of River Derwent

NZ040900	1958 GS	2010 RP	Rothley Lakes
NY621945	2010 QG		Chubbies Knowe, Kielder
NY631925 NY632926	2002 GSi, AY & GY	2008 WG	Kielder viaduct
NY9462	1995 AY & GY	2000 AY & GY	Ochrelands Cross-roads
NZ167823	1991 GS		Cockhill Plantation Searched for in 2012 but not found NF.
NY88NE	1975 GS	1984 GS	Near West Woodburn and on a dismantled railway near Cragg Farm. Perhaps two different sites, but it is not clear from the records.
NZ0356	1984 GS		Wild Wood
NY9463	1977 GS		Halfmile Wood
NY96SW	1973 GS	1975 GS	West Dipton Burn
NZ27SE	1972 GS		Gosforth Park SSSI
NY76SE	1974 GS		Kingswood Cleugh

*Vaccinium microcarpum* (Turcz. ex Rupr.) Schmalh.

## Small Cranberry

Native

Waiting list; locally rare

Difficult to separate from *Vaccinium oxycoccus* and more work should be done before this species is considered extinct in the county.

NY7982	1974 GS		Mesling Craggs. Swan (1993) stated that this species was “almost extinct” at this site.
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*Vaccinium uliginosum* L.

## Bog Bilberry

Native

Locally rare

NY571865	2009 AJR, JO & QG		Glendhu Hill (Kielder Mires SSSI, unit 3). One small plant.
NY6466	1964 GS	1979 GS	Baron House Bog
NY6469	1955 DR	2011 AJR & FJR	Crammel Linn (Irthing Gorge SSSI). One bush (2002, RC). What is believed to be the remaining plant is on an inaccessible cliff and further visits are required to ensure its identity.



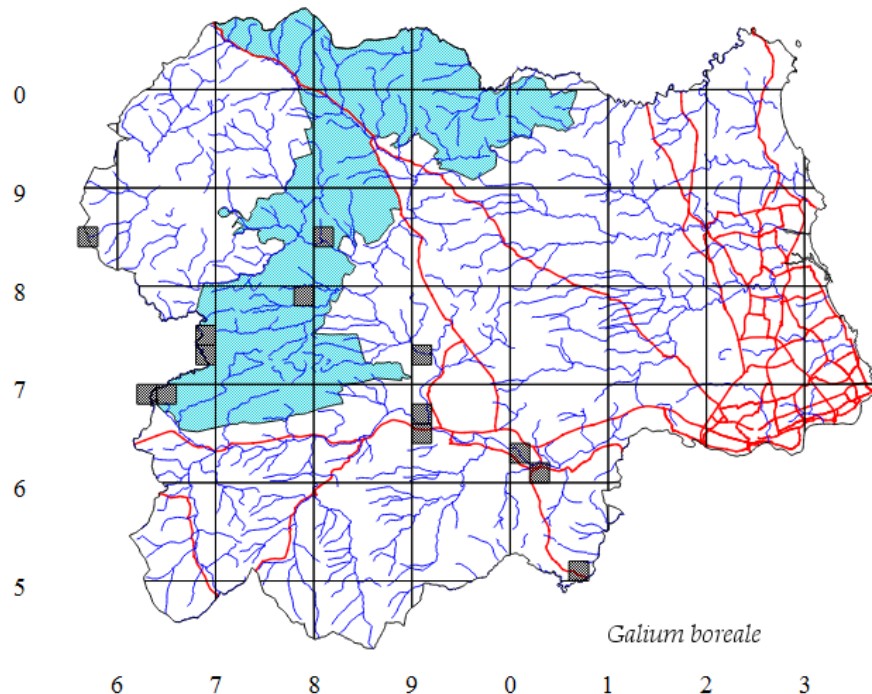
***Rubiaceae******Galium boreale* L.**

Native

This is not a common species and is perhaps underrecorded. However, the lack of recent records suggests a decline. It should be searched for along the banks of the North Tyne. The map shows records from 1987 onwards.

***Northern Bedstraw***

Locally data deficient

***Galium sternerii* Ehrend.**

Native

This species requires some targeted surveying to relocate older sites.

**Limestone Bedstraw**

Locally scarce

NY670660	2014 AJR & NW		Walltown Nature Reserve
NY681520	2014 AJR		Williamston
NY723499	2012 AJR		Kate's Well
NY970544	2010 AJR		Winnows Hill. "several patches" AJR.
NY6949	1971 GS	2008 CO & JO	Near to Kirkhaugh
NY708637	1989 MSw & GS		River South Tyne, south bank near Haltwhistle
NY65NE	1984 GS		Eals
NY74NW	1966 GS	1977 GS	Gilderdale
NY65SE	1974 GS		Barhaugh Burn
NY76SE	1971 GS		Riverbank near Bardon Mill

*Galium tricornutum* Dandy

## Corn Cleavers

Casual

Nationally Critically endangered, locally extinct

Only mentioned due to its status in the England Red-list, but never established in the county.

NZ26	c. 1829-1856 WGo		Newcastle-upon-Tyne
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***Gentianaceae****Centaurium littorale* (Turner ex Sm.) Gilmour

## Seaside Centaury

Native

Nationally scarce; locally extinct

Some unconfirmed records exist from the 1980s from the East Chevington part of Hadston Links.

*Centaurium pulchellum* (Sw.) Druce

## Lesser Centaury

Native

Locally rare

In need of a targeted survey. The site name does not closely match the given grid reference however, as an annual its site may change location readily.

NZ273990	1991 GS		Near the mouth of Chevington Burn (Druridge Bay country park & Hadston Links SSSI).
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*Gentianella amarella* subsp. *septentrionalis* (Druce) N.M.Pritch.

## Autumn Gentian

Native

Vulnerable; locally rare

NZ272986	2014 AJR		Hadston Links .
NZ272988			

*Gentianella campestris* (L.) Börner

## Field Gentian

Native

Endangered; locally rare

This species is declining in South Northumberland and across the country. If the current trend continues, it is likely to become extinct soon. It is a plant of nutrient-poor grassland in lowlands, but these habitats are rapidly disappearing due to agricultural improvement.

NY849464	1963 GS	2014 AJR	Bell's Grove, near Dirt Pot. Three patches. Probably the last site in the vice county. Forty-four plants counted in 2012 BH & GY. Fifteen in 2013 AJR. >80 in 2015 AJR.
NY849465			
NY850464			
NY850465			
NY850467			
NY851465			
NY815532	2002 MB		Dryburn Moor (Allendale Moors SSSI). Not found when AJR searched this site in 2008 and GY & BH searched it in 2012.
NY826537	1985 GS		Haggburn Gate SSSI. It has been looked for repeatedly, but is almost certainly extinct here.

***Boraginaceae****Cynoglossum officinale* L.

## Hound's-tongue

Native

Near threatened; locally scarce

NZ273981	1966 GS	2014 GY	In the dunes and sandy ground from Amble Dunes LNR through Low Hauxley Shore SSSI and Hadston Links SSSI. Well established and not threatened throughout the dunes.
NZ273999			
NU277006			
NU2801			
NU2802			
NU2803			
NZ2796	1960 GS	1992 JL	Druridge Links (Northumberland Shore SSSI)

NY86NE	1958 GS	1974 GS	Quarries north of Fourstones
NZ285946	1972 AJR		Dunes near Cresswell pond (Northumberland Shore SSSI)

*Myosotis stolonifera* (DC.) J.Gay ex Leresche & Levier

Pale Forget-me-not

Native

Locally scarce

NY671480	2012 PB		Grey Nag
NY808452	2012 BH & GY		Whetstone Mea
NY929507 NY930509 NY927510 NY926511 NY929512	2012 MH & AJR		Blackburn Head
NY797468 NY798468 NY800468 NY801468	1968 GS	2012 BH & GY	Smallburns Moor
NY9752 NY971533	1992 GS	2012 MH	Acton Burn
NY678468 NY679467 NY671471	1969 GS	2010 JO	Above Woldgill Scar and below Watchcurrick Spring.
NY834448 NY837454	1991 GS	1998 AY & GY	Middlehope Moor, near Carriers Way, Roundhill Sike & Hefty Well. Not found in 2011 (GY & AJR).
NY84SW	1989 GS		Coalcleugh Moor
NY902517	1975 GS		Stobbylee Burn. Searched for in 2011 but not found (AJR).
NY913505	1972 GS		Beldon Cleugh. Searched for in 2011 but not found (AJR).

***Convolvulaceae****Calystegia soldanella* (L.) R.Br.

Sea Bindweed

Native

Vulnerable; locally rare

NZ321789	1973 JP	2009 AY & GY	South Beach, dunes at Meggie's Burn outflow (Blyth To Seaton Sluice Dunes LNR).
NZ2798	1988 CD		Chibburn Mouth (Druridge Bay country park & Hadston Links SSSI)

*Cuscuta epithymum* (L.) L.

Dodder

Casual

Vulnerable; locally extinct

***Solanaceae****Hyoscyamus niger* L.

Henbane

Archaeophyte

Vulnerable; locally extinct

NZ36NE	1822 HL	1844 JSy	Tynemouth
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**Veronicaceae***Linaria × sepium* G.J.Allman*L. vulgaris* × *L. repens*

Native

Locally extinct

NY912662	1972 GS		Old railway, west of Bridge End
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*Veronica catenata* Pennell

Pink Water-speedwell

Native

Locally extinct

NZ29	1972 AJR		near Ellington
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**Callitrichaceae***Callitriche obtusangula* Le Gall

Blunt-fruited Water-starwort

Native

Locally rare

*Callitriche* spp. are notoriously difficult to identify and the only records accepted here are of GS who had their identity verified by an expert. Other records of this species do exist from the vice-county; however, they were all recorded from ponds rather than streams. If there is sufficient material to do so, it is always best to collect a small fruiting specimen of *Callitriche* so that its identity can be confirmed.

NZ232849	1984 GS	1989 GS	Near Hepscott and Healeywood
NZ28SE	1983 GS	1987 GS	Sleekburn
NZ244840	1984 GS		Willow Burn Pasture SSSI
NZ1676	1983 GS		River Pont

*Callitriche hermaphroditica* L.

Autumnal Water-starwort

Native

Locally scarce

NZ0582	2011 AJR		Shaftoe Crags SNCI
NY7667 NY7668	1942 JHH & WC	2010 SH	Crag Lough (Roman Wall Loughs SSSI)
NZ19B	1970 GS	1992 CP & PH	Rayburn Lake SNCI
NZ0881	1942 KB	1984 GS	Bolam Lake Country Park
NZ0589	1984 GS		Rothley Park Lake
NY77SW	1983 GS		Cadgeford
NZ116986	1980 GS		River Coquet, pond on south bank, north of Brinkburn
NY76NE	1971 GS		Broomlee Lough (Roman Wall Loughs SSSI)

**Lamiaceae***Clinopodium acinos* (L.) Kuntze

Basil Thyme

Native

Vulnerable; locally extinct

*Galeopsis angustifolia* Ehrh. ex Hoffm.

Red Hemp-nettle

Colonist

Critically endangered; locally extinct

*Galeopsis speciosa* Mill.

Large-flowered Hemp-nettle

Colonist

Vulnerable; locally extinct

*Lamium confertum* Fr.

Casual

Only two known observations and last recorded in 1967.

## Northern Dead-nettle

Endangered; locally extinct

*Lamium hybridum* Vill.

