

Bittern Countryside

Community Interest Company



An Atlas and Guide to the Orchids of the Arnside & Silverdale AONB



Supporting the **Arnside & Silverdale** **Area of Outstanding Natural Beauty**

Bittern Countryside Community Interest Company
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An Atlas and Guide to the Orchids of the AONB

by Ann Kitchen, September 2013

Why have an Atlas and what is it for?

For over 35 years the flora of the Arnside and Silverdale AONB has been recorded. First by Dr Margaret Baeker and Charles Bromley Webb followed by Julie Clarke who records for the BSBI. Geoffrey Halliday recorded the Cumbrian tetrads (2km squares) and Eric Greenwood the Lancashire ones for their Floras. Ken and I first got involved when we helped Charles Bromley Webb put all his records onto a computer. Julie and I went on to follow in his footsteps as the botanical recorders for the Arnside and District Natural History Society. Aided by a willing band of amateur botanists we have tried to record every species growing in each one-kilometre square (Monad) of the AONB and to record its progress through time. I suspect that there is still plenty out there to be discovered. We have not managed to cover all the squares.

This is an attempt to make some of the knowledge we have gained available to the wider public. Hopefully it will make you want to go out to look at our flora with a more informed eye. We hope eventually to cover all 950 species of plants found in our area. This booklet contains maps, help on identification and also habitat shots. It is not a true wildflower guide. For Orchids, a very good book is "Britain's Orchids" by David Lang.

A good web site is that of the Hardy Orchid Society at www.hardyorchidsociety.org.uk

If you would like to add to the records, a photo together with the date, a grid reference, and site description should be sent to Ann Kitchen at knak@kenak.plus.com.

Photographs by Ann and Ken Kitchen

All profits from this publication will go towards recording and conserving the flora and fauna of the AONB.



Looking over Arnside Moss

People have been fascinated by Orchids for generations. The Victorians used to prize the Lady's Slipper Orchid so much that it was almost driven to extinction in the UK by collectors. We are very fortunate to have 15 of the 50 or so orchids that are native to Britain in our AONB. It used to be said that if you knew the scientific name of a plant then there would be no ambiguity. With the coming of DNA testing of plants however the botanists have been busy renaming much of the British Flora. Orchids seem to be especially prone to this disease. Where names have changed the old one is mentioned in the text. All orchids have 3 petals and 3 sepals and they are very prone to cross with similar species. This can make identification very difficult.

Category 1 The Marsh-Orchids or Dactylorhizas. Page

Around 10 to 40 cm tall with flowers appearing in a long spike up the stem. They have leaves growing up the stems. Short spurs

<i>Dactylorhiza fuchsii</i>	Common Spotted Orchid	5
<i>Dactylorhiza purpurella</i>	Northern Marsh Orchid	6

Category 2 The Helleborines

Around 30 to 90 cm tall with flowers spaced up the stem in a long spike. No Spurs.

<i>Epipactis atrorubens</i>	Dark Red Helleborine	7
<i>Epipactis helleborine</i>	Broad-leaved Helleborine	8

Category 3 The Butterfly Orchids

All around 15 to 60 cm tall with white flowers with very long spurs and long lips.

<i>Platanthera bifolia</i>	Lesser Butterfly Orchid	9
<i>Platanthera chlorantha</i>	Greater Butterfly Orchid	10

Category 4 The Ophrys

Up to 60 cm tall with their flowers resembling insects. They have wintergreen leaves.

<i>Ophrys apifera</i>	Bee Orchid	11
<i>Ophrys insectifera</i>	Fly Orchid	12

Category 5 The Neottia

Very different in habit but the lower lip in both is split up the middle.

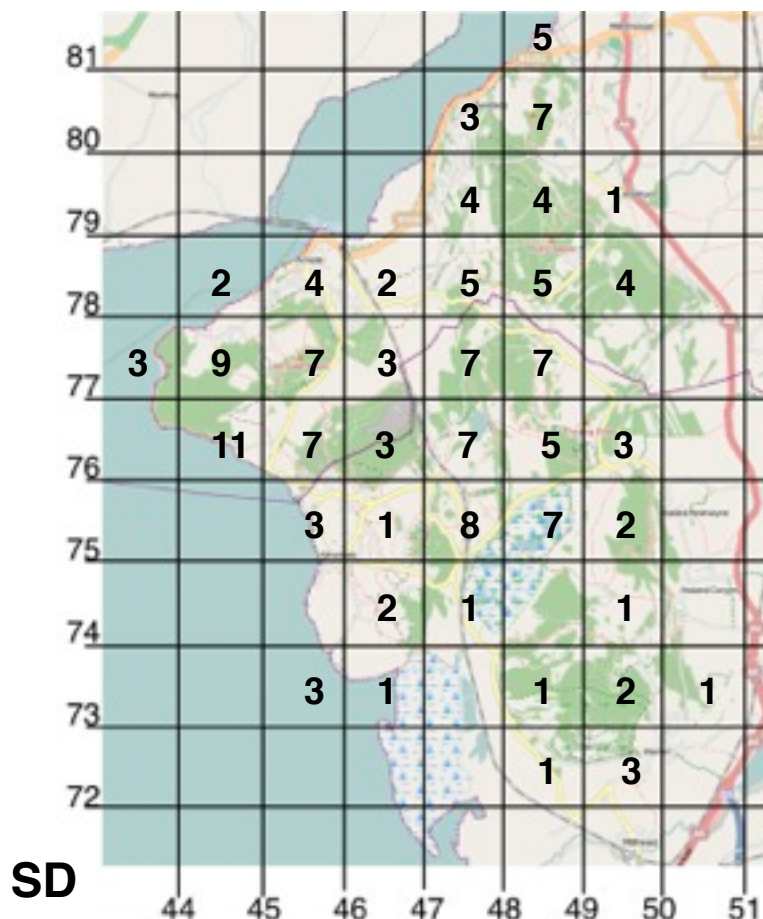
<i>Neottia ovata</i>	Common Twayblade	13
<i>Neottia nidus-avis</i>	Bird's-nest Orchid	14

