# **RED LIST ASSESSMENT**

## Questionnaire

(please complete one questionnaire per taxon, extra sheets may be used)

1a. Scientific name (including authority details):

**1b. Synonym/s** (if there has been a taxonomic change in the last 5 years or if widely used):

1c. English Common Name (if known):

1d. Other Common Names (if known and state language):

2a. Order

2b. Family

### 3. Distribution

Describe the range in terms of countries of occurrence, subcountry units (e.g., states, provinces, etc.). For an inland water taxon, record the name/s of lakes, river systems, etc. in which it occurs. For a marine taxon, record names of estuaries, territorial waters, FAO fisheries areas:

Note: A distribution map showing the extent of occurrence MUST be attached.

**3a. Red List Assessment** (Red List assessment using IUCN Red List Categories and Criteria: version 3.1. (IUCN 2001)). Cross (**X**) one of the following categories:

Extinct (EX)	<b>3b. Red List Criteria</b> (For threatened taxa (i.e., those assessed as CR, EN or VU) record which criteria are met (e.g., A2c+3c; B1ab(iii); D) alongside the appropriate Category. For NT taxa,
Extinct in the Wild (EW)	record criteria nearly met):
Critically Endangered (CR)	
Endangered (EN)	
Vulnerable (VU)	
Near Threatened (NT)	
Least Concern (LC)	
Data Deficient (DD)	
Not Evaluated (NE)	

**Note:** If one of the threatened categories is selected (i.e. CR, EN or VU) then **ALL** the criteria, subcriteria and sub-subcriteria met for that category, must be listed in the box provided.

**4. Rationale for the Red List Assessment** (record the reasons why the taxon is assessed as above, including any population or range information used, inferences, assumptions, etc. For NT specify what criteria were nearly met and for DD specify what little information is known. Use additional sheets if necessary):

5. Reason for Change from previous Red List assessment (if the taxon has changed Red List category from a previous assessment, record the reasons for this change (see <u>www.redlist.org</u>)). Indicate with a cross (x) at least one of the following:

Genuine change in status of species	New or better information available
Incorrect information used previously	Taxonomic change affecting the species
Previously incorrect application of the Red	List Criteria
6. Current Population Trend (cross (X) one of Increasing   Increasing   Decreasing   7. Date of Assessment (day/month/year):	the following):
8a. Name/s of the Assessor/s	
8b. Names of the Evaluators - to be filled in a (at least TWO evaluators, and the name of the R	

#### 9. Text documentation

Brief notes (i.e., a short narrative, on the topics below to complement the information entered above or on the Authority Files in Annex 1 (use additional sheets if required).

9a. Taxonomy (any taxonomic notes of relevance - optional):

**9b. Geographic Range** (including mention of important sites, and if known specify the extent of occurrence and area of occupancy):

**9c. Population** (for example, population size, abundance (rare, scarce, common, etc.), number and size of subpopulations if known, number of locations and degree of fragmentation):

9d. Habitat and Ecology (including particulars about breeding ecology if relevant):

9e. Threats (the main threats to the species, and if known, the severity and extent):

**9f. Conservation Actions** (including presence in protected areas and national/international legislation):

**g. Utilization** (Is the taxon utilized in any way, e.g., medicinal uses, food, building material, etc.? Which parts are utilized? Is there a local, national or international trade in the taxon?

**10. Literature References** (cited in full) used for the assessment and documentation:

#### Annex 1. Authority Files For Habitats, Threats and Conservation Actions and Utilization

This annex contains four Authority Files with standard categories to be used for documenting (a) the major habitats a taxon occurs in; (b) the major threats to the taxon (past, present and future); (c) what conservation actions are in place or are required for the taxon; and (d) information about the utilization of the taxon (locally, nationally or internationally). More detailed descriptors of the Authority File terms are being developed, and will be available in due course.

