

## **Pelican Watch on Jutten Island December 2019.**

I had the privilege of spending 9 days on Jutten Island in December 2019 in the company of fellow TBC member Ettienne Kotze and Dirk Havenga, a SanParks Honorary Ranger.

Our sojourn was part of the annual Pelican watch program organised by the West Coast Region of SanParks Honorary Rangers in conjunction with West Coast National Park. The aim of this program is to protect Cape Cormorant eggs and chicks from Pelican predation during the Cormorant breeding season.

The Western Cape breeding population of Pelicans increased from between 25 to 30 pairs in 1956 to about 650 pairs in 2001 and then decreased to 370 pairs in 2006.

Total pelican numbers also increased from about 500 in 1975 to an average of about 2000 in the period 2004–2007.

The population growth was initially due to the safe breeding environment on Dassen Island, where they started breeding in 1956, and subsequently to the availability of artificial food sources, mainly agricultural offal at piggeries in the Stellenbosch area. At the end of 2004, an average of 1 500 pelicans, (more than 60% of the regional pelican population) fed daily at these localities.

The offal supply at the piggeries decreased after 2005 which led to mass mortality of the pelicans at the farms in 2005. The surviving pelicans were forced to find alternative food sources, their situation becoming particularly acute during their breeding season when they experience increased energy needs for raising their chicks.

The pelicans breed between October and January. This coincides with the breeding season of cormorants, gulls and gannets on the West Coast off-shore islands. From the mid-1990s onwards an increasing trend set in of the pelicans preying on the hatchlings of these other birds, in the breeding colonies on islands close to Dassen Island, to meet the pelicans' increased food requirements during their own breeding cycle.

By the late 1990s they had extended their preying northwards to Vondeling and Jutten Islands. As well as the gulls and cormorants they were observed eating Bank Cormorants, Swift Terns and Cape Penguin nestlings.

Pelican predation on seabirds intensified during the 2005/06 and 2006/07 seasons (coinciding with the cutting off of the piggery offal supply) when they extended their range to Malgas, where they attacked gannet chicks. On Jutten and Schaapen islands they caused total failure of the breeding effort of the Cape Cormorant and Kelp Gull colonies.

Up to 200 pelicans at a time were seen on Jutten and Malgas during the 2005/06 breeding season and the results of their predation was a disastrously low breeding success rate for the species on which they preyed. This situation was ongoing and if left unmanaged was likely to have a catastrophic long-term effect on the populations of gannets and cormorants along the Cape West Coast. In the case of the threatened Cape Gannet, whose population is under stress from several other factors, this is a worry.

It has been suggested that predation is a learned behaviour that has expanded in the population by cultural transmission. Some generations of pelican chicks were all raised on "artificial" food supply and never on their natural fish prey. The predation on eggs and chicks of the cormorants and gannets was triggered by an increased population and scarcity of

other food sources near the breeding colony during the breeding season (i.e. the cutting off of artificial food sources on which they had come to rely), and their outgrowing of the “natural” food resources within easy reach of their breeding colony.

The protection of Cormorant nests and juveniles is provided by simply chasing the pelicans away when they come on to the breeding islands.

The effectiveness of this approach was demonstrated by the results of a controlled trial that was carried out on Jutten during the 2007/08 breeding season. In this trial half of the island was designated as “pelican free” and pelicans that came into this area were chased off. The other half of the island was deemed to be “pelican territory” where pelicans were left undisturbed. Monitoring of the breeding success of the Cape Cormorants in the two areas showed that in the pelican free area 0.72 chicks per nest were fledged in the study colonies, (within normal breeding rates for the species) whereas no cormorant chicks at all survived in the study colonies in the pelican territory. Only 62 chicks were fledged from a total of over 5,000 nests counted in this area, whereas each nest would normally have hatched between one to three chicks.

Free access of pelicans to the cormorant nesting areas thus has a devastating effect on their breeding success while physically chasing them away allows the cormorants to achieve something like normal breeding rates.

The Pelican Watch program is carried out by relays of teams of two to four volunteers, accompanied by a Park ranger if necessary, living on the islands for seven day periods and maintaining a dawn to dusk vigil for pelicans coming onto the Islands. In our case the big sea swells prevented the SANParks boat from taking us off the island at the end of our 7day shift and we had to remain for 2 extra days.

The basic task is to walk towards any pelicans that have landed on the island. Being quite shy birds, they usually fly off when approached to within about 50 metres. However they may settle elsewhere on the island and the process then has to be repeated until eventually they depart the island.

