

II. PREAMBLE

1. Application of the guidelines

Any country or region using the IUCN Red List Categories and Criteria for listing species must follow these guidelines if they wish to state that their assessment follows the IUCN system.

2. The regional concept

The word *regional* is used here to indicate any subglobal geographically defined area, such as a continent, country, state, or province.

Within any region there will be taxa with different distribution histories, ranging from those that are indigenous (native to the area), and have been there since pre-human settlement, to those introduced more recently. There may also be breeding and non-breeding taxa. The latter are those that do not reproduce in the region but may still be dependent upon its resources for their survival. There may also be formerly native taxa that are now extinct in the region, but which are still extant in other parts in the world.

3. IUCN Red List Criteria versus Regional Guidelines

All the rules and definitions in the IUCN Red List Categories and Criteria Version 3.1 (IUCN 2001) apply at regional levels, unless otherwise indicated here. Similarly, the ‘Guidelines for using the IUCN Red List Categories and Criteria’ (Standards and Petitions Subcommittee of the IUCN SSC Red List Programme Committee 2003) as well as the *IUCN Guidelines for Re-introductions* (IUCN 1998) also apply at regional levels. Consequently, a careful study of all these documents is highly recommended before application of the regional guidelines, and they should be constantly referred to when using this document. The guidelines for regional application are hereafter referred to as the Guidelines.

4. Scale applicability

Provided that the regional population to be assessed is isolated from conspecific populations outside the region, the IUCN Red List Criteria (IUCN 2001) can be used without modification within any geographically defined area. The extinction risk for such an isolated population is identical to that of an endemic taxon. However, when the criteria are applied to part of a population defined by a geopolitical border, or to a regional population where individuals move to or from other populations beyond the border, the threshold values listed under each criterion may be inappropriate, because the unit being assessed is not the

same as the whole population or subpopulation. As a result, the estimate of extinction risk may be inaccurate. These guidelines present methods for adjusting the results from the first step in the assessment process to obtain a Red List Category that adequately reflects a taxon's risk of extinction within the region.

Although the Guidelines may in principle be applied at any geographical scale, application within very restricted geographical areas is strongly discouraged. The smaller the region, and the more wide-ranging the taxon under consideration, the more often the regional population will interchange individuals with neighbouring populations. Therefore the assessment of extinction risk becomes increasingly unreliable. It is not possible to provide any specific guidance on the precise lower limit for sensible application as this depends on the nature of the region, and especially the barriers to dispersal that exist.

5. Regionally determined applications and modifications

Certain definitions and applications of the Guidelines are left to the discretion of regional Red List authorities. For example, the delimitation of natural range, time limits for regional extinction, and the nature of an initial filter for breeding and/or non-breeding taxa, are left open for the regional Red List authorities to decide. Such regional decisions must be clearly recorded and documented, for example as part of an introductory text to the listings.

6. Taxonomy

Regional Red List authorities are encouraged to follow the same taxonomic checklists as used by the global IUCN Red List (see http://www.redlist.org/info/info_sources_quality.html). For other taxonomic groups or any deviations from the recommended lists, the differences and the taxonomic authorities followed should be specified.

7. Scaling up assessments

Red List assessments from several smaller regions, such as countries on a continent, cannot be combined or scaled-up in any way to provide Red List Categories for the entire larger region. Assessments of extinction risk for the larger region require new evaluations using the pooled data from across the entire region. Data collected from individual smaller regions may be essential for the assessment of the larger region, and are often important for conservation planning.

8. Red List versus priority for conservation action

Assessment of extinction risk and setting conservation priorities are two related but different processes. Assessment of extinction risk, such as the assignment of IUCN Red List Categories, generally precedes the setting of priorities. The purpose of the Red List categorization is to produce a relative estimate of the likelihood of extinction of the taxon. Setting conservation priorities, on the other hand, which normally includes the assessment of extinction risk, also takes into account other factors such as ecological, phylogenetic, historical, or cultural preferences for some taxa over others, as well as the probability of success of conservation actions, availability of funds or personnel to carry out such actions, and legal frameworks for conservation of threatened taxa. In the context of regional risk assessments, a number of additional pieces of information are valuable for setting conservation priorities. For example, it is important to consider not only conditions within the region but also the status of the taxon from a global perspective and the proportion of the global population that occurs within the region. Consequently, it is recommended that any publication that results from a regional assessment process should include at least three measures: (1) the regional Red List Category, (2) the global Red List Category, and (3) an estimate of the proportion (%) of the global population occurring within the region (see section V. Documentation and Publication).

