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 their habitats.

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

Almost two thirds of the 58 species of butterfly found in the UK are declining or threatened, as are 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.

Please help us look after this reserve and others by donating just £3:

Text: PHRV01 £3 to 70070

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



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



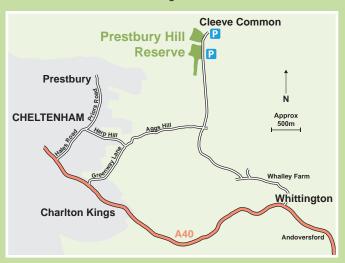
How to find the Reserve

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 SO 993 244 and the Masts Field at SO 993 247 (OS Map No 163). Postcode for Sat-Nav: GL54 4EU.

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 at the reservethe 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: Trish Atkinson, Sue Smith, Guy Meredith, John Coates, Bob Smith, Andrew Daw, Sue Dodd, Ed Kennerley, Jim Asher & John Davis











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.

The strong rabbit population plays an important role by keeping scrub in check and areas of grass short all year round. However, they are vulnerable to myxomatosis and other diseases.

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.



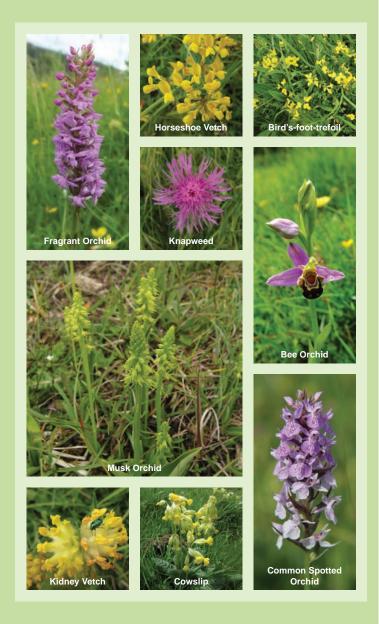
Background and Access

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 reserve lies within the Cotswold Area of Outstanding Natural Beauty (AONB) 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 quite common 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, 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, Small Blue, Chalk Hill 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 on this reserve with Early Purple, Common Spotted, Pyramidal, Fragrant, Musk and Bee all 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.

The reserve is grazed 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 on the reserve shows what riches these grasslands harbour. There could be other exciting finds still to be made.

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, 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 long-term declines 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 that have migrated from the continent.

In some years large numbers of the Chalk Hill Blue, with its dark edged pale blue wings, can emerge from mid-July into August. In contrast the wandering Wall Brown is only ever occasionally seen, for reasons that are still unclear.

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.













Cistus Forester





Moths

Five-spot Burnet

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

Since 2000, 404 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 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 and the delicate dusk-flying Lace Border.

	Α	М	J	J	Α	s	0
Green Hairstreak	Х	Х	Х				
Dingy Skipper		Х	Х				
Small Heath		Х	Х	Х	Х	Х	
Duke of Burgundy		Х	Х				
Small Blue		Х	Х	Х	Х		
Small Copper		Х	Х	Х	Х	Х	Х
Common Blue		Х	Х	Х	Х	Х	
Brown Argus		Х	Х	Х	Х	Х	
Wall Brown		Х	Х		Х	Х	
Large Skipper			Х	Х	Х		
Small Skipper			Х	Х	Х		
Meadow Brown			X	Х	Х	Х	
Marbled White			Х	Х	Х		
Dark Green Fritillary			Х	Х	Х		
Silver-washed Fritillary				Х	Х		
Chalk Hill Blue				Х	Х	Х	

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.