# The Rare and Scarce Plants of South Northumberland 2020

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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. This edition is being published only four years after the 2016 edition. The drive for up-to-date coverage for the BSBI 2020 Atlas has resulted in many new records and renewed assessments of the status of scarce plants in the county, and has stimulated production of this new version (AJR & GY).

#### **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). Names used follow Stace, C.A. (2019), 'New Flora of the British Isles', 4<sup>th</sup> edition.

#### **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  $100m \times 100m$  Ordnance Survey grid reference or better. 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  $(1km \times 1km)$  or tetrad  $(2km \times 2km)$ . Grid references for tetrads use the

DINTY format, where the letter refers to one of the 25 tetrads in a hectad ( $10 \text{km} \times 10 \text{km}$ ) (e.g. NY98i). Some records have only been located within a pentad ( $5 \text{km} \times 5 \text{km}$ ). 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 <a href="mailto:Hightreesgarden@btinternet.com">Hightreesgarden@btinternet.com</a>, or John Richards, High Trees, South Park, Hexham NE46 1BT.

# **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 giganteaGlyceria notataRosa caesiaBetula pubescensGymnadenia sppRanunculus fluitansssp.tortuosaPoa angustifoliaStellaria neglectaCallitriche hamulataPoa compressaCallitriche platycarpaRanunculus peltatus

# **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.

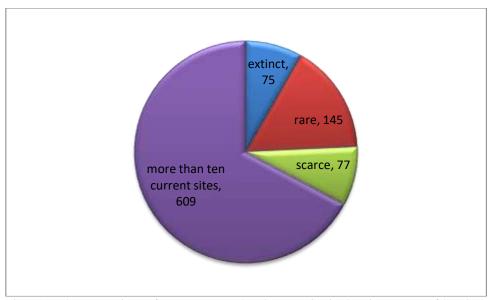


Figure 1. The proportions of scarce, rare and extinct species in the vice county of South Northumberland. Based on an estimated 906 native and archaeophyte species that have been recorded.

# **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. *Drymochloa sylvatica* (Wood Fescue), *Gagea lutea* (Yellow Star-of-Bethlehem), *Hordelymus europaeus* (Wood Barley), *Neottia nidus-avis* (Bird's-nest Orchid), *Ribes spicatum* (Downy Current) and *Ervilla 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 *Carex maritima* (Curved Sedge), *Centaurium 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 habit is important for *Crepis mollis*, particularly in Allendale which may hold 70% of the nation's plants, *Alchemilla* spp. (Lady's Mantles), *Euphrasia* spp. (Eyebrights), orchids, particularly *Platanthera chlorantha* (Greater Butterfly-orchid) and *Pseudorchis albida* (Small-white Orchid), though the latter is 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 special 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* (Longstalked 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 native site for *Filipendula vulgaris* (Dropwort) and one of the last sites for *Viola canina* (Heath Dog-violet), *Orobanche rapum-genistae* (Greater Broomrape), *Campanula glomerata* (Clustered Bellflower) and *Blysmus compressus* (Flat-sedge).

There are current attempts to reverse eutrophication-driven seral loss of the shallow-soil whin habitat under the 'Magnificent Meadows' Plantlife project.

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 , *Betula nana* (Dwarf Birch), *Diphasiastrum x 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 rare plants such as *Myosotis stolonifera* (Pale Forget-me-not) and *Epilobium alsinifolium* (Chickweed Willowherb) only survive in small quantities, because many upland areas have become lush and overgrown in recent years, presumably due to increased deposition of nitrogen salts in rainfall. Consequently, *Antennaria dioica* (Mountain Everlasting) has apparently become extinct, and *Sedum villosum* (Hairy Stonecrop) and *Gentianella campestris* (Field Gentian) have been restricted to single localities. There have also 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* (Longstalked 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 occured. 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), *Persicaria mitis* (Tasteless Water-pepper), *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  $Nuphar \times spenneriana$ .

#### **Metallophytes**

Another habitat of national significance is the metallophyte floras of the South Tyne and West Allen valleys. These habitats have resulted from the deposition of metal-rich mining spoil by periodic floods during the main periods of lead and zinc mining, chiefly in the nineteenth century. The county has a large proportion of the national populations of *Noccaea caerulescens* (Alpine Penny-cress), *Sabulina 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). However, over the last 50 years, the metal toxicity of these sites has ameliorated as they become eutrophicated. 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 colonised by birches.

All the grassland metalliferous species require nutrient-poor conditions and any enrichment of the soil will result in their loss from a site. Recently, management regimes under the 'Magnificent Meadows' Plantlife project have attempted to reverse seral eutrophication at several localities.

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.

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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** 

Nativ

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.

Chara globularis Thuill.

Fragile Stonewort

Native			Locally rare
NZ273724	2003 PN	Burradon Pond	

Chara hispida L.

**Bristly Stonewort** 

Native		Locally rare
NU2700	2008 JSi	Druridge Bay Country Park
NY778730	2007 JO	Little Bellcrags, 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 Crags 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. Native Least Stonewort

Nationally near threatened; locally rare

NY770696	2007 ENSIS	Greenlee Lough NNR (Roman Wall Loughs SSSI).	
		Only the 2nd record for England.	

### Nitella flexilis (L.) C.Agardh

**Smooth Stonewort** 

Nationally scarce; locally scarce Native

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

#### Nitella opaca (Bruzelius) C.Agardh

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

Nitella translucens (Pers.) C.Agardh Translucent Stonewort Native NZ110928 1992 PH & CP Rayburn Lake SNCI

# Lycopodiaceae

Diphasiastrum alpinum (L.) Holub Native

Alpine Clubmoss Locally vulnerable

Locally rare

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.

NY71264.98 330	2014 BBS	V	Blakehope Nick Quarry.
NZ024990 NZ024989 NZ022991 NZ025992	1991 GS	2014 WG	Simonside (partly within Simonside Hills SSSI)
NY812539 NY806536	1974 MEB	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	2015 AJR	Allendale Common (Allendale Moors SSSI). 36 plants in 2011, increased to several hundred plants in 2015 (AJR).
NY944542 NY952547 NY952548 NY953548 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 Smooring 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 Crags
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

# $Diphasiastrum \ x \ issleri \ (Rouy) \ Holub$

Issler's Clubmoss

Native

Critically endangered; locally scarce

These plants are currently considered to represent stabilised hybrids between *D. alpinum* and *D. complanatum*; the latter species may survive in north-east Scotland. Confusion is possible with shaded shoots of *D. alpinum*.

NY812539	2012 LF & GY	2014 AJR	Dryburn Moor (Allendale Moors SSSI).
NY827446	2011 GY	2015 AJR	Allendale Common (Allendale Moors SSSI). At least one plant, perhaps four (AJR).
NY63936.9 9678	1988 GS	2019 BB	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 EU Habitats Directive. Included here due to its international status and though it is not common, it is sufficiently abundant not to be threatened locally. Indeed, it has probably increased along forestry tracks.

### Isoetaceae

Isoetes lacustris L.

Quillwort

Native

Native

Locally extinct

*Isoetes lacustris* grew at Prestwick Carr during the 19<sup>th</sup> century before the draining of the Carr. It was also reported in Crag Lough by Winch (1831).

# Equisetaceae

Equisetum pratense Ehrh.

Shady Horsetail

Near threatened; locally rare

NU196007	1965 CNP	2013 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.

Equisetum variegatum Schleich. ex. F.Weber & D.Mohr

Variegated Horsetail

Native

Locally scarce

It grows by upland steams under the shade of trees. 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, particularly in the summer once the surrounding vegetation has grown.

NY640910 NY640911	2007 GSi, AY & GY	2019 AJR	Bakethin Reservoir, slipway (NWTR). This site streached over 80 m and encompassed more than 1000 stems, but is now severely curtailed due to shading from shrubs.
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 NY6351.66 92 NY6348.66 88	Circa 1831 JT	2016 GY	River Irthing, north of Gilsland (SSSI). Three colonies (2010). 2000+ stems. 100 stems upriver.
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

Equisetum × trachyodon A.Braun

Mackay's Horsetail Locally rare

One of only a handful of sites in England.

NY753823 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. Almost

certainly introduced at other sites in or near ornamental gardens. 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. Native

Tunbridge Filmy-fern Locally Scarce

1987 MOH	2014 QG	Bull Crag
2012 PB	2013 PB	Paddaburn Crags
2012 PB		Johnny's Crags
2012 PB		Jamie's Lodge
2011 FJR	2012 JA & GY	Spy Crags (part of Lampert Mosses SSSI).
		Eleven groups of plants scattered along the length of these crags.
		lengui of these crags.
1990 GS	2012 WG	Roughside Moor
	2012 PB  2012 PB  2012 PB  2011 FJR	2012 PB 2013 PB  2012 PB  2012 PB  2012 PB  2012 JA & GY

Hymenophyllum wilsonii Hook.

Wilson's Filmy-fern Locally scarce.

Native

At the eastern edge of its British distribution.

At the custom edge of its British distribution.				
NY615838	1985 CMO	2015 WG Gill Pike (Kielder Mires SSSI unit 5, NNR)		
NT740021	1929 RBC	2014 RP Cave to the east of Chattlehope Crag. "4 patches cm, 130×20 cm, 100×30 cm, 30×30 cm" (GY, 20		
NY951957	1985 JSt	2008 BH High Cove, Carrow Rigg. "Approximately 2 squ metres in area." GY (2008).		
NY687802	1995 APo	2007 WG	Seven Linns on Chirdon Burn. "A very small patch at Seven Linns (appox. 10×10 cm)" GY (2007).	

*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	2015 AJR	Hareshaw Linn (SSSI)

NY688758	2011 FJR		Spy Crags (part of Lampert Mosses SSSI).
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# Marsileaceae

Pilularia globulifera L.

Pillwort

Native

Colonist

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

Locally rare

The species is relatively common in the south and west of the country. It has colonized South Northumberland on morter walls and has probably benefited from a decline in air pollution and a warming climate.

NY973577	2014 JBo	2017 JBo	Slaley Post Office. Noticeably more abundant on the north side of the mortared stone wall.
NY985620	2010 JA & CI	2016 GY	Temperley Grange. Six clumps growing on a wall.
NZ348686 NZ348687	2006 AY & GY	2019 AY & GY	North Shields. 23 plants in 2006; 42 in 2011; 39 in 2012 and 51 in 2013, 46 plants in 2014 and 62 plants in 2019.

Asplenium marinum L.

Sea Spleenwort

Native		Locally rare
NZ343761	1868 BT	 Crag Point (Northumberland Shore SSSI). 46 plants in 2001.

Asplenium septentrionale (L.) Hoffm.

Forked Spleenwort

Native

Vulnerable; locally rare

Threatened by collectors

NY929496	1892 WF	2016 Ro	Beldon Shield mine (Hexhamshire Moors SSSI). Twelve
		& J Bo	plants in 2007 (WG) & 2010 (AJR), some increase 2016

Asplenium trichomanes subsp. pachyrachis (Christ) Lovis & Reichst.

Lobed Maidenhair Spleenwort

Native			Near threatened; locally rare
NY841854	1992 Л	2015 AJR	Hareshaw Dene SSSI. About 15 plants in 2010. Over 250 plants counted in 2012.

Asplenium viride Huds.

Green Spleenwort

Native

Locally vulnerable

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.

NY842855	1925 GWT	2015 AJR	Hareshaw Dene SSSI.
NY841853			
NY841854			
NY842846			

	1		
NY635689	c. 1819 NJW	2019 AJR	River Irthing, near Wardew (Irthing Gorge
NY635692			SSSI)
NY637693			
NY638695			
NY633695			
NY640696			
NY641696			
NY644695			
NY955928	1964 GS	2013 BH & GY	Mill Burn, Whiskershiel (NWTR). The
NY953925			population at NY953925 was looked for in 2013, but not found (BH & GY), but on the
NY954921			same occasion, two plants were found at
			NY954921 outside the reserve.
NY717661	1980 HSJL &	2012 JBo	near the Milecastle Inn
NY720663	SP		
NY639501	1975 GS	2012 AL	Gelt Burn
NY639502			
NY778482	1964 GS	2010 AJR	Yew Crag on Wellhope Burn (Allendale Moors
NY778483			SSSI). Six plants in 2010.
NY779482			
NY926834	2008 KC, AY &		Little Wanney Crag
	GY		
NY784672	1996 HSJL &	Not found by	East Crindledykes Quarry (Roman Wall
	SP	WG, 2014.	Escarpments, geological SSSI, NWTR)
NY752703	1995 SPr		Chatley Crags
NY64NE	1966 GS	1994 GS	Highshield Crags, Gilderdale
NY685668	1980 HSJL &	1992 SM	East of Arthur's Well & Walltown (Allolee To
NY681667	SP		Walltown SSSI)
NY687668			
NT798055	1939 RCr	1987 GS	Cottonshope Burn
NT796053			•
NY679679	1980 HSJL &		Tipalt Burn below Low Tipalt (Tipalt Burn,
	SP		geological SSSI). Searched for in 2012 but not found (JBo).
NY7367	1980 HSJL & SP		Caw Gap (Roman Wall Escarpments, geological SSSI)
NY758676	1980 HSJL &		Milecastle 39 (Roman Wall Escarpments,
111750070	SP		geological SSSI)
L	1	L	

# Dryopteridaceae

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

Northern Buckler-Fern Locally rare

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

NY689756	2012 WG		Spy Crags
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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 Salix herbacea (AJR, 2010)

# Dryopteris oreades Fomin

Mountain Male-fern Locally scarce

Native	orecides I offini		Locally scarce
NY753675	2018 AJR		Steel Rigg
NY684668 NY686668	1967 GS	2014 AJR	Walltown
NY762676 NY758678	1986 KH	2012 AJR	Peel Crags & Highshield Crags
NY799699 NY806702 NY800700	1980 HSJL & SP	2011 AJR	Sewingshield Crags
NY87SE	2006 DH & TH		Low Teppermoor
NY929496	2002 AJR		Beldon Shield mine
NY84NW	1988 GS		Carr Shield
NY95NW	1988 GS		Steelcrags
NY95A	1987 AJR		Harwood Shield
NY786688 NY785688	1976 anon.	1980 HSJL & SP	Housesteads Crags north
NY75SE	1975 GS		Sandyford Sike
NY962813	1972 GS		Sweethope Crags
NY639533	1968 GS	1972 GS	Hazely Crags

 $\label{eq:continuous} Dryopteris \times ambroseae \ (\text{C.Presl}) \ \text{Fraser-Jenk.} \ \& \ \text{Jermy} \\ \text{Native}$ 

 $D. \ dilatata \times D. \ expansa$  Locally rare

NY69NW	1997 KT	Deadwater Fell (Kielderhead & Emblehope Moors SSSI).
		3331).

