

Butterflies of *Dartmoor National Park*

dentification Guide

Wing span range

\(\text{\sqrt} \) Dartmoor Star Species

Please note: photos not to scale



Its wings are black or dark brown, with a chequerboard of white spots.

② 27mm



Veins visible on upperside but most conspicuous on underside, green on pale yellow background. First brood (May) is smaller and paler than its offspring (July onwards).

⋬ 50mm

Purple Hairstreak Favonius quercus

Red Admiral

Vanessa atalanta

Distinctive black, white

and red markings on

upperside; underside

forewing mottled to offer

good camouflage.

3 67 − 72mm

Comma

Polygonia c-album

Upperside orange with

black markings, distinctive scalloped

wing shape. Underside mottled

brown, with a white comma

mark on the hindwing.

3 55 − 60mm

Silver-washed Fritillary

Argynnis paphia

The largest of the fritillary butterflies.

Males richer orange, with four black

sex brands (thickened veins) on the

sexes with silver washes or streaks.

4 72 – 76mm

forewing. Underside of both

Underwings grey with white streak and small tails, upper wings brown. Males have a purple sheen, females have a purple mark on forewing.

37 − 39mm

Clouded Yellow Colias croceus

Rests with wings closed. Mustard yellow with ringed white mark in centre of hindwing and black dot in centre of forewing.

७ 57 − 62mm



Orange-tip Anthocharis cardamines

Male forewing tips bright orange, female wing tips black. Underside of hind wing mottled green.

🗗 45 – 50mm



Small Copper Lycaena phlaeas

Coppery-orange forewings with black margins and spots, brown hindwings with orange margins. Male smaller than female and forewings more pointed.

32 − 35mm

White Admiral

Limenitis camilla

It has white-banded black

wings and a distinctive

delicate flight, which has

short periods of wing beats

followed by long glides.

② 60 − 64mm

Pearl-bordered Fritillary

Boloria euphrosyne

Upperside chequered pattern of black

markings on orange background.

Underside hindwing with small central

black spot and margins with 7 silver

pearls bordered with red chevrons.

44 – 47mm

Marsh Fritillary

Euphydrias aurinia

Upperside with yellow, orange

and brown chequered markings.

Females larger and paler

than males.

42 - 48mm

Gatekeeper

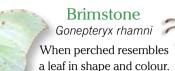
Pyronia tithonus



Small Skipper Thymelicus sylvestris

Upper side solid orange, no mottling. Males have a curved line (sex brand) on the forewing. Tips of antennae are orange.

30mm



Upperside of the male buttercup yellow, female pale lemon yellow. Central spot in both wings. Female can be confused with Large White in flight.

4 60mm



Green Hairstreak Callophrys rubi

Green underside distinguishes this butterfly from all other British butterflies. Upperside plain brown, only seen in flight.

33mm



Can be mistaken for female Common Blue. Upperside solid brown ground colour without blue scaling; lacks spots on underside forewing nearer than halfway to the body.

29mm



Chequered orange and brown markings with white spots in top half of forewing. Freshly emerged butterflies salmon-pink colour fading with time. Underside

mottled and well camouflaged.

② 50 − 56mm

Small Pearl-bordered Fritillary Boloria selene

Can be confused with Pearl-bordered Fritillary. Upperside black triangles along wing edge are joined to dark wing border. Underside hindwing black spot is large and silver pearls bordered with black chevrons.

3 41 − 44mm

Speckled Wood Pararge aegeria

Upperside deep brown with creamy-yellow markings on both wings. Three black eye spots with white pupils on hind wing, one on forewing. Underside mottled pale brown.

47 – 50mm

Meadow Brown Maniola jurtina

Males chocolate brown with orange-ringed 'eye' spot on forewing; females with 'eye' spot and splash of orange on forewing. Underside with prominent 'eye' spots on forewing and two small black spots noticeable on hindwing.

ॐ 50 − 55mm



Chequered pattern visible on both sides of the wings. The male has a prominent black line (sex brand) on the forewing.

