



Wildflower Grassland © Natural England/Paul Glendell

Habitats and species at Brown sites – a short guide

A concise definition of each of the priority habitats and typical species that you might find at a Capability Brown designed landscape supported by the parkland features he created or incorporated into his designs are listed here. The priority habitats mapped at each Brown site are listed on each Brown site webpage and their location can be seen on Magic – www.magic.gov.uk/

Habitats and species supported by Parkland pasture and Parkland trees:

Scattered or grouped individual trees, woods and clumps of parkland trees, with occasional veteran or ancient trees in open grassland or heathland pasture, provide **Wood Pasture and Parkland** habitat. Examples of old parklands where ancient trees and unimproved grassland occur in combination are now very uncommon and remaining examples are of great botanical and associated wildlife value.

Ancient and Veteran Trees are particularly important for species that need decaying wood and nooks and crannies in old wood to survive, some of them very rare, including lichens, fungi and invertebrates, as well as providing roosts for bats. Eagle's claw (*Anaptychia ciliaris* subsp. *Ciliaris*) is a classic parkland lichen and the bright red Cardinal click beetle (*Ampedus cardinalis*) is a colourful dead wood species.

Veteran trees are generally large in girth, with deadwood in the crown, and cavities in the trunk or major crown stems. It is currently accepted that a tree can be veteran without necessarily being very old.



Sources:

- Environmental Stewardship and Historic Parklands, Cookson Tickner, Natural England 2013
- Capability Brown's Contribution to Ecological Resilience, Landscape Character and Ecosystem Services. Webinar as part of the Landscape Institute's webinar series 2016 presented by Leslie Pearman, Senior Heritage Adviser Natural England.



Migrant Hawker Dragonfly © Natural England/Allan Drewitt

Habitats and species supported by Parkland pasture:

Unimproved parkland pasture, historically maintained by grazing animals, supports species rich grassland or heathland, consisting of a variety of grasses and flowering plants which varies immensely according to each site. Parklands with ancient deer parks are more likely to have species rich grassland or heathlands. Parklands that have been subject to ground modelling and cultivation in the past, or have had fertilisers and insecticides applied, are less likely to have species rich ground cover.

Areas of species rich grassland and heathland can provide important habitat for a range of animal species, including invertebrates such as butterflies, bees, hoverflies and crickets, ground nesting and foraging birds, and reptiles including frogs, lizards and snakes.

Unimproved parkland pasture historically maintained by grazing animals formed on chalk or limestone usually supports **Calcareous Grassland** habitat. It is often of significant botanical interest for its variety of wildflowers and importance for butterflies and other invertebrates, including the Cowslip (*Primula veris*) which provides food for the Duke of Burgundy butterfly (*Hamearis Lucina*) and rare orchids including the Bee orchid (*Ophrys apifera*).

Unimproved parkland pasture historically maintained by grazing animals formed on sandy soils usually support **Acid Grassland** habitat, sometimes with mosaics of **Lowland**

or **Upland Heath** habitat which also includes heather and gorse. Unimproved parkland pasture historically maintained by grazing animals formed on regularly wetted meadows or tidal soils adjacent to coasts or rivers and streams can support **Coastal and Floodplain Grazing Marsh** habitat including wet loving grasses and flowering plants such as the Cuckoo flower (*Cardamine pratensis*).

Fen habitat is a waterlogged area of unimproved pasture dominated by grasses, rushes or sedge including Purple moor-grass *Molinia caerulea*, and Sharp-flowered rush *Juncus acutiflorus*.



Ant beetle © Natural England/Allan Drewitt

Good Quality Semi-improved Grassland habitat occurs where the species content has been reduced to a few grasses and flowering plants by intensive management, including ploughing, drainage, application of fertiliser or herbicide, reseeding or over grazing.

Undetermined Grassland habitat is an area where the grassland habitat type has not been identified.



Fungi © Natural England/Peter Wakely

Habitats and species supported by Woodland:

Stands and clumps of woodland are typical features of parkland habitats and are distinct from scattered trees due to the relatively closed canopy conditions that prevent the development of grassland or heathland ground layers.

Woodlands support a variety of wildlife including mammals such as deer, foxes, dormice, badgers, squirrels and bats. Woodlands are important for flies, spiders, beetles, butterflies and moths and for woodland birds including the colourful Great spotted woodpecker (*Dendrocopos major*) and Jay (*Garrulus glandarius*). Woodland provides roosting and maternity sites for bats that hunt for insects along the edges of woodland as well as over water and grassland.

Deciduous Woodland habitat grows on a range of soils and has a canopy layer of broad leaved trees. Oak is the most commonly occurring tree in combination with locally native trees including ash and beech and with alder on wetter soils and birch on more acidic soils. There may be evidence of past hazel coppicing. The ground flora varies and can include

Bluebells (*Hyacinthoides non-scripta*) and Celandines (*Ficaria verna*) with Foxglove (*Digitalis purpurea*) in more open areas.

Ancient Woodland has existed as woodland since at least 1600 and contains native species that may date back to the original post-Ice Age woodland. Ancient woodland can be recognised by characteristic ancient woodland indicator species including Wood anemone (*Anemone nemorosa*), Wild garlic (*Allium ursinum*), Wood sorrel (*Oxalis acetosella*) and Small leaved lime (*Tilia cordata*). Some ancient woodland has been replanted with native and non-native species. Ancient woodlands are important for minute soil organisms that feed on deadwood and leaf litter, especially those that need undisturbed soils to survive.

Broadleaved Woodland is dominated by native and non-native broad leaved trees, usually deciduous. **Mixed Broadleaved Woodland** includes some coniferous trees. **Coniferous Woodland** is dominated by native and non-native trees with needle like leaves, usually evergreen. **Mixed Coniferous Woodland** includes some broadleaved trees. These woodlands may be ancient or recent woodland and either semi-natural arising from natural regeneration of trees, or planted.



Bluebells © Natural England/Allan Drewitt



Green woodpecker © Natural England/Allan Drewitt

Habitats and species supported by Waterbodies including lakes and ponds and waterlogged pasture:

Large Waterbodies found within parkland are relatively infrequent in the wider landscape and many support a range of different vegetation types and species including submerged aquatic plants such as waterlilies, fringes of emergent vegetation and marginal species. They provide important habitat for a range of breeding and wintering wildfowl that feed and breed in the shallows including the Tufted duck (*Aythya fuligula*), as well as for insect feeding species like the Swallow (*Hirundo rustica*). They are also important for bats who like to hunt over water for insects, particularly in areas where there is an abundance of potential roosting opportunities in the form of old trees and historic buildings.



Heron © Natural England/Allan Drewitt

Submerged aquatic plants and vegetation around the water edge are likely to provide egg-laying and feeding opportunities as well as cover for a range of aquatic molluscs, including snails and species such as beetles, dragon flies, frogs, toads and the Great crested newt (*Triturus cristatus*).

Reedbed habitat is a stand or clump of dense, tall vegetation, mainly reeds fringing a lake, river or pond. It provides food and shelter for many breeding birds such as Reed warblers (*Acrocephalus scirpaceus*) and in winter can be used as roosting sites.



Bats © Natural England/Michael Hammett

For further information please see the 'Biodiversity in Brownian Landscapes' downloadable PDF on the Capability Brown Festival website and the Natural England/Cookson Tickner 'Environmental Stewardship & Historic Parklands' report. www.randd.defra.gov.uk