Category 6 The Rest

<i>Anacamptis morio</i>	Green-winged Orchid	15
<i>Orchis mascula</i>	Early Purple Orchid	16
<i>Gymnadenia densiflora</i>	Marsh Fragrant Orchid	17
<i>Gymnadenia conopsea</i>	Common Fragrant Orchid	17
<i>Cypripedium calceolus</i>	Lady's Slipper Orchid	18
<i>Spiranthes spiralis</i>	Autumn Lady's Tresses	19

The following alphabetical list gives the number of monads in which the species is present. The orchid family is well defined and is well recorded in the AONB so this information is meaningful.

Scientific Name	Common Name	No of Monads	Page
<i>Anacamptis morio</i>	Green-winged Orchid	8	15
<i>Cypripedium calceolus</i>	Lady's Slipper Orchid	2	18
<i>Dactylorhiza fuchsii</i>	Common Spotted Orchid	26	5
<i>Dactylorhiza purpurella</i>	Northern Marsh Orchid	14	6
<i>Epipactis atrorubens</i>	Dark Red Helleborine	14	7
<i>Epipactis helleborine</i>	Broad-leaved Helleborine	17	8
<i>Gymnadenia conopsea</i>	Common Fragrant Orchid	2	17
<i>Gymnadenia densiflora</i>	Marsh Fragrant Orchid	3	17
<i>Neottia ovata</i>	Common Twayblade	9	13
<i>Neottia nidus-avis</i>	Bird's-nest Orchid	5	14
<i>Ophrys apifera</i>	Bee Orchid	2	11
<i>Ophrys insectifera</i>	Fly Orchid	10	12
<i>Platanthera bifolia</i>	Lesser Butterfly Orchid	4	9
<i>Platanthera chlorantha</i>	Greater Butterfly Orchid	5	10
<i>Orchis mascula</i>	Early Purple Orchid	28	16
<i>Spiranthes spiralis</i>	Autumn Lady's Tresses	7	19

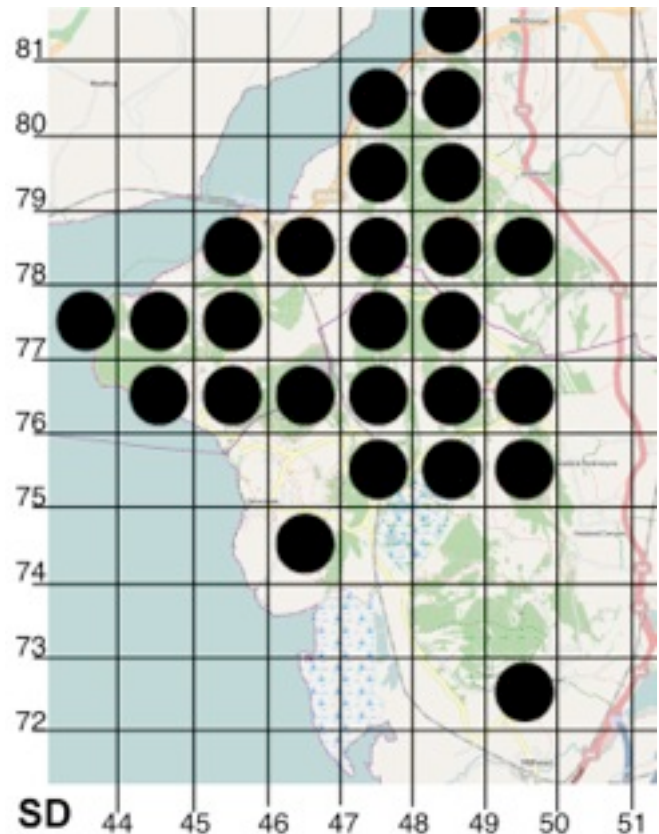


Number of Orchid species in each monad

Again this information will not necessarily be given for other guides with more varied species, but it is meaningful here to show those monads with the widest diversity of orchids and so has been included.

Dactylorhiza fuchsii - Common Spotted Orchid

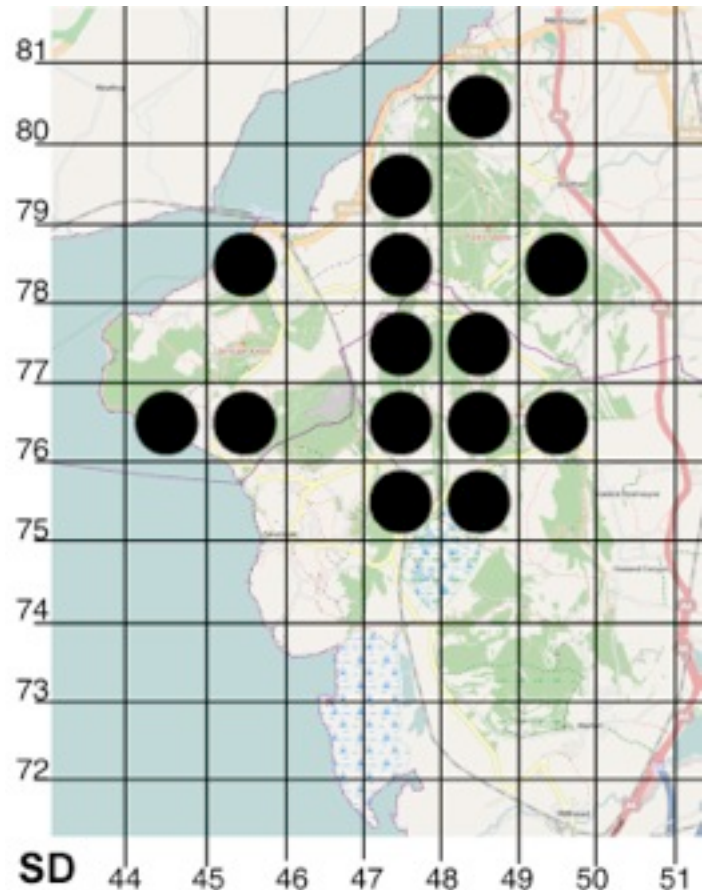
The dactylorhiza family cross very readily. They also have a wide colour variation. The Common-Spotted Orchid is usually a pale pink with darker markings but can have white flowers. The leaves are often spotted with dark blotches. They die down completely in the winter. However sometimes their dried stems last until the next spring. Flowering time: Mid May - July.