33 - 35mm



Conspicuous black tips to the upperside of the forewing extending about half way down the wing edge.

Females have double black dots on the forewings.

4 63 – 70mm



Orange margin to underside of hindwing and a distinctive 'tail' to wing shape. White line straddles both wings with 'W' shape on hindwing.

36mm



Common Blue Polyommatus icarus

Male upperside bright blue, females dusky brown with blue scaling and orange

markings to wing margins. Markings on underside of forewing closer to body than those on Brown Argus.

35mm



Easily distinguished

Holly Blue

Celastrina argiolus

from Common Blue by distinctive silvery blue underwing with black spots. Female upperwing with broad black margin.

35mm

Small Tortoiseshell Aglais urticae

Upperside bright orange with black markings, a white spot on the forewing and blue argins to both wings. Underside is dull and well camouflaged.

७ 50 − 56mm



Dingy Skipper

Its grey-brown wings are mottled with

intricate brown markings on both sides, a row of small white spots

on the upperwings, and a pale grey-

white fringe on the edges of the wings.

The butterfly usually rests with its wings

wavy white streaks with small tails on the

hindwings. The uppersides are brown;

the male's with a smallish yellow mark

38 – 40mm

and the female's with a large, orange mark.

closed. The underwings feature two

Small White

Pieris rapae

Black wing tips (but

less extensive than on Large

White). Males have a single black

spot on upperside of forewing (unlike

Large White); females have two.

48mm

Brown Hairstreak

Erynnis tages

29mm

Peacock Aglais io

Orangey-red ground colour with distinctive 'eyes' on the upperside of both wings. Underside 🛝 almost black and very well camouflaged.

4 63 – 69mm

High Brown Fritillary Argynnis adippe

Large, fast flying butterfly; bright orange with chequered black markings. Underside hindwing, row of white spots with black outline ringed in brown, not present in similar Dark Green Fritillary.

4 60 – 67mm



Wall Lasiommata megera

Similar to a fritillary, distinguished by the 'eye' spot on the forewings and three or four 'eye' spots on the hindwing. Underside dull, mottled brown, 'eye' spots visible.

44 – 46mm

Ringlet Aphantopus hyperantus

Upperside dark brown (female paler than male), with white fringe. Several 'eye' spots on upper and underside.

48 - 52mm



Very similar to High Brown Fritillary Differs on underside with distinctive green wash and bsence of brown-ringed spots.

७ 63 − 69mm



Distinctive black and white markings. Underside pattern similar on both sexes, hindwing black on male and browny yellow on female.

७ 53 − 58mm

Small Heath

Coenonympha pamphilus

Usually rests with wings closed. Smaller and paler than other brown butterflies. Underside of forewing pale orange with black 'eye' spot.

34 – 38mm



Grayling Hipparchia semele

Usually rests with wings closed. Underside dull brown and well camouflaged, two prominent

७ 55 − 60mm

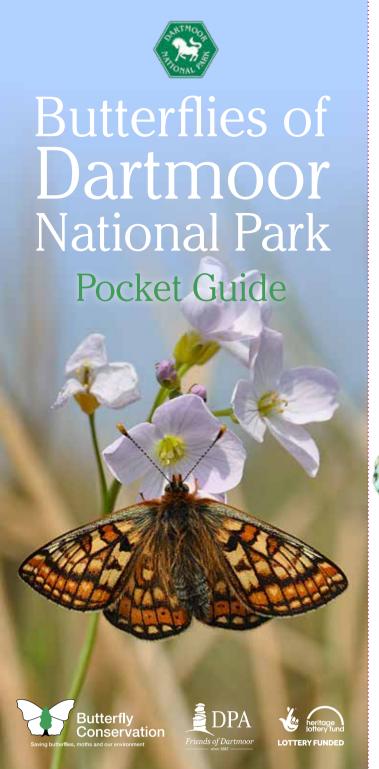


'eye' spots on the forewing visible on underside.









