

Flora of Natland

1. Natland Road verge, east side.

Surveyed by N.A.Robinson on 22 June 2004, from SD518893 to SD518905. 2 hours.
Resurveyed by N.A.Robinson, Ann Parnham and Colleen Harrison on 1 August. 2 hours.

A list of species is attached. The Frequency estimates are as follows:

Rare	Seen in one place only.
Occasional	Seen here and there.
Frequent	Common, seen often.
Abundant	Many plants together.
Dominant	Little else visible.

A total of 54 native plant species were recorded in the 22 June survey (excluding trees and shrubs, mostly planted), of which 41 were 'flowers' and 13 were grasses. Only two clumps of garden escapes were noted. The survey on 1 August added some species which had been overlooked before, and others which had come into flower later, raising the total of native plants to 71. Raspberry was included in the original list as 'native', because it occurs naturally in the Lake District, but it has been relegated to 'garden escape' because that is almost certainly how it comes to be on the verge. The identification of Hoary Plantain was corrected to Greater Plantain. Species added to the list on 1 August are indicated by an asterisk*.

Patches of the verge are dominated by Nettle and Creeping Thistle; this is due to disturbance and enrichment in the past (possibly stock-piling manure on the verge long ago?). There are patches of Bramble, and, more locally Raspberry, but there are also extensive stretches supporting a typical range of roadside (one-time 'meadow') flowers. Of particular interest is the range of species present and the frequency of Meadowsweet and Meadow Crane's-bill, classic hay meadow plants which are no longer to be seen in the fields of the Parish.

Neil A Robinson August 2004 .

Flora of Natland

1. Natland Road verge, east side, revised 1 August 2004

English Name	Scientific name	Frequency
'Flowers'		
Nettle	<i>Urtica dioica</i>	Frequent, locally dominant
Bramble	<i>Rubus fruticosus</i>	Frequent, locally dominant
Meadowsweet	<i>Filipendula ulmaria</i>	Frequent, locally abundant
Creeping Thistle	<i>Cirsium repens</i>	Frequent, locally abundant
Ground Elder	<i>Aegopodium podagraria</i>	Frequent, locally abundant
Cleavers (Goose-grass)*	<i>Galium aparine</i>	Frequent, locally abundant
White Clover*	<i>Trifolium repens</i>	Frequent
Meadow Crane's-bill	<i>Geranium pratense</i>	Frequent
Dandelion	<i>Taraxacum officinale</i>	Frequent
Cow Parsley	<i>Anthriscus sylvestris</i>	Frequent
Ribwort Plantain	<i>Plantago lanceolata</i>	Frequent
Greater Plantain*	<i>Plantago major</i>	Occasional
Knotgrass*	<i>Polygonum aviculare</i>	Occasional
Chickweed*	<i>Stellaria media</i>	Occasional
Mouse-ear*	<i>Cerastium holosteoides</i>	Occasional
Rosebay Willowherb*	<i>Chamaerion angustifolium</i>	Occasional
Fairy Flax*	<i>Linum catharticum</i>	Occasional
Hogweed	<i>Heracleum spondylium</i>	Occasional
Silverweed	<i>Potentilla anserina</i>	Occasional
Meadow Buttercup	<i>Ranunculus acris</i>	Occasional
Hedge Woundwort	<i>Stachys sylvatica</i>	Occasional
Yarrow	<i>Achillea millefolium</i>	Occasional
Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional

Dock	<i>Rumex</i> spp.	Occasional
Red Clover	<i>Trifolium medium</i>	Occasional
Knapweed	<i>Centaurea nigra</i>	Occasional
Sorrel	<i>Rumex acetosa</i>	Occasional
Crosswort	<i>Galium cruciata</i>	Occasional
Oxeye Daisy	<i>Leucanthemum vulgare</i>	Occasional
Creeping Buttercup	<i>Ranunculus repens</i>	Occasional
Bush Vetch	<i>Vicia sepium</i>	Occasional
Tufted Vetch	<i>Vicia cracca</i>	Occasional
Dog Rose	<i>Rosa canina</i>	Occasional
Germander Speedwell	<i>Veronica chamaedrys</i>	Occasional
Greater Stitchwort	<i>Stellaria holostea</i>	Occasional
Lesser Stitchwort	<i>Stellaria graminea</i>	Occasional
Rough Hawkbit	<i>Hypochoeris radicata</i>	Occasional
Intermediate Lady's-mantle	<i>Alchemilla xanthochlora</i>	Occasional
Smooth Hawk's-beard	<i>Crepis capillaris</i>	Occasional
Pineappleweed*	<i>Matricaria matricarioides</i>	Occasional
Lesser Trefoil*	<i>Trifolium dubium</i>	Rare
Mouse-ear Hawkweed	<i>Hieracium pilosella</i>	Rare
Nipplewort*	<i>Lapsana communis</i>	Rare
Greater Bird's-foot Trefoil	<i>Lotus ulginosus</i>	Rare
Hairy St John's Wort	<i>Hypericum hirsutum</i>	Rare
		PTO
Dog's Mercury	<i>Mercurialis perennis</i>	Rare
Self-heal	<i>Prunella vulgaris</i>	Rare
Heath Wood-rush	<i>Luzula multiflora</i>	Rare
Wood Crane's-bill	<i>Geranium sylvaticum</i>	Rare
Ragwort	<i>Senecio jacobaea</i>	Rare
Shepherd's-purse*	<i>Capsella bursa-pastoris</i>	Rare
Upright Hedge-parsley*	<i>Torylis japonica</i>	Rare
Hedge Bindweed*	<i>Calystegia media</i>	Rare