Polystichum setiferum (Forssk.) T. Moore ex Woyn.

Soft Shield-fern

Nativ

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.

NY771657	2018 EY		Low Fogrigg
NY766734	2015 QG		Shepherdshield. One plant in rocks at the side of a forest track.
NY939677	2014 NW & AJR		Fallowfield Dene. One plant.
NY938632	2016 AJR	2020 AJR	South Park, Hexham, self-sown.
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	2020 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	2002 JD		River Blyth, Bedlington
NZ2680			
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 Still has some 30 sites in the vice-county, with some sizeable populations, particularly in the Allendale and Holystone regions, but it has disappeared from some former sites and at the remaining sites it rarely

regenerates from seed. Now threatened by a newly described fungal disease Phytophthora austrocedri

Gresl. & E.M. Hansen (http://www.ndrs.org.uk/article.php?id=026002).

# Nymphaeaceae

Nuphar × spenneriana Gaudin Native 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 $19^{th}$ century, presumably from the site at Chartner's Lough. Approx. $2 \times 2$ m

Nymphaea alba L.

White Water-lily

Native & 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 Locally rare

Native Recently refound, this species was at one time thought to be locally extinct.

NZ311784	2013 AY & GY	Newsham South Farm, disused reservoir
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.

# **Papaveraceae**

Roemeria 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
NZ238855		Hall Farm east of Morpeth

Fumaria bastardii Boreau

Tall Ramping-fumitory

Native

Locally scarce but increasing

Swan (1993) called this species 'very rare', but it is being reported increasingly in greater Newcastle.

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	NZ255646	2019 GW	Shieldfield, Newcastle
	NZ362686	2019 GW	North Shields
	NY848486	2016 AJR	Spartylea, in 'amenity seed mix'
	NZ246669	2014 GW	Wallsend

#### Ranunculaceae

Helleborus foetidus L.

Stinking Hellebore

Native? and introduced

Locally rare

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

NY907663 NY908662	Circa 1831 AHa	2020 AJR	Bridge End. In 2010 there were probably more than 50 plants, but in 2020 only about 25.
NY907661			
NY912659			

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*.

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

vvcii sui veyeu i	ii tile 1980s, but fackling fecent fecords.				
NZ27310.99 730	2015 AJR		Druridge Bay Country Park		
NZ288940	1982 JL	2012 AJR	Cresswell ponds SSSI; not found 2015, 2016		
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. Looked for in 2015 but not found (AJR).

#### Grossulariaceae

Ribes spicatum E.Robson

Downy Currant

Native

Nationally scarce

More than 20 sites remain in the vice-county, often of persistent old stands. 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. Most reproduction is vegetative and evidence for establishment of new seedlings is rarely found. The county contains a significant proportion of British populations.

# Saxifragaceae

Micranthes stellaris (L.) Galasso, Banfi & Soldano

Starry Saxifrage 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	2012 BH & GY	2018 AJR	Coalcleugh, gorge S of road.
NY83254.44853	2015 WG		Carriers Way, flush N of path.
NY801449 NY807448	2012 BH & GY	2016 JBo RBo	Whetstone Mea, 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.
NY925496	1807 NJW	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), probably same as at NY801449.

# Saxifraga aizoides L.

Native

Yellow Saxifrage

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	2018 AJR	Near Wardrew on the River Irthing) (SSSI). In large numbers on cliffs along the River Irthing. Mostly
NY641696			from upstream of Crammel Linn, but it also grows
NY644695			downstream from there
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 tridactylites L. Native

Rue-leaved Saxifrage Locally rare Extinct from native habitats, but recently rediscovered as a colonist.

NY989635	2011 JBo	2015 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 had probably become extinct here before the transfer.
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.

NY9657	2019 JH		Highclear, Slaley
NY67N	2008 CO & JO		Windy Hill
NZ2163	2007 AY & GY		Benwell Nature Park
NY740787	1979 GS	1996 NB	Green Bothy
NY737780			
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, is monitored by Natural England and has been subject to management by NWT.

NY818456	1979 GS	2013 BH & GY	White Mere (Allendale Moors SSSI). Only one plant in fruit in 2013. Not seen in 2016 (NA).
NY9880	1805 NJW	2016 AJR	Great Bavington, exposed whin NW of farm (Bavington Crags SSSI). "becoming less common here and needs monitoring. Still occurs over an area of about 120 × 40 m. More than 2000 plants in 2016, most not flowering size. Colonising newly scraped areas.
NY7946	1974 GS	1983 GS	Carr Shield, Coalcleugh & Smallburns Moor. (Allendale Moors SSSI). Several sub-sites in this area. Probably extinct here.

# Haloragaceae

*Myriophyllum verticillatum* L. Native

Whorled Water-milfoil Near threatened; locally rare

NZ21543.71631	2018 LKo		Havannah SLCI, 2 <sup>nd</sup> largest pond
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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.

NZ272986	2015 GY		Hadston Links SSSI
NU2700 NZ273999	1962 GS	2015 AJR	Hadston Links SSSI
NZ323785 NZ325780 NZ326779 NZ326780 NZ327776 NZ328775 NZ328776 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).
NZ275969	1982 JL	1988 CD	Druridge Bay (Northumberland Shore SSSI)
NZ2894	1988 GR		Cresswell Dunes (Northumberland Shore SSSI)
NZ299855	1972 AJR		Sandy Bay
	1972 AJR		Beacon Point

Astragalus glycyphyllos L.

Wild Liquorice

Native Locally rare

NY90811.662 1769 JW 2019 JBo & Bridge End, near Warden. Increase to three large plants, both sides of path.

Ervilla sylvatica (L.)

Wood Vetch

Native Locally rare

There is no obvious explanation for the decline of this species. It lives in woods and denes, which in general, have lost fewer species than other habitats.

NZ2379	1974 GS	2015 LKo	Plessey Woods SNCI. About 140 plants scattered along the steep banks of the River Blyth.
NY790609 NY76SE	1959 GS	2014 AM	Kingswood Burn to Plankey
NT80NW	1987 GS		Ridlees Burn
NY874673	1978 JDS & TB		Settlingstones Burn. Looked for in 2012 but not found (AJR).
NY75SE	1975 GS		Blackett Bridge to Taylorburn
NU20SW	1971 GS	1973 GS	Morwick Banks
NY97SW	1974 GS		North bank of River North Tyne near Barrasford

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.

NY79267.66888	2018 RFr		Muckle Moss
NY875568 NY876568 NY878569 NY879569 NY887566 NY887567 NY887568 NY888565 NY888566 NY889570	2011 ЈВо	2019 JBo RBo	Whapweasel Burn (Hexhamshire Moors SSSI). 346 plants counted in 2013 (JBo).
NY787664 NY7766	1993 GS	2011 QG	Thorngrafton 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		Burntridge 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 Crags (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 Vulnerable: locally rare

Until 2019 only ever recorded at Seaton Sluice in 1911. It is considered native in Northumberland and Durham by Swan (1993) and Graham (1988). However, all its known sites are man-made and it is perhaps more likely to have be an introduction.

NZ	307899	2019 MW	South of Lynemouth Power Station in path.

# Trifolium fragiferum L.

Strawberry Clover

3 3 03	<b>-</b>
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	

#### Trifolium micranthum Viv.

Slender Trefoil

Native			Locally rare
NY982804 NY981805	2008 WG	2016AJR & NW	West of Great Bavington (Bavington Crags SSSI)
NY960805	2008 MM		Great Bavington

Trifolium scabrum L.

Rough Clover

Native

Native

Locally extinct

Last recorded in the 19th century.

# Trifolium striatum L.

**Knotted Clover** 

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	1860 NFC	2011 BH & GY	Gunnerton Crags (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. Native

Western Gorse 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. E bushes (2010, PB)	Eleven
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# Vicia lathyroides L.

Spring Vetch

Native			Locally scarce
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).
NU274002 NZ274999	1988 CD	2016 AJR	Hadston Links North SSSI, 20-25 in 2016.
NZ272986 272983	2016 AJR	2019 MW	East Chevington dunes, ca. 20
NY946763 NY945762 NY946760	1831 NJW	2016 AJR	Colwell. 100+

# Rosaceae

# Alchemilla acutiloba Opiz

Native

Starry Lady's-mantle Vulnerable; locally rare

NY957501 NY956503	1976 GS	2007 JO	Baybridge. In 2007 the recorder noted "a few plants surviving".
NY951550	2007 AJR		Ladycross Bank quarry (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		Locally extinct
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).

# Alchemilla glomerulans Buser

Clustered Lady's-mantle Endangered; locally rare

Native			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. In 2019, still in cultivation.
NT750030	2012 SH		Haugh grassland below Catcleugh.
NY668658	1981 FJR	2010 AH, MBr & LC	Greenhead

Alchemilla micans Buser

Shining Lady's-mantle

Native Endangered; locally scarce

			Endangered, rocarry searce
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	2016 AJR NW	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 2500 plants in 2016.
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

1 (6661 / 6				2
NY831552	2007 JO	2008 FC	Wooley Park	
NY832553				

# Filipendula vulgaris Moench

Dropwort

Native 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.

NU2823.0239	2019 DHu		Hauxley NR, presumed unrecorded introduction.
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

Locally rare, one surviving site

Apparently, close to extinction in the vice-county, with one recent discovery of a strong population. It has a western distribution in the British Isles and is declining nationally.

nas a western	has a western distribution in the British isles and is deciming harronary.					
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.			

NY966607	2016 R & J Bo	Dipton Forest. Spread over about 10 m of trackside.

Rosa arvensis Huds.

Field Rose

Probable introduction

Locally scarce

A southern rose with a very distinctive habit which has been introduced mainly in 'conservation plantings' and may have been overrecorded. Most records come outwith the 'botanical community'

NU2802	2013 BK	2018 FSa	Hauxley NR, probably planted
NZ3080	2007 JD		Delaval, Bede Academy site
NY917668	1969 GS		Nether Warden
NZ26	<1831 NJW		Elswick Dene

Rosa caesia subsp. caesia Sm.

Hairy Dog-rose

Native

Locally rare

		Boearry 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	2019 AJR	Williamston river shingle (NWTR, SSSI). A single tree,
			though a seedling was found in 2009, but has since
			disappeared (AJR).

# 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	2019 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	<1900	2012 TD	Seal Burn, Harbottle (NWTR). Rare at the site, which
NT937037			is within a conifer plantation.
NT936034			
NT936035			
NT941038			
NT940020	1769 JW	2011 RCR &	Holystone Burn (NWTR, SSSI). A large population
NT942021		MWR	of plants.
NT944021			
NT948017			
NT948016			
NT910035	1967 GS	1998 DW	Crane Moss (Harbottle Moss SSSI)
NT911034			
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. **Dwarf Birch** Critically endangered; locally rare Native

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

NY751721	2014 GSi		Wark Forest (Burlton et al, 2014)
NY694945	1973 ALH	BB 2019	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

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.

NY959640	2018 JLD		Sam's Island Plantation.
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NU2002	2018 FSa		Hauxley NR, probably planted.
NZ297801	2015 MR JA		Newsham, Blyth
NZ0521	2015 MR, JA		Stocksfield
NZ002633	2014 NW & AJR		Thornbrough Wood. One large bush, apparently native.
NZ054622	2012 AM		Riverbank of Tyne at Bywell Bridge
NZ0783.64 49	1976 GS	2017 WG	Whittle Dene. Four trees.
NY835642	2010 ЈВо		Haydon Bridge B6319. Six small saplings, apparently self-sown, though there are no mature trees nearby.
NY920662	2010 AJR	2019 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
NY9372	2016 AJR		Hedge, A6079 N of Chollerton.

# 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

In Northumberland this species is far north of its main range in southern England. In recent years it has become well established at Seaton Sluice and is spreading along the coast in both directions.

NZ3280	2019 GW MC PHa		South Beach, Blyth.
NZ37I	2018 PHa		Seaton Sluice to St Mary's.
NZ336767	2004 AY & GY	2019 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 Native?

Black-poplar Locally rare

**Dwarf Willow** 

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.
Native

Native		Locally rare
NY625975 1863 JHB	2019 BB	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.

