

CALCAREOUS GRASSLAND IN OXFORDSHIRE

1. INTRODUCTION

Calcareous grasslands are developed on shallow lime-rich soils generally overlying limestone rocks, including chalk. They are now largely found on distinct topographic features such as escarpments or dry valley slopes and sometimes on ancient earthworks in landscapes strongly influenced by the underlying limestone geology. They are typically species-rich, agriculturally unimproved grasslands, managed as components of pastoral or mixed farming systems, supporting sheep, cattle or sometimes horses; a few examples are cut for hay. It is one of the UK's most important wildlife habitats, supporting a wide range of specialised plants and animals including many rare species. In Oxfordshire these grasslands support the bulk of the UK populations of meadow clary, Chiltern gentian and downy woundwort. Some species, such as the marsh fritillary butterfly and dormouse, have very small populations and are vulnerable to extinction in Oxfordshire.

UK Biodiversity Action Plan - Priority species associated with farmland

Grey partridge
Lapwing
Skylark
Stone curlew
Turtle dove
Chalk carpet moth
Four spotted moth
Square spotted clay moth
Orange footman moth
Forester moth
Light feathered rustic moth
Striped lychnis moth
Pale shining brown moth
Adonis blue butterfly
Duke of Burgundy
Small blue butterfly
Grizzled skipper butterfly
Silver spotted skipper
Rufous grasshopper
Roman snail
Polydesmus coriaceus a millepede
Hornet robberfly
Dormouse
Hazel leaf beetle
Downy woundwort
Early gentian
Juniper
Meadow clary
Pasque flower

Associated Habitats

Chalk streams
Woodland (particularly beech, ash and yew)
Hedgerows
Farmland

Calcareous grasslands often support scrub habitats of high value for wildlife. Of particular interest in the Chilterns and Berkshire Downs is the occurrence of juniper.

2. CURRENT STATUS

2.1 Current status in the United Kingdom

The UK is thought to hold half the world's extent of calcareous grassland, an estimated 33,000 to 41,000 hectares,

2.2 Current status in Oxfordshire

2.2.1. Extent

Oxfordshire has an estimated 650 hectares of calcareous grassland. This amounts to 1.4% of the total area of unimproved grassland in the UK. Distinctly different types are present in the various parts of



the county; in the Chilterns the grassland is characteristically short and

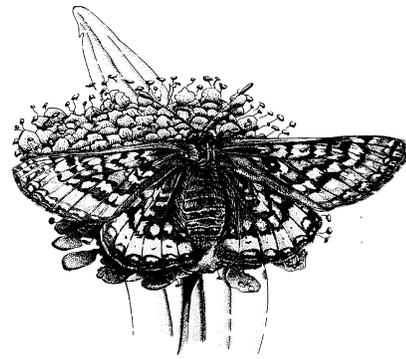
dominated by fine leaved grasses whilst in the Berkshire Downs and Cotswolds tall grasses such as tor grass are often dominant. It is important that these differing characteristics are maintained as they contribute to the diverse landscape character of Oxfordshire.

2.2.2. *Associated features*

The habitat is also important in supporting a wide range of other more common and familiar species including cowslip, Chiltern gentian, wild thyme, meadow pipit, glow worm, chalkhill blue butterfly and common lizard. Unploughed calcareous grassland is also noted for its archaeology, for its landscape value for both local people and visitors, and as an intrinsic part of the agricultural scene.

2.2.3. *Access provision*

Many sites have open public access, including Aston Rowant National Nature Reserve, Watlington Hill, Whitehorse Hill, Hartslock and Chinnor Hill. Public access to both the Chilterns and Berkshire Downs is facilitated by the promotion of the Icknield Way and Ridgeway long distance footpaths.



Marsh fritillary *Eurodryas aurinia*



Juniper *Juniperus communis*



Pasque flower *Pulsatilla vulgaris*