

Prestbury Hill Butterfly Reserve

The Bill Smyllie Reserve and Masts Field

About Butterfly Conservation

Butterfly Conservation is a national wildlife charity dedicated to saving butterflies, moths and our natural environment.

Our vision is for a world where butterflies and moths thrive and can be enjoyed by everyone, everywhere.

We work to safeguard the future of our butterflies and moths through:

- Monitoring and research
- Creating and managing reserves for their biodiversity
- Advising on land management for the creation and conservation of their habitats
- The conservation of threatened species including their re-establishment where appropriate
- Campaigning for Government policies and legislation that protect and sustain our environment
- Raising public awareness of nature conservation and encouraging participation with it

80% of the 59 species of butterfly found in the UK have declined since the 1970s as have many of our 2500 moths.

People acting locally can help prevent this getting worse and try to reverse it. We must ensure there's a wonderful natural heritage for future generations.

The Gloucestershire Branch and its members undertake local conservation work for the butterflies and moths in the county. We hope that those you see on this reserve will encourage you to support us.

You can help by joining Butterfly Conservation, giving a donation or on a more practical level you could send in butterfly records or come to one of our reserve work parties.

Visit our branch website for more information:
www.gloucestershire-butterflies.org.uk



And the main website at:
www.butterfly-conservation.org

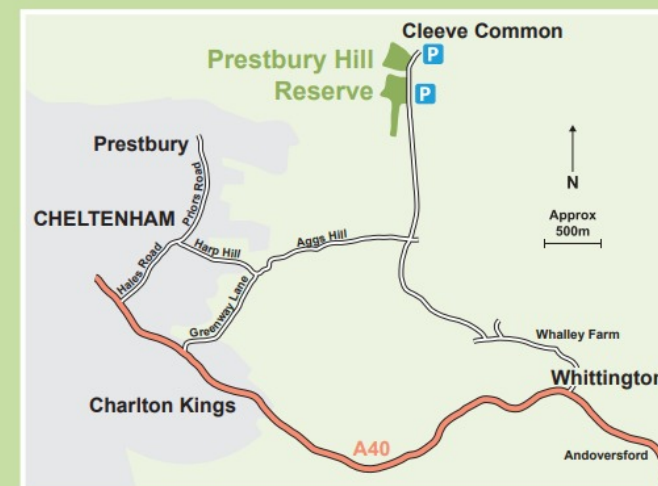


How to find the Reserve

The Reserve is on the Cotswold escarpment north-east of Cheltenham, along the narrow lane from Aggs Hill and Whittington leading to the Radio Masts and southern entrance to Cleeve Common. This access lane is single-track and a dead-end with restricted turning area. It is unsuitable for large vehicles such as coaches.

The parking and entrances for the Bill Smyllie reserve are at SO993244 and the Masts Field at SO993247 (OS Map No 163). Postcode is GL54 4EU but is not reliable for use with a satnav. What3Words: hometown.blissful.scrub

Prestbury village can be reached by public transport from Cheltenham and from there it's a 1.5 mile walk along Upper Mill Lane to the reserve. There are no toilet or refreshment facilities - the nearest are in Charlton Kings and Cheltenham.



Butterfly Conservation is a charity registered in England & Wales (254937) and in Scotland (SCO39268). Butterfly Conservation Company limited by guarantee, registered in England (2206468).

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Photos: Sue Smith, Guy Meredith, Bob Smith, Andrew Daw, Sue Dodd, Ed Kennerley, Jim Asher, John Davis, Iain Leach and Andrew Cooper.





Habitats and Management

The reserve adjoins Cleeve Common - which covers most of Cleeve Hill, the highest point of the Cotswolds. This is one of the most extensive areas of limestone grassland in the Cotswolds, encompassing surrounding areas of private farmland as well.

In places the oolitic limestone bedrock is overlain by deposits of Harford Sands - producing acidic conditions supporting heathland. This can be seen with gorse and heather on the top part of the Masts Field.

Most of the reserve area is unimproved limestone grassland with abundant herb-rich flora and associated wildlife. The thin soils, sheltered valleys, woodland edges, abandoned quarries and low scrub all contribute to this diversity. Its steep slopes and difficult terrain mean it escaped agricultural intensification.

The reserve is grazed with cattle, usually in autumn, and traditionally sheep will also have been used. Sometimes grass mowing is needed and regular scrub cutting is necessary to maintain open grassland. Where the scrub has already established in thickets, clearance might be done on rotation to produce low dense re-growth for birds or special sheltered clearings for butterflies like the Duke of Burgundy.

