

STATUS OF BIRDS AND THEIR HABITATS IN THE MARINE AND COASTAL ENVIRONMENT OF THE COMOROS

Foreword

Data and information for this report was compiled by Engagement Communautaire pour Developpement Durable (ECDD); Bristol Conservation and Science Foundation's (BCSF) with support from BirdLife International project in the Comoros working in partnership with Durrell Wildlife Conservation Trust (Durrell). This project has been working in the Comoros since 2007 to develop the best approach to forest management for the Comoros, based mainly on participatory learning and action methodology. The ecological monitoring department of the project have been surveying terrestrial birds on the three islands of the Comoros since 2009; with a species specific project funded by BirdLife International's Preventing Extinctions Initiative which focused on the distribution and estimated population size of the Anjouan Scops Owl (*Otus capnodes*). Observations from these, other studies, and personal observations made by members of the National Task Force, were used in this report to assess the current status of the Comorian avifauna, the threats they face, and conservation actions which could be implemented.

Acknowledgements

We thank members of the National Task Force for assistance with the contents of this report: representatives of the National Centre for Scientific Documentation and Research (CNDRS), OCB - Community-based organizations project in Comoros, University of the Comoros, the Marine Park Mohéli, and Engagement Communautaire pour le Developpement Durable (ECDD). From BirdLife International, we would like to thank Christina Moseley and Ross Wanless for their organisation of the first meeting, and for assistance with the production of the report Christina Moseley and Ademola Ajagbe.

Table of Contents

<i>Foreword</i>	1
<i>Acknowledgements</i>	1
1. Executive Summary	3
2. Introduction.....	4
2.1 Overview	4
2.2 Threats to birds and their habitats	4
2.3 The WIO marine project	5
2.4 Objectives of the national report	5
2.5 Project Implementation.....	6
3. General information.....	8
3.1 Location and physical features	8
3.2 Climate and vegetation.....	9
4. Ornithological importance	10
4.1 Categories and Criteria.....	10
4.1.1 BirdLife’s Guidelines.....	10
4.1.2 Species of Regional or National Conservation Concern	10
4.1.3 Criteria for habitat selection.....	10
5. Important Birds in the Comoros.....	12
5.1 Birds status	12
5.1.1 Tabular presentation of birds status	13
5.1.2 Graphical presentation of birds status.....	17
6. Conservation Issues	18
7. Priorities for Action.....	20
7.1 The approach.....	20
7.2 Assessing threats	21
7.3 Priority sites.....	23
8. Description of important birds	24

1. Executive Summary

The archipelago of the Comoros lies between Madagascar and Mozambique. It is one of the richest biodiversity hotspots in the world due to high levels of species endemism. In this report we identify 39 species of birds of regional or national conservation concern. Of these species 3 are listed as Critically Endangered on the IUCN Red List, 2 Vulnerable, and 2 Near-Threatened. The major threats to these species are identified as consequences of the pressures associated with the regions high human population density, unsustainable agricultural practices and timber extraction.

2. Introduction

2.1 Overview

The Comoros, Madagascar, and the other Indian Ocean Islands make up one of the world's richest biodiversity hotspots. Although not particularly species rich, the Comoros islands boast remarkable levels of endemism.

Much of the native vegetation on the islands is now restricted to the highlands due to increasing agricultural pressures. These habitats include tropical montane moist forest where the Endangered Livingstone's Fruit Bat (*Pteropus livingstonii*) endemic to Anjouan and Mohéli is found. The active volcano Mount Karthala is situated on Grande Comore. Montane moist forests form a ring around this mountain and above this ring, in the high altitudes, vast areas of heath vegetation (*Philippia*) dominate; this is home to the endemic white-eye (*Zosterops mouroniensis*).

The coastal and marine zones are made up of coastal mangroves, sea grass beds, inshore reefs, uninhabited islets, and off-shore reefs. They have been identified as one of the priority marine eco-regions due to its biological distinctiveness (WWF Global 200). Within these zones are nesting green sea turtles (*Chelonia mydas*), hawksbill seas turtles (*Eretmochelys imbricata*), coelacanths (*Latimeria chalumnae*), and dugongs (*Dugong dugon*).

A total of 102 bird species have been recorded in the Comoros; of these species 31 (30%) are endemic species or sub-species. Species distributions vary across the islands with each island having its own endemic species (3 in Anjouan, 5 in Grande Comore, 2 in Mohéli, and 3 in Mayotte). This includes the 4 island endemic scops-owls; *Otus capnodes* (Anjouan), *O. moheliensis* (Mohéli), *O. pauliani* (Grande Comore), and *O. mayottensis* (Mayotte). All except *O. mayottensis* are all classed as Critically Endangered on the IUCN Red List (IUCN, 2011), due to continuing habitat destruction and degradation in its small range. In addition, across all the islands, two species are listed as Vulnerable and two as Near-Threatened (IUCN, 2011).

2.2 Threats to birds and their habitats

The major threats to the unique avifaunal diversity of the Comoros and their habitats are a consequence of the pressures associated with the regions high human population density; in 2010 the World Bank estimated 395 people/km². This dense population has a huge impact on the natural environment of the Comoros. Much of the lowland forests have been cleared for timber, crops, and grazing. Due to the limited availability of suitable agricultural land on Anjouan, little intact montane forest remains on this island. The rapid encroachment of agricultural practices on the natural forests is resulting in a drastic loss of habitat for many of the endemic bird species. In the Karthala forests of Grande Comore, agricultural practices, selective logging, and grazing are found at high altitudes (>1000m.a.s.l.); this forest

degradation threatens the survival of two endemics: Karthala scops-owl (*Otus pauliani*) and Mount Karthala white-eye (*Zosterops mouroniensis*).

Several invasive species introduced by humans threaten the bird species in the Comoros. Black rats (*Rattus rattus*), pied crow (*Corvus albus*), civet (*Viverricula indica*), and Indian mongoose (*Herpestes javanicus auropunctatus*) all threaten the breeding success of the birds through nest predation. The common myna (*Acridotheres tristis*) is abundant on all islands and is a possible competitor for cavity nesting sites for the endemic scops-owls. The presence of invasive plants could lead to habitat alteration and degradation, in particular with the encroachment of agriculture within the montane forest zones.

2.3 The WIO marine project

In 1985, the Governments of the Eastern African Region adopted the “Protocol Concerning Protected Areas and Wild Fauna and Flora in the Eastern African Region”. This protocol obliges the Contracting Parties to undertake appropriate measures to maintain essential ecological processes and life support systems, to preserve genetic diversity, and to ensure the sustainable utilization of harvestable natural resources under their jurisdiction. In particular, to protect and preserve rare and fragile ecosystems as well as rare, depleted, threatened or endangered species of wild fauna and flora and their habitats in the Eastern African Region.

Over the years, the Eastern African region has come under intense pressure resulting from increasing population pressures, overexploitation and conversion of coastal habitats for other uses such as agriculture, aquaculture, port/harbour expansion or urban development. Some of these developments have led to the degradation of vital coastal and marine habitats such as mangrove forests, among others.

In this regard, BirdLife International in partnership with Nairobi Convention Secretariat facilitated the establishment of National Task Force (NTF) to review the status of birds listed in the protocol and compile a national report for [insert name of country].

2.4 Objectives of the national report

The main objective of the national report is to document the status of birds and their habitats in the marine and coastal environment as indicators of marine and coastal ecosystem health. Specifically, the national report will:

- a. Provide an up to date list of the important and threatened bird species with description of the major threats and recommend conservation strategies.
- b. Present the status of birds and their habitats in spatial, tabular and/or graphic format.
- c. List candidate marine Important Bird Areas (IBAs) that could be specially protected as Marine Protected Areas (MPAs) for birds and other forms of biodiversity as well as key ecosystem services.

- d. Create linkages with national environmental legislations and Multilateral Environmental Agreements (MEAs).

2.5 Project Implementation

The NTF for the Comoros is composed of representatives from the major national environmental organisations; National Centre for Scientific Documentation and Research (CNDRS), OCB - Community-based organizations project in Comoros, University of the Comoros, the Marine Park Mohéli, and the Engagement Communautaire pour le Developpement Durable (ECDD).

Table 1 gives details of the members of the NTF who were present at the first meeting held on the 7th February 2012. During this meeting the NTF revised the bird list for the Comoros and updated the information on their status, habitats, and threats. Members not present were contacted via email; Francois Beudard and Ambre Malet of the Marine Park Mohéli.

Table 1: The members of the NTF

Name	Organisation	Title	E-mail	Tel
Bourhane Abderemane	National Centre for Scientific Documentation and Research (CNDRS) – Anjouan	Regional Director	bourhane_abolere mane@yahoo.com	3366302
Fatima Attoumani	Direction General de l'Environnement (DGEF)	Management Officer	fat_imah@yahoo.fr	3267597
Bronwen Daniel	ECDD	Ecological Research and Monitoring Officer	bronwen.daniel@durrell.org	3270319
Miguel Fernandez	ECDD	GIS Volunteer	miguel@astudille.com	
Katie Green	ECDD	Head of Ecological Research and Monitoring	kgreen@bcsf.org.uk	
Christian Rakotarinivo	ECDD	Technical Assistant	christian.rakotarinivo@gmail.com	3415447
Daniel Mohamed Salim	ECDD	Ecological Technician	danielmohamedsalim@gmail.com	3322110
Amélaid Houmadi	ECDD	Ecological Technician	amelaidh@yahoo.fr	3399326
Hugh Doulton	ECDD	National Coordinator	hughdoulton@bcsf.org.uk	3342559
El-yamine Ali Mohamed	ECDD	Ecological Technician	elyaminealimed@yahoo.fr	3382605

Name	Organisation	Title	E-mail	Tel
Ishaka Said	ECDD	Ecological Technician	said.ishaka@yahoo.fr	3380294
Dr Thaoubane said Ali	University of the Comoros - Faculty of Science	Dean	sathaoubane@yahoo.fr	3313069
Mohamed Ali Mlazahe	OCB - Community-based organizations project in Comoros	Coordinator	medaliml@yahoo.fr	3361236
Anllaouddine Abou	National Programme for Sustainable Human Development (PNDHD)	Head of the Environmental Department	anllaouddine@yahoo.fr	3322969
Andilyat Mohamed	University of the Comoros	Herbarium Curator	andilyat1@gmail.com	3353443
Youssef Eddine Abdou	University of the Comoros	Lecturer and Researcher	youseddine@hotmail.fr	3329328
Yahaya IBRAHIM	National Centre for Scientific Documentation and Research (CNDRS)	Head of the Biodiversity Department	yahayaim@yahoo.fr	

3. General information

3.1 Location and physical features

The Comoros are an archipelago consisting four islands: Grande Comore (Ngazidja), Mohéli (Mwali), Anjouan (Ndzwani), and Mayotte (Maoré). They are located in the Western Indian Ocean, approximately 300km from the East African coast and Madagascar (Figure 1). The islands are of volcanic origin and up to 15 million years old. Grande Comore is the youngest of the islands on which the active volcano Mount Karthala is situated; the last eruption was in 2006.

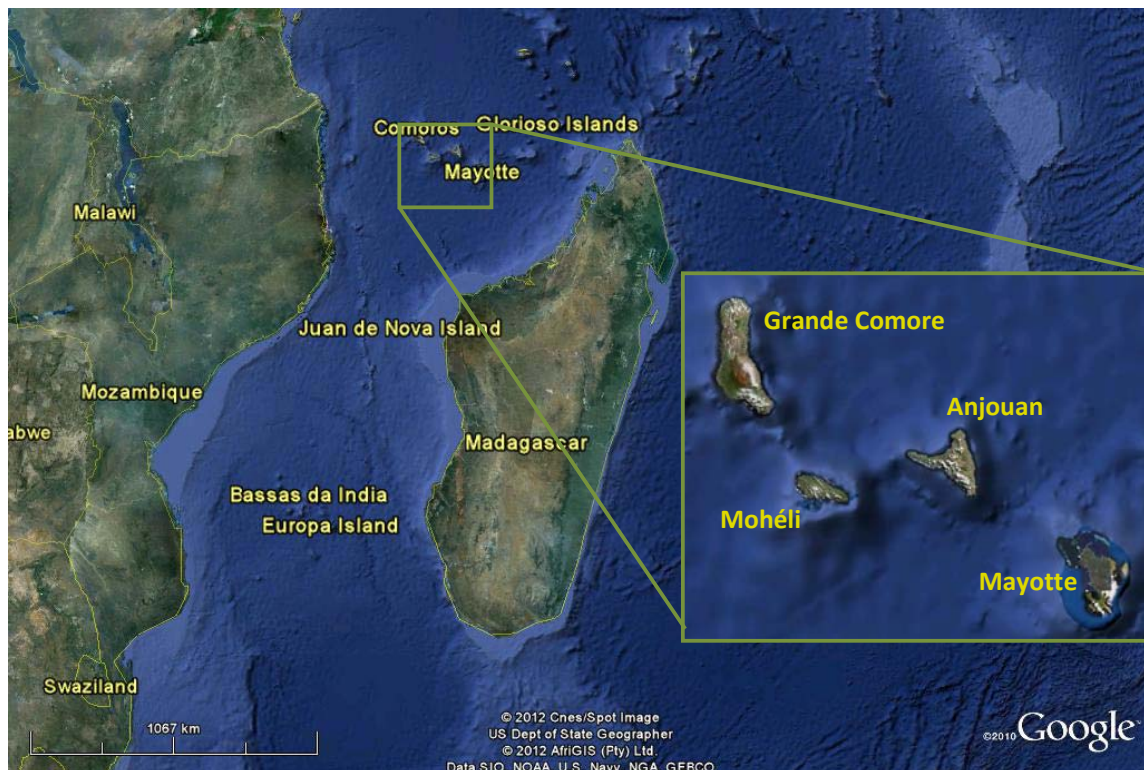


Figure 1. Location of the Comoros (GoogleEarth)

预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index/report?reportId=5_9515

