

History of the SOCC list based on papers from the Targets Group.

Introduction

The Biodiversity Reporting and Information Group at its inaugural meeting on 28 July 2003 formed the Species & Habitat Review Working Group. This group was tasked by the UK Biodiversity Standing Committee with the review of the Species and Habitat Action Plans. The minutes of the UK Biodiversity Standing Committee of 30 April 2003 state:

4.2 It was proposed that the work currently undertaken by the ad hoc UK Biodiversity Indicators Forum should be included within the work of BRIG. The group should also be given guidance on the approach to the adaptation of the HAP/SAP lists. It was agreed the group should be asked to present options for strategic directions for consideration at the next standing committee meeting.

Action: Secretariat to request BRIG to present options for changes to HAPs and SAPs to the standing committee on 29 September

As the first step in this process, a series of papers that was presented to the Targets Working Group during 2002, are attached to inform the new working group of relevant issues and actions already taken. These papers and cover the formation of the long, middle and short lists or Species of Conservation Concern (SOCC) and priority lists and working being done relating to review of species and habitats. The bulk of the original targets papers are unchanged although Stuart Ball's paper has been modified as explained below.

Ant Maddock
BIS, JNCC

The SoCC List and Review of BAP Priority Species – Update

Paul Rose, 10/5/02

The SoCC List

The SoCC list can be found on the UK BAP website. It aims to be the definitive authority on the designated status of species and the BAP listings. It is consequently best used by the Species Status Assessment project as a source of designated status information and a means of storing the results of applying scientific criteria.

The NBN species dictionary has developed technology for updating species lists and associated information so will be used to deliver the SoCC list and to update information in the list. At present this link has not been made and there is a small version control problem between the NBN species dictionary and SoCC. This will be rectified as soon as possible (by the end of 2002).

Review of BAP Priority Species

Targets Group was given the responsibility to develop a process for BAP priority species list review in 2005. This was never the remit for the SoCC List or its governance Sub-group. To start the task, Targets Group were given a background paper on the history of SoCC and BAP species listings. They decided to take this forward with another paper on the rationale for priority species listing which they accepted and asked to be trialled with the example of vascular plants. This was duly done for the scientific criteria following the SSA recommended procedure and the results resubmitted to Targets Group for consideration. Targets Group asked that the parallel work on birds be considered alongside the plant example in carrying out the next stage of applying the practical more subjective criteria needed to identify priorities for action. This work is about to start and is to be reported back to Targets Group in autumn 2002. The Papers presented to Targets Group and relevant extracts from the associated minutes are included in Annex A.

Conclusions.

The SoCC list is a source of species status information that will be delivered through the NBN species dictionary.

The process for deciding the BAP priority species delivered by SoCC is being developed under Targets Group. It will be a two stage process starting with the scientific application of criteria to available data and knowledge through the Species Status Assessment project. The second stage will be to apply practical criteria of a more subjective nature that are required to ensure action taken is likely to be cost effective and necessary.

A good example of the type of decision needed in stage two relates to alien invasive species. There is no single rule that can ever be applied to decide when a species has been established long enough to warrant conservation action if it becomes threatened. This has to be a subjective decision based on practicality and common sense.

BAP Priority species will be fully reviewed in 2005.

ANNEX A

Targets Group papers and extracts from minutes relating to BAP Priority Species Review.

Annex A

Paper on History of SoCC to December 2000 Targets Sub-Group.

- i. Outline procedure for priority species review to February 2001 Targets Group followed by associated minutes and actions.**
- ii. Proposals for the way forward to May 2001 Targets Group and associated minutes**
- iii. Initial work on higher plants presented to July 2001 Targets Group and associated minutes**
- iv. Materials and conclusions of final paper on first stage review of higher plants presented to December 2001 Targets group and associated (unconfirmed) minutes**
- v. Outline of the JNCC Species Status Assessment Project**

Annex A i Paper on History of SoCC to October 2000 Targets Group.

UK TARGETS GROUP, SUB-GROUP

Species of Conservation Concern (SoCC) – A Dictionary of Conservation Status

Paper by JNCC

1. The attached paper explains how lists of candidate species for inclusion in the BAP were drawn up, and what process exists for maintaining information on species status.
2. It is suggested that this approach could be used as the process for identifying additional candidate species for BAP in the future.
3. The Targets Sub-Group is asked to:
 - A. **consider** whether this process should be used to inform reviews of priority species and their targets;
 - B. **consider** the future proposals for future work by the SoCC Steering Group;
 - C. **agree** recommendations to be made to the Targets Group.

COVER NOTE

SPECIES OF CONSERVATION CONCERN (SOCC) – A DICTIONARY OF CONSERVATION STATUS

Paul Rose, Biodiversity Information Service, JNCC

The following paper gives a brief history of how lists of threatened species were developed in support of the UK BAP. These lists were originally managed through systems known originally as BURD and lately SoCC. The current status of SoCC is described and the relationships with apparently similar initiatives, that SoCC supports or is supported by, are clarified. Finally future work that might be undertaken to improve and maintain SoCC is suggested.

The main conclusions of the paper are:

- i. Version 1 of SOCC will be published before the end of 2000
- ii. The delivery of Version 1 SOCC will be via the National Biodiversity Network Species Dictionary
- iii. Future work on SOCC could continue to be overseen by the existing SOCC Steering Group.
- iv. SOCC should receive species status information from the JNCC 'Species Status Assessment' project that follows on from past Red Data Book work.
- v. The SSG needs to develop review and update processes for SOCC
- vi. SOCC could and probably should inform reviews of priority species and their targets.

SPECIES OF CONSERVATION CONCERN (SOCC) – A DICTIONARY OF CONSERVATION STATUS

Paul Rose, Biodiversity Information Service, JNCC

The Start – BURD and the 1995 Steering Group Report

1. The UK Database for Ranking Biodiversity (BURD) was developed at the start of the UK BAP process to inform the Biodiversity Steering Group about priorities for development of species action plans. Based on knowledge within BURD as of autumn 1995, the Steering Group Report included three lists of species. These were the 'Short List', 'Middle List' and 'Long List' containing 116, just under 300 and about 1250 species respectively.
2. The 'Long List' contained species selected by application of five criteria using the best information available. Each entry to the list also contained reference to the reasons for selection. It was acknowledged that the 'Long List' was not exhaustive at this stage.
3. The 'Middle List' consisted of species in the 'Long List' that were deemed to be globally threatened or rapidly declining in the UK. All of the 'Middle List' species were ear-marked as needing Action Plans within three years.
4. The 'Short List' consisted of 116 species extracted from the 'Middle List' for which Action Plans had already been produced. These are now often referred to as the Tranche 1 Action Plan Species.