Decisions on how these three variables, as well as other factors, are used for establishing conservation priorities is a matter for the regional authorities to determine. The authorities may also wish to consider other variables in setting priorities, which are to a large degree region-specific and therefore not covered by the Guidelines. However, one particular situation merits special attention. The application of the Red List Criteria, particularly criterion A, may under some circumstances result in a taxon qualifying for listing in a higher category at the global level than the regional level. This may be the case when the regional population is more or less stable but constitutes only a small percentage of the global population, which is experiencing a net decline. Such species should be given particular attention at the regional level because of their significance for global status.

Regional Red List authorities should be aware that the view that a Red List based on the IUCN criteria is not automatically a list of priorities for conservation actions, may conflict with current legislation in some regions.

III. DEFINITIONS

1. Benign introduction

An attempt to establish a taxon, for the purpose of conservation, outside its recorded distribution but within an appropriate habitat and ecogeographical area; a feasible conservation tool only when there is no remaining area left within a taxon's historic range (IUCN 1998).

2. Breeding population

A (sub)population that reproduces within the region, whether this involves the entire reproductive cycle or any essential part of it.

3. Conspecific population

Populations of the same species; here applied to any taxonomic unit at or below the species level.

4. Downgrading and upgrading

The process for adjusting the Red List Category of a regional population according to a decreased or increased risk of extinction; downgrading refers to a reduced extinction risk and upgrading to an increased extinction risk.

5. Endemic taxon

A taxon naturally found in any specific area and nowhere else; this is a relative term in that a taxon can be endemic to a small island, to a country, or to a continent.

6. Global population

Total number of individuals of a taxon. (See 10. Population.)

7. Metapopulation

A collection of subpopulations of a taxon, each occupying a suitable patch of habitat in a landscape of otherwise unsuitable habitat. The survival of the metapopulation is dependent on the rate of local extinctions of occupied patches and the rate of (re-)colonization of empty patches (Levins 1969, Hanski 1999).

8. Natural range

Range of a taxon, excluding any portion that is the result of an introduction to a region or neighbouring region. The delimitation between wild and introduced

populations within a region may be based on a preset year or event, but this decision is left to the regional Red List authority.

9. Not Applicable (NA)

Category for a taxon deemed to be ineligible for assessment at a regional level. A taxon may be NA because it is not a wild population or not within its natural range in the region, or because it is a vagrant to the region. It may also be NA because it occurs at very low numbers in the region (i.e., when the regional Red List authority has decided to use a “filter” to exclude taxa before the assessment procedure) or the taxon may be classified at a lower taxonomic level (e.g., below the level of species or subspecies) than considered eligible by the regional Red List authority. In contrast to other Red List categories, it is not mandatory to use NA for all taxa to which it applies; but is recommended for taxa where its use is informative.

10. Population

This term is used in a specific sense in the IUCN Red List Criteria (IUCN 2001), different from its common biological usage. *Population* is defined as the total number of individuals of the taxon. Within the context of a regional assessment, it may be advisable to use the term *global population* for this. In the Guidelines the term population is used for convenience, when reference is made to a group of individuals of a given taxon that may or may not interchange propagules with other such entities. (See 15. Regional population and 18. Subpopulations.)

11. Propagule

A living entity capable of dispersal and of producing a new mature individual (e.g., a spore, seed, fruit, egg, larva, or part of or an entire individual). Gametes and pollen are not considered propagules in this context.

12. Region

A subglobal geographical area, such as a continent, country, state, or province.

13. Regional assessment

Process for determining the relative extinction risk of a regional population according to the Guidelines.

14. Regionally Extinct (RE)

Category for a taxon when there is no reasonable doubt that the last individual potentially capable of reproduction within the region has died or has disappeared from the wild in the region, or when, if it is a former visiting taxon, the last

individual has died or disappeared in the wild from the region. The setting of any time limit for listing under RE is left to the discretion of the regional Red List authority, but should not normally pre-date 1500 AD.