### A. Habitats Authority File (Version 2.1)

This two-tiered habitat classification system is based on a climatic and biogeographic classification using Holdridge's life zones as a basis. The aquatic habitats (inland, marine and artificial) are based primarily on the classification system of wetland types used by the Ramsar Convention (see <u>http://www.ramsar.org/key\_ris\_types.htm</u>). The aquatic habitats are under review, particularly the marine ones, as these are far too simplistic a view of the marine environment. The categories are numbered to indicate their level in the hierarchy e.g., 1. Forest and 1.1 Boreal Forest.

There is a third level to the classification which is based on the Global Land Cover Characterization (GLCC) developed by the US Geological Survey's (USGS) Earth Resources Observation System (EROS) Data Center, the University of Nebraska-Lincoln (UNL) and the Joint Research Centre of the European Commission (see <u>http://edcdaac.usgs.gov/glcc/glcc.html</u>). This third level is not shown here, because without access to the Species Information Service (SIS) database or the GLCC maps, it is impossible for users to accurately record habitats at this level.

In using this classification, assessors are asked to indicate in which habitats their taxon is found. This is done by means of a simple scoring system:

- 1 = Suitable (main or preferred habitat/s, habitat/s containing major subpopulations, habitat/s with high population densities)
- 2 = Moderately suitable (secondary habitat/s, habitat/s containing minor subpopulations, habitat/s with low population densities
- 9 = Undefined (data deficient, possibly suitable or moderately suitable as inferred from the ecology of the taxon)

It is important to note that if a higher level in the hierarchy is scored, this automatically implies that all the habitat types nested below that level are also scored (e.g., scoring Forest, means that all the forest types i.e. 1.1. to 1.9 are scored). This will not be the intention in most cases. Users are therefore encouraged to select the appropriate habitat type from the lowest level in the hierarchy wherever possible.

If 'Other' is selected, the habitat type must be specified. Multiple additions under 'Other' are allowed, although extensive use of this is not encouraged. If the habitat is not known, please indicate this using a score of 9 under category '15. Unknown'.

Habitat Type	Score
1. Forest	
1.1. Boreal	
1.2. Subarctic	
1.3. Subantarctic	
1.4. Temperate	
1.5. Subtropical/Tropical Dry	
1.6. Subtropical/Tropical Moist Lowland	
1.7. Subtropical/Tropical Mangrove	
1.8. Subtropical/Tropical Swamp	
1.9. Subtropical/Tropical Moist Montane	
2. Savanna	
2.1. Dry	
2.2. Moist	
3. Shrubland	
3.1. Subarctic	
3.2. Subantarctic	
3.3. Boreal	
3.4. Temperate	
3.5. Subtropical/Tropical Dry	
3.6. Subtropical/Tropical Moist	
3.7. Subtropical/Tropical High Altitude	
3.8. Mediterranean-type Shrubby Vegetation	
4. Grassland	
4.1. Tundra	
4.2. Subarctic	
4.3. Subantarctic	
4.4. Temperate	
4.5. Subtropical/Tropical Dry Lowland	
4.6. Subtropical/Tropical Seasonally Wet/Flooded Lowland	
4.7. Subtropical/Tropical High Altitude	
5. Wetlands (inland)	
5.1. Permanent Rivers/Streams/Creeks [includes waterfalls]	
5.2. Seasonal/Intermittent/Irregular Rivers/Streams/Creeks	
5.3. Shrub Dominated Wetlands	
5.4. Bogs, Marshes, Swamps, Fens, Peatlands	
5.5. Permanent Freshwater Lakes [over 8 ha]	
5.6. Seasonal/Intermittent Freshwater Lakes [over 8 ha]	
5.7. Permanent Freshwater Marshes/Pools [under 8 ha]	
5.8. Seasonal/Intermittent Freshwater Marshes/Pools [under 8 ha]	
5.9. Freshwater Springs and Oases	
5.10. Tundra Wetlands [includes pools and temporary waters from snowmelt]	

