

Criteria for the selection of County Wildlife Sites in Norfolk

2016 Version

Sites of CWS status will contain habitats of the type and quality indicated below.

WOODLAND

1.	Ancient woodland with predominantly native broadleaf trees.	As indicated in EN register, Norfolk Ancient Woodland Inventory or from historical records, including wood pasture.
2.	A herb layer of native plants typical of semi-natural broadleaf woodland of the area or stand type.	See attached species lists for details of characteristic woodland species for Norfolk, including ancient woodlands, wet woodlands & ground layer flora. Characteristic flora must cover the greater part of the site (over 50%).
3.	Presence of rare or scarce plant species, or those identified as priorities.	See attached species lists for details of rare species in Norfolk.
4.	At least 2 ha in extent.	
5.	Woody species predominantly native to Norfolk and appropriate to the site.	
6.	Diverse physical and age structure, and other typical woodland features of benefit to wildlife.	Presence of understorey, glades, rides and perimeter shrubs. Presence of seedlings, saplings, mature and over-mature specimens. Presence of ponds, watercourses, pollards, old coppice stools, ancient wood banks, high proportion of dead wood both standing and fallen. Active traditional management.
7.	Presence or rare or scarce fauna, or those identified as priorities*	

Qualification: For woods up to 20 ha, the following criteria need to be met:

- either (a) 1 & either 2 or 3, plus 4 and ideally a degree of 5
- or (b) attributes 4 & 5, plus a significant range of features described in attribute 6; 3 and 7 may help with the qualification of other borderline sites..

For woods over 20 ha:

- either (a) attributes 1 and either 2 or 3
- or (b) attribute 5 and some of the features listed in attribute 6.

In borderline cases, attributes 1 to 5 may be met by the addition of attribute 7.

***Please note:** in all criteria, the presence of rare or scarce fauna refers to nationally rare or scarce fauna, or local and national priority species, occurring as a population significant in Norfolk. Faunal species considered should be dependent on the site, including species faithful to traditional breeding/roosting sites and not transitory. For lists of species, see www.norfolkbiodiversity.org.

SCRUB

1.	Part of, or adjacent to another habitat of CWS quality.	
2.	More than 2 ha.	
3.	Consisting of at least three species of native shrub.	
4.	Presence of rare or scarce fauna	

Qualification: A site must have attribute 3 in combination with 1 or 2; attribute 4 may be a qualifier for a site borderline on either attribute 1 or 2.

ORCHARDS

1.	A range of traditional orchard varieties standing in permanent grass.	
2.	Associated natural or semi-natural habitat, or a diverse physical and age structure and other features of benefit to wildlife.	Deadwood (fallen or standing), veteran trees (including veteran orchard trees), ponds, ancient/species rich hedgerows, including hedges with nut and fruit trees and herb-rich grassland. This can include neighbouring semi-natural habitats where sites are part of a mosaic.
3.	At least 0.5 ha in size for sites that demonstrate a good range of the features listed in 1 & 2. At least 1 ha in size for less diverse sites.	
4.	Significant assemblage of non-vascular plant species dependent on ancient trees.	See species list attached. It is essential that orchard surveys contain details of non-vascular plants.
5.	Presence or rare or scarce fauna, or those identified as priorities	

Qualification: A site must normally have attribute 1, 2, 3 & 4. 5 can be used to qualify borderline sites.

PARKLAND

1.	Ancient native trees standing in permanent grass.	
2.	Appropriately species-rich grassland or associated natural or semi-natural habitat, a diverse physical and age structure and other features of benefit to wildlife.	Deadwood (fallen or standing), veteran trees, ponds, ancient/species rich hedgerows, including hedges with nut and fruit trees and herb-rich grassland. This can include neighbouring semi-natural habitats where sites are part of a mosaic.
3.	At least 0.5 ha in size for sites that demonstrate a good range of the features listed in 1 & 2. At least 1 ha in size for less diverse sites.	
4.	Significant assemblage of non-vascular plant species dependent on ancient trees.	See species list attached.
5.	Presence or rare or scarce fauna, or those identified as priorities	

Qualification: A site must normally have attribute 1 and 3, coupled with either of 2 or 4. 5 can be used to qualify borderline.

