

4.8 Coastal Birds

Seabirds are broadly defined as birds that forage primarily on marine prey and spend most of their time (except when breeding) at sea.¹ This excludes shorebirds, which are common in freshwater and estuarine systems but rely to a lesser degree on marine resources.

African Black Oystercatcher.



Photo: Martin Taylor

Seabirds

Seabirds have very conservative life-history characteristics relative to most other bird groups.² Typically, they lay small clutches (1-3 eggs) and some groups (e.g. procellariiforms) cannot lay replacement clutches, and are generally late to reach sexual maturity. For these reasons they are, as a group, highly sensitive to additional, anthropogenic sources of

mortality. They are also amongst the most charismatic and highly visible components of marine biodiversity. Their widespread distributions and ability to track ephemeral oceanographic features, such as eddies and frontal lines, means that they are often used as surrogates or indicators of broader marine biodiversity.³

Seven seabird families breed along or visit the KZN coast annually, typically referred to as albatrosses, petrels and allies, storm-petrels, gannets, boobies, oystercatchers, skuas, gulls and terns.⁴

The lack of suitable breeding habitat (principally offshore islands) means that the breeding seabird assemblage is a considerably reduced subset in KZN, consisting only of those species that have more flexibility in their breeding requirements; i.e. terns, gulls and, more recently, African black oystercatchers. At the broadest scale, the KZN coast spans from warm, sub-tropical waters in the north to cooler, mixed waters in the south, and the area is sometimes considered a transitional zone between these biogeographic and oceanographic regions,⁵ for details see *Sections 2.1* and *2.3*. There is much heterogeneity at a finer scale, with a diversity of productivity and temperature habitats in the marine environment. This gives rise to an impressive

number of species that visit the coastal waters, either regularly or occasionally.

The biggest separation in both habitats and seabird assemblages is the inshore-offshore divide. The inshore species will be familiar to visitors to the KZN coast, because of their land roosting. This assemblage includes the two seagull species (kelp and grey-headed gulls), six species of terns and, in the south, the oystercatcher. These are all nearshore species that forage primarily in nearshore habitats. Also foraging near-shore, but not roosting or making landfall under normal circumstances, are some species that blur the distinction between inshore and offshore divisions. During the annual sardine run, Cape gannets put in an appearance,⁶ and the highly migratory, kleptoparasitic skuas also frequent the nearshore during the summer months.^{7; 8; 9; 10}

The offshore seabirds are loosely associated with the shelf edge (which is closer to land in KZN than anywhere else in South Africa), dominated numerically and in species diversity by the procellariiformes (albatrosses, petrels and allies, and storm-petrels). These are essentially Southern Ocean species, breeding on sub-Antarctic islands and migrating to southern African waters. Many of these species (especially albatrosses and the white-chinned petrel) associate strongly with fishing vessels,² particularly longliners and the demersal trawlers that operate occasionally along the shelf edge.¹¹

Further north, in the warmer waters, there are irregular incursions into the region by tropical species such as frigate birds, tropicbirds and boobies. An important area for the endangered Barau's petrel is south of Madagascar, but tracking studies have shown that this species regularly enters into the northeast edge of South Africa's territorial waters.¹²

Waders

A description of the KZN coastal bird life would be incomplete without mentioning the common group of shorebirds or waders that are a key to the province's coastal marine biodiversity.

Waders can be divided into resident and migrant wader groups. KZN resident waders do not form flocks and defend territories year-round. Eleven out of 12 wader species breeding in South Africa breed in KZN. They are surface nesters, which makes them very vulnerable to anthropogenic disturbance (including from human commensals e.g. dogs)



Photo: Ross Wanless



Photo: Martin Taylor

(Top) Subadult black-browed albatross.
(Bottom) White fronted plover.

and habitat change.¹³ Migrant waders, on the other hand, do not hold territories and arrive in their thousands, congregating on beaches, floodplains and wetlands to forage. They fatten up during the Austral summer and depart in the Austral autumn for their breeding sites in the northern hemisphere. There are 31 species of migrant waders in South Africa, of which 29 regularly visit KZN.

It is generally accepted that waders belong to the suborder *Charadrii*.¹⁴ The suborder comprises a number of families which have species that regularly visit or breed in KZN; namely snipes, oystercatchers, plovers, lapwings, sandpipers and curlews (the most commonly occurring waders in KZN), stilts and avocets, phalaropes, crab plovers, thick-knees and pratincoles and coursers.

Important bird areas

BirdLife International has identified several terrestrial and marine Important Bird Areas (IBAs) using criteria such as the number and abundance of resident and migrant wader species, and procellariiform tracking data.³ Key areas for waders and seabirds that roost on land, moving from north to south along the KZN coast¹⁵ include areas from Kosi to Durban Bay.