The evolution from BURD to SOCC

5. In 1997, the UK Biodiversity Group commissioned a review of the 'Middle List', prior to undertaking further action plan preparation. This review of species qualifying against 'Middle List' criteria resulted in about 100 further species being identified. In addition a few species were found to no longer meet qualification criteria. The final 'Middle List' consisted of about 450 species for which Tranche 2 Action Plans or statements have now been produced
6. The review also recommended that all species selected by 'Long List' criteria are classified as '**Species of Conservation Concern**' and that from within the list of Species of Conservation Concern, all species which qualify under the published 'Short and Middle List' criteria are classified as '**Priority Species**'. All priority species now have published action plans or statements.
7. The BURD database was considerably out of date at the end of the 1997 review so it was agreed that the database should be
 - redesigned to account for future reviews
 - updated in light of the 1997 review
 - more explicit as to the reasons for inclusion of species
 - more exhaustive in its application of the 'Long List' criteria.
 - It was also decided that BURD should be renamed as the Species of Conservation Concern (SOCC) database.

SOCC today

8. Three years on the work commissioned on SOCC is almost complete. Today, SoCC aims to be a definitive Conservation Status Dictionary serving multiple purposes, especially those of the UK BAP. It contains information on the both the designated and ecological status of UK species and provides a mechanism to ensure consistency and easy comparison between the many different species lists needed for conservation and legislative purposes.
9. Currently the Species of Conservation Concern (SoCC) list, as defined by the criteria in the 1995 Steering Group Report, contains approximately 4500 species names with a further 2000 synonyms. This compares with the 1995 'Long List' of approximately 1500 species. Remaining work needed before publication is restricted to enabling taxonomic sorting of the 3000 additions since the 1995 'Long List' and a final check by specialists to identify editorial mistakes. It is envisaged that the remaining work can be completed before the end of 2000.

Governance of SoCC

10. Work on SoCC is overseen by the SoCC Steering Group (SSG). This group comprises representatives from across the UK BAP community and currently reports to the Biodiversity Information Group (BIG). It is recommended that this governance structure remain while work associated with SOCC remains.

The relationship between SOCC and 'Species Status Assessment' projects

11. Update and review of the SoCC list is dependent on having good information, transparently used, through well-defined criteria, for the purpose of assessing the ecological status of species. Good information and input from taxonomically focussed expert groups is essential for this process. The SoCC Steering group is not equipped to undertake this work itself. The SSG will restrict its activities to ensuring that the BAP criteria are applied consistently and that the results are used in support of other BAP work. Taxonomic expertise and good species status information can both be provided by the JNCC Species Status project that has recently commenced as a follow-on from the traditional and well known red-data book work. A reciprocal arrangement whereby SoCC provides input to the Species Status project is also envisaged.

Delivery of SOCC via the NBN Species Dictionary

12. Publication and management of the SoCC list is planned to be through the NBN Taxon Dictionary. This does not remove the responsibility from the SoCC Steering Group, on behalf of the UK BAP, to keep this section of the Taxon Dictionary updated and reviewed. Use of the NBN Taxon Dictionary brings added value by allowing additional contextual information to be displayed alongside the SoCC listing. This information could potentially help subsequent SoCC reviews and allows a more complete input into the species status assessment project. Potentially the Taxon Dictionary provides the interface for the SoCC list to contribute to, and take advantage of, all the other information available through NBN. The Taxon Dictionary will also undergo regular reviews in order that it continues to make most efficient use of modern technology and SOCC will benefit from these reviews as well.

Future Work

13. Publication of the version 1 SOCC list is the highest priority for the SSG and should be complete before future work is started.
14. The SSG has considered its role beyond publication of the version 1 SOCC list and has proposed the following work programme:
 - Develop, agree and implement a review and update process for the SoCC list
 - Find options for long-term support of the SoCC list and associated management, review and update activities
 - Manage the initial relationships between SoCC, the species status assessment project, the NBN Species Dictionary and BAP priority species selection.
 - Give guidance on the actual and potential uses of the SoCC list
 - Suggest options by which SOCC could inform reviews of BAP priority species and their targets.

Annex A ii outline procedure for priority species review to February 2001 Targets Group followed by associated minutes and actions.

An outline procedure for reviewing the coverage of Species and Habitat Action Plans

Paul Rose, JNCC

Background

1. At the December meeting of the Targets Sub-group a paper on the Species of Conservation Concern (SoCC) list (attached as Annex 1) was discussed with respect to the review of gaps in the coverage of Habitat and Species Action Plans (HAPS and SAPS). The outcome of the discussion was that:
 - Review of HAP/SAP gaps should be part of a programmed process, rather than *ad hoc*.
 - HAP criteria, as used previously, are sound.
 - Ideally, review should be done in parallel with the Quinquennial Review, and also linked to the BAP reporting cycle. A five-year cycle was adequate, although there may be merit in having a fast track procedure available in case of urgent interim need.
 - SAP coverage should not be reviewed until at least 2004, and the cycle thereafter should be integrated with the Quinquennial Review.
 - The process of maintaining a database of Species of Conservation Concern (SoCC), which JNCC is responsible for, should continue. This ensures there is comprehensive and consistent information on species status, which can be used to inform decisions on future action.
 - Targets Group will be presented with an outline of a procedure for considering gaps in HAP and SAP coverage.
2. This paper attempts to provide Targets Group with an outline procedure for considering gaps in SAP coverage as agreed at the sub-group meeting. Targets review was a separate topic of discussion at the sub-group meeting and is not considered in this paper. This does not prohibit the process of targets review from being merged with SAP/HAP coverage review should this prove to have benefits in the future.

Habitats

3. The scope of the SoCC list is only species so it cannot inform any review of HAPs. Previous meetings of the SoCC steering group have considered extending the SoCC approach to habitats and concluded that habitat experts were needed to inform any decision. It is possible that SoCC and the procedure used for considering SAP coverage could provide a useful model for habitats and Targets group might wish to consider this at a future meeting.

A possible procedure

4. A procedure for the review of SAP coverage needs to:
 - take account of relevant sources of information
 - ensure appropriate information is stored and reported at the right time and in the correct format for use
 - develop and apply selection criteria
 - identify responsibilities for undertaking and agreeing the work
 - Include a timetable for the work.

Timetable

5. This paper does not address timetable as Targets sub-group agreed a broad timeframe. They suggested that a five yearly review, to coincide with the Quinquennial Review and not to start before 2004, was preferable. They also suggested that provision be made for interim addition or deletion of individual species under exceptional circumstances. Some discussion will be necessary to define the exceptional circumstances. This could be initiated through the SoCC Steering Group and reported to subsequent Targets Group or Sub-group meetings.

Species status assessment

6. The JNCC species status assessment project is anticipated to provide an independent scientific appraisal of species status along the lines of the red data books that have been produced to date. The project will aim to develop criteria that make best use of existing information via NBN while still reflecting the global red list criteria advocated by IUCN. To achieve this the project will also have to co-ordinate a considerable network of species experts. It is likely that the task of species status assessment will become easier once criteria have been developed, NBN is established and experts have become familiar with the change in working practice. The potentially high initial start-up costs might however cause some timetable problems for the review of SAP coverage and this will need to be considered carefully.

SoCC

7. SoCC and its steering group envisage working very closely with NBN to:
 - identify relevant data sources for species status assessment
 - deliver a window on the information for species status assessment and SAP coverage review
 - Store the audit trail behind the decisions taken within the species status and SAP coverage review processes.
8. SoCC will be delivered via the UKBG www site using the model of the NBN species dictionary as a technical solution. The UKBG www site aims to be a window on biodiversity information designed to meet the varied needs of the UK BAP. In short, an application of NBN to suit the requirements of the UK BAP. SoCC would sit snugly within the UKBG www site as the component dealing with species status setting and SAP coverage.

