

Bittern Countryside

Community Interest Company



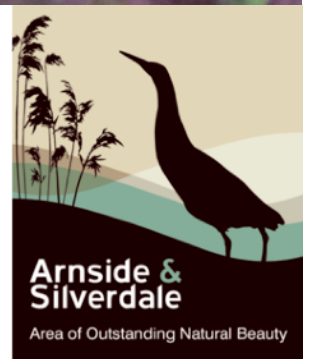
An Atlas and Guide to the Butterflies of the Arnside & Silverdale AONB



Supporting the Arnside & Silverdale Area of Outstanding Natural Beauty

Bittern Countryside Community Interest Company
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Website: <http://www.bitterncountrysidecic.org.uk>

An Atlas and Guide to the Butterflies of the AONB

Brian Hancock, July 2022

Why have an Atlas and what is it for?

The Arnside and Silverdale Area of Outstanding Natural Beauty is generally considered to be the best place for butterflies in northern England. The coastal climate, the abundance of limestone pavement and grassland, the varied woodland all conspire to make this a rich area for wildlife generally. Thirty five species have been recorded and all but three are resident. We still have some of the country's best sites for rare and declining species. The situation is dynamic with some species moving in and others struggling to survive. Numbers can vary as much as tenfold from year to year largely due to the vagaries of our weather. Well over a dozen sites are surveyed by volunteers who make weekly counts so the area has been extremely well recorded in recent years. This is essential to complement the extensive management work currently underway to improve the habitat for our threatened species.

This brief starter guide is intended for residents and visitors to help identify and appreciate the range of species to be found in our area and, hopefully, become involved in the many local activities to promote the wellbeing of our butterfly population.

Obviously warm sunny days are best but it is surprising how often one can spot butterflies at rest on dull days or in flight in brief sunny periods. Cooler sunny days are often best for photography as they will bask much more to warm up.

The Lancashire and Cumbria boundary passes through the AONB and both counties have branches of British Butterfly Conservation with useful websites well worth consulting for events, recording and contacts.

www.lancashire-butterflies.org.uk

www.cumbria-butterflies.org.uk

British Butterfly Conservation. www.butterfly-conservation.org.uk

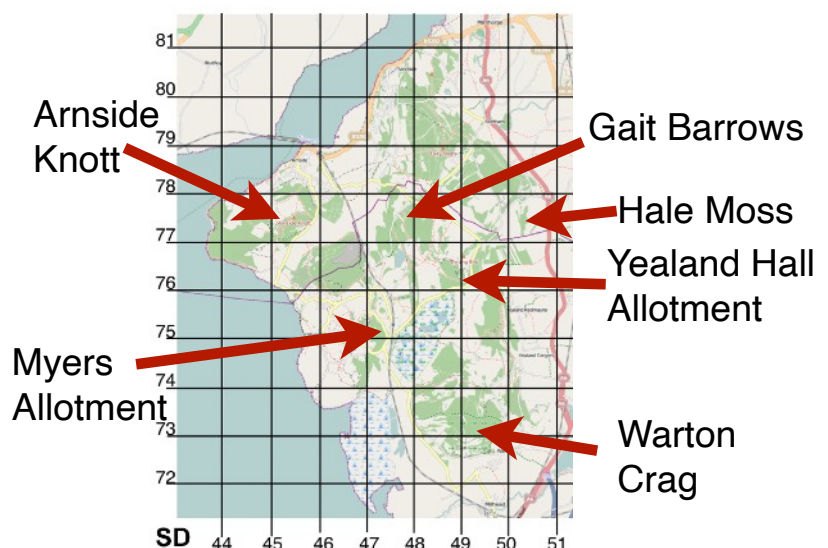
Leighton Moss RSPB reserve has an excellent bookshop with many books on butterflies.

The best and most comprehensive is "The Butterflies of Britain and Ireland" by Jeremy Thomas and Richard Lewington.

British Wildlife Publishing.

Photos by Brian Hancock unless otherwise stated.

Edited by Ann Kitchen



Some good places to see butterflies

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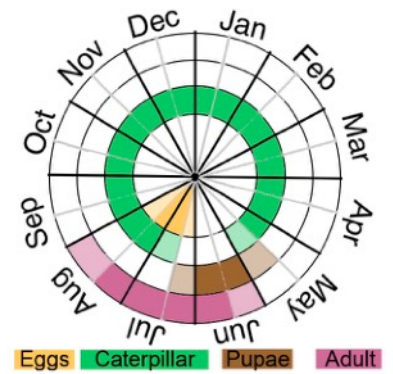
Small Skipper - *Thymelicus sylvestris*

Status: A recent arrival now quite common. Forewing: c 14mm.
 Caterpillar food plant: Grasses especially Yorkshire Fog.
 Habitat: Any rough grassy places. Occasionally gardens.



Small Skipper egg-laying on a stem of Yorkshire Fog

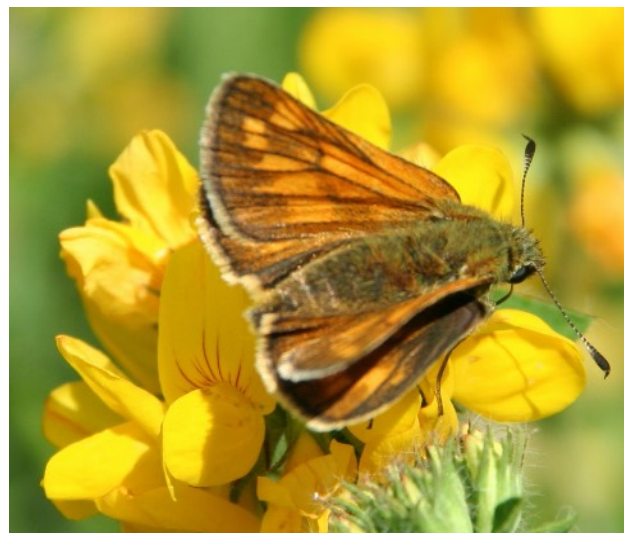
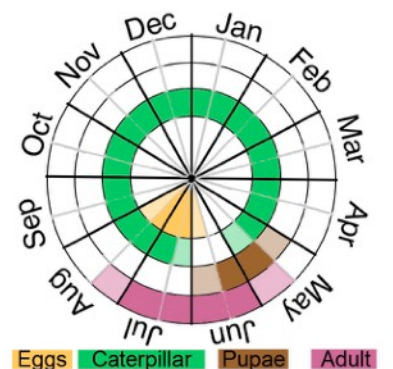
This attractive small fast flying butterfly is easily overlooked unless spotted at rest on a flower head. It has a uniform golden brown colour and often rests with its wings open at 45 degrees. For some years it has been spreading up from the south of England and is now well established here. July to mid August is the best time to see it. The caterpillar overwinters in a small cocoon.



Large Skipper - *Ochlodes venata*

Status: Stable and common. Forewing: c 16mm.
 Caterpillar food plant: Various grasses.
 Habitat: Grassy places especially woodland edges.