Kosi Bay

This is an estuary-linked lake system of fresh and brackish water bays and lagoons. Here the bird assemblage is prolific and diverse, largely as a result of the undisturbed condition of the vegetation along the water's edge, and the fact that several species reach the southerly limits of their Afro-tropical distribution here. The site is a Ramsar site (see *Section 10.3*), one of South Africa's 21 wetlands of international importance. The regionally threatened Caspian tern is found here in small numbers. No single species is outstanding in terms of abundance; however, the system acts as a staging post for migrating waders as part of their East Coast flyway.

Lake Sibaya

This is a freshwater coastal lake, with its closest point a mere 2 km from the coastline. When water in the surrounding coastal plain dries up during years of low rainfall, Lake Sibaya becomes the primary source of permanent water for birds in the area. The large congregation of waterbirds of up to 200 000 individuals (including migrating waders) is one of the reasons this lake is a Ramsar site and meets the IBA threshold. The regionally threatened Caspian tern is also found here.

Lake St Lucia and Mkuze swamp

Lake St Lucia is the largest estuarine system in South Africa. The system supports over 420 bird species and is the most important breeding area for waterbirds in the country. The St Lucia IBA has globally important numbers of grey-headed gulls and Caspian terns, which breed in the area. In some years 80% of the breeding population of Caspian terns has been recorded here (300 breeding pairs). There are also 300 breeding pairs of the grey-headed gull. The pied avocet, a breeding wader, sees over 3 000 individuals in some years.

Not surprisingly, this site is also a Ramsar site, where more than 20 000 waterbirds regularly occur. Commonly found waders include the little stint (5 000-6 000 individuals), curlew sandpiper (4 000-5 000 individuals) and the kittlitz's plover (100-200 breeding pairs). Others often spotted include ringed plover, wood sandpiper, common greenshank, white-fronted, ruff and marsh sandpiper.

At the Umfolozi river mouth, on the southern end of the lake, whimbrels, grey plovers, bar-tailed godwits, greater sand plovers, terek sandpipers, ruddy turnstones and sanderlings are also abundant. Unfortunately, the numbers of birds have decreased in recent years, due anthropological influences such as human disturbance, pollution and development.

Richards Bay Sanctuary

Located 190 km north of Durban, it is one of South Africa's top waterbird sites. Its surrounding areas include habitats of open freshwater lakes, mangroves, dune forest, mudflats and sandbanks. The area is generally teeming with bird life and the sanctuary portion of the bay regularly supports 20 000 waterbirds, which during the summer months increase to over 50 000 with the arrival of the Palearctic migrants.

The most numerous species of waders are whimbrel, grey plover, ringed plover, curlew sandpiper, white-fronted plover, bar-tailed godwit, common greenshank, sanderling, little stint, greater sand plover, terek sandpiper, red knot and ruddy turnstone. The much sought after crab plover, common to Mozambique, is an occasional summer visitor to KZN and can be seen here. A rare yet regular summer visitor to the area is the broadbilled sandpiper. Of the seabirds, the grey-headed gull and the common tern occur in great numbers (as many as 3 500 individuals).

Mvoti estuary

This site consists of the estuary, its associated sandbanks and floodplain with extensive mudflats exposed at low tide. The



Great white pelicans.

mudflats are high in nutrients deposited by the river and the site regularly supports over 10 000 individual birds of various species. The estuary is KZN's most important wetland for terns. Nine species are regularly present and roost in the sandbanks. The more numerous are the common tern (500-1 100 individuals), Arctic tern and Sandwich tern. Other regular tern species include the Caspian tern and Little tern.

The estuary is also the locality at which rare terns are most often encountered; for instance the black-naped, white-cheeked, sooty and roseate terns. The terns occasionally feed in the estuary, but more usually out at sea. The sandbanks, which are kept free of vegetation due to frequent flooding, offer no concealment for predators, and are used as a breeding site by several other species, including the regionally threatened chestnut-banded plover.

Durban Bay

Although Durban Bay is not an IBA, the remnant patches of mangroves and mudflats at the Durban Bayhead is an important wintering site for Palearctic waders. Before its development, the area was rich in waterbird diversity and abundance. However, only 14% of the bay's original tidal flats remain.¹⁶ Since 1965, the abundance of waterbirds has decreased by 70%, with five species becoming locally extinct.¹⁶ At present, only 3% of the surface area of Durban

Bay is protected within the Bayhead Natural Heritage Site. Another area which merits conservation is Centre Bank, which is an important foraging habitat for waders, and as a roosting site for migratory gulls and terns.^{16; 17}

A total of 47 227 waterbirds from 79 species have been recorded in Durban Bay, with more species being present during the summer, when the Palearctic migrants arrive. Between 1999 and 2003, the central banks supported 41% of waterbirds in the area. The most abundant species are the whimbrel, common greenshank, curlew sandpiper, grey plover, common ringed plover and common tern.

The KZN coastal environment is rich in bird life, nesting, roosting and feeding at a number of outstanding sites, often in their thousands. Although several sites have Ramsar and IBA status, their level of protection may not match their importance and vulnerability. ■

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