



Global Re-introduction Perspectives: 2011

More case studies from around the globe
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IUCN/SSC Re-introduction Specialist Group (RSG)





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Translocation of giant tortoises in the Seychelles Islands

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Introduction

Historically the Seychelles islands supported several forms of giant tortoise. The taxonomic status and their nomenclature is the subject of acrimonious dispute at present. The Tortoise & Freshwater Turtle Specialist Group currently refers to them as either *Aldabrachelys gigantea* or *Dipsoschelys dussumieri* (Turtle Taxonomy Working Group, 2010). Since 1997 Nature Protection Trust of Seychelles (NPTS) has been attempting to restore populations of two subspecies formerly considered extinct. Through successful captive breeding the Seychelles giant tortoise (*D. dussumieri hololissa* or *A. gigantea hololissa*) and Arnold's giant tortoise (*D. dussumieri arnoldi* or *A. gigantea arnoldi*) (Gerlach & Canning, 1998; Gerlach, 2004) were to be re-introduced into the wild on Silhouette Island and an initial re-introduction was made in 2006 (Gerlach, 2005; Pemberton & Gilchrist, 2009).

Further releases were planned for 2010 but the eviction of NPTS from Silhouette Island and the refusal of the Authorities to allow the establishment of wild tortoises in the Silhouette National Park necessitated a change in the project. Accordingly the tortoises were released on North, Fregate and Cousine Islands. These two forms are currently listed under the Aldabra giant tortoise as Vulnerable (proposed status as subspecies: Critically Endangered) and all tortoises are listed on CITES Appendix II.



Tortoises selected for relocation to North Island

Goals

- Goal 1: To increase the numbers of individuals of giant tortoises through captive breeding.
- Goal 2: To re-establish viable wild populations of giant tortoises on Silhouette Island.

Success Indicators

- Indicator 1: Captive breeding records showing a significant increase in numbers.

- Indicator 2: Survival of released tortoises on Silhouette Island.
- Indicator 3: Record of wild hatched juveniles on Silhouette Island.

Project Summary

Feasibility: Until the middle of the 19th century giant tortoises were found on most of the granitic islands of Seychelles. These populations were lost through hunting, sale to passing ships and thousands were sent to Mauritius where the native



Tortoises en route to Cousine Island

species had been exterminated. On the granite islands, the few remaining native species were subsequently mixed with giant tortoises from Aldabra. Silhouette Island was selected for re-introduction as it was possible to remove the captive Aldabra tortoises and re-introduce the native giant tortoise to the last remaining granite island that has no roads and minimal development. The island supports a wide range of habitats, has a large geographical area (2,000 ha) and has restricted access from the sea. The main settlement area of La Passe is accessible by boat but access is controlled by security guards. The Grande Barbe area is only accessible from the sea for a few weeks of the year and is consequently very rarely visited. The small human population were aware of and supportive of the project and the tortoises were a major attraction for tourists staying at the island's only hotel, and for visitors to the island on small expedition orientated cruise ships. Although no entrance fees were ever charged, financial support for the project came via donations and adoption of tortoise hatchlings. Re-introduction of tortoises to Silhouette was proposed in 1996 and approved by the Seychelles government's Ministry of Environment and Silhouette's management, the Islands Development Company (IDC) - a government development company. Reporting of progress on the project was by quarterly reports throughout the life of the project.

Implementation: The captive breeding of the giant tortoises was slow to start as the animals had previously been kept in captive conditions that varied from poor to abysmal. Five years after transporting the tortoises to Silhouette and releasing them into a spacious enclosure, the first viable eggs were produced. By the end of 2010 some 180 hatchlings had been raised. No health problems were ever encountered, the only losses were due to theft, which resulted in improved security for all the hatchlings. In December 2006, five adult *D. arnoldi* were released at Grande Barbe on Silhouette. This is an area with substantial vegetation, an extensive marsh system and a human population that varied from 3 to 8 inhabitants. The second release was planned for April 2010, when 30

Reptiles



Tortoises being released on North Island

© L. Vanherck

juveniles weighing between 15 and 30 kgs were to be released at Grande Barbe to increase the herd size there.

A project document detailing the proposed release of the tortoises and using IUCN guidelines was submitted to the Ministry of Environment and to the IDC. There were two submissions and permission for re-introduction was refused on both occasions based on the possible impact of tortoises on the vegetation and the possible risk of

tortoises being poached. This reason completely overlooks the presence of free-roaming tortoises on a number of nearby islands where poaching is not a problem. At the end of 2010, NPTS was evicted from Silhouette and alternative release sites had to be found. In 2011 the tortoise were transferred to North, Cousine and Fregate Islands. On these islands they will be free in the wild but unfortunately mixed once again with Aldabra tortoises.

Post-release monitoring: The tortoises released at Grande Barbe were monitored regularly for the first two months after release by a volunteer who stayed in the release site. Subsequently they have been monitored at 3 - 6 month intervals. On each visit their location was mapped. The 2011 releases on North, Cousine and Fregate are monitored by the ecological managers of the islands according to their management activities.

Major difficulties faced

- The only difficulty experienced was the lack of support for tortoise conservation. The emphasis on development in Seychelles means that conservation projects have no long term security even when plans have been agreed upon. Consequently sustainable conservation depends entirely on privately owned islands, although these are also subject to management changes due to external economic factors.

Major lessons learned

- Re-introduction of tortoises is practical and highly beneficial to environmental restoration.
- To increase the role of tortoise conservation in various agencies in the Seychelles.

Success of project

Highly Successful	Successful	Partially Successful	Failure
		√	

Reason(s) for success/failure:

- Adult tortoises at Grande Barbe have adapted to the wild environment successfully, with evidence of nesting although no juveniles have been located.
- A lack of support for tortoise conservation has prevented what could easily have been a highly successful project.

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