

OCEAN WANDERERS

PELAGIC BIRDS OF THE OPEN OCEAN

By Seshadri K. S.

A loud thud and delirious screams woke me up. Lying on the floor of the bus, without my glasses, it took me a few minutes to realise that the bus had met with an accident, and the impact had thrown many of us off our aisle seats. It was barely five in the morning and it was still dark outside. The front end of the bus was mangled. The driver had taken the catch line 'sleep like a baby', that was painted onto the side of his vehicle, a bit too seriously and rammed into an embankment. Vinay, Prashanth, and Sandeep managed to find my glasses and helped grab our things. After helping a few people off the bus, we got down and headed to Karkala, a little town near Mangalore.

On that fateful October morning in 2011, we were en-route to the coast to look for birds. Birds that call the deep open ocean, home. Our flock of

20 birders was headed to Malpe on the coast, west of Udupi. Teamleader Shiva Shankar picked us up and soon we joined the rest of the birders who had uneventfully reached the venue. A quick breakfast and we were off on a fishing boat. It was modest, in that it had a cabin for the helmsman and an undercarriage for storing fish in ice. The boatmen were off duty and were not going to fish. A water tank, a small array of cooking utensils, a rope to hold on to on deck and a large tarpaulin was the sum total of the items on board.

As we headed out into the wide waters of the Arabian Sea, we were greeted by several Brahminy Kites and crows. We passed innumerable islands, and fishing boats heading out to sea. They would only return at dusk or perhaps the next day to sell their catch. We too were set to return by dusk the next day. Not loaded with fish but

loaded with fond memories of watching birds that cruise above the open waters.

UNCHARTED TERRITORY

Hardly two nautical miles out and our encounters began with what looked like a Heuglin's Gull *Larus heuglini*. Our *modus operandi* involved two spotters standing on the hull, one shouting out locations with clock bearings and the other nailing a positive ID or at least trying to. The rest busied themselves observing birds through their field glasses or clicking away on their cameras. In less than ten nautical miles, we came across five species of pelagic birds. There was much more to come, but by then the blazing sun ensured most of us were seeking shade under the tarpaulin. Armed with data loggers and Global Positioning Systems, we were able to plot exact co-ordinates and corresponding weather data with each sighting.

Pelagic birds roam the vast oceanic waters and are found globally. Broadly, they are categorised as albatrosses, auks, boobies, frigate-birds, fulmars, gannets, penguins, petrels, puffins, shearwaters, terns and tropic birds. They are called pelagic as they occur in the pelagic zone of sea and ocean. These groups of birds have evolved for life on or over open waters. Reaching land only to breed, their life is spent on the high seas and often they flock alongside long line fishing vessels looking for food. Birds like Wandering Albatrosses *Diomedea exulans* and shearwaters achieve long distance flight by gliding close to the water thanks to their long wingspan. Others like the Wilson's Storm Petrel *Oceanites oceanicus* are small in size and have webbed feet that they use to 'dance' on water and feed on zooplankton.

Birds specialised in fishing, like Bridled Terns *Onychoprion anaethetus*, fly long distances and upon chancing on a shoal of fish congregate in large numbers. Others like the Arctic Skua or the Parasitic Jaeger *Stercorarius parasiticus*, as the name itself indicates, are parasites on birds like terns. Skuas, akin to pirates on the open ocean, indulge in what is known as kleptoparasitism where they harass and steal fish from unsuspecting terns. Piracy events are elaborate, often filled with high-speed fights and mobbing by the skuas. We were lucky to witness one such incident early in the afternoon when an immature Parasitic Jaeger harassed a Greater Crested Tern *Thalasseus bergii* and caught it by its nape after an aerial dogfight until the harangued tern regurgitated its food. The fish was caught mid-air before it fell into the water.

LIFE AT SEA

The boat crew consisted of four fishermen from Udupi. They had fresh supplies stored on deck and managed to fix us breakfast, lunch and dinner. Oranges and sweet lime kept us going in the hot sun. The data loggers indicated the heat index to peak at 46 ° Celsius in the shade. Such high heat index values are known to pose the danger of heatstroke as per National Oceanic and Atmospheric Administration lists. We too had to brave such dangers among many others to glimpse at the birds. In the sweltering, humid heat, we spent

a dull noon snatching forty winks and wondering how life manages to find its way in such extremes: high seas, humidity and temperature, with no land in sight.