Score: 1 = primary habitat type; 2 = secondary habitat type; 9 = possibly suitable habitat

5.11. Alpine Wetlands [includes temporary waters from snowmelt]	
5.12. Geothermal Wetlands	
5.13. Permanent Inland Deltas	
5.14. Permanent Saline, Brackish or Alkaline Lakes	
5.15. Seasonal/Intermittent Saline, Brackish or Alkaline Lakes and Flats	
5.16. Permanent Saline, Brackish or Alkaline Marshes/Pools	
5.17. Seasonal/Intermittent Saline, Brackish or Alkaline Marshes/Pools	
5.18. Karst and Other Subterranean Hydrological Systems [inland]	
6. Rocky Areas [e.g. inland cliffs, mountain peaks]	
7. Caves and Subterranean Habitats (non-aquatic)	
7.1. Caves	
7.2. Other Subterranean Habitats	
8. Desert	
8.1. Hot	
8.2. Temperate	
8.3. Cold	
9. Sea	
9.1. Open	
9.2. Shallow [usually less than 6 m deep at low tide; includes sea bays and straits]	
9.3. Subtidal Aquatic Beds [kelp beds, sea- grass beds and tropical marine meadows]	
9.4. Coral Reefs	
10. Coastline	
10.1. Rocky Shores [includes rocky offshore islands and sea cliffs]	
10.2. Sand, Shingle or Pebble Shores [includes sand bars, spits, sandy islets, dune systems]	
10.3. Estuarine Waters	
10.4. Intertidal Mud, Sand or Salt Flats	
10.5. Intertidal Marshes [includes salt marshes]	
10.6. Coastal Brackish/Saline Lagoons	
10.7. Coastal Freshwater Lagoons	
10.8. Karst and Other Subterranean Hydrological Systems [marine/coastal]	
11. Artificial - Terrestrial	
11.1. Arable Land	
11.2. Pastureland	
11.3. Plantations	
11.4. Rural Gardens	
11.5. Urban Areas	
11.6. Subtropical/Tropical Heavily Degraded Former Forest	
12. Artificial - Aquatic	
12.1. Water Storage Areas (over 8 ha)	
12.2. Ponds (below 8 ha)	
12.3. Aquaculture Ponds	
12.4. Salt Exploitation Sites	

12.5. Excavations (open)	
12.6. Wastewater Treatment Areas	
12.7. Irrigated Land [includes irrigation channels]	
12.8. Seasonally Flooded Agricultural Land	
12.9. Canals and Drainage Channels, Ditches	
12.10. Karst and Other Subterranean Hydrological Systems [human-made]	
13. Introduced Vegetation	
14. Other	
15. Unknown	

If you have selected "14. Other" for habitat type, please note details here:

## B. Major Threats (Version 2.1)

In using this hierarchical classification of causes of species decline, assessors are asked to indicate the threats that triggered the listing of the taxon concerned. These threats could be in the past and/or present and/or future, using a time frame of three generations or ten years, whichever is longer (not exceeding 100 years in the future) as in the Red List Criteria. Selecting past, present and future for any threat implies that it is ongoing. In this hierarchy, unlike that for the habitats, selection of a higher level threat e.g., 1.1. Agriculture, does not imply that all the threats below this e.g., 1.1.1 Crops to 1.1.7 Freshwater aquaculture, are indicated. It simply indicates that some unspecified form of agriculture is leading to habitat loss or habitat degradation for the taxon concerned. Selection of any threat category lower down the hierarchy automatically implies that the higher levels are indicated, i.e. it is not necessary to indicate all the levels met. For example, selecting threat 1.1.4.1. Nomadic, indicates that nomadic livestock is an agricultural activity (threat 1.1.) that causes habitat loss or degradation (threat 1.). It is very important for users to check the hierarchy above the level indicated to ensure that the correct threat is selected because similar terms (e.g., fire) are used in more than one place in the classification. Multiple threats can be selected as required. If 'Other' is selected, the threat or cause of the decline must be specified. Multiple additions under 'Other' are allowed, although extensive use of this is not encouraged. If no threats to the taxon are known (past and/or present and/or future this should be recorded against threat category 0. To indicate the threats use: Yes or Y or X.

