

Notes on the Species of Conservation Concern List (SoCC)

1 Summary

A set of criteria were developed to include species on a biodiversity 'Long List' in 1995 to help prioritise the selection of species for action under the Biodiversity Action Plan (BAP) process. The Long List was never complete by its own criteria as it did not include the entire Red Data lists and CITES species etc.

This SoCC list is an attempt to complete the Long List under expanded criteria laid down by the SoCC Steering Group following the publication of the Long List.

The National Biodiversity Network (NBN) Taxon Dictionary model and database, developed at JNCC, was considered to be the best platform in which to carry out this task. This database holds information on a wide range of taxonomic lists, taxon designations, statuses and synonymy. It also includes information on the source for its data and quality.

The relevant lists were compiled by JNCC, and the Natural History Museum (NHM) under contract, and checked by the NHM against the original source material. The lists were imported into the NBN Taxon Dictionary and a filter was applied based on the criteria listed to produce the SoCC list.

2 Background

The UK System for Ranking Biodiversity is an information management mechanism used to gather information on species (mainly species status information). The aim of this system is to provide a method of evaluating concern over threatened species which is shared between the statutory conservation agencies, NGO's and government departments. A common assessment of concern can be used to inform policy decisions, both joint ones e.g. BAP action, priorities for research and survey, and individual e.g. Natural Area priorities.

The mechanism consists of a management structure supported by a database. The Species of Conservation Concern database (formerly the UK Database for Ranking Biodiversity (BURD)) was developed originally to inform the Biodiversity Steering Group on priorities for development of species action plans.

The SoCC list, as an extension of the Long List, and forms the backbone of this database.

2.1 *The Long List*

The Long List was originally an output of the BURD created by Biodiversity Challenge. This was modified by JNCC prior to its publication in the Steering Group in 1995. The list contained 1252 entities, some grouped at a higher than species level. The criteria for inclusion on the Long List are attached as [Annex A](#). The Long List does not claim to be a comprehensive record of Species of Conservation Concern.

2.2 *SoCC*

Following the publication of the Long List, the Steering Group responsible for the management of the BAP species lists has been developing a management system for Species of Conservation Concern and an update mechanism for reviews of BAP species lists. As part of this process it was thought necessary to complete the work of the Long List and expand it to a comprehensive list of Species of Conservation Concern. The criteria for inclusion are similar to the Long List. The criteria for inclusion in SoCC are attached as [Annex B](#).

3 List building

The first stage of compiling the list of Species of Conservation Concern was to list all of the national and international schedule and RDB species under the criteria laid down by the SoCC group following the publication of the Long List.

To facilitate this process the relevant lists and publications were needed in an electronic format. Lists that have been used to compile the SoCC for legislation/status are attached as [Annex C](#). (The full details are on the spreadsheet.)

4 Worksheets.

The SoCC list is presented as a Microsoft Excel 97 workbook with three worksheets. The following table gives a description of each of the worksheets and what the columns are.

NOTE: THE SoCC LIST VERSION 4 IS A CONSULTATION DRAFT AND IS NOT IN THE PUBLIC DOMAIN.

<i>Worksheet</i>	<i>Description</i>
SOCC List	<p>The raw data for the SOCC list. The field are:</p> <p><i>Designated name.</i> The name under which the taxon appears on the checklist.</p> <p><i>Taxon.</i> In some cases the designated name is at the genus or family level. In these cases, the species for this name have been enumerated in this field, e.g. Cetacea is designated under the Habitat and Species Directive Annex 4, and all of its constituent species are given in the <i>taxon</i> field. For a description of how these species have been enumerated see Annex D.</p> <p><i>Common name.</i> The current preferred common name for the taxon.</p> <p><i>Taxon Group.</i> The broad taxonomic group in which the taxon occurs.</p> <p><i>Taxon Group Detail.</i> A more detailed taxonomic group in which the taxon occurs, where the information occurs.</p> <p><i>Designation.</i> The designation that is attached to the taxon.</p> <p><i>Designated date.</i> The date on which the taxon was designated.</p> <p><i>Geographic constraint.</i> If the designation only applies to a certain geographic region, this is given here.</p> <p><i>Status constraint.</i> If the designation is limited to a particular species or population this information is given here.</p> <p><i>Source.</i> The original checklist where the taxon was designated.</p>
Synonyms	<p>Synonymy information for the SOCC list to help identify taxon names. The fields are:</p> <p><i>Taxon.</i> The taxon name as it appears in the SOCC List <i>taxon</i> field.</p> <p><i>Synonym.</i> Any additional names that the taxon may be known by.</p>
Summary	<p>The table worksheet represents the information in SOCC List as a pivot table and shows each taxon against the designation. A number in the table indicates the number of times that designation occurs for the taxon, e.g. <i>Catinella arenaria</i> is designated twice as 'IUCN (pre 1994) - Endangered' (from 'A National Review of non-marine Molluscs (Foster, A.P.)' and 'Red Data Book of Invertebrates').</p> <p>The taxon are arranged with the taxon having the most designations at the top of the table.</p>