Salix triandra L. Almond Willow

Native (archaeophyte) & hortal

Locally scarce

Like most willows, this species is under-recorded due to inexperience and misidentification. Although, there have been few recent records of the type subspecies, it may still exist at its former sites. An unidentified form or hybrid has been extensively planted in the SE of the county, and this is not reported here.

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

Whin and sand-dune grasslands. Has perhaps been overlooked.

NZ273984	2017 AJR		East Chevington, dune grassland.
NZ3083	2016 DB		Cambois, dunes N of car park
NY944763 NY953766	с. 1959 ЈНН	2016 AJR	Colwell. 50+. Two sublocalities
NY91495. 75107	1985 GS	2015 AJR NW	Gunnerton (Gunnerton Nick SSSI). On a ledge at the north-east end of the crag, less than 10 plants (2007, AJR).
NY905732	2007 WG		Riverhill Farm
NZ2799	1988 GR		Hadston Links SSSI
NU2700	1985 GS	1988 GR	Hadston Links SSSI
NZ2894	1982 ЛL	1988 GR	Hemscotthill Links
NZ2796	1982 JL	1988 GR	Druridge Links

NZ17SE	с. 1939 ЈНН	1987 GS	Prestwick Carr
NY9882	1985 GS		Northside

Viola reichenbachiana Jord. ex Boreau

Early Dog-violet

Locally scarce

At the northern limit of its range in the British Isles. Ancient oak woodland in the south of the county.

Hybridises extensively with *V. riviniana*.

NY79464.62 158	2017 AJR		Plankey Mill
NY80045.59 198	2017 AJR		Cupola
NY950662	2011 WG		Oakwood
NY904616	1996 AJR	2016 AJR	West Dipton Burn. 20+.
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

Native

Near threatened; locally vulnerable

This species is included due to its national status, it is scattered across the vice-county as a weed of agriculture and is perhaps under-recorded. However the number of records per decade has fallen abruptly in the last decade.

#### Linaceae

Linum radiola 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.

NY89123.727 51	2016 AJR, NW		'New Scroggs'. transplant site
NY917747 NY913749 NY914749 NY914750	1831 NJW	2016. AJR, NW.	Gunnerton Nick, SSSI. Five plants in 1980, one plant in 2007. More than 25 plants in 2016.
NY891727	1976 MB	2009 AJR	The Scroggs, SSSI. "20+ plants" (JSi 2007).

NY677666	1831 NJW	2016 AJR	Walltown SSSI. 120+ in 2008. 30 in 2016.
NY679665			
NY680666			
NY680665			
NY683665			
NY683664			
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.
NY686665	2016 AJR		Limestone quarry E of Walltown. 500++

# Lythraceae

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

Water-purslane Locally scarce

Locally				
NZ025525	2011 ЈВо		Derwent Reservoir. "literally millions" AJR. Known from the Durham side of the reservoir since 2008.	
NY942788 NY934779 NY924783 NY926783 NY936786 NY937779 NY938777 NY938777	2009 CO & JO	2016 BH & GY	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	2016 AJR	Pond at Shaftoe (SNCI). Also by small flush.	
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, possibly overlooked but probably declining. Found in woodland close to rivers and streams.

NY7959	2019 EM & RFr		Cupola
NY798635 NY797634	1963 GS	2015 BH & GY	Allen Banks
NY949592	2014 NW & AJR		Ordley
NY6851 NY65SE	1974 GS	2014 QG	Lintley, 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	
NY86NE	1971 GS		old railway near Glendue	
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	

# $Epilobium\ alsinifolium\ Vill.$

# Chickweed Willowherb

rative					
NY807448	2012 BH & GY	2013 BH & GY	Whetstone Mea, Coalcleugh Moor . Only a few plants.		
NY8312.45 74	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 $10 \times 1$ m.		
NY84NW	1989 AS		Near Middlehope Burn		

 $Epilobium \times haynaldianum \; \text{Hausskn}.$ 

 $Epilobium\ alsinifolium \times palustre$ 

Native

Locally rare

First confirmed English site.

NY807448	2012 BH &	2013 BH &	Whetstone Mea, Coalcleugh Moor. First confirmed
	GY	GY	English site.

# Epilobium lanceolatum Sebast. & Mauri

Spear-leaved Willowherb

Native (Archaed	ophyte)	Single recent site
	2019 GW	St Nicholas Cathedral, Newcastle; several subsites
NZ250640		on different sides.

# Malvaceae

Malva neglecta Wallr.

Native (Archaeophyte)

Dwarf Mallow
Locally scarce

totalive (include opinyte)				
NZ317879 NZ315880 NZ316881	1999 HE & CE	2012 AY & GY	Newbiggin-by-the-Sea	
NZ307899	2011 BA, TA, JHa, BH, AY & GY		Lynemouth Power Station	
NZ2263	2010 JBo		Elswick. One plant.	
NZ319795	1937 GS	2019 AY & GY	Blyth, South Beach (Blyth to Seaton Sluice Dunes LNR). These sites have now been built upon but survives by road.	
NZ38SW	1983 GS	2017 GY	North Blyth harbour	
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 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 rar					
NZ314667	1989 GS	2011 AY &GY	Willington Gut		
NZ2985	1972 AJR	1989 GS	Saltmarsh on North bank of River Wansbeck. Not found 2015, 2016, presumed extinct.		

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. However, there is an old record from Whitley Bay in 1948.

NZ373692 20 NZ373693		2014 BH, AY &GY	Single plants on the foreshore, Prior's Haven, and on cliffs below Tynemouth Priory. Disappeared during 2019.
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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 campestre (L.) W.T. Aiton

Field Pepperwort

Native

Near threatened; locally scarce

This species has declined since the 19th 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.

NY907661	2019 AJR		Roadside at Low Cottages west of Low Warden. One plant.
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.
NZ327686	2019 GY		Dismantled railway near Coast Road, North Shields
NZ336693	2012 AY & GY	2013 AY & GY	Billy Mill, garden weed.
			i e

#### Lepidium coronopus (L.) Al-Shehbaz

1991 DH

Swine-cress

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

Whittle Dene. One plant.

#### Lepidium didymum L.

Lesser Swine-cress

Colonist

NZ0764

locally rare

Perhaps only ever casual in the vice-county.

NY943655	2018 SD	West Oakwood, garden weed.	2018 SD
NY942639	2013 AJR	Hexham hospital	2013 AJR
NZ2373	1989 DM	Seaton Burn waggon way	1989 DM

#### 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 Locally vulnerable

Native

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 (substantially more than 20) 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.

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 19th 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

Know 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

Locally frequent and increasing.

Inluded here and mapped in the 2016 version of RPR. However, has been recorded in 14 sites since 2010, many of them new, and is no longer considered a scarce plant in vc 67.

Persicaria minor (Huds.) Opiz

Small Water-pepper

Native	` ' 1		Locally rare, needs revisiting at its classic sites.
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

Vulnerable: locally rare

1 10001 7 0			, united action to carry the
NT70SW	1959 GS	1983 GS	Ramshope Burn
NZ0393	2016 AJR		Fontburn Reservoir, locally plentiful, mostly S side.
NZ0493			

Bistorta vivipara (L) Native

Alpine Bistort 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

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.

Native

**Great Sundew** 

Endangered; locally rare

These sites are all part of the Kielder Mires SSSI and NNR. Needs revisiting in its classic sites.

NY7071 NY7072	1966 AL	2007 WG	Hummel Knowe (Kielder Mires SSSI unit 26). Estimated to be 1000 plants in 2007.
NY7174 NY7175	1956 BHT	2014 GSi	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)

# Caryophyllaceae

Cerastium arvense L. Native			Field Mouse-ear Near threatened; locally scarce
NZ306839	2016 DB	2017 GY	Cambois, dunes N from car park
NZ309830			
NZ309831			
NZ306837			
NZ322787	1937 GS	2019 GY	Seaton Sluice Dunes & Meggie's Burn outflow
NZ322786			(Blyth to Seaton Sluice Dunes LNR). Widespread.
NZ325780			
NZ329773			
NZ327776			
NZ333773			
NU277043	2012 GY		Amble dunes, one patch $1m \times 1m$ .
NZ3085	2012 AY & GY	2016 AJR	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.

NZ273982	2018 AJR		East Chevington dunes
NZ273995 NZ274999	1988 GR	2016 AJR	Druridge Bay Country Park (Hadston Links SSSI)
NZ37327.6 9271	2000 AY & GY	2016 GW	Tynemouth Priory
NZ371693			
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	1998 AY & GY	2019 AY & GY	Seaton Sluice
NZ335768			
NZ333768			
NZ333779			
NZ327777			
NU278041	2012 GY		Amble dunes
NY982805	2008 WG		Bavington Crags 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 Crags
NY9779	2015 AJR NW		Newonstead, only 1 plant
NZ2985	2015 AJR		Sandy Bay

#### Dianthus deltoides L.

Maiden Pink

Native Vulnerable; locally scarce Occasionally planted or escaped from gardens. Threatened mostly by quarrying of whinstone.

NY669658 NY668659	2015 BH & JHa		Walltown Nature Reserve
NY979802 NY979798 NY981797	1831 NJW	2017 NW	Newonstead. 100+ flowering.
NY945761 NY946760	1978 GS	2018 AJR	Colwell Quarry. 100+ flowering, 2016.

NY913749 NY915749	1807 FS	2009 AJR	Gunnerton Crags (Gunnerton Nick SSSI). Five plants found in 2009 (AJR). Ex situ seedlings introduced 2016.
NY976795	1981 GS	2016 NW	Divethill, Clay Walls. A few.
NT80SE	(1963 GS)		Linshiels (Harbottle Moors SSSI). All current sites are on the north bank of the Coquet in North Northumberland.
NY9376	2016 NW		Reaver Crag. 'large population'.

Honckenya peploides (L.) Ehrh.

Sea Sandwort

Native

Increasing.

Only 16 records between 1970 and 2016, but an additional 13 to 2019 including five new tetrads and no longer a candidate for RPR.

#### Polycarpon tetraphyllum

Four-leaved Allseed.

Native and colonist

Vulnerable; very locally abundant

A remarkable discovery of this rare south-coast native, which is well-established in a limited urban area.

NZ358683	2019 GW	Stephenson and Tyne Streets, North Shields

Sabulina verna (L.) Hiern

Spring Sandwort

Native

Locally vulnerable

Sabulina (Minuartia) verna has been lost from former sites on whin outcrops, but remains fairly widespread on calaminarian grasslands and shingles in the Allen and South Tyne catchments, with more than 20 sites. However, it has been lost from all but one site downstream from Bardon Mill. As the riverside sites become eutrophicated and lose their toxicity, it is becoming scarcer.

Sagina maritima
Native
Sea Pearlwort
Locally scarce

Easily overlooked and should be sought especially on salted verges.

NY92896.8 4771	2019 AJR		Striddlehill Common
NY8582.89 15	2018 AJR		White Rigg
NZ3672	2019 GW		Rockcliffe, Whitley Bay
NY851887	2016 AJR	2019 AJR	Hareshaw Head, saline verge, 308 m. Altitudinal record for British Isles.
NZ320790	2012 AY & GY		A193 roadside near South Beach.
NZ318880 NZ319880	1966 GS	2012 A & GY	Newbiggin
NU20SE	1997 GS		Amble
NZ36NE	1984 GS		Tynemouth
NZ3376	1971 GS		Seaton Sluice Harbour

Scleranthus annuus L.

Annual Knawel

Native

Endangered; locally scarce

This species is declining nationally and is suffering from eutrophication and land use changes. Its remaining sites in the county are small and isolated.

NT943020	2015 AJR & SR		Holystone Oaks .
NY982794 NY984794 NY982805 NY982804 NY980805 NY9780	1977 GS	2015 AJR & NW	Clay Walls crags, Divethill & Holm Crags.
NY679665 NY680665 NY682665	1972 GS	2017 A & GY, J & BH	King Arthur's Well & Walltown (Allolee To Walltown, SSSI). Estimated to be about 100 plants in 2008 (AJR). "a few only" (2011 GY), "Many hundreds, probably thousands in 2012" (AJR).
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.
NY9880	2016 AJR NW		Great Bavington. Possibly accidentally introduced from Holm Crags.

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.

NY	7836638	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.
		<b>,</b> ,

### 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	2019 AJR	Newbiggin Point. More than 30 plants, probable introduction
NZ364712 NZ363713	2013 JA	2014 AJR	Cullercoats. Perhaps introduced to this site.

#### Stellaria aquatica L.

Water Chickweed

Native

Locally rare

Not recorded by Swan (1993) in vc 67, but has established in three localities since the Millenium

NZ0835.8150	2006 CI		Bolam Low House
NZ3348.7522	2007 HAE	2009 WG	Holywell Dene

NZ2647.8157	2009 A&GY	R Blyth near Bedlington

Stellaria neglecta Weihe

Greater Chickweed

Native

Locally scarce

At the northern limits of its range in the UK.. Favours wet disturbed ground at the edge of woodland. Probably overlooked.

NZ350736	2019 A & GY	Whitley Bay, small stream.
NY681741	2017 WG	Lampert, wet wood edge above R. Irthing.
NZ231736	2015 AJR	Big Waters
NZ3175	2015 AJR	Holywell Pond
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.

Stellaria palustris Ehrh. ex Hoffm.