GRASSLAND

1.	Appropriately species-rich dry acidic grassland.	See attached species lists for details of typical species.
2.	Appropriately species-rich neutral grassland.	See attached species lists for details of typical species.
3.	Appropriately species-rich basic grassland.	See attached species lists for details of typical species.
4.	Appropriately species-rich wet grassland, marsh, fen, fen-meadow or mire.	See attached species lists for details of typical species.
5.	A significant of rare or scarce plant species, or those identified as priorities.	See attached species lists for details of rare and scarce plants.
6.	Moderately species-rich grassland that is either part of or adjacent to another habitat of CWS quality, or extensive.	
7.	More than 0.5 ha for species-rich and 5 ha for moderately species-rich areas where not associated with another habitat of CWS quality.	
8.	Presence or rare or scarce fauna, or those identified as priorities	

Qualification: A site must normally have one of the first six attributes combined with 7. Where there is faunal interest, a site must be at least borderline on one of the first six attributes.

HABITAT MOSAICS

1.	At least 75% of site composed of more than one habitat of County Wildlife Site quality, but individually, these do not meet the criteria for size for that habitat.	
2.	Entire site more than 2 ha	
3.	Remaining 25% habitats uncultivated and unimproved or semi-improved.	
4.	Presence of rare or scarce plant species, or those identified as priorities.	See attached species lists for details of rare and scarce plants.
5.	Presence or rare or scarce fauna, or those identified as priorities	

Qualification: a site must have attributes 1 & 2, plus either 3 or 4 or 5 to qualify for CWS status. Attribute 5 can be used as a qualifier where a site is borderline on other criteria.

HEDGEROWS

1.	Part of or adjacent to another habitat of CWS quality, or linking 2 sites of CWS quality.	
2.	Composed in the main of woody species typical of the area/soils and with a diverse physical and age structure.	See attached species lists for Norfolk woodlands.
3.	At least 50m in length	
4.	Evidence of hedge pre-dating Parliamentary enclosure	Evidence available from NCC
5.	Herb layer of plants typical of hedgerows or of semi-natural broadleaf woodland of the area.	See attached species lists for Norfolk woodlands
6.	Presence of rare or scarce plant species, or those identified as priorities under.	See attached species list for rare and scarce plant species in Norfolk
7.	Presence or rare or scarce fauna, or those identified as priorities	

Qualification: hedgerows form part of a CWS, rather than forming a stand-alone site. To qualify, a hedgerow must have attributes 1, 2 3 and 4, plus any one of 5, 6, or 7.

HEATHLAND

1.	Significant stands of ericaceous species.	Normally at least 100m ² .
2.	Widespread scatter of ericaceous plants capable of being restored to some continuity.	
3.	Significant stands of gorse and or broom in an acid grassland composed of appropriate native plants.	
4.	Significant areas of acid grassland composed of a variety of appropriate native plants.	> 50% of site
5.	A significant population or combination of rare or scarce plant species, or those identified as priorities.	See attached species lists for details of rare and scarce plants.
6.	Lichen/Bryophyte community.	
7.	More than 0.5 ha for species-rich and 5 ha for moderately species-rich areas not associated with another habitat of CWS quality.	
8.	Presence or rare or scarce fauna, or those identified as priorities	

Qualification: A site must normally have attribute 7 combined with any of 1, 2, 3, 4, or 5. Attribute 6 is a sole qualifier. Attribute 8 can be used as a qualifier where a site is borderline for 1, 2, 3, 4 or 5.

SWAMP AND TALL FEN

1.	Single species swamp.	Dominated by reed, reed mace, reed canary grass, reed sweet grass or sedge.
2.	Tall fen with typical species, and not dominated by those indicative of drying.	Species indicative of drying include great willowherb, nettle, bramble and purple moor grass.
3.	A significant population or combination of rare or scarce plants species, or those identified as priorities.	See attached species lists for details of rare and scarce species.
4.	At least 0.5 ha unless part of or adjacent to a habitat of CWS quality.	
5.	Presence or rare or scarce fauna, or those identified as priorities	

Qualification: A site must normally have attribute 4 combined with any of 1 or 2 or 5.

PONDS (approx under 0.5 ha)

1.	Species-rich marginal vegetation.	See attached species lists for details of typical species of Norfolk ponds.
2.	Species rich submerged/floating-leaved vegetation.	See attached species lists for details of typical species of Norfolk standing waters.
3.	A significant population or combination of rare or scarce plant species, or those identified as priorities.	See attached species lists for details of rare and scarce plants & lakes.
4.	Typical pond features known to be of benefit to wildlife and pond surrounded by semi-natural habitat.	To include ephemeral ponds, buffer zones, clusters of ponds linked by semi-natural habitats and pingos.
5.	Presence or rare or scarce fauna, or those identified as priorities	

Qualification: a site must have attribute 4, plus at least one of attributes 1, 2 and 3. Attribute 5 can be used to qualify borderline sites.