They are present through most of the area and probably the squares where they are not marked are simply due to non recording. When they are present, as up on the Cowslip field above Heathwaite at SD445767, they are there in their hundreds.

Dactylorhiza purpurella - Northern Marsh Orchid

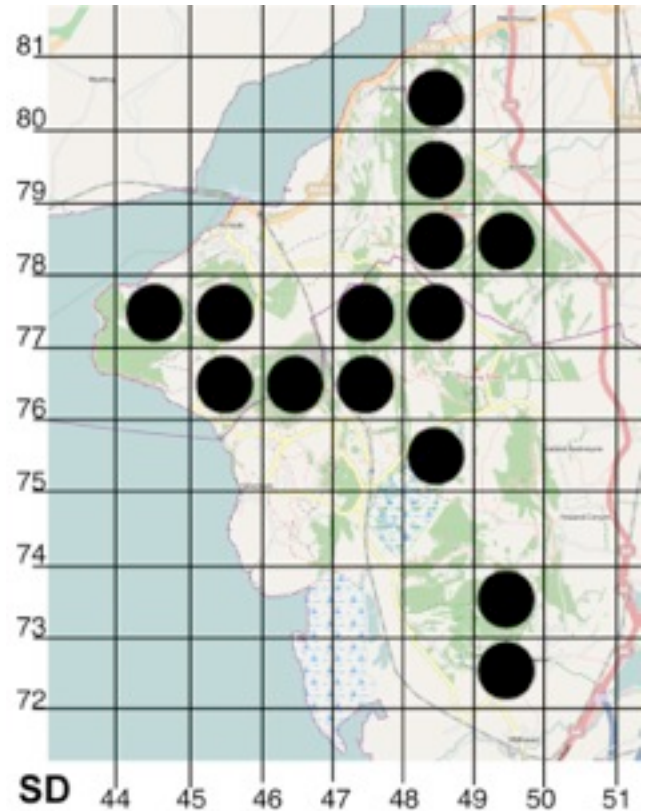
This is a stout plant with mainly darker purple flowers. The leaves are usually unspotted and the lip shape is different. In some of the sites it is very prolific but in others it occurs in ones and twos. It appears to favour the northern half of the AONB. The Cowslip field at SD445767 is a good place to look. Flowering time: Mid June - July.



Cowslip field, Heathwaite

Epipactis atrorubens - Dark Red Helleborine

This beautiful Orchid is a lover of our limestone rocks and screes. It can be found all over the limestone pavement at Gait Barrows and on the scree slopes of Arnside Knott at SD 451771. Strangely it also flowers in the grassland by Hawes Water. The lower lip is frilly and the flowers are dark red. The stem is hairy. Flowering time: June - July.

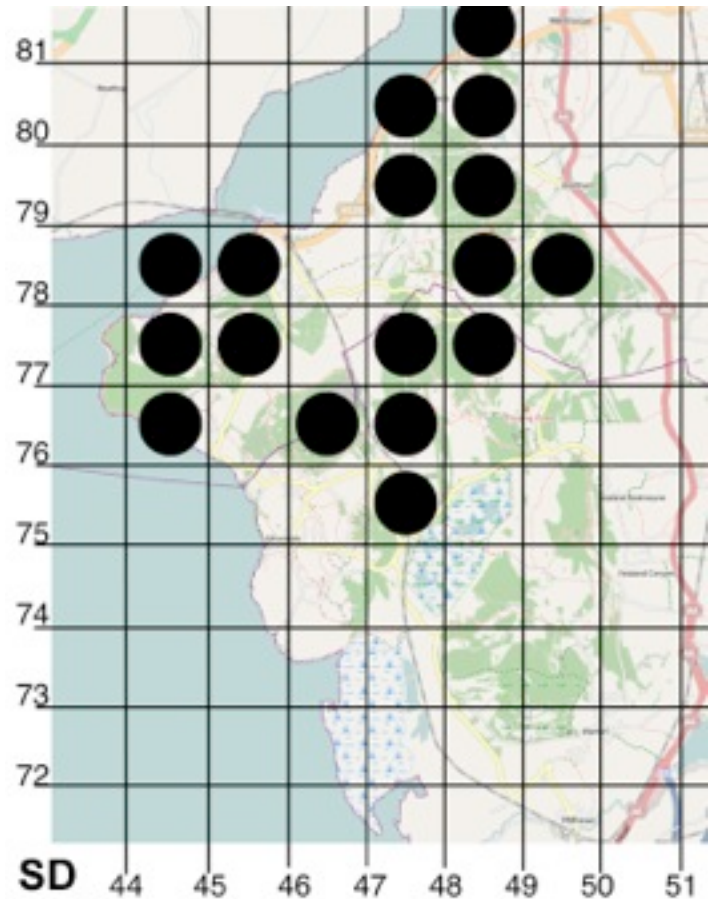


***Epipactis Helleborine* - Broad-leaved Helleborine**

While the Dark Red Helleborine has leaves in two opposite rows, the Broad-leaved Helleborine has leaves spiralling up the stem. It varies wildly in stature from tiny plants in the woodlands and open grasslands to huge plants on the main path into Trowbarrow from Red Bridge



The best places to look are at Trowbarrow at SD477757 and in Redhills Wood at SD457776. The flowers vary from pink to green but all have a dark red shiny centre to the lower lip. Flowering time: July - early September.