Marsh Stichwort

Native

Vulnerable; locally extinct

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

#### **Amaranthaceae**

Atriplex glabriuscula Edmondston

Babington's Orache

Native

No threat, locally vulnerable

This species appeared in earlier versions of RPR, perhaps because it was underrecorded due to confusion with *A. patula* forms. Populations fluctuate wildly in this annual and it some years it can be difficult to find and in others it is abundant. It occurs right round the coasts of Britain and Ireland and there is no justification for featuring it here.

Atriplex laciniata L.

Frosted Orache

Native

No threat, apparent increase.

Having received only about 10 records prior to 2010, this conspicuous and easily identified species has received 22 records in the last decade. Again, populations fluctuate wildly, but in 2019, plants could be found in almost every suitable maritime habitat in the vice-county, often in abundance. It is now recorded from every maritime hectad and most maritime tetrads in the county. Anecdotal evidence would suggest that it has become much more common in recent years.

#### Atriplex longipes Drejer

Long-stalked Orache

Native			Nationally scarce; locally rare
NZ272979	2011 AJR	2018 BSBI	East Chevington (Druridge Bay Country Park &
NZ27143.981 86			Hadston Links SSSI). In 2016, 4 flowering, several probable seedlings and several hybrids.

#### Atriplex praecox Hülph

Early Orache

Native			Critically endangered; locally rare
	NU28244.016 86	2017 AJR	Hadston. Was not found in 2018/9

NZ273987 NZ273991	2011 AJR	2016 AJR.	East Chevington. A total of nine plants (Druridge Bay Country Park & Hadston Links SSSI) in 2011.
NZ273995			Only one found in 2016. Not found in 2018/9.

Atriplex portulacoides L.

Sea-purslane

Native

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	1972 AJR	2016 AJR	Sandy Bay, North Seaton Colliery
NZ294854			
NZ295854			
NZ296854			
NZ297854			
NU2604	1985 GS	2012 QG	The Braid, Amble
NZ320817	2002 QG	2017 GY	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 rare

Towards the north-eastern limits of its distribution in the British Isles. Last previous record 1971.

NZ312824	2019 MW	Between Cambois beach	and N Blyth.
NZ3494.725	2014 GW	Whitley Sands. Disappea	ared 2019.

Blitum 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).

Oxybasis rubra (L.)

Red Goosefoot

Native

Locally scarce

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

NZ28918.6 2996	2017 AJR	Walker, Riverside Park
NZ2979	2016 QG	Chevington Burn, near mouth

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. There are few records for the last decade and the genus is in need or review in the county.

#### 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

Nati	ive				Locally rare
NZ	Z2982	1983 GS	2011 JO & QG	Sleekburn and Blyth Estuary SSSI	
NZ	Z2983				
NU	U2604	1983 GS		The Braid	

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

Yellow Glasswort

Native	, 0			Locally rare
NZ2982	1987 GS	2011 JO & QG	Sleekburn and Blyth Estuary SSSI	
NZ2983				
NZ3083				

#### 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 Increasing, locally scarce but abundant. In common with some other formerly localised strand species, has increased spectacularly in the last

few years and is now a common site on many sandy beaches in the county.

-			lay beaches in the county.
NU278008	2018 AJR		
NZ273996			
NZ272988			
NZ271980			
			Druridge Bay
NZ320796	2018 GY	2019 AJR	
NZ320798			South Beach, Blyth
NZ327778	2017 GY		Hartley Links
NZ321789	2017 GY	2019 GY	Meggies Burn to South Beach
NU2803	2009 AJR	2019 AJR	Hauxley NWTR (Amble Dunes LNR & Northumberland Shore SSSI)
NZ2798	1983 GS	2019 AJR	Mouth of Chevington Burn and Chibburn Mouth (Druridge Bay country park & Hadston Links SSSI)
NZ38NW	1998 GS		Unknown
NZ2799	1983 GS	2019 AJR	Hadston Links (Druridge Bay country park & Hadston Links SSSI)

Suaeda maritima (L.) Dumort.

Annual Sea-blite

Native	. ,		Locally scarce
NZ2985	2010 QG	2016 AJR	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	2019 GY	Seaton Sluice saltmarsh (Holywell Dene LNR). Four plants in 2011.
NZ320817	2002 QG		North Blyth
NZ2798	1988 CD	2019 AJR	Chibburn Mouth (Druridge Bay country park & Hadston Links SSSI)

#### Cornaceae

#### Cornus suecica L.

**Dwarf Cornel** 

ľ	Native			Near threatened; locally rare
	NZ023987	1976 EE	2014 WG	Simonside, north of summit (Simonside Hills SSSI). "Best flowering/fruiting site in VC67 & VC68" (GY)

# Balsaminaceae

Impatiens noli-tangere L.	Touch-me-not Balsam
Native or naturalised hortal	Locally rare
NY9262 1996 JA & CI	Hexham, Cockshaw Burn. "long gone" (CI, 2010)

NZ087819	1986 CC	1987 GS	Wood near Bolam
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#### Primulaceae

Lysimachia tenella L.

Bog Pimpernel Locally rare

Native			Locally rare
NY927609	2012 AJR	2016 AJR	Dipton Mill, a patch about 2.5 m across in each direction, spreading 2016. Not found 2019.
NY971868	1977 AJR	2011 AJR NW	Chesters Burn. "not very much; two patches" AJR (2011).
NU2700	1965 GS	2002 GS	Hadston Links SSSI
NY96	1921 RBC		Dipton Wood

Primula farinosa L.

Bird's-eye Primrose

Native Near threatened; locally extinct

NZ077665 1846 JFB 1987 AJR & Spital. This site was visited in 2009, but *P. farinosa* could not be found (AJR).

Samolus valerandi L.

Brookweed

Native

Locally extinct

Last recorded in 1972 by AJR, and Swan (1993) thought it probably was extinct. It has not been recorded since, but has several thriving stations in the north of the county.

### **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.

P - P			
NY967532 NY969532 NY969531 NY970532	1807 WR	2014 TC	Ravens Crags and Potter Burn (Muggleswick, Stanhope & Edmundbyers Commons & Blanchland Moors SSSI)
NY966969 NY966968 NY966971 NY966970 NY969970	1839 Anon.	2008 WG	Crags 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 at one site.

NY854686	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). Not seen since 2015 and probably extinct here.
NY825659 NY826660 NY827660	1996 LCC	2019ЈВо	Honeycrook Burn. Originally,17 spikes were found, but this has since increased. 68 spikes in 2007 (WG); and many more in 2019 (JBo).

#### Pyrola media Sw.

# Intermediate Wintergreen Endangered; locally rare

Native

There have been no records in the last decade and may now be extinct in the county.

There have been no records in the last decade and may now be extinet in the country.					
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 Crags (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 has been recorded from a number of new sites in recent years. It is able colonise conifer plantations and is tolerant of heavy metal pollution. However it is known to have become extinct at several sites for no obvious reason.

NZ236831	2019 MW		Bothal
NZ2088.7619	2019 MW		Pegswood Lake
NZ15120.73452	2016 JB RB	2017 JB	Limestone Lane, Ponteland.
NY96937.60470	2017 LK	2019 AJR	Dipton Forest. A very large population.
NY796629	2014 BH & GY		Allen Banks
NY853687 NY854688 NY85500.63650	1974 GS	2019 AJR	Settlingstones SSSI.
NY927778	2013 AM		Next to Colt Crag Reservoir
NZ05V	2011 KC		West bank of River Derwent
NZ040900	1958 GS	2016 WG	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. Extinct from about 2005.
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. Not seen for many years.
NZ27SE	1972 GS		Gosforth Park SSSI. Not seen for many years.
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.

ı	NY7982	1974 GS	GQ 1992	Mesling Crags. Swan (1993) stated that this species was
ı				"almost extinct" at this site.

### Vaccinium uliginosum L.

Bog Bilberry

Native			Locally rare
NY571865	2009 AJR, JO & QG		Glendhu Hill (Kielder Mires SSSI, unit 3). One small plant.
NY6466	1868 BT	1979 GS	Baron House Bog
NY6469	1955 DR	2011 AJR & FJR	Butt Rigg (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.

Northern Bedstraw

Native

Vulnerable; locally scarce

Most of our sites for this northern subalpine are on rocks close to lowland rivers. Formerly known from the Irthing, South Tyne, Tyne, Beldon Burn and Derwent, it is now almost confined to the North Tyne and has become much rarer.

NY997660	1971 AJR	2019 AJR	Nether Warden
NY921731	2015 AM		Barrasford
NY0750	2013 JD		Allensford Bridge
NY783853	2015 AM		Chirdonburn Bridge
NY917730	2004 AY GY	2015 AJR	Haughton Castle
NY907731 NY905732	2006 GY AJR		Riverhill
NZ0063	2002 JD		Thornborough Scar
NY9073	2004 MEB		Long Rack, Haughton
NY9173	2004 MEB		Coldwell Wood, N Tyne
NY811846	1993 SP		Hesleyside
NY641684	1805 NJW	1993 GS	Wardrew, Irthing
NY686748	1992 DJ		Lampert, Irthing
NY634682	1992 SM	1992 SM	Irthing Gorge

*Galium sterneri* Ehrend. Native Limestone Bedstraw Locally vulnerable This species has perhaps been overlooked in its main habitat in the county, river gravels on the South Type and elsewhere and there are a number of recent records.

I yile allu eisew	mere and mere are	a number of recent	i records.
NY94345.9 1423	2018 AJR DH		Benshaw Moor NR
NY652702	2018 WG		Forsters Hill
NY8867	2016 JD		R S Tyne SW of Fourstones
NY670660	2014 AJR & NW		Walltown Nature Reserve
NY6862	2015 AJR & NW		Burnfoot river gravels
NY681520	2014 AJR	2017 NW	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	2014 AJR plant not found	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). Looked for in recent
		years and not found.

Gentianella amarella subsp. septentrionalis (Druce) N.M.Pritch.

Native

Autumn Gentian
Vulnerable: locally rare

3	Native			vuniciable, locally fare
	NU273000 NZ273003	2017 AJR		Druridge Bay CP (Druridge Bay country park & Hadston Links SSSI)
	NZ272986 NZ272988	2014 AJR	2016 GY	East Chevington (Druridge Bay country park & Hadston Links SSSI)

Gentianella campestris (L.) Börner

Field Gentian

Native Endangered; locally rare

This species has declined severely in South Northumberland and may become extinct here soon. It requires open patches in mineral-rich turf which are disappearing due to atmospheric nitrogen deposition. However, two new sites have recently been found in the Cheviots and it should be sought for there.

NT6815.0325	2015 CI		Whitelee
NT68130310	2015 CI		Battlinghope Burn
NY849464 NY849465 NY850464 NY850465 NY850467 NY851465	1963 GS	2019 LM	Bell's Grove, near Dirt Pot. Three patches originally, only one surviving in 2019 (LM). 44, 2012 BH & GY >80, 2015 AJR. <20 in 2016.
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. Native

Hound's-tongue Increasing, vulnerable

Hound's-tongue was stated by Swan (1993) to be 'rare' in vc 67. It has undoubtedly become much more common on the northern half of the coast in recent years, and occurs frequently in sand-dunes from NZ2794 north to the Coquet. There is only one recent record inland, from Hogger's Cleugh, NY9397, 2017 WG.

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

Pale Forget-me-not Locally scarce

After a flurry of records between 2010 and 2015, in the absence of targeted searches, it has not been recorded since.

NY832448 NY834448 NY832449 NY837453 NY837454	1969 GS	2015 WG	Middlehope Moor, near Carriers Way, Roundhill Sike & Hefty Well, with <i>M x bollandica</i> .
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.
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	2019 AY & GY	South Beach, dunes at Meggie's Burn outflow (Blyth To Seaton Sluice Dunes LNR). 20+ flowering plants.
NZ2798	1988 CD		Chibburn Mouth (Druridge Bay country park & Hadston Links SSSI)

Cuscuta epithymum (L.) L. Casual

 $Linaria \times sepium$  G.J.Allman

Dodder

Vulnerable; locally extinct

*L.*  $vulgaris \times L.$  repens

# Solanaceae

Ì	Hyoscyamus	niger L.	Henbane	
1	Archaeophyte			Vulnerable; locally extinct
	NZ36NE	1822 HL	1844 JSy	Tynemouth

# Veronicaceae

Native	1	Locally extinct
NY912662	1972 GS	Old railway, west of Bridge End
Veronica o	catenata Pennell	Pink Water-speedwell Locally extinct
NZ29	1972 AJR	Ellington Pond. Searched for several times since.

# Callitrichaceae

Callitriche obtusangula Le Gall

Blunt-fruited Water-starwort

Locally scarce

Callitriche spp. cannot be reliably identified without flowering and/or fruiting material, which is best confirmed using good optical equipment and Northumberland populations are notoriously shy-

flowering. Most records accepted here are from GS who had their identity verified by an expert.

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 Native	hermaphrodi	tica L.	Autumnal Water-starwort Locally scarce
NZ0582	2011 AJR		Shaftoe Crags SNCI
NY7667 NY7668	1942 JHH & WC	2017 RVL	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

Cadgeford

#### Lamiaceae

Clinopodium acinos (L.) Kuntze Native

1983 GS

1980 GS

1971 GS

*Galeopsis angustifolia* Ehrh. ex Hoffm. Colonist

Galeopsis speciosa Mill.

