CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA



Twenty-sixth meeting of the Animals Committee Geneva (Switzerland), 15-20 March 2012 and Dublin (Ireland), 22-24 March 2012

Periodic Review of animal species included in the CITES Appendices

SPECIES SELECTED FOR REVIEW FROM COP15 (2010) TO COP17 (2016)

- 1. This document has been prepared by the Secretariat.
- 2. At its 25th meeting (Geneva, July 2011), in compliance with Resolution Conf. 14.8 on *Periodic Review of the Appendices*, paragraphs b), c) and d), the Animals Committee, in consultation with the UNEP World Conservation Monitoring Centre, selected 40 animal taxa that could be reviewed from the 15th to the 17th meetings of the Conference of the Parties (2010-2016). The list of taxa to be reviewed is shown in the table below.

Animals species selected for the Periodic Review from CoP15 (2010) to CoP17 (2016)

| Order | Family | Taxon | |
|-----------------|-----------------|----------------------------------|--|
| CLASS MAMMALIA | | | |
| ARTIODACTYLA | Bovidae | Rupicapra pyrenaica ornata | |
| CARNIVORA | Mustelidae | Aonyx capensis microdon | |
| | Phocidae | Monachus tropicalis | |
| | Viverridae | Prionodon pardicolor | |
| CHIROPTERA | Pteropodidae | Pteropus brunneus | |
| | | Pteropus subniger | |
| | | Pteropus tokudae | |
| DASYUROMORPHIA | Dasyuridae | Sminthopsis longicaudata | |
| | Thylacinidae | Thylacinus cynocephalus | |
| DIPROTODONTIA | Macropodidae | Onychogalea lunata | |
| | Potoroidae | Caloprymnus campestris | |
| PERAMELEMORPHIA | Chaeropodidae | Chaeropus ecaudatus | |
| | Thylacomyidae | Macrotis leucura | |
| PRIMATES | Cebidae | Saguinus martinsi | |
| | Cercopithecidae | Semnopithecus dussumieri | |
| | | Semnopithecus entellus | |
| | | Semnopithecus schistaceus | |
| | Cheirogaleidae | Phaner pallescens | |
| | Pitheciidae | Cacajao melanocephalus | |
| CLASS AVES | | | |
| FALCONIFORMES | Accipitridae | Chondrohierax uncinatus wilsonii | |
| | Falconidae | Caracara lutosa | |
| GRUIFORMES | Gruidae | Grus canadensis nesiotes | |
| | | Grus canadensis pulla | |
| PASSERIFORMES | Meliphagidae | Lichenostomus melanops cassidix | |
| PICIFORMES | Picidae | Dryocopus javensis richardsi | |

| PODICIPEDIFORMES | Podicipedidae | Podilymbus gigas | |
|------------------|----------------|--------------------------------|--|
| PSITTACIFORMES | Psittacidae | Cyclopsitta diophthalma coxeni | |
| | | Pionopsitta pileata | |
| | | Psephotus dissimilis | |
| | | Psephotus pulcherrimus | |
| STRIGIFORMES | Strigidae | Ninox novaeseelandiae undulata | |
| | | Sceloglaux albifacies | |
| CLASS REPTILIA | | | |
| CROCODYLIA | Alligatoridae | Caiman crocodilus apaporiensis | |
| RHYNCHOCEPHALIA | Sphenodontidae | Sphenodon punctatus | |
| SAURIA | Gekkonidae | Phelsuma gigas | |
| | Varanidae | Varanus bengalensis | |
| | | Varanus flavescens | |
| SERPENTES | Boidae | Epicrates inornatus | |
| | Bolyeriidae | Bolyeria multocarinata | |
| CLASS INSECTA | | | |
| LEPIDOPTERA | Papilionidae | Papilio hospiton | |
| CLASS BIVALVIA | | | |
| UNIONOIDA | Unionidae | Epioblasma sampsonii | |