Archaeophyte

## Cut-leaved Dead-nettle

Locally rare, perhaps extinct

This species has never been common in the county and information in the literature is scant. It may have been more common in the past, but historical records are largely from waste places and ballast hills (Wallis 1769; Winch 1831; Baker and Tate 1868).

NY918728	1995 MB		Haughton Castle, old walled vegetable garden
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*Lycopus europaeus* L.

Native

## Gypsywort

Locally scarce

This species is apparently increasing in the vice-county, particularly around Newcastle, though it is introduced in some places. Swan (1993) noted only one extant site, but it has benefited from the designation of nature reserves and the formation of ponds.

NZ144945	2014 QG		Longhorsley pond (introduced)
NZ215716 NZ2271	2002 AY & GY	2012 WG	Havannah LNR (SNCI). Rare in the reserve, but at several locations.
NZ265696	2011 JBo		Pond at West Baliol business park
NZ2163	1996 AY & GY	2007 AJR	Benwell Nature Park (LNR)
NT9900 NU0001	2006 JD		Caistron lakes (River Coquet & Coquet Valley Woodlands SSSI)
NZ2394	2003 NF		Stobswood
NZ2471 NZ2472	2003 SW		Sacred Heart Fen and Pond (SNCI)
NZ3467	2001 JD		Royal Quays Pond
NZ3069	1996 DM, DC & LK		Rising Sun Country Park, Swallow pond LNR
NZ2298	1991 GS		Chevington Wood, small pond.

*Nepeta cataria* L.

Native

## Cat-mint

Vulnerable; locally extinct

*Salvia verbenaca* L.

Native

## Wild Clary

Near threatened; locally rare

Swan (1993) considered this species native, but commented that it has been cultivated as a medicinal herb. All of the current and historic sites are near habitation and could be escapes from cultivation.

NZ371693	1805 NJW	2014 AJR, BH & GY	Tynemouth Priory. Six plants at top of bank but none to be seen on the bank where there used to be more than a hundred plants in the mid to late 1990s.
NY840483	2012 AJR & NW		Thorneyknowe Quarry, a single plant, presumable a garden escape.

*Scutellaria minor* Huds.

Native

## Lesser Skullcap

Locally rare

NT903032	1987 GS	1991 GS	Black Cleugh (Harbottle Moors SSSI)
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*Stachys arvensis* (L.) L.  
Colonist

Field Woundwort  
Near threatened; locally extinct

### *Orobanchaceae*

*Euphrasia arctica* subsp. *arctica* Lange ex Rostrup  
Native

Arctic Eyebright  
Data deficient; locally scarce

NY706637	2014 AJR		Haltwhistle
NY67N	2008 CO & JO		Windy Hill
NY65R	2008 JO		Slaggyford
NY6949	2008 CO & JO		Near Kirkhaugh
NY956503	2007 JO		Coat House Farm
NY955515	2007 JO		Pennypie
NY828536	2007 JO		Haggburn Gate SSSI

*Euphrasia micrantha* Rchb.

Native

Slender Eyebright  
Nationally endangered; locally vulnerable

A plant of dry, nutrient poor, acid soils. It is apparently declining, but not rapidly.

NZ0299	2014 WG		north of Simonside
NY793865	2014 WG		near Brownknowe
NY7892	2013 WG		Ridley Shiel
NT70Y	2013 NW & AJR		Canker Cleugh
NY6849 NY64Y	1969 GS	2013 AJR	West of Kirkhaugh
NY7866	2011 QG		Thorngraston Common
NY7084 NY719843	1963 GS	2011 JO	Dings Rigg area
NY645834	2010 JO & DF		Forestry track north of Humble Burn
NY9551	2010 AJR		Pennypie
NY9754	2010 AJR		Winnows Hill
NY663518 NY65L	1963 MSw & GS	2009 JO	Black Hill area
NT90SW	1948 WEF	2005 AL	Holystone Burn
NY910516	2003 AJR		Stobylee
NY95W	1987 AJR	2003 AJR	North-west of Derwent Reservoir
NY625876 NY68J	1964 MSw & GS	1988 AJR	Lewis Burn
NY98J	1988 AJR		Raylee Common
NT900040 NT910055	1941 Anon.	1986 EN	Barrow Burn & Harbottle Moor
NY918766	1970 MSw & GS		Camphill, sandstone quarry

NY79NE	1968 GS		Tarn Burn
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*Euphrasia officinalis* subsp. *monticola* Silverside

Native

Montane Eyebright

Data deficient; locally scarce

NT793070	2013 NW & AJR		Canker Cleugh
NY836477 NY839480	2012 NW & AJR		Swinhope Burn
NY904494	1967 GS	2009 AJR	Heatheryburn Bank SSSI
NY665525 NY667524 NY663518	1963 GS	2008 JO	Knar Burn (Aules Hill Meadows SSSI)
NY973834	1972 GS		Crook Dean

*Euphrasia tetraquetra* (Bréb.) Arrond.

Native

Western Eyebright

Near threatened; locally rare

NZ272983	2014 AJR		Hadston Links
NU285023	2013 AJR		Low Hauxley
NZ38NW	1966 GS		Newbiggin-by-the-sea

*Orobanche hederæ* Duby

Colonist

Probably a rare casual.

Ivy Broomrape

locally rare

NY943651	2013 WG		Bridge End, 11 Spikes (AJR).
NZ235658	2012 AJR		Moorbank
NZ280693	2007 AJR		Lyndhurst Road, Benton

*Orobanche rapum-genistæ* Thuill.

Native

Greater Broomrape

Vulnerable; locally scarce

This species should perhaps be considered rare as there are so few plants at each site. Furthermore, the sites are vulnerable to clearance of Gorse.

NZ0152	2007 AM	2009 AM	Cronkley Bank. From 2 to 6 plants.
NY926575	1976 GS	2013 WG	Near Whitley Chapel.
NY927609 NY930611 NY931611 NY931612	1868 BT	2008 AJR	Dipton Mill. From 7 to 10 plants. From 1 to 20 plants in two separate populations. Four plants in 2013.
NY856658	1993 MP	2006 JBo	Near Haydon Bridge. Two plants in 2006 (JBo).
NY907731	2006 WG	2009 MM, AY & GY	Riverhill Farm. Two plants in 2006, 1 plant in 2009.
NY953617	1977 MB		Linnels
NY9461	1977GS		near Newbiggin.

***Lentibulariaceae***

*Utricularia intermedia* Hayne  
Native

Intermediate Bladderwort  
Data deficient; locally extinct

*Utricularia minor* L.  
Native

Lesser Bladderwort  
Vulnerable; locally extinct

NY98NW	1959 GS		Linnheads Lake
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*Utricularia vulgaris* L.  
Native

Greater Bladderwort  
Locally rare

Not see for 30 years, but perhaps still present.

NY7769 NY7770	1982 MPa		Greenlee Lough NNR (Roman Wall Loughs SSSI)
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***Campanulaceae***

*Campanula glomerata* L.  
Native

Clustered Bellflower  
Locally scarce

We lack recent, detailed records from many sites and not all of these sites are native. It appears highly threatened in the vice-county as few sites have legal protection. This species needs a targeted survey to assess its status accurately.

NY917664	1969 GAS	2014 AJR	Howford Banks
NY905732 NY911737	1978 GS	2009 MM, AY & GY	Riverhill Farm
NY946659	2005 MH		Egger Factory Hexham, introduced.
NZ356714	1994 AY & GY		Marden quarry LNR Plant introduced with seed mix.
NY97SW	1937 GS	1987 MO	Chollerton area on the banks of the North Tyne.
NY87NW	1984 GS		Houxty Burn
NZ06SW	1984 GS		Near to Newton Hall.
NY78NW	1983 GS		Falstone
NZ06SE	1974 GS	1976 GS	South bank of the Tyne between Bywell Bridge and Eltringham.

*Jasione montana* L.  
Native

Sheep's-bit  
Vulnerable; locally extinct

Apart from a dubious J. Heslop-Harrison record it was also recorded in the 19<sup>th</sup> century near Gilsland, Hexham and Haltwhistle, but no reliable records exist from the 20<sup>th</sup> century.

***Asteraceae***

*Antennaria dioica* (L.) Gaertn.  
Native

Mountain Everlasting  
Vulnerable; locally rare

Under serious decline; Swan (1993) considered it localised and decreasing. The most recent sites are listed here, though it is suspected it has disappeared from most of them.

NY97NE	1975 GS	2006 JSi	Divethill. Very little and possible lost.
NY639502	2000 AL		Gelt Linn, looked for in 2012 but not found.



NY964930	1986 GS	1991 GS	Old quarry near to Eastnook. Searched for in 2014, but not found (AJR).
NY94NE	1988 GS		Dirt Pot
NY76NW	1988 GS		Winshields
NY953766	1963 GS	1985 GS	Colwell . Searched for since but not found.
NY76NE	1981 GS		Steel Rigg, eastwards

*Anthemis arvensis* L.

## Corn Chamomile

Casual colonist

Endangered; locally scarce

Only found as a casual along roadsides and on wasteland. All recent introductions are believed to be from seed sown on road verges. It does not persist long and there are no permanent sites.

NZ255652	2014 AY & GY		
NY9465	2009 JBo	2010 AJR	Hexham roundabout
NZ2465	2010 AJR		University roundabout in Newcastle.
NZ282821	2003 QG		Next to the A189 near Kitty Brewster Farm.
NZ287629	2002 NCC		Walker Riverside Park (SNCI)
NZ352682	2000 AY & GY		North Shields metro station. From “wildflower” seed.

*Bidens cernua* L.

## Nodding Bur-marigold

Native

Locally extinct

Not seen since the 19<sup>th</sup> century (Winch 1831).

*Bidens tripartita* L.

## Trifid Bur-marigold

Native

Locally rare

NY942789	2013 AM		Colt Crag Reservoir, only four or five plants.
NZ3175	1968 OG	1988 GS	Holywell Pond SSSI

*Carduus tenuiflorus* Curtis

## Slender Thistle

Native

Locally scarce

Found on disturbed ground and waste places mostly near the sea. It is not particularly threatened though populations are small.

NZ343759 NZ343757 NZ340759	2008 AJR	2014 AY & GY	Hartley. Over 100 plants in 2013.. Dozens of rosettes, especially on disturbed ground (2014).
NZ336768 NZ329773	2011 GY	2014 AY & GY	Astley Arms & ballast hills. 53 plants were counted in the car park in 2011; 59 in plants were counted in the dunes in 2012; at least 30 plants in 2013 and 420 rosettes counted in 2014.
NZ298855	1989 GS	2011 QG	Near to North Seaton Colliery. Three plants found in 2010.
NU261049	2009 AJR	2012 NF	Amble Marina. Two plants in 2012.
NZ336769 NZ37NW	1961 GS	2013 AY & GY	Between Seaton Sluice and Blyth (LNR); Seaton Sluice Ballast Hill.
NZ0063	2002 AY & GY		Thornbrough Scar

*Carlina vulgaris* L.

## Carlina Thistle

Native

Near threatened; locally rare

NU2802 NU285022	2013 AJR & NW		Hauxley Nature Reserve
NZ2894	2013 SL		Near outfall channel from Cresswell Pond, two plants.
NY892567	2010 AJR		Whapweasel Burn
NZ008633	1966 GS	1972 GS	Thornbrough Scar

*Cirsium* × *wankelii* Reichardt*C. heterophyllum* × *C. palustre*

Native

Locally rare

This is only the third English site and it is unknown if it will perennate.