Looking after the reserve and keeping it in a suitable condition needs constant attention. Volunteer work parties in autumn and winter are regular activities, as is checking for damage and litter.



Other Wildlife

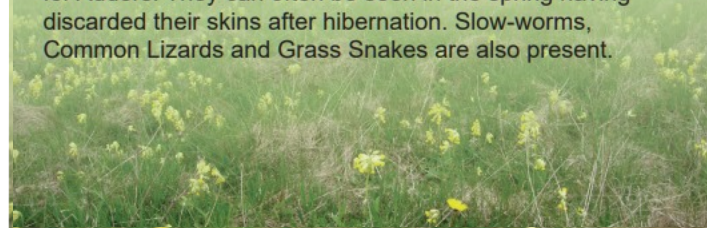
Many bird species frequent the reserve. Open farmland species like Skylark, Meadow Pipit, Mistle Thrush and Cuckoo can be seen and heard in summer. Scrub like gorse is ideal for nesting Yellowhammers and Stonechats. Kestrel and Buzzard are common sights hunting over the slopes, and Red Kites are increasingly making an appearance. Typical migrating and wintering birds include Wheatear and Redstart, Fieldfare and Redwing.

Insect life is plentiful and evident in all parts but still much un-recorded. The larvae of glow worms are a springtime spectacle and the sward in summer is alive with grasshoppers and crickets. Two rare bumblebees, the Ruderal Bumblebee and the Red-shanked Carder Bee have been found on the Bill Smyllie section.

The rabbit population is no longer as abundant as it used to be due to disease, but still plays a role in keeping areas of grass short and helping to control scrub.

Hares are always few in number but a delight to see. Foxes, Badgers, Stoats and Weasels are at home here and Roe deer common throughout the area.

The stony ground and scrub cover provide ideal conditions for Adders. They can often be seen in the spring having discarded their skins after hibernation. Slow-worms, Common Lizards and Grass Snakes are also present.



Background and Access

The two parts of the reserve were purchased in 1992 and 1994, starting with a generous donation from Dr Bill Smyllie, an international expert on the Brown Argus butterfly. The beech wood separating the two parts is not owned by BC.

The Masts Field is part of a Site of Special Scientific Interest (SSSI) - legal protection for our most important areas for nature conservation. The whole reserve lies within the Cotswold National landscape (CNL) and is designated Open Access land so may be enjoyed on foot in accordance with the regulations.

The steep hillsides have loose stone so stout footwear should be worn and care taken to keep to the paths for safety. Please be aware of basking Adders which are sometimes seen on the Reserve.

- Help us protect this beautiful place.
- Please follow the Countryside Code: - close all gates and take your rubbish home.
- You are welcome to picnic but fires, BBQs or camping are not allowed.
- It is an offence to uproot any plants - please don't pick the flowers.
- Horse riders and cyclists must keep to the designated bridleways. The Cleeve Common Hacking Permits do not apply on this land.
- Vehicles other than wheelchairs and disabled buggies are not allowed on the Reserve without permission.
- Keep your dog under close control at all times and on a lead during the bird nesting season and when livestock are on the Reserve.



Plants

The reserve supports high quality limestone grassland - one of the most species-rich types of habitat in the British Isles. Typical plants of such unimproved calcareous grassland shown above, Cowslip, Devils-bit scabious, Kidney Vetch, Horseshoe Vetch and Common Bird's-foot-trefoil, are also important food plants for some of the specialist butterflies found on this reserve: - Duke of Burgundy, Marsh Fritillary, Small Blue, Chalk Hill Blue, Adonis Blue and Dingy Skipper.