- 3. In accordance with paragraph e) of the same Resolution, the Secretariat issued Notification to the Parties No. 2011/038 of 21 September 2011, requesting range States of the taxa concerned to comment within 90 days (i.e. by 20 December 2011) on the need to review the taxa and express their interest in undertaking the reviews.
- 4. At the time of writing the present document (January 2011), the Secretariat had received comments supporting the selection and proposing to conduct periodic reviews from: Australia (for Pteropus brunneus, Sminthopsis longicaudata, Thylacinus cynocephalus, Onychogalea lunata, Caloprymnus campestris, Psephotus dissimilis, Psephotus pulcherrimus, Ninox novaeseelandiae undulate, Chaeropus ecaudatus, Macrotis leucura, Lichenostomus melanops cassidix and Cyclopsitta diophthalma coxeni); Cuba (for Chondrohierax uncinatus wilsonii and Grus canadensis nesiotes); Mexico (for Caracara lutosa see the Annex); and the United States of America (for Pteropus tokudae, Grus canadensis pulla, Epicrates inornatu and Epioblasma sampsonii).

Action required by the Animals Committee

5. As provided in paragraph f) of Resolution Conf. 14.8, the Animals Committee, taking account of the comments from range States, must inform the Standing Committee about the final selection of taxa to be reviewed. For the selected taxa, the Committee could start organizing the reviews and seek information, participation and support from the range States in compliance with paragraph h) of the Resolution.

REVIEW OF THE STATUS OF THE GUADALUPE CARACARA (CARACARA LUTOSA)

1. This document has been prepared by the CITES Scientific Authority of Mexico^{*}.

BACKGROUND

- 2. At its 25th meeting (AC25, Geneva, 2011), the Animals Committee discussed working document AC25 Doc. 15.6 (*Selection of species for review following CoP15*) which presented the possibility of including the Guadalupe caracara (*Caracara lutosa*) in the periodic review.
- 3. As a consequence of the foregoing, the CITES Secretariat sent Notification to the Parties No. 2011/038 (*Periodic review of species included in the CITES Appendices*) which invited volunteers to conduct the periodic reviews of the species selected at AC25. In response to that Notification, Mexico announced that it would undertake the periodic review of *C. lutosa*, currently listed in CITES Appendix II.
- 4. The CITES Scientific Authority of Mexico (CONABIO) contacted Dr Adolfo Navarro and the biologist Alejandro Gordillo of the Zoological Museum of the Faculty of Sciences of the UNAM (Universidad Nacional Autónoma de México), the latter being a specialist in ornithology, to carry out the study "Evaluation of the status of Carcara lutosa and Campephilus imperialis in the CITES Appendices", the project being financed by CONABIO.
- 5. Based on an exhaustive review of the sources of bibliographic information available, any extant information on taxonomy, distribution, habitat, biology, morphology, scale, status and trends of population and habitat, threats, management, utilization and trade (legal and illegal), and conservation of the two species was compiled and summarized. On that basis, supporting statements were drawn up for each species based on the items of information listed in Annex 6 of Resolution Conf. 9.24 (Rev. CoP15).

OUTCOME

- 6. *Caracara lutosa* was formerly endemic to the island of Isla Guadalupe, Baja California (AOU, 1998) where it is now considered extinct (Bent 1961, Dickinson 2003).
- 7. Since 1900, and despite frequent zoological expeditions to the region (e.g. Jehl and Everett 1985, Oberbauer *et al.* 1989, Pyle *et al.* 1994, Sweet *et al.* 2001) not a single specimen has been observed either in the wild or in captivity.
- 8. The species is listed as extinct in Mexico's list of endangered species NOM059-SENMARNAT-2010.
- 9. There is no information on utilization of the species. However, it appears that there used to be considerable commercial interest in its skin, which may have contributed to its disappearance. It should be noted that the disappearance occurred at a time when there was no applicable legislation.
- 10. The species fulfils the definition of "Possibly extinct" given in Annex 5 of Resolution Conf. 9.24 (Rev. CoP15).

CONCLUSIONS AND RECOMMENDATIONS

- 11. Caracara lutosa could be deleted from the CITES Appendices.
- 12. The Animals Committee is invited to take note of the outcome of this review and to propose the deletion of *Caracara lutosa* from the Appendices at the next meeting of the Conference of the Parties (CoP16, 2013).

The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat or the United Nations Environment Programme concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.

