Guidelines for the Selection of Wildlife Sites in South Wales

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Front cover photographs produced by kind permission of Blaenau Gwent County Borough Council and English Nature.

Published by The South Wales Wildlife Sites Partnership

ISBN 0 9548517 0 6

ACKNOWLEDGMENTS

Many organisations and individuals have contributed to the development of this project, some significantly so. For the initial start of the project and the production of the document, 'The Criteria for the Selection of Wildlife Sites in Gwent, Glamorgan and Carmarthenshire', David Clements and Richard Pryce are especially thanked for all their hard work and input into the report's development.

CONTENTS

PART 1

INTRODUCTION

1.0 BACKGROUND

1.1 In 1999 the document 'The Criteria for the Selection of Wildlife Sites in Gwent, Glamorgan and Carmarthenshire' was compiled in its first draft form by David Clements and Richard Pryce. That original document forms the basis of this new working version,

Monmouthshire County Council
Neath & Port Talbot County Borough Council
Newport City Council
Rhondda Cynon Taff County Borough Council
Torfaen County Borough Council
Vale of Glamorgan Council
Countryside Council for Wales
Gwent Wildlife Trust
The Wildlife Trust of South and West Wales

This partnership was formed to create and develop this unifying set of guidelines for the selection of Wildlife Sites. The Partnership meets regularly at steering group meetings in order to achieve this aim.

The Wildlife Sites Project is also in contact with;

- Country Land and Business Association (South Wales)
- Environment Agency
- Farmers Union of Wales (Gwent)
- Forestry Commission
- Glamorgan Biodiversity Action Group
- Greater Gwent Biodiversity Action Group
- National Farmers Union (Gwent)
- Welsh Development Agency

4.0 THE GUIDELINES

4.1

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indicator species has been compiled for certain habitats. Where considered appropriate, this has been accompanied by a threshold number of species which will generally need to be reached before a site can be selected as a Wildlife Site on the basis of its vegetation type and diversity.

4.12 The lists of indicator species are especially valuable in instances where an NVC type can contain examples of a wide range of quality, such as the MG6 semi-improved neutral grassland vegetation type. A species-rich MG6 grassland containing a reasonably large number of indicators of unimproved grassland will be worthy of selection, whilst a relatively species-poor MG6 grassland with few such indicators will not merit selection as a Wildlife Site.

4.13 The species lists are comprised of native species, or archaeophytes as indicated by the New Atlas of the British and Irish Flora (Preston, Pearman and Dines 2002), which are characteristic of the vegetation type in question. In the case of the grassland vegetation types, species that are regularly found in agriculturadny6(t)1(i)mpr2oved7grasslalds are ge144(n)-1(e)traly type in Nwhch they4(c)-4(t)1(en-1(n)-1(v)10(4(c)-4(o-4(h)-114)-b)1(h)-1(e)--( )--16(f)-8(o)-1(u)-1(n)-1(n)1

assess the suitability of a site for Wildlife Site designation by consideration of its size alone, and it must be recognised that size thresholds are particularly subjective and open to challenge. Minimum size thresholds for Wildlife Site designation do not appear in the guidelines. Providing that the quality of the site is sufficient, the smallest of sites can then be properly selected as a Wildlife Site. Further guidance can be found in the Site Boundary section, 7.4-7.7.

Naturalness/Typicalness

5.5 These factors are also difficult to quantify, although it is possible to assess how typical a given habitat is by comparison with, for example, published sources such as the detailed descriptions of UK plant communities provided by the National Vegetation Classification (*British Plant Commun10(m)8invi1134(s)16(0a)7(t)12(-1(l0( )-53(y)31(,)-r)5( )16(7)10(.)16(4)10(-)t)22( )-1*

a certain number of species from an indicator list of "quality" species. For some sites lower plants, fungi or fauna will be a key element of diversity.

5.10 Another aspect of diversity lies in the interaction between habitats. A potential Wildlife Site may contain a number of different, complimentary habitats, and in some cases these may have a combined value which is greater than that of the individual elements when considered alone. In situations where the individual elements each qualify for Wildlife Site selection on their own merits this does not present a problem, but merely reinforces the case for designation of the site. However, there may be some instances where the individual elements do not in themselves meet the guidelines, but which together have a combined value sufficient to warrant selection as a 'mosaic site'.

Secondary elements

5.11 It is anticipated that in almost all cases, consideration of the secondary elements is unlikely to result in a site being selected if it does not also meet or exceed one or more of the primary elements listed above. However, the secondary elements may provide powerful reinforcement of the case for selection and they may be sufficient to merit promotion of a borderline site to Wildlife Site status.

5.12 *Position in an ecological unit* may be an important consideration, especially in circumstances where a site forms a valuable adjunct to another Wildlife Site or to a SSSI, for example, or where a site forms part of a linear complex joining several otherwise isolated sites together. This element is reflected in the approach taken to defining appropriate boundaries.

5.13 *Potential value*: There is general agreement that a site should only be selected where it already has substantive nature conservation value. Although some types of degraded habitats (e.g. bog, heathland) may qualify for selection on their own merits, the potential of a degraded site for enhancement or for conversion to a former condition of higher nature conservation interest is not a reason for selection *per se.*

5.14 *Fragility*: The fragility of a given habitat is reflected to a great extent in the overall current extent of the habitat and its rarity. As a result fragility should not be a marked consideration provided the site meets the primary criteria at the time of selection. As with potential value, however, it is a valid point to bear in mind when considering the attributes of a given site and should be highlighted when considering the direction of management resources and funds in the future.

5.15 *Educational/Social value*: These 'non-scientific' criteria do not form an intrinsic part of the 'substantive nature conservation value' demanded by government guit i0(i)12(t)12(o)10(n)mi go (mi)-3

non-statutory designation can then be used to inform decisions made by a wide variety of individuals and organisations.

6.2 Any one intended use of the system does not have a bearing on whether or not a site is to

systems should seek to co-ordinate the provision of support and advice to land managers for the positive management of sites through the partnership. Wildlife Site systems should be used as a means of targeting by those who provide advice and support for land managers.

6.9 Sources of funding for the management of sites should be targeted towards Wildlife Sites as well as other sites. Particular priorities should include agri-environment schemes, through section 134 of the Environmental Protection Act 1990, and Local Authorities, entering into management agreements through section 39 of the Wildlife and Countryside Act 1981, as well as planning conditions and Section 106 Agreements attached to planning proposals.