Colonist

NY77SW

NZ116986

NY76NE

Lamium confertum Fr.
Casual
Only two known observation

Only two known observations and last recorded in 1967.

Basil Thyme

Vulnerable; locally extinct

Red Hemp-nettle Critically endangered; locally extinct

Large-flowered Hemp-nettle Vulnerable; locally extinct

River Coquet, pond on south bank, north of Brinkburn

Broomlee Lough (Roman Wall Loughs SSSI)

Northern Dead-nettle Endangered; locally extinct

Lamium hybridum Vill.

Archaeophyte

Cut-leaved Dead-nettle

Locally scarce, recent increase

This species 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). There are number of new records from urban sites in the south-east of the county suggesting that it may have been overlooked until recently.

NZ341758	2020 WG	Old Hartley, Delaval Arms
NZ2535.6438	2016 GW	Manors Business Park
NZ3416.6872	2017 GW	Balkwell, North Shields
NZ3480.7383	2017 GW	Whitley Bay
NZ3225.6868	2017 GW	Silver Link
NZ3450.7015	2020 GW AJR	Preston Grange
NY918728	1995 MB	Haughton Castle, old walled vegetable garden

Lycopus europaeus L.

Gypsywort

Native Locally scarce

This species is apparently increasing in the vice-county, particularly around Newcastle, though it usually has been introduced. Swan (1993) noted only one extant site, but it has benefited from the

designation of nature reserves and the formation of ponds.

NZ275709	2016 GY		Killingworth, large lake
NZ308725	2016 GY		West Holywell Pond.
NZ141649	2019 AJR GY		Leazes Park, Newcastle
NZ249816	2016 JLD		Woodside, Widdrington
NZ144945	2014 QG		Longhorsley pond (introduced)
NZ215716 NZ2271	2002 AY & GY	2018 LKo GY	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	2018 JLD	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 AS	1991 GS	Chevington Wood, small pond.

Nepeta cataria L. Cat-mint
Native Vulnerable; locally extinct

Salvia verbenaca L.

Wild Clary

Native

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 that a hundred plants in the mid to late 1990s.
NY840483	2012 AJR & NW		Thorneyknowe Quarry, a single plant, presumably a garden escape.

Scutellaria minor Huds.

Lesser Skullcap

Native Locally rare.

Probably extinct here, but needs a thorough targeted search. Inaccessible from the north.

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

Field Woundwort

Colonis

Locally rare

Extinct for many years, but with two recent records.

NZ2329.6527	2017 LKo	Nun's Moor, Newcastle

NZ322685	2017 GW	Silver Link

### Orobanchaceae

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

Arctic Eyebright

Data deficient; locally scarce

A rather dubious taxon, not easily separated from the much commoner subsp. borealis.

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.

Slender Eyebright

Native

Stable or increasing.

A plant of dry, nutrient poor, acid soils, frequent beside forest tracks. It is has been underrecorded, but there are 20 localised records over the last decade and is no longer considered a RPR species..

Euphrasia officinalis subsp. monticola Silverside

Montane Eyebright

Native

Vulnerable; locally scarce

Neither of the two subspecies of *E. officinalis* in the county are common and are associated with species-rich upland meadows. Subsp. *monticola* (*E. montana*) is mostly found south of the S. Tyne gap and subsp. *pratensis* (*E. rostkoviana*) north of this.

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 officinalis subsp. pratensis Schubl. & G. Martens Rostkov's Eyebright Vulnerable: locally scarce

Ivative			vulliciable, locally scarce
NY68102.74119	2017 WG		Lampert
NT91654.06056	2017 WG		Barrow Wood meadow
NY0596	2014 BB	2017 AJR	East Kielder Farm

#### Euphrasia tetraquetra (Bréb.) Arrond. Native

Western Eyebright Near threatened; locally scarce

NZ27245.9 8000	2018 AJR	Chibburn mouth (Druridge Bay country park & Hadston Links SSSI)
NZ272983	2014 AJR	Hadston Links (Druridge Bay country park & Hadston Links SSSI)
NU285023	2013 AJR	Low Hauxley NR
NZ38NW	1966 GS	Newbiggin-by-the-sea

Orobanche hederae Duby

Ivy Broomrape

Colonist

locally rare

Usually a hortal, introduced with ivy varieties.

NY943651	2013 WG	2019 JBo RBo	Bridge End, 11 Spikes (AJR).
NZ235658	2012 AJR		Moorbank garden, Newcastle. This garden has been destroyed by the Freemen of the City of Newcastle.
NZ280693	2007 AJR		Lyndhurst Road, Benton

Orobanche rapum-genistae Thuill.

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. It has not been seen at favourite sites for several years.

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	2016AJR	Dipton Mill. From 7 to 10 plants. From 1 to 20 plants in two separate populations. Four plants in 2013. One large multistemmed plant in 2016. Not seen in subsequent years.
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		Mill Haugh, 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

Utricularia vulgaris L.

Greater Bladderwort Locally rare

Native

Not seen for 30 years, but perhaps still present.

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

# Campanulaceae

Campanula glomerata L.

Clustered Bellflower

Locally scarce

Native Probably only native on the banks of the R. N. Tyne and its tributaries. Often stressed and fails to flower. 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.

NY910731	2017 AJR		R. N. Tyne N bank below Barrasford.
NY911731			
NY912731			
NY917664	1969 GAS	2016 AJR B & TA	Howford Banks
NY905732	1978 GS	2009 MM,	Riverhill Farm
NY911737		AY & GY	
NY946659	2005 MH		Egger Factory Hexham, introduced.
NZ356714	1994 AY &		Marden quarry LNR
	GY		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. 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.

Mountain Everlasting

Vulnerable; locally rare

Probably extinct in vc 67, although formerly recorded from 22 hectads, possibly the most striking loss in the county in recent years. Swan (1993) considered it localised and decreasing. The most recent sites are listed here, but it has not been seen for a decade,.

NY97NE	1975 GS	2006 JSi	Divethill. Very little and possibly 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. However in recent years it has been regularly resown at many sites.

Bidens cernua L.

Nodding Bur-marigold

Native

Extinct as a native. One recent record of a casual.

NY927638	2018 ЈВо	Bottom of Causey Way, Hexham

#### Bidens tripartita L.

Trifid Bur-marigold

Native			Locally rare
NY942789	2013 AM		Colt Crag Reservoir, only four or five plants.
NZ3175	1968 OG	2015 AJR	Holywell Pond SSSI. About 15 to left of members hide.

#### Carduus tenuiflorus Curtis

Slender Thistle

Native

Increasing, locally frequent

Swan (1993) calls this species 'rare' in vc 67. However, there have been 28 records in the last decade and it is now quite commonly encountered on disturbed ground and waste places near the sea. Although it is still very rare inland, no longer considered a candidate for RPR.

#### Carlina vulgaris L.

Carline Thistle

Native			Near threatened; locally scarce
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

#### Centaurea debauxii Gren. & Godr.

Chalk Knapweed

Native		Recent colonist
NZ28626.70744	2018	Warkworth Woods estate, Gosforth. Abundant and
	AJR	probably introduced with wild flower seed.

Cirsium ×wankelii Reichardt

C. heterophyllum  $\times$ C. palustre

Native

Locally rare

Thes e are only the third and fourth English sites.

NY6092.9633 NY6106.9608	2018 RVL	Kittyhirst cottage
NY672528	2010 PB	Knarsdale near Slaggyford. One plant.

Cirsium eriophorum (L.) Scop.

Woolly Thistle

Casua

Extinct

Recorded in the 19th century in Wallsend, but it was presumably introduced there (Winch 1831).

Crepis mollis (Jacq.) Asch.

Northern Hawk's-beard

Native Vulnerable; locally

scarce

Following a severe decline throughout its range (now perhaps extinct in Scotland), Richards (2020) has estimated that vc 67 may contain more that 50% of sites (12) and possibly as many as 90% of the plants (950+) in Britain. Our large stands, one of which holds more than half the British population, are confined to Allendale where it grows on steep, species-rich, unmanaged river terraces.

		i grows on steep	o, species-rich, unmanaged river terraces.
NY84715.487 67	2017 LM AJR		Upstream from Spartylea Bridge on E side of E. Allen. Eight flowering plants.
NY85081.485 07	2019 AJR		St Peters Cottage. 17 plants in 2019.
NY84609.491 79	2018 LM	2019 LM AJR	West Studdon Farm. 537 flowering plants in 2019.
NY84644.491 37			
NY84440.519 62	2017 RS-K	2019 AJR	S of Sinderhope Community Centre. 100+ plants in 2019.
NY84662.559 75	2017 LM	2019 AJR	Prospect Hill. 30 flowering plants in 2019.
NY835476	2012 AJR & NW		Swinhope Burn, eight plants.
NY839501	1983 ЈL	2019 AJR	High Knock Shiel, bank of small stream, 31 plants in 2016 Only one in 2019.
NY629928	1962 GS	2010 AJR	Along the abandoned railway line at Chubbies
NY6293			Knowe, Kielder. Twelve plants (AJR, 2008). It has been found at several areas along the old railway,
NY622944			but this is the only survivor.
NY622945			
NY904494	1967 GS	2008 AJR	Heatheryburn Bank SSSI. Seven plants.
NY846491	1962 GS	2019 AJR	West bank of River East Allen, N of Spartylea Bridge. At least 30 plants in 2008 (JO). 40 in 2019.
			TO 1 TT' 1 C' 1 1 "O 1 4"
NY844512	1962 GS	2019AJR	Road verges near High Sinderhope. "One plant in
NY847522	1962 GS	2019AJR	the pasture, about 7 in the road verge" JO 2008. 57
NY847522 NY844523	1962 GS	2019AJR	
NY847522 NY844523 NY845522			the pasture, about 7 in the road verge" JO 2008. 57 flowering plants in 2019.
NY847522 NY844523	1962 GS 2008 JO & FC	2019AJR 2019 AJR	the pasture, about 7 in the road verge" JO 2008. 57
NY847522 NY844523 NY845522	2008 JO &		the pasture, about 7 in the road verge" JO 2008. 57 flowering plants in 2019.  Bank behind Kittygreen. Over 500 plants counted
NY847522 NY844523 NY845522 NY813573	2008 JO & FC	2019 AJR	the pasture, about 7 in the road verge" JO 2008. 57 flowering plants in 2019.  Bank behind Kittygreen. Over 500 plants counted by JO & FC in 2008, 85+ in 2019.  Flat meadow by path to east of Kittygreen house.
NY847522 NY844523 NY845522 NY813573 NY814573	2008 JO & FC 2016 AJR 2008 JO &	2019 AJR	the pasture, about 7 in the road verge" JO 2008. 57 flowering plants in 2019.  Bank behind Kittygreen. Over 500 plants counted by JO & FC in 2008, 85+ in 2019.  Flat meadow by path to east of Kittygreen house. Four plants in 2016, nine in 2019.  unmanaged meadow west of Catton sewage works. Three plants in 2008 (JO & FC). Could not be
NY847522 NY844523 NY845522 NY813573 NY814573	2008 JO & FC 2016 AJR 2008 JO & FC	2019 AJR	the pasture, about 7 in the road verge" JO 2008. 57 flowering plants in 2019.  Bank behind Kittygreen. Over 500 plants counted by JO & FC in 2008, 85+ in 2019.  Flat meadow by path to east of Kittygreen house. Four plants in 2016, nine in 2019.  unmanaged meadow west of Catton sewage works. Three plants in 2008 (JO & FC). Could not be found by AJR in 2016 or 2019.  Verge of lane close to Frolar Meadows. One plant.
NY847522 NY844523 NY845522 NY813573 NY814573 NY827572	2008 JO & FC 2016 AJR 2008 JO & FC 2007 JO	2019 AJR 2019 AJR	the pasture, about 7 in the road verge" JO 2008. 57 flowering plants in 2019.  Bank behind Kittygreen. Over 500 plants counted by JO & FC in 2008, 85+ in 2019.  Flat meadow by path to east of Kittygreen house. Four plants in 2016, nine in 2019.  unmanaged meadow west of Catton sewage works. Three plants in 2008 (JO & FC). Could not be found by AJR in 2016 or 2019.  Verge of lane close to Frolar Meadows. One plant. Not found by AJR, 2016
NY847522 NY844523 NY845522 NY813573 NY814573 NY827572 NY820552 NY7690	2008 JO & FC 2016 AJR 2008 JO & FC 2007 JO 1963 GS	2019 AJR 2019 AJR 2019 AJR	the pasture, about 7 in the road verge" JO 2008. 57 flowering plants in 2019.  Bank behind Kittygreen. Over 500 plants counted by JO & FC in 2008, 85+ in 2019.  Flat meadow by path to east of Kittygreen house. Four plants in 2016, nine in 2019.  unmanaged meadow west of Catton sewage works. Three plants in 2008 (JO & FC). Could not be found by AJR in 2016 or 2019.  Verge of lane close to Frolar Meadows. One plant. Not found by AJR, 2016  Near Comb. Not found by AJR in 2016.