NY672528	2010 PB		Knars Dale near Slaggyford. One plant.
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*Cirsium eriophorum* (L.) Scop.

## Woolly Thistle

Casual

Extinct

Recorded in the 19<sup>th</sup> century in Wallsend, but it was presumably introduced there (Winch 1831).*Crepis mollis* (Jacq.) Asch.

## Northern Hawk's-beard

Native

Vulnerable; locally scarce

NY835476	2012 AJR & NW		Swinhope Burn, eight plants.
NY629928 NY6293 NY622944 NY622945	1962 GS	2010 AJR	Along the abandoned railway line at Kielder.. Twelve plants (AJR, 2008). It has been found at several areas along the old railway, but there are apparently fewer in recent years.
NY904494	1967 GS	2008 AJR	Heatheryburn Bank SSSI. Seven plants.
NY846491	1962 GS	2008 JO	West bank of River East Allen, east of Swinhope Shield. At least 30 plants in 2008 (JO).
NY844512 NY847522 NY844523 NY845522	1962 GS	2008 CO & JO	Road verges near Sinderhope and West Garrets Hill pastures. "One plant in the pasture, about 7 in the road verge" JO 2008.
NY681518 NY681520	2008 AJR	2010 AJR	Williamston River Shingle SSSI, River South Tyne, near Slaggyford. There are 25+ plants in the reserve where it is increasing and there is one plant beside the Pennine Way to the south-west of the bridge (2010, AJR).
NY813573	2008 JO & FC		Bank behind Kittygreen. Over 500 plants counted by JO & FC in 2008 – probably the biggest population in the country.
NY827572	2008 JO & FC		unmanaged meadow west of Catton sewage works. Three plants in 2008 (JO & FC).
NY820552	2007 JO		Verge of lane close to Frolar Meadows. One plant.
NY7690	1963 GS	2002 GS	Near Comb.
NY916931	1963 GS	2002 GS	Near Overacres.

NY9592 NY9593	1963 GS	2002 GS	Whiskershiel
NY8696	1987 GS		Durtrees Burn
NY888725	1985 GS	c. 1995 AJR	On a bank on the road near the Scroggs.
NY8350	1983 JL		High Knock Shield (Allendale Moors SSSI)
NY8197	1977 GS		Wind Burn

*Filago minima* (Sm.) Pers.

## Small Cudweed

Native

Near threatened; locally rare

NU00SW	1983 GS	2000 JH	Near Thropton
NZ093562	1972 GS	1988 GS	Broom Hill sandpit
NZ1056	1985 GS		Broad Oak
NT90SE	1968 GS	1972 GS	River gravels of the Coquet near Holystone. Seen in the 1980s on the North bank of the Coquet in Cheviotland.

*Filago vulgaris* Lam.

## Common Cudweed

Native

Near threatened; locally scarce

NY940780	2013 SH		
NZ300832	2012 DF		On the demolished Blyth Power Station site. "hundreds".
NY671660 NY671661	2010 GY	2014 AY, GY, AJR & NW	Walltown LNR (old quarry). A dozen small plants in 2010, 30–100 plants in 2011, 20 in 2012 (GY). An estimated 5000 plants in 2014.
NY97N	2007 JSi		Little Swinburne
NZ008633	1966 GS	2002 WG	Thornbrough Scar
NY6578	1977 GS		Cow Crag

*Gnaphalium sylvaticum* L.

## Heath Cudweed

Native

Endangered; locally scarce

Declining nationally and locally, it is restricted to the borders of forest tracks, particularly in Redesdale and in Kielder Forest.

NY620843	2011 GSi	2014 GSi	Broomylinn. One plant in 2011, 17 flowering plants in 2014 and more seedlings (GSi).
NY801956 NY802955 NY802956	2004 GSi	2012 BH, AY & GY	Near Kell's Pike. Twenty plants (2009, AJR). More than 100 plants in 2011 & at least 99 in 2012 (GY).
NY620883 NY621883 NY639892	1990 GSi	2011 GSi	Lewis Burn, just a few plants (GSi)
NY7599 NY748983	1993 GS	2005 GSi	Redesdale Forest, Just half a dozen plants in 2005 (GSi)
NY939887	2003 QG		Long Fell. One plant at the edge of a forest track.
NY726821	1992 GSi		Beacon Hill, looked for since, but not found (GSi).

*Hieracium argutifolium* Pugsley

## Sharp-toothed Hawkweed

Native

Near threatened; locally rare

NY679596	2010 JO		Thorneyhall Wood
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*Hieracium auratiflorum* Pugsley

## Dark-flowered Hawkweed

Native

locally rare

NY912732	1984 MSw & GS		near Barrasford
NY697502	1963 MSw & GS		near Kirkhaugh

*Hieracium piligerum* (Pugsley) P.D.Sell & C.West

## Brindled Hawkweed

Native

[Nationally critically endangered]; locally extinct

A verified specimen is present in the HAMU herbarium from 1800 and this is considered the only verified English locality. The England redlist status is therefore probably wrong and it should be considered extinct in England.

*Hieracium prenanthoides* Vill.

## Rough-leaved Hawkweed

Native

Endangered ; locally extinct

Last recorded in the 1833 in Allandale.

*Hieracium rhomboides* (Stenstr.) Johanss.

## Rhombic-leaved Hawkweed

Native

locally rare

NY959499	1984 GS		Baybridge
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*Lactuca virosa* L.

## Great Lettuce

Native

Locally rare

At one time extinct in the vice-county, but it has recently been found at urban sites where it presumably has been unintentionally reintroduced.

NZ259740 NZ260740	2014 JBo		Northumberland Business Park, Cramlington. Hundreds of plants along a 90 m stretch of ditch.
NY935644 NY935645 NY935646 NY933646 NY933647 NY942648 NY946649	2009 JBo	2013 JBo	Hexham Trading Estate. Thirty plants in 2009; 50 in 2010 and 34 in 2013 (JBo).
NZ331715	2012 DB		West Monkseaton, three plants.
NZ260745	2011 JBo		Dudley. More than 50 plants (JBo).

*Picris hieracioides* L.

## Hawkweed Oxtongue

Native or colonist

Locally extinct

Probably only a casual introduction in recent years.

*Seriphidium maritima* (L.) Poljakov

## Sea Wormwood

Native

Near threatened; locally extinct

Recorded during the 19<sup>th</sup> century in the Tyne estuary and on the ballast hills (Winch 1831).

*Serratula tinctoria* L.

Saw-wort

Native

Locally rare

These are some of the most northerly sites in the UK, though the Darras Hall site is likely to be the only native site.

NZ157713 NZ158713	1975 GS	2011 JA	Darras Hall, recreation area SSSI. 336 plants counted in 2011 (JA).
NU282022	2006 FA		Hauxley NWTR. Introduced and plentiful.
NZ28SW	1977 GS	1987 DW	Above Willow Burn near Netherton Colliery.

**Caprifoliaceae***Linnaea borealis* L.

Twinflower

Native?

locally rare

NY997564	1979 BL	2014 RBo & JBo	Kellas.
NY911496	1973 GS	1994 GS	The junction of Norham Burn and the Beldon Burn (Hexhamshire Moors SSSI). "a very small colony" Swan (1993). "almost extinct" Swan (2001).

**Valerianaceae***Valerianella dentata* (L.) Pollich

Broad-fruited Cornsalad

Archaeophyte

Endangered; locally extinct

Not recorded since the 19<sup>th</sup> century*Valerianella locusta* (L.) Laterr.

Common Cornsalad

Native

Locally scarce

Although it is probably native in the dunes along the coast, populations seem rather transient.

NZ019615	2011 JBo		Riding Mill Station
NZ3266	2010 QG		Willington
NZ245944	2003 NF	2004 NF	Widdrington Station
NZ2798	1988 CD		Chibburn Mouth (Druridge Bay country park & Hadston Links SSSI)
NZ06NE	1987 GS		Whittle Dene

**Apiaceae***Anthriscus caucalis* M.Bieb.

Bur Chervil

Native

Locally rare

NZ272987	2014 AJR		East Chevington
NZ3278	2005 AY & GY	2008 AY & GY	Seaton Sluice Dunes, near Gloucester Lodge Farm. (Northumberland Shore SSSI and Blyth to Seaton Sluice Dunes LNR). Looked for but not found since 2008 (AY & GY).
NU20SE	1985 GS		Hadston Links SSSI

*Apium graveolens* L.

Wild Celery

Native

Locally scarce

Probably increasing along the banks of the Tyne where it is well established. Swan (1993) described it as "rare and very scarce", but further searching may prove that it can be removed from the list of scarce species. Some old records reach up to the upper shores of the tidal Tyne (1978, 1985 GS).

NU243056	2009 AJR		The Coquet at Warkworth (River Coquet & Coquet Valley Woodlands SSSI)
NZ2163 NZ2263 NZ2262 NZ2362	2001 JD	2012 QG	Along a long stretch of Newcastle riverside
NZ284630	2001 JD		Walker Riverside Park (SNCI)
NZ314667	1999 AY & GY	2001 JD	Willington Gut
NZ272983	1988 JL		near mouth of Chevington Burn (Druridge Bay country park & Hadston Links SSSI)

*Apium inundatum* (L.) Rchb.f.

## Lesser Marshwort

Native

Vulnerable; locally rare

Few recent records suggest that this species may be close to extinction in VC67.

NY976769	2013 NW & AJR		Hallington Reservoirs
NZ033839	2013 WG		River Wansbeck at Wallington
NZ2064	1998 AY & GY		John Marley Community Garden. Introduced from Ryton Willows Gut Pond (VC66).
NZ2793	1984 GS		Ponds near to Warkworth lane, near Cresswell.
NZ17SE	1983 GS		Prestwick Carr
NZ116986	1980 GS	1983 GS	Pond on south bank of River Coquet, north of Brinkburn.

*Berula erecta* Besser ex W.D.J.Koch

## Lesser Water-parsnip

Native

Locally rare

There are no records since 1985 and no records with precise localities. However, it should be searched for along the banks of the River Pont west of Ponteland.

NZ140723	1984 GS		River Pont, Ponteland
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*Carum carvi* L.

## Caraway

Casual

Nationally critically endangered; locally extinct

This species is included due to its national status, but present in South Northumberland only as an escape from cultivation. It has never been common and was last recorded in the 1920s.

*Cicuta virosa* L.

## Cowbane

Native

Locally extinct

Last recorded in 1950.

*Meum athamanticum* Jacq.

## Spignel

Native

Nationally scarce and near threatened; locally rare

This is one of about 10 sites in England and is the first recorded site in Britain.

NY9579	1548 WT	2010 AJR	Houky Hill, Thockrington. Estimated to be 2100 plants in 2008 (AJR).
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*Oenanthe aquatica* (L.) Poir.

## Fine-leaved Water-dropwort

Native

Locally rare

NY643664	1979 GS		Small pond north-east of The Gap, Gilsland.
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*Oenanthe fistulosa* L.

## Tubular Water-dropwort

Native

Vulnerable; locally rare (perhaps extinct)

Never common in the county, but it has declined, presumably because of the drainage of marshes.

NZ256706	1972 GS	1990 NES	Gosforth Park SSSI. Searched for in 2009 but not found (AJR).
NY9565	1959 GS	1990 AJR	Pond near Anick. Searched for in 2009 but not found (AJR).
NZ17SE	1983 GS	1987 GS	Prestwick Carr. It's unclear where the 1987 site is and whether it was within Prestwick Carr SSSI.