Threat	Past	Present	Future
0. No threats			
1. Habitat loss/degradation (human induced)			
1.1. Agriculture			
1.1.1. Crops			
1.1.1.1. Shifting agriculture			
1.1.1.2. Small-holder farming			
1.1.1.3. Agro-industry farming			
1.1.2. Wood plantations			
1.1.2.1. Small-scale			
1.1.2.2. Large-scale			
1.1.3. Non-timber plantations			
1.1.3.1. Small-scale			
1.1.3.2. Large-scale			
1.1.4. Livestock			
1.1.4.1. Nomadic			
1.1.4.2. Small-holder			
1.1.4.3. Agro-industry			
1.1.5. Abandonment			
1.1.6. Marine aquaculture			
1.1.7. Freshwater aquaculture			
1.1.8. Other			
1.1.9. Unknown			
1.2. Land management of non-agricultural areas			
1.2.1. Abandonment			
1.2.2. Change of management regime			
1.2.3. Other			

1.2.4. Unknown			
1.3. Extraction			
1.3.1. Mining			
1.3.2. Fisheries			
1.3.2.1. Subsistence			
1.3.2.2. Artisinal/small-scale			
1.3.2.3. Large-scale/industrial			
1.3.3. Wood			
1.3.3.1. Small-scale subsistence			
1.3.3.2. Selective logging			
1.3.3.3. Clear-cutting			
-			
1.3.4. Non-woody vegetation collection 1.3.5. Coral removal			
1.3.6. Groundwater extraction			
1.3.7. Other			
1.3.8. Unknown			
1.4. Infrastructure development			
1.4.1. Industry			
1.4.2. Human settlement			ļ
1.4.3. Tourism/recreation			
1.4.4. Transport - land/air			
1.4.5. Transport – water			
1.4.6. Dams			
1.4.7. Telecommunications			
1.4.8. Power lines			
1.4.9. Other			
1.4.10. Unknown			
1.5. Invasive alien species (directly impacting habitat)			
1.6. Change in native species dynamics (directly impacting habitat)			
1.7. Fires			
1.8. Other causes			
1.9. Unknown causes			
2. Invasive alien species (directly affecting the species)			
2.1. Competitors			
2.2. Predators		1	
2.3. Hybridizers			
2.4. Pathogens/parasites			
2.5. Other		1	1
2.6. Unknown			
3. Harvesting [hunting/gathering]			
3.1. Food			

3.1.1. Subsistence use/local trade			
3.1.2. Sub-national/national trade			
3.1.3. Regional/international trade			
3.2. Medicine			
3.2.1. Subsistence use/local trade			
3.2.2. Sub-national/national trade			
3.2.3. Regional/international trade	1		
3.3. Fuel	1		
3.3.1. Subsistence use/local trade			
3.3.2. Sub-national/national trade			
3.3.3. Regional/international trade			
3.4. Materials			
3.4.1. Subsistence use/local trade			
3.4.2. Sub-national/national trade			
3.4.3. Regional/international trade			
3.5. Cultural/scientific/leisure activities			
3.5.1. Subsistence use/local trade			
3.5.2. Sub-national/national trade			
3.5.3. Regional/international trade			
3.6. Other			
3.7. Unknown			
4. Accidental mortality			
4.1. Bycatch			
4.1.1. Fisheries-related			
4.1.1.1. Hooking			
4.1.1.2. Netting			
4.1.1.3. Entanglement			
4.1.1.4. Dynamite			
4.1.1.5. Poisoning			
4.1.2. Terrestrial			
4.1.2.1. Trapping/snaring/netting			
4.1.2.2. Shooting			
4.1.2.3. Poisoning			
4.1.3. Other			 
4.1.4. Unknown			
4.2. Collision			
4.2.1. Pylon and building collision 4.2.2. Vehicle collision			 
4.2.3. Other			
4.2.4. Unknown			
4.3. Other			