NY888725	1985 GS	c. 1995 AJR	On a bank on the road near the Scroggs.
NY8197	1977 GS		Wind Burn

 $Filago\ vulgaris\ {\tt Lam}.$ 

Common Cudweed

Native Native			Near threatened; locally scarce but rapidly increasing
NZ3372.667	2012 DB		Percy Main
NY95970.7 7444	2015 AM		Carriers Lane
NY940780	2013 SH		Colt Crag Reservoir embankment
NY913750	1960 GS	2016 AJR NW	Gunnerton Crag and adjoining quarry.Many thousand.
NZ300832	2012 DF		On the demolished Blyth Power Station site. "hundreds".
NY671660 NY671661	2010 AY & GY	2019 R & J Bo	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.
NY9952763 NY949762	2007 JSi	2015 AM	Little Swinburne
NZ008633	1966 GS	2002 WG	Thornbrough Scar
NY6578	1977 GS		Cow Crag

*Hieracium.* Unfortunately, there has been little targeted interest in the county for many years, and no unusual species have been reported recently.

*Hieracium argutifolium* Pugsley

Sharp-toothed Hawkweed

Native			Near threatened; locally rare
NY679596	2010 JO	Thorneyhall Wood	

Hieracium auratiflorum Pugsley

Dark-flowered Hawkweed

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

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

Brindled Hawkweed

locally rare

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.

Native

Native

Last recorded in the 1833 in Allendale.

Rough-leaved Hawkweed Endangered; locally extinct

*Hieracium rhomboides* (Stenstr.) Johanss. Native

Rhombic-leaved Hawkweed locally rare

NY959499	1984 GS	Baybridge
141/3/4//	1904 US	Dayonage

Lactuca serriola L.

Prickly Lettuce

Colonist

Locally scarce, increasing

Only a single record until 2008 but now increasingly frequent in urban sites.

NZ297675	2019 A&GY	A1058 roadside, Wallsend
NY971648	2019 AJR	Hexham, rubbish disposal road
NY974634	2018 AJR	Dilston
NZ219634	2011 JBo	Scotswood Road, Newcastle
NZ224632	2010 JBo	Newcastle Business Park
NZ3266	2010 RS- K QG	Willington
NZ264695	2010 ЈВо	Balliol Business Park
NZ341703	2008 A&GY	N Tyneside Hospital
NZ336693	209 A&GY	Billy Mill, garden weed

Lactuca virosa L.

Great Lettuce

Native

Locally scarce

At one time considered 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 ЈВо	2020 AJR	Hexham Trading Estate and verge of railway. Thirty plants in 2009; 50 in 2010, 34 in 2013 (JBo). 100+ rosettes in 2016.
NZ331715	2012 DB		West Monkseaton, three plants.
NZ260745	2011 ЈВо		Dudley. More than 50 plants (JBo).

Logfia minima (Sm.).

Small Cudweed

Native			Near threatened; locally rare
NY750758	2014 GSi		The Haining Farm
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.

#### Omalotheca sylvatica (L.)

Heath Cudweed

Vative Endangered; locally scarce

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

NY75758.9 9260	2019 BB		Blakeburnhaugh, Kielder
NY62017.8 4306	2011 GSi	2015 WG	Gill Hassock, Broomylinn. One plant in 2011, 17 flowering plants in 2014 and more seedlings (GSi). About 100 rosettes in 2015 (AJR).
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).

Picris hieracioides L.

Hawkweed Oxtongue

Native or colonist

Locally extinct

Probably only a casual introduction in recent years.

Seriphidium maritima (L.) Poljakov

Sea Wormwood

Vative

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 northernly sites in the UK, though the Darras Hall site is likely to be the only native site.

<u> </u>			
NZ157713 NZ158713	1975 GS AGL	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? Twinflower

NY997564	1979 BL	2017 JBo	Kellas. Greatly reduced since plantation felled to within 150 m to east. Now restricted to three patches around raised tree bases next to road.
NY911496	1973 GS	2001 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 Archaeophyte Not recorded since the 19th century

Narrow-fruited Cornsalad Endangered; locally extinct

Valerianella carinata Loisel.

Keel-fruited Cornsalad

C	olonist			One recent record

NZ25548.75108	2019 LKo	Footpath entrance E of Arcot pond

Valerianella locusta (L.) Laterr.

Common Cornsalad

Native

Locally scarce

Although it is probably native in Druridge Bay dunes, populations seem rather transient

NZ273984	1988 CD	2017 AJR	E Chevington dunes (Druridge Bay country park & Hadston Links SSSI)
NU274000	2015 GY		Hadston Links (Druridge Bay country park & Hadston Links SSSI)
NZ019615	2011 JBo		Riding Mill Station
NZ3266	2010 QG		Willington
NZ245944	2003 NF	2004 NF	Widdrington Station
NZ06NE	1987 GS		Whittle Dene

# Dipsacaceae

Dipsacus laciniatus L.

**Cut-leaved Teasel** 

Introduction			A single locality
NU2802	2006 DH	2019 AJR	Hauxley Nature reserve. Well established. In 2018 some individuals of <i>D. xpseudosilvester</i> Schutt were also present.

Dipsacus pilosus L.

Small Teasel

Native			An occasional adventive in NE England, rarely establishing

NZ2570	2017 PD AJR		Gosforth Park Nature Reserve, established in quantity on clear fell.
NZ245648	2009 GY	2013 GY	St Thomas St., Newcastle
NZ261651	2003 QG	2003 GY	Jesmond Vale, Ouse Burn

**Apiaceae** 

Anthriscus caucalis M.Bieb.

Bur Chervil Locally scarce

Native

Grows on sand banks and pathsides under marram and often best looked for in winter.

NU285032	2017 AJR		Beacon Hill
NZ272987	2015 AY GY	2016 AJR	East Chevington (Druridge Bay country park & Hadston Links SSSI)
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).
NU276005	1985 GS	2015 GY	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 scarce

Few recent records, but should be looked for, sterile, on reservoir draw-down..

	us, but should be looked for, sterne, on reservoir draw-down			
NY91487.62 201	2017 WG		Hexham Racecourse, pond edge	
NY976769	2013 NW & AJR	2014 WG	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	1923-6 NHT	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 where forms of *Oenanthe crocata* can resemble it.

NZ140723	1984 GS	River Pont, Ponteland, Searched for in 2017 and not
		found.

Caraway Caraway

Casual

Nationally critically endandered; 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).	

*Oenanthe aquatica* (L.) Poir.

Fine-leaved Water-dropwort

Native			Locally rare
NY643664	1979 GS	Small pond north-east of The Gap, Gilsland.	

#### *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	1923-6 NHT	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, but could occur. There are several sites on the coast in vc 68.

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.

#### Lemnaceae

Spirodela po	olyrhiza (L	) Schleid.
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Greater Duckweed

Native	Locally rare
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F	Ias onl	y ever	been	recorded	from	two	sites,	but	currentl	y a	bunc	lant	at l	Bolan	Lak	e.

NZ080818	2008 BC	2019 AJR	Bolam Lake
	1067.66	2002 ID	Calculate Disease in City and a second disease of
	1967 GS	2002 JD	Saltwick Plantation. Site subsequently destroyed.
NZ177820			

# Lemna gibba L.

Fat Duckweed

Native		Recent introduction
NZ2824.0218	2017 AJR	Hauxley NR, probable intentional introduction

### Lemna minuta Knuth

Least Duckweed

Introduced horta	1	Recent introduction, scarce
NZ2979	2019 LKo	New Delaval
NZ0895.6734	2017 AJR	Northside
NY980797	2015 AJR NW	Newonstead
NZ349671	2008 WG	Royal Quays
NY984756	1999 GS	Hallington Reservoir
NY932593	1988 GS	Smelting Sike

# Hydrocharitaceae

#### Hydrocharis morsus-ranae L.

Frogbit

Native			Vulnerable; locally rare
NZ293759	2011 ASt & JHu	2017 GY	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).
NU2802	ca 1980 NES		Hauxley lakes, introduced.

# Lagarosiphon major (Ridl.) Moss

Curly Waterweed

Hortal		Recent introduction, scarce
NY934610	2018 AJR	Dipton Mill, pond in wood to south-east
NZ1760.9818	2017 SM	Eshott
NY6766	2015 QG	Walltown Crags

NZ2717.9833	2016 QG	2018 AJR	East Chevington Dunes ponds

## Zosteraceae

Zostera nolte	ei Hornem.		Dwarf Eelgrass
Native			Vulnerable; locally rare
NZ275988	2012 AJR	Druridge Bay (Nor	thumberland Shore SSSI)
NU265048	1973 GS	The Braid, Amble	
NU264047			

# Potamogetonaceae

Groenlan	idia dens	a (L.) Fourr.
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Opposite-leaved Pondweed

Native	. ,		Vulnerable; locally rare
NU2405	1965 GS	1988 GS	River Coquet SSSI, south bank, opposite Hermitage. Looked for in 2012, habitat appears unsuitable.
NU00SW	1974 AJR		Caistron Lakes (River Coquet SSSI)

Stuckenia	fili	formis	(Pers )	
Diuckenia	1111	OTTILLS	(1 013.)	

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. Has been looked for several times in recent years without success.

#### Potamogeton lucens L.

Shining Pondweed

Native			Locally rare
NY7869	1959 GS	2012 AJR	Broomlee Lough (Roman Wall Loughs SSSI)
NY7969			
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	1942 JWHH	2017 RVL	Crag Lough (Roman Wall Loughs SSSI)
NY769679	WAC		
NY765679			

# Potamogeton \* angustifolius J. Presl

Long-leaved Pondweed

Native	Locally rare			
NY976769	2013 NW & AJR		Hallington Reservoirs	

NY795696	1971 GS	2012 AJR	Broomlee Lough	
Potamogeton × lintoni	<i>i</i> 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)
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

Near threatened; locally scarce

In brackish water of ponds, streams and saltmarshes along the coast. There is only a small amount of suitable habitat, which makes this species vulnerable to habitat loss.

NZ297854	2015 WG		North Seaton Colliery . Only a small amount.
NZ334762	1864 TNFC	2019 GY	Seaton Sluice, salt-marsh (Holywell Dene
NZ334761			LNR). The plant can appear in different pools from year to year.
NZ334763			from year to year.
NZ334764			
NZ335761			
NU282019	1984 AJR	2010 AJR	Pond at Hauxley NWTR
NZ283944	1988 GS	2010 AJR	Cresswell Ponds SSSI
NZ286945			
NZ272981	1986 A&MS	1988 CD	Chibburn Mouth (Druridge Bay country park &
NZ273982			Hadston Links SSSI)
NZ271981			
NZ3278	1805 NJW	1844 JSy	mouth of Meggie's Burn

#### Dioscoreaceae

Tamus communis L.
Native
Not recorded since the 19<sup>th</sup> century.

Black Bryony Locally extinct

Melanthiaceae

*Paris quadrifolia* L. Native

Herb-Paris 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.

NU00254.004 54	1992 LA	2019WG	Bickerton Wood. A massive population.
NY952605 NY951599	2014 NW		Strothers Wood, Windy Hill
NY829616 NY829617 NY830617	2012 NW & AJR	2013 GY	Langley Burn
NZ1986	1548 WT	2019 WG	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	2019 AJR	Letah Wood. A very large population.
NY845794	2011 NW		Houxty Burn
NY842846 NY843843	1973 GS	2015 WG	Hareshaw Dene SSSI, about 100 plants in 2010.
NY7760	1974 GS	2010 JO	Kingswood Burn
NY923728	2010 AJR, BH, CL, AY & GY	2019 JBo RBo	Barrasford, riverside wood. About 250 plants.
NY822656	2007 JBo& GY		Tony's Patch (NWTR). One plant in 2007.
NZ087781	1998 GS		Belsay Hall
NZ066499 NZ066500	1984 GS	1992 Anon.	Moss 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. Native Yellow Star-of-Bethlehem

Locally scarce

Gagea lutea is difficult to find later in the year when it disappears under taller vegetation. Most sites do not contain many plants, and these plants are well scattered, but there is one large population.

Nevertheless, the known sites have persisted for many years and there is no clear evidence of decline.

NZ0500.6248	2017MW		Bywell to Ovington riverside
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NZ182646	2019 MW	2020 AJR	Howden Bridge, west of Wylam
NY90538.731 67 NY90429.731 13	2016 QG	2019 AJR	Coldwell, wood above the N Tyne. One large population and a smaller one near the river.
NZ138847	2012 NF & ID		Rivergreen Mill (1 plant)
NY917661 NY917662 NY917663	1807 Anon.	2020 JBo & AJR	Howford Banks by the North Tyne (SNCI, SSSI). Only three plants flowering in 2006; four in 2011; one in 2012, 16 in 2014 and 10 in 2015.
NZ188862 NZ187860	2003 GS	2019 WG	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	2020 R & JBo	Tony's Patch (NWTR). Four plants, two in flower.
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
NZ161854	1983 GS		The north bank of the River Wansbeck. "leaves only".

#### Orchidaceae

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

Green-winged Orchid Vulnerable; locally extinct

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

NZ053598	1975 EM	Near Broomley. Not found in 2016 (AJR)	
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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. However, massive populations are now commonplace on the coast north of the River Coquet, and it can only be a matter of time before our county is invaded.

NZ023749	2012 RW	Mootlaw Quarry, "less than half a dozen spikes".
NU278041	2012 GY	Amble Dunes, Five plants. None in 2015.
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 Endangered; locally extinct

Native

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.

NY93674.5 2017 MH Oakfield House. About 50 plants in an old meadow. 9297 2012 BH NY643969 Irthing Gorge, one plant. & GY NY851466 2011 LM 2018 LM & Bell's Grove. Between 5–20 plants in 2012 and 12 plants in 2013 (LM). About 15-16 plants in 2014 AJR NY851467 (AJR), three in 2016. 2010 WG NY767687 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 C. viride 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 C. viride was not found.(AJR, 2010).