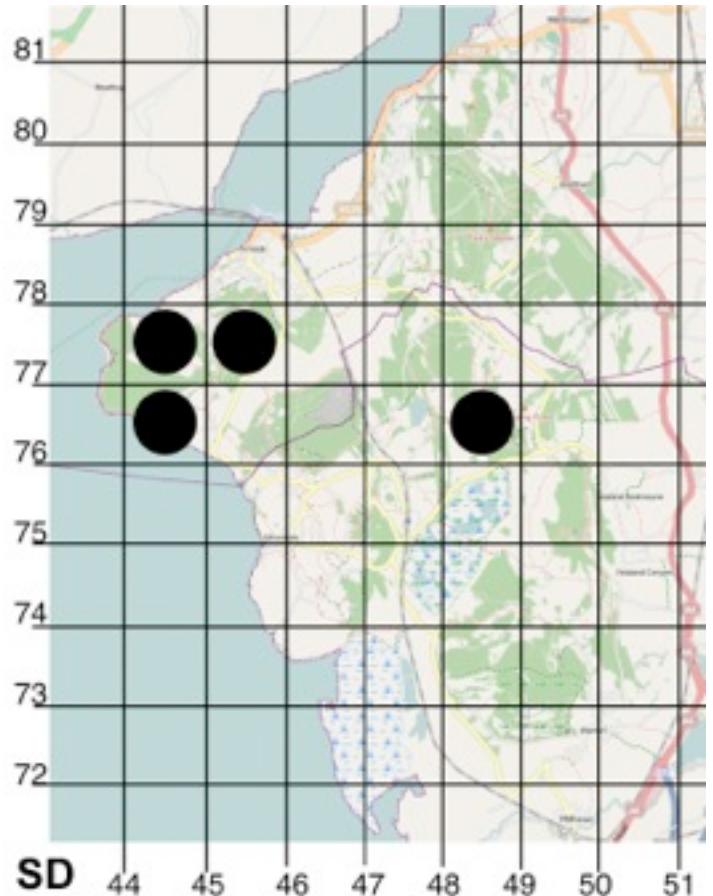


***Platanthera bifolia* - Lesser Butterfly Orchid**

One of our rarer orchids, it appears and disappears at will. It can stay underground for years reappearing when the conditions are suitable. It is usually only found in ones and twos and is often browsed off by deer before it flowers.

The long flower spur means that it is pollinated only by moths. The white colour helps them to find the flowers. The pollen is kept in small receptacles called pollinia which attach themselves to the moths. Those of the Lesser Butterfly Orchid are very close together and stick to the proboscis of the moth. They are parallel to each other.

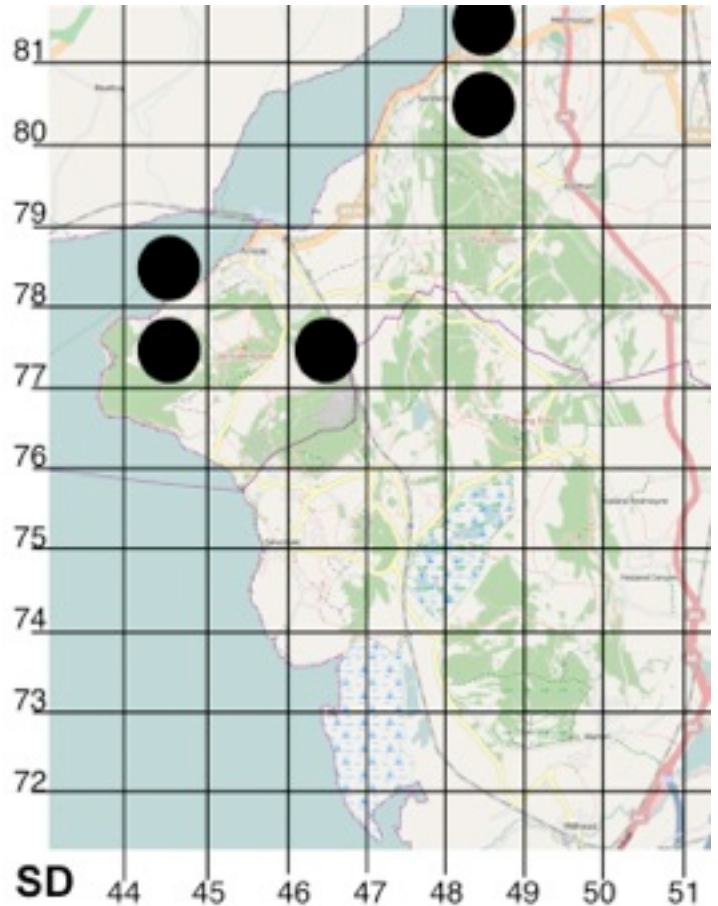
They were seen in 2012 in the triangular field next to Heathwaite at SD448767. Flowering time: Late May - July.