6.10 As well as taking on some responsibility themselves, Local Authorities should encourage partners to contribute directly to the running of the Wildlife Site systems by committing staff time and financial resources. Local Authorities and partnerships should ensure that Wildlife Site systems for their area are in place and fully compliant with this guidance. Individual Wildlife Site systems should review site presentation, achievements and processes at least once every ten years.

7.0 APPLICATION OF THE GUIDELINES

Relationship with Nationally Designated Sites

7.1 Statutory Sites of Special Scientific Interest and non-statutory Wildlife Sites do not generally overlap in South Wales. This limits the risk of confusion amongst landowners, users and potential developers etc. concerning the legal status and protection of the land concerned. However, there may be some instances where it is appropriate to designate SSSI land as a Wildlife Site, especially where:

- a SSSI is notified on geological grounds, and is subsequently selected as a Wildlife Site because of its biological (i.e. nature conservation) interest;
- the SSSI reasons for notification omit to mention key features which qualify for Wildlife Site status;
- planning authorities have already shown biological SSSIs as Wildlife Sites in strategic planning documents or supplementary planning guidance.

Geological Sites

7.2 Many potential Wildlife Sites in South Wales are also of geological or geomorphological importance in addition to their nature conservation significance, and there are other sites, which may have value and significance on geological grounds alone.

7.3 Wildlife Sites should be designated entirely on ecological grounds, without reference to geology except where this is a factor affecting or determining the ecological value. A national framework for the identification and recognition of non-statutory geological sites already exists in the form of the Regionally Important Geological and Geomorphological Sites (RIGS) programme. Whilst not strictly comparable with second tier biological

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- presence and abundance of different plant species in each habitat (either through NVC survey or using Phase 1 methodology with DAFOR information)
- recording the presence of uncommon, notable or rare vascular plant species with the location of such species identified on the accompanying site map
- recording of structures and features, such as fences, roads & buildings along with features of particular value to fauna such as invertebrates e.g. veteran trees, exposed riverine shingles & soft cliffs, bare ground and glades
- casual records of fauna, collected during the vegetation survey
- management regime (with any speculation being clearly indicated as such)
- potential threats
- communications made with landowners, managers or neighbours
-

PART 2

DETAILED GUIDELINES FOR SELECTION

HABITAT GUIDELINES

Scientific Name	Common Name
Luzula forsteri	southern woodrush
Luzula pilosa	hairy woodrush

H3) SCRUB COMMUNITIES

The following should be considered for selection:

- structurally-diverse and species-rich mixed scrub sites
- significant stands of gorse

It is suggested that 'mixed scrub' habitats considered for selection should normally contain at least 6 native woody species and that there is good structural diversity, for example with a varied range of shrub ages and canopy heights, the presence of small rides and clearings, good gradations in edge habitats, varied ground flora etc.

Most scrub communities comprise common and ubiquitous woody species and are widespread in the UK. However, scrub habitats are extremely variable in form and composition, and even some of the common communities may be exceptionally rich in species (Hopkins 1996).

A particular case can be made for the selection of extensive, and diversely structured stands of gorse (*Ulex europaeus; Ulex galli*), even when few other woody species or other vascular plants of interest are present. Gorse supports a distinctive faunal community, with such characteristic species as stonechat (*Saxicola torquta*), along with a high invertebrate diversity. The complex rigid structure of gorse bushes is such that it is a noted habitat for spiders, for instance.

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corniculatus), and common knapweed (*Centaurea nigra*), together with, *inter alia*, red clover (*Trifolium pratense*), hawkbits (*Leontodon* spp.), cowslip (*Primula vulgaris*), ox-eye daisy (*Leucanthemum vulgare*) and buttercups (*Ranunculus* spp.). Orchids, including the scarce and declining green-winged orchid (*Orchis morio*), are often present.

MG5 grassland was probably the natural community type for much of the lowland grassland of South Wales in its original, unmodified state. Agricultural improvement has altered huge areas into the less diverse and more widespread MG6 grasslands (here referred to as 'semi-improved neutral grassland'), or to other improved grassland communities of low diversity and value. Nevertheless species-rich examples of MG6 are still comparatively widespread and locally

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H5) CALCAREOUS GRASSLANDS

The following should be considered for selection:

- all examples of unimproved calcareous grassland
- all examples of species-rich semi-improved calcareous grassland

Calcareous grasslands are confined to basic soils, which are usually of low fertility and often free-draining. Key grass species include upright brome (*Bromopsis erecta*) and sheep's fescue (*Festuca ovina agg.*) together with characteristic herbs such as common thyme (*Thymus polytrichus*), rockrose (*Helianthemum nummularium*), fairy flax (*Linum catharticum*) and salad burnet (*Sanguisorba minor*).

Calcareous grasslands are better represented in Glamorgan than in Carmarthenshire or Gwent. However it is considered that all relatively diverse calcareous grasslands should be considered for selection as Wildlife Sites, regardless of the part of South Wales in which they are located. Calcareous grasslands can also arise on post-industrial substrates, e.g. rail and road cuttings, quarries, ballast, flue ash or slag and spoil tips. The guidelines should be applied equally to habitats regardless of their origins.

'Semi-improved' grasslands include those swards which have been degraded by agricultural management but which are still recognisably derived from a calcareous grassland. Only those semi-improved sites that are 'species-rich' should be considered as a Wildlife Site. 'Species-

Table 3. Indicator species for calcareous grasslands

Scientific Name	Common Name
Allium vineale	wild onion
Aloina aloides	
Anacamptis pyramidalis	pyramidal orchid
Anthyllis vulneraria	kidney vetch
Arabis hirsuta	hairy rock-cress
Asperula cynanchica	squincywort
Blackstonia perfoliata	yellow-wort
Brachypodium pinnatum	tor grass
Briza media	quaking grass
Bromopsis erecta	upright brome
Campanula glomerata	clustered bellflower
Campanula rotundiflora	harebell
Campanula trachelium	nettle-leaved bellflower
Carex caryophyllea	spring sedge
Carex flacca	glaucous sedge
Carex montana	soft-leaved sedge
Carlina vulgaris	carline thistle
Centaurea nigra	common knapweed
Centaurea scabiosa	greater knapweed
Centaurium erythraea	common centuary
Cirsium acaule	dwarf thistle
Cirsium eriophorum	woolly thistle
Cirsium tuberosum	tuberous thistle
Clinopodium acinos	basil thyme
Clinopodium ascendens	common calamint
Clinopodium calamintha	lesser calamint
Clinopodium vulgare	wild basil
Coeloglossum viride	frog orchid
Crepis biennis	rough hawk's-beard
Cruciata laevipes	crosswort
Daucus carota	wild carrot

H6) ACID GRASSLANDS

The following should be considered for selection:

- all examples of unimproved acid grassland
- all examples of semi-improved acid grassland which retain a relatively high diversity of indicator species

Acid grasslands are comparatively scarce in the lowlands, being restricted to areas of nutrient-poor acidic soils, and frequently occur on old colliery tips. They are more characteristic of the uplands where they occur over extensive areas, although many of these have been subject to agricultural improvement or are in deteriorating condition due to neglect. Acid grasslands are characteristically rather poor in terms of plant species-diversity, but unimproved swards often support characteristic plant species, as well as a range of other wildlife including scarce or rare species.