*Oenanthe lachenalii* C.C.Gmel.

## Parsley Water-dropwort

Native

Near threatened; locally extinct

Not recorded since the 19<sup>th</sup> century.*Scandix pecten-veneris* L.

## Shepherd's Needle

Introduced

Endangered; locally extinct.

Last recorded 1958. Once a common weed of arable land.

*Sison amomum* L.

## Stone Parsley

Introduced

Locally extinct

Stone Parsley was last seen in the 19<sup>th</sup> century, but there was only ever one site, far from its normal range in southern Britain.*Torilis nodosa* (L.) Gaertn.

## Knotted Hedge Parsley

Native

Locally extinct

Last recorded 1921.

This species is only questionably native in South Northumberland. All its known sites are from wasteland or ballast hills. However, it does grow in a more natural setting in North Northumberland.

***Alismataceae****Baldellia ranunculoides* (L.) Parl.

## Lesser Water-plantain

Native

Vulnerable; locally extinct

Found in Woodhorn Pond in 1972 (AJR), but the site was destroyed soon afterwards.

***Hydrocharitaceae****Hydrocharis morsus-ranae* L.

## Frogbit

Native

Vulnerable; locally rare

NZ293759	2011 ASt & JHu		East Cramlington Pond (LNR). Probably introduced.
NZ239839	1986 NSc	1991 GS	Pond near to Healeywood.. In 1986 it was described as "in great plenty" and in 1991 "large areas of water, white with flowers" (Swan, 1993).

***Zosteraceae****Zostera noltei* Hornem.

## Dwarf Eelgrass

Native

Vulnerable; locally rare

NZ275988	2012 AJR		Druridge Bay (Northumberland Shore SSSI)
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NU265048	1973 GS		The Braid, Amble
NU264047			

### *Potamogetonaceae*

*Groenlandia densa* (L.) Fourr.

Opposite-leaved Pondweed

Native

Vulnerable; locally rare

NU2405	1965 GS	1988 GS	River Coquet SSSI, south bank, opposite Hermitage.
NU00SW	1974 AJR		Caistron Lakes (River Coquet SSSI)

*Potamogeton filiformis* Pers.

Slender-leaved Pondweed

Native

Regionally extinct; locally rare (probably extinct)

NZ110929	1969 MS & GS	1992 PH & CP	Rayburn Lake SNCI. The only site in England.
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*Potamogeton lucens* L.

Shining Pondweed

Native

Locally rare

NY7869 NY7969	1959 GS	2012 AJR	Broomlee Lough (Roman Wall Loughs SSSI)
NY812719	2011 WG		Halleypike Lough
NZ063615	1976 GS		Sand-pit at Merry Shield

*Potamogeton praelongus* Wulfen

Long-stalked Pondweed

Native

Endangered; locally rare

NY807711	1970 GS	2011 AJR & WG	Stream south of Halleypike (Roman Wall Escarpments, geological SSSI)
NY770680 NY769679	1959 GS	2011 AJR	Crag Lough (Roman Wall Loughs SSSI)

*Potamogeton* × *angustifolius* J. Presl

Long-leaved Pondweed

Native

Locally rare

NY976769	2013 NW & AJR		Hallington Reservoirs
NY795696	1971 GS	2012 AJR	Broomlee Lough

*Potamogeton* × *lintonii* Fryer

Linton's Pondweed

Native

Locally rare

NY8071	2011 WG		Halleypike Lough
NU046013	1973 MS & GS		River Coquet SSSI, south bank west of Rothbury.

*Potamogeton* × *nitens* Weber

Bright-leaved Pondweed

Native

Locally scarce

NY7869	1975 GS	2010 SH	Broomlee Lough (Roman Wall Loughs SSSI)
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NY765692	1959 GS	1992 SM	Greenlee Lough NNR (Roman Wall Loughs SSSI)
NY744687	1988 GS		Caw Burn
NZ131920	1984 GS		Haredean Pond
NZ022616	1984 GS		River Tyne near Riding Mill Station.

### *Ruppiaceae*

*Ruppia maritima* L.

Beaked Tasselweed

Native

Bear threatened; locally scarce

NZ334762	1948 KMC	2011 AY & GY	Seaton Sluice, salt-marsh (Holywell Dene LNR).
NU282019	1984 AJR	2010 AJR	Pond at Hauxley NWTR
NZ283944 NZ286945	1988 GS	2010 AJR	Cresswell Ponds SSSI
NZ272981	1988 JL		Chibburn Mouth (Druridge Bay country park & Hadston Links SSSI)

### *Dioscoreaceae*

*Tamus communis* L.

Black Bryony

Native

Locally extinct

Not recorded since the 19<sup>th</sup> century.

### *Melanthiaceae*

*Paris quadrifolia* L.

Herb-Paris

Native

Locally vulnerable

This species is borderline scarce in the county. There are several pre-1987 sites that have not been visited recently, a few of which are mentioned below. Populations at most sites are small, but healthy.

NY952605 NY951599	2014 NW		Linnels Woods
NY829616 NY829617 NY830617	2012 NW & AJR	2013 GY	Langley Burn
NZ1986	1548 WT	2014 BH & GY	Cottingwood, near Morpeth. Well established covering a large area in damp areas of the wood. Estimated to be about 3000 plants (2014).
NY940602	2011 CO & JO		Letah Wood
NY845794	2011 NW		Houxty Burn
NY842846 NY843843	1973 GS	2010 AY & GY	Hareshaw Dene SSSI, about 100 plants in 2010.
NY7760	1974 GS	2010 JO	Kingswood Burn
NY923728	2010 AJR, BH, CL, AY & GY		Barrasford, riverside wood. About 250 plants.
NY822656	2007 JBo, AY & GY	2007 JBo & GY	Tony's Patch (NWTR). One plant in 2007.

NZ087781	1998 GS		Belsay Hall
NZ066499 NZ066500	1984 GS	1992 Anon.	Moss Wood
NU003004	1992 LA		Bickerton Wood
NZ166861 NZ18NE	1988 GS	2013 NW	Mitford Hall
NZ081871 NZ078871	1967 GS	1987 GS	North bank of Hart Burn, near Garden House.
Approx. NY7962	1983 GS		Briarwood Banks SSSI (NWTR).
NZ030706	1978 GS		Matfen
Approx.. NZ1487	1969 GS	1977 GS	Pigdon Banks
NY87NW	1950 BHT	1973 GS	Fawlee Sike
NY9559	1971 GS		Linnelswood Bridge

### *Liliaceae*

*Gagea lutea* (L.) Ker Gawl.

Yellow Star-of-Bethlehem

Native

Locally scarce

*Gagea lutea* is difficult to find, particularly later in the year when it disappears under taller vegetation.

Sites never seem to contain many plants, and these plants are well scattered. Nevertheless, the known sites have persisted for many years and there is no clear evidence of decline.

NZ138847	2012 NF & ID		Rivergreen Mill, Mitford (1 plant)
NY917661 NY917662 NY917663	1968 GS	2014 JBo, RBo, CI & CL	Howford Banks by the North Tyne (SNCI, SSSI). Only three plants flowering in 2006; four in 2011; one in 2012 and 16 in 2014.
NZ188862 NZ187860	1983 GS	2014 BH	The north bank of the River Wansbeck, Scotch Gill Woods LNR. Seven flower spikes were found in 2007 (AY & GY), but there are many more non-flowering plants at this site. 15 spikes were noted in 2010 (NF); 18 in 2011 (GY); 25 in 2012 (AY & GY); 20 in 2013 (JH & BH) and 15 in 2014.
NY822655 NY822656	1970 RH	2012 MRo	Tony's Patch (NWTR)
NZ2278 NZ2379 NZ2580 NZ2479	1942 GWT	2005 HE & CE	Plessey Woods SNCI, along the River Blyth until Hartford Hall. Found in scattered locations throughout this area.
NY9073 NY9172 NY9272	1973 MB	2004 MB	Haughton Castle by the North Tyne
NZ1685	1983 GS		The north bank of the River Wansbeck. "leaves only".

*Orchidaceae**Anacamptis morio* (L.) R.M.Bateman, Pridgeon & M.W.Chase

Green-winged Orchid

Native

Vulnerable; locally extinct

Probably always uncommon and at the northerly limits of its UK range.

NZ053598	1975 EM		Near Broomley
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*Anacamptis pyramidalis* (L.) Rich.

Pyramidal Orchid

Native

Locally scarce

More populations formally existed, either in or near limestone quarries inland. Although this species crops up occasionally, it never appears to have formed permanent or large populations, perhaps due to the lack of ideal habitat.

NZ023749	2012 RW		Mootlaw Quarry, "less than half a dozen spikes".
NU278041	2012 GY		Amble Dunes, Five plants.
NZ295686	2011 HE & CE		Rising Sun Country Park. One plant.
NZ3466	2002 AY & GY		Formally derelict land near the North Sea Ferry-terminal. One plant, but it was destroyed by the construction of a car park in same year as it was found.
NZ320791	2007 AY & GY	2008 HE & CE	South Beach dunes, opposite churchyard (Blyth to Seaton Sluice Dunes LNR). One plant in 2007. Looked for in 2012, but not found.
NZ303855	1997 HE & CE		Sandy Bay, dunes, two plants.
NY894689	1977 GS	1996 DHu	Park Shield Quarry. One plant.

*Cephalanthera longifolia* (L.) Fritsch

Narrow-leaved Helleborine

Native

Endangered; locally extinct

Not recorded since the 1830 near Bywell.

*Coeloglossum viride* (L.) Hartm.

Frog Orchid

Native

Vulnerable; locally scarce

This species is apparently declining and there has never more than a few plants at any one site.

NY643969	2012 BH & GY		Irthing Gorge, one plant.
NY851466 NY851467	2011 LM	2014 LM & AJR	Bell's Grove. Between 5–20 plants in 2012 and 12 plants in 2013 (LM). About 15-16 plants in 2014 (AJR).
NY767687	2010 WG		Caw Lough (Roman Wall Loughs SSSI)
NY635919	2008 WG		Kielder, Bakethin, calcareous flush (NWTR).
NY904494	1967 GS	2003 WG	Heatheryburn Banks SSSI
NY98A	1958 GS	1988 AJR	Waterfalls quarry. This area was extensively surveyed in 2003 and 2004 for the BSBI's Local Change project, yet <i>C. viride</i> was not found.
NY826537	1983 JL	1985 GS	Haggburn Gate SSSI, Allendale. Surveyed by JO in 2008, but not found.
NY75NE	1984 GS		Dewsgreen Burn, below Oaks Wood. This area was surveyed recently, but <i>C. viride</i> was not found. (AJR, 2010).

NY86NW	1964 GS	1983 GS	Honeycrook Burn
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*Corallorhiza trifida* Châtel.

## Coralroot Orchid

Native and perhaps a colonist

Vulnerable; locally rare

NZ257702	1963 AMT	2013 PD	Gosforth Park SSSI. Numbers vary from year to year, but 210 were recorded in 2008; 460 in 2010 and 168 in 2013 (PD).
NZ102787	1909 JF	1970 GS	Belsay. It is not clear what happened to this site, though the lack of recent records suggests it has gone. Searched for in 2013 but not found (NW).

