

7.4 Recreational Activities

The waters of the KZN coast are mostly sub-tropical and usually remain between 22-27°C,¹ encouraging a number of recreational activities such as swimming, surfing, sailing and diving. In addition, the KZN coast represents a subtropical transition between tropical Indo-Pacific biota in the north-east and warm-temperate biota in the south,^{2;3} making it a premier destination for recreational activities such as fishing, surfing, scuba diving and swimming.

Recreational invertebrate fishery

The invertebrate fishery consists of harvesting species such as mussels, east coast rock lobsters (colloquially known as crayfish), oysters and octopus for seafood, and species such as red bait, sand prawns and mole crabs for bait to catch linefish. Mussels, oysters and octopus are generally collected at spring low tide along rocky shores, while rock lobster are most often caught by snorkel diving on shallow, subtidal reefs.

A permit is required for recreational harvesting of invertebrates along the KZN coast, and harvests of individual species are regulated by means of daily bag limits, size limits,

closed seasons and closed areas. There are also limitations on the type of gear that can be used to harvest certain species; for example, no scuba gear is allowed for the collection of rock lobster.

Between 1999 and 2008, an average of between 3 800 and 5500 people purchased recreational permits to harvest rock lobster, mussels and other marine invertebrates along the KZN coast. Invertebrate harvesting is managed by Ezemvelo KZN Wildlife, and the Oceanographic Research Institute undertakes regular monitoring and periodic stock assessments to confirm the sustainable use of these valuable resources.

Recreational line-fishery

The recreational line-fishery consists of four distinct sectors: shore angling; light-tackle boat angling; ski-boat angling; and spearfishing. Each sector has competitive and non-competitive participants, with most competitive anglers being affiliated to clubs. Surveys suggest an estimated 15% of coastal residents fish in the sea on a regular basis.⁴ Recent estimates suggest that only about 3% of recreational shore

Sunset boat launch, Sodwana.



Photo: Rose Palmer



anglers in KZN are affiliated to registered fishing clubs, and fish competitively.⁵

Recreational shore angling is by far the biggest sector in the KZN recreational linefishery. In 2009, there were an estimated 55 000 participants, who collectively undertook 800 000 angler days of fishing.⁵ Shore angling effort is highest in, and adjacent to, urban areas (e.g. within eThekweni Municipality) and lowest in remote rural or protected areas, where there are few access roads or angling is prohibited.

The annual catch taken by the shore fishery varies from year to year, ranging between 250 and 600 tons.^{6,7} Over 84 species from 39 families have been recorded in the shore anglers' catches. Dominant species caught include shad/elf,

karanteen/strepie, blacktail, pinky/piggy and stonebream.^{5,6,7} Based on aerial counts of shore anglers conducted in 1994/95 and repeated in 2007/08,^{6,8} there has been a substantial decline in fishing effort along the KZN coast. Reasons for this are likely to be a combination of the implementation of the beach vehicle ban in 2002 (*Section 7.2*), declining catch rates, increasing costs (tackle, bait, travel, etc.) and increasing crime.⁸

The recreational boat angling fishery comprises various types of vessels from paddle-skis (also known as fishing-skis) to large, harbour-based vessels (>10 m). However, the most common vessel used for offshore fishing along the KZN coast is the "ski-boat" which is normally powered by two outboard motors and can be launched from the beach through the surf. This fishing vessel and method of launching is unique to South Africa.⁹ The development and use of ski-boats, jet-skis and paddle-skis has allowed boat fishing to spread out along the entire KZN coast.

Current estimates suggest that there are at least 10 000 recreational boat fishers who undertake over 30 000 recreational boat launches along the KZN coast each year.¹⁰ The total annual catch taken by this fishery has been estimated at between 400-470 tons per annum.^{6,10} More than 86 species from 27 families have been recorded in recreational boat anglers' catches. Dominant species caught include slinger, blue emperor, Englishman, yellowfin tuna, king mackerel and dorado.^{6,10}

It is important to note that shore and boat angling also occur in several estuaries in KZN (e.g. Durban Bay, St Lucia). It is estimated that there were approximately 51 000 anglers using estuaries in KZN.^{11; 12; 13; 14; 15} Ostensibly, there is much overlap between the fishing sectors, with a large proportion of anglers fishing in both marine and estuarine environments. The annual catch taken by estuarine anglers (from the shore and boat) was estimated to be approximately 100 tons, of which spotted grunter, Natal stumpnose, dusky kob, perch (river bream) and mullet made up the majority of the catch.¹¹ These values may have dropped considerably since the prolonged drought and subsequent closure of the St Lucia estuary mouth, in 2002.