Butterflies in decline

British butterflies remain a cause for conservation concern, with just over

half of our native species in decline. Four butterflies and over 60 moths became extinct in the last century. Butterfly Conservation aims to halt and reverse these declines by working closely with conservation partners and landowners to create a world rich in butterflies for future generations to enjoy.

Butterfly Conservation has been conserving butterflies on Dartmoor for 20 years. By working with partners, including conservation charities, landowners and farmers, we have turned the fortunes of some of our most threatened species around.

Above right: Marsh Fritillary. JIM ASHER



Butterfly monitoring is carried out to help us understand what is happening to our butterflies, and the data we collect helps us to direct our conservation resources where they are most needed. If you would like to get involved with recording butterflies, please get in touch with Butterfly Conservation (contact details are on the reverse of this guide).

Day-flying moths

If you see what looks like a butterfly on Dartmoor but it is not in the identification guide overleaf, it could be a day-flying moth. There are over 100 species of day-flying moth in Britain, compared to 59 species of butterfly. Some of the more common ones you might come across are included below.

There are a number of differences between most moths and butterflies, but there is no hard and fast rule which separates them. In general moths are active at night and butterflies are active during the day; moths tend to hold their wings flat against their body when resting, while butterflies tend to rest with wings held vertically; and the antennae of butterflies tend to be clubbed, rather than the feathery tips of many moths' antennae.



dark ground colour with strip of bright red along the top of the forewing. Underwing is also bright red in colour.

Silver Y dull grey or brown, with central silver spots in the shape of the letter 'Y'.

> **Six-spot Burnet** similar colours to the Cinnabar but instead of a red stripe it has six red spots on its wing.

Chimney Sweeper sooty black colour with white fringe at the tip of the forewing.



Narrow-bordered Bee Hawk-moth fast flying moth that resembles a bumblebee, hovering in mid-air to feed from flowers. A nationally rare moth and tricky to see, lives in wet grassland habitats on Dartmoor.