'Unimproved' in this context refers to swards, which contain a high proportion of the species listed as community constants or preferential associates of the relevant NVC community as described by Rodwell (1992). A list of species indicative of unimproved acid grasslands is given in Table 4. A site should be considered for selection if 7 or more of these species are recorded.

Context

The UK BAP identifies lowland dry acid grassland as a Priority Habitat in the UK, as does the Section 74 *List of Habitats of Principle Importance for Conservation in Wales* (WAG 2003). The *Welsh Biodiversity Guide* (ALGE 1999) does not refer directly to acid grasslands. The SSSI selection criteria (NCC 1989) identify U1 sheep's fescue-common bent-sheep's sorrel grassland, U2 wavy hair-grass grassland and U3 bristle bent grassland NVC communities as being of greatest potential value.

H7) MARSHY GRASSLANDS

The following should be considered for selection:

- all examples of:

associates and no uncommon species should not generally be considered good candidates for designation as a Wildlife Site.

Table 5. Indicator species for marshy grasslands

Scientific Name	Common Name
Achillea ptarmica	sneezewort
Agrostis canina	velvet bent
Agrostis curtisii	bristle bent
Anagallis tenella	bog pimpernel
Angelica sylvestris	wild angelica
Apium graveolens	celery
Apium inundatum	lesser marshwort
Apium nodiflorum	fool's-water-cress
Bidens cernua	nodding bur-marigold
Bidens tripartita	trifid bur-marigold
Briza media	quaking grass
Calamagrostis epigejos	

Scientific Name	Common Name
Geum rivale	water avens
Glyceria declinata	small sweet-grass
Glyceria fluitans	floating sweet-grass
Glyceria maxima	reed sweet-grass
Glyceria notata	plicate sweet-grass
Hydrocotyle vulgaris	marsh pennywort
Hypericum elodes	marsh St John's-wort
Hypericum tetrapterum	square-stalked St John's-wort
Iris pseudacorus	yellow flag-iris
Isolepis setacea	bristle club-rush
Juncus acutiflorus	sharp-flowered rush
Juncus articulatus	jointed rush
Juncus conglomeratus	compact rush
Juncus squarrosus	heath rush
Juncus subnodulosus	

Scientific Name	Common Name
Scrophularia auriculata	water figwort
Scutellaria galericulata	skullcap
Scutellaria minor	lesser skullcap
Senecio aquaticus	marsh ragwort
Serratula tinctoria	saw-wort
Sibthorpia europaea	cornish moneywort
Stachys officinalis	betony
Stachys palustris	marsh woundwort
Stellaria alsine	bog stitchwort
Succisa pratensis	devil's-bit scabious
Thalictrum flavum	common meadow-rue
Thelypteris palustris	marsh fern
Trichophorum cespitosum	deergrass
Triglochin palustre	marsh arrowgrass
Trollius europaeus	globeflower
Vaccinium oxycoccos	cranberry
Valeriana dioica	marsh valerian
Valeriana officinalis	common valerian
Veronica anagallis-aquatica	blue water-speedwell
Veronica beccabunga	brooklime

H8) COASTAL AND FLOODPLAIN GRAZING MARSH

The following should be considered for selection:

- examples of floodplain grassland and coastal levels which are extensive, subject to frequent inundation and support populations or communities of characteristic species, including at least one UK BAP Priority Species

Coastal grazing marshes occur in flat coastal situations, usually behind sea defences or natural barriers such as sand dunes, and are characteristically drained by a network of ditches or 'reens' containing standing water thoughout the year. They have commonly been derived from saltmarsh or freshwater swamp habitats. Well-known examples in the South Wales region include the Gwent

H9) BRACKEN COMMUNITIES

The following should be considered for selection:

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H10) HEATHLANDS AND GRASS-HEATH COMMUNITIES

The following should be considered for selection:

- all examples of unmodified wet heathland and wet grass-heath, and where cross-leaved heath is still present even though reduced in its cover due to grazing pressure

- all examples of unmodified dry heathland

- examples of degraded heathland, secondary heathland and grass-heath mixtures which either meet the guidelines for designation as acid grassland (and are thus designated as such) or which have at least 10% dwarf shrub heath cover

Lowland heathlands have become enormously reduced in extent through various human impacts, with an increasingly rapid decline in the period since the 1960's. The decline in the UK is estimated to be of the order of 85% in the last 200 years. Heathland is an internationally restricted habitat, with many of the communities that occur on the continent and elsewhere bearing very little floristic resemblance to those which occur in the UK. Heathland and grass-heath vegetation can be very extensive in the uplands, but large undegraded blocks are now uncommon. Overgrazing, agricultural improvement, afforestation, land reclamation and opencasting have all reduced the extent of upland heathland and grass heath in South Wales, whilst lowland heath is even more restricted in its extent. Old colliery spoil can support significant areas of dry heathland and in some cases older previously reclaimed sites are being encouraged to do so. The Phase 1 habitat survey manual (NCC 1990) stipulates that 25% dwarf shrub heath cover is required for habitat to be considered heathland. However, the 10% threshold for degraded heathland has been chosen with respect to these guidelines for Wildlife Site selection due to the importance of the habitat, and its growing rarity.

Context
Heathland habitats are included in the 'Dwarf Shrub Heath' category of the UK BAP, which identifies both upland and lowland heaths as Priority Habitats for conservation. These habitats are also identified in the Section 74 *List of Habitats of Principle Importance for Conservation in Wales* (WAG 2003).

The *Welsh Biodiversity Guide* (ALGE 1999) also identifies these categories as priorities in the region. Draft HAPs have been drawn up for lowland heathland in Glamorgan and Gwent.

