# Butterflies



# of Langrish, East Meon and thereabouts

#### Introduction

This 2nd edition has been expanded to include the wider area of the 'Old East Meon Hundred' which extended from West Meon to the Sussex border, east of Petersfield and included Froxfield and Steep but not Noar Hill (although I have included one species, the Brown Hairstreak which around here, is only found there). Also briefly mentioned are two occasional sightings - both very distinctive - the White Admiral and the Purple Emperor

As previously, this is not a comprehensive book on butterflies. It only gives those that one could expect to find in this area. Neither does it attempt to categorise the butterflies into their families; but they are in family groups in the various habitat sections under which they appear. The main family groups are: *Skippers, Yellows* and *Whites, Coppers* and *Blues, Vanessids* and *Admirals* (the aristocrats), *Fritillaries* and the *Browns*. Within each section, which is not necessarily where they breed, as well as the family groupings, the butterflies are arranged according to the time of year in which they are to be found flying. It is arranged in sections in which it is common to see the various types:- gardens, downland, hedgerows, woodlands and meadows. I have not included heathlands, coastal areas or mountains and moors as there are none of these around here. Many butterflies are to be found in other habitats, as well in the section in which they appear in this booklet

I have attempted to give enough, but not too much, information to enable you to identify the butterfly you find. Butterflies keep to very well-defined flight periods and this helps to identify similar- looking types. For example, the *Duke of Burgundy*, which looks not unlike a small Fritillary, flies only in the early summer, while true Fritillaries fly in the late summer months.

As before, the photographs of four common Day-flying moths that are regularly seen around here are included.

All the photographs, apart from the rare *Small Blue, Green* and *Brown Hairstreaks, White Admiral* and *Purple Emperor* which come from the Internet, were taken by either Doris Rattray or Rosemary Hopewell, although not all of the pictures were taken in Langrish.

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#### Butterflies

There are about 60 species of butterflies that can be seen in Britain. Some are very rare and only 20 are considered common but even amongst these, some are not found around here as they are only found in coastal areas, mountains or heathland. We are lucky because both Butser and Old Winchester Hill are listed as good sites for seeing butterflies. Among those found is the 'Duke of Burgundy' which is very rare and on the Endangered list. This can be found in Rakes Bottom. There are some 30 or so species that can be found around here on a regular basis.

Most British butterflies live in discreet colonies that breed in the same area year after year. In each colony males and females are about equal, although it often looks as if they there are more males as the females tend to be inconspicuous. Each female lays up to 50 pin-head sizes eggs on the specific plant for that species (eg Cowslips for *'Duke of Burgundy'*), taking great care to lay the eggs in the precise place where they are most likely to survive. Attrition rate for eggs, caterpillars and chrysalises is very high, but in effect, only two – one male and one female of each batch of eggs needs to survive to adulthood for the colony to remain stable.

Butterflies do not fly when it is windy or wet

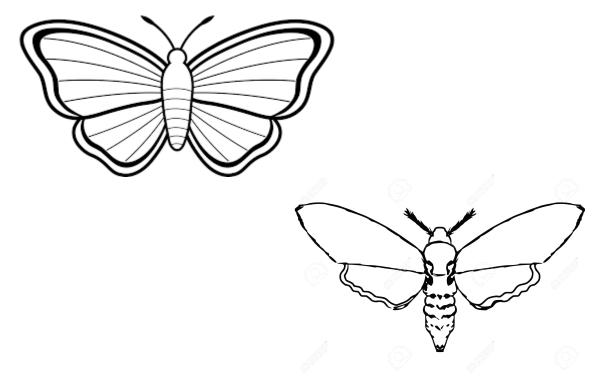
Butterflies in Britain have clearly defined flight periods; these may be single, double, or treble, depending on the species and weather. If Spring has been warm and dry, they may emerge earlier. Some of these flight periods may be as short as six weeks, during which an individual butterfly may only live a few days.. Most species hibernate here – passing the winter in a dormant stage. Some overwinter as eggs, some as caterpillars, some as chrysalises and others as butterflies, often indoors. If the species cannot survive winter, they migrate, eg the 'Painted Lady' and 'Clouded Yellow' which fly northward from their breeding area in North Africa and the Mediterranean each year, returning there before the winter sets in. In some years they are common, in other years, not, depending on the weather in early summer.

The main habitats in which butterflies can be found are woodlands, mountains, moors, heaths, gardens (eg Buddleia bushes) and hedgerows and, especially around here, grasslands. In each habitat, there are types of butterfly which can only be found in that habitat, but many of these have been affected by changes in agricultural practice in recent years.

There is noticeable falloff in number of species as one travels north in Britain. This may, in part be due to the need of 'coldblooded' butterflies to keep their body temperature between 30-35°C. They do so by altering the area of wing surface exposed to the sun or aligning their bodies to it. Some caterpillar food plants do not grow further north in Britan

#### Butterfly or moth?

Butterflies fly only during the day and most are brightly coloured; moths tend to be nocturnal and to be rather drab. All butterflies bar one species, the Dingy Skipper which occurs around here, shut their wings together above the body when they roost. Most butterfly bodies tend to be thin, while many moths have fat, furry bodies, and drape their wings in various postures when not flying. There are a very few – some highly coloured, day flying moths. Moths can be distinguished most easily by their antennae which have various shapes - from single strings to elaborate feathers. In butterflies these are slender always ending in a swollen tip or club.



#### Gardens



Large numbers of butterflies are attracted to gardens to feed, but the range of species is small because most cannot breed there.

Visitors include mobile species that are attracted to garden flowers for their nectar, particularly *Small Tortoiseshell, Peacock, Red Admiral, Comma* and *Painted Lady* together with the *Brimstone.* Other butterflies commonly found, are the *Large* and *Small White* – the so-called '*Cabbage' Whites* which breed in vegetable gardens particularly among Brassicas. *Orange Tips* and *Green-veined Whites* may also visit gardens. The *Holly Blue* is the only other butterfly to breed in gardens – even doing so in urban areas

Country Gardens, particularly if they are close to woodland, may attract *Speckled Wood, Meadow Brown, Large Skippers* and even *Silver-washed Fritillaries* when the flowers are at their best in July and August.