Butterfly	Jan													
0 11 01 1		Feb	Mar	Apr	May	Jun	三	Aug	Sep	0ct	Nov	Dec	Regional Trend*	Habitat
Small Skipper										\prod			C/U	Grassy areas, woodland glades and rides
Large Skipper	Ш	Ш	Ш	Ш		Ш			Ш	Ш	Ш	Ш	C/U	Areas with long grass, scrubby areas, woodland rides
Dingy Skipper	Ш	Ш	Ш	Ш	Ш	Ш		Ш	Ш	Ш	Ш	Ш	R/NA	Open, sunny habitats including woodland rides and clearings, heathland and quarries
Grizzled Skipper	Ш	Ш	Ш			Ш		Ш	Ш	Ш		Ш	R/NA	Open, sunny habitats including woodland rides and clearings, heathland and quarries
Clouded Yellow	Ш	Ш	Ш			Ш	Ш		Ш			Ш	M / NA	Sunny, open, flowery meadows
Brimstone												Ш	C/I	Scrubby grassland, hedgerows, woodland rides or glades
Large White		Ш										Ш	C/U	Gardens and allotments
Small White		Ш										Ш	C/I	Gardens, allotments and fields of Oil-seed Rape
Green-veined White		Ш										Ш	C/I	Hedgerows, riverbanks and damp vegetation
Orange-tip	Ш	Ш	Ш			Ш	Ш	Ш	Ш	Ш		Ш	C/U	Damp, grassy habitats
Brown Hairstreak	Ш	Ш	Ш	Ш	Ш	Ш			Ш			Ш	R/NA	Hedgerows, scrub and woodland
Green Hairstreak	Ш	Ш	Ш			Ш			Ш	Ш		Ш	L/U	Moorland, heathland, chalk downland, woodland rides
Purple Hairstreak	Ш	Ш	Ш	Ш		Ш			Ш	Ш		Ш	L/NA	Oak trees in mature woodland, parkland and hedgerows
White-letter Hairstreak	Ш	Ш	Ш		Ш				Ш	Ш		Ш	R/NA	Elm in hedgerows and woodlands
Small Copper	Ш	Ш	Ш			Ш			Ш			Ш	C/U	Unimproved grassland, woodland rides and glades
Brown Argus	Ш	Ш	Ш	Ш			Ш			Ш		Ш	R/NA	Heathland, woodland clearings, road verges, chalk grassland
Common Blue	Ш	Ш	Ш			Ш	Ш			Ш		Ш	C/U	Sunny sheltered areas , woodland clearings, grassy areas
Holly Blue	Ш	Ш	Ш			Ш	Ш			Ш		Ш	C/S	Hedgerows, woodland rides, gardens
Red Admiral	Ш		Ш			Ш			Ш	Ш		Ш	C/S	Sunny, open habitats, gardens, flower-rich areas
White Admiral	Ш	Ш	Ш	Ш	Ш				Ш	Ш	Ш	Ш	R/NA	Woodland rides and glades
Painted Lady	Ш	Ш	Ш			Ш			Ш			Ш	M/D	Dry, open, sunny areas
Small Tortoiseshell	Ш	Ш				Ш			Ш	Ш		Ш	C/I	Sunny, open habitats
Peacock	Ш	Ш				Ш						Ш	C/S	Sunny, open habitats, woodland rides and glades
Comma	Ш	Ш			Ш	Ш					Ш	Ш	C/U	Open woodland, woodland edges, gardens
Pearl-bordered Fritillary	Ш	Ш	Ш		Ш	Ш	Ш	Ш	Щ	Ш	Ш	Ш	L/D	Open, sunny bracken habitats
Small Pearl-bordered Fritillary	Ш	Ш	Ш	Ш		Ш			Щ	Ш	Ш	Ш	L/I	Woodland glades and clearings, damp grassland areas
High Brown Fritillary	Ш	Ш	Ш	Ш		Ш		Ш	Щ	Ш	Ш	Ш	R/U	Open, sunny bracken habitat
Dark Green Fritillary	Ш	Ш	Ш	Ш		Ш			Ш	Ш	Ш	Ш	R/NA	Open, sunny bracken habitats, moorland, woodland rides & clearings
Silver-washed Fritillary	Ш	Ш	Ш	Ш	Ш					Ш	Ш	Ш	L/S	Sunny rides and glades in woodland, woody hedgerows
Marsh Fritillary	Ш	Ш	Ш	Ш	Ш	Ш			Ш	Ш	Ш	Ш	R/I	Damp tussocky grassland (chalk downland in Dorset)
Speckled Wood	Ш	Ш	Ш			Ш				Ш	Ш	Ш	C/S	Woodland rides and glades, hedgerows, gardens
Wall	Ш	Ш	Ш			Ш	Ш			Ш	Ш	Ш		Short, open grassland, stony tracks, cliffs, quarries
Marbled White												Ш	L/S	Unimproved grassland, flowery meadows
Grayling												Ш	L/NA	Dry heathland, chalk or limestone grassland, quarries, coastal habitats
Gatekeeper		Ш	Ш	Ш						Ш			C/D	Hedgerows and woodland with wide sunny rides
Meadow Brown		Ш	Ш							Ш			C/S	Flowery open grassland areas, verges, woodland rides
Ringlet		Ш	Ш							Ш			C/S	Tall grassland, woodland rides and glades
Small Heath		Ш	Ш										C/U	Heathland, dry grassland, coastal dunes
	Occasional/possible flight time Peak flight period												(C) Cor	s/Regional Trend: mmon (R) Rare (L) Locally Common (M) Migrant (D) Decline ease (S) Stable (U) Uncertain (NA) Not assessed

Discover Dartmoor's butterflies...

Dartmoor is home to 38 species of butterfly, and offers fantastic opportunities to view them in a stunning landscape. Its diverse range of habitats, including moorland, heathland, woodland, valleys and farmland, support a wealth of butterflies, including some very rare species found in only

a few locations in Britain.

Butterflies vary in their flight periods and the type of habitat they use. This guide will help you identify all the species you are likely to come across, and show you when and where to see them.