15. Regional population

The portion of the global population within the area being studied; which may comprise one or more subpopulations.

16. Rescue effect

Process by which immigrating propagules result in a lower extinction risk for the target population.

17. Sink

An area where the local reproduction of a taxon is lower than local mortality. The term is normally used for a subpopulation experiencing immigration from a source where the local reproduction is higher than the local mortality (see Pulliam 1988).

18. Subpopulations

Geographically or otherwise distinct groups in the (global) population between which there is little demographic or genetic exchange (typically one successful migrant individual or gamete per year or less; IUCN 2001); a subpopulation may or may not be restricted to a region.

19. Taxon

A species or infraspecific entity whose extinction risk is being assessed.

20. Vagrant

A taxon that is currently found only occasionally within the boundaries of a region. (See 21. Visitor.)

21. Visitor (also, visiting taxon)

A taxon that does not reproduce within a region but regularly occurs within its boundaries either now or during some period of the last century. Regions have several options on how to decide the boundaries between visitors and vagrants, e.g., using a preset percentage of the global population found in the region or predictability of occurrence.

IV. THE ASSESSMENT

1. Taxa to be assessed

The categorization process should be applied only to wild populations inside their natural range and to populations resulting from benign introductions (IUCN 1998, 2001). Taxa only marginally within the region should also enter the assessment process (unless excluded by an optional filter, see below). But a taxon that occasionally breeds under favourable circumstances in the region but regularly becomes (regionally) extinct should not be considered. Similarly, a taxon that is currently expanding its distributional range outside the region and appears to be in a colonization phase within the region should not be considered for regional assessment until the taxon has reproduced within the region for several years (typically for at least 10 consecutive years).

Taxa formerly considered Regionally Extinct (RE) that naturally re-colonize the region may be assessed after the first year of reproduction. Re-introduced, formerly RE taxa may be assessed as soon as at least a part of the population successfully reproduces without direct support and the offspring are shown to be viable.

Visiting taxa may be assessed against the criteria, but vagrant taxa should NOT be assessed.

The regional Red List authority may decide to apply a filter, e.g., a preset threshold of global or continental population share, to the assessment of breeding and/or visiting taxa. For instance, a region may decide that they will not assess species that occur or have occurred within the last century in the region with less than 1% of the global population. All filters applied must be clearly specified in the supporting documentation.

2. The categories

The IUCN Red List Categories (IUCN 2001) should be used unaltered at regional levels, with three exceptions or adjustments.

1. Taxa extinct within the region but extant in other parts of the world should be classified as *Regionally Extinct* (RE). A taxon is RE when there is no reasonable doubt that the last individual potentially capable of reproduction within the region has died or disappeared from the region or, in the case of a former visiting taxon, individuals no longer visit the region. It is not possible to set any general rules for a time period since the last observation before species are classified as

RE. This will depend on how much effort has been devoted to searches for the taxon, which in turn will vary, both with organism and region. If the regional authority decides to adopt any time frames for RE assessments, these should be clearly specified.

Populations of long-lived individuals that have ceased to reproduce within the region (for example, as a result of a deteriorating environment) should be regarded as potentially capable of reproduction and consequently should not be classified as RE. On the other hand, vagrant individuals of a formerly regionally breeding taxon that reach the region should not be regarded as potentially capable of reproduction.

2. The category of *Extinct in the Wild* (EW) should be assigned only to taxa that are extinct in the wild across their entire natural range, including the region, but that are extant in cultivation, in captivity, or as a naturalized population (or populations) outside the past range. If a taxon is (globally) EW but extant as a naturalized population within the region, the regional population should be treated as being the result of a benign introduction and consequently should be assessed according to the Red List Criteria. The rationale for the latter exception

