

**Preliminary list of scarce plants potentially at risk from the Ray, Steadings
and Green Rigg windfarms, as recorded in Swan (1993)
(excluding widespread species, hortals & introductions)**

Notes.

1. It has been possible to locate certain species more precisely than is always possible from Swan's *Flora*, by use of the list provided for the Steadings Environmental Statement by Dr Quentin Groom (July 2005).
2. "Northumberland specialty" means a species (1) that is nationally rare or scarce, or on the national Red Data Book lists; (2) that occurs in 8 or more 5km squares in the county and (3) of which a substantial proportion of the national population is in the county. These plants are indicated with an asterisk *.
3. The numbers 1-4 indicate 5km squares 9085, 9585, 9080 and 9580 respectively and T indicates square 9579. Sc = scarce. Occ = occasional. VC67 is the botanical Vice-County 67 (South Northumberland). RDB = Red Data Book (the designations in the Northumberland RDB are D = rapid national decline; G = globally threatened; Ii = internationally important population in the county; L = on the Long List of the *UK Steering Group Report*; NR = rare in Northumberland; Pop = nationally important population in the county; Sc = nationally scarce.) Plants in **bold** are potentially of special relevance to the windfarm projects.

Fir clubmoss *Huperzia selago* 124 Summit Cottage NY 937847; Sweethope Crag. Localized and scarce in VC67.

***Alpine clubmoss *Diphasiastrum alpinum* 1 (and possibly 3 – Groom list – NY9384 NW of Summit Cottages). Very localised and scarce in the county.**

***Parsley fern *Cryptogramma crista* 4 Great Bavington Green Crag NY978807; Sweethope Crag NY9681. Very localised and scarce in VC67**

Hard shield fern *Polystichum aculeatum* 34 Crook Dean

***Mountain male fern *Dryopteris oreades* 4 . Sweethope Crag. Very localised and scarce in county. Very limited distribution in England, declining.**

***Blinks (*Montia fontana* subsp. *minor*, formerly *chondrosperma*) 4T. Great Bavington NY978807 (ie Green Crag). Very localised in VC67. Nationally scarce.**

***Lesser chickweed *Stellaria pallida* 4T "crag near Bavington NY98SE" Very localised (six 5km squares) in VC69 and throughout North of England.**

Small mouse-ear *Cerastium semidecandrum* 24T. Great Bavington; quarry at NY978823.

***Annual knawel *Scleranthus annuus* 4T. Whin crags near Great Bavington; Holm Crag (NY978803). Very localised and scarce in VC67. Nationally scarce and declining. Holm Crag near Steadings turbine 11 at cNY973803.**

***Maiden pink *Dianthus deltoides* 4T (RDB – Pop. Sc) Great Bavington, Holm Crag NY 978803 [& 9880 (Winch)] "Rare and very localised in VC67" National RDB "near threatened" list. "Northumberland specialty". Holm Crag near Steadings turbine 11 at cNY973803.**

Goldilocks buttercup *Ranunculus auricomus* 124 Crook Dean; Kirkwhelpington; Ray Burn at NY9785.

Ivy-leaved crowfoot *R. hederaceus* 124T (RDB – D L G Ii) Great Bavington "NY98SE"; Sweethope Crag. Scattered & occasional VC67.

Stream water-crowfoot *R. penicillatus* 1 (RDB – L Ii). Very localised in VC67. Occurs only in the River Rede (and ? in its tributaries including the Lises Burn).

Hairy rockcress *Arabis hirsuta* 4(T) Great Bavington; also between North Heugh and Thockrington NY 957802. “Very localised & scarce in VC67”.

Whitlowgrass *Erophila verna* group 1234 T (Common, round-podded & glabrous whitlowgrass subspp. all occur in 4). “*E. verna sens. lat.*”, at Great Bavington NY988804 (near Bab Crag).

Glabrous whitlowgrass *Erophila glabrescens* 4T. At NY985807 (500m N of Great Bavington). One of few records for county, but these form a high proportion of the records for northern England. It may be under-recorded.

***Hairy stonecrop *Sedum villosum* 4 Rare. Near Great Bavington on whin (RDB – Sc) declining. National RDB “near threatened” list; declining; “Northumberland specialty”.**

Meadow saxifrage *Saxifraga granulata* 4T Great Bavington. Localised and occasional in VC67. Declining nationally.

Grass of Parnassus *Parnassia palustris* 124 Ray Burn at NY953842 Scattered and occasional in county. Declining nationally.

Downy currant *Ribes spicatum* 1 (RDB – Pop Sc) Nationally scarce or rare (Plantatt). “Northumberland specialty”. ? site

Great burnet *Sanguisorba officinalis* 124T Crook Dean; limestone quarry in 9580

Salad burnet *Sanguisorba minor* 1234T. “Crag near Bavington NY98SE”; Sweethope Crag. Scattered and occasional in VC67.

Marsh cinquefoil *Potentilla palustris* 134T Crook Dean. Declining nationally. Significant proportion of English population in the county.

***Tormentil subsp. (*Potentilla erecta strictissima*) 24. Sweethope Crag. Known from 14 5km squares in the county. These form the great majority of English records other than in Devon & Cornwall.**

Spring vetch *Vicia lathyroides* T. North of Throckrington in 1961. Rare and occasional (two extant sites) in VC67.

Long-stalked crane’s-bill *Geranium culumbinum* (4) (RDB – NR). Declining nationally and in the North. ?site

Shining crane’s-bill *Geranium lucidum* 4T Great Bavington. Localised and occasional in county.

Heath dog-violet *Viola canina ssp canina* 4 T. Severe national decline. National RDB “near threatened” list. ?site

***Mountain pansy *Viola lutea* 2 4 (T). “Crag near Bavington NY98SE.” Great Bavington (Bavington crag and Holm Crag). Localised and occasional in the county. Declining nationally.**

Common rock-rose *Helianthemum nummularium* 124T Sweethope Crag. Localised and occasional in VC67.

Marsh pennywort *Hydrocotyle vulgaris* 1234T Lises Burn (between Ray turbines 6 & 7 and 8 & 10). Scattered and occasional in VC67. Declining nationally.

Burnet saxifrage *Pimpinella saxifraga* 1 (3) 4. Whin outcrop N of Northside NY990827. Scattered and occasional in county.

***Spignel *Meum athamanticum* T – Houky Hill north of Thockrington – only site in county (RDB – NR Sc); sparse and declining nationally, especially in England where recorded from only seven 10km squares; National RDB “near threatened” list.**

Bog-rosemary *Andromeda polifolia* 123 (Sweethope Moss). (RDB – Pop). Almost qualifies as “Northumberland specialty”, but narrowly misses the “nationally scarce” criterion. National decline outside the North-East.

Chickweed wintergreen *Trientalis europea* 3 [ext 2] Sweethope Lough (south shore) NY937822 May 2000. Very localised and occasional in VC67. Declining in NE England.

Bog pimpnel 2 – but E of main road on Chesters Burn (NY983870) – only site in VC 67. Declining nationally.

Autumn gentian *Gentianella amarella* 1 (2Extinct) 4. Localised and occasional in county. Some evidence of a national decline. ?site

Bogbean *Menyanthes trifoliata* 1234T. “Small Burn NY98SW” (Groom). The Small Burn drains the area of Steadings turbines 20 & 22 and the roads connecting them. Scattered and occasional in VC67.

Early forget-me-not *Myosotis ramosissima* 4. Great Bavington. Very localised in VC67. Scarce in northern England.

Eyebrights *Euphrasia rostkoviana* subsp. *montana* 4 at Crookdean NY973834 (RDB – Sc) Nat RDB “vulnerable” list. “Northumberland specialty”.

E. arctica subsp. *borealis* (4)

E. nemorosa 1(34) Localised and occasional in county.

E. confusa (1) 2 (3) 4 Great Bavington NY981803 (ie c.200m W of village). “Scattered and occasional-frequent” in county.

E. micrantha (2)34T Risey Burn NY935843 near new road between Ray turbines 16 and 17, localised in VC67. Northumberland has a significant proportion of the English population.

Marsh lousewort *Pedicularis palustris* 1234T. “Small Burn NY98SW and NY98SE” (Groom). The Small Burn drains the area of Steadings turbines 20 & 22 and the road connecting them. Scattered in VC67. Declining nationally as a result of land drainage.

Hoary plantain *Plantago media* 1234T. Quarry at 978823; Sweethope Crag.

Small scabious *Scabiosa columbaria* 4. Crook Dean; whin near Great Bavington. Localised and occasional in county. Declining nationally.

Giant bellflower *Campanula latifolia* 4 Crook Dean

Marsh cudweed *Gnaphalium uliginosum* 13 “Small Burn NY98SW” (Groom).
Scattered and occasional in county. Increasing nationally. The Small Burn drains the area of Steadings turbines 20 & 22 and the road connecting them.

Dandelions *Taraxacum lacistophyllum* 24 (Loc in 67)
T. fulviforme 24 (Very loc & occas in 67)
T. oxoniense 24 (Loc & uncommon inland in 67)
T. maculosum 123 (Scattered and occas in 67)
T. subnaevosum 1 Very loc & occas in 67)
T. fulvicarpum 4 (Very loc and scarce in county – only in VC 67)
T. nordstedtii 1234
T. subbracteatum 23T (loc & freq in 67)
T. polyodon 2 (Very local in hill country in 67; com in lowlands)
T. fasciatum 2 Rare outside Tyne Valley

Hawkweeds *Hieracium schmidtii* 4 – Great Bavington on whin at 230m at NY981803, sole site for county (c. 300m w of village).

H. caledonicum 4 Great Bavington whin at 245m NY978807 (ie Green Crag) – one of 3 sites (close to turbine 11).

H. rubinginosum 4. Bavington Crag NY9881 & Sweethope Dean. “Rare”.
Bavington Crag runs from NY982812 to 985815 near the site of the Steadings borrow pit. It is one of seven recorded sites for the county.

H. vulgatum 14 on whin at Great Bavington NY 981803. Scattered and occasional in county.

H. cravoniense 4. Bavington Crag NY9881. Very localised and scarce in VC67. This crag runs from NY982812 to 985815. SITE OF PROPOSED STEADINGS BORROW PIT. One of 13 sites in county.

H. eboracense 4 “Bavington, Hexham to Rothbury road” only county record.

H. sabaudum 14. Scattered & occasional in county.

Pondweeds *P. polygonifolius* 1234 Ferneyrigg Burn, Middlerigg Burn (near Ray turbine 17) Scattered and occasional in VC 67. Declining in lowland Britain.

P. gramineus 3 Very localised and occasional in county. Scarce & declining in Britain.

P. alpinus 34 “Red pondweed”. “Small Burn NY98SW” (Groom).
Localised and occasional in VC67, extinct in VC68. The Small Burn drains the area of Steadings turbines 20 & 22 and the road connecting them. Localised in VC67; extinct in the north of the county. Declining in England.

P. perfoliatus 3 Very localised and occasional in VC67

P. obtusifolius 2. Localised and occasional in VC67.

P. berchtoldii 13. Scattered and occasional in VC67.

P. crispus 134T Crook Dean. Scattered and occasional in VC67.

P. pectinatus 1. Very localised and occasional in VC67.

Chives *Allium schoenoprasum* 4 On whin near Great Bavington at 220m (RDB – NR Sc). One of three sites in the county. “Very rare and endangered” as a native plant.

Grasses *Squirreltail fescue* *Vulpia bromoides* 2

Downy oat-grass *Helictotrichon pubescens* 24T

Meadow oat-grass *H. pratense* (3)4T. Whin outcrop near Northside NY990827. Scattered and occasional in VC67.

Crested hair-grass *Koeleria macrantha* (23)4T Crook Dean; whin near Great Bavington. Localised in VC67.

Smaller cat's-tail *Phleum bertelonii* (34) Great Bavington NY9880 "very localised"; not seen since 1962)

Bristle club-rush *Isolepis setacea* 234T. "Small Burn NY98SE" (Groom). The Small Burn drains the area of Steadings turbines 20 & 22 and the road connecting them. Scattered and occasional in the county.

Deergrass *Trichophorum cespitosum* subsp. *cespitosum* 123

**Sedges Flat-sedge *Blysmus compressus* 14 National RDB "vulnerable" list
Broad-leaved cotton-grass 1234**

Few-flowered spike-rush *Eleocharis quinquefolia* 12(3)4. "Small Burn NY98SE" (Groom). Near Steadings turbines 20 & 22 and the road connecting them. Scattered and occasional in VC67.

Slender spike-rush *E. uniglumis* 3. Small Burn marsh at 225m (c.NY952809); Near Steadings turbines 20 & 22 and the road connecting them. Rare in VC 67 (four extant sites).

Greater tussock-sedge *Carex paniculata* (4)(T)

Remote sedge *C. remota* 1(3)

Dioecious sedge *C. dioica* 124. "Small Burn NY98SE" (Groom). Near Steadings turbines 20 & 22 and the road connecting them. Scattered and occasional in VC 67.

Long-stalked yellow-sedge *C. viridula* ssp. *brachyrrhyncha* 1234T; Risey Burn road-crossing; "Small Burn NY98SW and NY98SE" (Groom). Near Steadings turbines 20 & 22 and the road connecting them. Scattered in VC67.

Frog orchid *Coeloglossum viride* 23. Localised and scarce in VC67. Declining nationally. National RDB "Vulnerable" list.

Early Marsh-orchid *Dactylorhiza incarnata* 2. Very localised and occasional in VC 67. Scarce and declining.