



**REHABILITATION OF ISLAND ECOSYSTEMS PROJECT**  
*PROJET REHABILITATION DES ECOSYSTEMES INSULAIRES*

**Seychelles Black Parrot *Coracopsis (nigra) barklyi***  
**Conservation Assessment & Action Plan 2009-2013**



Compilers:

**G rard Rocamora<sup>1</sup> & Victorin Laboudallon<sup>2</sup>**

<sup>1</sup>*Scientific Director & FFEM Project Leader, Island Conservation Society (Seychelles) & Affiliated Ornithologist, Centre de Recherches sur la Biologie des Populations d'Oiseaux, Mus um National d'Histoire Naturelle, Paris.*

<sup>2</sup>*Senior Conservation Officer, Conservation section, Division of Environment, Ministry of Environment, Natural Resources & Transport, Praslin, Seychelles.*

*Photo on cover: G rard Rocamora*

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## Participants :

Name	Organisation
Mitcy LARUE	MNA, Baie Sainte Anne
Marc VOLCERE	MNA, Grande Anse Praslin
André SOPHA	Seychelles Farmers Association
Denis MATATIKEN	DGNC, Department of Environment; MENRT
Wilna ACCOUCHE	P.O., Conservation section, Department of Environment, MENRT
Marvel LESPERANCE	Department of Environment, MENRT, Praslin
Chris ALISSOP	Forestry section, Department of Environment, MENRT, Praslin
Frauke FLEISCHER-DOGLEY	CEO, Seychelles Islands Foundation
Marc JEAN-BAPTISTE	Warden Vallée de Mai, Seychelles Islands Foundation, Praslin
Exciane VOLCERE	Ranger Vallée de Mai, Seychelles Islands Foundation, Praslin
Debrah ESTER	Ranger Vallée de Mai, Seychelles Islands Foundation, Praslin
Uzice SAMEDI	Head Ranger, Vallée de Mai, Seychelles Islands Foundation, Praslin
Nancy BUNBURY	Projects Programme Coordinator, Seychelles Islands Foundation, Mahé
Steve HILL	Representing Frégate Island Private
Ritval PILLAY	SCMRT-MPA, Curieuse Marine Park
Gemma JESSY	Natural History Guide, Creole Travel Services
Victorin LABOUDALLON	S.C.O., Department of Environment, MENRT, Praslin
Gerard ROCAMORA	Science Director & FFEM Project Leader, Island Conservation Society

## Persons / organisations that could not attend but provided comments or apologies:

Name	Organisation
Linda VANHERCK	North Island
Martin BROUWER	North Island
Gilles-David DERAND	Science Coordinator, Nature Seychelles
Ron & Justin Gerlach	Nature Protection Trust of Seychelles

## List of Acronyms:

DoE : Department (formerly Division) of Environment  
DNR : Department of Natural Resources  
ETF : Environment Trust Fund  
FFEM : Fonds Français pour l'Environnement Mondial  
FIP : Frégate Island Private  
ICS : Island Conservation Society  
MENRT : Ministry of Environment, Natural Resources and Transport  
MNHN : Muséum National d'Histoire Naturelle (Paris)  
MoE : Ministry of Environment  
MoT : Ministry of Tourism  
MoU : Memorandum of Understanding  
NI : North Island  
PDF : Praslin Development Fund  
PPS : Policy, Planning & Services Division (within DoE)  
RNP : Ring-necked Parakeet  
SBP : Seychelles Black Parrot  
SIF : Seychelles Islands Foundation

# Seychelles Black Parrot Conservation Assessment & Action Plan 2009-2013

**Seychelles Black Parrot**  
 Perroquet noir des Seychelles  
Kato nwar  
*Coracopsis (nigra) barklyi*

<b>Summary Conservation Assessment &amp; Action Plan Goal and Objective</b>	
IUCN Threat Status	Not applicable as not yet officially recognized as full species, but Vulnerable if this happens (criteria D2, D1 <sup>3</sup> )
Range	Praslin and Curieuse only, as reported by first expeditions prior to colonization.
Population estimate	645 (404-1034; P<0.05) individuals <sup>22</sup> .
Population trend	An increase of c.40% of the abundance index (floating mean over 3 years of the average number of parrots on 24 point-counts) has been recorded between 1985 and 1997 <sup>1,2</sup> . Reached a peak in 1999, trend uncertain since then due to fluctuations and missing counts during period 2005-07.
Altitude	0-367 m.
Habitats	Native forests of endemic palms, orchards and gardens with fruit trees, mixed woodland of broad-leaved trees and palms (both introduced and native). Marginally present on beach crest, and rocky sparsely vegetated (Glacis) habitats <sup>22</sup> .
Threats	Introduced Ring-necked Parakeets present on Mahé (competition and disease) Forest fires (destruction of nesting sites and feeding trees). Nest predation by rats. Persecution from farmers. Pesticides on commercial fruit trees (poisoning and reduction of breeding success). Nets set up to trap Fruit-bats.
<b>Goal</b>	Improve the conservation status of this endemic parrot with the aim of downlisting it from 'potentially' Vulnerable to Near-threatened (IUCN criteria).
<b>Objective</b>	The goal will be achieved by (1) furthering knowledge and understanding of the species ecology through research, and (2) by adding a minimum of two islands to its range and increasing the population to a minimum of 1000 individuals.