Later in the evening, as temperatures dropped, we sighted thousands of jellyfish. They are neither made of jelly nor are they fish. Many species have stingers that can cause considerable harm to any unsuspecting quarry. An occasional sea snake would surface to gasp for air and then disappear into oblivion. The golden sun began to descend, painting the skies with mesmerising colours. The boat would rock heavily on waves from passing large ocean liners. A pair of Wilson's Storm Petrels descended on starboard and began their magical water dance, pecking away on cuttlefish bones, disappearing and reappearing behind waves as the boat rocked.

Post-dinner discussions gradually ended with snores as we fell asleep on deck. There was hardly any space, but we managed to find nooks and corners just like organisms find their niches. We did not anchor the boat as it would make it rock a bit too much. The moon was up, and apart from a few clouds the sky was studded with stars. Sandflies and the stench of fish kept a few people awake.

Morning came with a surprise, as we were woken by the incessant calls of a Crested Serpent-eagle *Spilornis cheela*. We had sailed over 70 nautical miles and there was no way a serpent-eagle could

be on the open sea. Some suspected it to be an alarm tone on a phone, and sure enough, Jayram, the only one sleeping in spite of the commotion, later admitted that his phone was the culprit! The boat did not have any restrooms and those without mighty bowel control, had to make do in the fishermen way by throwing their bottoms of the boat by holding onto a rope behind a modest tarpaulin sheet. While people were busy with ablutions, Shyamal spotted a bat land on the boat. We delicately recovered it from the tarpaulin and photographed it. We presumed it either flew from the Somali coast, which was the nearest land in the west or that it hung around on boats and flew around over the open seas. A few weeks later, it was identified by my Turkish colleague Dr. Kartas as either *Scotophilus heathii* or *S. kuhlii*. Both the species were widespread in India and Africa and since we had not measured the bat, we could never confirm its identity.

MARINE DEBRIS

All is not well, even in paradise. Marine ecosystems are facing severe threats from anthropogenic activities. Non-biodegradable materials like plastic are clogging the world's oceans, and though 70 nautical miles from the coast, we encountered vast amount of debris including plastics, foam and polystyrene. Unsuspecting birds often ingest these debris and the disastrous ensuing impacts

FACING PAGE Arctic Skuas, also known as Parasitic Jaegers, have earned a reputation for being pirates of the high seas for stealing much of their food from other birds.

BELOW The author was lucky enough to witness an immature Arctic Skua harassing a Greater Crested Tern until it regurgitated its food, which was grabbed mid-air by the aggressive seabird.



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have been clearly documented on Frigate birds on Midway Atoll in the middle of the Pacific Ocean. In our case, birds were using pieces of foam to land and rest but who knows what else they might be doing?

Another impact of fishing boats is overfishing and by-catch. With long line fishing and trawling being extensively used, the world's oceans are being rapidly emptied of fish. Such fishing techniques do little to distinguish or increase efficiency of fishing by avoiding by-catch. Often pelagic birds fall prey by taking fish baited for tuna on long lines. They get entangled in fishing lines and die a lingering death; drowning in the very ocean waters they have mastered. While trawling, many other forms of marine life get trapped in nets and are cast back into the water as waste. Some of these include endangered species like olive Ridley turtles. Perhaps the lone, floating olive Ridley carcass we encountered died from this cause, or maybe it was hit by the propeller of a speeding trawler, we could not tell for certain.

AN OCEAN OF KNOWLEDGE

Our oceans hold about 97 per cent of all water. They play a vital role in ecosystem functioning and maintain a delicate ecological balance. In our myopic pursuits, we continue to exploit natural resources and shut one eye to the consequences that we ourselves are to ultimately bear. Our knowledge and understanding of the delicate balance of nature is never complete and is particularly patchy in marine biology. While fishery industries boom; increasing marine traffic has escalated oceanic noise pollution. Oil spills take all life out of the oceans; propellers of boats have butchered unsuspecting cetaceans. Burning of natural gases has led to increased ocean acidification and global climate change is posed to drastically increase sea level. All this, sooner than later, must have a domino effect on the whole ecosystem, ultimately impacting us.

As we returned to Malpe port in Udipi, I could not but wonder about the 11 species and about four hundred individual birds we had observed. Our team added several new records of birds to Karnataka's coastal waters. Many of them were never thought to occur in these parts of the world. These birds must traverse into international waters and go past vast continents in search of food. One nation's environmental policies will impact other nations' relationships, but ultimately, by destroying our natural heritage, these birds suffer for they know no barriers and immigration points. How these birds manage to survive in one of the world's harshest environments is a mystery. There is much to learn from the ocean for its mysteries are as deep as its depth. There is however hope.

As renowned marine geographer Dr. Sylvia Earle puts it, "Far and away, the greatest threat to the ocean, and thus to ourselves, is ignorance. But we can do something about that." →

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