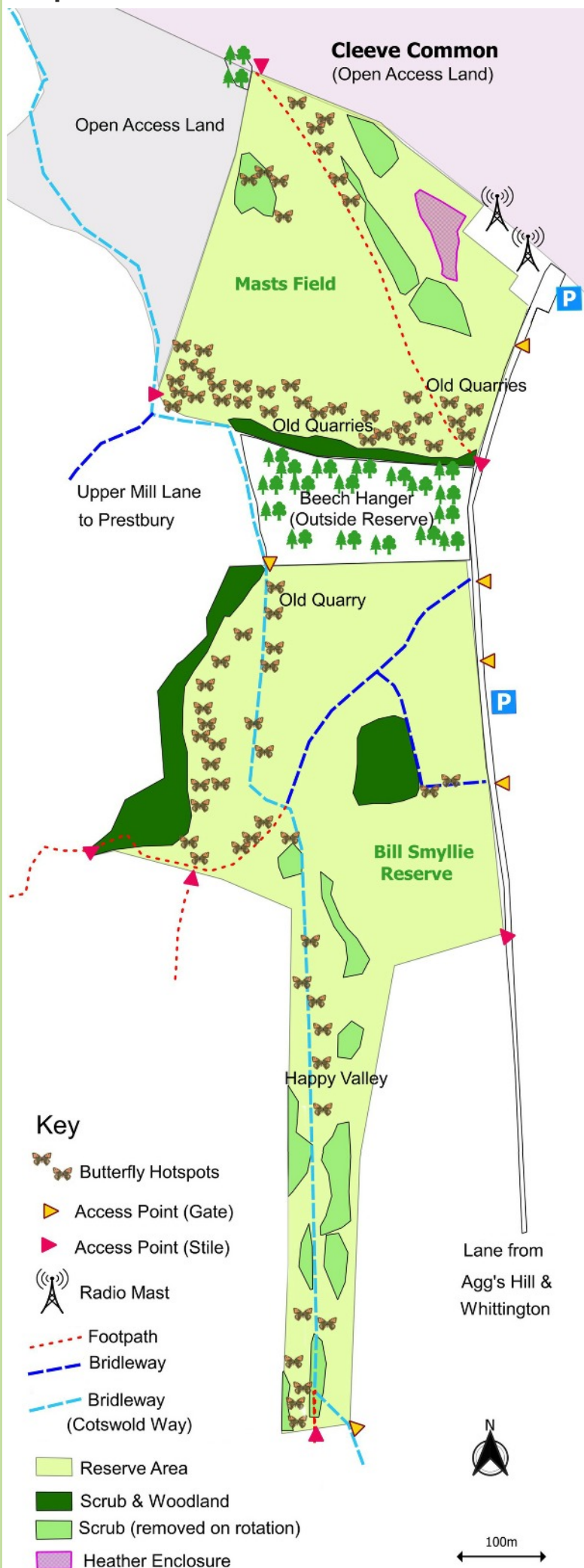
Summer flowers that are good nectar sources for insects such as Knapweeds, Scabious and Hawkbits, can be very abundant. A wide range of grasses make up the sward, and the caterpillars of many butterfly and moth species also feed on these. Orchids are well represented with Common Spotted, Pyramidal, Early Purple, Fragrant, Musk and Bee being found, sometimes in profusion. Helleborines and Twayblades also occur.

Patches of heather - an unusual sight on a calcareous site, are also present on the uppermost part of the reserve due to different soil conditions. An enclosure has been erected on the Masts Field to help protect the small Heather plants from being grazed by rabbits.

The reserve is grazed by cattle to prevent the more robust grasses dominating the sward and excluding the smaller wildflowers. Grazing also helps reduce scrub invasion but cutting is still needed. Management of the reserve aims to maintain the best range of conditions for all the special fauna and flora of the site.

The recent re-discovery of a nationally rare moss *Atrichum angustatum* shows what riches these grasslands harbour.

Map of Reserve



Butterflies

Some 30 species of butterfly are resident on the reserve and migrants also frequently occur. This elevated, exposed site is quite windswept so the lower slopes, hollows and the shelter of scrub can be the best places to see most butterflies.

In the spring, Duke of Burgundy, Marsh Fritillary, Adonis Blue, Green Hairstreak, Small Blue, Dingy Skipper and Brown Argus, as well as many of the commoner species can occur throughout, but the best places to find them are shown on the map as 'Hotspots'.

The Duke of Burgundy is nationally threatened following a long-term decline through loss of habitat but it is thriving here. The sheltered clearings amongst the scrub in Happy Valley provide the male butterflies with 'leks' (displaying places) in which to compete for passing females. The medium height grassland with plenty of cowslips is typical breeding habitat.

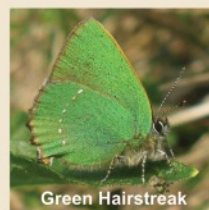
Green Hairstreaks can also be seen on and around the Hawthorn bushes in the Valley and elsewhere on both sections of the reserve.

During the summer months large numbers of the meadow butterflies, Marbled White, Ringlet and Meadow Brown, can be seen throughout the reserve. As can the Small Heath which flies from May until September and particularly likes stony paths and areas of short turf.