It is simple to attract butterflies into gardens by growing their favourite nectar plants. In spring primroses and even dandelions may be used by them. Early in the summer, various Crucifers, such as Wallflowers, Honesty, Sweet Rocket, Alyssum and Aubretia and many others will attract them. In the summer, Sweet Williams and Thymes and later on Mints, Marjoram, Lavender and Buddleia, come into their own. Essential autumn plants are Michaelmas Daisies, ice plants (*Sedum spectabile*) and rotting apples, pears and plums.

#### Brimstone (Gonepterys rhamni)



Female

Male

<u>Wingspan</u> Large 60 - 74mm Both sexes equal size Common One of first butterflies to be seen in Spring

Very long-lived butterfly - some living for 10-11 months <u>Habitat</u> Woods, scrubby areas, gardens <u>Flight pattern</u> Settles with wings closed <u>Behaviour</u> Solitary

Tend to migrate towards woods in Autumn to hibernate Distinguishing markings Looks leaf-like

Antennae pink

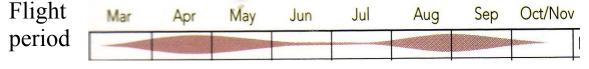
Males bright yellow. Females greenish-yellow

Large reddish spot near centre of underside hindwing <u>Wintering</u> Over winters as butterfly in Ivy, Holly or other evergreens <u>Nectar plants</u> Dandelions in spring, Clovers, Thistles, knapweeds,

Teasels, other pink and purple flowers

<u>Caterpillar food plant</u> Purging Buckthorn Also Alder Buckthorn One generation emerging in August





#### Small Tortoiseshell (Aglais urticae)



<u>Wingspan</u> Large 50 - 56mm Males < females Common but declining

Seen most of the year

Habitat Ubiquitous - Woods, hedgerows, fields, gardens

<u>Flight pattern</u> Most of the time on the move.

Periods of cross-country travel

Behaviour Basks with wings wide open

Distinguishing markings Unmistakeable in Britain

Reddish orange wings with black and orange blotches and dark border containing blue chevrons. Alternating patches of black and orange in a strip on edge of forewing

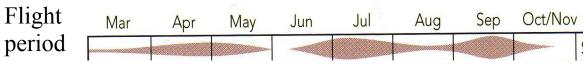
Wintering As a butterfly, often indoors in houses, sheds etc

Nectar plants Dandelions, Thistles, marjoram, Teasels, Buddleia, Ice

Plants (Sedums)



Caterpillar food plant Common nettle Also Small Nettle Two / three generations in hot years



#### Comma (Polygonum c-album)





<u>Wingspan</u> Large 52 - 64mm Males < females Common <u>Habitat</u> Numerous - Woodland clearings & rides, visits gardens & parks

<u>Flight pattern</u> Mobile within its area but not colonial

Can be mistaken for a Fritillary in flight

Behaviour Males perch looking for females

Distinguishing markings Jagged, scalloped edges to wings

Upperwings-tawny-orange black and dark brown blotches

Underwings—brown/dark brown with white comma-shaped mark

on hindwing that gives butterfly its name

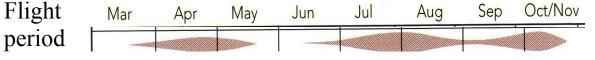
Wintering Overwinters as butterfly, mainly in woodland

Emerges in March

<u>Nectar plants</u> Ivy, Buddleia, ripe apples, pears and blackberries, tree sap

<u>Caterpillar food plant</u> Common Nettle Also Hops, Elms, Currants and Gooseberries Two generations





#### Peacock (Inachis io)



<u>Wingspan</u> Large 63 - 70mm Males < females

Common

Habitat Numerous - around woods, hedgerows, gardens and parks

<u>Flight pattern</u> Strong flight, migrating cross-country

Behaviour Not colonial

Distinguishing markings Unmistakeable

Forewings - velvety reddish-brown with large, differing coloured eyes on both fore- and hindwing, resembling those of the bird Underwings – dark brown or black (Well camouflaged)

<u>Wintering</u> Hibernates early as butterfly in hollow trees, wood piles,

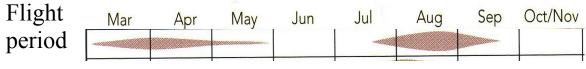
old, disused buildings

Emerges in March

Nectar plants Thistles, Hemp Agrimony, Buddleia, rotting fruit



<u>Caterpillar food plant</u> Common Nettle Also Small Nettle, Hops Must be young and in sunny position One generation



#### Painted Lady (Vanessa cardui)



<u>Wingspan</u> Large 64 - 70mm Males < females

<u>Migrates</u> - sometimes in large numbers from Mediterranean and North African breeding grounds

Common but numbers vary tremendously depending on Spring weather

Habitat All types of sunny open habitats

Flight pattern Fly rapidly - up to 150km per day

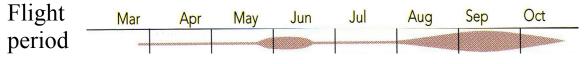
Behaviour May bask on ground

Distinguishing markings Unmistakeable

Background varies from salmon pink to orange, with white patches on black wing tips. black spots on edge of hind wing <u>Wintering</u> Does not overwinter, breeding here only in summer <u>Nectar plants</u> Wide variety - Buddleia, Brambles, Thistles, Knap weed

<u>Caterpillar food plant</u> Creeping Thistle Musk & Spear Thistles Sometimes Burdock and Mallows Early arrivals breed & mature during summer





#### Red Admiral (Vanessa atalanta)



<u>Wingspan</u> Large 65 - 75mm Males < females Migrates from Mediterranean each May via Continental Europe, but

increasingly seen all year round

Common

Habitat Anywhere, particularly gardens and orchards

<u>Flight pattern</u> Powerful fliers, alternating between strong flits and glides

Behaviour Feed on over-ripe fruit particularly plums, becoming very

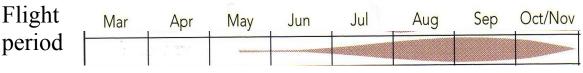
docile (intoxicated!)

