



# KENYA'S MARINE BIG 5

*Bottlenose dolphin  
Photo by Watamu Marine Association*

*By Michael G. Mwang'ombe  
Watamu Marine Association, Kenya*

**D**olphins are cornerstones of Kenya's marine ecosystem as a whole and the north coast that Watamu is a part of in particular. As long term residents or semi-residents of the Watamu waters, they can serve as important sentinels of the health of coastal marine ecosystems.<sup>1</sup>

Ask any tourist to name the Big Five of Kenya, and they will no doubt list familiar animals. Although visitors to Kenya are aware of its beautiful beaches, coral reefs, fishes and sea turtles, not many know that three different species of dolphins and whale have been identified in Watamu which could easily be included in the "Marine Big Five"

Both in Kenya and worldwide, relatively little is known about the wealth of marine mammals inhabiting Kenya's inshore and oceanic waters. Sadly some species face human threats such as fishing by catch, loss of habitat, resulting in their decline in the Western Indian Ocean. Such decline in turn affects the overall balance of the delicate marine ecosystem.

The good news is that Kenya, over recent years, has been recording new species. This has been reported by sports fishermen from the Kenya Association of Sea Anglers. They are part of the Kenya Marine Mammal

Network (KMMN), whose database is run by scientists at Watamu Marine Association (WMA) and Global Vision International (GVI), together with Kenya Wildlife Service. The research unearthed through this collaboration contributes to both conservation and tourism efforts.

Tourists can expect to see Indo-Pacific bottlenose dolphins, Indo-Pacific humpback dolphins, spinner dolphins and humpback whales. In addition, there are occasional sightings of killer whales, sperm whales and dwarf minke whales. More unusual species include pilot whales, Bryde's whales and striped dolphins.



*The dolphin dance.  
Photo by Watamu Marine Association*

<sup>1</sup>Bottlenose Dolphins as Marine Ecosystem Sentinels: Developing a Health Monitoring System



WMA and GVI have been recording the hotspots for dolphins and whales, aided by sports and local fishermen and other marine users including divers. So far in Watamu Marine Reserve, over 100 bottlenose individual dolphins have been identified, mainly living in family pods of up to 25. It is understood that Watamu is an important natural sanctuary for mothers and calves.

Dolphin watching and whale watching boat excursions have been a popular tourist activity in Watamu for the last twenty years, and in recent years, local fishermen are combining fishing trips with dolphin and whale watching for their guests. This helps WMA market Watamu as a destination of international distinction, combining sustainable tourism, community based ecotourism activities and conservation efforts.

In 2012 a five star hotel in Watamu was the first coastal hotel to offer whale-watching excursions and in 2014 sports fishermen followed suit. WMA has therefore developed good dolphin and whale watching guidelines in an effort to protect marine mammal populations and the marine ecosystem that they depend on.

East African humpback whales are a special sub-population from the South West Indian Ocean. Interestingly, Watamu sports fishermen say that they have only been seen in Kenya in the last 15 to 20 years. This is possibly due to previous threats from hunting and the whaling industry in the southwest Indian Ocean before it was banned by international law in 1986.

Each year they are first sighted along the East African


coast of in early June as they make their annual northwards migration from Antarctica.

It is believed that they travel to warm tropical inner reefs to enable them breed and give birth to their calves, which remain with the mothers for about two years, until they are weaned. They then make the return journey in October, swimming over 4,000km to the cold food-rich seas of Antarctica, their main feeding area.

These magnificent marine mammals can reach a length of 15 metres and weigh around 30 tonnes, about six times the weight of an elephant. Watching them in their natural environment leaping out of the water, sometimes in pairs, or larger family groups, is an unforgettable sight. Also amazing is that these marine giants mainly feed on small fish like sardines and small shrimp-like creatures called krill.

Reports of humpback whales in Kenyan waters rocketed in 2013 and 2014, with up to 25 whales per day spotted between July and September in the Malindi-Watamu Marine Reserve alone. Assisting the research work of WMA, local and sports fishermen were especially helpful in reporting, with over 550 whales seen during the 2013 peak season. Sometimes, the whales can even be seen from hotels in Watamu.

Following on from occasional shore sightings, scientific based Land based surveys (LBS) of Humpbacked Whales were successfully pioneered by WMA in 2014. They were conducted in July and August during the height



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*A powerful ocean spectacle  
Photo by Watamu Marine Association.*

of the migration. WMA researchers conducted weekly surveys from a single position to reduce error, four days a week, five hours per day. After 144 hrs hours of observations, 73 adults and 7 calves were spotted, 5km off shore and as close as 750 metres from the shore.

Since 2011 in just over three years, fifty fishermen participants have reported 821 sightings from Shimoni to Lamu. The Indo-Pacific bottlenose dolphin is the most frequently sighted species along the length of the Watamu coast, most of them close to shore.

Humpback whales come second and Spinner dolphins are third, sighted 32 times, most of them by sea anglers from Watamu. Spinner dolphins are mainly found in deep offshore waters in the Watamu Banks. They are known to be the most acrobatic of dolphins with their breath-taking high spinning leaps, hunting in “super pods” of up to 1,000 strong, impressively corralling their prey into fish bait balls. Sports fishermen sometimes describe the ocean as being “black with dolphins” when they are sighted.

Surprisingly, killer whales, also known as orca and actually the largest dolphin specie, were sighted annually on three occasions in Watamu waters during the month of February and around the offshore sport fishing area known as “The Rips”. Fishermen say they are seen every 1 – 3 days, following the boats in family pods of up to six, often unnervingly observed attempting to take the fish bait.

However despite all this positive information, Watamu cetacean populations face serious threats. The ring net fishery continues to be a subject of much controversy and stakeholder conflict. Although it is still considered a legal and permitted fishing method by the Department of Fisheries it is arguably a very destructive method of fishing, causing the depletion of fish stocks and damage to coral reefs and the marine environment in the local protected marine areas. Some local tour boat captains state that the ring net fishery has been the main contributory cause to the decrease in dolphin numbers.

Indeed, WMA and boat operators have observed a marked change for a fourth season running in the bottlenose dolphin population movement as they have now translocated and are feeding in South of Watamu as opposed to North Watamu, which is their normal foraging area and where the ring nets have been operating. Continuation of this commercial scale fishery will result in a reduction in prey and source

of food for resident dolphin populations. WMA, local conservationists and the community boat operators are concerned that dolphin populations may move away from the Watamu Marine Protected Area entirely, should the ring net fishery continue.

Further to this, offshore oil and gas exploration is gathering pace in Kenya across the entire sea board. Of real concern in the Watamu area is the leasing of L Block 16 which includes the Arabuko Sokoke Forest (the last indigenous coastal forest) and the Watamu National Marine Park and Reserve to an oil exploration company.

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WMA continues to work with Kenya Oil and Gas Working Group and CANCO conservation organisation to lobby and establish mitigation measures with the oil companies.

However, increased awareness because of the KMMN’s work will ultimately help protect dolphin and whale populations in Kenya. As cornerstones of coastal Kenya’s marine ecosystems, sea mammals must be conserved at all costs.

***WMA wish to thank the African Fund for Endangered Wildlife for supporting Watamu Marine Mammal Conservation and Research***