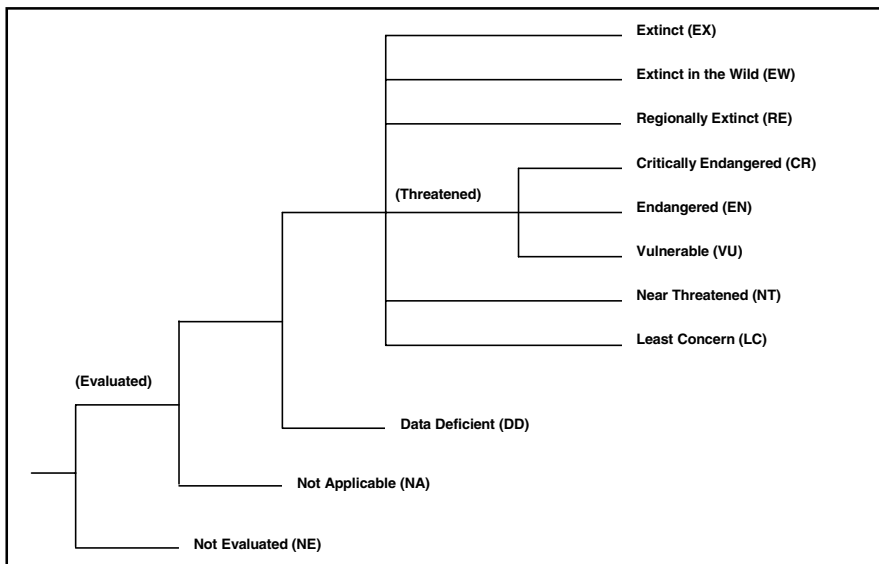


Figure 1. Structure of the categories at regional level.

is that if a taxon is extinct over its entire natural range the presence of the taxon within the region must be considered important to highlight and preserve even though the region is not part of the taxon’s natural range.

3. Taxa not eligible for assessment at the regional level (mainly introduced taxa and vagrants) should be assigned the category *Not Applicable* (NA).

3. The Assessment Procedure

Regional assessments should be carried out in a two-step process that is slightly different for breeding and non-breeding populations (Table 1; Fig. 2).

Breeding populations

In step one, the IUCN Red List Criteria are applied to the regional population of the taxon (as specified by IUCN 2001), resulting in a preliminary categorization. All data used in this initial assessment – such as number of individuals and

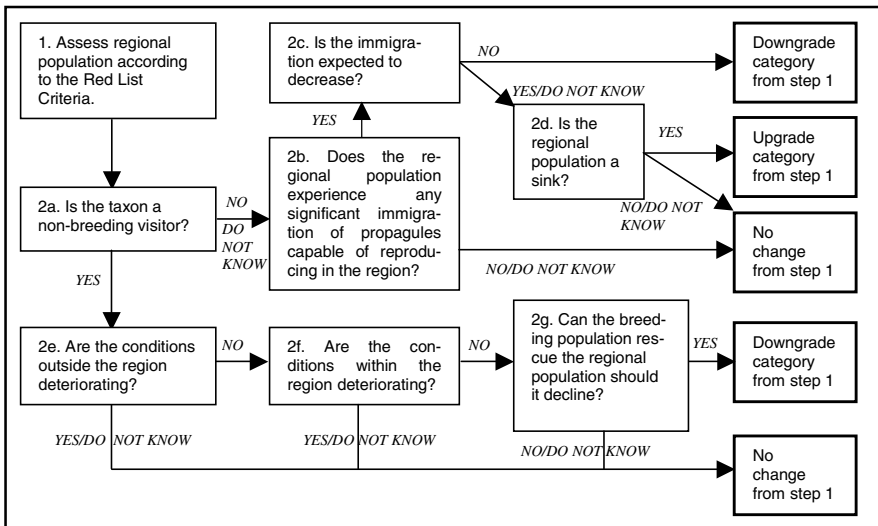


Figure 2. Conceptual scheme of the procedure for assigning an IUCN Red List Category at the regional level. In step 1 all data used should be from the regional population, not the global population. The exception is when evaluating a projected reduction or continued decline of a non-breeding population, in such cases conditions outside the region must be taken into account in step 1. Likewise, breeding populations may be affected by events in, e.g., wintering areas, which must be considered in step 1. See Table 1 for further details on the procedures to follow, especially for the second step.

parameters relating to area, reduction, decline, fluctuations, subpopulations, locations, and fragmentation – should be from the regional population, NOT the global population. However, it must be noted that taxa migrating to other regions during part of the year may be affected by conditions there. It may be essential to take such conditions into account, particularly when applying criteria pertaining to decline and area (A, B and C).

