

ADDENDUM TO THE SEABIRD IDENTIFICATION CARDS FOR FISHING VESSELS OPERATING IN THE INDIAN OCEAN

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ABSTRACT

IOTC Seabirds Identification Cards for Fishing Vessels Operating in the Indian Ocean covers seabirds mainly from Southern and Central Indian Ocean and includes only three species i.e. flesh-footed shearwater, wedge-tailed shearwater and masked booby from Northern Indian Ocean (Arabian sea). In addition, existing IOTC Seabirds Identification Cards does not include some species of sea birds which are associated with tuna school such as tropic birds, noddies, gulls and terns. Considering these lacunae, WWF-Pakistan has drafted a Seabirds Identification Cards which will be equally helpful to observers, skippers and scientists from not only Northern Indian Ocean but will cover entire IOTC area of competence.

INTRODUCTION

Indian Ocean Tuna Commission has published five species identification guides covering tuna and tuna like species, marine turtles, sharks and rays, billfishes and seabirds. Identification cards for fishing vessels operating in the Indian Ocean mainly cover species occurring in the Southern and Central Indian Ocean. It includes only three species that occur in the Northern Indian Ocean (Arabian Sea) i.e. flesh-footed shearwater (*Puffinus carneipes*), wedge-tailed shearwater (*Puffinus pacificus*) and masked booby (*Sula dactylatra*). The IOTC identification guide for sea bird, therefore, is not helpful in the identification of sea birds associated with tuna fishing or found in the offshore waters in the northern Indian Ocean. Some species groups such as gulls, terns, noddies and tropicbirds are not covered by the Seabirds Identification Cards for Fishing Vessels Operating in the Indian Ocean.

WWF-Pakistan initiated an crew based Observer Programme in October, 2012 and since then this programme is continuing. The observers posted on the tuna gillnet vessels which operate in offshore waters of Pakistan, in its Exclusive Economic Zone (EEZ) and in the Area Beyond National Jurisdiction (ABNJ) regularly encountered seabirds associated with tuna schools, interacted with fishing gears or followed the fishing vessels. They have complained that with the exception of masked booby and wedged-tailed shearwater, the species of seabirds cannot be identified using IOTC Seabirds Identification Cards for Fishing Vessels Operating in the Indian Ocean.

Tropicbird

Tropicbirds are prominent seabirds with extremely elongated central tail feathers. Chiefly white in color, tropicbirds are medium-sized seabirds with robust bodies and slightly curved bright beaks and noticeable black markings on various parts of the body. These birds have weak, backward-set legs that do not support body weight hence limiting the activity on land.

Tropicbirds show perplexed behavior when it comes to migration. These non-colonial species disperse after breeding in various directions and have been reported as *vagrants*. Primarily these are non-migratory species.

Previously placed in *Pelicaniformes*, tropicbirds have obtained their own order *Phaethontiformes*. It is represented by a single genus *Phaethon* with only three known species namely Red-Tailed Tropicbird, Red-Billed Tropicbird and White-Tailed Tropicbird. All three species occur in the IOTC area.

Red-Tailed Tropicbird

Phaethon rubricauda rubricauda

Phaethon rubricauda westralis

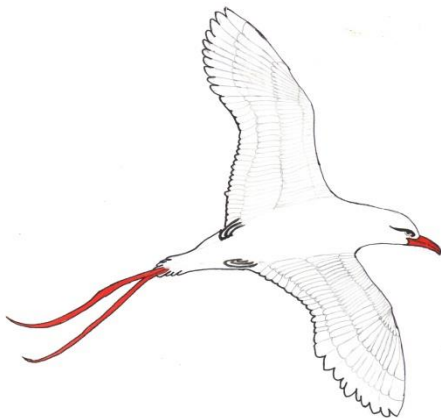
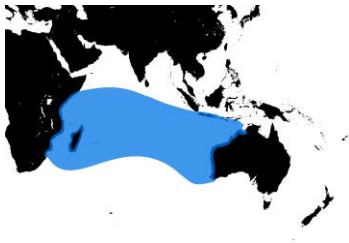


- Wingspan: 104-119 cm
- Common in South Indian Ocean
- Non colonial species

ADULT:

- Black streaks present at sides of the body and base of wings
- Black feathers' crescent in front of eyes
- Central elongated red tail feathers
- Bill red

Beware: Juveniles lack elongated tail feathers



Tropicbird

Red-Billed Tropicbird

Phaethon aethereus indicus



- Wingspan: 99-106 cm
- Pelagic; found in tropics & subtropics
- Vagrant

ADULT:

- Fine prominent brown barring on upperparts
- Wings tipped black
- White central elongated tail feathers
- Crimson red bill

