EC Directive 92/43 on the Conservation of Natural Habitats and of Wild Fauna and Flora

Name:	Craven Limestone Complex
Unitary Authority/County:	North Yorkshire
SAC status:	Designated on 1 April 2005
Grid reference:	SD924673
SAC EU code:	UK0014776
Area (ha):	5328.25
Component SSSI:	Bastow Wood SSSI, Conistone Old Pasture SSSI, Kilnsey Flush SSSI, Malham-Arncliffe SSSI, Malham-Arncliffe (Cool Pasture) SSSI

Citation for Special Area of Conservation (SAC)

Site description:

The Craven Limestone Complex includes the second most extensive area of calcareous grassland in the UK. It supports blue moor-grass – limestone bedstraw (*Sesleria caerulea* – *Galium sterneri*) grassland that exhibits exceptional structural diversity, ranging from hard-grazed open grasslands, through to tall herb-rich grasslands on ungrazed cliff ledges, woodland margins and around limestone pavements and screes. It is thus an important example of grassland-scrub transitions. The site supports a large mid-altitude limestone pavement, with a wide range of transitions to other habitats, including the calcareous grasslands, as well as alkaline fens and *Tilio-Acerion* woodlands.

There are large species-rich fen systems, principally of the dioecious sedge – common butterwort (*Carex dioica – Pinguicula vulgaris*) mire, quaking-grass – bird's-eye primrose (*Briza media – Primula farinose*) sub-community. Frequent species include bird's-eye primrose and grass-of-Parnassus *Parnassia palustris* alongside rarities such as broad-leaved cottongrass *Eriophorum latifolium*, hair sedge *Carex capillaris*, alpine bartsia *Bartsia alpina* and dwarf milkwort *Polygala amarella*. There are also extensive spring-fed flush fens throughout the site, typically associated with calcareous grassland and limestone scars.

The site contains extensive complexes of tufa-forming springs associated with a wide range of other habitats, including alkaline fens, calcareous grasslands, limestone pavements, cliffs and screes. Locally, calcareous springs emerge within areas of acid drift supporting heath and acid grassland. The flora of these habitat mosaics is outstandingly species-rich and includes many rare northern species, such as alpine bartsia and bird's-eye primrose.

Craven contains what are believed to be the largest expanses of purple moor-grass – marsh hawk's-beard (*Molinia caerulea* – *Crepis paludosa*) mire in the UK, amidst alkaline fens and active raised bog communities of the Malham Tarn area. Malham Tarn Moss is an active raised bog in an area overlying limestone where wetlands are more typically base-rich fens. It displays a classic raised dome with transition from raised bog (base-poor) to base-rich conditions at the bog margin where it interfaces with land influenced by water from the limestone. It has an unusual mixture of bog-moss *Sphagnum*-rich and hair-grass *Deschampsia*-dominated vegetation.

Malham Tarn is considered the best example of an upland stonewort *Chara*-dominated lake in England and is the highest marl lake in the UK. The water drains from surrounding Carboniferous limestone and is nutrient-poor. The feeder streams and the tarn itself support strong populations of white-clawed crayfish *Austropotamobius pallipes*, while upland becks



and streams with calcareous waters and stony beds support good numbers of bullhead *Cottus* gobio.

Craven Limestone Complex is also the single remaining native site for Lady's-slipper orchid *Cypripedium calceolus*.

Qualifying habitats: The site is designated under **article 4(4)** of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I:

- Active raised bogs*
- Limestone pavements*
- Petrifying springs with tufa formation (*Cratoneurion*). (Hard-water springs depositing lime)*
- *Tilio-Acerion* forests of slopes, screes and ravines. (Mixed woodland on base-rich soils associated with rocky slopes)*
- Alkaline fens. (Calcium-rich springwater-fed fens)
- Calaminarian grasslands of the *Violetalia calaminariae*. (Grasslands on soils rich in heavy metals)
- Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp. (Calcium-rich nutrient-poor lakes, lochs and pools)
- *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*). (Purple moor-grass meadows)
- Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*). (Dry grasslands and scrublands on chalk or limestone)

Qualifying species: The site is designated under **article 4(4)** of the Directive (92/43/EEC) as it hosts the following species listed in Annex II:

- White-clawed (or Atlantic stream) crayfish Austropotamobius pallipes
- Bullhead Cottus gobio
- Lady's-slipper orchid Cypripedium calceolus

Annex I priority habitats are denoted by an asterisk (*).

This citation relates to a site entered in the Register of European Sites for Great Britain. Register reference number: UK0014776 Date of registration: 14 June 2005

Signed: Trem Salam

On behalf of the Secretary of State for Environment, Food and Rural Affairs