1. Taxonomy

- 1.1 Class: Aves
- 1.2 Subclass: Neornithes
- **1.3 Order:** Falconiformes
- **1.4 Family:** Falconidae
- 1.5 Genus, species or subspecies (including author and year): Caracara lutosa Ridgway, 1876a
- **1.6 Scientific synonyms**: *Polyborus lutosus*. Ridgway 1876b, Friedmann 1950. Others are *Polyborus plancus lutosus*, Caracara plancus lutosus, and Caracara lutosus.

1.7 Common names:

Spanish: Carancho de Guadalupe, caracara de Guadalupe, quebrantahuesos, quelele

French: Caracara de Guadalupe

English: Guadalupe caracara

1.8 Reference number in the CITES Identification Manual: A-213.005.009.002

2. Overview

The Guadalupe caracara [*Caracara lutosa* (Ridgway, 1876a)] has been included in CITES Appendix II since 1975. At the 25th meeting of the Animals Committee (Geneva, 2011), it was selected in the periodic review to be conducted between CoP15 (Doha, 2010) and CoP17.

The species was endemic to the island of Guadalupe, having been identified as *Polyborus lutosus* by Ridgway in 1875 based on 20 specimens collected *in situ* and currently placed in the National Museum of Natural History of the United States of America (USNM) (Bent 1961, Dickinson 2003). Banks and Dove (1992) suggested the use of the generic name of *Caracara* and, in 1999, on the basis of morphological characteristics, they proposed that it should be treated as a species, giving it the name *Caracara lutosa*.

Since 1900, and despite frequent zoological expeditions to the region (e.g. Jehl and Everett 1985, Oberbauer *et al.* 1989, Pyle *et al.* 1994, Sweet *et al.* 2001) not a single specimen has been observed either in the wild or in captivity. The species was exterminated from the island of Guadalupe by means of direct hunting and poisoning because it was considered a harmful bird, owing to its carrion-eating habits and because it hunted domestic animals. Additionally it appears that there used to be considerable commercial interest in its skin, which may have contributed to its disappearance. It should be noted that the disappearance occurred at a time when there was no applicable legislation. Currently, there are a few stuffed specimens in museums around the world, such as of those in Chicago, Washington or Tring, but there are none in Mexico (Iñigo-Elías 2000). The species is listed as extinct in Mexico's list of endangered species NOM059-SENMARNAT-2010, entitled "Environmental protection – Native species of wild fauna and flora of Mexico – Categories of risk and specifications for inclusion, exclusion and change – List of endangered species" [*Protección ambiental-Especies nativas de México de flora y fauna silvestres-Categorías de riesgo y especificaciones para su inclusión, exclusión o cambio-Lista de species en riesgo*], as well as in the Red List of the International Union for Conservation of Nature (IUCN) (BirdLife International 2008, DOF 2010).

3. Species characteristics

3.1 Distribution

This species was formerly endemic to the island of Guadalupe, located 217 km west of the Baja California peninsula in Mexico (AOU, 1998), where it is now considered extinct (Bent 1961, Dickinson 2003).

3.2 Habitat

According to the few data published about the species in its natural environment, the Guadalupe caracara frequented low-lying land, valleys and plateaux, primarily those with cover of bushes and trees, and also the coastline and pools of either brackish or fresh waster (see Abbott 1933). The main habitat on the island comprised bushy scrubland at lower levels and trees higher up, specifically cypresses (*Cupressus guadalupensis*), pines (*Pinus radiata* var. *Binata*), island oaks (*Quercus tomentella*) and palms (*Erythea edulis*) (Howell and Cade 1954).

3.3 Biological characteristics

The diet of the species consisted mainly of carrion, although it would occasionally eat birds that were already dying, insects and fish (Bent 1961, Iñigo-Elías 2000). Furthermore, when the first settlers reached the island they brought goats as livestock, and the young offspring also became part of the diet of the caracara (Iñigo-Elías, 2000). The Guadalupe caracara utilized the hollows between rocks and trees to build its nests, although it is also known that it nested in the forks of cacti and shrubs (Bryant 1887, Bent 1961, Iñigo-Elías 2000). It is known that it laid one or two eggs a year and that these were short and oval, ranging from white to a light earthy colour, with reddish coffee-coloured markings on the shell (Iñigo-Elías 2000).