***Platanthera chlorantha* - Greater Butterfly Orchid**

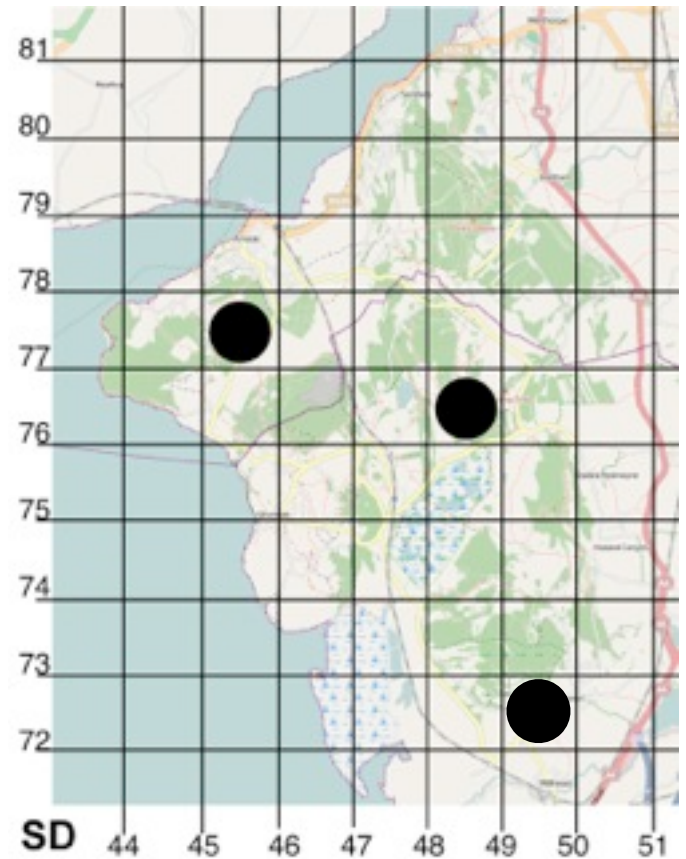
These are easier to find because they grow in Arnside Cemetery at SD460776 among other places. They are sufficiently abundant there that you can find some most years in the wild flower triangle at the bottom of the cemetery along with Twayblades. The pollinia here are widely divergent. There is very little difference in size between the Lesser and Greater Butterfly Orchids if any. If growing in shade both can be positively weedy.

Both the Butterfly Orchids have two large shining green base leaves with other small ones up the stem. Flowering time: Late May - July.



Ophrys apifera - Bee Orchid

This wintergreen orchid is very scarce and is another that comes and goes unpredictably. Just when you think you know where to go to look it pops up elsewhere in the area. It is wintergreen and each year makes a fresh tuber. The flowers mimic bees, but unlike many of the other orchids it can pollinate itself if the right pollinator does not turn up. This is just as well as they are only found in ones and twos in our area and it is unlikely that a bee would find another plant.



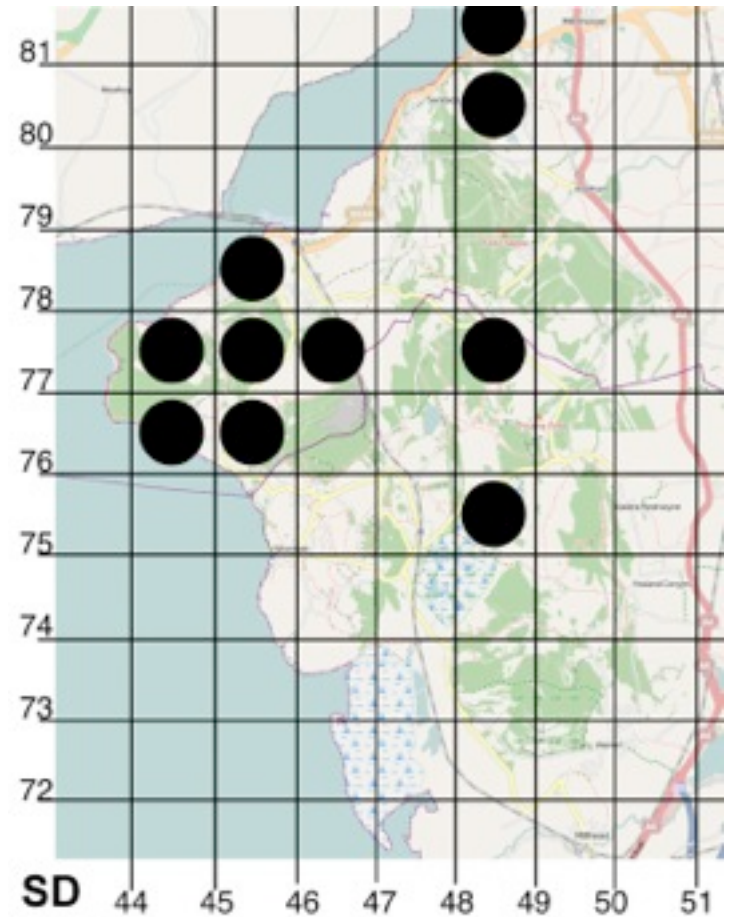
The best place to go is Trowbarrow at SD480757. There are Fly Orchids there as well.

The winter rosettes of leaves are often nibbled by deer and rabbits. Flowering time: Early June - late July.



Ophrys insectifera - Fly Orchid

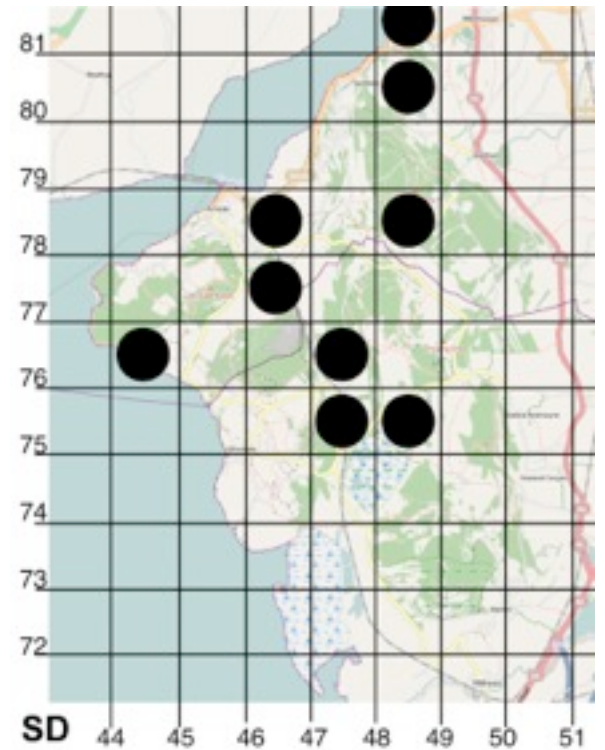
By far the more common of our two ophrys species, this can be found most easily at the little triangle of grass by the steps leading down to the embankment at SD483802. It is also scattered over the Knott and at Trowbarrow. The plants in these two latter locations are very small and can be easily trodden on, so look where you walk. Flowering time: May - June.