Right: High Brown Fritillary. IAIN H LEACH

Cover image: Marsh Fritillary on Cuckoo Flower. TIM MELLING

Butterflies can be enjoyed on Dartmoor during most months of the year. A warm and sunny day in January or February might offer the chance to see a Peacock or a Red Admiral, having awoken from their winter hibernation. A few weeks later a Brimstone or a Small Tortoiseshell might reveal itself, and by April the butterfly season is upon us, with many other species beginning to emerge as spring Dartmoor is a stronghold for some of Britain's rarest fritillary

butterflies, including our most rapidly declining species, the High Brown Fritillary. This large, bright orange butterfly is faring well on the steep, south facing bracken slopes in the Dart Valley, assisted by conservation management undertaken by the Devon Wildlife Trust and Butterfly Conservation. Populations of Pearl-bordered Fritillary can be seen on warm and sunny days in late April or early May, gliding gracefully over bracken slopes in search of violets. The exquisite Marsh Fritillary is found in many of Dartmoor's valleys, making its home in the wet grassland that is found here. Lookout for the impressive Silver-washed Fritillary as it flies along wooded paths and glades. Other special species can also be spotted on Dartmoor, including the Small Pearl-bordered Fritillary, Green Hairstreak, Wall and Grayling.



Walking route to view fritillaries at Aish Tor

Located in the gorgeous Dart Valley, Aish Tor is a special place for butterflies. Managed by the Devon Wildlife Trust, this nature reserve is home to five species of fritillary butterfly. In spring the first to emerge is the Pearl-bordered Fritillary (April-May), closely followed by the Small Pearl-bordered Fritillary (May-June), then as you move into the summer months the High Brown Fritillary (July), Dark Green Fritillary (July) and Silver-washed Fritillary (July-August) all emerge to put on a dazzling display as they glide gracefully over the warm bracken slopes. It's not just fritillaries that are found here, you can also see Brimstone, Green Hairstreak, Grayling, Purple Hairstreak, Small Heath and Wall.

The reason why this site is so good for the fritillaries is because of the warm south facing bracken slopes, which contain a healthy population of violets (the fritillarie's foodplant). Butterfly Conservation and the Devon Wildlife Trust work together to manage the site for these rare butterflies, carrying out works to care for the habitat found here.



Deadma

Walk: This circular walk starts and finishes at the Newbridge car park and takes you through the prime fritillary areas. From the car park walk down the tarmac lane, keeping the river on your left. Take the footpath that branches off to the left, walking through the woodland. Soon the path

exits the woodland and you reach the lower slopes of Aish Tor. Keep an eye out for Fritillaries here as they fly over the bracken. Take the right hand path that branches off up the slope, enabling you to climb up to the higher ground. The path bends round to the right, veering east and heading back towards the minor road. When you reach the road follow it back down the hill and it will take you back to the car park. **Distance:** The walk is 2.8km and can take up to 1 hour to complete. It involves a steep climb so appropriate footwear

Location: Newbridge car park post code is TQ13 7NT and the grid reference is SX710708. It is approximately 3 miles from Ashburton and can be reached by taking the B3352 exit from the A38.

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Where to find out more

There are many excellent guides to British butterflies available, including: • WildGuides: Britain's Butterflies by David Newland,

Robert Still, Andy Swash & David Tomlinson

• Pocket Guide to the Butterflies of Great Britain & Ireland by Richard Lewington

Other useful and interesting books are:

• WildGuides: Britain's Day-flying moths by David Newland, Robert Still & Andy Swash

• The Wildlife of Dartmoor by John Walters and Norman Baldock

iRecord Butterflies app

Download the free iRecord Butterflies app to help you identify butterflies you see and to submit your sightings to Butterfly Conservation. It is available in the iTunes and Google app stores.

For information about local events and guided walks, visit the Devon Branch Butterfly Conservation website: www.butterfly-conservation.org

witter.com/savebutterflies



This leaflet has been created as part of Butterfly Conservation's aims to conserve the threatened butterflies and moths of Dartmoor, Exmoor & Bodmin Moor. Find out more online:

www.butterfly-conservation.org/allthemoor

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