In step two, the existence and status of any conspecific populations outside the region that may affect the risk of extinction within the region should be investigated. If the taxon is endemic to the region or the regional population is isolated, the Red List Category defined by the criteria should be adopted unaltered. If, on the other hand, conspecific populations outside the region are judged to affect the regional extinction risk, the regional Red List Category should be changed to a more appropriate level that reflects the extinction risk as defined by criterion E (IUCN 2001). In most cases, this will mean downgrading the category obtained in step one, because populations within the region may experience a “rescue effect” from populations outside the region (Brown and Kodric-Brown 1977, Hanski and Gyllenberg 1993). In other words, immigration from outside the region will tend to decrease extinction risk within the region.

Normally, such a downgrading will involve a one-step change in category, such as changing the category from Endangered (EN) to Vulnerable (VU) or from VU to Near Threatened (NT). For expanding populations, whose global range barely touches the edge of the region, a downgrading of the category by two or even more steps may be appropriate. Likewise, if the region is very small and not isolated by barriers from surrounding regions, downgrading by two or more steps may be necessary.

Conversely, if the population within the region is a demographic sink (Pulliam 1988) that is unable to sustain itself without immigration from populations outside the region, AND if the extra-regional source is expected to decrease, the extinction risk of the regional population may be underestimated by the criteria. In such exceptional cases, an upgrading of the category may be appropriate. If it is unknown whether or not extra-regional populations influence the extinction risk of the regional population, the category from step one should be kept unaltered.

Visiting populations

The distinction between a visitor and a vagrant should be noted because the latter cannot be assessed.

Table 1. Checklist for judging whether extra-regional populations may affect the extinction risk of the regional population (the question numbers refer to the boxes in Fig. 2).

Questions	Comments
<p>2a. Is the taxon a non-breeding visitor? Is the taxon reproducing within the region, or is it a visitor utilizing resources within the region?</p>	<p>If the answer to the headline question is both yes and no, then there are two distinct subpopulations, with one being a non-reproducing migrant and the other being a reproducing subpopulation. In such cases each subpopulation should be treated as different taxa and should be assessed separately.</p>
<p>2b. Likelihood of propagule migration Are there any conspecific populations outside the region within a distance from which propagules could reach the region? Is the regional population part of a larger metapopulation involving extra-regional patches? Are there any effective barriers preventing dispersal to and from neighbouring populations? Is the taxon capable of long-distance dispersal? Is it known to do so?</p>	<p>If there are no conspecific populations in neighbouring regions or if propagules are not able to disperse to the region, the regional population behaves as an endemic and the category should be left unchanged.</p>
<p>2b. Evidence for the existence of local adaptations Are there any known differences reflecting local adaptations between regional and extra-regional populations (i.e., is it probable that individuals from extra-regional populations are adapted to survive within the region)?</p>	<p>If it is unlikely that individuals from extra-regional populations would be able to survive and reproduce within the region, the category should be left unchanged.</p>
<p>2b. Availability of suitable habitat Are current conditions of habitats and/or other environmental (including climatological) requirements of the taxon in the region such that immigrating propagules are able to establish themselves successfully (i.e., are there habitable areas?), or has the taxon disappeared from the region because conditions were not favourable?</p>	<p>If there is not enough suitable habitat and if current conservation measures are not leading to an improvement in the habitat within the foreseeable future, immigration from outside the region will not decrease extinction risk and the category should be left unchanged.</p>
<p>2c. Status of extra-regional populations How abundant is the taxon in neighbouring regions? Are the populations there stable,</p>	<p>If the taxon is relatively common outside the region and there are no signs of population</p>

Table 1. ...cont'd.