Distinguishing markings Unmistakeable

Scarlet bands with white blotches on black background <u>Wintering</u> Increasingly overwintering as butterfly and as chrysalis <u>Nectar plants</u> Over-ripe fruit, Buddleia, Iceplant (*Sedums*), Michael mass Daisies, Ivy flowers



<u>Caterpillar food plant</u> Nettles One generation in summer



# Holly Blue (Celastrina argiolus)



Male

Wingspan Small 26 - 34mm Both sexes equal size

Common Most common Blue butterfly in gardens

<u>Habitat</u> Woods, hedgerows, churchyards, gardens (urban & rural), parks

Flight pattern High, fluttering around shrubs

Behaviour Solitary and very mobile

Perch with wings half open often on shrubs with shiny leaves

Only common butterfly to lay eggs exclusively on trees

Distinguishing markings Bright blue upperwings with black borders

- wider in females

Underwings - pale silvery blue with small black dots <u>Wintering</u> 2nd brood winters as chrysalis

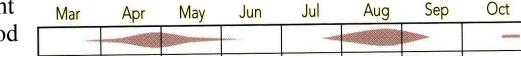
Nectar plants Marjoram etc



<u>Caterpillar food plant</u> Spring - Female holly flower bud Summer - Ivy flower bud Occasionally - Spindle, Dogwood, Gorse, Snowberry, Buckthorn Two generations



Flight period



#### Green-veined White (Pieris napi)





Female (2nd brood)

Wingspan Medium 50mm Both sexes equal size

Common

<u>Habitat</u> Wet meadows, riversides, ditches, hedgerows, woodland glades Frequent garden visitor

Flight pattern Weak, fluttering flight but quite mobile

Behaviour Not colonial

Usually settles with wings closed

Distinguishing markings Underwings - distinctive grey-green veins on pale yellow background. Fainter in summer (2nd) brood Upperwings - dark tips on forewing. Veins picked out as fine grey lines

2nd brood forewings - males: 1 smudgy black spot, females: 2 spots <u>Wintering</u> As a chrysalis

Nectar plants Dandelion, crucifers, marjoram etc

Caterpillar food plant Garlic Mustard (Jack-by-the-hedge) Also Watercress, Lady's Smock (Cuckoo Flower), Hedge Mustard **NOT** Cabbages Two generations Flight Oct Mar May Jun Jul Aug Sep Apr period

#### Small White (Pieris rapae)





Female

<u>Wingspan</u> Medium 48mm Both sexes equal size Common Numbers reinforced by migrants from Continent

Habitat Hedgerows, vegetable gardens, Cabbage fields

Behaviour Not in colonies

<u>Flight pattern</u> Ranges widely, congregating in large numbers in cab bage fields

<u>Distinguishing markings</u> Upperwings - white, with black edges to extreme tip. **(See Large White)** 

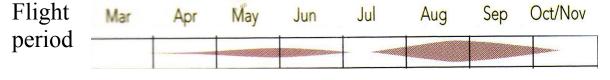
Forewing - Male 1 black spot (sometimes none); Female 2 black spots and grey streak along lower edge

Underwings - Forewing: white with pale yellow tip. Hindwing - pale yellow

<u>Wintering</u> As chrysalis, under ledges, on walls and fences, in sheds <u>Nectar plants</u> White plants, particularly crucifers. Lavender

> <u>Caterpillar food plant</u> Cabbages Also other brassicas, wild crucifers eg Charlock, Garlic Mustard Two generations





#### Large (Cabbage) White (Pieris brassicae)





Female

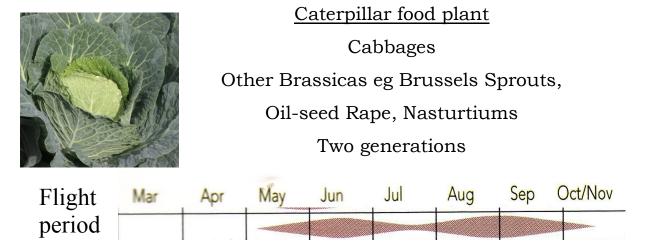
<u>Wingspan</u> Large 63 - 70mm Males < females Very common Numbers reinforced by migrants from Continent <u>Habitat</u> Almost anywhere - cabbage fields and vegetable gardens <u>Flight pattern</u> Capable of flying long distances (100+km) <u>Behaviour</u> Not in colonies

May rest high in trees

<u>Distinguishing markings</u> Upperwings - Conspicuous gleaming white with black tips extending well down edges **(See Small White)** Female: 2 black spots in centre of forewing with grey smear along lower edge

Underwings - Forewing: white with pale yellow tip and 2 black spots Hindwing - pale lemon yellow

<u>Wintering</u> As chrysalis, under ledges, on walls and fences, in sheds <u>Nectar plants</u> Wild and garden plants, particularly crucifers



# Silver-washed Fritillary (Argynnis paphia)

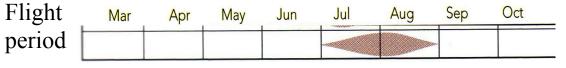




Wingspan Large 60 - 70mm Males < females Locally common Largest British Fritillary Habitat Woodlands, hedge banks along lanes, gardens if near woods <u>Flight pattern</u> Powerful but elegant Behaviour Fairly compact colonies Roost high in tree branches Distinguishing markings Upperwing - deep orange with large black spots and lines. Males - 4 black 'scent' lines on forewing Females - duller background, lacking 'scent lines' Underside hindwing - subtle silvery-white streaks on dull green background (See Dark Green Fritillary) Wintering As caterpillar on tree trunks above violets Nectar plants Brambles, Buddleia, purple flowers, aphid honeydew Caterpillar food plant

Common Dog Violet Eggs laid on tree trunks above violets Caterpillars descend to ground to feed in the Spring One generation





#### Grassland



The varieties of butterflies to be found on downland, varies with geology, local climate, topography and soil. Richest are the south-facing slopes of chalk or limestone hills, as are to be found on Butser and Old Winchester Hill. Their calcareous soil supports a range of caterpillar food plants, rare or absent elsewhere. These slopes are warm. But even these grasslands need to be 'managed' by grazing either by rabbits or sheep in the winter, otherwise they will revert to coarse grass or scrub and will become unsuitable.