		1	
4.4. Unknown			
5. Persecution			
5.1. Pest control			
5.2. Other			
5.3. Unknown			
6. Pollution (affecting habitat and/or species)			
6.1. Atmospheric pollution			
6.1.1. Global warming/oceanic warming			
6.1.2. Acid precipitation			
6.1.3. Ozone hole effects			
6.1.4. Smog			
6.1.5. Other			
6.1.6. Unknown		İ	
6.2. Land pollution			
6.2.1. Agricultural			
6.2.2. Domestic			
6.2.3. Commercial/Industrial			
6.2.4. Other non-agricultural			
6.2.5. Light pollution			
6.2.6. Other			
6.2.7. Unknown			
6.3. Water pollution			
6.3.1. Agricultural			
6.3.2. Domestic			
6.3.3. Commercial/Industrial			
6.3.4. Other non-agricultural			
6.3.5. Thermal pollution			
6.3.6. Oil slicks			 
6.3.7. Sediment			
6.3.8. Sewage			
6.3.9. Solid waste			
6.3.10. Noise pollution			
6.3.11. Other			
6.3.12. Unknown			
6.4. Other			
6.5. Unknown			
7. Natural disasters			
7.1. Drought			
7.2. Storms/flooding			
7.3. Temperature extremes			
7.4. Wildfire			

	1	1	1
7.5. Volcanoes			
7.6. Avalanches/landslides			
7.7. Other			
7.8. Unknown			
8. Changes in native species dynamics			
8.1. Competitors			
8.2. Predators			
8.3. Prey/food base			
8.4. Hybridizers			
8.5. Pathogens/parasites			
8.6. Mutualisms			
8.7. Other			
8.8. Unknown			
9. Intrinsic Factors			
9.1. Limited dispersal			
9.2. Poor recruitment/reproduction/regeneration			
9.3. High juvenile mortality			
9.4. Inbreeding			
9.5. Low densities			
9.6. Skewed sex ratios			
9.7. Slow growth rates			
9.8. Population fluctuations			
9.9. Restricted range			
9.10. Other			
9.11. Unknown			
10. Human disturbance			
10.1. Recreation/tourism			
10.2. Research			
10.3. War/civil unrest			
10.4. Transport			
10.5. Fire			
10.6. Other			
10.7. Unknown			
11. Other			
12. Unknown			

If you have selected "Other" for any of the threats options, please note details here:

## C. Conservation Actions Authority File (Version 1.0)

In using this hierarchical classification of conservation actions, assessors are asked to indicate the conservation actions or measures that are in place and/or that are needed for each taxon. In suggesting what actions are needed, assessors are asked to be realistic and not simply select everything. The selection should be for those actions which are most needed and which could realistically be achieved in approximately the next five years. Selection of a higher level action e.g., 1.2. Legislation, does not mean that all the actions below this e.g., 1.2.1 Development and 1.2.2. Implementation, are indicated. It simply indicates that legislation is either in place or is needed as part of a policy-based action for the taxon concerned. Selection of any action lower down the hierarchy automatically implies that the higher levels are indicated, i.e. it is not necessary to indicate all the levels, just the lowest. For example, selecting action 4.4.2. Establishment, indicates that establishment of a protected area (action 4.4) is one of the habitat and site based actions (action 4.) required for the taxon concerned. Multiple conservation actions can be selected as required. If 'Other' is selected, the conservation action or measure must be specified. Multiple additions under 'Other' are allowed, although extensive use of this is not encouraged. If no conservation actions or measures are in place, this should be recorded, against conservation action 0. Similarly, if no conservation actions are needed, then it is also important to record this against conservation action 0 (both 'In Place' and the 'Needed' columns could be ticked). To indicate the actions use: Yes or Y or X.