The little flowers look like a small fly. It is much less likely to self pollinate so where it occurs it does so in small patches to encourage insect pollination.

Neottia ovata - Common Twayblade

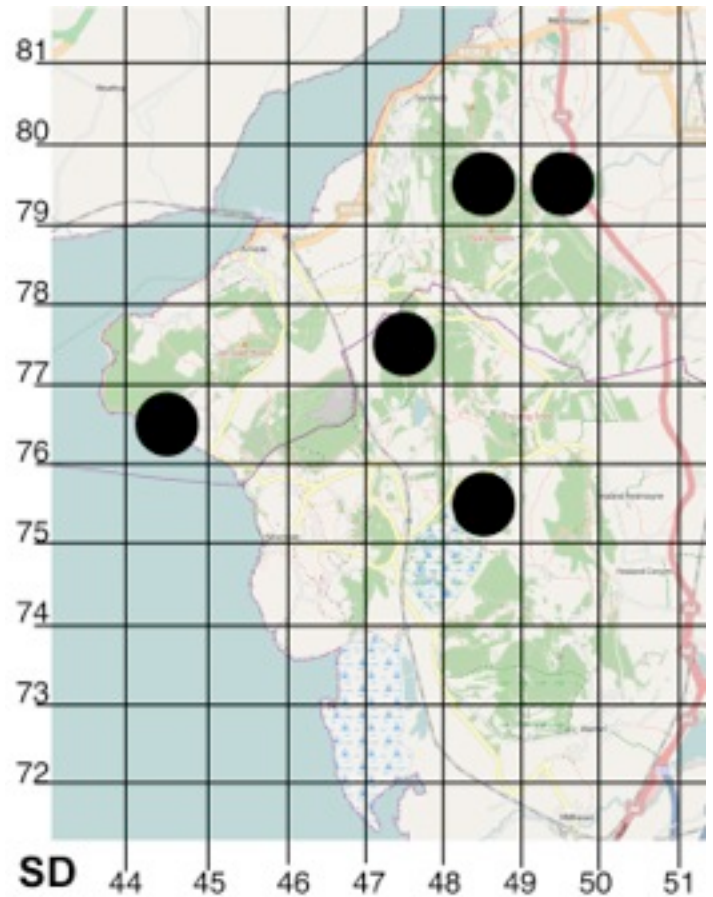
This little orchid is not one of the showy ones and can be easily overlooked. Looked at close up its small flowers are really attractive. It was called *Listera ovata* but genetic studies have moved it to be with the saprophytic Bird's-nest Orchid. It can be found with the Fly Orchids at SD483802 and also at the bottom of the steps there. However you are likely to find it at many of the other locations where orchids have been found. Flowering time: Late April - late July.



Sandside Orchid Triangle

***Neottia nidus-avis* - Bird's-nest Orchid**

With no chlorophyll this orchid is entirely saprophytic. It can be mistaken for a broomrape or a Yellow Bird's-nest, neither of which are orchids. It is a very occasional shower. Like some other saprophytes it can spend many years underground.

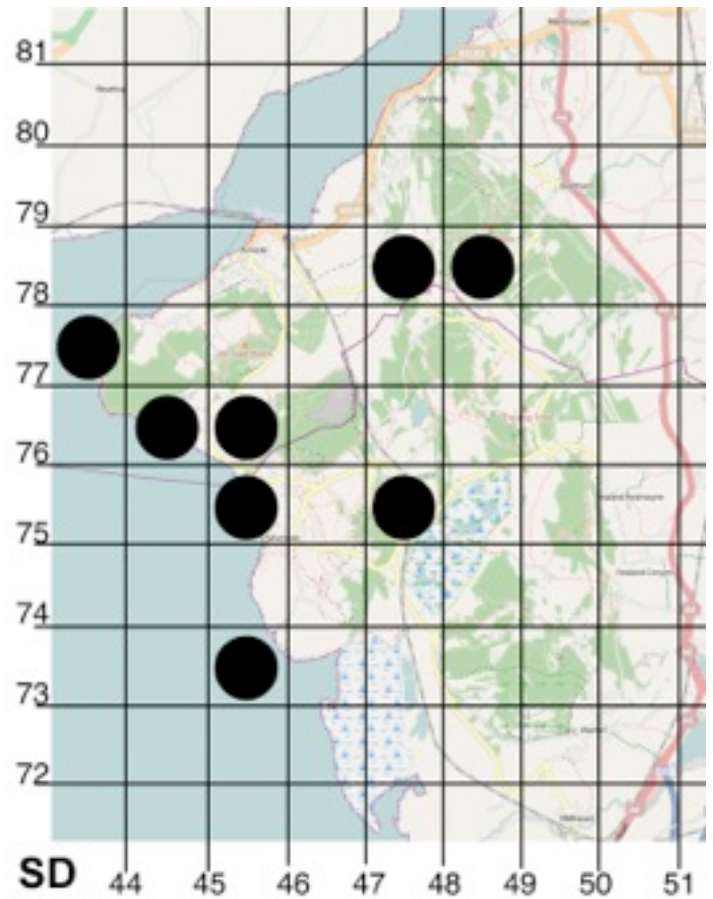


Its young shoot is unmistakeable however and when the flowers are open you can see the resemblance to the Twayblade flower.