Criteria

9. Criteria are critical to the efficiency of the SAP coverage review procedure. Species status assessment work will need to develop criteria that make best use of UK data sources to reflect IUCN global red list criteria. These criteria might use a wide variety of information products such as:
 - the number of 10km² or 1km² in which the species occurs
 - trends in the number of 10km² or 1km² occupied
 - changes in distribution
 - population size
 - changes in population size
 - indexes of recording frequency
 - vulnerability based on habitat associations, bottlenecks, sensitivity, fragmentation etc
 - forecasts based on current threats and level of protection
 - Priority indexes created from a combined score of global, European, UK, country and local priority lists.
10. Criteria to select the long list were published in the UK BAP and have been rigorously applied to create the SoCC list that is maintained and updated by JNCC, guided by the SoCC Steering Group. Once species status assessment has been undertaken and the results stored within the SoCC list, the SoCC steering group could develop and apply a second tier of criteria for SAP selection/de-selection and present the results to Targets group for further discussion and amendment. This would be similar to the initial work of targets group in selecting the current list of SAP species and would draw on the earlier work of Targets Group wherever possible. These SAP selection/de-selection criteria would be based on expert interpretation of practical issues such as:
 - The chance of success in improving the conservation status of the species
 - availability of funds
 - major factors causing loss and decline
 - The appropriate level for addressing the critical factors. For example, if climate change was the only threat to a species then it would make more sense to intensify our climate change work than to write a species specific Action Plan.

Conclusion

11. Figure 1, illustrates a possible outline procedure for SAP coverage review based on the content of this paper.

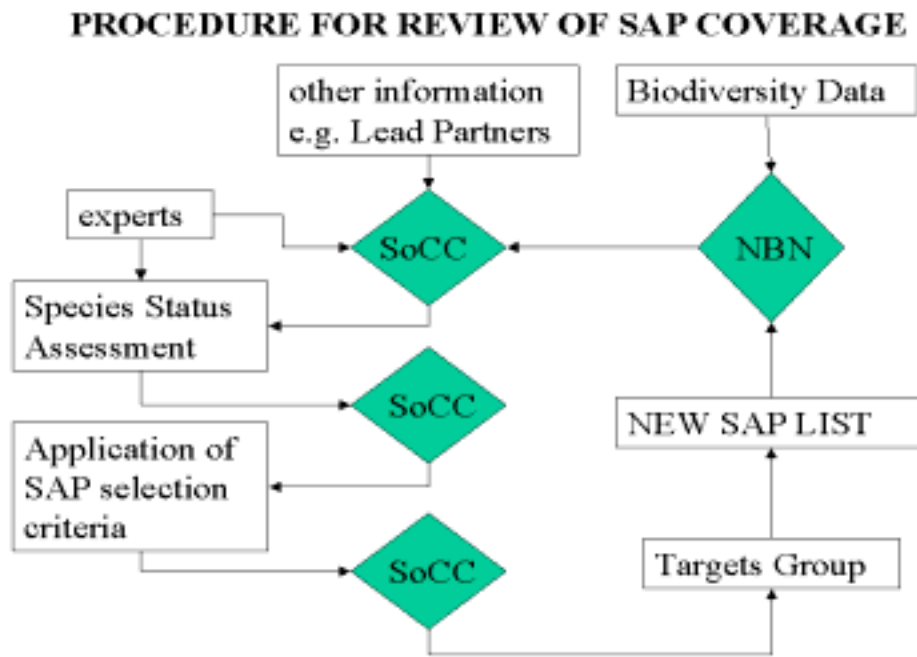


Figure 1. Possible outline procedure for the review of SAP coverage.

Minutes of February 2001 Targets Group Meeting Future review of HAP/SAP coverage (UKTG-01-04)

- 3.3.1 Paul Rose introduced his paper on identifying SAP candidates. There was support for the procedure set out in figure 1 of the paper, with an amendment to show Country Groups included in the decision-making loop. The bureaucracy needs to be kept to a minimum. There was interest in the criteria given in para 9, and agreement that these should be developed further. Information against which the practical criteria (para 10) would be applied may only become evident during plan preparation. Criteria for selection of priority species needs to be distinguished from decision making on conservation approach (i.e. SAP, grouped SAP, conservation statement).
- 3.3.2 In addition, there was the need to develop criteria for fast-tracking species onto the priority list. As well as securing progress for the most urgent cases, this could also help achieve action on some of the lower plant groups. JS offered Plantlife's input to the development of the fast-tracking approach, and agreed to put forward some specific proposals for consideration and illustration of the approach.
- 3.3.3 It was recognised that paucity of data on some taxonomic groups was a constraint to the application of criteria. A parallel process of survey and status assessment is important.
- 3.3.4 Alongside a further paper on procedure and criteria, there was support for bringing to the next meeting of the TG some early proposals for changes to the priority species list. These would include proposals from two categories of species highlighted in the MBR: those that have been confirmed as extinct (although recognising that 100% confirmation is difficult, and that re-introductions may be desirable); and species that have recovered.
- 3.3.5 The review of priority habitats in the future was briefly discussed, and a five year cycle for such proposed. Effective reviews depended on habitat surveillance and monitoring, and all existing opportunities (e.g. Countryside Survey) needed to be explored. **It was agreed** that the priority for the TG was to sign off the current review.

Action 6 Further paper on criteria and procedure for SAP review, and first proposals for priority species changes, to be put forward for the next TG meeting. (ACTION: JNCC/TG Secretariat)

Annex A iii proposals for the way forward to May 2001 Targets Group and associated minutes
UKTG-01-P13 May 2001
UK TARGETS GROUP

SAP Coverage Review

This paper builds on two previous papers. One on the SoCC database was presented to the first meeting of the new Targets sub-group, and another on a process for SAP coverage review was presented to the first meeting of the new Targets Group.

Proposals for pieces of work that can be undertaken now to start the process of SAP coverage review are outlined and suggestions are made as to how the work could be undertaken and signed off.

Targets Group are now asked to:

1. Suggest amendments to, and endorse, the work proposed on SAP coverage review
2. Discuss and confirm deadlines for the pieces of work proposed. This will require balancing the benefits of waiting for elements of the process that are under development (e.g. Species Status Assessment Project) versus urgency.
3. Agree the proposals for identifying, through example, the circumstances under which fast tracking of changes to the priority list might take place.

Review of SAP Coverage – Possible Next Steps

Paul Rose -JNCC

Background

1. At the February 2001 meeting of Targets group a paper presenting an outline procedure for reviewing the coverage of Species Action Plans (SAPs) was discussed and agreed with some minor amendments. The procedure as it currently stands is illustrated in the diagram below.