Pelicans may invade in ones and twos or in groups of as many as 30 or 40 at a time and the frequency of visits may vary between five or six times a day to none at all.

Pelicans are intelligent birds and are canny at exploiting hidden localities and staying out of sight. “Rogue” groups or individuals are at times extremely determined to stay on the island and dealing with them – chasing them from one point on the island to another - can be very hard and frustrating work. During our 9 day shift we counted in excess of 200 pelicans landing on the island. That is more than 20 pelicans per day. Most days the to and fro chase around the island until the last pelican left the island, lasted up to 5 hours making the beer taste very sweet after a long day of pelican chasing.

Jutten Island is located on the south side of the entrance to Saldanha Bay, it is 900 metres long and approximately 500 meters at its widest point across. It has two hills towards the south end. Most of the Island is visible from the top of these hills which serve as a vantage point for the pelican watch.

The shoreline is made up of tumbled boulders and rock shelves. The interior is criss-crossed by a system of stone walls (built during the guano collecting stage of yesteryear) and the ground surface is composed of bouldery rocks and soil flats, both vegetated with succulent ground cover.

There is a cluster of mostly derelict buildings that were the base for guano collectors. Accommodation is in one of these that has been refurbished to very basic standards.

Access to the island is by means of a stairway lowered from a jetty to the SANParks boat, which stands offshore for the transfer of baggage and personnel. Access about the island is cross-country walking and boulder hopping.

Thousands of Cape Cormorants nest in dense colonies during the breeding period. There nests are predominantly on the rocky perimeter of the island. During our shift most of the Cormorant chicks had hatched and had reached juvenile stage. There was only a small area of Cormorants still nesting. It is surprising how fast the birds grow in a 9-day period. From clumsy chicks just sitting on rocks we witnessed the development to first flying attempts and nurseries of juveniles doing their gala sessions in tide pools.

A few Crown Cormorants also breed on the island. Surprisingly the Crowned Cormorants do not nest on the rocks but in the few Manatoka trees on the island. We counted a meagre 20 Crowned Cormorants.

Kelp Gulls breed on the central part of the island in large numbers. Being accustomed to docile Kelp Gulls in my home domain in Melkbosstrand, I was surprised at the testosterone affected nesting gulls being very vocal and aggressive when disturbed. Moving through them frequently stirs up a riot. Their abuse can be quite intimidating, they can defecate on an intruder with surprising accuracy and "klaps" on the head are not uncommon. A stick waved above the head is a useful deterrent / distraction in these situations.

One becomes very aware of the concepts "cycle of life"; "survival of the fittest" and "the food chain" whilst doing duty on the island. Patrolling on the island is not for the squeamish and faint hearted. Death amongst the thousands of birds that inhabit the islands during the breeding season is common and is encountered daily. It is distressing to witness such things as a pelican gulping down a hatchling or a gull stealing an egg from a nest or an ibis disembowelling a chick or a seal taking a young bird from the sea, but these things happen and are part of the natural scene. Heart breaking to see a Cormorant juvenile which has survived the early traumas from being hatched through the chick stage and eventually making its debut swim and dive in the ocean only to be gulped up by a seal off shore. It is

therefore necessary to maintain a degree of detachment if one is to avoid being upset by these scenes.

During our stay on the island the following species were observed:

Cape Cormorant, Kelp Gull, Great White Pelican, Crowned Cormorant, Hartlaubs Gull,, Ruddy Turnstone, Barn Owl, Barn swallow, Crowned Lapwing, Swift Tern, Common Tern, Sandwich Tern, Cape Gannet, Egyptian Goose, Grey Heron, African Sacred Ibis, Hadida Ibis, Cape Wagtail, African Oystercatcher, Cape Sparrow, House Sparrow, African Penguin, Speckled Pigeon, Little Egret, Rock Martin, Common Starling.

The island also has several rabbits who were introduced as a source of food for the guano collectors. The present ones being the offspring of those who escaped lunch!

The Pelican Watch experience although arduous and not an exotic island holiday, is something to treasure. There are not many opportunities elsewhere for the non-specialist or the non-professional to live and work in a teeming bird colony and the intimacy of one's association with the birds and the closeness of one's experience of their day to day lives is truly memorable. There is also the personal reward of doing something tangible, necessary and very worthwhile in protecting the upcoming generation of our seabirds from a real and present threat - and a largely man induced threat at that.

Rocco Nel

(This article is an adaptation of the Pelican Watch Manual produced by the SANParks Honorary Rangers in conjunction with SANParks staff)