LAKES (approx over 0.5 ha)

1.	Species-rich marginal/emergent vegetation.	See attached species lists for details of typical species of Norfolk standing waters. Extensive reed swamp fringes may be important features for lakes.
2.	Species rich submerged & floating-leaved vegetation, especially where macrophytes cover a significant area of the lake from May - September.	Of special note are : <ul style="list-style-type: none"> Lakes where Charophytes are present, ideally where they form large beds in some years. Lakes with a high diversity of macrophyte species (+8) are present, including evergreens (e.g. Ceraophyllum & Chara) & deciduous (e.g. Potamogeton species). See attached species lists for details of typical species of Norfolk ponds & lakes.
3.	A significant population or combination of rare or scarce plant species, or those identified as priorities.	See attached species lists for details of rare and scarce plants of lakes.
4.	Diverse physical features known to be of benefit to wildlife	Includes pH, a range of shoreline features, differing substrates and depths and geological features, including pingos and other glacial features. Also included here are buffer zones and lakes linked by semi-natural habitats. Total phosphorous <50 micrograms/litre desirable.
5.	Presence or rare or scarce fauna, or those identified as priorities	Can include information on native/semi-native fish populat dragonflies.

Qualification: a site must have attribute 4, plus at least one of attributes 1, 2 and 3. Attribute 5 can be used to qualify borderline sites.

SOFT CLIFFS

1.	Range of physiographic features and microhabitats associated with soft cliffs	No sea defence present or if present still allowing enough erosion to maintain a pioneer vegetation community. Presence of areas of exposed substrate, patches of pioneer vegetation and flushes/seepages.
2.	Vegetation typical of soft cliffs	May also contain vegetation communities and species inherited from the cliff top due to slumping/cliff fall.
3.	Cliffs at least 500m in length for sites of borderline quality; or 250m in length for higher quality sites (i.e. demonstrating a wide range of micro-habitats and frequent erosion).	
4.	Buffer zone of semi-natural habitat present on cliff top, at least 6m in width.	
5.	A significant population or combination of rare or scarce plant species.	See attached species lists for details of rare and scarce plants.
6.	Presence or rare or scarce fauna, or those identified as priorities	

Qualification: A site must have attributes 1, 2 and 3; either of 4 or 5 or 6 is desirable, especially on otherwise borderline sites.

SAND DUNES

1.	A range of successional stages present.	Presence of successional stages from embryo/strandline vegetation, yellow dune, dune grassland (fixed calcareous/acid dune), dune heath or dune slack. No sea defence or engineering work present that is causing over-stabilisation of the dune system.
2.	Vegetation typical of microhabitats and successional stages present.	
3.	Site over 5ha in extent for borderline sites, or 1ha in extent for high quality sites (i.e. demonstrating a wide range of successional stages or species-rich).	
4.	Dunes in combination with other coastal habitats or terrestrial habitats of CWS quality, even when these do not, individually, meet the criteria for size for these habitats.	
5.	A significant population or combination of rare or scarce plant species.	See attached species lists for details of rare and scarce plants.
6.	Presence or rare or scarce fauna, or those identified as priorities	

Qualification: A site must have attributes 1, 2 and 3, either of 4 or 5 or 6 is desirable, especially on otherwise borderline sites.

TALL HERB AND FERN (including areas dominated by bracken).

This category is not considered relevant as a CWS habitat in Norfolk. Examples will be included in CWS quality grassland, heath and fen.

BOG AND FLUSH

This category is not dealt with separately as any examples are expected to be found in wet grassland, marsh or mire context dealt with earlier.