#### Corallorhiza trifida Châtel.

1964 GS

1983 GS

NY86NW

Coralroot Orchid

Native and perhaps a colonist			Vulnerable; locally rare
NZ257702	1963 AT	2019 AJR	Gosforth Park SSSI. Numbers vary from year to year, but 210 were recorded in 2008; 460 in 2010 and 168 in 2013 (PD). Since then in low double figures.
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).

Honeycrook Burn

Dactylorhiza praetermissa (Druce) Soo

Southern Marsh-orchid Locally rare, spreading north.

N	lative		Locally rare, spreading north.
	NZ239707	2017 LKo	Warkwoods Estate, Newcastle Great Park. Several
			subpopulations, 100+ in total, not including hybrids
			with <i>D. purpurella</i> and <i>D. fuchsii</i> .

#### Dactylorhiza incarnata (L.) Soó Native

#### Early Marsh-orchid Locally scarce

Native			Locally Scarce
NZ271983	2019 AJR		East Chevington (Druridge Bay country park & Hadston Links SSSI)
NY948911	2019 DH		Benshaw Moor NR
NZ273997	2015 AJR		Druridge Country Park
NY958844	2015 MD	2016 WG	Ray Burn, Blackhalls Farm, 20+
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	2010 AJR & NW	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
		1	U

## 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, some of which are suburban or post-industrial.

NY92420.6 5277	2019 AJR		Riverside walk west of Hexham.
NY672611 NY672612	2014 QG		Crow Wood opposite Featherstone Castle
NY928661	2015 AJR	2019AJR	Acomb mine waste pumping station. 30+
NY682521 NY682522	1962 GS	2019 AJR	Williamston (NWTR, SSSI). 160 plants in 2008 (AJR). Estimated to be more the 500 plants in 2014. 170 2016.

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	2017 ME	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	2015 NW & AJR	Burnfoot River Shingle & Wydon Nabb SSSI 100+ 2015.
NY945645	2003 MH	2009 ЈВо	Egger Factory Hexham. More than 150 plants in 2003; more than 50 plants in 2003 (MH) and 11 in 2009. Not found 2013.
NY695636	2009 MG	2016 AJR	Industrial estate at the western end of Haltwhistle. Twenty plants. Four in 2016.
NY772658	2009 AJR		Other side of the ravine from Vindolanda. Eight plants
NY676598 NY676583 NY680573 NY674590	1974 GS	2018 DF	Lambley River Shingles SSSI (though recent reports of plants are outside the SSSI boundaries). Eight plants in 2008. 100+ in 2017 (probably different site)
NY675596	2017 JBo R Bo		Lambley roadside by bridge
NY825659 NY825661	1994 LCC	2017 JBo, RBo	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	2019 AJR	Close House (NWTR). More than 100 plants in 2000 (MF), >200 plants in 2006 (WG). 100 plants in 2019.
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 plants (AJR, 2000). Not seen post 2010.
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 NZ273985 NZ272993 NZ272987 NZ273986 NZ272985 NZ272984	1966 GS	2018 AJR (BSBI meeting)	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, 72 in 2016 (GY).
NZ272988			

 $\label{prop:prop:matter} \textit{Epipactis phyllanthes} \ \text{G.E.Sm.}$ 

Green-flowered Helleborine Nationally scarce; locally rare

Native

Also, see Richards and Swan (1976).

NY854683 NY854688 NY855685 NY855685	1974 GS	2018 AJR	Stonecroft Mine, Settlingstones Burn (Stonecroft Mine SSSI). About 20 plants in 1994, about 30 in 2009 and 2011 and 90 plants in 2012, 200+ in 2016, 100 in one stand.
NZ041901	1982 GS	2000 ЈН	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 myrtillis* 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	2019 AJR	Dipton Wood. Several small patches scattered through the wood. Over 100 spikes counted in 2012. Lost from many subsites in 2016 due to felling but still at 970605.
NZ010590 NZ003591 NZ007589 NZ008589	c. 1935 GW	2014 QG & AJR	Broomley Fell Plantation

### Gymnadenia conopsea s.l.

The three species that make up the *Gymnadenia conopsea* complex are not difficult to tell apart, but only in recent years have the crucial characters been clarified. In the *Flora of Northumberland* (1993) Swan admits that there is more work to be done to identify the taxa and sites in the county, but states that *G. conopsea* was present at every site investigated. Although this is unlikely, it is certainly the commonest taxon in the county and usually the only one present on limestone grassland. *G. borealis* is

typical of more acidic sites, and *G. densiflora* should be sought in wet base-rich localities. Despite Swan (1993), we consider that there is only a single confirmed record from East Chevington, although there are large populations on the Durham Magnesian limestone. *G. borealis* and *G. conopsea* are still underrecorded.

Gymnadenia borealis (Druce) R.M.Bateman, Pridgeon & M.W.Chase Heath Fragrant-orchid

Native		Data dencient; data dencient
NT92239.0 5368	2017 WG	Angryhaugh
NY627888 NY622891	1989 GS	Lewis Burn
NY85M	2007 JO	The Spittal
NY67X	2007 JO	Stower Hill
NZ025937	1989 GS	Fallowlees Burn
NZ037893	1989 GS	Donkin Rigg
NY627888	1989 GS	Lewis Burn
NY622891	1989 GS	Lewis Burn

Gymnadenia conopsea (L.) R.Br.

Chalk Fragrant-orchid Least concern; data deficient

Underrecorded, most records still as aggregate species.

C III de l'II de d'I de d'	, most records sur	<u>88 8</u>	
NZ2729.98 63	2017 ME		East Chevington (Druridge Bay country park & Hadston Links SSSI)
NY68271.7 4267	2017 WG		Lampert, Irthing
NY613897	1964 MSw & GS		Akenshawburn

Gymnadenia densiflora (Wahlenb.) A. Dietr.

Marsh Fragrant-orchid

Native

Vulnerable; locally rare

This is the only record confirmed in recent years using modern criteria. Previous recorded by GS from more than 11 sites, but all these except perhaps Whiskershield Burn are unlikely habitats.

NZ2727.9865	2014 GY	2016 GY	Hadston Links (Druridge Bay country park &
1,22727.9005			Hadston Links SSSI). Four plants, then six plants.

# *Hammarbya paludosa* (L.) Kuntze Native

Bog Orchid 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	2019 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 22+ in 2016
NY896515 NY896513	1991 DH & TH		Stobbylee Burn (Hexhamshire Moors SSSI). Revisited in 2002, but the site had been largely 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

Neottia nidus-avis (L.) Rich.

and long gone (Baker & Tate 1868).

Bird's-nest Orchid

Native			Vulnerable; locally scarce
NU002004	2019 WG		Bickerton Wood
NY792622	2008 AM & LS	2015 BH	Briarwood Banks and Allen Banks (NWTR,
NY795626		& GY	SSSI). Four plants in 2008 (AM & LS); Nine
NY797630			plants in 2014 (GY).
NY8896	2013 JDa		West Dipton Wood, two spikes.
16			
NY84663 2	2013 AM	2014 AM	Spring Wood
NZ101787	1970 GS	2013 NW	Belsay Woods, 30 plants.
NY799592	1868 BT	2019 LM, RFr	Stawardpeel wood, near Cupola Bridge,
NY901648	1999 AJR	2019 AJR,	High Wood and Coastley area. Three plants in
NY900652		MR, JBo	2009 (JBo). Four in 2011 (JBo & AJR), 22 in
NY900647		RBo	2016.
NY90072.6			
4758			
NY8517	2011 NW		West bank of North Tyne at Houxty, one plant.
88			
NZ151734	1975 GS	2018 DW	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)
NV(0)4(70	1010 NIWI	1007 DI	& 2 plants in 2007 (JS & MR).
NY634678	1819 NJW	1997 DI	Wardrew, Gilsland Gorge
NZ266806	1991 GS		Humford Mill (Bedlington Country Park LNR)

*Platanthera bifolia* (L.) Rich. Native

Lesser Butterfly-orchid Endangered; locally scarce

NZ269982 NZ268990 NZ271990 NZ271987	1993 GS	2019 AJR	East Chevington (Hadston Links SSSI). Several subsites 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, 60+ in 2019.
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	2003 CE, HE	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. Not found by AJR in 2016.

#### Platanthera chlorantha (Custer) Rchb.

# Greater Butterfly-orchid

Native			Locally scarce
NY7373	2012 AJR		Grindon Green
NY82725.5 3868	2008 CO & JO	2019R& JBo	Haggburn Gate SSSI. 40 plants in 2010; 8 in 2011; 35 in 2012 (Jbo); 15 in 2013 (JBo), 45 in 2019 (JBo).
NY927609 NY927610 NY930611 NY931611 NY 931612	1983 GS	2019 AJR	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), 13 in 2013 at four subsites, 29 in 2016 and 48 + 18 in 2019.
NY667524 NY666522	1984 GS	2008 JO	Knar Burn (Aules Hill Meadows SSSI). 22 flower spikes (2008, JO).
NY812566 NY813573	2006 JO	2019 AJR	Crockton Burn & Kittygreen. Several populations in this area. 14 in 2016., 100+ in 2019.
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.

## Pseudorchis albida (L.) Á.Löve & D.Löve

Small-white Orchid

Native

Vulnerable; locally rare (probably extinct)

This species is extinct in the county. It has been declining for many years, probably due to changes in land management, particularly the loss of upland hay meadows. It has also virtually disappeared from Gowk Bank NNR on the west bank of the R. Irthing.

NY903494	1982 AJR	1995 JL & SH	Heatheryburn Bank SSSI
NY75NE	1984 GS		Dewsgreen Burn, below Oaks Wood (Whitfield Moor, Plenmeller & 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

1 1411 10			Escary rare
NY9175 NY913749 NY920754	1850 TBe	2014 NW	Gunnerton Nick, SSSI. A few plants (2011, GY).
NY936648	2015 AJR		Bank of Cockshaw Burn immediately before river, west side. Considerable colony. Extinct in 2018 due to path works.
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 Locally extinct

Native

Not recorded since the 19th century.

### Allium schoenoprasum L.

Chives

Native			Locally rare
NY671660 NY671661 NY677666 NY678666 NY679665 NY682665 NY680666 NY680665 NY682664 NY683666 NY693667 NY683665	1819 NJW	2019 AJR	Walltown, on exposed whin and whin grassland near the houses and old lime kilns. SSSI. "Many large plants" (2011, GY). The eastern populations have expanded enormously since 2010, possibly exceed the western populations in extent and now cover perhaps 1 ha.
NY9880	1837 JTr	2016 NW & AJR	Exposed whin NW of farm at Great Bavington SSSI
NY747672	1805 JT	2009 AJR	Winshields

# Asparagaceae

Convallaria majalis L.

Lily-of-the-valley

Native?

Threatened as a native

There were several probably native sites in ancient woodland on the Allens, Dipton Burn and Wansbeck, but possibly only surviving on the E Allen. Other sites represent escapes from cultivation or deliberate introductions.

delicerate min			
NY87048.6 3486	2017 JBo		Yexley Cottage
NY917668	1769 JW	2014 JBo	Warden
NY6651	2008 JO		Far House

NZ259702 NZ256706	1990 NES	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
NY834563	1983 GS	2015 GY	River East Allen, NE bank
NZ224860	1868 WR	1980 GS	River Wansbeck, near Morpeth
NY95NE	1972 GS		Linnelswood, Pethfoot
NY797637	1959 FE		Ridley College

Polygonatum verticillatum (L.) All.

Whorled Solomon's seal

Native

Regionally extinct; locally extinct

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

#### Juncaceae

Juncus ranarius Songeon & E.P.Perrier

Frog Rush Locally scarce

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

	•	66 7
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.

Sea Rush

Native

Locally extinct

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

Juncus subnodulosus Schrank

Blunt-flowered Rush

Native

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. It has several strong locations in vc 68.

# Cyperaceae

Blysmus compressus (L.) Panz. ex Link

Flat-sedge

Native

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. Has not been seen in coastal sites recently.

NY674590	2019 DF		Lambley shingles
NY9260.9519 NY9316.9412 NY9597.9520	2015 MD	2016 WG	Elsdon Burn. Several subpopulations over 1 km+.
NY769763	1959 GS	2009 QG	Stonehaugh. Only 19 flowering stems counted in 2009. The site is perhaps suffering from undergrazing.
NY676595	1984 GS	2014 AM	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.

Bolboschoenus maritimus (L.) Palla Native Sea Club-rush Locally scarce

In brackish ponds, streams and seashores. There is little suitable habitat in South Northumberland, but there are no particular threats to this species and it is reasonably common elsewhere in Great Britain.

NZ274966	1972 AJR	2019 AJR	Chibburn Mouth, locally abundant
NZ274900 NZ276972	1/12 AJI	201 <i>3 I</i> AJIX	Cinobani Mouni, iocany abundant
NZ272979			
NZ272980			
NZ271980			
NZ271982			
NZ304908	1972 AJR	2012 QG	River Lyne
NZ302908			
NZ300917	1972 AJR	2012 QG	Lynemouth
NZ2987	2012 JO		North Seaton, Summerhouse lane
NZ316890	2011 GY		Beacon point
NZ335760	1984 GS	2019 GY	Seaton Sluice salt-marsh (HolywellDene LNR)
NZ334762			
NZ332762			
NZ288940	1972 AJR	1995 NCC	Cresswell
NZ285946			
NZ287939			
NZ285944			
NU282024	1966 GS	1995 NCC	Hauxley
NZ28NE	1984 GS		Stakeford Bridge

NZ28SE	1974 GS	1983 GS	Sleek Burn
NZ2991	1972 AJR		Lynemouth Dene

Carex aquatilis Wahlenb.