Beware: Juveniles lack elongated tail feathers



White-Tailed Tropicbird

Phaethon lepturus lepturus

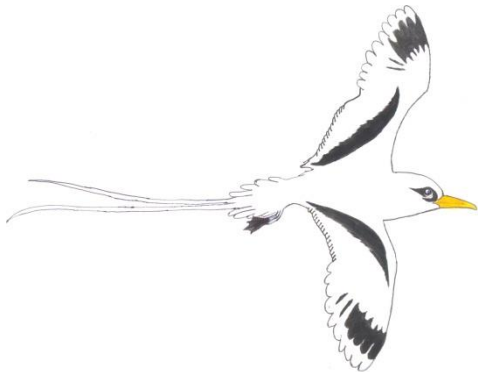


- Wingspan: 90-95 cm
- Tropical; Offshore; Common
- Disperses after breeding

ADULT:

- Characteristic diagonal black band present on inner wing with black markings on outer wings
- Black feathers' crescent in front of eyes
- Central elongated white tail feathers
- Bill deep yellow

Beware: Juveniles lack elongated tail feathers



Tropicbird

Noddies

Noddies are small seabirds representing the tern family. These coastal, pelagic waders are found in colonies but mostly on isolated off-shore islets, coral reefs and rocky cliffs.

Noddies are chiefly recognized by completely white or paler crowns contrasting with dark plumages. While the feature that separates these seabirds from the rest of the terns is notch-wedge shaped tails and not forked. These birds have slender darker bills with comparatively light colored legs and webbed feet.

The Noddies that occur in the IOTC Area are all three representatives of the genus *Anous* with two subspecies of Lesser Noddy namely *Anous tenuirostris tenuirostris* and *Anous tenuirostris melanops* followed by Brown Noddy – *Anous stolidus pileatus* that occurs widely while Black Noddy – *Anous Minutus* has been reported as Vagrant

Lesser Noddy



-Wingspan: 58-63 cm

-Occurs on off-shore oceanic islets

-Non Migratory

Anous tenuirostris tenuirostris

Anous tenuirostris melanops

ADULT:

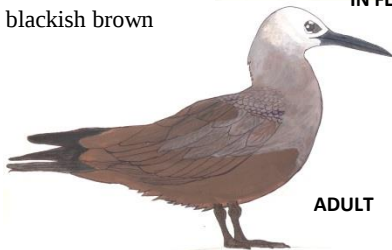
- Sooty blackish-brown tropical and subtropical bird
- Forehead and crown white that blends into gray-brown neck and cheeks
- Dark, slender, pointed bill
- Black brown legs and wading feet

JUVENILE:

- Juveniles are rather pale brown than blackish brown



IN FLIGHT



ADULT

Brown Noddy

Anous stolidus pileatus



- Wingspan: 75-86 cm
- Occurs on isolated islands, reefs, cliffs
- Migration known poorly

ADULT:

- Medium-sized sea bird
- Plumage chocolate brown in color
- Characteristic white-gray forehead that blends into pale grayer crown and nape of neck with grey-brown cheeks and dark black lores

JUVENILE:

- Juvenile crown is brown
- Pale fringes on upperparts present



IN FLIGHT



ADULT

Black Noddy

Anous minutus



- Wingspan: 66-72cm
- Offshore species
- Vagrant

ADULT:

- Sooty black tropical and subtropical bird of the Pacific Ocean
- A somberly spotless white head cap that steadily blends into shady neck
- Dark, slender, pointed bill
- Light black legs and wading feet

JUVENILE:

- Juvenile has gray feathers



● Vagrant / Occurs occasionally



ADULT



IN FLIGHT

Noddies

In order to assist, the observers, WWF-Pakistan decided to develop to expand IOTC Seabirds Identification Cards for Fishing Vessels Operating and to include bird groups and species which were not covered.

ADDENDUM TO THE IOTC SEABIRD IDENTIFICATION CARDS

WWF-Pakistan has drafted cards which may be added to the existing IOTC Seabirds Identification Cards for Fishing Vessels Operating in the Indian Ocean to enhance their usage by the observers, skippers and scientist working. Identification cards have been designed to include the groups of seabirds not covered in the IOTC Seabirds Identification Cards for Fishing Vessels Operating in the Indian Ocean as well as those species groups which although have representatives from Southern and central Indian Ocean but do not have species from northern Indian Ocean. The drafted Identification cards includes distribution of these species in the entire area under IOTC. It also includes species which are found in Southern and Central Indian Ocean but not included in the IOTC Seabirds Identification Cards for Fishing Vessels Operating in the Indian Ocean.

Some of the groups covered under the proposed amendments include tropic birds, noddies, sea gulls, terns, pelican, flamingoes, raptors, skuas, shearwaters, jaegers and cormorants. Some of the species may be considered as coastal in their general distribution, however, these were included because of their occurrence in offshore waters or associated with tuna schools, or follow fishing vessels in offshore waters.

As an example, Identification cards for tropicbirds and noddies are given here. WWF-Pakistan will seek endorsement of the addendum to the IOTC Seabirds Identification Cards for Fishing Vessels Operating in the Indian Ocean and may also request Bird International or any other organization/person to vet the Identification so these may be printed and circulated. WWF-Pakistan also seek permission to include existing cards from IOTC Seabirds Identification Cards for Fishing Vessels Operating in the Indian Ocean into a consolidated version. Alternatively the species already covered may also be separately designed and included in a new IOTC Seabirds Identification Cards for Fishing Vessels Operating in the Indian Ocean.