**Authorship:** Gérard Rocamora & Victorin Laboudallon

### **Introduction**

The Seychelles Black Parrot is currently recognised as an endemic sub-species, although distinguishability from the Comores Black Parrot has sometimes been questioned<sup>2</sup>. Three other sub-species of Black Parrot have been identified in Madagascar (*Coracopsis nigra nigra* and *Coracopsis nigra libs*) and Comores (*Coracopsis nigra sibilans*). Therefore, the Seychelles Black Parrot was never identified as a threatened species by BirdLife International and IUCN<sup>3</sup> despite its small population size and range. However, because of differences in size, coloration and vocalization between birds from Seychelles/Comores and Madagascar, its status may have to be revised when results from taxonomical studies become available<sup>4,5</sup>. Recent DNA analysis shows that the Seychelles Black Parrot represents one of the most evolutionary distinct extant parrot populations within the *Coracopsis* group<sup>23</sup> and suggests it may deserve to be treated as a separate species, as will be done in a forthcoming book on birds of the Malagasy region<sup>24</sup>. The species would then be identified as Vulnerable as it would qualify for IUCN criteria<sup>3</sup> D2 and D1. In any case, this rare bird will always be of great importance for Seychelles, where it is a flagship species and national emblem<sup>1,6</sup>.

Although little has been published on this species, its biology and ecology are reasonably well known as well as its population trends, as the species benefits from an ongoing regular monitoring scheme conducted by the Division of Environment since 1985<sup>1</sup>; counts were discontinued between 2005 and 2007 but resumed in 2008 as part of the FFEM project 'Rehabilitation of Island Ecosystems' lead by ICS<sup>25</sup>. In 2008, a Master of Sciences study<sup>22</sup> was conducted in collaboration with SIF on the population size, ecology and habitat use of the Seychelles Black Parrot; however, more precise knowledge on taxonomy (including comparative research on vocalisations, morphology, biology and ecology), population size, and habitat requirements is still needed.

An earlier, unpublished version of this Action Plan<sup>27</sup> had been prepared by the same authors for the period 2001-2006, but was kept internal to the Department of Environment.

<b>Status and level of biological knowledge</b>		
Population	Size: Numbers trend Range trend	645 (404-1034; P<0.05) individuals <sup>22</sup> Strong increase from 1982 to 1999, trend uncertain since then due to fluctuations and missing counts in 2005-07. Increase from 1982 to 1997, stable since then.
Knowledge of	Status Trends Conservation requirements	3 (= good knowledge) 3 3

### Family & Genus

Parrots are popular birds, much appreciated for their exuberant appearance and often colourful plumage, and their imitating skills. Their bulky head has a strong characteristic curved bill and a thick developed tongue. They belong to the Psittacidae, a pan-tropical family (marginally present in the holartic), with 332 species and 78 genera<sup>2</sup>. They live mainly in forests, woodland or savanna. The genus *Coracopsis* has currently 2 recognized species, *C. vasa* & *C. nigra*, both present in Madagascar and Comores, and the latter in Seychelles. There are 97 globally threatened species of Psittacidae, including one in Africa and one in Mauritius<sup>2,26</sup>. About 30 additional species are considered near-threatened (none in Africa and western Indian Ocean) and a minimum of 9 species and 8 subspecies have already become extinct<sup>2</sup>. Major threats include habitat destruction, illegal or unsustainable trade, and introduced predators in the case of island parrots<sup>2,3</sup>. Habitat protection, trade control and eradication of alien predators are the main conservation actions required. Captive breeding programmes have been successful in saving several species from extinction.

### Identification

The plumage is entirely dark grey-brown, except for greyish undertail coverts, outer webs and primaries<sup>4</sup>. It has a bulky head and a strong hooked greyish-black bill. Legs are also greyish-black. Its flight is quick and direct with rapid and large wing beats, and long tortuous glides before landing. It also climbs among branches with its claws and beak like all parrots. Sexes are alike. Immature birds are paler than adults with pale undertail coverts and a yellowish tinge around the bill, mustard flush to face, throat and upper breast<sup>4</sup>.