It is hard to find most years but you could try the woods round Heathwaite at SD445767. Flowering time: May - early July.

Anacamptis morio - Green-winged Orchid

This beautiful orchid was named *Orchis morio* until recently. It grows in large numbers most years on Post Office Lots at Silverdale SD457752 and in much smaller numbers elsewhere. Careful grazing regimes now mean that the spikes are seen. In less enlightened times the sheep would eat the flower spikes off before they had a chance to open. Hazelslack Bog SD474785 and Heathwaite SD448966 are other good locations. Flowering time: Mid April - early June.

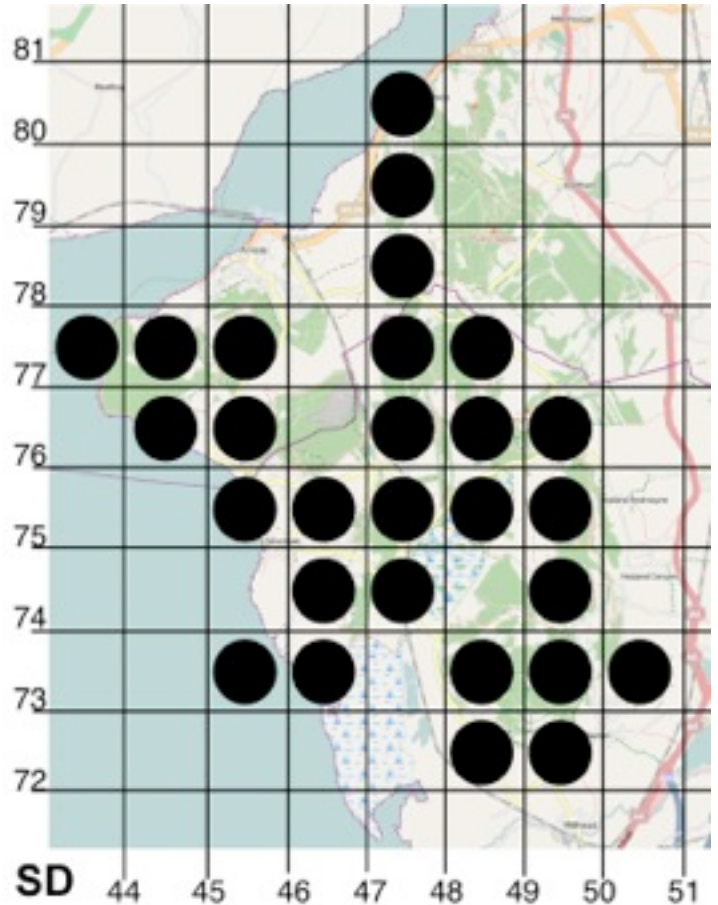


The Lots, Silverdale

Orchis mascula - Early Purple Orchid

This is one of our easiest orchids to find. It grows in good numbers throughout the area and its large showy purple flowers make it easy to spot at a distance.

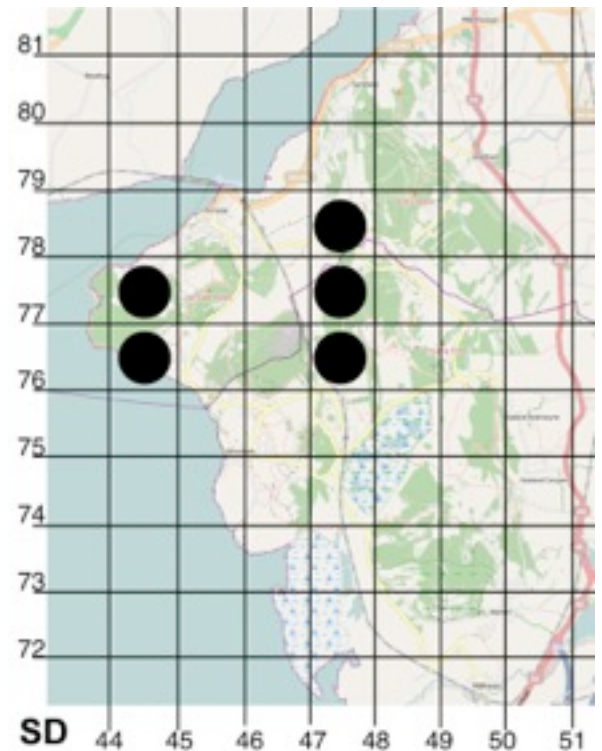
Post Office Lots, Coldwell Parrock SD473778 and the slopes of the Knott are all good places to find it. As its name suggests it is the first orchid to flower and its spotted leaves can be found in early spring ignoring the snow and frost. Colours range from the usual dark purple through pink to white. Flowering time: April - mid June.



***Gymnadenia densiflora* - Marsh Fragrant Orchid**

***Gymnadenia conopsea* - Common Fragrant Orchid**

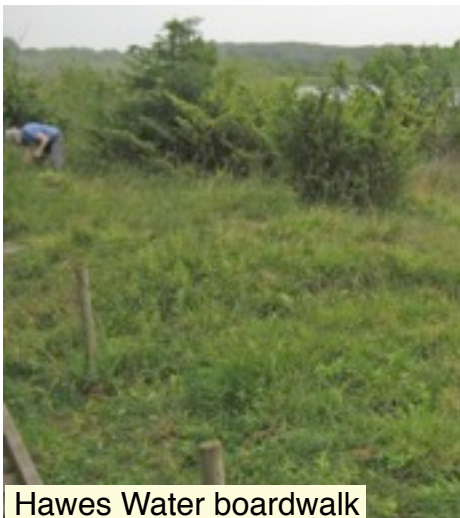
The Fragrant Orchids have only recently been split into 3 species and it appears that the records in SD4476 and SD4477 are in fact Common Fragrant Orchid. A couple of these were found flowering at SD448766 this year. The Marsh Fragrant Orchid was under threat in its main stronghold round Hawes Water SD478767 until recently. The rushes and bracken were overwhelming the marl grassland where it thrives. Careful management has meant that the habitat is being restored and the orchids are beginning to regain their former numbers. Flowering time: Early June - July.