Annex A - Long List criteria

Key to biodiversity lists

The following lists are not intended to be comprehensive but to provide an indication of how each species qualifies for inclusion under the selection process. Thus, the information does not provide a full synopsis of all the Directives and Conventions on which species are listed, but is restricted to those relevant to their inclusion under this process.

In order to present the information concisely, abbreviations have been used. The following provides a key to interpret these:

STATUS:

RDB = Red Data Book	} (using original
(RDB 1 = Endangered, RDB 2 = Vulnerable, RDB 3 = Rare)	} IUCN Red List
pRDB = Proposed for British Red Data list	} categories)
CR = Critically endangered	} (using 1994
EN = Endangered	} Red List
VU = Vulnerable	} categories)

INTERNATIONAL THREAT:

2	Species of global conservation concern
2?	Status uncertain - possible 2
1	Unfavourable conservation status in Europe
0	Favourable conservation status in Europe

INTERNATIONAL IMPORTANCE

3	75+% of the world population in the UK
3*	Believed endemic
3*?	Possible endemic
2	50 - 77% of the world population in the UK
1	25 - 49% of the world population in the UK
0	0 - 24% of the world population in the UK

DECLINE

2	50 - 100% decline in numbers/range in GB in last 25 years
1	25 - 49% decline in numbers/range in GB in last 25 years
0	0 - 24% decline in numbers/range in GB in last 25 years
0	0 - 24% increase in numbers/range in GB in last 25 years
-1	25 - 49% increase in numbers/range in GB in last 25 years
-2	50+% increase in numbers/range in GB in last 25 years

LOCALISATION

2	Currently occurs in 1-5 10km squares in GB	2	Currently occurs in 1-3 10km squares in GB
1	Currently occurs in 6-15 10km squares in GB	+	Currently occurs in 9-55 10km squares in GB
0	Currently occurs in 101+ 10km squares in GB	0	currently occurs in 56+ 10km squares in GB

Values for marine species are as follows:

(BR = Breeding numbers)
(W = Winter numbers)
(S = Numbers at sea)

For species occurring in Northern Ireland only, the values apply to that Province only

EC DIRECTIVES

Birds Directive I (native species only)
EC Habitats Directive Annex II and/or IV (native species only)

BERN CONVENTION

Appendices I and II (native species only)

BONN CONVENTION

Appendices I and II (native species only)

UK ACT SHEDS.

1	Schedule 1	} Wildlife and	(a)	Schedule 1	} Wildlife
5	Schedule 5	} Countryside	(b)	Schedule 5	} (Northern Ireland)
8	Schedule 8	} Act 1981	(c)	Schedule 8	} Order 1985
5*	Schedule 5 but protection against sale only				

EXTINCTION Denoted by X

X(C) indicates a species which has gone extinct in the wild but is held in captivity
X(R) indicates a species which has gone extinct in the wild but has been re-introduced

Annex B - SoCC criteria

'Field'	Old Code	New Code	Category	Notes
GLOBAL THREAT	2	2	Of global concern	IUCN 1996 criteria, all except Lower Risk: Least Concern
	2?	2?	Possibly of global concern	
	1	1	Unfavourable in Europe	
	0	0	Favourable in Europe	
INTERNATIONAL IMPORTANCE	3*	4	Believed endemic	Identify geographic basis for assessment
	3?	4?	Possible endemic	
	3	3	>=75% world popn. and/or range in UK	
	2	2	50-74% in UK	
	1	1	25-49% in UK	
	0	0	0-24% in UK	
NATIONAL THREAT	RDB1	RDB1	Endangered	Pre 1994 criteria
	RDB2	RDB2	Vulnerable	Pre 1994 criteria
	RDB3	RDB3	Rare	Pre 1994 criteria
		RDB EX	RDB Extinct	Pre. 1994 criteria
	pRDB			Possible RDB?
		EX	Extinct	1994 IUCN criteria
		EW	Extinct in the wild	1994 IUCN criteria
	CR	CR	Critically endangered	1994 IUCN criteria
	EN	EN	Endangered	1994 IUCN criteria
	VU	VU	Vulnerable	1994 IUCN criteria
		CD	Lower risk: Conservation dependant	1994 IUCN criteria
		NT	Lower risk: Near Threatened	1994 IUCN criteria
DECLINE	2	2	Rate of decline>2% pa	
	1	1	1-2% pa	
	0	0	Rate of increase 0 -<1% pa	
	-1	-1	1-2% pa	
	-2	-2	>2% pa	
LOCALISATION	2	2	Occurs in 1-5	10km sq. in the UK
Terrestrial	1	1	6-15	10km sq. in the UK
	+	+	16-100	10km sq. in the UK
	0	0	>100	10km sq. in the UK
Marine	2	2	1-3	10km sq. in the UK
	1	1	4-8	10km sq. in the UK
	+	+	9-55	10km sq. in the UK
	0	0	55>	10km sq. in the UK