3.4 Morphological characteristics

The Guadalupe caracara closely resembled the crested caracara (*Caracara cheriway*). It was of a dark coffee colour over the whole body, with white cheeks and throat. In other parts of its plumage, it had feathers with dark coffee-coloured to white transversal bands. It had a large head, with a small crest and a featherless face. The skin of the face was chrome yellow in colour and the iris of the eye light coffee-coloured. The beak was short and thick, light lead blue in colour. It had a long tail and long legs, with strong talons and pale yellow tarsi (Friedmann 1950, lñigo-Elías 2000). It was 60 cm in length and had a wingspan of 132 cm. There was no sexual dimorphism in the species, although among the specimens that were measured and utilized by Ridgway (Friedmann 1950) to describe the species, the males were smaller than the females. In males, average length was 393.3 mm, neck 265.7 mm and tarsi 89.3; in females, average length was 407.5 mm, neck 272.6 mm and tarsi 88.5 mm.

3.5 Role of the species in its ecosystem

The caracara played an essential biological role in its ecosystem, as a scavenger (Bent 1961, Iñigo-Elías 2000). Its diet of carrion determined the role it played within the food chain, as it removed the remains of other species that had died in the wild, thereby preventing the spread of disease among other wild animals.

4. Status and trends

4.1 Habitat trends

The original vegetation of the island has now almost entirely disappeared, and the plants that remain are some introduced grasses and some scrubland plants. The greatest part of the original vegetation succumbed to the continuous degradation caused by the introduction of free-roaming goats and their subsequent uncontrolled reproduction (lñigo-Elías 2000). This trend was probably worsened by scientific collectors (Howell and Cade 1954).

4.2 Population size

The size of the population before the anthropogenic changes on the island is not known. The reports of Dr. Edward Palmer (who discovered the species) are not conclusive, as they state that, by 1875, the

species was still abundant throughout the island, whereas it is reported elsewhere that, for some reason, it was already close to extinction [Ridgway (1876a)].

Subsequent reports indicate that population numbers of the Guadalupe caracara never exceeded a dozen individuals on the island, suggesting that its rate of reproduction was extremely low (Abbott 1933). According to the final report on the species in 1900, the population dwindled rapidly to extinction (Abbott 1933, Bent 1961).

4.3 Population structure

No published information is known on the population structure.

4.4 Population trends

The species was discovered by Dr. Edward Palmer in 1875. The birds were called "queleles" by the inhabitants of the island, on which at the time they were abundant.

It appears that the islanders, observing that the caracaras attacked the goat kids, which were not defended by their mothers, decided to control the population of the caracara by means of poison and firearms, but despite those efforts a significant reduction in the population was not observed (Bent 1961).

Ten years after the visit of Dr. Palmer, Dr. Walter E. Bryant visited the island and observed a major drop in the population numbers. This drop continued in 1886 and by 1889 Dr. Bryant asserted that the species had been exterminated from the island (Bryant 1889), a finding that was corroborated by Dr Palmer who revisited the islands the same year. In 1896, four individuals were sighted by "goat hunters", in March of 1897 one specimen was spotted and it appears that the last sighting recorded was of a flock of 11 in 1900. Those 11 were caught by the scientific collector Rollo Beck, who asserted that those were the only individuals remaining on the island (Abbott 1933, Bent 1961).

During a stay of two months on the island in 1906, W. W. Brown, I. Oroso and H. W. Marsden did not manage to spot a single specimen (Thayer and Bangs 1908). Similarly, specimens of the species have not been observed in more recent expeditions (e.g., Jehl and Everett 1985, Oberbauer *et al.* 1989, Pyle *et al.* 1994, Sweet *et al.* 2001).

5. Threats

It is thought that the principal threat to the species was the targeted persecution and extermination carried out by the people who had settled the island. In addition, the grazing and uncontrolled reproduction of the goats brought about a considerable reduction in the habitat available to the species for nesting and feeding. The outcome led to a deterioration in the conditions that would have allowed the subsistence of the species, reducing its chances of survival (lñigo-Elías 2000).

There is a theory that depredation by cats and the collection of specimens played a significant role in the rapid dwindling of the species, as did the disappearance of species that might have provided food for it, such as the colonies of seabirds, the elephant seal (*Mirounga angustirostris*) and the Guadalupe fur seal (*Arctocephalus townsendi*) (Thayer and Bangs 1908, Anthony 1925).