Conservation Action	In Place	Needed
0. No conservation actions		
1. Policy-based actions		
1.1. Management plans		
1.1.1. Development		
1.1.2. Implementation		
1.2. Legislation		
1.2.1. Development		
1.2.1.1. International level		
1.2.1.2. National level		
1.2.1.3. Sub-national level		
1.2.2. Implementation		
1.2.2.1. International level		
1.2.2.2. National level		
1.2.2.3. Sub-national level		
1.3. Community management		
1.3.1. Governance		
1.3.2. Resource stewardship		
1.3.3. Livelihood alternatives		
1.4. Other		
2. Communication and Education		
2.1. Formal education		
2.2. Awareness		
2.3. Capacity-building/Training		
2.4. Other		

3. Research actions	
3.1. Taxonomy	
3.2. Population numbers and range	
3.3. Biology and Ecology	
3.4. Habitat status	
3.5. Threats	
3.6. Uses and harvest levels	
3.7. Cultural relevance	
3.8. Conservation measures	
3.9. Trends/Monitoring	
3.10. Other	
4. Habitat and site-based actions	
4.1. Maintenance/Conservation	
4.2. Restoration	
4.3. Corridors	
4.4. Protected areas	
4.4.1. Identification of new protected areas	
4.4.2. Establishment	
4.4.3. Management	
4.4.4. Expansion	
4.5. Community-based initiatives	
4.6. Other	
5. Species-based actions	
5.1. Re-introductions	
5.2. Benign introductions	
5.3. Sustainable use	
5.3.1. Harvest management	
5.3.2. Trade management	
5.4. Recovery management	
5.5. Disease, pathogen, parasite management	
5.6. Limiting population growth	
5.7. Ex situ conservation actions	
5.7.1. Captive breeding/Artificial propagation	
5.7.2. Genome resource bank	
5.8. Other	
6. Other	

If you have ticked "Other" for any of the conservation actions options, please note details here:

## D. Utilization Authority File (Version 1.0)

This Authority File should be filled for any taxon that is utilized locally, nationally or internationally. The purpose or type of use, the parts and proportion of the taxon used and the source of specimens in commercial trade should be indicated on the tables below by means of a cross (**X**) in the appropriate boxes. Text boxes are included for additional information. If a taxon is not utilized this should be recorded below and the remainder of the form left blank.

## Taxon is not used locally, nationally or internationally

What proportion (as a %) of the total population (i.e., global) is utilized? This helps to place the information filled in below into context %

## Purpose/Type of Use

Subsistence (Sub.)	Subsistence use/local trade (generally implies direct use by the harvester/family/local community; includes barter for other locally-produced goods, but not sale for profit)
National (Nat.)	Sub-national/national trade (commercial trade, i.e. involving sale/barter for profit, without crossing international borders)
International (Int.)	Regional/international trade (commercial trade crossing one or more international borders)

Purpose/Type of Use	Sub.	Nat.	Int.
<b>1. Food - human</b> Food and beverages for human consumption/nutrition			
2. Food - animal			
Food and liquids for consumption by domestic/captive animals			
<b>3. Medicine - human and veterinary</b> Materials administered specifically to treat or prevent a specific illness or injury. Items administered as vitamins, tonics etc., should be included under food.			
<b>4. Poisons</b> e.g. pesticides, herbicides, fish poisons			
5. Manufacturing chemicals e.g. solvents, dyes, adhesives, resins, etc. whether for domestic or commercial/industrial use			
6. Other chemicals e.g. incense, perfumes, cosmetics			
7. Fuel Including wood and charcoal production from wood, grasses, etc.			
8. Fibre			