Prickly Sow-thistle*	<i>Sonchus asper</i>	Rare
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Total 'Flowers': 54

Grasses

False Oat	<i>Arrhenatherum elatius</i>	Frequent, locally dominant
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Cock's-foot	<i>Dactylis glomerata</i>	Frequent
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Yorkshire Fog	<i>Holcus lanatus</i>	Frequent
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Creeping Soft-grass*	<i>Holcus mollis</i>	Frequent
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Red Fescue	<i>Festuca rubra</i>	Frequent
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Smooth Meadow-grass	<i>Poa pratensis</i>	Frequent
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Rough Meadow-grass	<i>Poa trivialis</i>	Frequent
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Common Bent*	<i>Agrostis capillaris</i>	Frequent
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Creeping Bent*	<i>Agrostis stolonifera</i>	Frequent
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Timothy*	<i>Phleum pratense</i>	Occasional
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Vernal Grass	<i>Anthoxanthum odoratum</i>	Occasional
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Couch Grass	<i>Elymus repens</i>	Occasional
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Rye-grass	<i>Lolium perenne</i>	Occasional
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Downy Oat-grass	<i>Avenula pubescens</i>	Rare
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Dog's-tail	<i>Cynosurus cristatus</i>	Rare
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Tufted Hair-grass	<i>Deschampsia cespitosa</i>	Rare
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Meadow Foxtail	<i>Alopecurus pratensis</i>	Rare
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Total: 17

Total Native Plants: 71

Garden Escapes

Raspberry	<i>Rubus idaeus</i>	Occasional, locally dominant
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Pink Spiraea	<i>Spiraea x brumaldi</i>	Rare
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Comfrey	<i>Symphytum sp.</i>	Rare
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Flora of Natland

2. Helm Lane verges.

Surveyed by N.A.Robinson on 11th July, and with Anne Parnham and Colleen Harrison on 18 July 2005.

Starting at the junction with Abbey Drive, the mown verge on the south side has frequent Daisies, Yarrow, White Clover, Creeping Buttercup, Greater Plantain, Silverweed and occasional Dandelion.

Both sides of the narrow verge beyond have Garlic Mustard (Jack by the Hedge), Broad-leaved and Curled Dock, and Smooth and Prickly Sow-thistle.

Opposite Spence House the unmown face of the bank supports a range of meadow flowers including Cat's-ear, Oxeye Daisy, Knapweed, Black Medic, Ribwort Plantain and Fox and Cubs (a garden escape).

At the footpath stile there is a clump of Sweet Cicely, an aromatic umbellifer smelling of aniseed, which according to the Flora of Cumbria, is probably not native here but was grown as a cottage garden plant for flavouring purposes.

Opposite Hope Cottage is a very dense old hedge containing Hawthorn, Elder, Sycamore, Ash and Crab Apple - and another 'cottage garden' plant: Greater Celandine. (This is a singularly inappropriate name since it is not related at all to the common spring-flowering Celandine; in fact it is in the Poppy family, as is indicated by its yellow latex sap.) It was apparently used to treat skin ailments.

Up to High House Farm the narrow wall footings are much disturbed, but beyond the farm the widening verge on the north side is backed by an old ivy-covered wall and has Hogweed, Cow Parsley, Bramble, Male Fern and increasing amounts of Ground Elder. It is mown opposite Hill Cottage, but this cannot conceal the huge amounts of two cottage garden plants: Bistort and Ground Elder. Bistort was used as a spinach-like vegetable. Ground Elder is an umbellifer with white flowers and leavers resembling Elder. It is thought not to be native to the area, but was grown for 'culinary and medicinal purposes'. Believed to have been introduced by the Romans, it was used to treat gout (hence its alternative name Goutweed) and its leaves were cooked as a vegetable. However, as any gardener who has suffered from it knows, Ground Elder spreads rapidly by underground rhizomes. In consequence it can be seen spreading along roadsides beside many farms and cottages.

Beyond the railway bridge there is a small dense patch of Ash woodland with typical ground flora of Dog's Mercury, plus Hedge Woundwort.

The most impressive part of the Lane is found beyond here. On the south side, from the field gate to the bench seat, the bank is covered by flower-rich grassland with a colourful display of both Meadow and Wood Crane's-bill, Knapweed, Greater Bird's-foot Trefoil, Meadowsweet, Field Scabious, Meadow Vetchling, Meadow Buttercup, Hogweed, Cow Parsley, Red and White Clover, and only a little Nettle. This remarkable bank preserves a small fragment of what would have been typical hay meadow vegetation in the Parish in former times. There are also fine patches of Crane's-bills on the north side of the road, opposite.

Soon the Lane becomes shaded on both sides by tall Sycamores to the south and the vegetation becomes less diverse. Interestingly, at this point there is a patch of Bearded Couch-grass on the north side; this is a typical woodland edge species. As the Lane enters the shady cutting passing Elstead, the situation becomes even more like woodland. The retaining wall on the south side is festooned with Ivy, and has abundant Polypody Fern. Woodland plants like Herb Bennet , Wall Lettuce, Dog's Mercury and Nipplewort occur, and at the downhill end there are a few plants of Rough Chervil. This is a small bristly-stemmed umbellifer with tiny white flowers and rectangular fruits in starry clusters like projecting fingers. Though not rare, it is one of the less commonly noticed umbellifers, possibly on account of its small size.

As one reaches Little Helm, the vegetation is dominated by Ground Elder, and Cow Parsley.

A **list of species** is attached. This covers the verge and plants growing on the walls, but does not include the hedges. It is interesting that the total number of native plants recorded (85) is greater than that for the Natland road east side verge (71). Many of the plants are present only in small quantities, but it shows how important even quite narrow verges are for our native plants. The part immediately above the railway bridge is particularly important in preserving an example of rich hay meadow flora, and it is desirable that it should not be interfered with in any way.

The Frequency estimates used in the list are as follows:

Rare Seen in one place only.
Occasional Seen here and there.
Frequent Common, seen often.
Abundant Many plants together.
Dominant Little else visible.

Neil A. Robinson July 2005 .

Flora of Natland - 2: Helm Lane

English Name	Scientific name	Frequency
'Flowers'		
Nettle	<i>Urtica dioica</i>	Frequent
Bramble	<i>Rubus fruticosus</i>	Rare
Meadowsweet	<i>Filipendula ulmaria</i>	Rare
Creeping Thistle	<i>Cirsium repens</i>	Rare
Ground Elder	<i>Aegopodium podagraria</i>	Frequent, locally dominant
Meadow Crane's-bill	<i>Geranium pratense</i>	One area
Wood Crane's-bill	<i>Geranium sylvaticum</i>	One location
Dandelion	<i>Taraxacum officinale</i>	Occasional
Cow Parsley	<i>Anthriscus sylvestris</i>	Occasional
Broad-leaved Plantain	<i>Plantago major</i>	Occasional
Ribwort Plantain	<i>Plantago lanceolata</i>	Occasional
Hogweed	<i>Heracleum spondylium</i>	Frequent
Silverweed	<i>Potentilla anserina</i>	Occasional
Meadow Buttercup	<i>Ranunculus acris</i>	Rare
Creeping Buttercup	<i>Ranunculus repens</i>	Occasional
Hedge Woundwort	<i>Stachys sylvatica</i>	Rare
Yarrow	<i>Achillea millefolium</i>	Occasional
Meadow Vetchling	<i>Lathyrus pratensis</i>	Occasional
Broad-leaved Dock	<i>Rumex obtusifolius</i>	Occasional
Curled Dock	<i>Rumex crispus</i>	Occasional
Red Clover	<i>Trifolium medium</i>	Occasional
White Clover	<i>Trifolium repens</i>	Occasional
Knapweed	<i>Centaurea nigra</i>	Occasional
Crosswort	<i>Galium cruciata</i>	Rare

Oxeye Daisy	<i>Leucanthemum vulgare</i>	Occasional
Bush Vetch	<i>Vicia sepium</i>	Rare
Dog Rose	<i>Rosa canina</i>	Rare
Cat's-ear	<i>Hypochoeris radicata</i>	Rare
Mouse-ear Hawkweed	<i>Hieracium pilosella</i>	Rare
Greater Bird's-foot Trefoil	<i>Lotus ulginosus</i>	Rare
Dog's Mercury	<i>Mercurialis perennis</i>	Rare
Ragwort	<i>Senecio jacobaea</i>	Rare
Knot-grass	<i>Polygonum aviculare</i>	Rare
Toad Rush	<i>Juncus bufonius</i>	Rare
Daisy	<i>Bellis perennis</i>	Occasional
Pineapple Weed	<i>Matricaria matricariodes</i>	Occasional
Rough Sow-thistle	<i>Sonchus asper</i>	Occasional
Smooth Sow-thistle	<i>Sonchus oleraceus</i>	Rare
Groundsel	<i>Senecio vulgaris</i>	Occasional
Garlic Mustard	<i>Alliaria petiolata</i>	Frequent
Cleavers	<i>Galium aparine</i>	Frequent
Field Forget-me-not	<i>Myosotis arvensis</i>	Rare
Hazel	<i>Corylus avellana</i>	Rare
Elder	<i>Sambucus nigra</i>	Rare
Broad-leaved Willowherb	<i>Epilobium montanum</i>	Occasional
Rosebay Willowherb	<i>Chamerion angustifolium</i>	Rare, locally dominant
Black Medic	<i>Medicago lupulina</i>	Rare
Total: 41		
Field Bindweed	<i>Convolvulus arvensis</i>	Rare
Sweet Cicely	<i>Myrrhis odorata</i>	Rare: two clumps
Herb Robert	<i>Geranium robertianum</i>	Occasional
Herb Bennet	<i>Geum urbanum</i>	Rare
Greater Celandine	<i>Chelidonium majus</i>	Rare: one location
Spear Thistle	<i>Cirsium vulgare</i>	Rare

Blackthorn	<i>Prunus spinosa</i>	Rare
Hawthorn	<i>Crataegus monogyna</i>	Rare
Nipplewort	<i>Lapsana communis</i>	Occasional
Ivy	<i>Hedera helix</i>	Occasional
Bistort	<i>Polygonum bistorta</i>	One dense patch
Field Scabious	<i>Knautia arvensis</i>	Rare
Rough Chervil	<i>Chaerophyllum temulentu</i>	Rare
Colt's-foot	<i>Tussilago farfara</i>	Rare
Sycamore	<i>Acer pseudoplatanus</i>	Rare
Cuckoo Pint	<i>Arum maculatum</i>	Rare
Crab Apple	<i>Malus sylvestris</i>	Rare
Mouse -ear	<i>Cerastium fontanum</i>	Rare
Chickweed	<i>Stellaria media</i>	Rare
Wall Lettuce	<i>Lactuca muralis</i>	Occasional
Wild Garlic	<i>Allium ursinum</i>	Rare

Total: 69

Grasses

False Oat	<i>Arrhenatherum elatius</i>	Frequent, locally abundant
Cock's-foot	<i>Dactylis glomerata</i>	Frequent
Creeping Soft-grass	<i>Holcus mollis</i>	Rare
Yorkshire Fog	<i>Holcus lanatus</i>	Occasional
Red Fescue	<i>Festuca rubra</i>	Frequent
Smooth Meadow-grass	<i>Poa pratensis</i>	Frequent
Rough Meadow-grass	<i>Poa trivialis</i>	Frequent
Vernal Grass	<i>Anthoxanthum odoratum</i>	Occasional
Couch Grass	<i>Elymus repens</i>	Frequent
Rye-grass	<i>Lolium perenne</i>	Occasional
Creeping Bent	<i>Agrostis stolonifera</i>	Frequent

Timothy	<i>Phleum pratense</i>	One gateway
Yellow Oat-grass	<i>Trisetum flavescens</i>	Rare

Total: 13

Ferns

Male Fern	<i>Dryopteris felix-mas</i>	Occasional
Polypody Fern	<i>Polypodium vulgare</i>	Locally frequent
Maidenhair Spleenwort	<i>Adiantum trichomanes</i>	Rare

Total: 3

Total Native Plants: 85

Garden Escapes

Fox and Cubs	<i>Hieracium aurantiacum</i>	Rare
Welsh Poppy	<i>Mecanopsis cambrica</i>	Rare
Horse-radish	<i>Armoracia rusticana</i>	Rare

The Vegetation of Helm Common

Neil A. Robinson

A survey was made on 27 August 2004, with Dennis Pook for the Helm Working Group of the Parish Council. This did not try to list all the plants present, but simply sought to identify the main vegetation types, particularly in relation to soil types and current management.