Arid, sun-baked turf with very short grass is essential for the rare *Silver-spotted Skipper*, *Adonis* and *Small Blue*. Slightly taller grass is inhabited by various '*Blues*': *Chalkhill Blue*, *Brown Argus* and *Common Blue*, *Grizzled* and *Dingy Skippers* and also the *Small Heath*. Once the grass is over 8 cm (3 in) or so, their food plants are 'shaded-out' so they cannot breed. Larger '*Brown*' butterflies such as *Gatekeeper*, *Meadow Brown* flourish in medium to tall grass, whilst the *Large*, *Small* and *Essex Skippers* are found in the overgrown swards in which the *Marbled White* may also be found breeding. *Green Hairstreaks* are found in scrub on the edge of it.

The endangered *Duke of Burgundy* can now only be found on scrubby downland, where cowslips may be growing under bushes

*Chalkhill Blues, Adonis* and possibly *Small Blues* together with other **'Blues'** not found around here, have an intricate relationship with ants, which are attracted to the caterpillars and chrysalids by the sugars and amino acids secreted by them. These then are attended in the ant's nest until ready to emerge

#### Duke of Burgundy (Hamearis lucina)







<u>Wingspan</u> Small 29 - 32mm Males < females Rare - on Endangered List

Habitat Scrubby downland. Formerly in coppiced clearings in woods

Flight pattern Seen in ones and twos

Behaviour Small close-knit colonies

Individual butterflies only live for 5-7days

Males very territorial perching on shrubs awaiting females

Females more mobile

Distinguishing markings Chequered pattern of orange on dark brown

background

Looks very like some Fritillaries, but much smaller and earlier in the year

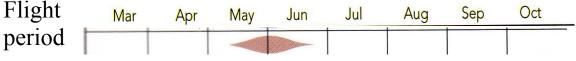
Females have 6 legs but males only 4

Wintering As a chrysalis in tussocks of grass

Nectar plants Occasionally Hawthorn flowers, otherwise do not feed

<u>Caterpillar food plant</u> Cowslips Will also use primroses in woods Both must be in sheltered position One generation





# Grizzled Skipper (Pyrgus malvae)



<u>Wingspan</u> Small 23 - 29mm Both sexes equal size Locally common on Butser & Old Winchester Hill

<u>Habitat</u> Sunny chalk downland with patches of bare ground on edge of scrub

Also recently abandoned quarries, railway lines and brown-field sites Occasionally woodland glades and clearings

Flight pattern Very rapid flight (skips) at low level over grassland

Behaviour In small discrete colonies

Males - Long periods of basking with wings fully open on bare ground

Distinguishing markings Moth-like

Wings brown /black with chequered white spots with black & white fringe

Males and females similar markings.

Female body 'stumpier' than male

Wintering As a chrysalis

Nectar Plants Bird's-foot Trefoil, any spring plants



Caterpillar food plant

Wild Strawberry (in short turf) Creeping Cinquefoil, Agrimony, Tormentil, Bramble

Flight	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct/Nov
period						2010000		

#### Dingy Skipper (Erynnis tages)



<u>Wingspan</u> Small 27 - 34mm Males < Females Locally common

Habitat Downland, but also on dunes, cliffs, abandoned quarries.

Embankments and brown-field sites. Woodland clearings <u>Flight pattern</u> Very rapid flight (skips) at low level over grassland <u>Behaviour</u> In small discrete colonies

Males & females bask on bare ground for long periods Males & females 'roost' together morning & evening with wings open. Only British butterfly to do so

<u>Distinguishing markings</u> Moth-like with muted shades of brown and grey

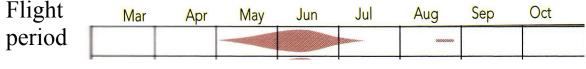
Males and females similar markings

Wintering As a caterpillar in a 'tent' on food plant

Nectar Plants Bird's-foot Trefoil, yellow composites

<u>Caterpillar food plant</u> Bird's-foot Trefoil on bare ground Also on Horseshoe Vetch Wetter areas, Greater Bird's-foot Trefoil One main generation + one partial





#### Large Skipper (Ochlodes venata)



Male

<u>Wingspan</u> Small 30 - 36mm Males < Females Common

Habitat Tall grass - Rough grassland, hedgerows, woodland glades:

Flight pattern Males fly at low level. Slow flights interspersed with

rapid bursts. Buzz or skips Only fly in sunshine

Behaviour Discrete colonies

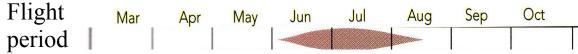
Perch with forewings held at an angle

Males perch on vegetation, darting out at passing insects <u>Distinguishing markings</u> Faint chequered brown pattern on both sides of wings. Brown around edges

Males have a large black scent-line across each forewing <u>Wintering</u> As a caterpillar, half grown in tent on grass <u>Nectar plants</u> Brambles, Thistles, Scabious, Knapweed, Ragwort etc



<u>Caterpillar food plant</u> Cock's-foot Occasionally - False Brome Tall clumps in sheltered areas One Generation



# Small Skipper (Thymelicus sylvestris)



Male

Female

<u>Wingspan</u> Small 30mm Both sexes similar size Common

Habitat Rough downland, woodland glades, field edges, waste ground

Flight pattern Skipping, darting flight

Behaviour Exists in small, discrete colonies

Perch with wings half open

Females much less active than males, pausing frequently to feed

Distinguishing markings No pattern on either side of wings

(See Large Skipper)

Reddish-orange tips to antennae (See Essex Skipper)

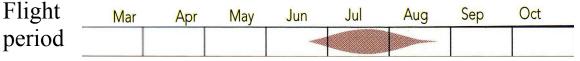
Males have scent-line parallel to forewing edge