H11) FENS, REEDBEDS AND OTHER SWAMPS

The following should be considered for selection:

- all examples of fen habitat, providing they are not grossly modified by agricultural improvement

- all examples of reedbed and other tall swamps

'Fens' are here defined as mire vegetation occurring on peat or mineral soils ≥0.5m deep, where the water level is at or just below the surface for most of the year. The water level in the mire is maintained either as a result of containment by the surrounding topography, or as a result of water running in from surrounding land. Bog moss (*Sphagnum* spp.) and/or sedges (*Carex* spp.), are usually important vegetation components, although consideration should still be given to the designation of degraded fens, where bog moss and sedges are greatly reduced in their abundance.

Three main types of fen are usually recognised, determined primarily by topographic features. These are 'valley mire' (fed by an obvious water flow), 'basin mire' and 'floodplain mire' (both formed as a result of impeded drainage), although in practice these may be difficult to distinguish. Fens may support vegetation more usually characteristic of other habitats such as marshy grassland, swamp and reedbeds.

'Swamp' comprises tall wetland vegetation occurring in situations where the water level is usually distinctly above the surface for much of the year. Swamps occur on a range of soils, but seldom on deep peat. The category includes reedbeds and tall marginal/emergent vegetation. In the uplands, these communities are most likely to be small and will probably form part of a mosaic with other surrounding habitats that may also qualify for selection.

Reedbeds and other swamps are particularly important for birds and invertebrates, the former including uncommon and declining nesting species such as reed warbler, reed bunting and water rail, and wintering species such as snipe and bittern. 'Secondary' swamps in disturbed locations often develop substantive conservation significance, for example in supporting key nesting birds, especially where they are of larger size.

Context

The UK BAP identifies 'Fen, Marsh and Swamp' as a single broad habitat. Within this category 'Fen' and 'Reedbed' are listed as Priority Habitats, and also feature on the Section 74 *List of Habitats of Principle Importance for Consery3tun in Wales* (WAG 2003). A wide range of NVC communities may occur in fens, including the tall herb communities S25-S28 and the mires M9-10, M13-14, M21 and M27 (see Rodwell 1991 for further detail). The UK is believed to

H12) BOG HABITATS AND FLUSHES

The following should be considered for selection:

- all examples of undegraded bog habitats, and degraded bog habitats which still show some remaining distinctive features of n- IN a-4ita2tun- y0(e)pN W.95212.96 TD d
  -

H13) COASTAL HABITATS

The following should be considered for selection:

- all examples of unmodified semi-natural coastal cliff, together with associated crags, ledges,

H16) STANDING OPEN WATER

H18) POST-INDUSTRIAL LAND

The following should be considered for selection:

- all examples of post-industrial land that has re-vegetated with a diverse range of native and archaeophyte non-woody plant species

Unusual assemblages of plant species of interest can occur on post-industrial land. Such sites with a high diversity of native and archaeophyte species can be selected as Wildlife Sites, even if a significant habitat mosaic is absent and the habitat present does not merit selection as a 'secondary' example of any of the semi-natural habitats for which there are other habitat guidelines. It is considered that substantive nature conservation value can be demonstrated, and thus the site is eligible for Wildlife Site selection, if 20 or more plant species from the combined lists of grassland species (Tables 2-5) and the following list of characteristic (but not ubiquitous) additional species in Table 6 are present.

A diverse range of post-industrial sites are found throughout South Wales, with areas of colliery

Table 6. Indicator species for post-industrial land

Scientific Name	Common Name
Agostis vineale	brown bent
Aira caryophyllea	silver hair grass
Aira praecox	early hair grass
Anthemis arvensis	corn chamomile
Anthemis cotula	stinking chamomile
Arctium lappa	greater burdock
Arctium minus	lesser burdock
Artemisia absinthium	wormwood
Atriplex patula	common orache
Atriplex prostrata	spear-leaved orache
Ballota nigra	black horehound
Barbilophozia floerkei	
Beta vulgaris	sea beet
Calluna vulgaris	heather
Carduus crispus	welted thistle
Carduus nutans	musk thistle
Carduus tenuiflorus	slender thistle
Carex arenaria	sand sedge
Carex otrubae	false fox-sedge
Carex pilulifera	pill sedge
Catapodium rigidum	fern grass
Centaurea cyanus	cornflower
Chaenorhinum minus	small toadflax
Chenopodium album	fat hen
Chenopodium bonus-henricus	good-king-Henry
Chenopodium ficifolium	fig-leaved goosefoot
Chenopodium hybridum	maple-leaved goosefoot
Chenopodium polyspermum	many-seeded goosefoot
Chenopodium rubrum	red goosefoot
Chrysanthemum segetum	corn marigold
Cichorium intybus	chicory
Crepis biennis	rough hawk's-beard
Crepis capillaris	smooth hawk's-beard
Deschampsia flexuosa	wavy hair grass
Dipsacus fullonum	teasel
Erica cinerea	bell heather
Festuca ovina	sheeps fescue
Filago minima	small cudweed
Filago vulgaris	common cudweed
Galeopsis bifida	bifid hemp-nettle
Galeopsis speciosa	large-flowered hemp-nettle
Galeopsis tetrahit	common hemp-nettle
Gnaphalium uliginosum	marsh cudweed
Kickxia elatine	

Scientific Name	Common Name
Misopates orontium	weasel's-snout
Onopordum acanthium	cotton thistle
Orobanche minor	common broomrape
Parentucellia viscosa	yellow bartsia
Picris echioides	bristly oxtongue

H19) SPECIES-RICH TILLAGE FIELDS AND MARGINS

The following should be considered for selection:

- All examples of fields that contain eight or more of the species listed in table 7

The flora of arable fields across Europe has seriously declined, mainly as a result of the use of selective herbicides, seed-cleaning techniques and competitive crop variants. In Wales this loss has been compounded by conversion of fields to permanent pasture, and many characteristic species are now either threatened, rare or extinct.

Arable field margins are strips of land that lie between intensively managed cereal crops and the adjacent field boundary. Such margins can take a variety of forms, but principally consist of either fallow ground (cultivated regularly, but not cropped), conservation headlands (crops grown using limited inputs of pesticide or none at all) or grass margins (infrequently cut or grazed grassy margins). Although the maximum width of a margin is 12m, species-rich areas

H20) MOSAIC HABITATS

Mosaic sites, comprising of complex mixtures of semi-natural habitats, are acknowledged to be

H21) ROCK EXPOSURES

The following should be considered for selection:

- all occurrences of limestone pavement, especially where supporting a rich gryke flora (i.e. mixtures of species characteristic of calcareous woodlands and grasslands living within the cracks and furrows)

- inland cliffs, crags and associated screes, where these support species of interest

Rock exposures are a particular feature of the uplands, but also occur locally in lowland situations. There should be a general preference for the selection of semi-natural rock exposures and screes, but care should be taken to ensure that the test of 'substantive nature conservation interest' is met. The presence of species of interest may allow selection under the Species Guidelines. In many cases, these features are likely to fall within mosaics of other surrounding habitats that also qualify for selection.