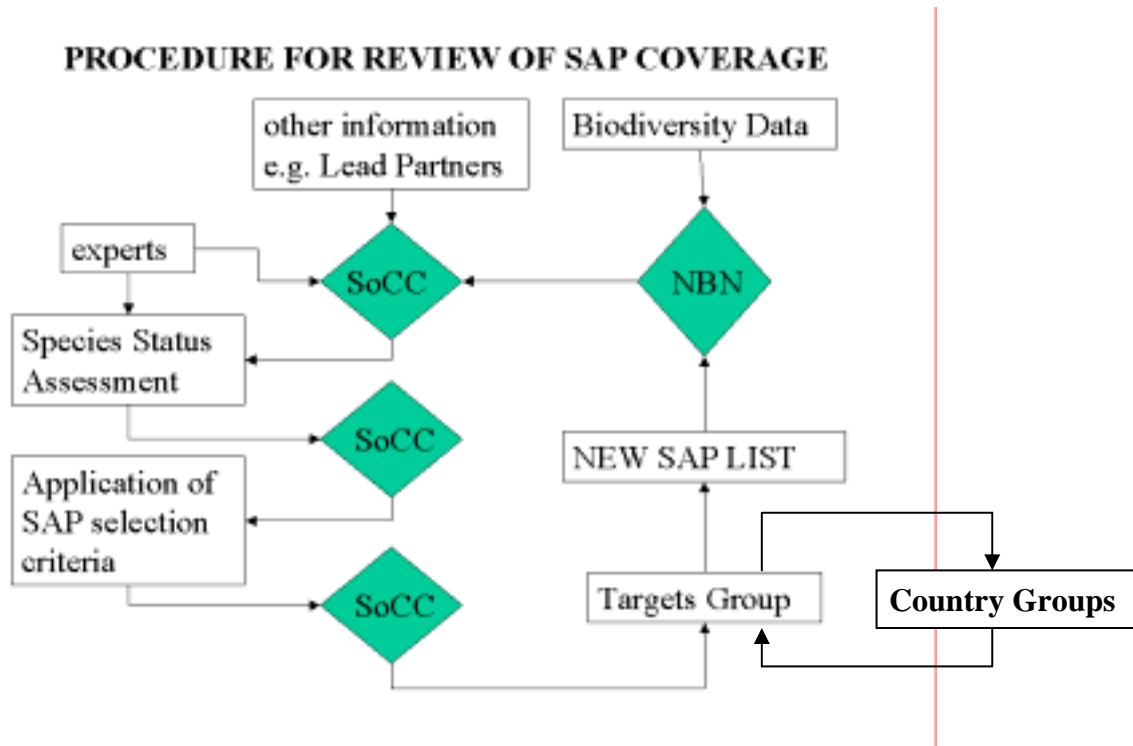


Figure 1. Possible outline procedure for the review of SAP coverage.

2. February 2001 Targets Group also agreed that in order to meet a 2004 deadline for SAP coverage review, work needed to start now on confirming and adding detail to the procedure used. Testing the selection criteria and further developing ideas for special additions or deletions of priority species outside of the agreed timetable were given special emphasis.
3. This paper proposes work that needs to be done now for presentation to subsequent Targets Group meetings and asks Targets Group to comment on and endorse this approach.

JNCC Species Status Assessment Project

4. JNCC is co-ordinating a species status assessment project, steered by an inter-agency group chaired by Bill Heal from the Joint Committee. This project aims to adapt previous red-data book initiatives within an information system that attributes species status through a transparent combination of selection criteria, available information and expertise. The project will capitalise on the many advantages now offered by NBN to increase the quality and quantity of available information and to provide the technologies necessary to deliver and update species status information.
5. At present, draft criteria for the assessing species status have been produced by the project and are attached as Annex 1. The criteria are extremely similar to those suggested in the previous paper on this subject to the February 20001 Targets Group meeting. Acknowledging that the criteria still need to be further developed, that detail needs to be added and that testing is necessary, it still seems sensible to use the species status assessment project as the first cut selection for BAP priorities. It is consequently recommended that Targets Group is consulted on the results of testing these criteria, thereby ensuring their suitability as a first cut for BAP priority species selection.

Selecting and Deselecting BAP priorities

6. The species status assessment project needs to provide Targets Group with an up to date list of species of conservation concern that have been transparently selected using all readily available information and the knowledge of an expert network. Having received this list, Targets Group will need to agree the priority species.
7. It has been suggested that the Species of Conservation Concern Steering Group (SoCC SG) develop options on how priority species might be agreed for Targets Group consideration. It is proposed that the SoCC SG starts this work through a comparison of the existing BAP priority species list with the first results of testing the species status assessment criteria.

Reviewing SAP coverage outside of the agreed timetable

8. It will inevitably be necessary to add or remove priority species outside of the review timetable if their status changes rapidly. There are a number of scenarios that Targets Group needs to identify under which this specific type of emergency review needs to happen. As suggested at the last meeting this might best be undertaken through consideration of some actual examples.

Proposals for a way forward

9. The information on the status of vascular plants is reasonably up to date and accessible as a result of a recent red data book, the recently produced plant atlas, an active expert network and the possibility of NBN access to threatened plant information. This makes vascular plants a good group on which to test the proposed process for priority species review. The following tasks are proposed as a means of further developing the process for review of SAP coverage:
 - 9.1. Test the Species Status Assessment criteria in Annex 1 by adding the detail necessary to apply them to a sample of an appropriate taxonomic group. This will be undertaken by the JNCC Species Status Assessment project in conjunction with the JNCC NBN project.
 - 9.2. Compare the current list of BAP priority higher plants with the list resultant from the species status assessment criteria and present next Targets Group meeting with some recommendations for criteria for priority selection based on the current BAP approach. To be undertaken by the SoCC Steering Group.

- 9.3. Assess discrepancies between the new draft list of priority plants and the existing BAP priority plant list and discuss the differences in terms of modification of the criteria versus valid amendments to the existing priority list. To be undertaken by SoCC Steering Group.
- 9.4. Develop some options for dealing with new and de-selected priority species.
- 9.5. Apply revised criteria to other taxonomic groups as information becomes available and modify criteria accordingly in consultation with targets group and the species status assessment project.

Timetable

- 10. It is envisaged that the way forward proposed in Para 9 above is applied to some higher plants by the end of June and the results brought to the next targets group meeting. There is an optimal balance to be struck between establishing and testing the process for SAP coverage review and ensuring that the Species Status Assessment work can progress fast enough to contribute.

Annex 1

Draft criteria for assigning species conservation status as developed by the JNCC Species Status Assessment (SSA) project

The Species Status Project covers all species 'of conservation concern'. These are currently listed in the SoCC list (Species of Conservation Concern). This list pre-dates the SSA and will be modified as the SSA progresses, so that areas of weakness are strengthened and all species included are assessed to an agreed standard.

The SoCC list is compiled according to a number of criteria: Red List status, international threat/importance, decline, localisation and occurrence on international directives. Thus, Red Lists and legislative lists nest inside the SoCC list. The following diagram illustrates how the various components nest within one another.