Voice : A variety of high pitched-whistles and calls, some of them available on CD<sup>7</sup>. The most frequent are monosyllabic notes, melodious trisyllabic whistles heard during the breeding period, and alarm calls. A typical trisyllabic note *weee-tooo-twee*, lower on the second note, has also been described<sup>4</sup>.

### Range and Population

The ‘Kato nwar’ only occurs on Praslin and Curieuse, a small island close to Praslin, which was recolonized in the late 1980s<sup>8</sup>. It was recorded in both islands in 1768 by the expedition Marion-Dufresne, prior to the colonization of Seychelles by humans<sup>9</sup>. Green parakeets, possibly *Psittacula (eupatria) wardii* or an undescribed form, were also recorded on Praslin during the same expedition, meaning that both species may have originally co-existed on this island. Records from Marion-Dufresne expedition suggest that the Black Parrot and other species of birds found on both islands were abundant. The species had also been reported from Marianne<sup>10</sup> in 1875 and from Aride<sup>4</sup> in 1907, from where it apparently became extinct later on, and possibly also in other islands of the Praslin group. Numbers were reported to be very low by the end of the 1960s on Praslin<sup>11,12</sup>, with a guesstimate of c. 30-50 birds given as an order of magnitude<sup>13</sup>. In 1976, the population was estimated at 90 birds ( $\pm 20$ ) from simultaneous counts<sup>14</sup>. A population estimate of 50-200 birds, based on previous surveys and information given by M.E. Nicoll, was given in 1984<sup>15</sup>. Three series of simultaneous counts of 30 minutes were conducted almost every year since 1985, normally in August, from 24 fixed points (22 on Praslin and 2 on Curieuse) known to host good numbers of parrots, using a standardized methodology. The Black Parrot has never been reported as breeding on Curieuse and only one regular roost is known to be present, at Anse Caiman<sup>28</sup>. These counts have been coordinated by V. Laboudallon (DoE). Results show important variations of the yearly index of abundance, and a regular increase of 40% during the period 1985-1997 when using a 3 year floating mean<sup>1</sup>. Simultaneous counts were increased to 50 points in 1997 and gave a minimum figure of 173 birds, resulting in an overall population estimate of 200-300 individuals<sup>1</sup>. However, real numbers probably exceeded this figure, which was revised to 300-400 in the earlier, non-published, 2001-06 Action Plan draft<sup>27</sup>. After 1997, the index of abundance continued to grow until a peak in 1999 but appears to have decreased lately, although the trend is uncertain due to 3 years without counts between 2005 and 2007. In 2008, the counts resumed and gave a minimum total of 163 birds counted. During the same year, an estimate of 645 birds (404-1034;  $P < 0.05$ ) was derived from density measurements using the Distance Sampling technique, as part of a Master study<sup>22</sup>. Potential explanations for the recovery of the species during the last decades include the protection of the species by law in 1966, the significant extension of fruit tree plantations on Praslin during the 1980s, the protection of all endemic palms in 1991 (*Deckenia nobilis* used to be felled in large numbers for human consumption), and the recovery of vegetation on Curieuse after its substantial destruction by forest fires in the 1960s<sup>20</sup>. Black Parrots are now found commonly over most of Praslin, but they are still very rare in a few specific areas, such as Fond Diable, despite the presence of suitable habitat.

Size and location of populations		
Location	Estimated population size	Year of most recent estimate
Praslin	645 individuals <sup>22</sup> (404-1034; $P < 0.05$ )	2008
Curieuse	6-10	2004-2008

## ECOLOGY

The breeding season is from October to March, during the northwest monsoon, with a peak of laying in December<sup>16,18,19</sup>. The nest is in a hollow trunk of Coco de mer (*Lodoicea maldivica*)<sup>21</sup>, Albizzia (*Paraserianthes falcataria*), Vacoa parasol (*Pandanus hornei*)<sup>16,17,18</sup> or Palmiste (*Deckenia nobilis*)<sup>19</sup>. The depth of the cavity varies between 1 to 3 meters<sup>19,20</sup>. The species lays 1 to 3 eggs per clutch, with normally no more than 2 hatchlings; incubation lasts for c.15-18 days and nestling period for 59-61 days<sup>18,19</sup>. Young are still fed by parents several months after fledging<sup>21</sup>.

The Black Parrot is typically found in the endemic palm forests of Praslin, dominated by Palmiste, Coco de mer, Latanier mille-pattes (*Nephrosperma vanhoutteana*), Latanier lattes (*Verschaffeltia splendida*) and Latanier feuille (*Phoenicophorium borsigianum*)<sup>11,14</sup>. It is also found commonly in cultivated or abandoned orchards, as well as in the gardens of hotels and residential areas, normally present at lower altitudes. The species also nests and feeds in mixed forests of palms with broadleaved trees such as Albizzia, Mahogany (*Swietenia macrophylla*), Calice du Pape (*Tabebuia pallida*), Santol (*Sandoricum indicum*), Bois de natte (*Mimusops sechellarum*), Capucin (*Northea hornei*)<sup>19,20</sup>, all exotics except the last two. Black Parrots are also present, but more marginally, in coastal beach crest and glacis and scrub habitats, whereas palm forests, and secondly cultivated land have been identified as the two most important habitats for the species<sup>22</sup>.

The Parrot's main food consists of fruits or seeds from all endemic palms except Coco de mer, other native trees like Bois rouge (*Dellenia ferruginea*), Bois doux (*Craterispermum microdon*), or introduced plants like Casuarina (*Casuarina equisetifolia*), Santol (*Sandoricum indicum*), Lepeka creeper (*Tylophora indica*)<sup>14,19</sup>. During the day, birds are also often found in coastal areas where they feed on a large variety of introduced fruit trees: Bilembi (*Averrhoa bilimbi*), Mango (*Mangifera indica*), Jamalac (*Eugenia javanica*), Pomme gouvernement or Malay Apple (*Syzigium malaccensis*), Jeanblon (*Syzigium communis*), Jambrosa (*Syzigium jambos*), Bois pomme (*Syzigium wrightii*), Golden Apple (*Spondium cytherea*), Guava (*Psidium guajava*), Star fruit (*Averrhoa carambola*)<sup>19</sup>. For the two following trees, Kapoc (*Ceiba pentandra*) and Papaya (*Carica papaya*), birds have only been recorded feeding on flowers. Seeds from an herbaceous plant, Herbe rasoir *Lophosonus sp.* are also eaten. Recent studies have revealed seeds of the endemic Kastic *Phyllanthus pervilleanus* as an important food source, and Tamarind *Tamarindus indicus* seeds, very young coconuts *Cocos nucifera*, and new shoots and seed cones of Casuarina to be also eaten<sup>22</sup>.

## SOCIO-ECONOMIC CONTEXT

Predation of nests by introduced rats<sup>19</sup>, and hunting by early settlers<sup>13</sup>, are the main likely causes of the decline of the population, which may have reached less than 50 birds in the 1960s. Birds were probably killed mainly because they were eating fruits from trees planted by humans for their own consumption. Parrots have also occasionally been caught in lime sticks used to catch and destroy Bulbuls in vanilla plantations on Praslin. Destruction of nesting and feeding habitat in primary indigenous forests formerly present on Praslin must also have contributed significantly to the population decline, and Parrots had to adapt to this new situation, especially in terms of diet. However, it is likely that the introduction of fruiting trees (mainly Mango, Bilembi, Guava, Starfruit, Malay apple and Jamalac) by settlers and their spread into the forests, plus the extension of fruit tree plantations in the 1980s is likely to have somehow compensated for the loss of native fruiting trees due to



habitat destruction. Generally speaking, the development of agriculture never assessed potential conflicts with Parrots when promoting new commercial fruit crops like Starfruit. It is possible that some birds may have also been captured to be kept as pets<sup>17</sup> or traded although few records exist. Negative impacts must have resulted in a tremendous decline and the extinction of the Curieuse population, today limited to a few non-breeding birds that come and go from Praslin (distant of only c. 1km from Curieuse). The same may have happened on Aride, where the species population formerly reported and destruction of endemic palms and invasion by rats may have caused the species extinction on Marianne<sup>13</sup>, although persecution could also have played a role. It is worth noting that another Seychelles endemic parrot *Psittacula eupatria wardii* became extinct around 1930, probably for the same human-induced causes. The simultaneous increase of Black Parrot populations and agriculture on Praslin means that damage done by parrots to commercial farmers has become much more significant during the last decade. The problem is mainly with Starfruit, Bilimbi and to a minor extent Papaya (male flowers). Although farmers have remained very understanding so far, they are now asking for the problem to be acknowledged by government, and some action to be taken such as or compensation paid to them, and some have even suggested that parrots be transferred to other islands<sup>22</sup>.

## THREATS

Threat type	Description	Importance
<b>Direct threats</b>	Destruction of nests (eggs and chicks) by rats	Medium (Immediate)
	Parrots caught into nets set at night for Fruit Bats but left open during the day	Low (Immediate)
	Persecution of parrots by farmers	Medium (Potential)
	Poisoning of parrots by chemical treatments on commercial fruit trees	Low (Potential)
<b>Indirect threats</b>	Destruction of nesting, feeding and roosting habitats by fire	Medium (Immediate)
	Disease introduced by Ring-necked Parakeets and other exotic species,	High (Immediate)
	Competition with Ring-necked Parakeets or other exotic species which could colonise Praslin	High (Immediate)

Diseases (such as the Psittacine Beak and Feather Disease) and competition for food or nesting sites from introduced birds such as the Ringed-necked parakeet, currently present in low numbers on Mahé, represents the most serious threat to the Black Parrot. Fire is probably the second most serious threat to the Black Parrot<sup>1,5,20</sup>. It can indirectly affect the

population by destroying its nesting sites (mainly dead trunks of Coco de mer, Palmist, Vacoa parasol, old Albizzia with holes or hollow trunks), its feeding habitat (particularly Palm forests that are very sensitive to fire), or its roosting sites (broad-leaved trees). Although fire prevention and fire-fighting are nowadays relatively efficient in preventing important fires to happen, about 60 ha of mixed woodland and palm forest were destroyed in 2008 (F. Fleischer-Dogley, pers. comm.). Although farmers have until now always avoided harming the Parrots for causing crop damage, direct persecution could become a real threat in future if this problem worsens<sup>22</sup>. Despite the considerable growth of the parrot population in the last decades, the destruction of eggs and chicks in natural nests by introduced rats (mainly the arboreal Black Rat *Rattus rattus*)<sup>1</sup> continues to be a significant threat. For example, 72 rats were trapped around a single nest box during the whole nesting period (c. 2 months)<sup>19</sup>, which gives an idea of the tremendous predation pressure caused by rats (mainly at nestling stage after chicks start begging for food at c. 3 days old). Another direct but less important threat is the unintentional catching of parrots by nets set up by local people during the night for Fruit Bats, and left open by negligence and unattended during the whole day. Fortunately only a minority of Fruit Bat trappers leave their nets open during the day, but this activity should be better controlled through regulations and licensing. Parrots are known to have been trapped and died rapidly in case of heavy rain or if the nets are in the sun, or from harassment by Bulbuls and Mynas which are attracted by the calls of distress of the parrot. Poisoning from chemical treatments on commercial fruits such as Mango, Starfruit, Guava, Paw-paw, etc. (all favoured by Black Parrots) is only considered a potential threat as today there is no chemical treatment of such crops. As for all other rare and threatened birds in Seychelles, the effects of inbreeding due to the genetic bottleneck that affected the species may be detrimental to reproduction and health (not listed in the table).

## CONSERVATION ACTION TO DATE

### Policy & Legislation

Like the other native species of wild birds in Seychelles, the Black Parrot is protected by law under the Wild Birds Protection Regulations (1966) of the Wild Animals and Birds Protection Act (1961). This law prohibits the intentional killing, the detention in captivity and the commerce of this species and its nests. Coco de mer, Palmist and other endemic palms, that are very important for the nesting and feeding of the Black Parrot, are protected under the various amendments and regulations (latest 1994) of the 'Breadfruit and other trees Protection Act' (1917). Albizzia (where most natural Black Parrot nests have been found) is also protected as a timber species under this act.

### Site Safeguard

The most important breeding area for Black Parrots on Praslin was designated as Praslin National Park in 1979 (334 ha). An adjacent site (Fond Ferdinand, 133 ha, managed by Praslin Development Fund) may also obtain National Park status in future. The Vallée de Mai (19.2 ha) was designated as a World Heritage Site by UNESCO in 1983 but currently lacks official status of strict Nature Reserve although it is managed as such by the Seychelles Islands Foundation. Curieuse is also managed as a Nature Reserve (by Marine Park Authority) and lies within a Marine National Park. 527 Coco de mer were planted on Curieuse in 1998 and 2000, and a management plan for the Vallée de Mai was produced in 2002. Tree planting was conducted at Fond Ferdinand in 1990 after fire destroyed several hectares.

### Species Management & Protection

After some unsuccessful attempts (Penny 1968b), 2 suitable nest boxes were finally

designed and erected in 1983 by V. Laboudallon (Forestry and Conservation Division of the Department of Environment). These proved successful and produced the first broods of Seychelles Black Parrots fledged from artificial nests. 12 additional nest boxes were built and erected in the following years. A project to build 100 nest boxes for the Black Parrot ('Opération 100 nichoirs pour le Cateau noir') was recommended<sup>1</sup> to provide protection to a significant proportion of the breeding population (based on occupancy rate of c.30% observed in the 12 nest boxes). A total of 70 additional nest boxes were built and erected in the field between 2000 and 2002, but the difficulty of finding or building hollow trunks of palm-trees or Albizzia for the chimneys of the nest-boxes, and the long term maintenance costs have been serious limitations. Only 10% of these 70 nest-boxes were used by Black Parrots, and only 2 were still in use in 2007 due to lack of maintenance. New prototypes with more weather resistant wood and an artificial chimney (e.g. fiberglass) have been designed by V. Laboudallon but still need to be built and tried in the field.

### **Advocacy**

No real advocacy actions have been conducted in recent times, since the main stakeholders, MoE and SIF, are fully aware of the threats concerning this species and are currently taking appropriate actions to improve its conservation. Areas surrounding the National Park with favourable habitat for the Black Parrot have also been included in an IBA which holds the majority of the Black Parrot's population. A second large site on North Praslin has also been proposed as a shadow list site<sup>5</sup>.

### **Research and Monitoring**

Little research has been done on this Black Parrot. First population estimates and conservation recommendations were provided in the 1960s<sup>11,12,13</sup>, as well as some basic information on the bird's biology<sup>16,17,21</sup>. Additional information on the status and conservation of the species was gathered in 1976<sup>14</sup>, and its breeding biology was investigated between 1983 and 1987<sup>18,19</sup>. Population monitoring started in 1982<sup>18</sup>, and standardised counts have been conducted almost every year from 24 selected points on Praslin and Curieuse since 1985 by MoE<sup>1</sup>. Counts were stopped between 2005 and 2007, but resumed in 2008. In 1997, 1998, 2004 and 2008, this scheme was extended to 50 points including the initial 24. Trials to capture and ring Black Parrots with mist nets were conducted in 2005 and 2006 by ICS. However, attempts to calculate an accurate population size estimate using Mark-Release and Relocate methods were unsuccessful due to the low capture rate observed with Black Parrots, and to the unavailability of white or yellow dyes to mark for several weeks the bird's plumage (after being captured, or from a distance with a toy watergun). A habitat suitability assessment of 2 medium size islands (Frégate & North) for the Black Parrot is being conducted by ICS & MERNT as part of the current FFEM project 'Rehabilitation of Island Ecosystems'<sup>29,30</sup>. Researchers at the University of Kent (led by J. Groombridge) are conducting research on the phylogeny of Indian Ocean psittacids based on DNA hybridisation, and initial results suggest that that the Seychelles Black Parrot represents one of the most evolutionary distinct extant parrot populations within the *Coracopsis* group<sup>23</sup>. In 2008, a Masters study from the University of East Anglia was conducted (by Ellen Walford) to investigate population size, habitat preferences, feeding ecology and relationship with humans<sup>22</sup>. Additional research is still required in the fields of ecology and habitat use, as well as comparative taxonomical studies involving morphology, voice, ecology, biology and further DNA analysis.

### **Education & Awareness**

Information on the fragile status of the species, the threats affecting it (fires, habitat loss, introduced mammals, etc.) and conservation measures that are being undertaken has been widely advertised in the past. Some articles in local newspaper, and broadcasts on radio and

television (e.g. programmes on National Parks of Praslin, Project G1 on Rare & threatened species including 2 x 14mn broadcasts in 1996, Environment weeks, 1 broadcast of 5mn in 2006) have been produced for the general public, but little has been done during the last decade. More specific sensitization needs to be done for Farmers through Praslin Farmer Association and Ministry of Agriculture and Marine Resources, and for Fruit bat trappers. Numerous local volunteers have participated in annual Parrot counts over the years. In 2008, the MSc student visited schools on Praslin to talk to children about the black parrot and gave public presentations. Generally speaking, both Praslin residents and visitors are well informed about the special status of the Black Parrot <sup>22</sup> Although visits from schools and Wildlife Clubs on Praslin have been regularly organized to Vallée de Mai and Fond Ferdinand, more needs to be done to increase awareness among schools pupils and their teachers about the conservation of the Black Parrot.

### **Co-operation & Participation**

Cooperation is required from Forestry section to leave standing dead trees as potential nest sites for Parrots. Continued collaboration is required between SIF, Marine Park Authority (as managers of Curieuse), volunteers from hotels and guesthouses, Nature Reserves and NGOs, or from the general public to carry on successfully the annual Black Parrot counts, and to help protect the species. Cooperation has been so far obtained from most farmers despite facing serious crop damage from the Black Parrot, although this is unlikely to be sufficient in future.

### **Resources**

SR70,000 were provided by ETF to build the first 35 Black Parrot nest boxes in 1997. An additional £15,000 (SR128 700) were received in 1999 from the British Government to undertake the construction of more nest-boxes under the second Phase of the project. Small grants, such as SR10,000 funded by Cable and Wireless in 1998 through Environment Trust Fund, were obtained to repair the first 12 old nest-boxes. Funds and motivation appear to have been lacking during the last decade to reach significant achievements on the conservation of the Black Parrot. In 2008, financial support from the World Parrot Trust and the University of East Anglia, and in kind support from SIF were provided to Ellen Walford to conduct research for her MSc Thesis. The ICS project 'Rehabilitation of Island Ecosystems', supported by Fonds Français pour l'Environnement Mondial funded several capture and ringing trials in 2005 and 2006, provided support to DoE to resume the annual counts in 2008, and funded the preparation of this Action Plan 2009-2013. Part of the preparation of the first unpublished draft 2001-2006 of this action plan was done with some support from BirdLife Seychelles GEF 'Management of Avian Ecosystems'.

## **ACTION PLAN REVIEW**

The action plan for the Black Parrot should be reviewed every five years, but regular meetings of key stakeholders to review progress and assess priorities should take place during this interval.

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# SEYCHELLES BLACK PARROT ACTION PLAN

2009-2013

## OVERALL GOAL

**Improve the conservation status of this endemic parrot with the aim of downlisting it from ‘potentially’ Vulnerable to Near-threatened (IUCN criteria).**

## OBJECTIVES

**The goal will be achieved by (1) furthering knowledge and understanding of the species ecology through research, and (2) by adding a minimum of two islands to its range and increasing the population to a minimum of 1000 individuals.**

Activity	Time table	Indicators	Lead Resp.	Prio rity	Comments
<b>Policy &amp; Legislative</b>					
Review of lightening and Fire Act	2009-2010		DoE	High	Make it more efficient
Protocols for rat & cat contingency and use of pesticides agreed in islands selected for population transfers	2009-10	MoU between govt. and island owners/managers	DoE & Island managers	High	
Establishment of legal control and licensing for utilization of nets to trap Fruit Bats.	2009-10	Control and licensing of activity included in new legislation (Biod. Cons. Act)	PPS (DoE)	Medium	Only c.10 people involved
Reinforce legislation to prevent introduction of new (avian) species in Seychelles.	2009-10	No new populations of Parrots established in Seychelles	PPS (DoE)	High	Currently only a policy that needs to be upgraded to Legislation. To be done under GEF Biosecurity
<b>Site safeguard</b>					
Designate Fond Pepper as a Special Reserve	2010	Sites designated	DoE	Medium	Change it from Nature to Special Reserve
Legal protection of Fond Ferdinand	2011	Site designated	DoE/ PDF	High	
Rat and cat eradication / control on at least another island / site potentially suitable for SBP.	2010-11	Control programme set up / island confirmed rat & cat free by 2011	Island managers & NGOs	Low	Eradication of rats on Curieuse could be reconsidered

<b>Species Management &amp; Protection</b>					
Renovate and maintain the currently occupied nest-boxes on Praslin, and reinstall in sites formerly occupied and next to natural nests	2009-2010	Number of nest-boxes renovated and maintained	DoE & specific project	High	Nest-boxes should be next to natural nests to replace them when no longer usable
Creation or restoration of key habitats : native palm forest and areas with fruiting trees on medium-size islands potentially suitable	2009-2013	Number of trees planted  Number of ha restored as palm forest or orchards	Private islands	High	This should be large enough to sustain a small breeding population on middle sized islands (more research required).
Captive chick-rearing of at least 20 parrots from eggs, chicks or near-fledged birds taken from Praslin nest boxes, in medium-sized rat free island.	2009-2013	Number of fledglings hand reared	Management of selected islands in coll. with DoE & other partners	Medium/High	Some adults may be transferred at later stage  Protocol subject to agreement by DoE.
Install nest boxes on (1) Curieuse and (2) islands where transfers have been agreed	2010-2013	Number of nest boxes installed	Island / Conservation managers	(1) Medium/ (2) High	
First transfer of c.30-50 birds (adults or fledglings) to a large island with sufficient suitable habitat to host a second viable population	2012-2013	Transferred birds survive and breed successfully	DoE, & partners (NPA, Foundation, NGOs)	High	Nest boxes and rat control around natural nests crucial. A second similar transfer to same island to be envisaged if first giving good results (up to 80-100 birds in total)
Eradication of Ring-necked Parakeets established on Mahé	2009-2013	Number of RNP killed	DoE	High	Consider a public bounty to help professionals locate RNPs birds and nests and destroy them
Eradication of any exotic parakeets and parrots - captive or wild - on all granitic islands	2001-2006	Number of birds killed  Number of species prevented from becoming established	DoE & Island managers	Critical	Exotic Parrots not to become established on Praslin/La Digue/Silhouette/Frégate or surrounding islands.
<b>Advocacy (none)</b>					



