Deletion of Mariana Mallard *Anas oustaleti* from Appendix I

Proponent: Switzerland, as Depositary Government, at the request of the Animals Committee

Summary: The Marianas Mallard "*Anas oustaleti*" is a form of duck once found in the Mariana Islands of Guam (USA), Tinian and Saipan (both part of the Commonwealth of the Northern Mariana Islands). It is now considered to be extinct. Its taxonomic status is a matter of debate. It may have been a form of *Anas platyrhynchos* (Mallard) or (generally regarded as more likely) a hybrid of Mallard and some other species, probably the Pacific Black Duck *Anas superciliosa*. It is not recognised as a species in the current CITES standard reference for birds, nor is it considered a true species by BirdLife International, the Red List Authority for Birds, and is not included in the IUCN Red List of Threatened Species.

The Marianas Mallard was a relatively large duck of variable appearance found in freshwater marshes and swamps on Guam, Tinian and Saipan. Its total population is thought always to have been small, because of very limited habitat availability. It was affected by habitat loss and overhunting and was last seen in the wild in 1979. No birds were sighted during extensive surveys in the 1980s and the last known specimen died in captivity in 1981 after failed attempts at captive breeding. Researchers and managers of Guam and the Commonwealth of the Northern Mariana Islands agree that the Marianas Mallard has gone extinct, as does the US Fish and Wildlife Service (USFWS) who removed "*A. oustaleti"* from their Endangered Species Act (ESA) in 2004 for this reason.

The only records of trade in "*Anas oustaleti"* in the CITES trade database are of one specimen exported from Canada to the USA in 1993, and of 10 feathers exported from the USA to Canada in 2005. These two exports were undoubtedly of dead biological specimens and both post date the last sightings of the duck in the wild. It is unlikely that the Marianas Mallard would be subject to trade in the highly unlikely event of its rediscovery and no evidence has been found to suggest that it has been illegally traded.

The proponent seeks to delete "*Anas oustaleti"* from Appendix I on the basis that it satisfies the "possibly extinct" criterion set out in Annex 5 of *Resolution Conf. 9.24 (Rev. CoP14*, which states "a species is 'possibly extinct' when exhaustive surveys in known and/or suspected habitats, and at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual".

Analysis: It appears that "*Anas oustaleti*" meets the criterion for "possibly extinct" as no specimen has been seen in the wild since 1979 and surveys have been carried out over an appropriate time-frame for its life cycle and life form, as required by *Resolution Conf. 9.24 (Rev. CoP14)* Annex 5. Annex 4D specifies that species that are regarded as '"possibly extinct" should not be deleted from Appendix I if they "may be affected by trade in the event of their rediscovery". There is no evidence that the duck would be affected by trade in the highly unlikely event of its rediscovery, so it would appear that this precautionary measure is satisfied.

Under *Resolution Conf. 9.24 (Rev. CoP14)*, for a hybrid to be eligible for inclusion in the Appendices, it must form a distinct and stable population in the wild (paragraph g under "RESOLVES"). Assuming that the Marianas Mallard was in fact a hybrid, its variable appearance would indicate that it did not form a stable population in the wild. It would appear therefore that it has (or had) no place in the Appendices irrespective of its demise.