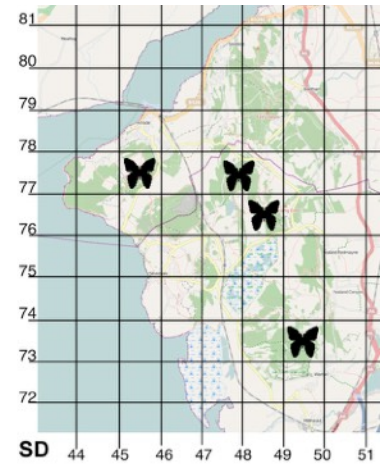
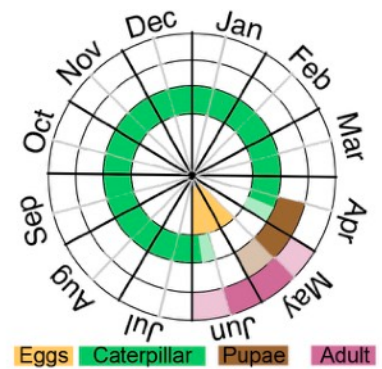
A long established resident and the most frequently seen skipper, it is only a little larger than the Small Skipper. The Large Skipper can be distinguished by the paler and darker marks on the forewings and hindwings in contrast to the plain brown of the Small Skipper. It flies from early June to late July. Look for it on Gait Barrows and Arnside Knott.



Dingy Skipper - *Erynnis tages*

Status: Nationally scarce but locally common here.
 Forewing: c 14mm. Caterpillar food plant: Birdsfoot Trefoil.
 Habitat: Limestone grassland and waste places.

We are fortunate that this nationally scarce and declining species is quite common most years on our limestone pavements. Flying in May till mid June it is easily mistaken for a moth but it is fond of perching with wings wide open on warm bare ground or flower heads which allows close inspection. When freshly emerged (see below) it has strongly patterned forewings but later, when worn, lives up to its common name. Look on sunny days on Arnside Knott, Yealand Allotment, Myers Allotment or Warton Crag. Active management in removing bracken and scrub growth means that the Birdsfoot Trefoil can grow well. The caterpillar constructs a home from the leaves in which it overwinters.



Eggs on Birdsfoot Trefoil leaf

Clouded Yellow - *Colias croceus*

Status: Uncommon late summer migrant.
 Forewing: c 25mm. Caterpillar food plant: Clovers.
 Habitat: Coastal flowery places.

This is a regular summer migrant in small numbers to the south and occasionally there is a large influx from the continent so that some reach northern England. In 2000 and 2006 a few were seen in our area. They tend to follow the coastal areas and many are just seen flying fast. When they stop to nectar it's only for a few seconds and the wings are always kept closed.



A Clouded Yellow on a brief stop at Jack Scout. September 2000

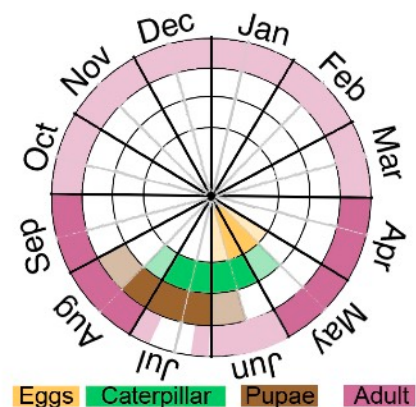
Brimstone - *Gonepteryx rhamni*

Status: Common. Spring and Autumn.

Forewing: c 32mm. Caterpillar food plant: Buckthorn.

Habitat: Woodland edges, Gardens.

This familiar butterfly hibernates as an adult and is one of the first to emerge on mild days in early spring. The eggs are laid on Buckthorn and the next generation emerge in late July and are on the wing until the end of September.



Female

The male is unmistakably yellow but the female is much paler and can be mistaken for a Large White in flight. They always rest with wings closed but on closer inspection the pointed tips of fore and hind wing are distinctive.

It can be seen anywhere in our area and often nectars in flowery gardens.



Male

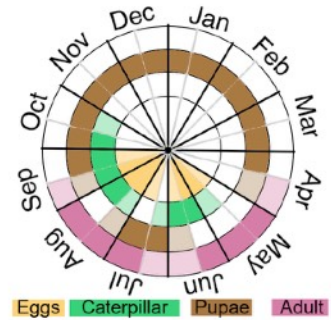
Large White - *Pieris brassicae*

Status: Common. Forewing: c 30mm.

Caterpillar food plants: Cabbage and other crucifers.

Habitat: Widespread often in gardens.

Many people call any white butterfly a “Cabbage white” but this is the only species, with its all too familiar yellow and black caterpillars, that can be really destructive to Cabbage plants. Flying in late spring and early autumn its numbers are often boosted by an influx of migrants. The male has almost pure white forewings whilst the female has two large black dots. The caterpillars will often crawl a long way from their food plant and may be found as a chrysalis on a wall or fence. Some are attacked by a parasitic wasp whose larvae feed inside the body and hatch out forming yellow cocoons outside the dead caterpillar.



Female: Geoffrey Brunt



Female egg-laying



Caterpillars on Cabbage

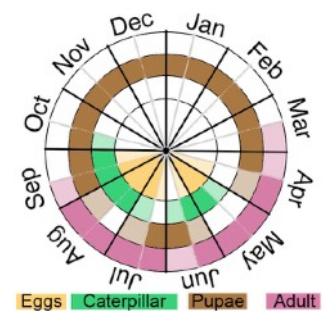
Small White - *Pieris rapae*

Status: Common. Forewing: c 22mm.

Caterpillar food plant: The crucifer family and Nasturtium.

Habitat: Widespread, often in gardens.

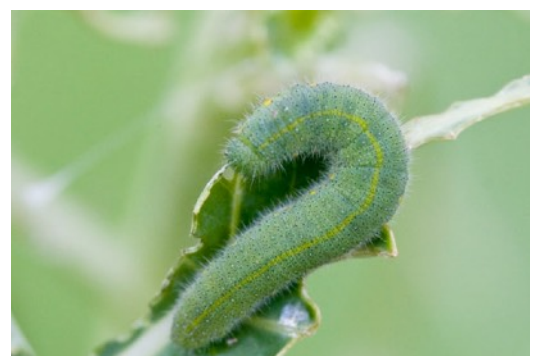
This is a familiar garden butterfly and though its larvae may feed on Cabbage, it often chooses alternative wild crucifers. It is a little smaller in size than the Large White. The female has two black spots on the forewing like the Large White whilst the male has only one. It is always common but exceptional numbers can appear as in July and August 2013.



Male: © John Bebbington FRPS



Female on Verbena



Caterpillar: Butterfly Conservation

Green-veined White - *Pieris napi*

Status: Common. Forewing: c 23mm.
Caterpillar food plant: A wide variety of crucifers.

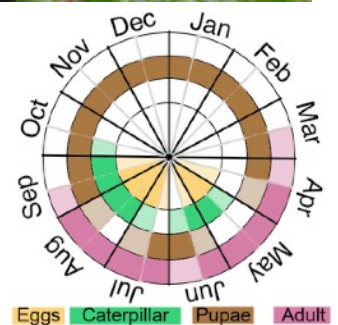
Habitat: Widespread but preferring damp spots, ditches and even boggy areas in upland places outside our area.



Caterpillar:
Butterfly Conservation



In flight it is impossible to distinguish from the Small White but once settled a good view of the hind wing will show the distinctive green veins on a creamy background. Its habitat is different though both frequent gardens. It has two generations, and like the other two whites, the female upper side is more heavily marked with black. Occasionally very large numbers of second generation appear as in July 2011. Look round Hawes Water at SD478767 or Hale Moss Reserve at SD504776.

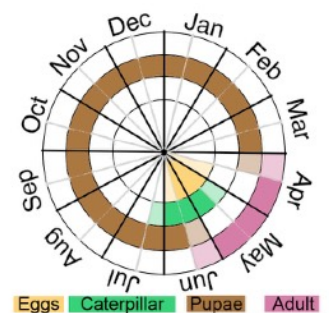


Orange Tip - *Anthocharis cardamines*

Status: Common. Forewing: c 23mm.