Wintering As a caterpillar in cocoon of silk

Nectar plants Bramble, Marjoram, Thistles, Knapweed, vetches, clover

<u>Caterpillar food plant</u> Yorkshire Fog Usually on tall, sheltered clumps One generation





# Essex Skipper (Thymelicus lineola)



<u>Wingspan</u> Small 26 - 30mm Males < females

Common

Habitat Long grass: Chalk grassland, road verges, wood clearings,

waste ground

Flight pattern Skipping, darting flight

Behaviour At western edge of range in Hampshire

Perch with wings half open

Female more sedentary than males who both perch and patrol

Distinguishing markings No pattern on either side of wings

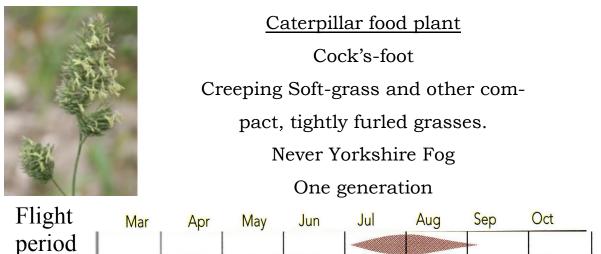
(See Large Skipper)

Ink-black tips to antennae (See Little Skipper)

Males have fainter scent-line across forewing

Wintering Hibernates as an egg

Nectar plants Thistles, Knapweed, Ragwort



#### Silver-spotted Skipper (Hesperia comma)



<u>Wingspan</u> Small 30 - 36mm Males < Females Rare - confined to Southern England <u>Habitat</u> Steep, south facing, thin-soiled chalk downland <u>Flight pattern</u> Rapid, skipping flight . Low to ground. Usually only active if temperature above 20° C <u>Behaviour</u> Small discrete colonies (related to availability of food

plant

Males perch in sunny position awaiting females

Sometimes basks on bare ground

<u>Distinguishing markings</u> Silvery-white blotches on underside of wings, otherwise very similar to Large Skipper

Wintering Overwinters as egg on grass

Nectar plant Dwarf thistle

<u>Caterpillar food plant</u> Sheep's Fescue Needs small tufts of grass with growing tips intact on grazed land One generation



Flight	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
period						~		

# Green Hairstreak (Callophrys rubi)



<u>Wingspan</u> Small 28 - 33mm (15mm closed) Both sexes equal size Not abundant, localised. Well camouflaged. Only green UK butterfly

<u>Habitat</u> Many - Chalk grassland, woodland rides and clearings, heathland rough scrubby grassland. Wet heathland and bogs

Must have trees & bushes (May) present for shelter and perching)

Flight pattern Quick, busy short flights

Behaviour Individuals or small colonies.

Males very territorial - perching on trees or shrubs for many hours.

Always perches with closed wings.

Lives only for about 2 weeks.

Aligns body to sun - side to warm, head-on to cool

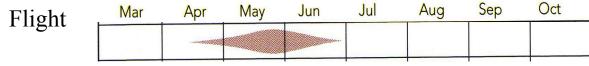
<u>Distinguishing markings</u> Upperwings glimpsed only in flight - dark brown. Underwings: various shades of brilliant green. White line or dots (may be absent) across middle of hindwing

Wintering As chrysalis in association with ants

Nectar plants Bird's-foot Trefoil, Gorse, Red Clover, Bilberry, Bluebells.



<u>Caterpillar food plant</u> Bird's-foot Trefoil or Gorse In wetter areas - Bilberry, Cross-leaved heath One generation



#### Marbled White (Melanargia galathea)



<u>Wingspan</u> Medium/Large 53 - 58mm Males < females Locally common

<u>Habitat</u> Warm south-facing downland slopes with tall grasses, woodland rides, uncut verges

Flight pattern Flies slowly, flapping wings, over tall grass

<u>Behaviour</u> Localised colonies, persisting on same site for many years

Distinguishing markings Distinctive

Upperwings - black and white chequered pattern

Underwings - series of blue-centred eye spots. Ground colour

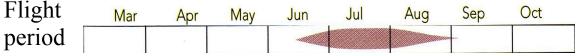
white or pale yellow. Markings - Male-grey, females-olive green

<u>Wintering</u> As a caterpillar in dead vegetation

<u>Nectar plants</u> Thistles, Knapweeds, other purple or mauve flowers

<u>Caterpillar food plant</u> Sheep's Fescue Other Fescues, Timothy, Cock's-foot Eggs laid on tall grass and fall to ground One generation





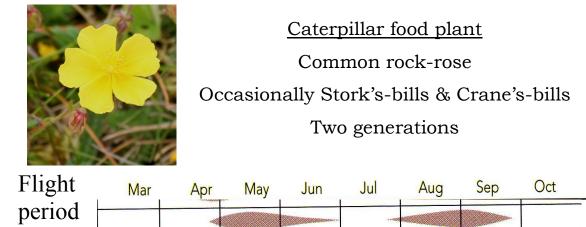
#### Brown Argus (Aricia agestis)



Female

Wingspan 25 - 31mm Males < Females Small Locally common Habitat Chalk & Limestone downland Behaviour Small colonies Butterflies only live for about 4 days Dull weather and at night, roost on grass stems Distinguishing markings Upperwings - dark chocolate-brown with bright orange markings - smaller in males. Black spot in centre of forewing Underwings - Buff in females, blue-grey in males Both sexes - No spot on half of forewing nearest body 2 spots on edge of hindwing arranged like a colon (:) (See Commom Blue) Wintering As a caterpillar in association with ants

Nectar plants Thyme, Marjoram, Crane's-bills



#### Common Blue (Polyommatus icarus)



Female

Male

WingspanSmall29 - 34mmBoth sexes equal sizeCommonMost common Blue butterfly in countrysideHabitatWide variety - Rough grassland, dunes, heaths, waste groundBehaviourDiscrete colonies

In dull weather and at night rest, head-down, with wings closed.