Red List categories

Definitions of IUCN threat categories (World Conservation Union 1994) ^(a)

<i>IUCN threat category</i>	<i>Definition of taxon</i>
<i>Extinct (EX)</i>	A taxon is <i>Extinct</i> when there is no reasonable doubt that the last individual has died.
<i>Extinct in the Wild (EW)</i>	A taxon is <i>Extinct in the Wild</i> when it is known to survive only in cultivation, in captivity or as a naturalised population (or populations) well outside the past range. A taxon is presumed <i>Extinct in the Wild</i> when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual) throughout its range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form.
<i>Critically Endangered (CR)</i>	A taxon is <i>Critically Endangered</i> when it is facing an extremely high risk of extinction in the wild in the immediate future, as detailed by any of the criteria A–E. ^(a)
<i>Endangered (EN)</i>	A taxon is <i>Endangered</i> when it is not <i>Critically Endangered</i> but is facing a very high risk of extinction in the wild in the near future, as defined by any of the criteria A–E. ^(a)
<i>Vulnerable (VU)</i>	A taxon is <i>Vulnerable</i> when it is not <i>Critically Endangered</i> or <i>Endangered</i> but is facing a high risk of extinction in the wild in the medium-term future, as defined by any of the criteria A–D. ^(a)

^(a) For full details of criteria see the IUCN website at <http://www.iucn.org/themes/ssc/redlists/ssc-rl-c.htm>

Summary of the thresholds of the IUCN criteria

Criterion	Main thresholds		
	Critically Endangered	Endangered	Vulnerable
A rapid decline	>80% over 10 yrs or 3 generations in past or future	>50% over 10 yrs or 3 generations in past or future	>20% over 10 yrs or 3 generations in past or future
B small range — fragmented, declining or fluctuating	extent of occurrence <100 km ² or area of occupancy <10 km ² + single locality, decline or fluctuation	extent of occurrence <5,000 km ² or area of occupancy <500 km ² + 2–5 localities, decline or fluctuation	extent of occurrence 20,000 km ² or area of occupancy <2,000 km ² + 6–10 localities, decline or fluctuation
C small population and declining	<250 mature individuals, population declining	<2,500 mature individuals, population declining	<10,000 mature individuals, population declining
D1 very small population	<50 mature individuals	<250 mature individuals	<1,000 mature individuals
D2 very small range			<100 km ² or < 5 locations
E probability of extinction	>50% within 5 years	>20% within 20 years	>10% within 100 years

Near Threatened

This category includes:

- All species in 1-15 10 km squares not in the Red List (on the basis that anything this rare is *de facto* at least close to being threatened).
- All species that have declined/are declining severely, but are not yet on the Red List (existing SoCC criteria state a rate of decline of >1% per annum).
- A subset of the species now listed as *Nationally Scarce* that are genuinely rare but not in the Red List or listed as *Near Threatened* (*precise criteria yet to be devised*).

International responsibility

This category includes:

- All species of global concern (i.e. on IUCN global Red Lists) or possibly of global concern.
- All species of unfavourable conservation status in Europe.
- Endemic species.
- Species with >25% world population and/or range estimated to be in UK.

Legislation

This category includes all species listed on:

- Schedules 1, 5 & 8 of the Wildlife & Countryside Act 1981
- EC Birds Directive I (native species only)
- EC Habitats Directive Annex II and/or IV (native species only)
- Bern Convention Appendices I & II (native species only)
- Bonn Convention Appendices I & II (native species only)

Priority species (=‘BAP species’)

These are species for which a national (UK) Action Plan (or in some cases a ‘species statement’) has been written. They correspond to the old ‘short list’ and ‘middle list’ produced by the UK Biodiversity Group. They are species which are (a) globally threatened and (b) rapidly declining in the UK (i.e. by an estimated >50% in the last 25 years).

Other categories and lists

Data Deficient

“A taxon is *Data Deficient* when there is inadequate information to make a direct or indirect assessment of its risk of extinction based on its distribution and/or population status. A taxon in this category may be well studied, and its biology well known, but appropriate data on abundance and/or distribution are lacking. *Data Deficient* is therefore not a category of threat or *Lower Risk*. Listing of taxa in this category indicates that more information is required and acknowledges the possibility that future research will show that a threatened category is appropriate.” (IUCN 1994). The fact that a

species might have a status of *Data Deficient* does not imply that it is consigned to a 'dustbin'. Indeed, if it is listed as *Data Deficient*, new survey work should be a high priority for that species. There is even an argument for including *Data Deficient* species in the SoCC list, though this is not proposed here before the matter has been considered further.

Nationally Scarce

A category of frequency, not threat, applied to any species occurring in 16-100 hectads (10 km squares) throughout GB. Includes the now unused old Invertebrate Site Register categories of:

'Notable A' = 30 or fewer hectads
'Notable B' = 31-100.

This category currently includes some species that will move into *Near Threatened* when the criteria for that category are finalised.

Rare

A category of frequency, not threat, used in old Red Lists but now discontinued. It used to be defined in GB as species occurring in 15 or fewer hectads. The term 'rare' is now used more loosely. Many of the species in the old *Rare* category are now in the *Near Threatened* category.

Local Red Lists

Numerous 'Red Lists' have been produced by many different organisations and individuals covering geographical sub-units of GB/UK: regions, counties, districts and even parishes. These follow widely varying criteria and are not produced to a common standard. The SSA project does not cover or endorse these. However, those involved in conservation practice covering a specific area of GB/UK may wish to use these local lists in determining conservation priorities locally. They should always be viewed in a national and international context.

Nick Hodgetts
Species Advisor
20.12.00

Minutes of May 2001 Targets Group Meeting

5.2 SAP coverage review (UKTG-01-P13)

5.2.1 PR presented his paper updating the group on the intended way forward. The TG endorsed the pilot work proposed for higher plants, requesting the work to be completed by end-June and the results to be reported on at the next meeting. PR would appraise the Group of the approach being taken in the meantime. Some examples of circumstances under which fast-tracking should be looked at were raised (e.g. re-finding species not observed for ten years and with species statements, or dealing with problems on the lower plant lists) but agreement on these should follow from the pilot work. The project would take into account the debate on the relative importance of global rarity and national decline in species assessment.

Action 15 Pilot work on higher plants to be undertaken, for reporting back at next meeting. (ACTION:

**Annex A iv initial work on higher plants presented to July 2001 Targets Group
and associated minutes.**

UKTG-01-P19 July 2001

UK TARGETS GROUP

Review of BAP priority species – initial work on a higher plant pilot

At the May 2001 meeting of targets group a paper presenting a process for review of BAP priority species was presented and JNCC were asked to pilot the process on a group of species. Higher plants were proposed for the pilot species group. Specific reference was made to the relative importance of national versus global rarity and the importance of information on decline.

This paper presents the work that has been possible to date and proposes work necessary to complete the action. It has not proved possible to extract decline information nor has it been possible to provide the IT solution necessary for the transparency and quality assurance needed for proper discussion of the results.

Since the last meeting in May, it has been confirmed, or at least suggested, that the CROW Bill has placed legislative status on the BAP priority species and habitats lists. Targets group is invited to explore this issue in relation to the schedule for completion of the BAP priority species review in 2004/5 and how this relates to timelines relating to the legislative list. There are also likely to be similarities between the work being undertaken by Targets Group and others now dealing with the legislation.

Targets group are also asked to:

- **Consider** and endorse the further work recommended on the higher plants;
- **Discuss** the results of the higher plant example as far as is useful at this stage;
- **Consider** the role of Targets Group in finalising the priority species review on receipt of information from the Species Status Assessment project.