Supporting Statement (SS)	Additional information
Taxonomy	

Synonym: *Anas platyrhynchos oustaleti*	
Anas oustaleti was first described by Salvadori (1894) based on six specimens, which were collected from Guam in 1887 and 1888.	"Anas oustaleti" *was first reported in 1856 by Bonaparte based on one specimen and later described by Salvadori in 1894 (Yamashina, 1948).*
Anas oustaleti was believed to be a subspecies that originated as a hybrid between *Anas platyrhynchos* (Mallard) and *Anas superciliosa* (Grey Duck). These two species have also been reported to hybridize in New Zealand.	*There has been debate and confusion over the taxonomy. Some ornithologists believe "*Anas oustaleti" *is a hybrid while others think it is a subspecies of* A. platyrhynchos *(Livezey, 1991).*
Integrated Taxonomic Information System (ITIS) consider *Anas oustaleti* as an invalid name and note it as a hybrid of the above-named species.	*Reichel and Lemke (1994) noted that in 1944 "*Anas oustaleti" *was generally considered a species but more recently had been considered a subspecies of* A. platyrhynchos *that originated as a hybrid from* A. superciliosa *and* A. platyrhynchos.
At the14th meeting of the Conference of the Parties (CoP14) the taxonomic and nomenclatural references listed in the Annex to *Resolution Conf. 12.11 (Rev. CoP14)* were adopted as the official standard references for species included in the CITES Appendices. In June 2008, the Management Authority of the USA wrote to the Secretariat regarding some inconsistencies between nomenclature in the CITES Appendices and the taxonomic and nomenclatural references adopted at CoP14. It indicated that *Anas oustaleti* was not found in the reference for birds.	The Howard and Moore Complete Checklist of the Birds of the World *(Dickinson, 2003), the current CITES standard reference for birds, does not recognize "*Anas oustaleti" *as a species, nor do BirdLife International who regard it as a hybrid of* A. platyrhynchos *and* A. superciliosa *and therefore do not include it in their global checklist of birds (Butchart, 2009). Sibley and Monroe (1990) cited Johnsgard (1979: 470) as the basis for regarding "*A. oustaleti" *as probably a hybrid and added that hybridization of* A. superciliosa *with introduced* A. platyrhynchos was extensive in New Zealand. *Yamashina (1948) considered "*A. oustaleti" *a hybrid swarm of* A. platyrhynchos *and* A. poecilorhyncha *(including* superciliosa*).*
	Wiles (2009) notes that the fact that the literature indicates that Mariana Mallards were variable in appearance would seem to make the term "stabilized" inappropriate. The ducks formed their own breeding population in the southern Marianas and thus were not first generation hybrid birds in the traditional sense that a hybrid results from the crossing of genetically different parents.

Range

Endemic to the Mariana Archipelago and has been recorded in the Territory of Guam (USA) and in the Commonwealth of the Northern Mariana Islands (CNMI;USA).	

IUCN Global Category

Not included in the *IUCN Red List of Threatened Species*.	*"*Anas oustaleti*" has not been assessed by the* IUCN Red List of Threatened Species *as it is not considered a species by BirdLife International, the Red List Authority for Birds (Butchart, 2009).*

Biological criteria for inclusion in Appendix I

A) Small wild population

(i) Population or habitat decline; (ii) small sub-populations; (iii) concentrated geographically during one or more life-history phases; (iv) large population fluctuations; (v) high vulnerability

Anas oustaleti is or was endemic to the Mariana Archipelago and has been recorded in the Territory of Guam and in the Commonwealth of the Northern Mariana Islands (CNMI). Confirmed habitats include: the islands of Guam, Tinian, and Saipan. There have been two unconfirmed sightings of "unidentified ducks" on Rota island and remains of an *Anas* sp. were found during an excavation on Rota.

Historically populations of *Anas oustaleti* have been reported to be small. Accounts have suggested that the Mariana Mallard was relatively more abundant on Tinian, followed by Saipan, and least abundant on Guam. The last recorded sighting of the Mariana Mallard on Guam was in 1967, despite wetland surveys carried out from the late 1960s to the 1980s.

In the 1940s, two flocks of 50–60 *Anas oustaleti* were recorded at two locations in Tinian, the largest-ever documented sighting. However, an estimate in 1945 suggested just 12 specimens remained on Tinian. The small populations on Tinian and Saipan were thought to persist until the late 1970s. A study in 1978–1979 estimated the total population of "*A. oustaleti"* to be 20. In 1979, the population appeared to have dropped to fewer than 12 and since 1979 there have been no confirmed sightings.

Wetland habitats were surveyed intermittently, 1982–1984, with no records of *Anas oustaleti*. Extensive and systematic surveys of the CNMI were also conducted 1983–1989 on wetland habitats, with no sightings or vocalizations recorded, leading to the conclusion that "*A. oustaleti"* had gone extinct. More recently surveys focusing on other species have revealed no sightings of "*A. oustaleti"*.

Anas oustaleti was removed from the USA's ESA List of Endangered and Threatened Wildlife on 23 February 2004 because it was considered extinct by numerous scientists. Researchers and managers of Guam and the CNMI also believe that "*A. oustaleti"* is now extinct. 'The supporting statement concludes "In summary, all available information indicates that the Mariana Mallard is extinct".