In sunny weather bask on flowers or ground with wings open

<u>Distinguishing markings</u> Upperwings - Males - bright blue upper wings with thin black border and clear white fringe

Females - varying amount of blue on upper wings, many almost

entirely brown, with orange markings near outer edge

Underwings - Buff in females, grey-blue in males.

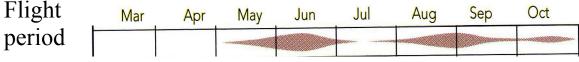
Both sexes - spot on forewing in half nearest body.

On hindwing - 2 spots alongside each other (..) **(See Brown Argus)** <u>Wintering</u> Final batch overwinters as caterpillar

Nectar plants Bird's-foot Trefoil, other yellow plants, Scabious

<u>Caterpillar food plant</u> Bird's-foot Trefoil Other leguminous plants - other Trefoils, Black Medick, White Clover, Restharrow Two / three generations





#### Small or Little Blue (Cupido minimus)





<u>Wingspan</u> Small 18 - 27mm Both Smallest British Butterfly

Both sexes equal size

Rare - Can be found on Old Winchester Hill and ?Butser

<u>Habitat</u> Chalk & Limestone downland on south-facing, sunny & sheltered slopes with hollows and sparse vegetation

Occasionally abandoned quarries, railways & embankments

<u>Flight pattern</u> Weak fluttering flight

Behaviour Small colonies (average <50)

Extremely local - in same place for many generations Males perch on grass, wings half open - pounce on virgin females Both sexes roost head down on grass at night

<u>Distinguishing markings</u> Upperwing - Males smoky-black with blue sheen in sunlight, Females dark brown. No pattern on either sex Underwings - silver-gray with smattering of small black dots (See

Holly Blue)

Wintering As caterpillars in crevasses often covered by moss

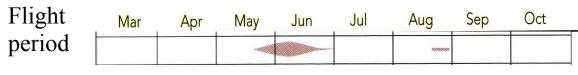
Nectar plants Horse-shoe & Kidney vetches, Bird's-foot Trefoil

Males extract salts etc from dung & muddy puddles

<u>Caterpillar food plant</u> Kidney Vetch (between buds)



One generation + one partial



#### Adonis Blue (Polyommatus bellargus)





<u>Wingspan</u> Small / medium 30 - 40mm Both sexes equal size Rare - Limited in UK to South-east England only

<u>Habitat</u> Unimproved chalk downland with short grazed turf Typically steep, south-facing, sunny slopes with warm hollows Need as high temperature as possible

Behaviour Discrete colonies - fluctuating yearly

Males fly slowly at low level pouncing on newly emerging virgin females who crawl away

Distinguishing markings Upperwings - Males brilliant blue upper wings

- females chocolate brown

Both sexes - distinctive black lines entering / crossing white fringe

Underwings - Buff - female much darker than male.

Orange & pale blue surrounds to black spots on the edges

Female underwing very similar to **Chalkhill Blue** 

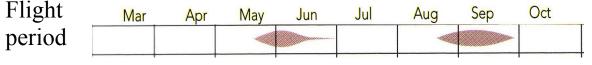
<u>Wintering</u> Overwinters as caterpillar attended by ants who bury it

<u>Nectar plants</u> Horse-shoe vetch, Wild Marjoram

<u>Caterpillar food plant</u> Horse-shoe Vetch (only)

Two generations





## Chalkhill Blue (Polyommatus coridon)



<u>Wingspan</u> Medium 35 - 40mm Both sexes equal size Locally common

<u>Habitat</u> Chalk & Limestone downland on south and west-facing slopes

Behaviour Large colonies

Large numbers of males congregate on dung.

Males more mobile than females

<u>Distinguishing markings</u> Males - pale milky-blue, tinged with brown on upper wing, black borders & row of black dots on hindwing margin. Females - dull brown with variable amounts of blue near body. Underwing - light grey in males, buff in females

Wintering As eggs on ground

Nectar plants Downland plants eg Marjoram, Red Clover and other

clovers



<u>Caterpillar food plant</u> Horse-shoe Vetch (Larger, more vigorous plants) One generation

Flight	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
period							>-	

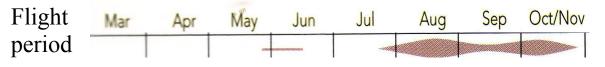
#### Clouded Yellow (Colias croceus)



Wingspan Medium/large 54 - 62mm Males < femalesMigrates from around the Mediterranean across Europe in waves Locally common some years - rare other years Habitat Southern downland and coastal grasslands, arable fields Flight pattern Rapid flight Behaviour Settles with wings closed <u>Distinguishing markings</u> Upperwings - rich yellow, with broad black borders, seen only in flight Underwings - shades of yellow with pair of silver spots surrounded by reddish-brown forming figure 8 on hind wing. Black spot(s) on forewing (See Brimstone) Wintering Does not overwinter, breeding here only in summer Thistles, yellow composites and other nectar-rich Nectar plants plants Caterpillar food plant Lucerne Other Clovers and Trefoils

Early arrivals breed & mature during summer





#### Dark Green Fritillary (Argynnis aglaja)



<u>Wingspan</u> Large 59 - 69mm Males < females Scarce in eastern England, locally common in West

- <u>Habitat</u> Open scrubby downland, coastal dunes, woods with bracken
- Flight pattern Rapid gliding and soaring flight

Quite mobile - 5Km from colony

Behaviour Very localised colonies

<u>Distinguishing markings</u> Upperwings - Orange with pattern of black spots and streaks. Female background paler

Underside - hindwing shining silver blotches on green back-

#### ground (See Silver-washed Fritillary)

Wintering As caterpillar in leaf litter

Nectar plants Thistles, Knapweed, other purple or mauve flowers



<u>Caterpillar food plant</u> Hairy Violet Other violets including Common Dog and Marsh in damper woods One generation

Flight	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
period			s					

#### Small Heath (Coenonymphia pamphilus)



<u>Wingspan</u> Small 34 - -38mm (closed-18mm) Male < females Common

<u>Habitat</u> Mostly on short, dry grasses:- downland, heaths, dunes Flight pattern Low, erratic, bobbing fight (Well camouflaged)