	1	1	1
e.g. for weaving, sewing, rope, paper, thatch, etc.			
9. Construction/structural materials			
e.g. supports, timber, fencing, etc.			
10. Wearing apparel, accessories			
e.g. clothing, footwear, belts, bags, trimmings			
11. Other household goods			
e.g. containers, furnishings, etc. with primarily utilitarian functions, though potentially highly decorated			
12. Handicrafts, jewellery, decorations, curios, etc.			
Finished goods with primarily ornamental/decorative rather than utilitarian functions			
13. Pets/display animals, horticulture			
Includes animals used as pets and for display (e.g. in zoos, circuses); plants used for re-planting for ornamental purposes, including in private gardens and public display (e.g. in botanical gardens)			
14. Research			
Includes specimens used in or as the subject of any type of research (e.g. behavioural, medicine, propagation, disease resistance, etc.			
15. Sport hunting/specimen collecting			
Includes collection and preservation of dead specimens for personal pleasure, e.g. not for research; collection of live specimens should be included under pets/display animals, horticulture			
16. Other			
Please specify in the "Notes" section below			
17. Unknown			

If you have filled in the "other" section for purpose/type of use please put details here:

**Primary forms removed from the wild** Estimated percentage of the total harvest/offtake contributed by each form (indicate with a cross (X))

Primary forms removed from the wild	100%	>75%	51-75%	26-50%	0-25%
1. Whole animal/plant Removal of the whole individual from the wild population					
2. Parts - non-lethal removal Removal of parts without obviously increasing the risk of death or decreasing reproductive ability of the individual, i.e. so that it remains a functional part of the wild population; includes non-reproductive parts shed without interference, e.g. antlers.					
3. Parts - lethal removal Removal of parts resulting in the death and or/reproductive incapacity of the individual and therefore its biological removal from the wild population.					
4. Eggs, fruits, seeds Removal of eggs from gravid females should be included under 'parts' above.					
5. Other Please specify in the "Notes" section below.					
6. Unknown					

If you have filled in the "other" section for primary forms removed from the wild please put details here:

Source of specimens in commercial trade The percentage of the harvest/offtake for commercial trade (i.e. not for subsistence use) that is taken (sourced) from a particular production system (indicate with a cross (X)).

Source of specimens in commercial trade	100%	>75%	51-75%	26-50%	0-25%
1. Wild Specimens taken from natural habitat, with no human intervention in terms of enhancing individual survival or production					
2. Captive breeding/farming Production of offspring in a controlled environment ( <i>ex situ</i> ) either from parents produced in captivity (F1) or from parents taken from the wild but maintained in captivity, where there is little further input from the wild, e.g. essentially a closed cycle production system					
<b>3. Ranching - </b> <i>ex situ</i> Production of saleable specimens from eggs (including within gravid females), juveniles, immature plant specimens removed from the wild and raised ex site prior to commercial sale					
4. Ranching - in situ Specimens maintained within confined areas of wild habitat, with or without other forms of manipulation, e.g. habitat manipulation					
5. Other					

Please specify in the Notes section below			
6. Unknown			

If you have ticked the "other" section for source of specimens please put details here:							

## Offtake/harvest trends

1. Trend in the level of wild offtake/harvest in relation to total wild population numbers over the last five years (indicate with a cross (x))?

Increasing	Stable	Decreasing	Unknown	
2. Trend in the amount of off last five years (indicate with		duced through dom	nestication/cultiva	ation over the
Increasing	Stable	Decreasing	Unknown	
CITES status				
Is the taxon included on one of	of the CITES Ap	pendices (indicate	with a cross ( <b>x</b> ) i	f known):

Is the taxon included on one of the CITES Appendices (indicate with a cross (**x**) it known): Ар

ppendix I	Appendix II	Appendix III	Not Listed	
			I I	

If the listing is annotated for particular products, for particular populations, or there are CITES quotas in place, or recent changes in the listing, etc., these should be recorded here: