

cp Shark Bay Gypsum,
24 Mount Street

Perth, W.A. 6000.

14/8/72.

Dear Dr. Serrenty,

Some months ago you suggested that my humble observations on the bird life of this area should be published, particularly those on Slope Island. I have therefore gone over my diary & the result is enclosed herewith. Perhaps you would care to glance through them and if you still consider them worthy of attention kindly pass them on to the editor of the W.A. Naturalist.

Since completing them (the notes), about ten days ago, another Masked Gannet has put in an appearance - at almost the same spot as the first sighting was made - and only two days ago (12th). This differs by only ten days from last year's appearance so it could be that this species is a regular visitor to Shark Bay waters every year at this time.

Red-capped Darters have been very active this last two months and quite a number have been found with eggs or chicks around the salt ponds. Stilts are beginning to congregate for nesting after an almost complete absence from the ponds for a few months but I have only noticed one or two Avocets to date. Our colony of White-backed Swallows has reappeared & a few days ago we were visited by a Horsfield's Bronze Cuckoo which perched on the power lines just outside my house - the first I have seen here. Our resident Ospreys have again built a

rest on the same pole they used last year - the hen appears to be sitting and is being fed by her mate who invariably feeds himself on another power pole about a hundred or fifty yards away - he would be the most successful fisherman around here just now as we poor humans are having a lean time while he eats a fresh catch every morning about 9.30 - I can see him from my office windows.

In closing I would like to ask a small favour - I would like to subscribe to the N.A. Naturalist but have no idea to whom I should send my subscription - perhaps you could put me in touch with the right person in due course.

Yours sincerely

Robert C. Mitchell

NOTES ON THE BIRDS OF SLOPE ISLAND

Slope Island, situated roughly halfway down the eastern side of Heirisson Prong, in Sharks Bay, has for long been noted for its colonies of breeding birds. A glance through "The Birds of Western Australia" - 4th Edition (Serventy & Whittell) will find the following five species listed as nesting on the Island:-

Wedge-tailed Shearwater (*Puffinus pacificus*)

Silver Gull (*Larus novae-hollandiae*)

Pacific Gull (*Larus pacificus*)

Caspian Tern (*Hydroprogne caspia*)

Bridled Tern (*Sterna anaethetus*).

Additionally the island is known to have housed a colony of the Rock Parrot (*Neophema petrophila*).

Few figures pertaining to the numbers of each of these breeding species are available. There is, however, little doubt that the largest colonies were those of the Wedge-tailed Shearwater and the Bridled Tern, whose numbers may each, at one time, have run into many hundreds and could quite easily have reached four figures. The Rock Parrot colony, by no means so vast, was, according to local information, probably in the order of some forty or fifty pairs of birds. Of the remainder it is doubtful that more than a handful of pairs of Pacific Gulls and Caspian Terns nested on the island. Harder to judge is the size of the Silver Gull colony. However, bearing in mind that, in its original state, almost the entire centre of the island was the roosting site of a vast horde of Pied Cormorants (*Phalacrocorax varius*) the Silver Gulls would not have been so numerous as in some other colonies, and, to judge by the number of birds of this species in the immediate vicinity, the island population was probably no greater than 100-200 pairs.

Slope Island, as it was until recently, could roughly be divided into three 'zones' - a low cliff face of between 10 and 25 feet in height running almost all round the island, a narrow sloping belt of vegetation atop the cliff (mainly nitre bush) and a bare dome-shaped centre, the latter covered with guano. This picture is typical of many of the Sharks Bay islands including nearby Friday and Saturday Islands. In recent years though the island has undergone great changes, it now playing an important role in the salt producing venture based on Useless Loop, some mile or two to the southwest. Between 1967 and 1970 the domed top of the island was bulldozed into the sea, a ship-loading jetty was constructed and finally the island was connected to the mainland by a causeway.

The overall effect of these activities was to increase the size of the island, but, as all the surface area was to be utilized in the stock-piling of both salt and gypsum, the result drastically reduced the space available for the bird population, the roosting Pied Cormorants being the first to suffer. In passing it is interesting to ponder on the question of the present whereabouts of this roosting colony, which was by no means a small one. Indications are that other known roosting sites in the Sharks Bay district carry relatively stable numbers. Did the Slope Island roost disperse and become absorbed in these other roosts or did the birds move as a colony to a new roosting site?

Today the space available for bird breeding is confined to the cliff face along the eastern and southern sides of the island and to the remnants of the nitre bush belt, of which only a few square yards remain. It has therefore been possible to attempt an accurate count of the birds currently breeding on the island and to attempt to assess the outlook for the survival of the colonies in the future.

The following comments are based on a close study of the island from mid-August 1971 to the end of April 1972.