6. Utilization and trade

From 1875, when it was discovered (Abbott 1933), to 1900, the year in which the taking of possibly the last specimens of the species is recorded, living and dead (stuffed) specimens were taken at a rate that was very high by comparison with the possible rate of reproduction of the species. It is highly probable that the local inhabitants participated in that process by working as harvesting assistants for the scientific collectors from North America who undertook expeditions during the 19th century (Abbott 1933). In 1897, six live individuals were taken from the island, having been caught by a fisherman who took them to San Diego, California, where they were kept in a cage with the intention of selling them. All of them died within a month.

6.1 National utilization

Historical records show that the species was hunted and poisoned by the local people who settled the island (Íñigo-Elías 2000). It is evident that there was major commercial interest in stuffed specimens of the species on the part of private and scientific collectors, which contributed to its disappearance.

6.2 Legal trade

The trade in skins and live specimens of the Guadalupe caracara took place at a time when no applicable legislation existed.

There are no records of international trade in the species between 1975, the year in which it was listed under CITES, and 2010 (UNEP-WCMC CITES Trade Database, January 2012).

6.3 Parts and derivatives in trade

Live specimens or stuffed skins for scientific and private collections (Abbott 1933).

6.4 Illegal trade

Not known.

6.5 Actual or potential effects of trade

Since the species is extinct, there is currently no actual or potential negative effect of trade. The sole trade possible would be scientific exchange between collections. However, that is rather improbable, given that this is an extinct species of which there are only a few specimens in the world, which means that the scientific repositories are unlikely to wish to dispose of their specimens.

7. Legal instruments

7.1 National

The species has been considered extinct in the relevant official Mexican regulation NOM-059 since 2001, and is listed so in the updated version of 2010 (DOF 2010).

7.2 International

The Guadalupe caracara is listed as extinct in the IUCN Red List (BirdLife International 2008).

8. Species management

8.1 Management measures

There are no specific management measures for the species.

8.2 Population monitoring

There are no measures for population measuring.

8.3 Control measures

8.3.1 International

Apart from CITES, there is no international control measure for the species.

8.3.2 Domestic

The Guadalupe caracara has been considered extinct in the relevant official Mexican regulation NOM-059 since 2001 (DOF 2010).

8.4 Captive breeding

Abbott (1933) indicates that various attempts were made to keep the species in captivity and notes that a San Diego newspaper reported that a hunter was keeping four to seven caracaras in captivity in California, having captured them on the island of Guadalupe and succeeded in partially domesticating them. It appears that the specimens were displayed in various places, but that one escaped and was killed by hunters. There are no indications, beyond those reports, that the species was ever kept outside its natural habitat.

8.5 Habitat conservation

There are no specific habitat conservation measures for this species, because it is extinct. The vegetation on the island of Guadalupe has been severely degraded for almost two centuries owing to overgrazing by goats, both in the lowlands and in the mountains (Oberbauer 2006).

8.6 Safeguards

In accordance with national legislation, paragraph 6.4 of NOM-059-SEMARNAT-2010 states that, in the event of rediscovery or reintroduction of any population of a species formerly considered as probably extinct in the wild, there would be an immediate change in its classification, with it then being listed as in danger of extinction. By that process, it would automatically become regulated and protected by national legislation (DOF 2010).

9. Information on similar species

The Guadalupe caracara was allegedly similar to the crested caracara (*Caracara cheriway*); however, the latter species is lighter in colour over most of its body and has fewer bands on the chest and the back (Friedmann 1950, Iñigo-Elías 2000, Rodríguez-Flores *et al* 2010).

10. Consultations

Since the Guadalupe caracara is a species that is endemic to Mexico only, there were no consultations with the authorities of any other country.

11. Additional remarks

In short, all of the information available indicates that the Guadalupe caracara is extinct. Not a single specimen has been observed either in the wild or in captivity since 1900, despite frequent zoological expeditions to the region. Both in the list of endangered species of Mexico and in the IUCN Red List, the species is classified as extinct (BirdLife International 2008, DOF 2010).

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