Questions	Comments
<p>increasing, or decreasing? Is it Red Listed in any of those regions? Are there any important threats to those populations? Is it probable that they produce an appreciable amount of emigrants and will continue to do so for the foreseeable future?</p>	<p>decline, and if the taxon is capable of dispersing to the region and there is (or soon will be) available habitat, downgrading the category is appropriate. If the taxon is currently decreasing in neighbouring regions, the “rescue effect” is less likely to occur, so downgrading the category may not be appropriate.</p>
<p>2d. Degree of dependence on extra-regional sources Are extant regional populations self-sustaining, showing a positive reproductive rate over the years, or are they dependent on immigration for long-term survival, i.e., are the regional populations sinks?</p>	<p>If there is evidence that a substantial number of propagules regularly reach the region and the population still has a poor chance of survival, the regional population may be a sink. If so, AND if there are indications that the immigration will soon cease, upgrading the category may be appropriate.</p>
<p>2e. Environmental conditions outside the region Are the habitat or other conditions of the taxon deteriorating, or projected to do so, in the breeding area or in other areas that the taxon utilizes resources?</p>	<p>If yes, the taxon will experience a reduction or continuing decline, either current or projected, which will affect the classification in step one. Consequently, such conditions should not be accounted for once again in the second step, thus leaving the category unchanged.</p>
<p>2f. Environmental conditions inside the region Are the habitat or other conditions of the taxon deteriorating, or projected to do so, within the region?</p>	<p>If yes, the taxon will experience a reduction or continuing decline, either current or projected, which will affect the classification in step one. Consequently, such conditions should not be accounted for once again in the second step, thus leaving the category unchanged.</p>
<p>2g. Plausible rescue effect? Is the taxon globally very sparse, e.g., classified as threatened according to criterion D; or Near Threatened because it almost meets VU D; or globally Not Evaluated but judged to meet criterion D?</p>	<p>If the breeding population is very restricted, the regional population visiting the region cannot expect a rescue, thus leaving the category unchanged. If, on the other hand, the breeding population is quite substantial and the conditions are not deteriorating neither within nor outside the region, the probability of regional extinction is less likely than suggested by the criteria in step one, consequently, a downgrading may be appropriate.</p>

As with breeding populations, data used in the initial step (box 1, Fig. 2) – such as number of individuals and parameters relating to area, reduction, decline, fluctuations, subpopulations, and locations – should be from the regional population, not the global population. To be able to correctly project a population reduction (criteria A3 and A4) or a continued decline (criteria B and C) it may, however, be necessary to examine the conditions outside the region, and particularly in the population’s breeding area. It is also essential to distinguish true population changes and fluctuations from transient changes, which may be due to unsuitable weather or other factors and may result in visitors temporarily favouring other regions. Observed population numbers will expectedly fluctuate more in non-breeding than in breeding populations. This must be carefully considered when evaluating the parameters of reduction, continuing decline and extreme fluctuations.

In the second step, the environmental conditions outside (box 2e, Fig. 2) and inside (box 2f) the region should be examined. Because past or projected population reductions outside the region, as well as deteriorating environmental conditions inside the region, have already been accounted for in the first step, such changes will not lead to any adjustments in the second step. There may be reasons to downgrade the category met in step one only when environmental conditions are stable or improving. Note that taxa which are globally very rare, for example if Red Listed under criterion D, should not be downgraded because a very small global population would not be expected to produce any notable rescue effect within the region.

Adjustments to categories

Adjustments can be made to all the categories except for Extinct (EX), Extinct in the Wild (EW), Regionally Extinct (RE), Data Deficient (DD), Not Evaluated (NE), and Not Applicable (NA), which cannot logically be up- or downgraded.