Water Sedge

Native			Locally rare
NY652770	1976 FJR	2016 AJR	Paddaburn (Kielder Mires SSSI unit 8). Not much,
NY662768	CCH (in		mixed in with <i>C. rostrata</i> beside river and shy
NY661766	NY67N)		flowering.
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	2019 BB	Deadwater Fell (Kielderhead & Emblehope Moors SSSI). Much reduced and now in a strip about 50m × 2m (AJR, 2010).
NT67361.0 2185	1993 RC	2019 BB	Limestone Knowe (Kielderhead & Emblehope Moors SSSI)
NY659470	1975 GS	1987 GS	Grey Nag

Carex diandra Schrank

Lesser Tussock-sedge

Native			Vulnerable; locally rare
NY771691	2009 AJR	2010 AJR	Caw Lough East (Roman Wall Loughs SSSI). "very
NY772691			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 scarce

Although locally common in maritime sites in the north of the county, *C. distans* probably only survives in two localities in the vice-county.

NZ271982 NZ271983	2014 GY & WG	2019 AJR	Pool edge near Chibburn Mouth
NZ334760 NZ334761 NZ334762 NZ334763	1998 AY & GY	2017 WG	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  $19^{th}$  century.

#### Carex lasiocarpa Ehrh.

Slender Sedge Vulnerable; locally rare

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> .
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 proportion 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.

NY634833	2019 BB		Humble Loop
NY6769 NY6770 NY6870	1964 GS AJR	2010 JO	The Wou (Kielder Mires SSSI unit 30). "Hundreds of plants" JO.
NY697943 NY693944	1967 GS	2019 BB	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	с. 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 $10m \times 4m$ of the wettest part of the bog. 22 stems were counted in $2m^2$ 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 GSi	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.

Prickly-sedge Locally scarce

Native	1 1	`	Locally scarce
NY791735	2019 BB		Viewie Knowe
NY7899	2019 BB		Blackburnhaugh
NY9565 NY942652	1969 GS	2012 QG	Near Anick. Site may have been destroyed by road works in 2016.
NY9174	2006 CI, LS & KC	2018 AJR	Gunnerton Crags (Gunnerton Nick SSSI)
NY9476	1963 GS	2015 WG	Colwell

Carex pauciflora Lightf.

Few-flowered Sedge

Native

Threatened; locally scarce

Northumberland had a significant proportion of the English sites, though it is relatively common in Scotland. However there has only been a single record in the last decade despite searches in known sites.

NY679791	1956 BHT	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.

Spiked Sedge

Native	Locally scarc
Apparently, this species has recentl	y increased on derelict industrial sites around Newcastle.

NY8668	2014 WG	-	Lower Stonecroft Farm
NY943651	2013 WG		Oakwood.
NZ214717	2000 WG	2018 LKo	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	2018 AJR	Hallington Reservoir, north shore.
NZ0668	1973 GS		Great Northern Reservoir. Presumed extinct as drawdown no longer occurs there.

 $Carex\ acuta \times nigra$ 

Native			Locally rare
NZ061726	2011 JA & AH	How Burn	

#### Carex × boenninghausiana Weihe

C. paniculata  $\times$  C. remota

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

Carex × fu Native	lva Gooden.			C. hostiana $\times$ C. lepidocarpa Locally rare
NY7776 2010 JO		White Hill		

Eleocharis acicularis (L.) Roem. & Schult.

Needle Spike-rush

Native			Near threatened; locally scarce
NZ2391.771 6	2016 JO		Northumberlandia
NY975770 NY976769	1984 GS	2014 AJR	Hallington Reservoirs
NT733036 NT747028	1972 GS WAC	2016 QG	Catcleugh Reservoir. A small patch, at most 1m <sup>2</sup> (QG 2011).

NY933780	1972 GS	2018 AJR	Colt Crag Reservoir
NY9377			
NY9478			
NZ070585	1984 GS		Great Northern Reservoir. Presumed extinct as drawdown no longer occurs there.

 ${\it Eleocharis\ mamillata\ subsp.\ austriaca\ (Hayek)\ Strandh.}$ 

Northern Spike-rush

Locally scarce

Nearly all the old sites of this rare plant have been lost, although it still probably hangs on in two. It

seems to be becoming sterile, perhaps through climatic reasons.

NY63205.91464	2018 WG		Capon Pond, Bakethin. A magnificent fertile population.
NY68120.73629 NY68132.73665	2017 WG		Lampert, R Irthing. Fails to set any mature fruit.
NY640910 NY642909	2006 CI	2016 AJR	Bakethin Reservoir (NWTR). The original site near the slipway has disappeared, but larger patches still exist in Lewie Hope, mixed with <i>E. palustris</i> .
NY664710	2016 AJR		Wileysike, edge of R. Irthing. One clump with <i>E. palustris</i> . Fails to set any mature fruit. Could not be found in 2018.
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.

Eleocharis multicaulis (Sm.) Desv.

Many-stalked Spike-rush

Native

It perhaps grew at Prestwick Carr until the 19th century.

Locally extinct

Eleocharis uniglumis (Link) Schult.

Slender Spike-rush

Native

Locally rare, probably extinct.

In 2011 AJR visited the Wileysike House and Small Burn sites. He was unable to confirm the presence of *E. uniglumis*. However, at Small Burn a perplexing *Eleocharis* was found with some characters of *E. uniglumis*. He concluded though, 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 J	fluitans (L.) Link	Floating Club-rush 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).

Rhynchospora alba (L.) Vahl

White Beak-sedge

Native

Near threatened; locally scarce

This is largely a western species and the South Northumberland sites represent isolated eastward

extensions of its range.

NY932778	2015 DHu		Folly Moss
NY758673	1974 DHa	2012 AJR	Hotbank Moss (Roman Wall Loughs SSSI)
NY760673			
NY760674			
NY763674			
NY765674			
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
NY9999	2019 BB SH		Bickerton Knowe
NY957977	1974 GS	2012 MR	Grasslees LNR & NWTR (Simonside Hills SSSI). The largest patch is approximatly $10 \text{ m} \log \times 3.5 \text{ m}$ but with approx 50 tufts (MR).

#### Poaceae

Agrostis gigantea Roth

Black Bent

Locally frequent.

This species appeared in earlier editions as underrecorded and data deficient. There have been a number of new records in the last decade, and it is clear that this species is not uncommon in the county, most often on the edge of footpaths in plantations.

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	2016 AJR	Old railway near Elrington. Has colonised about 10 m of bank in 2016.

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.

2001 GS	NY 798629	Allen Banks, Raven Crag. Not found 2016.
Bromus rac	remosus Schrad.	Meadow Brome
Native		Rare colonist
NZ101783	2018 AJR	West Newham, field edge (as B.
		commutatus now = $R$ racemosus)

.

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

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

Near threatened; locally scarce

NZ234729 NZ232731	2013 QG	Brunswick Village. Apparently, established as a weed of agriculture.
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 Locally scarce

Native			Locally scarce
NY763694 NY766694 NY766698 NY768689	2010 SH	2015 AJR, JO & AM	Greenlee Lough NNR & Caw Lough (Roman Wall Loughs SSSI). "abundant over quarter of a hectare".
NY691591	2012 AJR & NW		Coanwood Fen, a large population.
NY6977	2010 JO		Little Gowany Knowe. A large patch at least 5m by 20m.
NY631927 NY632927 NY632926	2002 GS	2008 AJR	Kielder

NY686891 2001 GSi	North side of Kielder Water, near to Wind Hill.
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#### Catabrosa aquatica (L.) P.Beauv.

Whorl-grass

Native	<i>1</i> ······		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 marinum (L.) C.E.Hubb.

Sea Fern-grass

Nativ

Locally scarce

In short turf and bare ground near the sea. While not common it can colonize new sites and does not seem to be declining.

NZ303843	2017 GY		N of Cambois
NZ303847 NZ304847			
NZ309872 NZ309873	2015 AY & GY		Newbiggin Bay, promenade embankment
NZ325778 NZ325779 NZ320790 NZ320791 NZ324780 NZ325780	2005 AY & GY	2018 GY	A193 roadside verge, north of Astley Arms, Seaton Sluice.
NZ374692 NZ371693 NZ371694	1984 GS	2019 GY	Tynemouth pier, growing well for 60m by the side of path, the best we have ever seen it (GY).
NZ314880 NZ319881 NZ319880 NZ318880 NZ317879	1985 GS	2015 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

Drymochloa sylvatica (Pollich) Holub.

Wood Fescue

Nativ

Locally scarce

In shady denes in the Tyne and Derwent valleys. Rarely in large populations, but these populations seem stable. South Northumberland holds a relatively large proportion of all the English sites.

NY696627 2015 AM Bellister Castle Woods	
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NY634666 NY635678 NY638678	2008 AY, GY & AJR	2015 QG	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.
NY948595	2014 AJR & NW		Ordley, Eleven plants
NY803607	2013 AM		Harsondale Cleugh
NY799595 NY802598 NY802599 NY803596 NY804596	2009 AJR	2019 AJR	Stawardpeel Wood, W. Allen, a total of 525 plants North of Cupola Bridge (Stawardpeel Woods SSSI).
NY798629 to NY798633	1974 GS	2019 AJR	Allen Banks. 48 plants in 2011. Several hundred in 2019.
NY918613	1975 GS	2016 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	1960 OG	2014 GY	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).

# *Elymus athericus* (Link) Kerguélen Native

Sea Couch

Locally scarce

 $E.\ athericas$  can be confused with its hybrids  $E.\times acuta$  ( $E.\ atherica\times juncea$ ) and  $E.\times drucei$  ( $E.\ repens\times atherica$ ). The following records are considered reliable, but the presence of hybrids should be considered. There are two records of  $E.\ x$  acuta nothosubsp. obtusiuscula in the last decade but it is almost certainly overlooked and at Cresswell, Sandy Bay and Chevington Burn probably occurs with

E. atherica. However, $E. \times drucei$ has not been recorded in Northumberland.					
NZ314667	1987 NWT	2001 JD	Willington Gut		
NZ313668					
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 Locally scarce *Elytrigia juncea* is present in most parts of the county with mobile primary dunes, and is well-recorded with 15 records in the past decade, although it is often shy-flowering. It is probably not increasing but was overlooked in previous years.

#### 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.

NZ3280	2019 GW MC PH	South Beach, Blyth
NZ272980	2002 GS	Near mouth of Chevington Burn (Northumberland Shore SSSI)
NZ3189	1996 GS	Newbiggin-by-the-Sea

Festuca rubra subsp. juncea (Hack.) K. Rickt.

Native		Locally rar
NZ033922	2010 WG	Greenleighton Quarry SSSI

#### Festuca vivipara (L.) Sm.

Viviparous Fescue

Native			Locally rare
NY698478	1969 GS	2011 AJR	Gilderdale Burn. Only a little growing in rock
NY696477			crevices.
NT690040	1998 JBu		Carter Bar to Buzzard Crag. Diary record.
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.

N70276	2015 ID	Most Low Overse
NZ0276	2015 JD	Moot Law Quarry
NZ181773	2007 JD	Pont Ends oxbow
NY980797	2016 AJR & NW	Newonstead
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	2004 MB	2015 AJR	River North Tyne, near Haughton Castle. The only
NY919731			English site.
NY917730			

*Hordelymus europaeus* (L.) Jess. ex Harz Native Wood Barley Locally rare

NY799592 NY799593 NY799594 NY799595	1966 OG	2019 AJR	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.

Hordeum secalinum

Meadow Barley

Native Recent colonist

Common in the south of the country, but with only scattered records north of south Yorkshire.

NZ200847 2000 QG Morpeth

 NY672524
 2015 DF
 Lambley

 NY766679
 1989 GS
 Highshield Crags

Lolium temulentum (L.) Desv.

Darne

1

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	2016 AJR	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		River 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.

#### 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.

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			7
NY96SE	1983 GS	Railway near to Farnley	

#### Poa compressa L.

Native

Flattened Meadow-grass

Vulnerable

As suggested in earlier editions of the RPR, probably not a native species in the county, colonising new, impermanent or artificial habitats. There have been a spate of recent records in the vice-county, mostly in the SE, but also in the Forests and it is no longer as overlooked as previously, so has been withdrawn from the RPR.

### Polypogon viridis (Gouan) Breistr.

Water Bent

Colonist			Locally Scarce
NZ301927	2018 AJR	Snab Point, Cresswell	
NZ2557.8545	2015 WG	North Seaton Colliery	
NZ2888	2009 MU	Woodhorn Museum	
NZ2567	1981 GS	Ouse Burn, Gosforth	

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  $19^{th}$  century and only doubtfully native.

#### Sesleria caerulea (L.) Ard.

Blue Moor-grass

Native			Locally rare
NY951924	1964 GS	2014 AM	Mill Burn (NWTR) NY953921 & NY954921 are
NY952926			outside the reserve.
NY953921			
NY953922			
NY953923			
NY953924			
NY953925			
NY954921			
NY955928			

Burns SSSI).	NY967931	1967 GS	1989 GS	A small stream near Eastnook (Mill & Whiskershiel Burns SSSI).
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