*Dactylorhiza incarnata* (L.) Soó

## Early Marsh-orchid

Native

Locally scarce

NT796072	2013 NW & AJR		Canker Cleugh, two plants.
NY771691	1988 GS	2010 AJR	Caw Lough (Roman Wall Loughs SSSI). All three subspecies!
NY7969	1966 GS	2009 QG	South side of Broomlee Lough, Dove Crag (Roman Wall Loughs SSSI). 27 plants in 2009.
NZ327777	1966 GS	2008 HE, AY & GY	Seaton Sluice dunes LNR. Seven plants in 2008, but not found in 2010, 2011 & 2012 (GY).
NY634921	1996 DMc	2008 AJR	Bakethin (NWTR)
NY7278	1996 GS		Gowany Knowe Moss (Kielder Mires SSSI unit 17)
NZ3188	1985 GS	2002 GS	Newbiggin Moor. subsp. coccinea.
NZ0293	1964 GS	1991 GD	Fallowlees Flush SSSI. subsp. coccinea.
NY99SE	1988 GS		Eastnook. subsp. incarnata.
NY967883	1974 GS	c. 1988 AJR	Ottercops Moss flushes
NY971868	c. 1988 AJR		Chesters Burn
Approx. NT937017	1982 AJR		Holystone Burn(NWTR, SSSI). subsp. pulchella.
Approx. NY951886	1980 MB		Spring mire near Otterburn. subsp. pulchella. This site has been “improved” and it is probably lost (AJR, 2011).
NZ19SW	1980 GS		Tod Burn

*Epipactis dunensis* Godfery

## Dune Helleborine

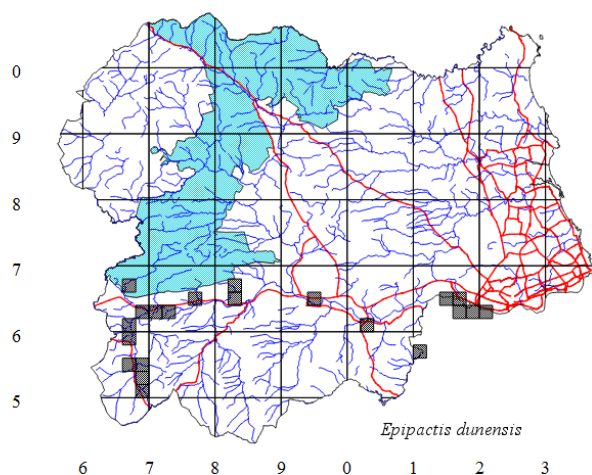
Native

Data deficient; locally vulnerable

This is a British endemic and its population in South Northumberland is a large proportion of the national total. *Epipactis dunensis* grows on bare, often metal polluted, sites along the Tyne valley. Some sites have been lost as vegetation has grown denser on these sites, but it is able to colonise new sites.

NY672611 NY672612	2014 QG		Crow Wood opposite Featherstone Castle
NY682521 NY682522	1962 GS	2014 AJR	Williamston (NWTR, SSSI). 160 plants in 2008 (AJR). Estimated to be more the 500 plants in 2014.
NY705637	2012 PB		Haltwhistle riverside near footbridge

NY682547	2012 PB		Knarsdale, five plants.
NY681553 NY679556	2012 PB		River side at Eals & Eals Road Bridge, more than 17 plants.
NZ1763 NZ181637 NZ181638	2012 DS & JL		Riverside cycleway to west of Stella House on Newburn Riverside, more than 100 plants counted.
NZ100567	2011 DH		Broad Oak Quarry
NY669662	2011 JC, AY & GY		Walltown LNR (old quarry). Not found in 2012 (GY).
NY690623 NY688623 NY672600 NY673613	1974 GS	2010 PB	Burnfoot River Shingle & Wydon Nabb SSSI
NY945645	2003 MH	2009 JBo	Egger Factory Hexham. More than 150 plants in 2003; more than 50 plants in 2003 (MH) and 11 in 2009.
NY695636	2009 MG		Industrial estate at the western end of Haltwhistle. Twenty plants.
NY772658	2009 AJR		Other side of the ravine from Vindolanda. Eight plants
NY676598 NY676583	1974 GS	2008 JBo & RBo	Lambley River Shingles SSSI (though recent reports of plants are outside the SSSI boundaries). Eight plants in 2008.
NY825659 NY825661	1994 LCC	2007 JBo, RBo, AY & GY	Honeycrook Burn. 24 plants (2007, JBo, RBo, AY & GY) and 25 (2006, JA & CI).
NZ217637	2007 AY & GY		Benwell Nature Park. 30 plants.
NY727638	2007 SL		Seldom Seen Caravan Park, Haltwhistle. 3 plants.
NZ129652 NZ130652	1974 GS	2006 WG	Close House (NWTR). More than 100 plants in 2000 (MF), >200 plants in 2006 (WG).
NZ159655 NZ160655	2003 AJR		Newburn Country Park & the east bank of Reigh Burn. 127 plants (AJR, 2007).
NY786640 NY785641 NY784641	1974 GS	2000 AJR	Beltingham (NWTR, SSSI). About 35 plant (AJR, 2000).
NZ031619	1997 NB		Upstream of Styford Bridge.
NZ095639 NZ095640	1996 LK & SD, AY & GY		Spetchells, looked for but not seen since (GY).

*Epipactis palustris* (L.) Crantz

## Marsh Helleborine

Native

Locally rare

According to historical records, this species used to grow at several inland sites around the county. However it is now restricted to one coastal site. Its former sites have been lost either due to drainage or agricultural improvement (Winch 1831; Baker & Tate 1868).

NZ271986	1966 GS	2014 GY, AJR & BH	Hadston Links (Druridge Bay country park & Hadston Links SSSI). Perhaps represented by more than one group of plants, though there are never many in any one place. Eight plants were recorded in 2004 (NF). More than 69 flowering plants in 2014.
NZ273985			
NZ272993			
NZ272987			
NZ273986			
NZ272985			
NZ272984			
NZ272988			

*Epipactis phyllanthos* G.E.Sm.

## Green-flowered Helleborine

Native

Nationally scarce; locally rare

Also, see Richards and Swan (1976).

NY854683	1974 GS	2014 WG	Stonecroft Mine, Settlingstones Burn (Stonecroft Mine SSSI). About 20 plants in 1994, about 30 in 2009 and 2011 and 90 plants in 2012.
NY854688			
NY855685			
NY855685			
NZ041901	1982 GS	2000 JH	Rothley Lakes. Five stems in 1982 and four in 2000, none found in 2010.

*Goodyera repens* (L.) R.Br.

## Creeping Lady's-tresses

Native or colonist

Locally rare

Under *Pinus sylvestris* plantations, together with *Vaccinium myrtillus* and *Calluna vulgaris*. At risk from clear-felling and a change in the species of trees that are planted. However, it seems these are active populations able to colonise new plantations.

NY968599 NY968607 NY969604 NY963613 NY966613 NY971603 NY974611 NY974612 NY976607 NY978614	1917 NT	2014 QG	Dipton Wood. Several small patches scattered through the wood. Over 100 spikes counted in 2012.
NZ010590 NZ003591 NZ007589 NZ008589	c. 1935 GW	2014 QG & AJR	Broomley Fell Plantation

*Hammarbya paludosa* (L.) Kuntze

## Bog Orchid

Native

Vulnerable; locally rare

NT911034	c. 1929 RBC	2004 JS & DG	Crane Moss (Harbottle Moors SSSI). 155 plants in 2004 (JS & DG) and 167 in 2001 (DH & TH). The numbers of plants seem to have increased. GS recorded 11 and 7 spikes in 1967 and 1988 respectively.
NY901547 NY900546 NY900547	1964 RS	2014 AJR	King's Law (Hexhamshire Moors SSSI) 54 in 2001 (DH & TH) 103 in 2002 (DH & TH) 6 in 2003 (DH & TH) 14 in 2004 (AY & GY) 11 in 2010 (CS) 5 in 2011 (CS) 8 in 2014
NY896515 NY896513	1991 DH & TH		Stobylee Burn (Hexhamshire Moors SSSI). Revisited in 2002, but the site had been large destroyed and the plants were not found.
NY69SE	1967 GS	1973 GS	Head of Buck Lake Sike (Kielderhead & Emblehope Moors SSSI)
NY867564	1971 GS		Lambrigg Sike (Hexhamshire Moors SSSI). Not found by GS subsequently, apparently due to overgrazing.

*Neotinea ustulata* (L.) R.M.Bateman, Pridgeon & M.W.Chase

## Burnt Orchid

Native

Endangered; locally extinct

Once found in the dunes between Cullercoats and Tynemouth, but probably never a large population and long gone (Baker & Tate 1868).

*Neottia nidus-avis* (L.) Rich.

## Bird's-nest Orchid

Native

Vulnerable; locally scarce

NY792622 NY795626 NY797630	2008 AM & LS	2014 Bh & GY	Briarwood Banks and Allenbanks (NWTR, SSSI). Four plants in 2008 (AM & LS); Nine plants in 2014 (GY).
NY889616	2013 JDa		West Dipton Wood, two spikes.

NY846632	2013 AM		Spring Wood
NZ101787	1970 GS	2013 NW	Belsay Woods, 30 plants.
NY799592	1868 BT	2013 AY & GY	Staward Peel wood, near Cupola Bridge, one plant.
NY901648 NY900652 NY900647	1999 AJR	2011 JBo & AJR	High Wood and Coastley area. Three plants in 2009 (JBo). Four in 2011 (JBo & AJR).
NY851788	2011 NW		West bank of North Tyne at Houxyty, one plant.
NZ151734	1975 GS	2007 JS & MR	Wood at corner of Limestone Lane and West Road. 21 spikes in 1981 & 1982 (AD); 20 plants in 1991 (AY & GY); 10 plants in 2005 (AY & GY) & 2 plants in 2007 (JS & MR).
NY634678	1819 NJW	1997 DI	Wardrew, Gisland Gorge
NZ266806	1991 GS		Humford Mill (Bedlington Country Park LNR)

*Platanthera bifolia* (L.) Rich.

## Lesser Butterfly-orchid

Native

Endangered; locally scarce

NZ269982 NZ268990 NZ271990 NZ271987	1993 GS	2014 BH & AJR	East Chevington (Hadston Links SSSI). Several sub-sites exist within this site and between 140 and 50 (ALi) plants have been counted at this site between 2003 and 2009. In 2014 there were an estimated 120 spikes.
NZ2795	1999 GS	2008 SL	Druridge Bay Country Park. Six plants in 2008 (SL).
NZ2295 NZ2296	1980 GS	2004 NF	In the area of Colliersdean Plantation. Only three plants in 2004 at which time it was reported that the site was becoming overgrown. The original site within Colliersdean Plantation has gone as the trees have grown up.
NZ264778 NZ265778	1991 NES	1998 AY & GY	Cramlington, near Brockwell Centre. More than 100 plants in 1995 (GY), but only four plants in 2003 (HE & CE).
NZ2475	1975 GS	1993 EN	Arcot Hall Grassland and Ponds SSSI

*Platanthera chlorantha* (Custer) Rchb.