In recent years, a large charter boat fishery has developed,¹⁶ that operates from Durban and Richards Bay harbours and



Photo: Bruce Mann

Recreational shore anglers, Durban beachfront.

from popular launch sites, such as Shelly Beach, Rocky Bay and St Lucia. Charter boats provide a means for recreational anglers who do not own vessels to fish at sea. It is therefore an extremely popular tourist activity and over 6 000 charter boat launches occur annually along the KZN coast, taking approximately 15 000 anglers to sea.^{10; 16}

In the South African recreational spearfishery, divers are limited to breath holding (a.k.a. free-diving) and may not use SCUBA gear. As a consequence, spearfishing is limited to a maximum depth of about 30 m, although most spearfishers cannot effectively dive much deeper than 15 m.¹⁷ Spearfishing can take place by either swimming from the shore or diving off a boat. Either way, spearfishing is undoubtedly the most physically challenging of all types of angling and requires both physical and mental fitness in order to be successful. There are approximately 1 800 spearfishers active in KZN and the total annual catch taken by the spearfishery was estimated at approximately 108 tons in 1994.⁶ Over 48 species from 18 families have been recorded in spearfisher's catches, including queen mackerel, king mackerel, garrick/leervis, bronze bream, baardman and knifejaws.¹⁷

Surfing

The KZN coastline has several world renowned surfing breaks (e.g. Bay of Plenty and New Pier). What makes surfing unique in KZN is that there are more than 48 well-known surf spots, which in the right conditions can produce great waves for the professional and beginner. KZN has developed some top international surfers, i.e. Jordy Smith and Shaun Thomson to name a few, who have competed in high profile surfing events against some of the best surfers in the world.

Winter is the best time to surf, as cold fronts moving up from the Cape combined with onshore winds create swells of up to 4 m. Summer swells tend to be a bit smaller, but the generally uncrowded beaches still provide excellent surfing.

Sailing

The warm water and moderate winds off KZN offer fantastic sailing conditions year-round, providing enjoyment to social and professional sailors, with Durban and Richards Bay both

having hosted international, national and local competitive regattas. The harbours and coastal waters are regularly used by small dinghies and large yachts, and the marinas situated within the main harbours offer safe moorings for yachts. The Durban marina in particular is popular amongst sightseers, some of whom are lured out to sea for a short trip on charter boat operations.

SCUBA Diving

KZN has approximately 46 documented dive sites,¹⁸ of which the Maputaland coral reef complex, Aliwal Shoal and Protea Banks are most famous.¹⁸ In 2011 it was estimated that there were approximately 11 000 boat outings undertaken solely for SCUBA diving, which made up 20% of all boat launches conducted in KZN.¹⁹ By itself, the Maputaland coral reef complex, which is situated in the Maputaland and St Lucia marine reserves, accounts for 65 000 SCUBA dives per year.²⁰ This complex, which is described in *Section 3.8*, is particularly unique, since it has some of the southernmost coral reefs in the world.²¹ This area is widely accepted to be the centre of the SCUBA diving community in South Africa, and Sodwana Bay is the only significant site where sufficient diving infrastructure is available to access these reefs.¹⁸

Aliwal Shoal, located only 5 km offshore from Umkomaas, is a highly rated dive site and probably the best known after Sodwana Bay.¹⁸ It offers a host of exciting dives with diverse reefs and a broad mix of fish species, including large congregations of ragged tooth sharks at certain times of the year.¹³ Another form of SCUBA diving which is becoming



Surfers about to take to the water.

Photo: Kirsty Bowles



increasingly popular is wreck diving. Two shipwrecks, the *Nebo* and *Produce*, are popular dive sites in the Aliwal Shoal area as they attract a host of different fish species.¹⁸

More recently, shark diving is a growing attraction, where divers can dive with zambezis, raggies and tiger sharks at Aliwal Shoal (see *Section 4.6*).