Caterpillar food plant: Seed pods of Jack by the Hedge and other crucifers.

Habitat: Roadsides, gardens and damp meadows.



Spring has really arrived when this beauty emerges in mid April. The males are unmistakable as they fly up and down roadsides and through gardens looking for females. These emerge a little later, and as they have no orange tips are easily mistaken for a Small or Green-veined White being only slightly smaller. At rest however the pretty marbled underside of both male and female is distinctive and gives a wonderful camouflage when roosting.



Male on Primrose



Female egg-laying

Brown Hairstreak - *Thecla betulae*

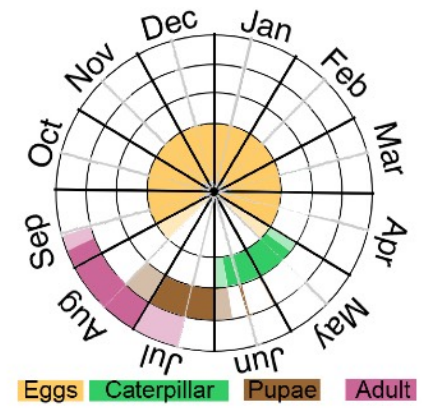
This elusive southern species has been seen at Gait Barrows since 2015. Its eggs are increasing at this site and Coldwell Parrock in the winter. Eggs have also been found on Arnside Knott. Look for the adult female basking or egg laying on blackthorn saplings in August.

Status: Recent arrival in the AONB. Forewing: c 40mm.

Caterpillar food plant: Blackthorn.

Habitat: hedges and thickets of blackthorn.

Adults congregate around the tops of trees, usually Ash.



Egg and larva on blackthorn



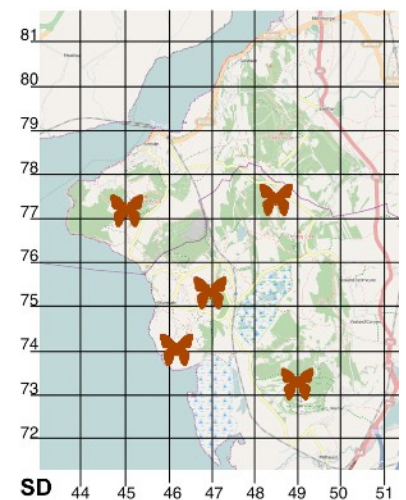
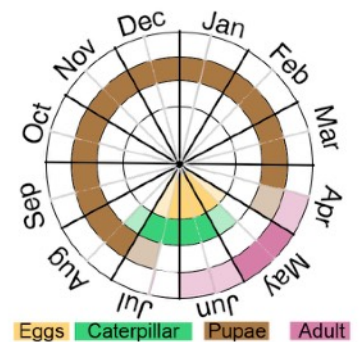
Green Hairstreak - *Callophrys rubi*

Status: Very local. Forewing: c 12mm.

Caterpillar food plant: Birdsfoot Trefoil, Rock Rose and Gorse.

Habitat: Limestone grassland.

This charming bright green butterfly is out in late April and May. Some years in fair numbers, others rarely, but confined to our limestone outcrops. Warton Crag and Arnside Knott are the best sites. Nearby Meathop Moss, where it feeds on Bilberry, has some of the best counts in the country. The male has a dashing flight that is hard to follow but it often returns to a favourite perch where it can look out for females or chase off any competition.



Purple Hairstreak - *Neozephyrus quercus*

Status: Common but overlooked.

Forewing: c 14mm. Caterpillar food plant: Oak.

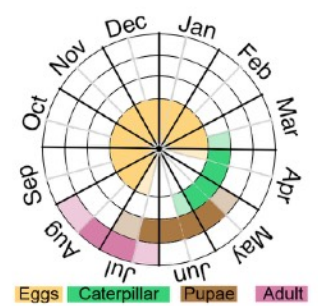
Habitat: Oak woodland.

Like other hairstreaks the Purple Hairstreak is hard to spot unless you know how to look. It can be seen from mid July to the end of August flying around mature oak trees, sometimes quite isolated ones, in late afternoon sunshine. It likes basking on high oak leaves with wings half open and it is not difficult to spot with binoculars. A favourite place is the Butterfly Conservation Reserve, Myers Allotment at SD474749 where it is possible to get level with the oak canopy.

Another good place is the oak in the middle of the Pig Field at SD451769. It rarely comes to a lower level so is a most difficult butterfly to photograph. In autumn and winter its presence can be detected by searching oak buds for the distinctive pale round eggs. The caterpillar cannot be found as it burrows into the opening oak buds in spring.



Egg on oak bud



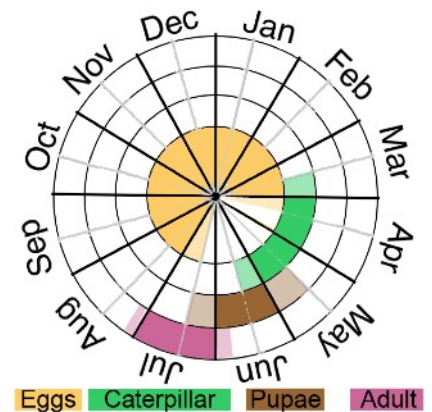
White-letter Hairstreak - *Satyrrium w-album*

Status: Overlooked local resident. Forewing: c 17mm.

Caterpillar food plant: Common and Wych Elm.

Habitat: Tree tops of Wych Elm.

This rather obscure little butterfly has long been associated with the English Elm but following the Dutch Elm disease outbreak in the 70's it has become rare. Fortunately it has adapted to the Wych Elm which is quite common in our area. The butterfly spends most of its life high in the canopy. It is being increasingly seen in this area by patiently watching for a small dark butterfly dashing around the canopy of Wych Elms in July. Very occasionally it comes down to nectar on flowers especially in the rare hot, dry, summers when their preferred food source, aphid honey-dew, has dried up. The photo was a once in a life time shot at Yealand. It always rests with its wings closed. There are Wych Elms in Coldwell Parrock at SD479778 or Yealand Hall Allotment at SD493760.

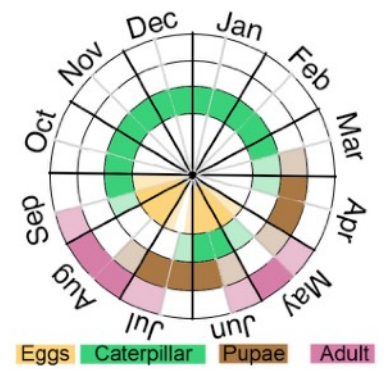


Small Copper - *Lycaena phlaeas*

Status: Double brooded in small numbers.

Forewing: c 14mm. Caterpillar food plant: Docks and other rumex species.

Habitat: Flowery areas especially near the coast.



This cheerful little butterfly is widespread in Britain but is only seen in small numbers here as it tends to avoid limestone grassland. The best place locally is Heysham Nature Reserve but it can often be seen on the lower Cumbrian fells. However it can turn up anywhere in our area, sometimes in gardens. The first brood is out in May but the second brood in July and August may be more numerous. Look for it nectaring on Ragwort flowers.

Northern Brown Argus - *Aricia artaxerxes*

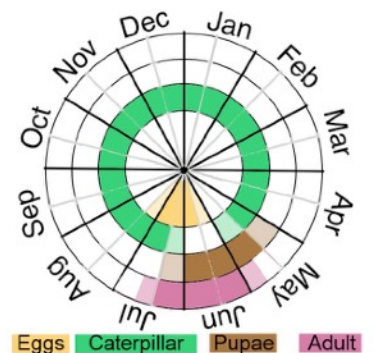
Status: Local. Forewing: c 14mm.