Context
'Limestone Pavement' is a Priority Habitat of the UK BAP and features on the Section 74 *List of Habitats of Principle Importance for Conservation in Wales* (WAG 2003).

H22) OTHER FEATURES

The following should be considered for selection:

- continuous sections of disused railway lines supporting semi-natural vegetation
-

SPECIES GUIDELINES

S1) MAMMALS

Those species in **bold** are afforded 'European Protected Species' status through the European Habitats Directive (1992) implemented in UK law by The Conservation (Natural Habitats & c) Regulations 1994.

Mammals (excluding Bats)

The following should be considered for selection:-

- any sites supporting breeding (or probable breeding) species (other than bats) which are listed as fully or partially protected on Schedule 5 of the Wildlife & Countryside Act 1981, together with any areas which are critical for nesting, foraging, roosting (laying up), territorial or other significant use, where this has been determined by survey. These species currently comprise:

HABITAT GUIDELINES

- Information on the global and European conservation status of UK bird species from BirdLife International's *Threatened Birds of the World* (2000) and *Birds in Europe* (Tucker *et al* 1994)
- Information on trends in breeding populations and range sizes from the BTO/JNCC Common Birds Census and Waterways Bird Survey; the BTO/JNCC/RSPB Breeding Bird Survey: the JNCC/RSPB/SOTEAG seabird monitoring programme and Seabird 2000; the Rare Breeding Birds Panel; single-species surveys, mostly undertaken as part of the SCARABBS agreement; and the BTO/SOC/IWC *New Atlas of Breeding Birds*
- Information on population trends in non-breeding birds from the BTO/WWT/RSPB/JNCC Wetland Bird Survey and WWT/JNCC goose counts
- Information on species' distributions from BirdLife's *Important Bird Areas in Europe* and the JNCC's *The UK SPA Network*
- Information on population sizes in the UK and Europe from the Avian Population Estimates Panel and BirdLife/EBCC's 12(16]tr)-()]4s

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Table 9. Breeding Birds of Conservation Significance in Gwent, Glamorgan and Carmarthenshire

Species	National status			Local Status
	W&CA 1	Red/Amber	Section 74	**A** = Designates B = C15(t)-A

Species	National status			Local Status **A** = Designates B = Contributes
	W&CA 1	**Red/Amber**	**Section 74**	
Kestrel		A		B
Kingfisher	X	A		B
Linnet		A	X	B
Martin, Sand		A		B
Owl, Barn	X	A		B
Oystercatcher		A		B
Pintail		A		B
Redstart		A		B
Skylark		A	X	B
Sparrow, House		A		B
Starling		R		B
Stonechat		A		B
Thrush, Song		A	X	B
Warbler, Grasshopper		R		B
Woodcock		A		B
Woodpecker, Green		A		B

W&CA1 : Wildlife & Countryside Act 1981, Sch 1
Red/Amber : Red List (High Concern); Amber List (Medium Concern) Thorpe, R.I. & Young, A (2003)
Sec 74 : WAG's Section 74 List of 'Species and Habitats of Principle Importance for the Conservation of Biodiversity in Wales'

Table 10. Wintering and Passage Birds of Conservation Significance in Gwent, Glamorgan and Carmarthenshire

Species	National Status			Local Status **A** = Designates B = Contributes
	W&CA 1	**Red/Amber**	**Section 74**	
Avocet	X			**A**
Bittern		R		**A**
Bunting, Corn		R		**A**
Chough	X	A		**A**
Dove, Turtle		R		**A**
Egret, Little		A		**A**
Grouse, Red		R		**A**
Harrier, Marsh	X	-		**A**
Harrier, Hen	X	R		**A**
Owl, Long-eared		A		**A**
Owl, Short-eared		A		**A**

Species	National Status			Local Status **A** = Designates B = Contributes
	W&CA 1	**Red/Amber**	**Section 74**	
Shelduck		A		B
Shoveler		A		B
Skylark		A	X	B
Snipe, Common		A		B
Sparrow, House		A		B
Starling (roosts)		R		B
Stonechat		A		B
Teal, Eurasian		A		B
Tern, Arctic		A		B
Tern, Common		A		B
Tern, Sandwich		A		B
Thrush, Song		A	X	B
Tit, Marsh		R		B
Tit, Willow		R		B
Turnstone		A		B
Wagtail, Yellow		A		B
Whimbrel		A		B
Wigeon		A		B
Woodcock		A		B
Woodpecker, Green		A		B
Woodpecker, Lesser-spotted		R		B
Yellowhammer		R	X	B

W&CA1 : Wildlife & Countryside Act 1981, Sch 1
Red/Amber : Red List (High Concern); Amber List (Medium Concern) Thorpe, R.I. & Young, A (2003)

S3) REPTILES

Four species of reptile occur in South Wales (Arnold 1995) all of which are partially protected under Schedule 5 of the Wildlife & Countryside Act 1981. These are slow-worm, common lizard, adder and grass snake. The UK's two rarest reptile species (smooth snake and sand lizard) do not occur in South Wales.

The following should be considered for selection:

- sites supporting three or more reptile species
- sites supporting good populations of any reptile species

The occurrence of any reptile species, in any number, on a site should be considered a supporting reason for selection of a site which also qualifies under other guidelines (i.e. on habitat grounds or for species other than reptiles).

Context
The SSSI selection criteria suggest that the best sites supporting three out of the four commoner

S4) AMPHIBIANS

Five species of amphibian occur in South Wales (only four in Carmarthenshire) (Arnold 1995). These are common frog, common toad, smooth newt and palmate newt. Great crested newt occurs in Gwent and Glamorgan only. Of these, only great crested newt is listed as fully protected under Schedule 5 of the Wildlife & Countryside Act 1981. The UK's rarest amphibian (natterjack toad) does not occur in South Wales.

General Guidelines
The following should be considered for selection:

- sites supporting four or more species of amphibian
- sites supporting good populations of three or more species of amphibian
- sites supporting exceptional populations of any single species of amphibian.

Groups of ponds may be selected as single sites where these all lie reasonably close to each other (see above), and there is a good probability that there is migration of amphibians between the ponds, together with an appropriate surrounding area of terrestrial habitat.