*As no permanent wetlands or ephemeral wetlands (of >0.2ha) occur on Rota it is unlikely that "*Anas oustaleti*" ever resided or reproduced on Rota (Reichel & Lemke, 1994).*

B) Restricted area of distribution

(i) Fragmented or localized population; (ii) large fluctuations in distribution or sub-populations; (iii) high vulnerability; (iv) decrease in distribution, population, area or quality of habitat, or recruitment

Anas oustaleti was never considered abundant, owing to its restricted habitat availability. The ducks were found at small freshwater marshes and swamps. In the past 50–100 years, these have declined greatly and become subject to

Island species tend to suffer particularly high rates of decline because of their vulnerability to introduced predators and diseases, their often small population size, small geographic range and low fecundity (Purvis et al*., 2000).*

fragmentation owing to conversion into rice paddies, use for discharging sugar mill wastes and drainage/filling of lakes as a result of urban development.	*Reichel and Lemke (1994) observed that the reduction and fragmentation of wetland habitats probably allowed easier access to the habitats of* "A. oustaleti" *and therefore increased hunting.*

C) Decline in number of wild individuals

(i) Ongoing or historic decline; (ii) inferred or projected decline on the basis of decreasing area or quality of habitat, levels of exploitation, high vulnerability, or decreasing recruitment

(i) Numbers of wild specimens have seemingly decreased to the point of extinction. For information on (ii), see B) above. Levels of decline were intensified by overhunting.	

Trade criteria for inclusion in Appendix I

The species is or may be affected by trade

During the period 1975–2007, one specimen in 1993 and a single shipment of 10 feathers in 2005 were recorded in international trade. These two imports are not likely to have involved live specimens of the bird.	*The specimen reported as imported to the USA from Canada in 1993 was of unknown source and for unspecified purpose. The 10 feathers reported as exported from the USA to Canada in 2005 were recorded to be of ranched origin and exported for commercial purposes (CITES trade database).* *It is possible that the 10 feathers were obtained from the specimen imported into the USA in 1993, or that both records were the result of misidentification.*

Other information

Threats

Habitat loss was regarded as the primary cause of the suspected extinction of *Anas oustaleti*. Since colonization of the Mariana Islands, threats have included introduced predators such as rats and cats, although predation and disease have not been identified as key contributors to the decline of *Anas oustaleti*. *Anas oustaleti* was subject to overhunting for food. Despite no hunting having been permitted on Tinian and despite "*A. oustaleti*" having been listed as endangered by the Trust Territories and the Services, lack of enforcement meant hunting persisted.	*According to the Fish and Wildlife Information Exchange Division (1996), habitat loss through land development projects such as the building of airports, military bases, roads, tourist facilities and housing developments—noticeably, the destruction of a marsh in Saipan previously home to a breeding population of* "A. oustaleti"*—are thought to have had a negative impact on the population of* "A. oustaleti" *on Saipan and Guam.* *According to Reichel & Lemke (1994), potential predators were cats, rats, dogs, pigs, freshwater eels and monitor lizards.* *Residents of Saipan reported considerable hunting of ducks by residents and migrants (Pratt* et al*, 1979).*

Conservation, management and legislation

Anas oustaleti was listed in CITES Appendix I at the Plenipotentiary Conference in 1975.	"Anas oustaleti" *was protected by the* Lacey Act*, making it unlawful to import, export, sell, receive, acquire or purchase any wild specimen, alive or dead and including*

	parts and derivatives (Fish and Wildlife Information Exchange Division, 1996).
Anas oustaleti was listed as endangered by the Governments of Guam, the Trust Territory of the Pacific Islands in 1976 and by the USFWS in 1977. Extensive surveys were carried out to establish the likelihood of extant specimens throughout the 1980s. It was removed from the USFWS list of endangered species in 2004 as it was considered extinct.	

Similar species

There are a number of similar-looking species, including: Laysan Duck or Laysan Teal *Anas laysanensis*, Grey Duck *Anas superciliosa*, Mallard *Anas platyrhynchos* and Meller's Duck *Anas melleri*.	Anas laysanensis *is included in Appendix I.*

Artificial Propagation/Captive breeding

An attempt to save *A. oustaleti* from extinction was made in 1979 when a pair of birds was taken into captivity for reproduction purposes. This was unsuccessful and the last captive specimen died in 1981.	*No records were found to suggest "*Anas oustaleti" *had been successfully bred in captivity.*

Other comments

At the 24th meeting of the Animals Committee in 2009, the Committee discussed a proposal to delete *Anas oustaleti* from Appendix I because it was believed to be extinct. The Committee agreed that a proposal to delete this taxon from the Appendices would be prepared.	

Reviewers:
S. Butchart, T. Inskipp, TRAFFIC International, G. Wiles, G. Young.

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