Often stopping to rest rather than feed

Always settles with wings closed

<u>Behaviour</u> Small, close-knit colonies, sometimes seen as ones & twos <u>Distinguishing markings</u> Upperwings - pale tawny-brown (Only seen in flight)

Underwings - small, conspicuous dark eye-spot with white pupil and yellowish halo near tip of pale tawny-brown forewing. Hindwing: shades of pale brown and grey with white area in

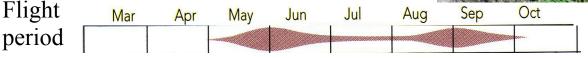
centre. +/- white dots near edge

Wintering As caterpillar in grass

Nectar plants Thyme, Clovers, Hawkweeds

<u>Caterpillar food plant</u> Sheep's Fescue Other medium fine grasses eg Meadow Grasses, Bents Two generations





#### Hedgerows



Hedgerows, as well as providing shelter from wind and rain, are important habitats with a range of species in them, particularly since the intensive management of farmland has driven many butterflies from breeding in meadows. Many species feed on the nectar plants found in hedgerows or use the plants for breeding or hibernation.

Butterflies that breed and feed in hedgerows include *Gatekeeper, Peacock, Small Tortoiseshell, Holly Blue, Green-veined White, Orange Tip* and *Brimstone.* All feed on either the hedgerow shrubs or ground plants under the hedge. Others that may breeding hedgerows as well as elsewhere, include *Small Copper, Common Blue* and *Large* and *Small Skippers* 

Well-managed ancient boundary hedges with a variety of shrubs above a sheltered bank or broad verge that is not cut sprayed or burnt are best for finding butterflies

# Orange Tip (Anthocharis cardamines)



<u>Wingspan</u> Medium 45 - 50mm Males < females

Common

Habitat Damp grassland and meadows, hedgerows, woodland glades

Flight pattern Mobile with males patrolling hedgerows

Behaviour Not in colonies

Distinguishing markings Both sexes – upperwings, white.

Forewing with black spot and dark grey tips

Males: distinctive orange tip to forewing. Female: none (looks like

#### Small-veined White)

Underwing - Both sexes distinctive mottled green & white hindwing <u>Wintering</u> As a chrysalis in dense vegetation

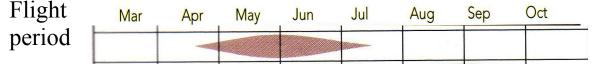
Nectar plants Lady's-smock, Garlic Mustard, yellow crucifers,

Honesty in gardens

Caterpillar food plant

Lady' Smock (Cuckoo Flower) Also Garlic Mustard (Jack-by-the hedge) On flower heads and seed pods One generation





#### Meadow Brown (Maniola jurtina)





Female

<u>Wingspan</u> Medium 50 - 55mm Males < females Common Commonest brown butterfly

<u>Habitat</u> Warm, open grassland with flowers, lanes, rides, hedgerows <u>Flight pattern</u> Erratic, weak & jerky flight just above grass & flowers

Behaviour Distinct colonies with well-defined boundaries

Basks in weak sunlight with wings open.

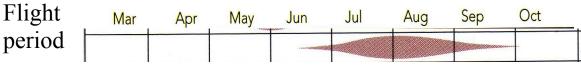
Wings closed in dull light and full sunlight

Distinguishing markings Forewing - males: dull, dark brown with small black and white eye-spot with orange halo on forewing. Females: orange patch on forewing with more prominent eye-spot Underwing - dull orange forewing with eye-spot on forewing. Hindwing - grey-brown with zig-zag boundary between darker inner and paler outer half. Variable number of small black spots (See Gatekeeper)

<u>Wintering</u> As caterpillar in clumps of grass Nectar plants Brambles, Thistles, Knapweed, Marjoram, Wild Privet



<u>Caterpillar food plant</u> Annual meadow Grass Other medium sizes grasses eg Bents, Rye Grass One generation



#### Gatekeeper or Hedge Brown (Pyronia tithonus)



<u>Wingspan</u> Medium 40 - -47mm Males < females Common particularly where trees present

<u>Habitat</u> Sunny woodland edges, hedgerows, lanes. scrubland, heaths Flight pattern Jerky, hopping over flowers, Sometimes high among

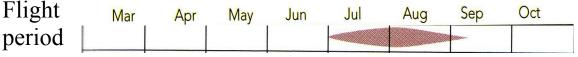
trees. Seldom over-flies grass

<u>Behaviour</u> Discrete large colonies, sometimes contains thousands Seldom settles on ground but basks on leaves eg Bramble

<u>Distinguishing markings</u> Upperwings - Large patches of rich orange on both fore and hindwings, with grey-brown border. Large black eyespot with two white 'pupils' on forewing. Also on underside forewing Underside hindwing—mottled pale brown & fawn with paler streak down centre, Variable number of white spots (**See Meadow Brown**) <u>Wintering</u> As caterpillar on appropriate grasses

Nectar plants Brambles, Knapweed, yellow flowers eg Fleabane, Ragwort





# Small Copper (Lycaena phlaeas)



<u>Wingspan</u> Small 30 - 35mm Males < Females Fairly common

<u>Habitat</u> Warm dry grassland, heaths, hedgerows, dunes. Sometimes in urban gardens and parks

<u>Flight pattern</u> Rapid, difficult to see because well camouflaged <u>Behaviour</u> Small discrete colonies

<u>Distinguishing markings</u> Only British butterfly with shinning coppery-orange upperwings with black spots and borders. on forewing, Black hindwing with copper border Underside hindwing - grey-brown, Forewing - pale brown with black spots

Males and females similar markings

<u>Wintering</u> Overwinters as a caterpillar

Nectar plants Knapweed, yellow Composites eg Hawkweed, Rag

wort



<u>Caterpillar food plant</u> Common sorrel Also Sheep's Sorrel and occasionally broad-leaved Docks Three generations

#### Woodland



Depending on their type and how they are managed, woods differ greatly in the number of butterflies they contain, (butterflies are rarely found in coniferous woods).