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Great Crested Newts

The following should be considered for selection:

- sites supporting 'good populations' of great crested newt, defined here as 10 or more individuals counted by torchlight

Preference should be given to sites supporting 'good' populations of Great Crested Newts rather than all sites, bearing in mind that the species and its habitats are *per se* afforded full statutory protection by the Wildlife & Countryside Act 1981. 'Good populations' are here defined as sites that give counts of 10 or more individuals during torchlight surveys. The Great Crested Newt is also a 'European Protected Species' under the European Habitats Directive (1992) implemented in UK law by The Conservation (Natural Habitats & c) Regulations 1994.

The occurrence of great crested newt, in whatever numbers, should be considered a supporting reason for selection of a site which also qualifies under other guidelines (i.e. on habitat grounds or for species other than great crested newt).

Context

The SSSI criteria suggest the selection of all 'exceptional' sites for great crested newt, assessed as sites where 100+ individuals are counted by torchlight survey at night. 'Good' sites are assessed as those where counts of 10+ individuals are made, and this is considered to be a suitable threshold for Wildlife Site selection.

Grayson (1994) recommends that groups of breeding ponds should be selected collectively as 'pond cluster' Wildlife Sites. Juvenile newts can migrate up to 2km between ponds, whilst adults tend to be more pond-loyal, tending to stay within 250-500m of their spawning pond. It is therefore recommended that qualifying ponds falling within 250m of each other are aggregated together with any suitable intervening terrestrial habitat.

Torchlight surveys should be carried out at night in warm conditions during the peak breeding period (April to mid-June). Important migration routes and terrestrial habitats should ideally be established by means of actual sampling (e.g. using pitfall traps) wherever possible.

S6) INVERTEBRATES

There are more than 30,000 species of invertebrates in Great Britain. All species have a life cycle which comprises several distinct phases i.e. egg/larvae/pupae/adult or egg/nymph/adult. Therefore a combination of conditions and habitats are usually required by each species for each of these stages. Determination of site boundaries should therefore reflect the habitat and structural diversity needed to sustain a species. It should be noted that often microhabitats such as dead wood or small areas of bare ground may be important in sustaining a species.

General Guidelines

These guidelines should be applied to all invertebrate taxa (including those taxa with additional specific guidelines). Sites that meet any of the following guidelines should be considered for selection. In the case of less well-known taxa, it is strongly recommended that appropriate experts and Vice-County recorders are consulted as part of the selection process. The term 'supports' refers to any verified record of a species (of wild occurrence) in possible breeding habitat. In general it should therefore be assumed that a record of a species from a site fulfils the 'supports' guideline unless there is evidence to the contrary e.g. the species is an obvious migrant or in totally unsuitable breeding or foraging habitat.

The following should be considered for selection:

- any site which supports a species, which is listed in the UK Red Data Book, or the "Section 74 List" (WAG 2003).

- any site which supports an important assemblage or population(s) of 'Nationally Scarce'

- any site which supports a species which fulfils the criteria for a High Priority Species (in Britain or Wales) in Butterfly Conservation’1(1V(s)-5(e)c0 0)-27WWitiiona eclion aon lo Wale

List 'A'	List 'B'
Hairy Dragonfly (*Brachytron pratense)*	Golden-ringed Dragonfly (*Cordulegaster boltonii)*
Club-tailed Dragonfly (*Gomphus vulgatissimus)*	Black-tailed Skimmer (*Orthetrum cancellatum)*
Downy Emerald (*Cordulia aenea)*	Black Darter (*Sympetrum danae)*
Ruddy Darter (*Sympetrum sanguineum)*	
Keeled Skimmer (*Orthetrum coerulescens)*	

Orthoptera (Grasshoppers and allied insects)

Some species are probably under-recorded in South Wales and others are currently expanding their range. It will therefore be necessary to review the status of some species in the light of new data in the future.

The following should be considered for selection;

- any site which supports a species which is 'Nationally Scarce'.
- any site which supports an assemblage of 7 or more species.
- any site which supports any species in list 'A' of Table 14 (see below).
- sites which support significant populations or assemblages of species in list 'B' of Table 14 (see below). Their presence should also contribute towards the designation of sites which qualify under other guidelines.

'Significance' should be determined by LBAP partnerships in consultation with the appropriate Vice-County recorders.

Table 14. Grasshoppers and allied insects of conservation significance

List 'A'	List 'B'
Great Green Bushcricket (*Tettigonia viridissima)*	Oak Bushcricket (*Meconaema thalassinum)*
Grey Bushcricket (*Platycleis albopunctata)*	Short-winged Conehead (*Conocephalus dorsalis)*
Bog Bushcricket (*Metrioptera brachyptera)*	Speckled Bushcricket (*Leptophytes punctatissima)*
Roesel's Bushcricket (*Metrioptera roeseli)*	Slender Groundhopper (*Tetrix subulata)*
Long-winged Conehead (*Conocephalus discolor)*	Lesser Marsh Grasshopper (*Chorthipus albomarginatus)*
House Cricket (*Acheta domesticus)*	Mottled Grasshopper (*Myrmeleotettix maculates)*
Scaly Cricket (*Pseudomogoplistes squamiger)*	Lesne's Earwig (*Forficula lesnei)*
Cepero's Groundhopper (*Tetrix ceperoi)*	
Tawny Cockroach (*Ectobius pallidus)*	

S7) VASCULAR PLANTS

A great many rare and notable plant species have been recorded at various times, often as casuals or introduced aliens occuring, for example, in the docks area of Barry, Cardiff and Newport or

Primary species	Date class	Status	Total 10km Squares
Eriophorum latifolium (broad-leaved cotton-sedge)	1987-1999	Native	14
Erodium lebelii (sticky stork's bill)	1987-1999	Native	4
Erodium moschatum (musk stork's-bill)	1987-1999	Alien	7
Erophila glabrescens (whitlow grass)	1987-1999	Native	6
Erophila majuscula (hairy whitlow grass)	1987-1999	Native	2
Erysimum cheiranthoides (treacle mustard)	1987-1999	Alien	11
Euphorbia platyphyllos (broad-leaved spurge)	1970-1986	Alien	2
Euphorbia serrulata (upright spurge)	1987-1999	Native	6
Euphrasia arctica x E. confusa	1987-1999	Native	2
Euphrasia confusa x E. nemorosa	1987-1999	Native	12
Euphrasia confusa x E. scottica	1987-1999	Native	5
Euphrasia micrantha (an eyebright)	1987-1999	Native	5
Euphrasia pseudokerneri (an eyebright)	1987-1999	Native	1
Euphrasia rostkoviana subsp. Montana			