The Protea Banks, although not as famous, provide a unique experience, with deep shoals that host more than a dozen different shark species.¹⁸ The reefs are located offshore from Margate and are easily accessed from the Shelly Beach ski-boat launch site.¹⁸

Snorkelling

Snorkelling is a less taxing underwater activity and is ideal for beginners and children. Almost any calm body of water, especially rock pools that are exposed at low tide, can be used to snorkel in, and a host of fish and invertebrate species can be seen. The most popular snorkelling spots include Kosi Bay,

Island Rock, Black Rock, Mabibi, Sodwana Bay, Cape Vidal, Vetch's Pier and Limestone Reef, in front of uShaka Marine World in Durban.¹⁸

Swimming

The KZN coastline is renowned for its great swimming beaches, with numerous protected beaches being designated for this purpose. At these protected beaches, there are lifeguards on duty to ensure public safety, although at some of the less popular beaches this is only on weekends or during peak seasons. For the less experienced or less bold swimmer, a number of tidal pools have been established along the KZN coast. These have come to be a main tourist attraction, providing safe bathing area for those that do not want to brave the sea. The tidal pools are filled with sea water on the incoming tide, providing a clean swimming area; They are usually warmer and ideal for floating and playing in, unaffected by sea currents. For most visitors to the KZN coast though, the main attraction is to swim in the warm sea.

KZN Sharks Board checking shark nets.



Photo: Jeremy Cliff

Shark safety gear

Although the frequency of shark attacks in KZN is extremely low, a spate of 21 attacks on bathers near Durban between 1943 and 1952 convinced the authorities to protect the local tourism industry by deploying shark nets at Durban beaches. In time, nets were set at additional beaches, with a major expansion of the shark net program taking place in the 1960s. At its maximum extent in the early 1990s, there were 44 installations with 45 km of netting. However, several installations were later removed, in most cases because the number of bathers did not warrant their retention. Between 1999 and 2004 the length of netting was again reduced by approximately one third, the objective being to reduce catches of marine animals.

A typical shark net measures 213.5 m long by about 6.3 m deep, is manufactured from black multifilament polyethylene braid, and is set about 400 m from shore in 12-14 m water depth. The nets at Durban, Anstey's Beach and Brighton Beach measure 304.8 m by 7.6 m.

In February 2007, approximately 50% of the nets on the Hibiscus Coast were replaced with drumlines, a more selective shark fishing device that has been in use off the coast of Queensland, Australia, since 1962.^{22;23} By December 2010 there were 38 installations comprising a total of 23.1 km of netting and 79 drumlines. A drumline consists of a large (14/0) J-shaped shark hook, baited with a fish and suspended from an anchored float.^{24; 25; 26}

On the Hibiscus Coast, where both net reduction and the introduction of drumlines has occurred, a typical beach that was protected by three shark nets in the 1990s is now protected by a single shark net and four drumlines. The introduction of drumlines has reduced the catch of non-shark animals at such beaches by over 50%.²⁷

Most beaches are protected either by two shark nets or by one net and four drumlines,²⁶ although the quantity of gear varies from beach to beach. However, during the annual winter sardine run (*Section 5.2*) the nets and drumlines are taken out of the water for several weeks, to prevent other animals that follow the sardines from being caught in the nets.²¹

Contrary to common perception, shark nets do not achieve their protective function by acting as a physical barrier to sharks. Instead, by "fishing" for sharks in the vicinity of a

protected beach, both shark nets and drumlines reduce local shark numbers and hence the probability of an encounter between a shark and a person in the water.²⁸ Importantly, the nets do not eliminate the risk of shark attack completely, but have been very effective in achieving their objective and have reduced the risk at those beaches by over 90%.²⁸

Shark nets catch not only potentially dangerous sharks but also animals that pose no threat to people.²⁹ Hence, it is desirable to reduce the quantity of shark fishing equipment in use and to seek measures that result in reduced catches of marine animals. Although the KZN Sharks Board (KZNSB) is required to implement measures to safeguard bathers against shark attack, in terms of the *KZN Sharks Board Act (Act No. 5 of 2008)* it is also required to endeavour to reduce the environmental cost associated with providing protection. For this reason, KZNSB is committed to the investigation of new beach protection technologies, such as electrical and other shark repellents, that have the potential to reduce environmental impact.

The process of inspecting the gear, recording and removing the catch is known as "meshing" and usually takes place at first light each weekday. The process includes replacing the drumline baits. Each installation is typically meshed on about 19 days per month and each net is replaced with a clean one approximately every 10 days. A fleet of 15 ski-boats is used daily, each with a crew of five. All catches are recorded; live animals, including sharks, are released. About 60% of the sharks caught are taken to the central facilities of the KZNSB and are dissected in front of a public audience for purposes of both research and public education.

Since KZN has pleasant all-year-round temperatures, warm sub-tropical waters and is in relative close proximity to the well-populated interior, it is one of the most popular recreational holiday destinations in South Africa. However, in order to ensure long-term multi-use of the coast, all activities need to be appropriately managed. ■

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