Caterpillar food plant: Rock Rose.

Habitat: Limestone grassland.

The pretty Northern Brown Argus is one of our special species, being very local throughout the north of England and Scotland.

It is also declining in numbers. It is out in June and early July. Unlike the Common Blue both male and female are brown and the undersides are very similar. The Common Blue has one extra spot as indicated on the photo. The best places to see it are in the patches of limestone grassland on Warton Crag, Gait Barrows and Arnside Knott.



Northern Brown Argus



Northern Brown Argus
underside



Common Blue underside

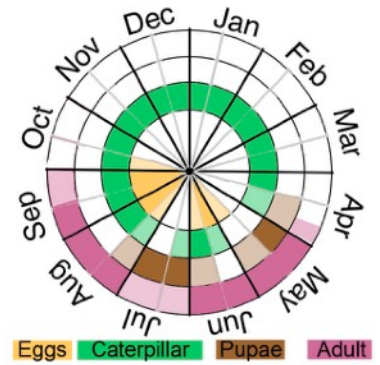
Common Blue - *Polyommatus icarus*

Status: Common, fluctuating yearly numbers.

Forewing: 15mm. Caterpillar food plant: Birdsfoot Trefoil.

Habitat: Limestone flowery grassland.

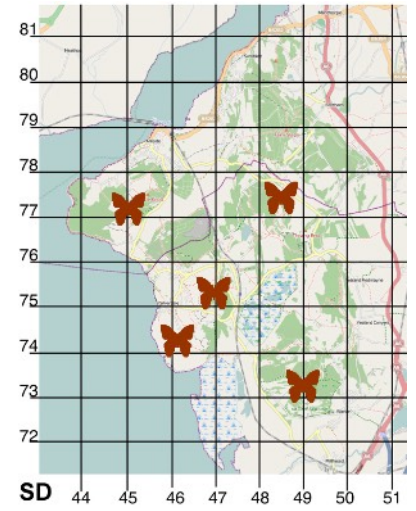
The first brood is out in May and the second is often more numerous in August. The male is unmistakable; the female is more brown and not so often seen. Females need to hide more as the future of the species depends on their survival to lay all their eggs. Good places to see them are at the Warton Quarry car park at SD491723 or on Heathwaite at SD449766.



Male



Female



Holly Blue - *Celastrina argiolus*

Status: Fairly common but large yearly fluctuations.

Caterpillar food plant: Holly in spring, Ivy in Autumn.

Forewing: 15mm. Habitat: Wide ranging, often gardens.

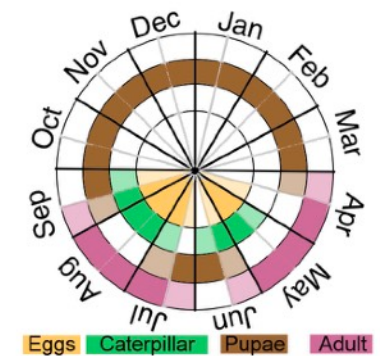
Any blue seen in gardens is likely to be this species.

It's a vigorous flyer often just passing by, but when settled

almost always has its wings closed exposing the powder

blue underside with faint dots. On the rare occasion it basks with wings wide open

its full beauty is revealed.



Female



Male

Duke of Burgundy - *Hamearis lucina*

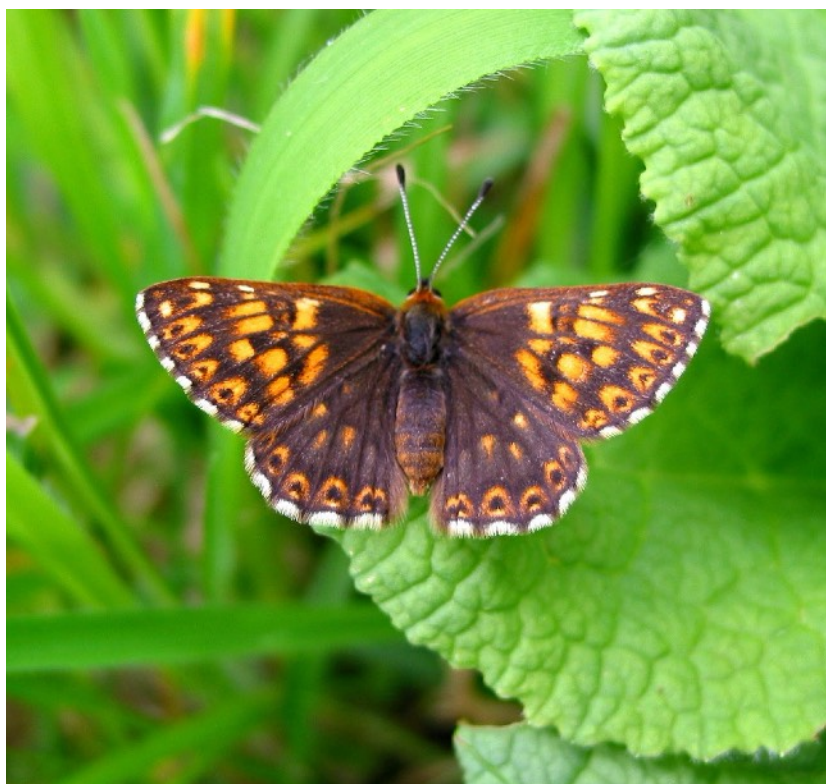
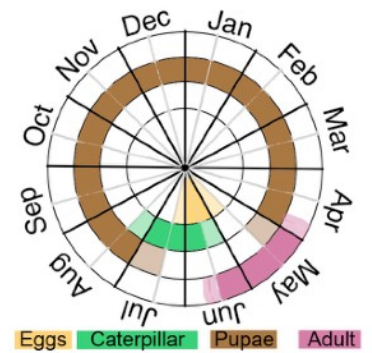
Status: Very local and threatened.
Forewing: c 15mm. Caterpillar food plant: Primulas.
Habitat: Regular coppiced woodland glades.

Fifteen year ago this charming butterfly could be found locally at about six sites in our area, but we are down to one small colony at Gait Barrows. This pattern is happening nationally due to habitat loss and perhaps climate change.

Its caterpillars feed on Primrose and Cowslip but it has very precise habitat requirements. The surrounding vegetation must not be too low so that the plants wither in summer nor too high so that the plants become too shaded and damp.

Recently coppiced woodland glades provide the right conditions and only last a year or two, so the butterflies need to move on to nearby recently coppiced woodland. Rotational coppicing, once a common activity, has been revived on Gait Barrows and other local reserves to halt the decline of the Duke and some Fritillaries. Bad weather in spring when the butterfly is out can cause a big drop in numbers.