Review of BAP priority species – initial work on a higher plant pilot

Paper by Paul Rose, JNCC

1. Higher plants as a pilot group

- 1.1 The higher plants were chosen as a pilot group for testing the proposed process for BAP priority species review because of the readily available sources of information that had become available since the priority species were first selected. These data sources are the Threatened Plant Database, the 1999 Higher Plant Red Data Book (Wiggington 1999) and the new atlas (Atlas 2000) to be published imminently.
- 1.2 The readily available data sources allow criteria to be applied and manipulated quickly. They also make debate over the selections easier. Because new data is now to hand, we can also expect changes in the priority species selected. These changes will be useful in helping Targets Group develop the process for dealing with the changes.

2. Work undertaken

- 2.1 Since the last meeting it has not been possible to fully interrogate Atlas 2000 nor has it been possible to automate application of criteria to the datasets. This means that species qualifying under decline criteria will be poorly represented at present and that the transparency and quality assurance behind selection is missing. The initial piece of work presented in this paper is, consequently, little more than a consistent application of scientific criteria developed by the species status assessment project. The criteria have been applied to the new Red Data Book and supplemented by some cursory knowledge of the new atlas and threatened plant database.
- 2.2 The results of this early piece of work have been presented to, and discussed by, the Species Status Assessment Steering Group. Differences with the existing BAP priority list were very large and proved to be controversial. It was also impossible to untangle the reasons for the differences without the transparency and quality assurance that an automated IT solution would give.
- 2.3 Possible reasons for the differences might be due to:
 - Starting with a subjectively enhanced list used as the basis of the threatened plant database
 - Modifications to criteria
 - Lack of information on decline from CS2000
 - New information
 - Real changes to status
 - Lack of practical criteria to ameliorate the purely scientific status assessment.
- 2.4 Resources have now been found within JNCC to provide automated access to the relevant datasets and to provide the transparency and quality assurance so critical to productive discussion of results. The delay caused by this resource not being available sooner is regrettable, but I strongly believe that the clarity it will add to results is critically important. The Species Status Assessment Steering Group has requested that JNCC continues with the work on higher plants. The Group is considering the technical resource issue with regard to the review of other taxonomic groups and is looking to provide expert input and critique to the review at all stages.

3. Results

- 3.1 The BAP priority list for higher plants currently consists of 82 taxa. Scientific review of the list, as described above, resulted in removal of 26 species (32%) and addition of 98 species to give a new list of 154 priority taxa. The list almost doubled but this is of course without the second stage of practical consideration by Targets Group that happened first time around.

- 3.2 All 26 species excluded were on the basis of reduced status listing in the Red Data Book. Twelve are now in the 'Vulnerable' category, one below the 'Endangered' category used as the threshold for priority selection, but the rest (14) are given a RDB status even lower than 'Vulnerable'. It is likely that many if not all of the excluded species might qualify when statistics on decline are available.
- 3.3 The 98 species added can be attributed to 3 broad categories:
- Enhanced red data book status
 - Endangered (32 taxa)
 - Critical (17 taxa)
 - Endemic to the UK (30 taxa)
 - International criteria (19 taxa)
- 3.4 It is impossible at present to know if the red data book additions are due to changed status in the new red data book or whether they were removed initially for practical reasons. Planned follow-up work will reveal the answer.
- 3.5 The 30 endemic additions result from dealing with a few groups of species and subspecies equivalently. For example all endemic *Sorbus* taxa are now listed resulting in 8 additions on endemic basis and 4 on red data book status. Previously, only one *Sorbus* taxa had been listed which appeared inconsistent with the treatment of *Limonium* taxa and *Euphrasia* taxa. This is not to say that practical reasons for this difference treatment first time round are not still valid.

4. Role of Targets group

- 4.1 If scientific criteria applied under the umbrella of the Species Status Assessment project can be agreed, the rather crude example of higher plants strongly suggests that it will be necessary to consider the list from a practical perspective and to decide how to deal with any agreed changes.
- 4.2 It is also reasonable to assume that the transparency and quality assurance behind the practical consideration will be as important as it is to the scientific process.

5. Conclusions

- 5.1 Wherever possible, it is essential to provide an IT solution that automates application of criteria to datasets and provides the transparency and quality assurance necessary to allow informed debate of the results. NBN aims to provide this facility in the medium term but in the short-term resources need to be found to undertake this task. JNCC will look to provide an IT solution of this type around the higher plant example and present results to the next targets group meeting.
- 5.2 It is recommended that Targets Group start to consider how it will apply practical considerations to the scientific priority lists that it receives from the Species Status Assessment project. Some aspects of this discussion might be more profitable when the higher plant example has progressed a little further.

Minutes of July 2001 Targets Group Meeting

5.4 SAP coverage review (UKTG-01-P19)

- 5.4.1 An initial assessment of the vascular plant priority species had been made. As noted in the paper, however, there was further work needed to bring quality assurance and transparency to the process, and it was agreed that it would not be a useful exercise to discuss the results generated thus far. No-one identified an immediate urgency for the work to be completed, and the meeting was happy with JNCC delivering the full results of the pilot by the next or subsequent TG meeting. This would be with the help of a technical group involving Plantlife and BRC. It was requested that comments on the application of the criteria were included in the next paper; a comment on endemism as a criterion was made.
- 5.4.2 There was discussion on the reference in the paper to the legislative lists of the CROW Act. It was reinforced that initially the Act sought to underpin the existing BAP priority lists and the processes in hand for their revision, rather than generate any additional bureaucracy of species selection and review at this stage. It was mentioned that in Wales there was interest in adding some emblematic species to the existing BAP priorities within the country. In England, however, English Nature is likely to recommend that the CROW list should be the BAP priority list alone.

Action 13 Pilot work on plants to be completed and reported back at next TG meeting. (ACTION: JNCC led technical group)

Annex A v Final paper on first stage review of higher plants presented to December 2001 Targets group and associated (unconfirmed) minutes.

**TARGETS GROUP COVER NOTE
PRIORITY PLANTS REVIEW – PROGRESS UPDATE**

Paul Rose JNCC

Attached is a paper by Stuart Ball presenting the results of applying the criteria for selecting BAP Priority Species to new and improved vascular plant information.

The list presented in Stuart's original paper is not yet final. Experts have advised us and worked with us on applying the criteria to new sources of information but in this version of the draft most reference to plant species are omitted. Instead the problems and recommendations are presented to give an idea of issues that the BRIG Species and Habitat Review Working Group may have to consider. Outstanding issues include the treatment of micro-species complexes, native species and the inclusion of habitats directive species under the globally threatened criteria.

Biodiversity Action Plan: Review of Criteria.