The main factor influencing the vegetation on Helm is the underlying Silurian rock which gives rise to a predominantly acid soil. This contrasts with Little Helm (the subject of a report to the Parish Council in May 2003) which is on limestone, giving a base-rich soil. This difference is most evident in the trees. On Helm the main trees are Rowan, Oak and Birch, whereas across the road on Little Helm, Sycamore and Ash predominate and in the centre there is a surviving fragment of the Wych Elm and Ash woodland typical of limestone.

Woodland and scrub.

- The commonest tree on Helm is Rowan, followed by (Sessile) Oak and Birch. These are exactly the native trees one would expect to find in this situation. Sycamore and Hawthorn are also common. Holly, Beech and Gean (Wild Cherry) occur occasionally. More rare are Hazel, Elderberry, Buckthorn and Bird Cherry (one only?). Gorse forms dense thickets in some places, particularly at the south end and there is also some Broom. Brambles do not occupy large areas. There are occasional saplings of Ash, which must have seeded themselves in from across the road.

At the south end, between the bridleway and the road, the trees are close enough to amount to woodland and woodland plants such as Wood Sage, Foxgloves and Buckler Fern can be seen along the edge of the path. (Also along the roadside are Male Fern and Lady Fern.) The trees thin out up the hillside. Rowan is the main tree on the upper slopes and persists right up to the top of the ridge (earning its alternative name of Mountain Ash) accompanied, remarkably, by a few stunted Oak. The Sink Wells basin is occupied by Grey Willow (Sallow) and this extends a little round about. Rather surprisingly, there seems to be no Alder, which one might expect in this wet hollow.

Bracken

- Probably the most conspicuous feature of Helm is Bracken, kept partially in check by the current mowing regime, but present more or less everywhere except where the soil is wet or very thin or public usage maintains paths. Viewed from a distance, it is densest at the south end and more gappy to the north, where it is kept in check by mowing.

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Grassland

The upper part of the ridge, as for instance where one emerges from the gorse at the south end, is covered by typical fine-leaved acid grassland of Common Bent and Sheep's Fescue with patches of Mat Grass and Sheep's Sorrel (a specific acid soil indicator), and yellow flowers of Tormentil. On the summit there is Wavy Hair-grass, but this is more evident on the other side of the wall, which is ungrazed. This acid grassland extends north along the ridge where the soil is thin, but down the slopes it undergoes transition to more neutral, broader leaved, grassland where the soil is deeper, with Meadow Grasses, Yorkshire Fog, Crested Dog's-tail, Cock's-foot, etc. This grassland is more 'natural' towards the south end. To the north, especially in the area where stock-feeding takes place, is more disturbed, with Docks in evidence. There are also damp areas with Soft Rush. The soil is deeper on the northern slopes, to the extent that this end looks like a Bracken-infested pasture. However, Nettles and Creeping Thistles are not common; they are mainly confined to disturbed ground, with Hogweed and Burdock, along the lower side of the road. An interesting feature of the paths at the south end is the presence on them of Slender Rush. This North American rush, accidentally introduced to Britain, thrives on being trampled is only found on footpaths.

The Sink Wells

This is a very remarkable natural feature. Rivulets of clean water run down into the basin from springs nearer the road, creating a typical fen community with Jointed Rush, Wild Angelica, abundant Water Mint, Marsh Pennywort, Marsh Cinquefoil, Greater Bird's-foot Trefoil, Devil's-bit Scabious, Marsh Willowherb, Marsh Bedstraw, Marsh Thistle, Marsh Horsetail, etc. The water then seeps through pools in the Grey Willow carr before going into a culvert under the road. The pools contain water plants and patches of Sphagnum Moss. Frogs spawn there and it is probably valuable for a wide range of pond life. It is very unusual to find such a natural community nowadays; it is Natland's 'mini-Everglades' and should not be interfered with in any way.

Castlesteads Iron Age Hillfort

The earthworks on the summit of Helm are a Scheduled Ancient Monument. Details are to be found the Cumbria Sites and Monuments Record (SMR No. 2642). In brief: it is an exceptionally small example of a hillfort of a type which was constructed during the Iron Age between the sixth century BC and the middle of the first century AD. It is defended from the north by two banks with a ditch between, and from the south by a single bank. Apparently when the site was investigated in the early 20th century there were still traces to be seen of earthworks on the east and west sides, indicating that the summit was originally completely enclosed, but these have since disappeared. There are three levelled areas on the summit which are believed to have been hut platforms. There are various other faint associated features which are described in the SMR.

Neil A. Robinson September 2004.