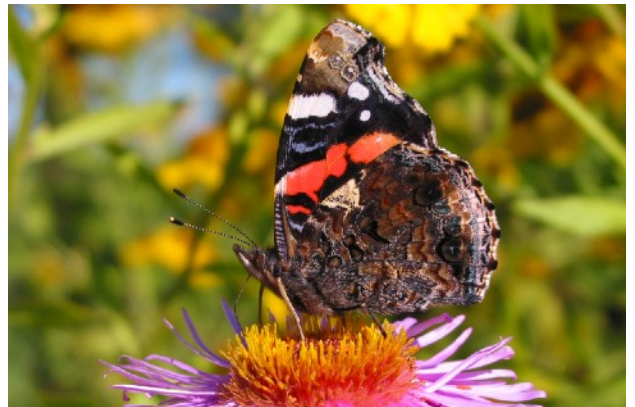
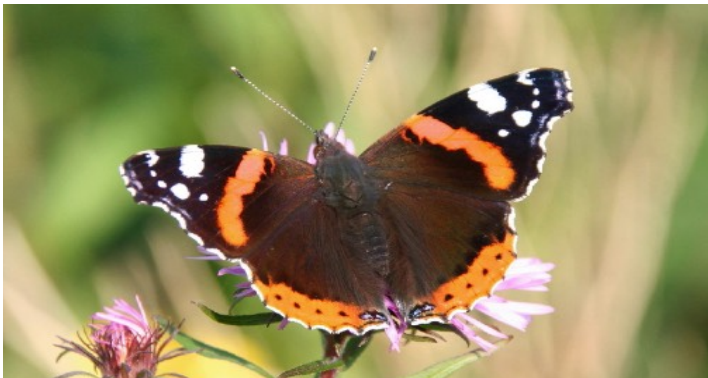
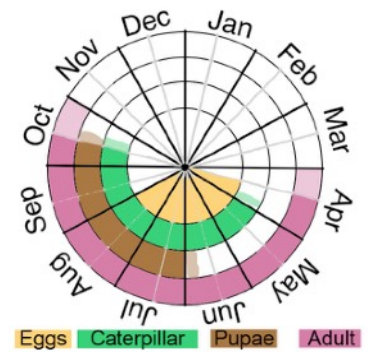
It is not an easy butterfly to find being small and unobtrusive. The male spends most of its time perched looking out for females or rival males. In known colonies the best way to assess numbers is to search for eggs on the undersides of Primulas in the second half of May.



Red Admiral - *Vanessa atalanta*

Status: Common migrant. Forewing: c 30 mm.
Caterpillar food plant: Nettles.
Habitat: Widespread, gardens

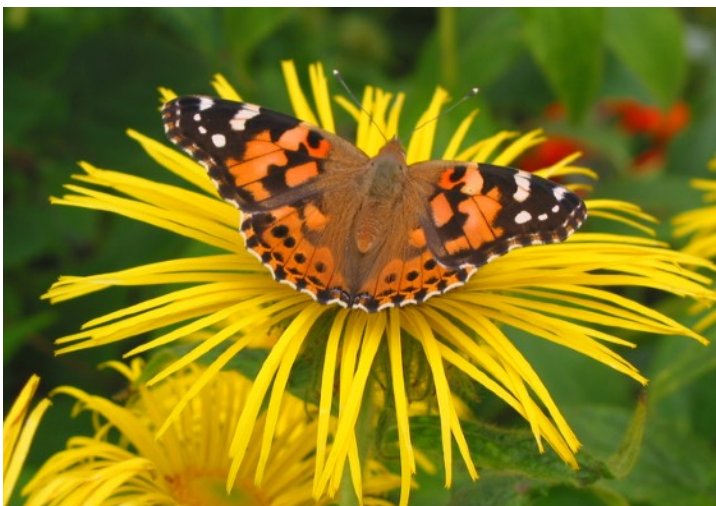
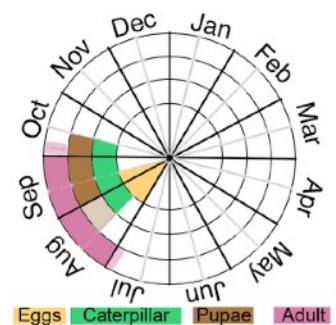
This is a striking and familiar species seen mostly in late summer when it is attracted to nectar-rich garden flowers. Most that we see are immigrants or their offspring that have come from North Africa and Europe. The first arrive in southern England in spring with a few moving north. Many more arrive in summer and boost the numbers we see here. They linger in mild weather into October feeding up for a return migration south. Some are seen every year but numbers can vary tenfold as in the good summer of 2003 when hundreds were seen in the AONB feeding on ivy blossom into October. In recent years a few have overwintered up here and this may become more common.



Painted Lady - *Vanessa cardui*

Status: Regular migrant in small numbers.
Forewing: c 29mm. Caterpillar food plant: Various thistles.
Habitat: Widespread. Gardens and flowery open spaces.

Another regular migrant but only seen in small numbers most years. Every 10 years or so large numbers arrive from Europe and spread all over Britain. The last large influx was in 2009. The



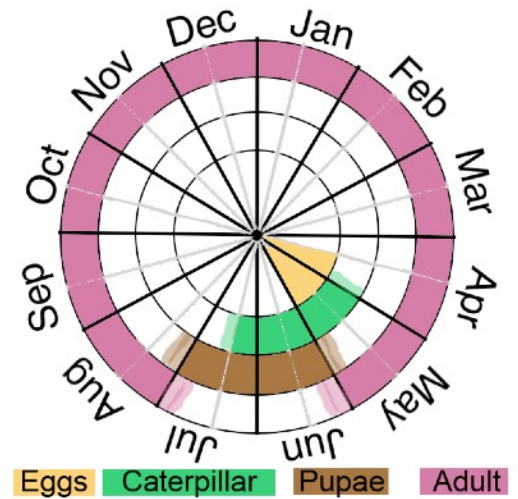
early arrivals will lay eggs which will produce even more butterflies in autumn. It is often seen in the company of Red Admirals, Peacocks and Small Tortoiseshells on Buddleia and other late summer flowers.

Like the Red Admiral, the majority are thought to migrate south in late autumn while a few try to overwinter though probably many perish. Until recently neither species was able to survive winter in England.

Small Tortoiseshell - *Aglais urticae*

Status: Common with large fluctuations.
Forewing: c 22mm. Caterpillar food plant: Nettles.
Habitat: Widespread, gardens.

Usually considered a common butterfly and a favourite in gardens, it is subject to alarming fluctuations in numbers from year to year. This may be due to a parasite as well as long hot summers (in the south) that lead to withered nettles. Currently (2013) it has been doing quite well here.



The adults hibernate and are out in late March on any sunny day till May. Eggs are laid on large patches of nettles growing on rich soil on the edges of fields rather than small patches in garden. Caterpillars feed communally at first and then wander off and pupate some distance away. The butterflies emerge in early August and are a familiar sight on Buddleia, Sedum and Michaelmas Daisy till early October, often in company with many other species of butterfly in the vanessid group.

Although the Small Tortoiseshell can have two broods in the south of England it only has one in the AONB.



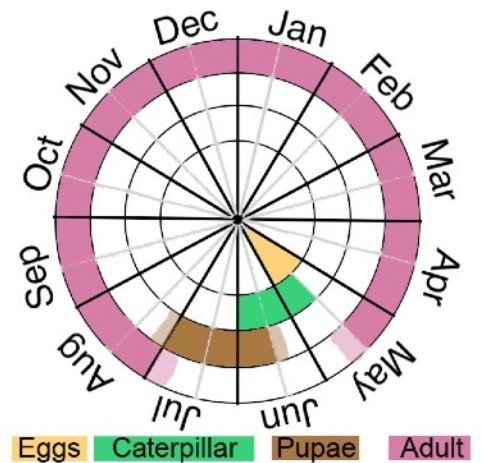
Peacock - *Inachis io*

Status: Generally common.

Forewing: c 29mm. Caterpillar food plant: Nettles.

Habitat: Widespread, gardens.

This must be the first butterfly many people learn to recognise being common and so distinctive with its four "Peacock" eyes. After hibernation, sallow blossom is a favourite nectar source and the butterfly is around till May.