Common Fragrant Orchid Photo: Ian Brodie



Marsh Fragrant Orchid



Hawes Water boardwalk

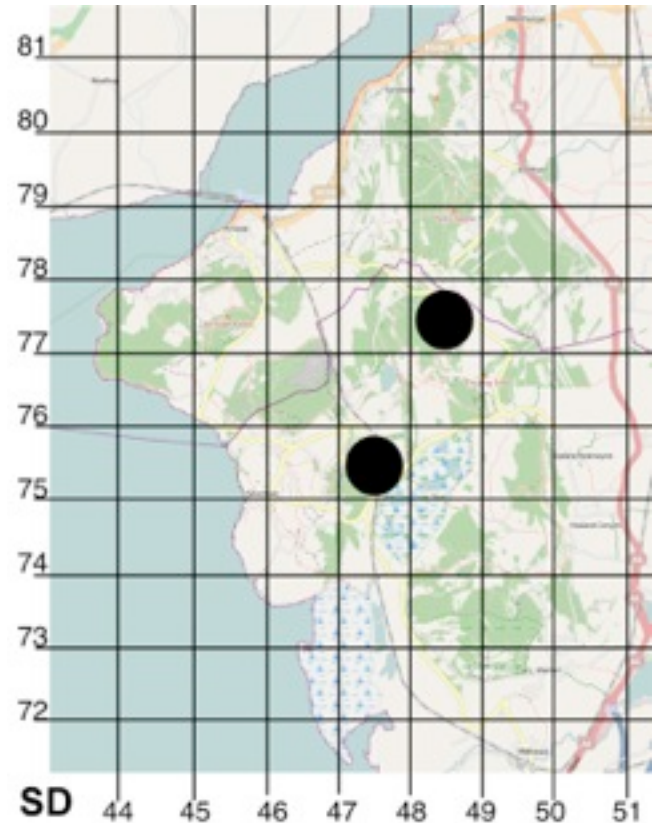


Cypripedium calceolus - Lady's Slipper Orchid

A single plant has been present in the area since at least 1930 but it was thought to have been planted.

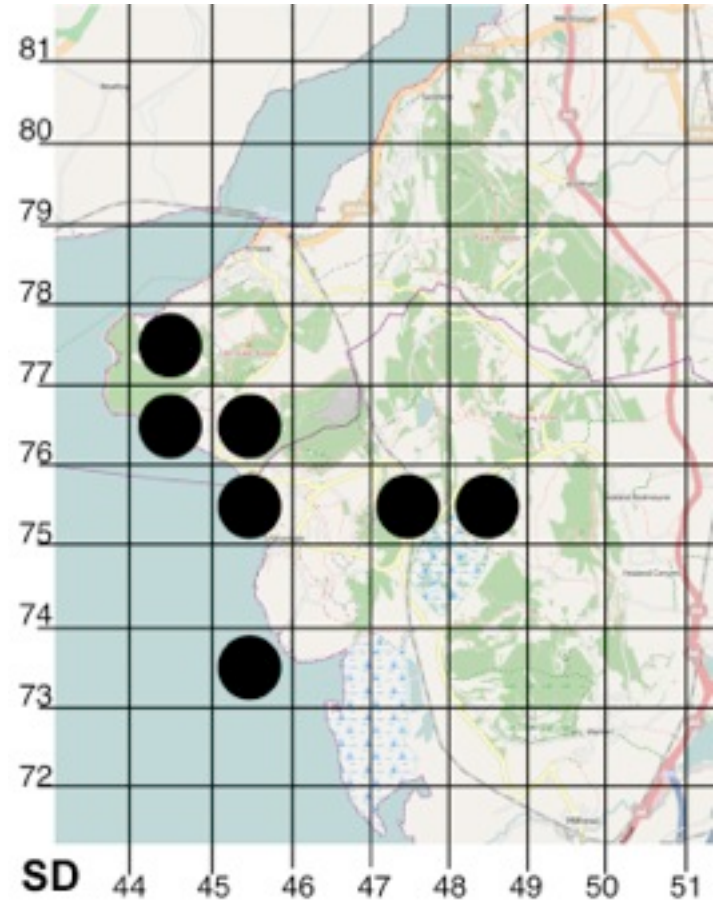
For the last 20 years or so Lady's Slipper Orchids of English stock have been re-introduced into our AONB. You can see them best at Gait Barrows where open days are held in late May/early June to enable them to be enjoyed. Follow the waymarked paths but be careful where you put your feet when you are photographing them.

SD references are not given here. Look for more publicity on showing times during the spring and go to see them then. Flowering time: May - early June.



***Spiranthes spiralis* - Autumn Lady's Tresses**

As its name suggests, this flowers at the end of August to the beginning of September. The best place to see it is at Post Office Lots at SD457752 in the close-cropped grass. It is a tiny orchid and can easily be overlooked.



Other good sites are at Heathwaite and at Jack Scout at SD459736.

The flower spike grows up from what seems to be bare earth. As it does so the new rosette of leaves for the following year's flower grows by its side. Flowering time: August - late September.



Cowslip field Heathwaite



Pasture above Redhills Wood



Looking over pasture from Arnside Knott