Primary species	Date class	Status	Total 10km Squares
Paeonia mascula (peony)	1987-1999	Alien	1
Papaver argemone (prickly poppy)	1987-1999	Alien	2
Papaver hybridum (rough poppy)	1987-1999	Alien	1
Parapholis incurva (curved hard-grass)	1987-1999	Native	1
Parentucellia viscosa (yellow bartsia)	1987-1999	Native	4
Parnassia palustris (grass of Parnassus)	Pre-1970	Native	2
Persicaria minor (small water-pepper)	1987-1999	Native	3
Persicaria mitis (tasteless water-pepper)	1987-1999	Native	1
Petrorhagia nanteuilii (childing pink)	1987-1999	Alien	1
Pilularia globulifera (pillwort)	1987-1999	Native	1
Pimpinella major (greater burnet-saxifrage)	1970-1986	Native	1
Platanthera bifolia (lesser butterfly-orchid)	1987-1999	Native	16
Poa angustifolia (narrow-leaved meadow-grass)	1987-1999	Native	8
Poa bulbosa (bulbous meadow-grass)	1987-1999	Native	2
Polygonatum multiflorum (Solomon's-seal)	1987-1999	Native	12
Polygonatum odoratum (angular Solomon's-seal)	1987-1999	Native	2
Polygonum oxyspermum (Ray's knotgrass)	1987-1999	Native	6
Potamogeton alpinus (red pondweed)	1987-1999	Native	1
Potamogeton coloratus (fen pondweed)	1987-1999	Native	1
Potamogeton gramineus (various leaved pondweed)	1987-1999	Native	1
Potamogeton gramineus x P. lucens	1987-1999	Native	1
Potamogeton gramineus x P. perfoliatus	1987-1999	Native	1
Potamogeton lucens (shining pondweed)	1987-1999	Native	2
Potamogeton lucens x P. perfoliatus	Pre-1970	Native	1
Potamogeton obtusifolius (blunt-leaved pondweed)	1987-1999	Native	6
Potamogeton perfoliatus (perfoliate pondweed)	1987-1999	Native	8
Potamogeton trichoides (hairlike pondweed)	1987-1999	Native	6
Potentilla argentea (hoary cinquefoil)	1987-1999	Native	1
Potentilla neumanniana (spring cinquefoil)	1987-1999	Native	3
Pseudorchis albida (small white orchid)	1987-1999	Native	1
Puccinellia fasciculata (Borrer's saltmarsh-grass)	Pre-1970	Native	2
Puccinellia rupestris (stiff saltmarsh-grass)	1987-1999	Native	6
Pulicaria vulgaris (small fleabane)	Pre-1970	Native	1
Pyrola minor (common winter green)	1987-1999	Native	4
Pyrus cordata (Plymouth pear)	Pre-1970	Native	1
Radiola linoides (allseed)	1987-1999	Native	1
Ranunculus arvensis (corn buttercup)	1987-1999	Alien	1
Ranunculus baudotii (brackish water crowfoot)	1987-1999	Native	13
Ranunculus circinatus (fan leaved water crowfoot)	1987-1999	Native	6
Ranunculus fluitans (river water crowfoot)	1987-1999	Native	8
Ranunculus lingua (greater spearwort)	1987-1999	Native	6
Ranunculus parviflorus (small-flowered buttercup)	1987-1999	Native	10
Ranunculus penicillatus subsp.pseudofl.	1987-1999	Native	8
Ranunculus tripartitus (three-lobed water-crowfoot)	1987-1999	Native	2
Rhynchospora alba (white beak-sedge)	1987-1999	Native	12
Rhynchospora fusca (brown beak-sedge)	Pre-1970	Native	1
Rorippa amphibia (great yellow-cress)	1987-1999	Native	6
Rorippa amphibia x R. sylvestris	1987-1999	Native	1
Rorippa islandica (Northern yellow-cress)	1987-1999	Native	13
Rosa arvensis x R. canina	1987-1999	Native	5
Rosa caesia subsp. Caesia (hairy dog-rose)	1970-1986	Native	2
Rosa canina x R. obtusifolia	1987-1999	Native	3
Rosa canina x R. rubiginosa	1987-1999	Native	1
Rosa canina x R. sherardii	1987-1999	Native	5
Rosa canina x R. tomentosa	1987-1999	Native	4
Rosa micrantha (small-flowered sweet-briar)	1987-1999	Native	11

Primary species	Date class	Status	Total 10km Squares
Spergularia rupicola (rock sea-spurrey)	1987-1999	Native	9
Stellaria nemorum (incl. ssp nemorum) (wood-stitchwort)	1987-1999	Native	7
Stellaria pallida (lesser chickweed)	1987-1999	Native	11
Stellaria palustris (marshy stichwort)	Pre-1970	Native	1
Subularia aquatica (awlwort)	Pre-1970	Native	1
Thalictrum flavum (meadow rue)	1987-1999	Native	8
Thalictrum minus (lesser meadow-rue)	1987-1999	Native	11
Thelypteris palustris (marsh fern)	1987-1999	Native	3

Table 16. Contributory Species from Monmouthshire, Glamorgan and Carmarthenshire

Contributory species	Date class	Status	Total 10km Squares
Agrimonia procera (fragrant agrimony)	1987-1999	Native	34
Alchemilla glabra (a lady's-mantle)	1987-1999	Native	34
Alchemilla xanthochlora (a lady's-mantle)	1987-1999	Native	27
Althea officinalis (marsh-mallow)	1987-1999	Native	15
Anacamptis pyramidalis (pyramidal orchid)	1987-1999	Native	27
Anchusa arvensis (bugloss)	1987-1999	Alien	18
Anthemis cotula (stinking chamomile)	1987-1999	Alien	20
Apium graveolens (wild celery)	1987-1999	Native	23
Apium inundatum (lesser marshwort)	1987-1999	Native	16
Arenaria serpyllifolia subsp.leptoclad. (thyme-lvd sandwort)	1987-1999	Native	36
Asplenium marinum (sea spleenwort)	1987-1999	Native	11
Asplenium trichomanes subsp.trichomanes (mdnhair splnwrt)	1987-1999	Native	17
Atriplex glabriuscula (Babington's orache)	1987-1999	Native	15