The eggs are laid in April on young nettle plants, the caterpillars feed up in early summer and, after a few weeks as pupae, emerge as butterflies in mid July or August. It is then a common visitor to any flowery places feeding up to survive the winter in hibernation. It usually settles down by early September a month earlier than other hibernating species. Though it probably hibernates in wall cavities and ivy clad trees it is quite often found in outbuildings. The underside is uniformly dark in complete contrast to the forewings and provides good camouflage.



A Peacock hibernating in an outhouse found in early September and departed in early April.

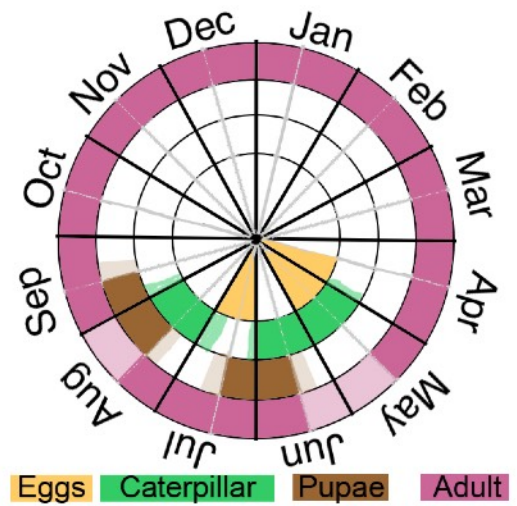


Photo: Ken Kitchen

Comma - *Polygonia c-album*

Status: Quite common. Forewing: c 22mm.
 Caterpillar food plant: Nettles and Wych Elm.
 Habitat: Widespread, gardens.

This distinctive species has been spreading north over the last two decades and is now well established here. It hibernates as a butterfly so is seen in early spring. These mate and lay eggs that produce a new generation of butterflies in autumn.



These are regular visitors to gardens on Buddlea, Michaelmas Daisies, Sedum and Ivy blossom well into mild October days.

The rich tawny colour is striking but the most obvious feature is the ragged wing margins. Underneath it mimics a leaf perfectly and the white comma is visible if you look closely.



Pupa on Golden Hop
Ken Kitchen



Caterpillar feeding on
Wych Elm

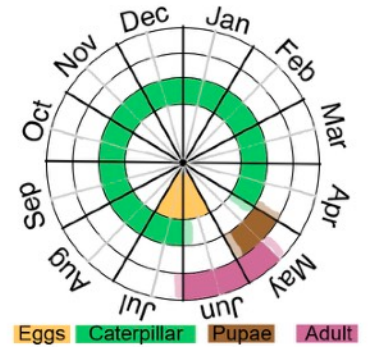
Small Pearl-bordered Fritillary - *Boloria selene*

Status: Local, numbers fluctuate. Forewing: c 20mm.

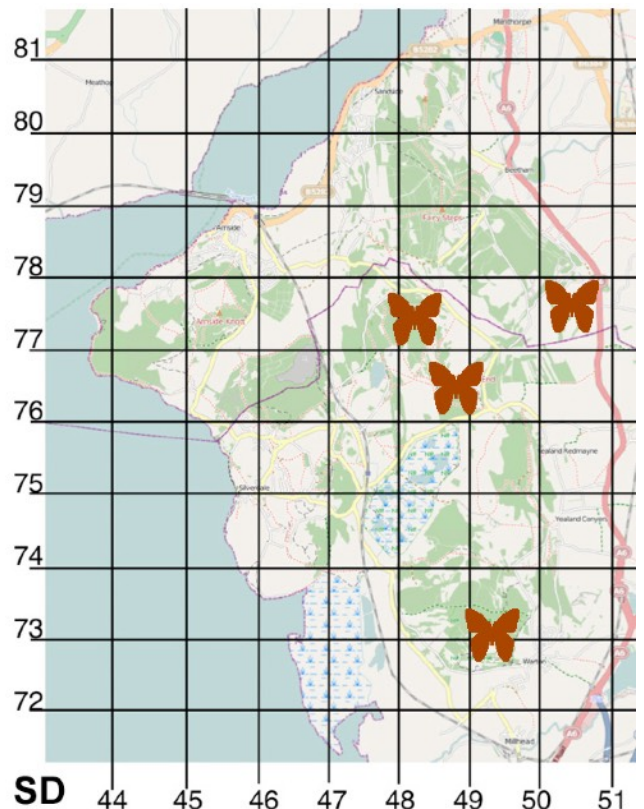
Caterpillar food plant: Violets.

Habitat: Limestone grassland and unimproved grassland areas.

This Fritillary is in fact no smaller than its close relative the Pearl-bordered. It flies a fortnight later so any small fresh Fritillary in late May and June is likely to be this species. It is a hardier species being found in some upland areas of western England, Wales and much of Scotland.



Here it occurs on our limestone grassland but in addition a strong colony occurs on Hale Moss where a Pearl-bordered would never be seen. The numbers fluctuate from year to year and it has been doing well recently and appears less affected by poor weather than its sister species. One needs a close view of its underside to be sure of identification but the number 730 on the upper side can help. Close focus binoculars are most helpful for identification of all our Fritillaries. The underwing veins are a heavy black and there are several silvery spots on the underside apart from the pearls around the edge. If you look at the Pearl-bordered Fritillary on the opposite page you will see the veins are much paler and there are only 2 silver spots on the hindwing.



Pearl-bordered Fritillary - *Boloria euphrosyne*

Status: Local and declining.

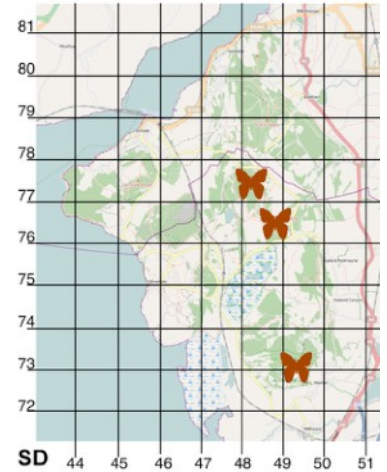
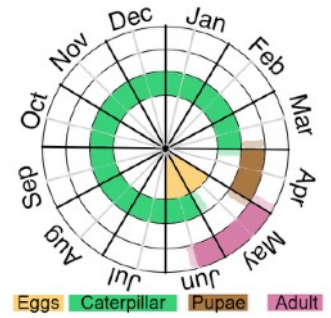
Forewing: c 20mm. Caterpillar food plant: Violets.

Habitat: Woodland margins with bracken and limestone grassland.

One of our top three threatened species in Britain. It has disappeared from most of its former sites in southern England and our area remains one of its strongholds. However in spite of much management to preserve and restore its habitat it has suffered badly in a succession of cold springs. It has gone from Arnside Knott but is still found on Gait Barrows, Yealand Hall Allotment and best of all Warton Crag.

It is the first Fritillary to emerge, and can be seen from early May to mid June. The very similar Small Pearl-bordered is out at the same sites two weeks later. To be sure of the identity a good view of the underside is needed.

Even one good spring will boost their numbers and it is to be hoped that the extensive regular coppicing on our crags will reverse the downward trend of this very beautiful butterfly.



Pearl-bordered Fritillary: only 2 silver spots on the underside of the hindwing.

High Brown Fritillary - *Argynnis adippe*

Status: Locally common but decreasing.

