

AVIFAUNA BETWEEN CAPE OF GOOD HOPE TO ANTARCTICA

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ABSTRACT

Southern Ocean and Antarctic oceans, lying between Africa and Antarctica in general and south and sub tropical convergence area in particular is known for rich nutrients and marine diversity including plankton and fishes, which in turn, supports avifauna of both migratory and non migratory nature. Observations made in the above area during XX Indian Antarctic Expedition reveals the presence of 34 species of birds including petrels, albatross, penguin's etc.,

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KEY WORDS: Avifauna, Antarctica.

Introduction

The great water mass lying between Cape of Good Hope and Antarctica has a vastness of about 5000km. It encompasses Atlantic as well as Southern ocean. The environmental conditions range from typical tropical to polar weather. As the water body is highly productive in this area, due to sub tropical convergence, water currents and associated upwelling of the nutrient rich sub surface water. This, alongwith good solar radiation has resulted in high phytoplankton productivity, which in turn supports zooplankton and ultimately other aquatic fauna. Apart from the above, as there are several islands, which are safe for breeding activity for the migratory as well non migratory birds, there is rich fauna of birds in this area. Observations made during XX Indian Antarctic Expedition (2000-2001), recorded 34 species of birds belonging to 21 genera and seven families. Though, similar kind of observations were made earlier^{3,4} there is a large time gap of more than one and half decades, present investigations were undertaken

Material and Methods

Every day morning from 0700hrs to 0900 and in the evening from 1600-1800 observations for the birds were made from the upper deck. Both flying as well ones resting on the water were noted. Based on the colour, size, plumage, colour of the beak and other distinguishable characters, the

birds were identified based on the available literature^{1,2,5,6}.

Results

Thirty four species of bird belonging to 21 genera and seven families were observed during the voyage, which are as listed below:

TABLE -1: Check list of the bird recorded between Cape of Good Hope and Antarctica

Family: Stercoraridae

Genus: *Catheracta*

Species: *Catheracta maccormicki*
(South Polar skua)

Catheracta natarctica (Antarctic skua)

Family: Sternidae

Genus: *Sterna*

Species: *Sterna fuscata* (Sooty tern)

Sterna paradisaea (Arctic tern)

Genus: *Anous*

Species: *Anous stolidus* (Brown noody)

Family: Spheniscidae

Genus: *Aptenodytes*

Species: *Aptenodytes forsteri* (Emperor penguin)

Aptenodytes patagonica (King penguin)

Genus: *Pygoscelis*

Species: *Pygoscelis adelia* (Adelie penguin)

Genus: *Eudyptes*

Species: *Eudyptes chrosolophus* (Macaroni penguin)

Family: Procellariidae

Genus: *Macronectus*

Species: *Macronectus giganteus* (Southern giant petrel)
Macronectus halli (Northern giant petrel)

Genus: *Puffinus*

Species: *Puffinus griseus* (Sooty shear water)

Genus: *Fulmarus*

Species: *Fulmarus glacialis* (Southern fulmar)

Genus: *Pagodroma*

Species: *Pagodroma nivea* (Snow petrel)

Genus: *Daption*

Species: *Daption capensis* (Cape pigeon)

Genus: *Thalassoica*

Species: *Thalassoica antarctica* (Antarctic petrel)

Genus: *Pachyptila*

Species: *Pachyptila desolata* (Antarctic prion)

Pachyptila vittata (Broad billed prion)

Pachyptila crassirostris (Thick billed prion)

Pachyptila belcheri (Thin billed prion)

Genus: *Halobaena*

Species: *Halobaena caerulea* (Blue petrel)

Genus: *Procellaria*

Species: *Procellaria aequinoctialis* (White chinned petrel)

Genus: *Pteroderma*

Species: *Pteroderma macroptera* (Great winged petrel)

Pteroderma lessoni (White headed petrel)

Pteroderma brevirostris (Kerguelan petrel)

Family: Pelicanidae

Genus: *Pelicanoides*

Species: *Pelicanoides uricatrix* (Common diving petrel)

Pteroderma mollis (Soft plumed petrel)

Family: Diomedidae

Genus: *Diomedea*

Species: *Diomedea chrysostoma* (Grey headed albatross)

Diomedea exulans (Wandering albatross)

Diomedea melanophris (Black headed albatross)

Genus: *Phoebastria*

Species: *Phoebastria palpebrata* (Light mantled sooty albatross)

Phoebastria fusca (Sooty albatross)

Family: Hydrobatidae

Genus: *Gerrodia*

Species: *Gerrodia nereis* (Grey backed storm petrel)

Genus: *Fregatta*

Species: *Fregatta tropica* (Black billed storm petrel)

Discussion

The presence of birds in particular and any animal in general, can be considered as an indicator of availability food, in that particular area. Birds of either migratory or non migratory nature, flying over vast oceans, always prefer to take route, where sufficient food is available to them. The present studies indicate that, as a number of species of birds belonging to 21 genera and seven families were recorded, provides a clue that, the ocean in this area is quite fertile which means, there is a good plankton diversity. This in turn, harbors variety of fish fauna, which happens to be the food for these birds. As the survey conducted was during Antarctic summer, all most all birds in general and migratory birds in particular, were found moving towards south, except for a few. Further, the Cape of Good Hope is situated around 40°S, where mixing up of tropical waters with

temperate water takes place and the ocean becomes quite disturbed. This is the area where one tends to see rich plankton and fish diversity, leading to have optimum diversity of avifauna too. Similar thing happens at 50°S also, due to mixing up of temperate waters with polar water. This is confirmed by the recording of 34 species of birds belonging to 21 genera and seven families.

Wandering albatross, thin billed prion,

southern fulmar, sooty shear water were the common birds with wide latitudinal distribution. While, King penguin, Macaroni penguin, thick billed prion, southern giant petrel had a narrow latitudinal distribution. Though earlier worker had reported and listed 13 species of birds, from this list, birds such as yellow nosed albatross⁴, Antarctic tern, King shag, Dominican shag etc., were not sighted during present observations.

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