## Greater Butterfly-orchid

Native

Locally scarce

NY7373	2012 AJR		Grindon Green
NY8253	2008 CO & JO	2013 JBo	Haggburn Gate SSSI. 40 plants in 2010; 8 in 2011; 35 in 2012 (JBo); 15 in 2013 (JBo).
NY927609 NY927610 NY930611 NY931611 NY 931612	1983 GS	2013 WG, RBo & JBo	Dipton Mill. At a few locations within in this area. Nine plants were reported in 2006 and 2007; ten plants in 2010 (JBo); seven in 2012 (JBo) and 13 in 2013 at four subsites.
NY667524 NY666522	1984 GS	2008 JO	Knar Burn (Aules Hill Meadows SSSI). 22 flower spikes (2008, JO).
NY812566 NY813573	2006 JO	2008 FC	Crockton Burn & Kittygreen. Several populations in this area.



NY836547 NY837545 NY843542	2007 JO		Peckriding Meadows SSSI and nearby pasture. Over 1000 plants in the pasture and just a handful of plants in the meadows. The meadows are over half a mile away from the pasture.
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*Pseudorchis albida* (L.) Á.Löve & D.Löve

## Small-white Orchid

Native

Vulnerable; locally rare (probably extinct)

This species is on the verge of extinction. It has been declining for many years, probably due to changes in land management, particularly the loss of upland hay meadows.

NY903494	1982 AJR	1995 JL & SH	Heatheryburn Bank SSSI
NY75NE	1984 GS		Dewsgreen Burn, below Oaks Wood (Whitfield Moor, Plennmeller & Ashholme Commons SSSI). Searched for in 2010 but not found (AJR).
NY837478	1963 GS	1988 MP	Swinhope Burn (Allendale Moors SSSI). Looked for in 2014, but not found (BH & GY).

*Alliaceae**Allium oleraceum* L.

## Field Garlic

Native

Locally rare

NY9175 NY913749 NY920754	1850 TBe	2014 NW	Gunnerton Nick, SSSI. A few plants (2011, GY).
NU195006	1978 GS	2013 AY & GY	South bank of River Coquet, east of Felton. 16 plants in 2012. Part of the site was lost in 2013 due to riverbank erosion.
NY892675	1996 GS		River South Tyne, North bank near Fourstones. Looked for in 2013, but not found (AJR).

*Allium scorodoprasum* L.

## Sand Leek

Native

Locally extinct

Not recorded since the 19<sup>th</sup> century.

*Allium schoenoprasum* L.

## Chives

Native

Locally rare

NY671660 NY671661 NY677666 NY678666 NY679665 NY682665 NY680666 NY680665 NY682664 NY683666 NY693667 NY683665	1819 NJW	2014 JC	Walltown, on exposed whin and whin grassland near the houses and old lime kilns. SSSI. "Many large plants" (2011, GY).
NY9880	1837 JTr	2010 AJR	Exposed whin NW of farm at Great Bavington SSSI
NY747672	1805 JT	2009 AJR	Winshields

*Allium vineale* L.

## Wild Onion

Native

Locally scarce

A persistent weed and nationally common, not threatened in South Northumberland.

NU246058 to NU263047	2012 QG		Scattered along the banks of the Coquet for about 2 km near Warkworth. A very large population.
NU279037	2012 GY		Amble Dunes, Two plants
NZ184858	2010 NF	2012 NF	High House Wood, Morpeth. Ten plants in 2010. 23 plants in 2012.
NZ164653 NZ164655	1996 AY & GY	2010 GY	River Tyne, near Newburn Bridge.
NZ322786	2008 AY & GY	2013 AY & GY	Seaton Sluice dunes, near Gloucester Lodge Farm. Scattered over a 10 × 10 m area.
NY9175 NY913749	1960 GS	2011 BH & GY	Gunnerton Nick SSSI
NY907741	1984 GS	2006 AY & GY	Barrasford roadside
NZ086511	2005 AY & GY	2011 GY	west bank of River Derwent. Across 30m × 8m.
NY9166	2002 AY, GY & JD	2004 AY & GY	Waters Meet (Howford Banks SNCI, SSSI)
NZ327685	1971 GS	2001 AY & GY	West Chirton. Dismantled railway line & adjacent land, south of coast road. This site has recently been destroyed.

*Asparagaceae**Convallaria majalis* L.

## Lily-of-the-valley

Native?

NY917668	1831 NJW	2014 JBo	Warden
NY6651	2008 JO		Far House
NZ259702 NZ256706	1990	2008 JO	Gosforth Park Nature Reserve
NZ2063 NZ2064	1805 NJW	2007 AY & GY	Scotswood & John Marley Community Garden
NZ253656	2003 QG		Border of Metro line, Jesmond
NZ05NW	1986 GS		Minsteracres
NZ066579	1968 GS		Lynn Burn, at path crossing from Kipperlynn to Apperley
NY834564	1983 GS		River East Allen, NE bank
NZ224860	1868 WR	1980 GS	River Wansbeck, near Morpeth
NY95NE	1972 GS		Linnel Wood, Pethfoot
NY797637	1959 FE		Ridley College

*Polygonatum verticillatum* (L.) All.

Native

## Whorled Solomon's seal

Regionally extinct; locally extinct

*Polygonatum verticillatum* grew at one site in Tynedale during the 19<sup>th</sup> century but has not been seen since. This is considered the only native site of *Polygonatum verticillatum* in England.

***Juncaceae****Juncus ranarius* Songeon & E.P.Perrier

Native

## Frog Rush

Locally scarce

This species is probably under-recorded as suggested by the recent finds along salted roadsides.

NZ266639	2012 QG		Newcastle Quayside, at the side of a road.
NY7359	2009 JO		Limestones Fell. On a salted roadside.
NZ29NE	1988 GS		Near the mouth of Chevington Burn (Druridge Bay country park & Hadston Links SSSI).
NZ279955	1983 MSw & GS		Hemscotthill Links
NZ302856	1983 MSw & GS		Mouth of River Wansbeck
NZ301917	1983 MSw & GS		South of Cresswell (Cresswell Ponds SSSI).

*Juncus maritimus* Lam.

Native

## Sea Rush

Locally extinct

Known from the estuary of the River Blyth in the 19<sup>th</sup> century but not recorded recently.

*Juncus subnodulosus* Schrank

Native

## Blunt-flowered Rush

Locally extinct

*Juncus subnodulosus* grew at Prestwick Carr during the 19<sup>th</sup> century, but was lost, presumably due to drainage and agricultural improvement of the carr.

***Cyperaceae****Blysmus compressus* (L.) Panz. ex Link

Native

## Flat-sedge

Vulnerable; locally scarce

In addition to the sites noted below, there are many old and unlikely records. This is not an easy species to spot, particularly later in the season and is surely overlooked. However, it is doubtlessly suffering from changing land use and agricultural improvement of grazing land.

NY769763	1959 GS	2009 QG	Stonehaugh. Only 19 flowering stems counted in 2009. The site is perhaps suffering from undergrazing.
NY676595	1984 GS	2009 JO & QG	East bank of South Tyne near Coanwood. A large site where it flowers in abundance.
NY6887	1963 GS	2009 JO	Sandboard Knowe. The 1963 record is from the adjacent monad now under Kielder Water.
NY9073	1981 GS	2008 AJR	Riverhill Farm. Three fairly small groups (AJR, 2008).
NZ314889	1985 GS	2002 GS	Newbiggin Moor
NU274002	1985 GS	1988 CD	Hadston Links SSSI
NY9392	1957 GS	1987 GS	Elsdon bridge. Not found in 2002.

*Carex aquatilis* Wahlenb.

## Water Sedge

Native

Locally rare

NY652770 NY662768 NY661766	1977 GS	2012 WG & PB	Paddaburn (Kielder Mires SSSI unit 8)
NY673711	1979 GS	2010 MM, AY & GY	Rotheryhaugh
NY686748	1992 DJ		Lampert

*Carex bigelowii* Torr. ex Schwein.

## Stiff Sedge

Native

Locally scarce

NY625997 NY627998	1970 GS	2010 QG	Summit of Peel Fell (Kielderhead & Emblehope Moors SSSI)
NY625971	1972 RC	2011 MM & GY	Deadwater Fell (Kielderhead & Emblehope Moors SSSI). Much reduced and now in a strip about 50m × 2m (AJR, 2010).
NT675023	1993 RC	2002 GS	Limestone Knowe (Kielderhead & Emblehope Moors SSSI)
NY659470	1975 GS	1987 GS	Grey Nag

*Carex diandra* Schrank Lesser Tussock-sedge

Vulnerable; locally rare

Native

NY771691 NY772691	2009 AJR	2010 AJR	Caw Lough East (Roman Wall Loughs SSSI). “very abundant and widespread” (AJR, 2010).
NY7668	1981 AJR	2010 SH	Crag Lough (Roman Wall Loughs SSSI). “much less than at Caw Lough” (AJR).

*Carex distans* L.

## Distant Sedge

Native

Locally rare

NZ271982 NZ271983	2014 GY & WG		Pool edge near Chibburn Mouth
NZ334760 NZ334761 NZ334762	1998 AY & GY	2011 AY & GY	Salt-marsh at Seaton Sluice (Holywell Dene LNR).
NZ3092	1972 AJR	1977 GS	Quarry pond south of Cresswell (Cresswell Dunes SSSI).
NZ288940	1972 AJR		Croft Letch, Cresswell (Cresswell Ponds SSSI)

*Carex divisa* Huds.

## Divided Sedge

Native

Locally extinct

There is some doubt as to whether it actually ever grew in South Northumberland, but it has certainly not been seen since the 19<sup>th</sup> century.

*Carex lasiocarpa* Ehrh.

## Slender Sedge

Native

Vulnerable; locally rare

NY766689 NY770690 NY772691	2009 AJR	2010 AJR	Caw Lough East (Roman Wall Loughs SSSI). The recorder considered this the best site in the county for <i>Carex lasiocarpa</i> .
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NY786698	2010 SH		Broomlee Lough (Roman Wall Loughs SSSI)
NY728783 NY728787	1988 GS	1994 GS	Gowany Knowe Moss (Kielder Mires SSSI unit 17)

*Carex limosa* L.

## Bog-sedge

Native

Endangered; locally scarce

Although this species is much more common in Scotland, the Northumberland populations constitute a large number of the English sites. This species is a good indicator of the health of the Border Mires, it requires very wet conditions and drying of the Mires is an important threat to its existence.

NY6769 NY6770 NY6870	1964 GS	2010 JO	The Wou (Kielder Mires SSSI unit 30). "Hundreds of plants" JO.
NY697943 NY693944	1967 GS	2010 CI	Buck Lake Sike, Emblehope Moor (Kielderhead & Emblehope Moors SSSI). The records of this species are a little confusing, because there are two sites with similar names. One is Buck Lake and the other is Buck Lakes.
NY7377	2009 QG		Butthill Sike (Kielder Mires SSSI unit 18)
NY7772	2009 QG		Bellcrag Flow (Kielder Mires SSSI unit 25)
NY728783 NY728787	1988 GS	1996 GS	Gowany Knowe Moss (Kielder Mires SSSI unit 17)
NY6868	c. 1972 DHa	1988 GS	Outer Dodd Moor
NY686824	1988 AJR		Robin's Knowe
NY5991	1964 HM	1967 GS	Buck Lakes

*Carex magellanica* Lam.

## Tall Bog-sedge

Native

Near threatened; locally scarce

Not uncommon in the border mires, but never much at any locality. It requires very wet conditions in sphagnum peat bogs and has suffered from the drainage of bogs for forestry. However, even where the bogs are not drained they are encroached upon by self-sown Sitka Spruce.