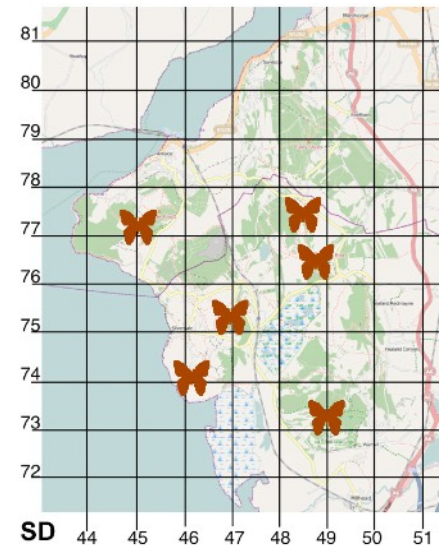
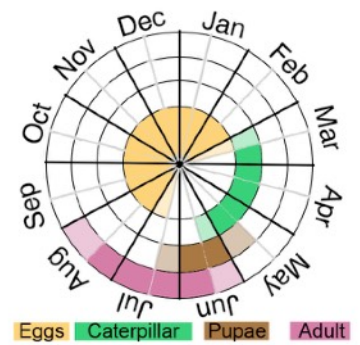
Forewing: c 27mm. Caterpillar food plant: Violets.

Habitat: Limestone grassland.

Another of our endangered species. It has disappeared from all but a handful of its southern locations and we now have the largest stronghold in the UK. The High Brown Fritillary needs a special micro climate for the eggs to survive the winter. This is provided by the right depth of winter bracken or leaf litter. Its caterpillars feed on violets like the Pearl-bordered Fritillary.

Female High Browns spend a long time choosing the best sites to lay eggs. The male dashes about and unless seen clearly when settled it is difficult to distinguish from the Dark Green Fritillary. There is a subtle difference in the outer margin of the forewing which in the High Brown is slightly concave. With practice it is quite easy to spot.

The other difference is the row of rusty ringed spots on the underside of the hindwing. Extensive coppicing on Gait Barrows, Arnside Knott, Myers Allotment, Warton Crag and Yealand Hall Allotment all aim to extend suitable habitat. However a succession of bad summers has had a very negative effect on the numbers seen during their main flight period from mid June to early August.



High Brown Fritillary: above
Outer margin slightly concave
Dark Green Fritillary: below
Outer margin straight or convex



High Brown Fritillary showing rusty ringed spots

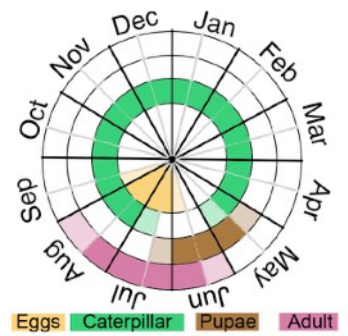


Dark Green Fritillary - *Argynnis aglaja*

Status: Locally fairly common.

Forewing: c 27mm. Caterpillar food plant: Violets.

Habitat: Limestone grassland and other rough open spaces.



This Fritillary is the most widespread in the UK favouring chalk and limestone grassland and coastal sites right up to northern Scotland. It is not so particular about its egg laying sites and appears to withstand poor weather as the numbers have been increasing in our area over the last decade.

It is a strong flyer and may be encountered away from its favoured Arnside Knott and Warton Crag even feeding on garden flowers. It has the same flight period as the very similar but more local High Brown. As well as the identification aids on the previous page, the Dark Green Fritillary has a much more definite green tinge to the base of the underside of the hind wing.



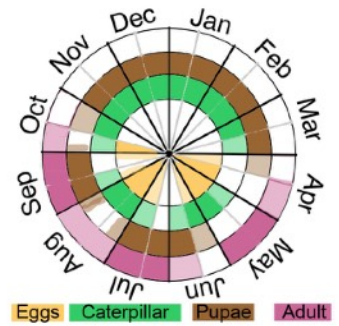
Dark Green Fritillary: no rusty ringed spots on the underside of the hindwing.

Speckled Wood - *Pararge aegeria*

Status: Fairly recent arrival, now common. Forewing c 23mm.

Caterpillar food plant: A wide variety of grasses.

Habitat: Woodland glades and sometimes gardens.



The Speckled Wood has seen a significant northerly spread in the 1990's and is now firmly established as a common butterfly. This must be accounted for by climate warming and it is clearly a successful butterfly producing three generations a year. It can be seen from early April to mid October in favourable seasons. It loves woodland clearings and will bask in shafts of sunlight to be admired by all. Sometimes one can see two butterflies in a twirling flight, rising higher and higher in a sunlit glade. These are territorial disputes between the males. It will overwinter as either a caterpillar or a pupa.

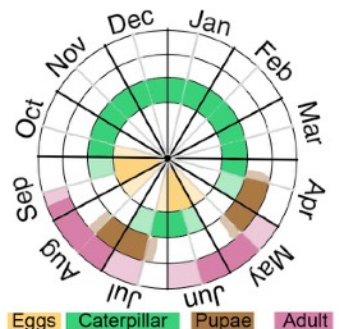


Wall Brown - *Lasiommata megera*

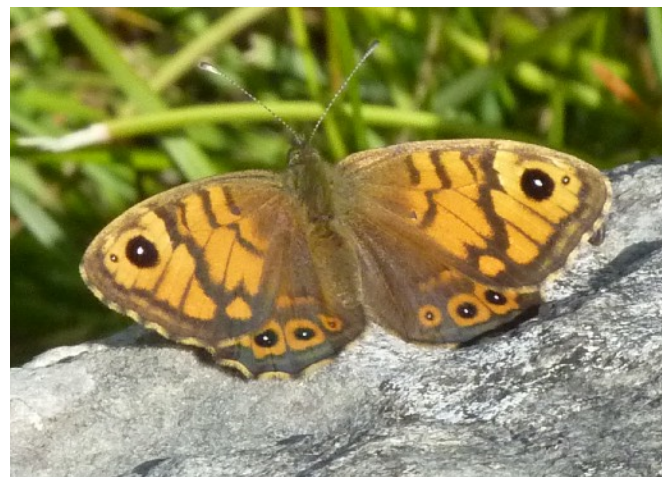
Status: Formerly common, now scarce.

Forewing: c 21mm. Caterpillar food plant: A variety of grasses.

Habitat: Unfertilised grassy places, woodland edges and limestone grassland.



Even 10 years ago this was a common species in our area. It has almost disappeared from southern England except for some coastal sites and now is disappearing here and only remains in very small numbers on Warton Crag and a few other limestone areas. It has suffered major fluctuations in numbers in the past and it is to be hoped that it could still recover. It has a late spring and early autumn brood and is more likely to be seen in August if there has been a good summer. It lives up to its name and loves perching on warm dry stones and walls.



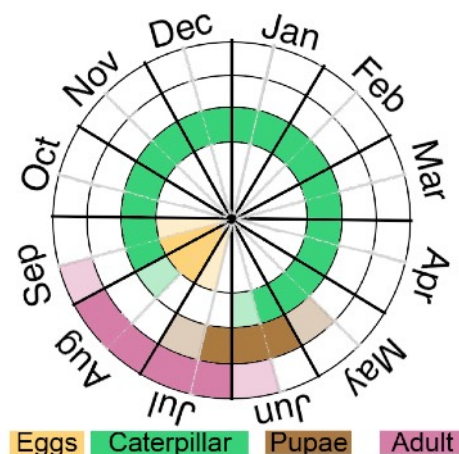
Wall Brown in typical pose on bare limestone

Grayling - *Hipparchia semele*

Status: Locally common. Forewing: c 25mm.
Caterpillar food plant: A variety of grasses.
Habitat: Stony areas of limestone grassland.