Contributory species	Date class	Status	Total 10km Squares
Echium vulgare (viper's bugloss)	1987-1999	Native	36
Eleocharis multicaulis (many-stalked spike-rush)	1987-1999	Native	29
Eleocharis quinqueflora (few-flowered spike-rush)	1987-1999	Native	26
Eleogiton fluitans (floating club-rush)	1987-1999	Native	19
Elytrigia juncea (sand couch)	1987-1999	Native	18
Elytrigia juncea x E. repens	1987-1999	Native	2
Empetrum nigrum (crowberry)	1987-1999	Native	26
Epipactis palustris (marsh helleborine)	1987-1999	Native	23
Equisetum variegatum (variegated horsetail)	1987-1999	Native	12
Erodium maritimum (sea stork's-bill)	1987-1999	Native	13
Eryngium maritimum (sea-holly)	1987-1999	Native	13
Euphorbia amygdaloides (wood spurge)	1987-1999	Native	31
Euphorbia exigua (dwcm 32632710 41 exig	dwcm 32632710 41 exig		

Contributory species	Date class	Status	Total 10km Squares
Lemna gibba (fat duckweed)	1987-1999	Native	11
Lemna trisulca (ivy-leaved duckweed)	1987-1999	Native	18
Lepidium heterophyllum (Smith's pepperwort)	1987-1999	Native	36
Leymus arenarius (lyme-grass)	1987-1999	Native	9
Limonium binervosum agg. (rock sea-lavender)	1987-1999	Native	19
Limonium vulgare (common sea-lavender)	1987-1999	Native	14
Linum bienne (pale flax)	1987-1999	Native	18
Lithospermum officinalis (gromwell)	1987-1999	Native	15
Littorella uniflora (shoreweed)	1987-1999	Native	17
Malva neglecta (dwarf mallow)	1987-1999	Alien	if(3124-5(l)p5(l(o)-1c3 11 af)1-t-17(u1 0 m

Contributory species	Date class	Status	Total 10km Squares
Rorippa microphylla (narrow-fruited watercress)	1987-1999	Native	14
Rorippa microphylla x R. nasturtium-aq.	1987-1999	Native	18
Rosa caesia subsp. glauca (glaucous dog-rose)	1987-1999	Native	14
Ros*a caesia x R. canina* (*R. x dumalis*)	1987-1999	Native	21
Rosa canina x R. stylosa	1987-1999	Native	11
Rosa pimpinellifolia (burnet rose)	1987-1999	Native	19
Rosa stylosa (short-styled field-rose)	1987-1999	Native	17
Rubia peregrina (madder)	1987-1999	Native	23
Rumex hydralopathum (water dock)	1987-1999	Native	29
*Sagina marit*ima (sea pearlwort)	1987-1999	Native	13
Sagina nodosa (knotted pearlwort)	1987-1999	Native	21
Salicornia dolichostachya (long-spiked glasswort)	1987-1999	Native	10
Salicornia ramosissima (purple glasswort)	1987-1999	Native	13
Salix purpurea (purple willow)	1987-1999	Native	16
Salix trandra (almond willow)	1987-1999	Native	17
Salsola kali subsp. kali (prickle saltwort)	1987-1999	Native	12
Salvia verbenaca (wild clary)	1987-1999	Native	8

Sambucus ebulus

Contributory species	Date class	Status	Total 10km Squares
Viola tricolor subsp. curtisii (wild pansy)	1987-1999	Native	10
Viscum album (mistletoe)	1987-1999	Native	27
Vulpia fasciculata (dune fescue)	1987-1999	Native	14
Zannichellia palustris (horned pondweed)	1987-1999	Native	21

S8) FUNGI

The following should be considered for selection:

- all grassland sites suporting 8 or more species of waxcap (*Hygrocybe* spp.)
-

The compilation of lists for the groups S9 and S10 was deemed to be beyond present resources and will have to await further investigation at a later date. In the meantime the guidance found below should be applied, with further information to be sought from published sources.

GLOSSARY OF TERMS AND ABBREVIATIONS

Archaeophyte: A plant that was introduced to our area by man (or arrived naturally from an area in which it was present as an introduction) and became naturalised before AD1500**.**

BTO: British Trust for Ornithology

DAFOR: A description of the distribution of plant species used when carrying out a Phase 1 survey; Dominant, Abundant, Frequent, Occasional, Rare.

DETR: Department for the Environment and Transport

EBCC: European Bird Census Council

Epiphytic: Growing on other plants (usually trees), without deriving or contributing nutritional benefit.

Ericoid: A plant that is a member of the Ericaceae family, e.g. heather.

Fluviomorphology: The flow characteristics of a watercourse, including its related physical features such as riffles & pools, waterfalls, weirs, dams, artificial embankments, meanders and ox-bow lakes, undercut banks, soft cliffs, and sand and shingle bars and beaches.

HAPs: Habitat Action Plans. These are contained within Local Biodiversity Action Plans and describe the current status of priority habitats, setting targets and objectives for the management, restoration and/or creation of the habitat, and proposing the actions necessary to achieve them.

HEGS:

Oligotrophic: A water body containing few available nutrients; usually applied to water bodies or to soil water in peaty or hill areas where the underlying rocks are of low base status.

Phase 1 Survey: A standardised methodology for classifying and mapping of wildlife habitats in Great Britain.

RIGS: Regionally Important Geographical Sites

RSPB: Royal Society for the Protection of Birds

SAPs: Species Action Plans. These are contained within Local Biodiversity Action Plans and set out objectives and targets for the maintenance or enhancement of the populations and range of key species, and the actions necessary to achieve them.

Saproxylic: An organism which is associated with rotting wood. Saproxylic communities encompasses an unusually high proportion of endangered or little known animals, fungi and other life-forms.

SCARABBS: An acronym of Statutory Conservation Agencies and RSPB Annual Breeding Bird Survey

SINC's: Sites of Importance for Nature Conservation. Also known as Wildlife Sites, Sites of Nature Conservation Interest (SNCI's), County Sites, Biological Heritage Sites, County Wildlife Sites and Locally Important Nature Conservation Site.

SOC: Scottish Ornithologists Club

SOTEAG: Shetland Oil Terminal Environmental Advisory Group

SPG: Supplementary Planning Guidance

SSSI: Site of Special Scientific Interest

UK Biodiversity Group: The UK Group which has provided the overall strategic guidance to the UK Biodiversity Action Plan process with representatives from key sectors.

UK BAP: United Kingdom Biodiversity Action Plan. The UK Government's plan for the protection and sustainable use of biodiversity, published in 1994. It represents a commitment to joint action nationwide through the securing and better use of resources.

Unimproved: A habitat where species diversity has not been detrimentally affected by agricultural improvement, such as draining, fertilising, spraying or seeding.

Veteran Trees: Are here defined as trees that are ≥3.7m circumference at 1.3m from base, or individuals that are estimated to be at least 200 years old which exhibit characteristics such as rot hollows, bracket fungi or a large proportion of dead wood.

WAG:

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HABITAT GUIDELINES