RIVERINE SITES

These criteria incorporate Environment Agency CWS criteria

1	Appropriately species-rich marginal and riverine flora.	
2	Presence of rare or scarce plant species and/or significant populations of BAP plant species, including non-vascular plants.	
3	Fish (from electro-fishing surveys): presence of a diversity of native species, appropriate to river type, plus a lack of influence from stocking, consistency of recording and self-sustaining populations	Species of note include: Brown trout (native populations), Brook lamprey, River lamprey, Bullhead, Spined loach, Stone loach, Sea trout, Smelt, Minnow, 3 Spined stickleback, 9 Spined stickleback, Grayling, Barbel.
4	Presence of rare invertebrates species and/or sections of river where there is a high invertebrate diversity. This includes UK BAP priority species.	
5	Records of water vole, water shrew and /or the status of otters is noted in the summary of conservation interest of each river.	
6	Physical features of the river are relatively natural, with minimum modification to bed and water level.	It is accepted that most Norfolk rivers have been modified to some degree, but the majority of the river or CWS stretch must appear relatively natural. Features to include: riffles, pools, bends, native bank side trees, scrub, woody debris etc.
7	Surrounding semi-natural habitat of CWS quality	CWS quality habitat beyond the river channel contributes to both the water quality and the quality of the whole area for wildlife. This includes extensive grazing systems such as grazing marshes of CWS quality.

Qualification: a site must have 1 plus elements of 6 and/or habitat as defined in 7, plus at least one of 2, 3, 4 or 5. In the absence of data for 2, 3, 4 and 5, sites can be notified on 1, plus strong elements of 6 and or 7 alone. Where 6 is weak, 2, 3 or 4 need to be strong.

Guidance for defining boundaries:

- Notify whole river channel or sections <1km in length, but consider river's role as a corridor between good quality habitats.
- Core area should be river and banks.
- Upper limit of banks defined as first or major or break of slope, where not adjacent to another site of CWS quality or where adjacent land not surveyed.
- Where channel alone of interest, boundary should follow break of slope, unless there is a demarcating feature on the ground (eg, hedge, tree line or flood bank).
- Adjacent semi-natural wet habitat which is probably dependent on the river should be included within the boundary and islands within the river should be included, unless they need to be excluded due to their degree of modification.
- Good quality habitats adjacent to the river, but not dependent on it should be included as a habitat mosaic and the site assessed as such, except for non-wetland habitats that contribute significantly to

sustaining fauna associated with the river (e.g., scrub for otters). The role of the river as a corridor between good quality habitats can also be considered.

GRAZING MARSH

1.	Appropriately species-rich grassland, marsh or mire	See attached species lists for details of typical species Where the dyke network is of little intrinsic interest, it should nonetheless be included as an integral part of the grazing marsh habitat
2.	Presence of appropriately species-rich drains and dykes, including marginal/emergent and/or aquatic/floating vegetation	See attached species lists for details of typical species Where the grassland matrix is of little botanical interest, it must nonetheless be included as a 'buffer' for the dyke network
3.	More than 0.5 ha for species-rich and 2 ha for moderately species-rich grassland where not associated with another habitat of CWS quality.	
4.	More than 50% of drains and dykes, or minimum of 0.5km combined length, to be appropriate* species-rich where not associated with another habitat of CWS quality	* ie at least 10 species indicative of good quality habitat per 20m length
5.	In an appropriate and stable management regime and / or in an agri-environment scheme	
6.	Management of water levels for breeding waders	
7.	Presence or rare or scarce fauna, or those identified as priorities	

Qualification: to qualify, a site must have at least:

- a) attribute 1 and 3, plus attribute 5;
or
- b) attribute 2, 4 and 5, plus at least one of attributes 6 or 7

Habitat created and managed for nature conservation

1.	Created over 10 years ago (20 if woodland)	<p>Ponds- to have typical features known to be of benefit to wildlife and pond surrounded by semi-natural habitat.</p> <p>Woodland to be of diverse age and physical structure with understorey, glades, rides and perimeter shrubs. Presence of seedlings, saplings, and older trees. Presence of dead wood both standing and fallen. Active traditional management.</p>
2.	Planted seed/plants/trees must be locally and site appropriate	
3.	<p>Appropriately species-rich habitat of more than 0.5ha (except ponds)</p> <p>Ponds must have species-rich marginal or submerged/floating vegetation</p>	See attached species lists for details of typical species.
4.	Moderately species-rich habitat of more than 5ha	See attached species lists for details of typical species.
5.	Adjacent to another habitat of CWS quality/SSSI or in a cluster of CWS's demonstrating habitat connectivity.	
6.	Presence or rare, scarce or notable fauna, or those identified as priorities	

Qualification: A site must normally have at least the first 2 attributes where relevant, combined with 3 or 4 and 5 or 6. Where there is faunal interest a site must be at least borderline on one of attribute 1 or 2 and borderline on attribute 3 or 4.

NB: A site will only be considered under these criteria if management for nature conservation is a high priority.