Stuart Ball, Joint Nature Conservation Committee

Criteria

The following criteria are extracted from UK Biodiversity Group (1998) "Annex 2. Species selection criteria":

Criteria for selecting 'species of conservation concern'

Species which qualify for one or more of the following categories should be considered as *species of conservation concern*:

1. Threatened endemic and other globally threatened species
2. Species where the UK has more than 25% of the world or appropriate biogeographic population
3. Species where numbers or range have declined by more than 25% in the last 25 years
4. In some instances where the species is found in fewer than 15 ten km squares in the UK
5. Species which are listed in the EU Birds or Habitat Directives, the Bern, Bonn or CITES Conventions, or under the Wildlife and Countryside Act 1981 or the Wildlife Order(Northern Ireland)

Criteria for selecting 'priority species'

Species which qualify for one or more of the following categories should be considered as *priority species*:

1. Species which are globally threatened
2. Species which are rapidly declining in the UK, i.e. by more than 50% in the last 25 years

Application of criteria

Globally threatened species

The 2000 IUCN Red Data List (Hilton-Taylor, 2000) lists the plant species occurring in the UK:

Endemic and near endemic species

Compiled from the British Red Data Book (Wigginton, 1999):

Species where the UK has more than 25% of the world or appropriate biogeographic population (taken as Europe in this case) qualify as SoCC.

Species which are considered to be endemic to the UK **AND** are assessed as threatened in the UK (i.e. assessed as Critically Endangered, Endangered or Vulnerable in the Red Data Book) must be "Globally threatened" and are therefore qualify as Priority species.

Species whose range has declined

The preliminary analysis of decline was carried out using Atlas 2000 data aggregated to 10km squares compared to the data used for the original Atlas of the British Flora (Perring & Walters, 1962). "Recent" records for this atlas were collected between 1930 and 1959/60, but there has been some updating of the data set held at BRC for the years immediately afterwards up to 1969. Information on the number of 10km squares in each species was recorded in the period 1930-1969 was therefore supplied by CEH.

The data from the Atlas 2000 project, supplied by CEH contained the year and a "modifier" indicating how that year should be interpreted.

Modifier	Meaning	Number of aggregate records
<none>	Exact year	1,506,757
+	Year onwards	1,302,182
-	Up to year	13,582
C	About	18,905
P	Year of publication	1,392
Total		2,896,818

Years with the "+" modifier were almost all 1970 (190,071) or 1987 (1,007,535). Therefore this exercise is constrained to use the date class of "1987 onwards".

The number of 10km squares in which each native species (aggregating subspecies and varieties with their parent species using the method used in preparing maps for the atlas) were counted, using those records where the year had no modifier or a "+" modifier.

Decline was calculated by comparing the number of 10km squares in which each species was recorded by the two atlas projects. For the purposes of calculating a rate of decline, the time between the two atlases was taken as 40 years, which is the difference between the median year for the two datasets (Chris Preston, pers. com.).

Data was supplied by CEH on which to compare these two atlases. This provided counts of the number of 10km squares in which each species was recorded in each atlas project, but only from those 10km squares which were surveyed in both projects. This restricts the information to 2,789 squares out of the 3,011 for which there was information collected by Atlas 2000.

Calculating a measure of decline

The BAP criteria relate to decline in numbers or range over the last 25 years. Ideally, we would look at the range or numbers of a species in 1976 and compare it with the current position. However, the available data can only be used to calculate decline over a longer, 40 year period.

Preston, Telfer Arnold and Rothery at CEH have developed methods of measuring relative changes in range for the Atlas 2000 publication. They express the number of squares in which each species was found in each of the two surveys as a proportion which is transformed to a logit (i.e. if p is the proportion (where p must be greater than 0 and less than 1) then $\text{logit}(p) = \text{Log}_e(p / (1 - p))$). A linear regression was then fitted between the logit transformed proportions with the earlier survey as predictor variable. From the fitted regression, it is possible to derive, from the number of 10km squares in which a species was observed in the earlier survey, the number of squares one would expect to observe in the later survey. If a species was observed in more squares from 1987 onwards than expected from the regression then it has done better than a notional "average species", if less then it has done worse. The relative performance of each species was quantified by measuring the vertical distance between the point for that species and the regression line (expressed as a standardised residual). However, they state that this method cannot be used to obtain an absolute measure of decline because it is not possible to calibrate the hypothetical "average species" relative to which the changes are measured.

A measure of the change in range between the two atlas projects was therefore calculated simply as the number of squares in which the species was recorded in the Atlas 2000 project divided by the number in which it was recorded in the earlier atlas. If this proportion was greater than 1 then the species has expanded, if less than 1 then it has declined. The measure of decline is therefore:

$$\text{Decline} = \left(\frac{\text{No of 10km squares in Atlas 2000}}{\text{No of 10km squares in 1962 Atlas}} - 1 \right) \times 100\%$$

Threshold for SoCC and Priority species

The criteria for a SoCC species is "declined by more than 25% in the last 25 years" and for a Priority species "declined by more than 50% in the last 25 years", but comparison of the two vascular plant atlases produces a measure of decline over a period of about 40 years. Unfortunately it is not as simple as saying "a decline of 25% in 25 years" is equivalent to 1% / year, therefore take the measured decline between the two atlases, divide by 40 years and see if this is more than 1%!

If a species is declining by 1% per year, then after one year, 99% will remain, but after two years, the amount remaining will be 99% of 99% = 0.99^2 . To generalise, if the annual rate of decline is p , then after a period of n years, the proportion of the original that will remain is $(1 - p)^n$. Thus, if a species declines by 25% in 25 years (i.e. 75% of the original amount remains after 25 years), then the annual rate of decline must be:

$$(1 - p)^{25} = 0.75$$

Solving this for p gives:

$$p = 0.01144$$

If this decline continued for 40 years, then the proportion of the original remaining would be:

$$(1 - p)^{40} = (1 - 0.01144)^{40} = 0.6311$$

Giving a decline of $(1 - 0.6311) = 36.89\%$

Applying the same argument to calculate the annual rate of decline required to observe a decline of 50% in 25 years (= 2.73% / year), and then calculating what would be left after 40 years at this annual rate, gives 32.99% remaining which is a decline of 67.01%.

Therefore the threshold values used for selecting SoCC and Priority species, based on a comparison in the change of range between the two atlases, are 36.89% and 67.01% over 40 years respectively. Appendix 2 lists the species with declines greater than these threshold values.

Species found in fewer than 15 ten km squares in the UK

The most recent data class available in the Atlas 2000 data (i.e. 1987 onwards) was used. Native species (i.e. those flagged as "Native" in the data supplied by CEH) in which the total number of 10km squares from which they were recorded in Great Britain and Northern Ireland was 15 or fewer were selected. The aggregation methods for subspecies and varieties used for the atlas (i.e. records made for subspecies and varieties are included in the count for their parent species) were employed in making this count.

It is unclear whether or not these species qualify as SoCC. The criterion states "In some instances where the species is found in fewer than 15 ten km squares in the UK", but no clarification or guidelines are available on how to decide which instances qualify. Therefore the phrase "In some instances" has been ignored and **all** species found in 15 or fewer 10km squares in the UK from 1987 onwards are considered to qualify as SoCC. This point is raised under "Issues" (see 3.7).

The species which qualify under this criterion are listed in Appendix 3.

Species listed in various legislation, Conventions and Directives

Appendix 1 lists species on the legislation, Conventions and Directives listed in the criteria. It was compiled from the British Red Data Book, Appendix 3 (Wigginton, 1999) and NBN taxon dictionary (for Wildlife Order (NI)). Note that the list includes four sub-species (see Issues). All **species** qualify as SoCC.

