

CHALK GRASSLAND

The Chiltern Hills were designated an Area of Outstanding Natural Beauty (AONB) in 1965 in recognition that they are one of the finest landscapes in England and Wales. This leaflet, part of the Chilterns Landowners' Guide, is intended to provide you with some basic information to help you maintain and enhance the natural beauty of your local landscape.

What is Chalk Grassland?

Chalk grassland is the result of continual grazing, usually by sheep, on nutrient-poor chalky soils which produces a short turf (or 'sward') rich in herbs, flowers and grasses. It is a unique, specialised and fragile habitat which is not only very important for wildlife but also for landscape and historical value. This habitat has declined significantly over the past 50 years, with many of the small areas remaining under threat.

Why is it under threat?

Large areas of grassland were rare or absent before woodland clearance by early man. Chalk grassland developed in response to regular grazing or hay cutting and has to be managed, for example through grazing, to be kept in good condition. Lack of regular management, such as grazing, quickly results in the area being colonised by 'scrub' such as hawthorn and blackthorn. Eventually the area will revert to woodland. This is seen below - on the left is Whiteleaf Cross

100 years ago when much of the area was chalk grassland; on the right is the same area in 2003 showing dense woodland. (This has since been cleared as part of the restoration project on this site, increasing the area of chalk grassland.)



Why is chalk grassland important... ...for wildlife?

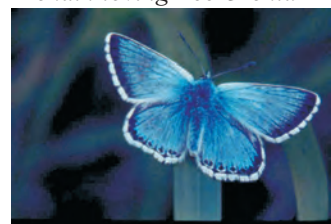
Many of the plants found in chalk grassland, for example the Chiltern Gentian and several species of orchid, do not live in other habitats. This specialised habitat also supports a wide variety of insects, many of which need specific chalk grassland plants in order to survive, for example the Chalkhill Blue butterfly. Much grassland in the AONB has been 'improved' by the use of reseeding and fertilisers leading to a loss of its unique wildlife diversity. Other areas have been ploughed up to plant arable crops during and since the war.



The rare Chilterns Gentian



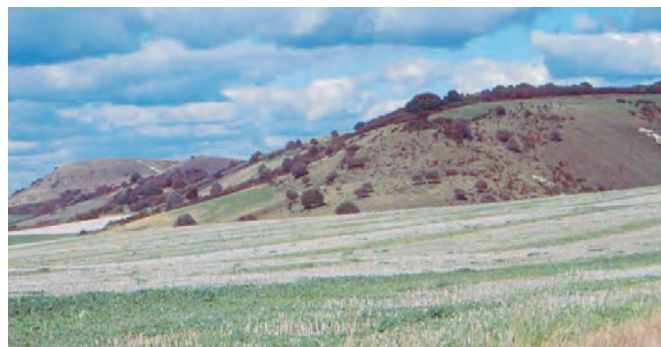
A chalk-loving Bee Orchid



Chalkhill Blue butterfly

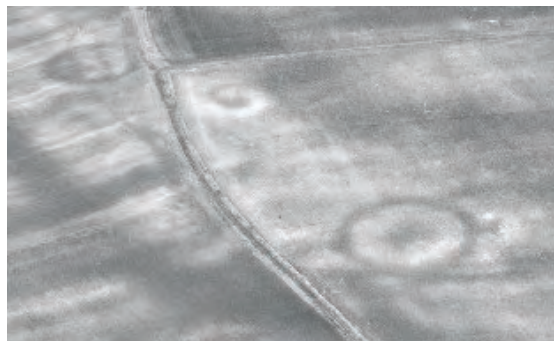
...for landscape?

Large tracts of chalk grassland, or 'downland', are key landscape features in the Chilterns AONB. They are prominent features of the chalk ridge or escarpment which rises up from the vale below to form the steep, northern edge of the Chilterns. If grassland areas reverted to woodland, many valued views from the Chilterns would be lost.



Ivinghoe Beacon

...for the historic environment?



The chalk downland is rich in historic features from Iron Age Hillforts, Bronze Age Barrows to Medieval Field Systems, many of which can only be seen from the air. The roots of trees and shrubs damage archaeological features and also obscure them preventing their discovery and subsequent study.

Bronze Age Barrows at Bledlow cum Saunderton - Bucks CC

How do I know if I have chalk grassland?

The distribution of chalk grassland in the Chilterns is linked to the region's geology, with the largest areas occurring along the chalk escarpment. Grazed chalk grassland in good condition is characterised by short springy turf, rich in grass and wildflower species including orchids. Neglected chalk grassland is often covered in scrub and even woodland. Restoration may involve removing some of this growth and re-introducing management in the form of grazing and/or hay cutting. Expert advice should be sought before starting any such work.

What Can I Do?

The most important thing a landowner/manager can do is to actively manage chalk grassland, for example, by appropriate grazing. You can also maintain any existing 'unimproved' grassland you control by ensuring that this grassland rich in flowers and grasses ('species rich') is not unnecessarily 'improved'.

Such improvement includes activities like spraying, reseeded, drainage and artificial fertiliser application. It is not always necessary to carry out these operations, and consideration should be given to any existing wildlife and the landscape setting before they are undertaken.



Marbled White butterfly on chalk grassland

Management of Chalk Grassland

Chalk grassland is best managed by grazing, ideally with a mix of sheep and cattle. Native ponies are sometimes used but horses are not ideal. Take further advice if in doubt. Cutting is an alternative if there are no stock available to graze. Good management relies on the creation of a mixture or 'mosaic' of habitats, for example, some areas of short grazed areas, longer thicker tussocks of grasses and small areas of scrub. Although scrub should not be allowed to cover the whole site, an area of about twenty five percent brings many benefits for birds and certain insects particularly butterflies, that use it during part of their lifecycle.

Each site is different and it is recommended that independent advice be sought if you are in any doubt about the appropriate management requirements. If your land includes a Site of Special Scientific Interest (SSSI), you should contact English Nature in the first instance for specific management guidance. The Grazing Animals Project website has more information on conservation grazing. www.grazinganimalsproject.org

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**FOR FURTHER INFORMATION,
PLEASE CONTACT**



an Area of Outstanding Natural Beauty