V. DOCUMENTATION AND PUBLICATION

1. IUCN Red List Criteria and guidelines must be followed in order to facilitate the exchange of information between assessors in different regions and between regional and taxonomic Red List Authorities, it is recommended that all regional (and global) assessment exercises should follow global documentation standards (IUCN 2001 Annexes 2–3). See Annex 1 for shortened examples.
2. The introductory sections should include a list of the taxonomic groups that have been evaluated against the Red List Criteria as well as what taxonomic standards have been followed. It should also clearly report any regionally determined settings, filters, etc.
3. Taxa that have been up- or downgraded in the regional Red List should be clearly indicated, for example by a dot after the category (VU[.]). The category of such a species should be interpreted as being equivalent to the same category that has not been changed (i.e., VU[.]=VU). The dot is comparable to a footnote and is merely to flag the special history of the categorization process. Any up- or downgrading must be fully accounted for in the documentation, where the number of steps up or down also must be stated.
4. A printed regional Red List should present at least the scientific name and the authorship of the taxon, the regional Red List Category (using the English abbreviated forms) and criteria met, the global IUCN Red List Category and Criteria, and the proportion (%) of the global population occurring within the region (Table 2). If the proportion of the global population is unknown, this should be noted with a question mark. The region may also wish to present the proportion (%) of other geographical scales (e.g., a continent), or any other additional data fields; this is up to the regional Red List authority to decide. It should be noted that the taxonomic classification level of a taxon, i.e., whether an entire species or a single subspecies with a more restricted distribution is under consideration, will influence the proportion occurring within a region. If possible, the vernacular name (in the national language) and a short summary of the supporting documentation for each taxon should also be included. Visiting taxa should preferably be listed in a separate section, but if they are included in a list of breeding taxa, it should be clearly indicated that they are visitors.

Taxon name	Breeder Visitor	Regional Red List Category	Global Red List Category	Proportion (%) of Global Population
<i>Aus australis</i> (Linnaeus, 1759) Eastern angel	B	CR D	VU D1	7
<i>Bus borealis</i> Smith, 1954 Northern boxer	V	NT*	–	?
<i>Cus communis</i> (Alvarez, 1814) Common clipper	B	EN A3c; B1ab(iii)+2ab(iii)	NT	15
<i>Dus domesticus</i> Liu, 1888 Native delta	B	NT	–	2
<i>Dus domesticus</i> Liu, 1888 Native delta	V	VU A2bc	–	6

Table 2. Example of a regional Red List, presenting fictive species. The region may wish to present additional information, like proportion at other geographical scales or conditions pertaining to legislation or international conventions. Visiting taxa should preferably be listed in a separate section; if, as in this example, they are included in the same list as the breeding taxa, it should be clearly indicated that they are visitors. The data and rationale behind each listing should be fully documented according to IUCN 2001, Annex 3. Such documentation can easily be presented for example on the World Wide Web.

- The global Red List Category should follow published IUCN Red Lists (for the current *IUCN Red List of Threatened Species* see <http://www.redlist.org>; and for plants also refer to Walter and Gillett 1998). If a globally Red Listed taxon is endemic to the region and the regional assessors have come to a different conclusion about the category than the global assessors, then the appropriate authority on the global Red List should be contacted and the status of the taxon re-examined (contact details are available from <http://www.iucn.org/themes/ssc/sgs/sgs.htm> or contact the Red List Programme Office at redlist@ssc-uk.org). If agreement is reached to change the global assessment, the new global category may be used in the regional Red List even if it will be published before the next update of the global IUCN Red List (updated annually from 2002). If no agreement is reached, the regional authority may submit an appeal based on the Red List Criteria (to redlist@ssc-uk.org) for judgment by the SSC Red List Programme Standards and Petitions Subcommittee (for further details see [18](http://www.iucn.org/themes/

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ssc/redlists/petitions.html). If no conclusion is reached before the finalization of the regional Red List, the category determined by the regional assessment may be used as the regional category, and the IUCN global Red List category should be used as the global category. In all three cases, the issues must be documented under the listing for the taxon concerned.

6. The application of the Red List Criteria, particularly criterion A, may under some circumstances result in a taxon qualifying for listing at the global but not at the regional level (see Preamble, point 8). Such taxa should be included (in the main list or in an annex) in the regional Red List, and their regional category should be denoted as LC. The inclusion of globally Red Listed taxa is important, not the least, in the process of setting priorities for conservation action at the regional level.
7. In addition to a printed Red List, which is normally written in the national language(s), publication on the World Wide Web in English (and the national language) is recommended. The web version could include the full documentation (according to IUCN 2001, Annex 3 and information about up- and downgrading), which could be difficult in the printed version unless it is published as a full Red Data Book. A web version may also include the extensive listing and documentation of taxa assessed as LC. A publication on the web may be a particularly important tool in the process of transferring information from the regional to the global scale (Rodríguez *et al.* 2000).