High summer is also the time for the large, fast-flying Dark Green Fritillary and in certain years Painted Ladies and Clouded Yellows which have migrated from the continent.

Chalk Hill Blue, with its dark-edged pale blue wings, flies from mid-July into September, alongside the second brood of Adonis Blue. The Wall has declined in inland Britain and is on the Butterfly Conservation Endangered list but is occasionally seen here.

The south-west corner of the Masts Field is a veritable hotspot for all the spring and summer species and particularly the Small Blue. The reserve is one of the top sites nationally for numbers of this dainty but strong-flying little butterfly and in some years is the most numerous species on the reserve.



Green Hairstreak



Dingy Skipper



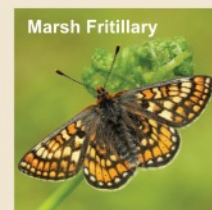
Small Heath



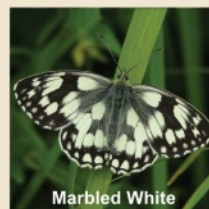
Duke of Burgundy



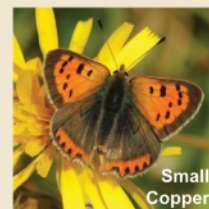
Small Blue



Marsh Fritillary



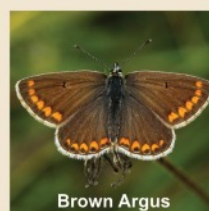
Marbled White



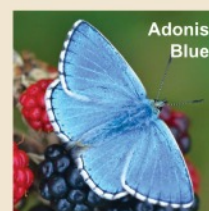
Small Copper



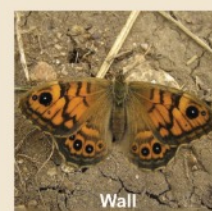
Common Blue



Brown Argus



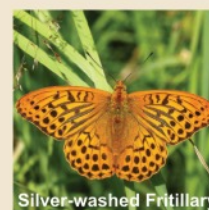
Adonis Blue



Wall



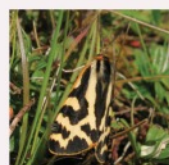
Dark Green Fritillary



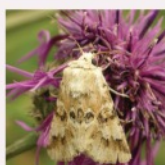
Silver-washed Fritillary



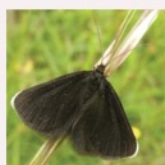
Chalk Hill Blue



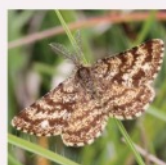
Wood Tiger



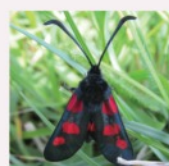
Dusky Sallow



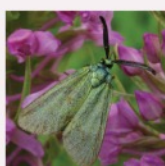
Chimney Sweeper



Common Heath



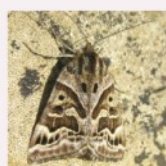
Five-spot Burnet



Cistus Forester



Lace Border



Mother Shipton

Moths

The great variety of moths to be found in such good habitats is always surprising and exciting.

Since 2000, around 400 moth species have been recorded, with one nationally rare and 17 nationally scarce species, although it is likely there are many more still to be found. The most noteworthy so far being the micro-moth *Elachista orstadii* whose caterpillars are thought to feed inside grass leaves.

Many of the day-flying moths such as Common Heath, Five-spot Burnet and the distinctive Chimney Sweeper can be numerous. Worth looking out for in early summer are the small metallic-green Cistus Forester feeding on the flowers of Salad Burnet, the colourful Wood Tiger, the impressive Narrow-bordered Bee Hawkmoth and the delicate dusk-flying Lace Border.

	A	M	J	J	A	S	O
Green Hairstreak	X	X	X				
Dingy Skipper		X	X				
Small Heath		X	X	X	X	X	
Duke of Burgundy		X	X				
Small Blue		X	X	X	X		
Small Copper		X	X	X	X	X	X
Common Blue		X	X	X	X	X	
Brown Argus		X	X	X	X	X	
Wall		X	X		X	X	
Marsh Fritillary		X	X				
Adonis Blue		X	X		X	X	
Meadow Brown			X	X	X	X	
Marbled White			X	X	X		
Dark Green Fritillary			X	X	X		
Silver-washed Fritillary				X	X		
Chalk Hill Blue				X	X	X	

Typical flight periods of butterflies on the reserve: - this shows when they are most likely to be seen but can vary according to weather in any year and is also affected by the altitude of this site.