NY680704 NY677702	1964 GS	2010 JO	The Wou (Kielder Mires SSSI unit 30). JO found 17 plants in 2010 but suggest there may be more.
NY706862 NY707861 NY707860	1968 GS	2010 JO, AJR, JBo & QG	Falstone Moss (NWTR, Kielder Mires SSSI unit 15). In 2010 occupying about 10m × 4m of the wettest part of the bog. 22 stems were counted in 2m <sup>2</sup> of the population and it was estimated that there were 60–100 flowering stems in total. The site is at risk of drying out and being invaded by Sitka Spruce.
NY691945	1983 GS	2010 CI	Buck Lake Sike (Kielderhead & Emblehope Moors SSSI)
NY707715 NY7072	1983 GS	2007 WG	Hummel Knowe Moss (Kielder Mires SSSI unit 26). About 25 plants in 2007.
NY7377 NY7477	1988 GS	2005 EM	The Lakes Butthill Sike (Kielder Mires SSSI unit 18). 20+ plants in 2005.
NY6383	1969 GS	2005 GS <i>i</i>	Near pond on The Rigg. In 2005 there were at least 10 plants, but notes on the records suggest there were originally many more at this location.

NY6979 NY6878	1961 GS	1994 GS	Coom Rigg Moss (Kielder Mires SSSI unit 12).
NY7679	1994 GS		Blackaburn Lough
NY7277	1983 GS		Felecia Moss (Kielder Mires SSSI unit 12)
NY8066	1840 JT	1978 GS	Muckle Moss SSSI (NNR)
NZ0095	1957 GS	1972 GS	Chartners Lough
NY7075	1965 GS	1968 GS	Nameless Sike (Lampert Mosses SSSI)

*Carex maritima* Gunnerus

Native

Last seen c. 1950.

## Curved Sedge

Regionally extinct; locally extinct

*Carex muricata* subsp. *pairae* (F.W.Schultz) Čelak.

Native

## Prickly Sedge

Locally rare

NY9565 NY942652	1969 GS	2012 QG	Near Anick
NY9174	2006 CI, LS & KC	2009 AJR	Gunnerton Crag (Gunnerton Nick SSSI)
NY9476	1963 GS	1991 GS	Colwell

*Carex pauciflora* Lightf.

Native

Northumberland has a significant proportion of the English sites, though it is relatively common in Scotland.

## Few-flowered Sedge

Near threatened; locally scarce

NY679791	2012 PB		Muckles Samuel's Moss (Kielder Mires SSSI unit 10)
NY651770	2008 CO & JO		Bog south of Windy Hill (Kielder Mires SSSI unit 8)
NY775792	1994 GS		Pundershaw Moss (Kielder Mires SSSI unit 16)
NY714748	1992 GS	1994 GS	Haining Head Moss (Kielder Mires SSSI unit 22)
NY745737	1993 GS		Grains Head Moss (Kielder Mires SSSI unit 23)
NY76NE	1803 NJW	1981 GS	Hotbank Moss (Roman Wall Loughs SSSI)
NY967953	1974 GS		South of Darden Pike (Simonside Hills SSSI)

*Carex spicata* Huds.

Native

Apparently, this species has recently increased on derelict industrial sites around Newcastle.

## Spiked Sedge

Locally scarce

NY943651	2013 WG		Oakwood.
NZ214717	2000 WG	2007 AY & GY	Havannah LNR (SNCI)
NZ347663	2002 AY & GY		Derelict land up-river, North Sea Ferry-terminal. Probably destroyed when a car park was built on the site, however many similar areas are adjacent to this site.
NZ259647	1999 QG		Wasteland on Portland Road, Newcastle.
NY923727	1973 MB	1991 MB	Haughton Castle

*Carex oederi* Retz.

## Small-fruited Yellow-sedge

Native

Locally rare

NY965763 NY966763	1999 JY	2013 AJR	Hallington Reservoir, north shore.
NZ0668	1973 GS		Great Northern Reservoir

*Carex acuta* × *nigra*

Native

Locally rare

NZ061726	2011 JA & AH		How Burn
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*Carex* × *boenninghausiana* Weihe*C. paniculata* × *C. remota*

Native

Locally rare

NY771690	2010 AJR		Caw Lough (Roman Wall Loughs SSSI)
NT80SE	1996 GS		Ramsey's Burn SSSI
NZ225923	1980 GS		Ulgham

*Carex* × *fulva* Gooden.*C. hostiana* × *C. lepidocarpa*

Native

Locally rare

NY7776	2010 JO		White Hill
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*Eleocharis acicularis* (L.) Roem. & Schult.

## Needle Spike-rush

Native

Near threatened; locally rare

NY975770 NY976769	1984 GS	2013 AJR	Hallington Reservoirs
NT733036 NT747028	1972 GS	2011 QG	Catcleugh Reservoir. A small patch, at most 1m <sup>2</sup> (QG 2011).
NY933780 NY9377 NY9478	1972 GS	2009 CO & JO	Colt Crag Reservoir
NZ070585	1984 GS		Great Northern Reservoir

*Eleocharis mamillata* subsp. *austriaca* (Hayek) Strandh.

## Northern Spike-rush

Native

Locally scarce

NY640910 NY642909	2006 CI	2010 QG	Bakethin Reservoir (NWTR). The original site near the slipway has almost disappeared, but a larger patch still exists near by mixed with <i>E. palustris</i> .
NY604864 NY68NW	1969 GS	1989 GS	Lewis Burn
NY663984 NY657991	1970 GS	1990 GS	Scaup Burn
NY649995	1962 GS	1988 GS	Along Kielder Burn
NY649836	1990 GS		Humble Burn
NY753780	1988 GS		Blackie Burn, old pond
NY675773	1977 GS		North bank of River Irthing, between Churnsike & Whitehill. Looked for in 2012 but not found (AJR).

NT732035 NT732038	1972 GS		Catcleugh Reservoir, margins.
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*Eleocharis multicaulis* (Sm.) Desv.

Many-stalked Spike-rush

Native

Locally extinct

It perhaps grew at Prestwick Carr until the 19<sup>th</sup> century.*Eleocharis uniglumis* (Link) Schult.

Slender Spike-rush

Native

Locally rare (data deficient)

In 2011 AJR visited the Wileysike House and Small Burn sites. He was unable to confirm the presence of *E. uniglumis*, however, at Wileysike some of the site was accessible and at Small Burn a perplexing *Eleocharis* was found with some characters of *E. uniglumis*. Though he concluded, it was probably a form of *E. palustris*. This species needs further research.

Approx. NZ3188	1985 GS		Newbiggin Moor
NY666711	1974 GS		near Wileysike House
approx. NY6771	1974 GS		Rotheryhaugh
NY98SE	1972 GS		Small Burn

*Eleogiton fluitans* (L.) Link

Floating Club-rush

Native

Locally extinct

NY7378	1971 AL & MJH		In a pool by a forest road near Gowany Knowe Moss (Kielder Mires SSSI unit 17). "...no longer there" Swan (1993).
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*Rhynchospora alba* (L.) Vahl

White Beak-sedge

Native

Near threatened; locally rare

NY758673 NY760673 NY760674 NY763674 NY765674	1974 DHa	2012 AJR	Hotbank Moss (Roman Wall Loughs SSSI)
NY7174	1965 GS	2012 JO	Haining Head Moss (Kielder Mires SSSI unit 22)
NY7071 NY7072	1968 AL	2007 WG	Hummel Knowe Moss (Kielder Mires SSSI unit 26). "10,000 plants in 30m square area" AJR.

*Schoenus nigricans* L.

Black Bog-rush

Native

Locally rare

NY957977	1974 GS	2012 MR	Grasslees LNR & NWTR (Simonside Hills SSSI). The largest patch is approximately 10 m long × 3.5 m but with approx 50 tufts (MR).
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## Poaceae

*Agrostis gigantea* Roth

Black Bent

Native

Locally data deficient

Almost certainly under-recorded and misidentified and needs some targeted work to identify its true status.

NY863683	2014 WG		Low Stonecroft Farm
NZ0369	2013 QG		south of Matfen



NZ269836	2012 AJR & NW		Sleekburn
NY9875	2011 AJR		Hallington
NT9502	2011 AJR		Holystone
NZ1280	2003 QG		East Whiteside Bridge area
NZ0963	1995 RF		Prudhoe Castle
NZ3166	1991 NTBC		Willington Gut
NZ3067	1987 NWT		Wallsend Dene LNR
NZ15NW	1979 GS		Broad Oak Farm
NZ201954	1977 GS		West Forest

*Apera spica-venti* (L.) P.Beauv.

## Loose Silky-bent

Colonist

Nationally near threatened; locally rare

Probably only ever casual.

NZ2373	2002 QG		Derelict land up-river from North Sea Ferry-terminal. This site has been built on since.
NZ3466	1990 GS		Brenkley Colliery Plantation

*Brachypodium pinnatum* (L.) P.Beauv.

## Heath False-brome

Colonist

Locally rare (data deficient)

In addition to the listed sites, there are several uncorroborated sites from the 1990s. Most old sites are either from quarries or near old railways and this species is at its northernmost limits in Britain.

NY988754 NY989754	1978 GS	2011 AJR	Near Hallington. There are two large patches, each about 10m long, probably an introduction with seed mixtures.
NY7287	1989 GS		Falstone, near old railway
NY862633	1977 GS		Old railway near Elrington

*Bromopsis benekenii* (Lange) Holub

## Lesser Hairy-brome

Native

Nationally scarce; locally rare

Perhaps overlooked elsewhere in the area, but this is the only known site in Northumberland and Durham.

NY798629	2001 GS		Allenbanks, Raven Crag
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*Bromus commutatus* Schrad.

## Meadow Brome

Native

Locally extinct

There are no accurately localised or dated records and those records that do exist are from the 19<sup>th</sup> century. It has perhaps been overlooked as it is common in southern England and one would expect it to crop up occasionally as a seed contaminant.

*Bromus hordeaceus* subsp. *thominei* (Hardouin) Braun-Blanq.

## Lesser Soft-brome

Native

Nationally scarce; locally extinct

Recorded from the sand dunes in Blyth in 1967, but not recorded since. This subspecies is a rather easily overlooked and it may have been overlooked.

*Bromus secalinus* L.

## Rye Brome

Colonist

Near threatened; locally scarce

Until recently, it had not been seen for a long time.

NZ234729 NZ232731	2013 QG		Brunswick Village. Apparently, established as a weed of agriculture.
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NY640911	2008 AJR		Bakethin Reservoir (NWTR)
NY6391	2008 AJR		Kielder, near car-park.
NZ348661	2002 AY & GY		Derelict land up-river from the North Sea Ferry-terminal. The site has since been built on.
NY843646	2000 NS		Haydon Bridge

*Calamagrostis canescens* (F.H.Wigg.) Roth

## Purple Small-reed

Native

Locally scarce

NY691591	2012 AJR & NW		Coanwood Fen, a large population.
NY6977	2010 JO		Little Gowany Knowe. A large patch at least 5m by 20m.
NY763694 NY766698 NY768689	2010 SH		Greenlee Lough NNR & Caw Lough (Roman Wall Loughs SSSI). "abundant over quarter of a hectare".
NY631927 NY632927 NY632926	2002 GS	2008 AJR	Kielder
NY686891	2001 GSi		North side of Kielder Water, near to Wind Hill.

*Catabrosa aquatica* (L.) P.Beauv.

## Whorl-grass

Native

Vulnerable; locally scarce

NU258046 NU259046	1990 GS	2014 AJR	Small stream near to Gloster Hill
NY813845	2013 NW & AJR		Hesleyside
NY813683	2009 QG		A small pond near Beamwham. Covering the whole surface of the dried out pond.
NZ080773	1998 GS		Jock's Well, near Belsay
NU20SE	1990 GS		A small stream near Amble
NZ38NW	1983 GS		Newbiggin-by-the-Sea

*Catapodium maritimum* (L.) C.E.Hubb.

## Sea Fern-grass

Native

Locally scarce

NZ325778 NZ325779 NZ320790 NZ320791	2005 AY & GY	2013 AY & GY	A193 roadside verge, north of Astley Arms, Seaton Sluice.
NZ374692 NZ371693 NZ371694	1984 GS	2014 AY, GY & BH	Tynemouth pier, growing well for 60m by the side of path, the best we have ever seen it (GY).
NZ319881 NZ319880 NZ318880 NZ317879	1985 GS	2011 AY & GY	Newbiggin-by-the-Sea, Newbiggin Point. In short turf at the top of the cliffs and behind the sea wall.

NZ320818	1983 AWD	2006 NWT	North Blyth
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*Elytrigia atherica* (Link) Kerguelen

Sea Couch

Native

Locally scarce

*Elytrigia atherica* can be confused with its hybrids *Elytrigia* × *acuta* (*E. atherica* × *juncea*) and *Elytrigia* × *drucei* (*E. repens* × *atherica*). The following records are considered reliable, but the presence of hybrids should be considered. However, *Elytrigia* × *drucei* has not been recorded in Northumberland.

NZ314667 NZ313668	1987 NWT	2001 JD	Willington Gut
NZ3091	2002 GS		South of Cresswell (SSSI)
NU2604	2002 GS		The Braid
NZ2797	2002 GS		Near mouth of Chevington Burn (Northumberland Shore SSSI).

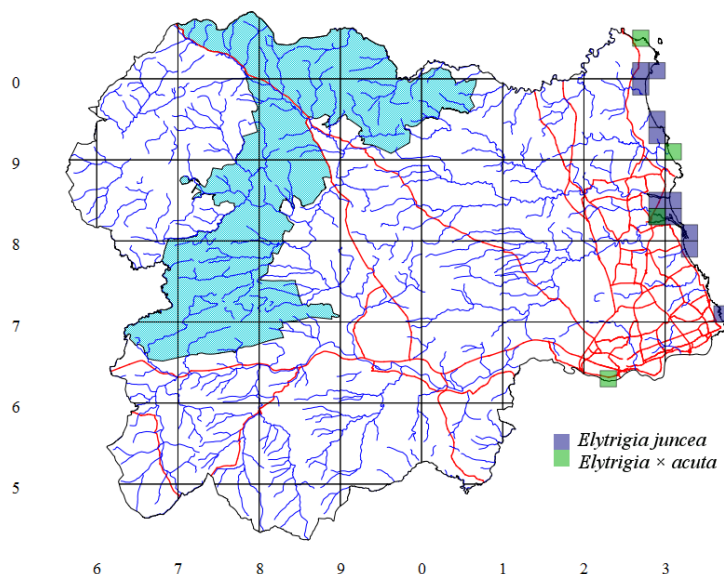
*Elytrigia juncea* (L.) Nevski

Native

## Sand Couch

Data deficient

*Elytrigia juncea* is frequently confused with the hybrid *E. × acuta* (*E. atherica* × *E. juncea*). Some of the recent records are considered unreliable. In addition, both the hybrid and *E. juncea* are probably under-recorded. It is expected that one or other of these taxa occur along much of the coastline. The following map shows all records since 1987. Blue squares represent records of *E. juncea* and green squares are of *E. × acuta*.

*Festuca altissima* All.

Native

## Wood Fescue

Locally scarce

NY948595	2014 AJR & NW		Ordley, Eleven plants
NY803607	2013 AM		Harsondale Cleugh
NY799595 NY802598 NY802599 NY803596 NY804596	2009 AJR	2013 GY	Staward Peel Wood near Haltwhistle, a total of 525 plants. . North of Cupola Bridge (Stawardpeel Woods SSSI).
NY634666 NY635678 NY638678	2008 AY, GY & AJR	2011 BH & GY	Along the banks of the River Irthing and its tributaries in scattered locations (Irthing Gorge SSSI). The number of plants has not been counted at each location, but there were more than 35 plants in 2010. 52 flowering stems in 2011.
NY798629 to NY798633	1974 GS	2011 AJR	Allenbanks. 48 plants in 2011.
NY918613	1975 GS	2010 AJR	West Dipton Burn. 11 plants in 2010.
NY697496 NY695496	2000 AJR	2009 AJR	River South Tyne, under footbridge at Underbank.
NY781562	1969 GS	2009 AJR	Monk Wood SSSI.
NY8485 NY8484	1972 GS	2009 GY & AJR	Hareshaw Dene SSSI. 22+ plants in 2009 (AJR), 24 flowering stems in 2010 (GY).
NY960624	2009 AJR		Devil's Water. 50+ plants.

NZ216859 NZ214860	1980 GS	2009 AJR	Along the River Wansbeck from Northstead Banks to Morpeth. Three plants in 2009.
NY789620 NY792618	1969 GS	2009 WG	Kingswood Burn. Twelve plants in 2009.
NZ0549	1967 GS	1979 GS	Northumberland side of River Derwent (Derwent Gorge and Muggleswick Woods NNR & SSSI). Looked for in 2009 without success (AJR).

*Festuca arenaria* Osbeck

## Rush-leaved Fescue

Native

Locally rare

This species is easily overlooked and requires expert determination to separate it from *F. rubra*. It may be more common than the number of records suggests.

NZ272980	2002 GS		Near mouth of Chevington Burn (Northumberland Shore SSSI)
NZ3189	1996 GS		Newbiggin-by-the-Sea

*Festuca rubra* subsp. *junceae* (Hack.) K. Riekt.

Native

Locally rare

NZ033922	2010 WG		Greenleighton Quarry SSSI
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*Festuca vivipara* (L.) Sm.

## Viviparous Fescue

Native

Locally rare

NY698478 NY696477	1969 GS	2011 AJR	Gilderdale Burn. Only a little growing in rock crevices.
NY84NW	1975 GS		Black Hill (Allendale Moors SSSI).

*Glyceria notata* Chevall.

## Plicate Sweet-grass

Native

Data deficient

Swan (1993) wrote that the distribution of this species was “Widespread and occasional”. However, recent records have been few. Either there has been a decline in its abundance or it is being overlooked.

NZ181773	2007 JD		Pont Ends oxbow
NZ2588	2006 JD		Potland Burn
NZ1994	2006 JD		Earsdon Burn at Causey Park
NZ1084	2006 JD		Pow Burn/River Wansbeck

*Hierochloe odorata* (L.) P.Beauv.

## Holy-grass

Native

Vulnerable; locally rare

Refer to Braithwaite (2005) for a full account of this species in Northumberland.

NY919730 NY919731 NY917730	2004 MB	2005 MH	River North Tyne, near Haughton Castle. The only English site.
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*Hordelymus europaeus* (L.) Jess. ex Harz

## Wood Barley

Native

Locally rare

NY799592 NY799593 NY799594 NY799595	1966 OG	2013 BH & GY	North of Cupola Bridge on the River East Allen (Stawardpeel Woods SSSI). Estimated to be at least 300 plants in 2007; 413 plants counted in 2013. Probably, the largest population in the county.
NZ076644	1971 GS	2009 AJR	Whittle Dene.
NZ2186	1868 MSi	1962 GS	Chapel Wood.

*Lolium temulentum* (L.) Desv.

## Darnel

Casual

Critically Endangered; locally extinct

This species is mentioned in Baker and Tate (1868) as growing in Newcastle, but without further details. No other observations seem to exist, but it is mentioned due to its national status.

*Melica nutans* L.

## Mountain Melick

Native

Vulnerable; locally scarce

Apparently declining, however, targeted searches of the old sites might rediscover it in some of them. It lives in shady places near streams in the upland. These sites are not under any particular threat, but as far as can be told from the records, there are not many plants at each site.

NY800591 NY800590 NY802590	1974 GS	2013 AY & GY	Cupola Bridge (Stawardpeel Woods SSSI) , more than 100 plants in 2007 (AJR).
NY9460	2009 JBo		Letah Wood
NY774907	1958 GS	2008 QG	Gilliehill Clints, one plant in 2008 (QG)
NY96SW	1849 TN	1992 GS	West Dipton Burn
NY634682	1831 NJW	1992 SM	Irthing Gorge Wood
NY941492	1966 GS	1981 GS	Beldon Burn
NY76SE	1974 AJR		Briarwood Banks
NT90SW	1973 GS		Yardhope
NY88SE	1966 GS	1969 GS	Rede Bridge
NZ04NE	1966 GS		Derwent near Crooked Oak
NY730499	1965 GS		Ayle Burn

*Mibora minima* (L.) Desv.

## Early Sand-grass

Colonist

Near threatened; locally extinct

Known from Seaton Sluice in the 1930s.

*Parapholis strigosa* (Dumort.) C.E.Hubb.

## Hard-grass

Native

Locally rare

NZ298853	2012 AJR & NW		Sandy Bay
NZ2798	1988 CD		Chibburn Mouth (Druridge Bay country park & Hadston Links SSSI).
NZ334764 NZ335761	1999 AY & GY	2009 WG	In the saltmarshes near the mouth of Holywell Dene LNR.

*Phleum arenarium* L.

## Sand Cat's-tail

Native

Near threatened; locally rare

NZ37NW	1961 GS	c. 2004 AJR	Seaton Sluice dunes LNR. Searched for in 2011 but not found.
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*Poa angustifolia* L.

## Narrow-leaved Meadow-grass

Native

Locally rare (data deficient)

Very little is known about this species. It is under-recorded, but it is also rare.

NY96SE	1983 GS		Railway near to Farnley
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*Poa compressa* L.

## Flattened Meadow-grass

Native

Locally scarce

Its native status is rather doubtful though both Winch (1831) and Baker & Tate (1868) knew it in the county. However, the scattered sites in ruderal habitats would suggest many sites are introductions. It is easily overlooked and is therefore under-recorded. The records from tracks in Kielder forest are obviously recent colonisations, as no suitable habitat existed before the construction of the tracks.

NY652838	2013 QG		On a forest track, near Humble Burn
NY722901	2011 QG		The Cross. Scattered culms covering perhaps 10m <sup>2</sup> on either side of a forest track
NY938582	2003 AJR		South of Juniper
NY7880	1994 GSi		Pundershaw
NZ075617 NZ075618	1985 GS		Mickley St George, on wall
NY824635	1977 GS		Lees

*Puccinellia rupestris* (With.) Fernald & Weath.

## Stiff Saltmarsh-grass

Native?

Locally extinct

Once known near Cullercoats and on the Tyne ballast hills, but not seen since the 19<sup>th</sup> century and only doubtfully native.

*Sesleria caerulea* (L.) Ard.

## Blue Moor-grass

Native

Locally rare

NY951924 NY952926 NY953921 NY953922 NY953923 NY953924 NY953925 NY954921 NY955928	1964 GS	2013 BH & GY	Mill Burn (NWTR) NY953921 & NY954921 are outside the reserve.
NY967931	1967 GS	1989 GS	A small stream near Eastnook (Mill & Whiskershiel Burns SSSI).

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