The Grayling is a familiar butterfly on Arnside Knott in July and August. The exposed stony areas provide just the right habitat. It spends a lot of time resting on rocks always with wings closed and inclined to the sun's rays to get the maximum warmth. When disturbed it flies off sharply and soon lands. It can be quite difficult to see as its drab colours blend so well with the stony background.

It is found in smaller numbers on our other limestone pavements. Numbers fluctuate greatly from year to year. It is of note that as with others in the Brown family it does rather well after wet summers, perhaps because of the good growth of their grassy food plants.



Typical habitat:
Yealand Hall Allotment

Scotch Argus - *Erebia aethiops*

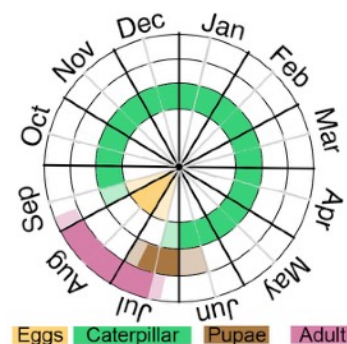
Status: Common in one location. Forewing 22mm.

Caterpillar food plant: Purple moor grass.

Habitat: Limestone grassland on Arnside Knott.

A very special species for us as, though widespread in Scotland, there are only two colonies in England. Both are in Cumbria, one at Smardale and ours on Arnside Knott.

When first in flight in the last week of July it is confined to the tops of the Knott. Look at the slope near the toposcope.



At the end of its season in late August it may wander a bit and has been seen on Lower Heathwaite and even on the coast at Far Arnside. It is strange that it is so faithful to one site as its food plant, the purple moor grass, is common on our other limestone pavements. When freshly emerged it appears almost black in flight but when worn it needs close inspection to separate it from Meadow Browns and Ringlets. Though still common its numbers have decreased recently and regular management of the site aims to keep its favoured grassland open.

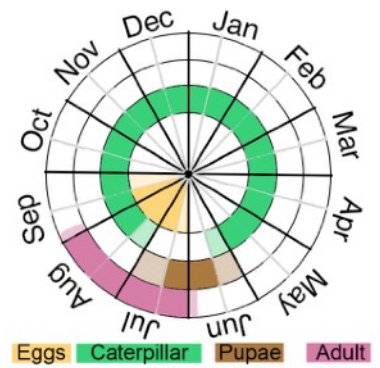


Gatekeeper - *Pyronia tithonus*

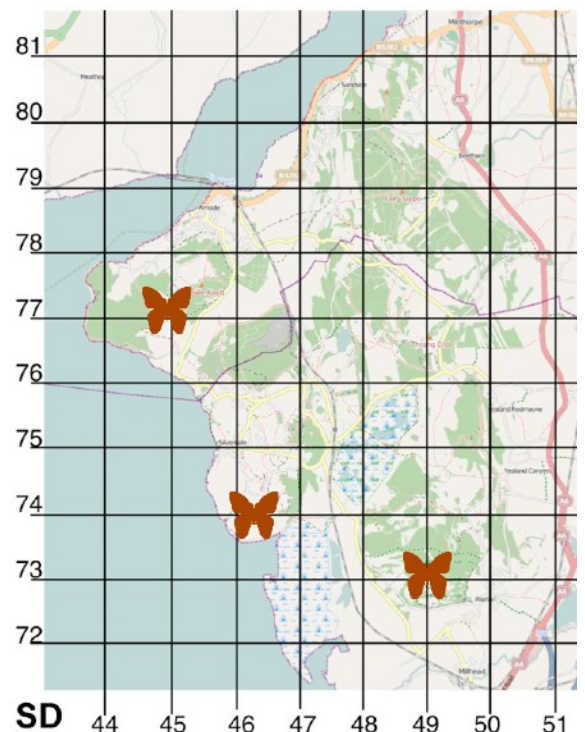
Status: Recent arrival. Now locally common.
Forewing: c 21mm. Caterpillar food plant: Various grasses.
Habitat: Woodland rides and hedgerows.

A very common butterfly in the south of England, the Gatekeeper has been slowly spreading north and in the last few years has become established here. It favours coastal rather than inland sites. So it is quite common in July and August on Arnside Knott, Heathwaite, Heald Brow and Warton Crag. Look for it feeding on Bramble blossom.

It is a little smaller than the very common Meadow Brown, but has much more orange on the forewings and double pupils in the black eye spot.



Typical habitat:
Arnside Knott

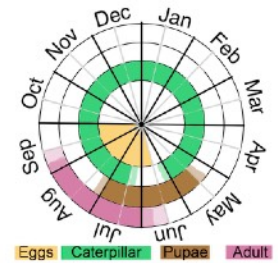


Meadow Brown - *Maniola jurtina*

Status: Common. Forewing: c 24mm.

Caterpillar food plant: A variety of grasses.

Habitat: Unimproved grassland, garden visitor.



This is one of our most common butterflies and has not been much affected by a run of bad summers. It used to be easy to identify in high summer as it was the only brown butterfly in many areas. Now one has to look closely since the Ringlet and Gatekeeper have arrived in our area. The male Meadow Brown has very little orange so may be confused with the Ringlet and the female has more orange though not nearly as much as the Gatekeeper.



Female on Inula



Male



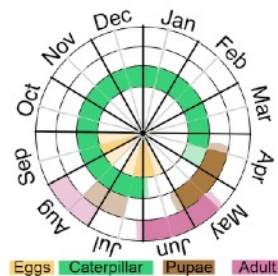
Underside of Meadow Brown

Small Heath - *Coenonympha pamphilus*

Status: Locally common. Forewing: c 16mm.

Caterpillar food plant: Various grasses.

Habitat: Limestone grassland.



Small Heath in typical pose in grassland

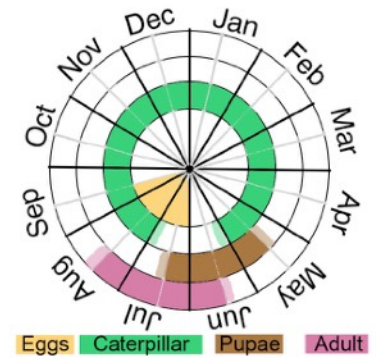
This, the smallest of our Browns, is more often seen on upland grassland and fells outside our area. Here it occurs in small numbers on Warton Crag and Arnside Knott and a few other places. It is a hardy little species not badly affected by poor summers and can be disturbed on dull days. It has a distinctive short erratic flight before landing again in the grass. It always keeps its wings closed when settled. Sometimes double brooded but is more likely seen in late May and June.

Ringlet - *Aphantopus hyperantus*

Status: Recent arrival, locally common.

Forewing: c 22mm. Caterpillar food plant: Various grasses.

Habitat: Light woodland and hedgerows with a preference for damper areas.



The Ringlet is a welcome arrival to our area. Though widespread in Britain it had been curiously absent from south Cumbria and Lancashire until very recently. When first seen in 2004 it was thought they might be from an unauthorised release but their spread has been rapid here and throughout south Cumbria so this seems unlikely. It may be seen almost anywhere in our area and in some locations it is as frequent as the Meadow Brown e.g. around Little Hawes Water. When settled with wings either open or closed the multiple "eyes" are distinctive.



Underside showing "eyes"



The first sighting on Yealand Hall Allotment, July 2004



Looking for Purple Hairstreak on Myers Allotment



Perfect habitat on Arnside Knott



Primroses at Gait Barrows