Annex C - List and schedules used for the SoCC list

A summary of the lists and schedules are outlined below.

UK lists

Wildlife and Countryside Act 1981: The species on Schedules 1, 5 and 8 of the Act and its subsequent amendments.

Wildlife (Northern Ireland) Order 1985: The species on Schedules 1, 5 and 8 of the Act.

Red Data Books and Reviews: For published Red Data Books and also the national reviews of some of the species groups the lists were filtered on the pre. 1994 IUCN criteria of Extinct, Endangered, Vulnerable and Rare and the 1994 IUCN criteria Extinct, Extinct in the wild, Critically endangered, Endangered, Vulnerable, Lower risk: Conservation dependant and Lower risk: Near threatened.

Where species have been assigned Nationally Rare (1-15 10km sq. for terrestrial and 1-55 10km sq. for marine) they are also included in the list.

Biodiversity Action Plan lists: As the forerunner and basis to the SoCC list the 'Long List' is included in its entirety. In addition those species chosen as Priority for action in 1998 have been included.

International lists

Also included in the SoCC are species on several international lists which are deemed relevant to the UK. There will always be interpretation on what constitutes a UK relevant species. In compiling this list JNCC have attempted to be inclusive rather than exclusive. There has not been an attempt to assign native or non-native status to these species.

To establish a list of UK relevant species JNCC compiled a filter based on the UK lists above, the British List for birds published by the British Ornithologists Union for 1998 and our an interpretation of a list generated by JNCC for this purpose in 1995. The Bern, Bonn, Birds and Habitats Directive were filtered against this list to establish relevant species for the UK. It is expected that this process will have missed species on those schedules which are still relevant to the UK and included rare visitors, wide ranging and migratory species.

The Global IUCN Red List has only species noted as being found in the UK according to the occurrence lists in the published volumes excluding Overseas Territories. The CITES list was compiled by the Natural History Museum for UK relevant species only.

CITES: Interpretation of the CITES Convention and EC REG 338/97 and 938/97 for UK relevant species only on Annex A, B, C & D.

Bern: The species on Appendix 1 and 2 and all updates listed, filtered against a list of UK relevant species.

Bonn: The species on Appendix 1 and 2 and all updates listed, filtered against a list of UK relevant species.

Birds Directive: The species on Annex 1 and 2 and all updates listed, filtered against a list of UK relevant species.

Habitats and Species Directive: The species on Annex 2 and 4, filtered against a list of UK relevant species.

IUCN Global Red Lists for animals and plants: species noted as being found in the UK according to the occurrence lists in the published volumes excluding Overseas Territories.

Annex D

Including species which have been designated at a higher level

There are a number of pieces of European and international legislation that use a higher taxonomic level for designating species. For example, on Berne the Family Gruidae is listed and all species are included. This presents a number of difficulties in interpreting what species are actually protected in each member state. No taxonomic reference source is given in any of the legislation on which to derive what species are protected and therefore it entirely open to interpretation. For the SOCC List, there are 80 higher level designations and these will add additional species to the list. The following reference sources (and checklists) were used for enumerating the higher level designations in the SOCC List:

Birds	Birds of the Western Palaearctic Vols. I to IX (for the taxonomy) The British Ornithologists Union British List (for the species names)
Plants	List of Vascular Plants of the British Isles, D. H. Kent (1992)
Mammals, Turtles, Cetacea	Margaret Palmers Checklist
Fish	Freshwater Fishes, P. S. Maitland and R.N. Campbell (1992)