Issues

Can taxa other than species qualify for consideration?

The criteria talk of "species" throughout, yet a number of sub-specific taxa have been included in both the current SoCC and Priority lists (true for other groups apart from vascular plants, e.g. Macro-Lepidoptera). If sub-specific taxa can be considered as SoCC and Priority "species", then guidelines are needed indicating the circumstances under which they may be considered. This is particularly necessary when considering the "Globally threatened" and "Threatened endemic" criteria since there are many cases where endemic British sub-species, forms or races have been erected. If these are assessed as "threatened" as part of a Red Listing exercise, then they would seem to qualify as both SoCC and Priority species.

Native species

The analysis of decline and localisation only included species which are flagged as "Native" in the species list, supplied by CEH, on which the Atlas 2000 maps will be based. The expert group consider that there is a feeling amongst botanists in conservation organisations that archaeophytes (ancient introductions which are long established) should be included. For this reason species flagged as "archaeophytes" are included, but listed separately, in Appendices 2 and 4 (no species qualify under the localisation criterion).

Micro-species complexes

This is a particular issue with vascular plants and the complexes (e.g. *Limonium*, *Euphrasia*, *Hieracium*) included in the current SoCC and Priority species are not dealt with consistently. Need some guidelines on how such complexes should be dealt with and then to apply these consistently to micro-species complexes.

Use of Red Data Books to define "Globally threatened" species

It is suggested that "globally threatened" species are those that are either listed in the threatened categories of the IUCN Global red data book or are considered endemic to the UK **AND** are listed in the threatened category of the British red data book. This is dependant on three sources of information

- IUCN Red Data Book
- British Red Data Book
- Listing of British endemic species

Whilst the 2000 IUCN Red Data Book was used (Hilton-Taylor, 2000), the introduction to this work makes it clear that this is based on a reassessment of existing data against the latest IUCN criteria mainly for trees, conifers, carnivorous plants and bryophytes. So far only a very small proportion (<4%) of known plant taxa have been assessed by IUCN. The relevant IUCN specialist groups have an ambitious programme to increase the coverage of plants listed on the IUCN red lists over the next few years. It will be necessary to monitor the results of this work, as they are published, to assess whether further species meet the globally threatened criterion.

Whilst the British Red Data Book is recent (Wigginton, 1999), the majority of the work was done before the completion of the Atlas 2000 survey so it is possible that some species may need reassessment in the light of the new information gathered by this survey - especially species where the results of the Atlas 2000 survey suggest a rapid decline.

Further work needs to be done to establish the importance of British species relative to their global and European populations. The data available to assess the endemic and near endemic status of British species came from the introduction to the Red Data Book (Wigginton, 1999) and, whilst this was the best available at the time, it is unlikely to be of sufficient quality to apply this criterion with confidence. More work is needed in this area and a start has been made by a collaboration between CEH and BSBI.

HSD and "Globally Threatened Species"

According to Ruth Davies (Plantlife), in the initial round selection of Priority species, all species listed on Annex II of the Habitats and Species Directive were regarded as "Globally Threatened" and were,

therefore, listed as Priority species. This is not justified under the criteria for Priority species as they stand since there are many examples of species listed on this Annex which are clearly not threatened (although there may well be other good reasons for to prioritise action relating to them).

It may be sensible to include species listed on the HSD Annexes in the BAP Action Planning process because the UK Government is required to take on these species by the European Legislation. If this is the case, then a new criterion should be added to those for selecting Priority species which explicitly states that species listed on this Annex should be selected.

Quantifying decline

The analysis presented here quantifies decline by looking at the change in the number of 10km squares in which each species occurs in the two atlas projects. The criteria relating to decline specify "decline in numbers or range have declined". Whilst the method presented here is probably adequate as a "first filter" to detect major contractions in range of more widespread species, it is not adequate to detect either decline in numbers in existing populations or decline in range by loss of a proportion of the populations or locations within 10km squares. Both of these processes may result in a considerable reduction in population without reducing the number of 10km squares in which a species is recorded.

It is suggested that species that meet SoCC criteria should be examined in more detail to look for decline in numbers or loss of localities at a finer spatial scale. Information on population size and number of localities is given, in some cases, in the Red Data Book species accounts (Wigginton, 1999) and it would be possible to extract 1km square counts from the Threatened Plant Database.

However, it is difficult to automate this process because the appropriate measures to use depend very much on the ecology of individual species and the type of monitoring that has been carried out. This analysis, therefore, requires input from expert botanists.

Localisation criterion for SoCC

What does "In some instances" mean? I recommend that this phrase should be dropped and any species found in 15 or fewer 10km squares in the UK should qualify as SoCC.

References

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- UK Biodiversity Group, 1998. *Tranche 2 Action Plans. Volume 1 – vertebrates and vascular plants*. English Nature, Peterborough.
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Minutes of December 2001 Targets Group Meeting

4.2 Priority Species Review. Report back on pilot assessment of vascular plant priorities. Paper by JNCC (UKTG-01-P23)

- 4.2.1 PR advised that the analysis has not yet been completed. He listed some of the issues that the paper has raised: microspecies/sub species; definition of 'native, archeophyte'; how we interpret 'decline.' The Group needs to decide how to take forward these issues.
- 4.2.3 RD commented that there are some controversial aspects of the current approach that require the latest results to be treated with caution. These include, matters of scale (for example, a decline may not show up at 10 km² for all species) and the question as to whether using decline in range is too conservative (the BAP criteria use a decline in numbers). PR will continue to refine the analysis using additional data where possible.
- 4.2.4 The chair noted that the paper had raised quite a lot of questions. TG agreed to hold a discussion at a later meeting to look at these questions, the issues defined in Section 5 and broad issues. It is important that a clear framework for reviewing priority lists is in place prior to 2005, if that review is to be successful. It is also important to consider both practical and policy concerns when establishing review criteria.
- 4.2.5 RD suggested some of the plant and bird data be used to develop some of the approaches in the paper as case studies. GW highlighted the need for a fast track process if a species is in trouble e.g. lapwing.

Action 12 The consultation version of the Birds of Conservation Concern document to be circulated to Group members. (ACTION: GW)

Action 13 A short discussion paper to be prepared, for the meeting after next, on the generic issues surrounding the revision of the priority species list based on higher plant, butterfly and bird priorities. (ACTION: PR)

v Species status assessment Project detail

Project information

Project ID - 29

Name - Species status assessment

Strategic theme - Developing common standards for nature conservation and co-ordinating UK approaches

Aim - Bring into operation a single agreed process to assess the conservation status of UK species, ensuring that the process is both efficient and transparent.

Project manager - Deborah Proctor

Allocation holder - Ian McLean

Targets

- Produce Red Lists for lichens and Aculeates (bees, wasps and ants) and disseminate through the JNCC website and as publications
- By December 2003, prepare a summary report assessing the benefits of reviewing and reporting species status at national, regional and European scales

Actions

- Liaise with other relevant initiatives in this area, including the forthcoming review of UK BAP priority species
- Organise a European colloquium on the links between national and European red listings
- Manage Species Status Assessment project via a Steering Group and deliver agreed reviews and information products
- Increase awareness of the Species Status Assessment project via JNCC website, publications and talks