Woods attract mobile species such as *Clouded Yellow, Large* and *Small Whites*, which feed but do not breed in them and others such as the *Brimstone, Comma, Peacock* and *Holly Blue* which will breed there, but not exclusively. Other more sedentary species are only to be found if enough of the caterpillar's food plant is present.

Only four species, of which only the *Purple Emperor is* occasionally seen around here, breed on the trees. *Brimstone, Holly Blue and White Admiral* (occasional around here) breed on climbers and shrubs; the remaining species feed on food plants on the ground.

Woodland glades and rides are no more than sheltered strips of permanent grassland and therefore support typically grassland butterflies such as the '*Browns*' and '*Skippers*' and some *Fritillaries*.

Speckled Wood and Ringlet butterflies, the only examples around here that exclusively breed in woodland, require semishaded rides and sunny areas respectively. Several species require fresh clearings and more open rides for breeding. These include *Common Blue, Small Copper, Dingy* and *Grizzled Skipper, Dark-green* and *Silver-washed Fritillaries* and even the endangered *Duke of Burgundy* which has largely been driven out of woodlands because of poor management and lack of coppicing.

## Speckled Wood (Pararge aegeria)



<u>Wingspan</u> Medium 47 - 50mm Males < Females

Common - increasing

<u>Habitat</u> Shady woods, woodland clearings and rides, overgrown hedge rows. Increasingly in gardens

Flight pattern Dancing, fluttery flights

Behaviour Solitary

Males perch in sunny spots, sometimes on the ground

<u>Distinguishing markings</u> Only British butterfly with pattern of cream patches on a dark brown background

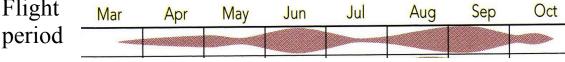
Males and females similar markings

Wintering Unique in Britain in overwintering either as a caterpillar or

a chrysalis

Nectar plants Ground Ivy, over-ripe Blackberries, Honeydew from aphids





# Ringlet (Aphantopus hyperantus)



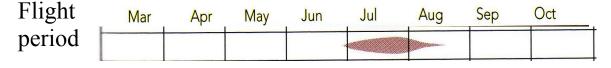
Female

Wingspan Medium-large 48 - 55mm Males < Females Common Habitat Woodland glades, shady hedgerows, rough damp grassland <u>Flight pattern</u> Slow fluttering flight Most often settles with wings closed Behaviour Close-knit colonies Active even in damp, gloomy weather Distinguishing markings Upperwings-Dark velvety-brown with eyespots. Males darker than females Underside - bronze background with 5+ spots with yellow haloes on hindwing and 2+ on forewing Wintering As caterpillar in clumps of grass Nectar plants Brambles, Privet, Thistles Caterpillar food plant Cock's-foot

Various tall grasses - Wood False Brome,

Tufted hair-grass, Couch etc Female drops eggs from perch or while flying One generation





# Brown Hairstreak *(Thecla betulae)* **Noar Hill only**



Female

<u>Wingspan</u> Medium 37 - 44mm Males < females (Largest Hairstreak) Uncommon & elusive - Only found around here on **Noar Hill** 

<u>Habitat</u> Woodland, scrub and hedgerows where Blackthorn is not flailed annually Prefers heavy soils

<u>Flight pattern</u> Males seldom fly - remaining in tree tops Females - erratic, rapid flight, hugging hedgerows

<u>Behaviour</u> Small colonies centred on woods with prominent 'master' tree.
Spend most of time out of site in Ash or Oak trees
Most of time perches with closed wings. Females occasionally open wings in sunlight

<u>Distinguishing markings</u> Upperwings - Females: forewing - bright orangebrown patches on dark brown background. Less marked in males.

Both sexes - orange tips on hindwing

Underwings - golden-brown with double thin white line.

Wintering As egg on twigs

Nectar plants Aphid honeydew in trees.

Occasionally Hemp Agrimony, Fleabane, Brambles

No.

<u>Caterpillar food plant</u> Blackthorn (Sloe) Very occasionally Wild Plum One generation

Flight <sub>F</sub>	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
period						~		

### Possible Woodland sightings

#### White Admiral (Limenitis camilla)

Large 56 - 64mm Males < Females <u>Habitat</u> - Deciduous woods including conifers <u>Flight pattern</u> - Elegant, gliding. Able to fly fast along rides, also weaving in & out <u>Behaviour</u> - Basks on vegetation with wings open <u>Markings</u> - Similar in both sexes <u>Wintering</u> - As caterpillar in tent on leaf stem <u>Nectar plants</u> - Aphid honeydew. Brambles One generation flying between late June - mid August





Food plant Honeysuckle

# Purple Emperor (*Apatura iris*)

- Large 75 90mm Males < Females Britain's 2nd largest butterfly
- Habitat Well wooded areas. Often on clay

<u>Flight pattern</u> - Males, spectacular soaring flight from tree tops. Occasionally descend in morning to drink from puddles

Behaviour - Congregate in tree tops

Markings - Similar in both sexes

<u>Wintering</u> - As caterpillar in silk pad in crutch of twig

Nectar plants - Aphid honeydew and sap

One generation flying between late June - early August (Most males dead by mid July)





Food plant Pussy (Goat) Willow

#### Meadows and fields



Most fields in lowland Britain have been ruined for butterflies by intensive agriculture which has eliminated the native plants on which butterflies may breed. The main exception being the occasional breeding of the *Painted Lady* on Lucerne or other planted clovers in arable fields. The *Orange Tip* may breed on Lady's Smock (Cuckoo Flower) in damp, unimproved meadows. The Green-veined White can be found in damp meadows

It is unusual nowadays to find hay meadows with flowers in them, left uncut until July, but if they exist, many species of butterflies already depicted may be seen feeding on the flowers.

## Some common Day-flying Moths



Six-spotted Burnet (Zygaena filipendulae)

Silver-Y (Autographa gamma)





Hummingbird Hawk Moth (Macroglossum stellatarum)

Chimney Sweeper (Odezia atrata)