<b>Resources</b>					
Fund habitat rehabilitation projects on middle-size islands, and hand rearing captive programme (c.100.000 USD).	2009-13	Commitment obtained	Private islands & conservati on partners	High	c.10-20 ha of palm forest planted. Building, equipment & 1 specialized technician. Frégate has agreed to cover all costs.
Fund island transfers, population monitoring and management on large (government owned) island	2010	Funding obtained	DoE, & partners (NPA, Foundation , NGOs)	High	On Silhouette, island, partners including private developers are regrouped under an Island Foundation
<b>Research &amp; Monitoring</b>					
Conduct research & trials on efficient mitigating measures to minimise damage from Parrots to farmers	2009-2013	Techniques tried Number of hectares planted	DoE, DNR & specific project	High	- try methods used in other countries  - farmers to consider alternative fruits
Improve the design of nest-boxes to make them more resistant and attractive	2009-2010	More resistant nest box created and tested in the field	SIF, DoE & specific project	High	Try other woods such as Albizzia. Trials with polysterene or fiberglass already ongoing
Conduct research on nest-site selection and nest-box occupancy	2009-2013	Nest site selection parameters better defined	DoE, SIF & specific project	Medi um	May not be easy due to small % of nest-boxes occupied
Suitability assessment of a large island for the Black Parrot	2010-2011	Habitat suitability assessment report produced	DoE & partners (Silh.Foun dation, NPA, NGOs)	High	Silhouette identified as first option due to its extension of palm forests, brood-leaf woodland & fruit trees
Circulate reports on suitability of other islands to all stakeholders.	2009	Reports circulated	ICS, Island Managers	Medi um	Important for awareness and transparency
Review and analysis of areas of high suitable habitat for SBP destroyed by fire on Praslin and Curieuse	2010	Report produced	SIF, DoE	Medi um	Important to determine extent of damage occasioned by fire

Continue annual counts and database input to determine abundance and analyse trends.	2009-2013	Trends analysed every 5 years	DoE/ICS/ Museum Paris	High	Programme was interrupted between 2003 and 2007  Assess representativeness
Publish results from monitoring programme and existing knowledge on species breeding biology & ecology	2009-10	Scientific papers published	DoE/ICS/ Museum Paris	High	
Improve population estimate and update every 5 years	2010-13	More precise and accurate estimates produced	SIF, DoE & researchers	Medium	To be compared with results derived from annual counts
Continue research into habitat preferences, breeding ecology population size, and comparative taxonomical studies.	2009-2013	Reports or papers published  Better understanding of SBP ecology	SIF, DoE & researchers	High	
Continue assessment of other islands as potential sites to create alternative populations	2009-2011	Assessments produced	DoE, SIF & researchers	Low	
Monitoring population of Ring-necked Parakeets on Mahé	2009-2013	Estimate population size and determine extent of range	DoE & SRBC	High	Simultaneous counts at roosts
Pathogen-screening of Ring-necked Parakeets on Mahé to identify potential disease threat to SBP	2010-2012	Results obtained	SIF & DoE	High	

<b>Education &amp; Awareness</b>					
News on SBP conservation and research activities for general public and world conservation community.  Prevention of fires through public information.	2009-2013	Press articles in newspapers and magazines, TV broadcasts	DoE, SIF & others	Medium	
Specific sensitization for farmers & Fruit-bat trappers	2009-2013	Presentations through DNR for Praslin Farmer Association  Leaflets, TV programmes, direct contacts	DoE, DNR, SIF	Medium	Display in Vallée de Mai  Could be part of a specific project on BP
Specific sensitization for schools, with an emphasis on Praslin	2009-2013	Presentations done	DoE, SIF officers	Medium	Display in Vallée de Mai
Public awareness /sensitization of potential threats from Ring-necked Parakeets and how to identify and report them	2009-2013	TV, newspapers, posters, presentations etc.	DoE	High	Consider reward scheme for info leading to capture or kill.  Set up scheme for early reporting of RNPs on other islands.
<b>Cooperation &amp; Participation</b>					
Island owners, managers and residents helping to maintain rat-free status on middle-size islands	2009-2013	No recolonisation by rats	Island owners & managers	High	
Volunteers from NGOs, Wildlife Clubs, private sector and general public participating in annual counts	2009-2013	Annual monitoring implemented with strong public support  Summary results regularly circulated or published.	DoE, SIF, ICS, NGOs	High	
Set up a working group on the SBP and conduct regular meetings	2009-2013	- number of meetings during period  - number of MoUs	DoE, SIF & ICS	High	Meetings once to twice a year to review progress depending on resources
Prior understanding and acceptance required from managers & residents in destination islands, that the BP may cause problems by eating certain fruits	2010-2011	- information meetings prior to transfers  - MoU between DoE & islands	Private islands, managers	High	Most problems are with Starfruit, and to a minor extent Bilimbi and Mango