Rock Parrots have now departed from the island, probably for good, no birds having been known to breed there for the past two seasons at least. During the period of study one or two pairs were observed to fly in, and appeared to be prospecting for nesting sites, but remained only for a few hours. It is doubtful that Slope Island will enjoy their presence again. The colony has not however been lost sight of, several small flocks being always present around Useless Loop and breeding there, as well as on small islands at the southern end of Useless Inlet.

Similarly no Caspian Terns now breed on the Island but two pairs nested successfully on nearby sandhills on the mainland.

The same applies to the Pacific Gulls, the small local population finding no apparent difficulty in rearing their young along the beaches of the mainland despite the presence of marauding foxes which infest the Heirisson Peninsular.

One pair of Silver Gulls only attempted to nest on Slope Island in the spring season (of 1971). This pair chose the top of a large rock at the base of the cliff on the eastern corner of the island. Two eggs were laid but no chicks were hatched. Both eggs vanished, but whether through the attentions of natural predators or small boys is not known, whereon the adult birds vacated the site immediately.

We are therefore left with the colonies of Wedge-tailed Shearwaters and Bridled Terns, the former being the most numerous but apparently in the greater danger of suffering from considerable reduction in numbers.

Throughout the breeding season under review several ~~XXXXXXXXXXXXXXXXXXXX~~ exhaustive counts were made, every hole and crack being closely examined, and it is the author's opinion that only 230-250 pairs of Shearwaters attempted to breed on the island. Such limited space as exists is riddled with nesting burrows and it is probably this density which is the bird's downfall.

The provision of the causeway connecting the island to the mainland has enabled foxes to infiltrate the island and for them the Shearwater has proved easy prey. Moving from burrow to burrow one fox has been known to pull out and kill fourteen birds in an evening, the method of killing being always the same - the head is bitten off and the carcass allowed to remain, often still half out of the burrow, the predator apparently having no appetite for the prey. On one visit to the colony 27 freshly killed birds were counted. Only those birds whose burrows are too narrow and too deep for the fox to enter or those whose burrows are too inaccessible on the cliff face seem to have any chance of survival. Shearwaters are greatly attached to their burrows, returning season after season to the same one and appearing reluctant to move elsewhere. During the season, under ~~XXXXXXXXXX~~ discussion only some 35-40% breeding success was achieved and, if the death rate continues at only the

same pace it is obvious that the colony will quickly be reduced to a fragment of its ~~former~~ ^{current} size.

Strangely, although sharing the same breeding space, the smaller colony of Bridled Terns appears to have met with far greater breeding success. On Sunday, November 28th, 1971, when almost all the pairs had laid, an all day search was made, 78 pairs being counted and almost every egg located. Approximately two thirds of the eggs found were secreted under the nitre bushes, a few were in holes in the rocks and in abandoned Shearwater holes whilst one was located under the steps of a small hut, its owner being quite tame and tolerant of the many human feet going up and down the steps. Lastly a few were laid in the open along the edge of the cliff.

The first Tern chick appeared on Friday December 3rd. and within a few ~~xxx~~ days scarcely an egg remained unhatched. Certainly foxes took care of the exposed eggs but of the remainder ~~hardly~~ a chick was lost. This could be due to the chick's ability to hide at the first sign of danger and to become almost invisible simply by keeping still. There are grounds for supposing too that the chick gives off no scent. The author observed one particular chick run swiftly between two small rocks and 'freeze' when a fox came on the scene. The fox passed within less than two feet of the chick without seeming to realise its presence. When it had gone, after an interval of several minutes, the chick ran back to its original place, whereon the adult bird which had been hovering overhead flew down and proceeded to feed it.

It was heartening later to see the number of fully fledged chicks from such a small colony, and it would seem that any further reduction in the size of this colony could be more due to a diminishing nesting site rather than to the attentions of predators. It is also possible that ^{many} of the birds of this (formerly) large population have transferred to Friday Island, only a few chains away. Unfortunately it was not possible to attempt a survey of that island but with binoculars, from a distance of some two hundred yards, hundreds of terns were observed flying in and out, again mainly within the nitre bush 'belt'. If we assume that many of the birds would have been sitting and others would have been food-hunting when this observation was made then the colony on Friday Island must be many times the size of that on Slope Island, and indeed, could be as high as 500 pairs.

The overall position of Slope Island as a breeding station is therefore most unsatisfactory and even the most optimistic observer would be unlikely to visualise any birds breeding there for more than a very few more years. That is if one ~~excepts~~ a newcomer - a pair of Welcome Swallows (*Hirundo neoxena*) having nested in the girders of a salt conveyor!

FOOTNOTE: One sighting, made on August 22nd, 1971, the author feels should be recorded. Whilst walking along a beach about two miles west of Slope Island attention was drawn to a "squeaky" bird-call overhead. On looking up two Masked Gannets (*Sula dactylatra*) were observed circling overhead at a height of less than fifty feet. With glasses the all-black tail and the black facial 'mask' were plainly visible, these being the characteristics distinguishing this species from the Australian Gannet (*Morus serrator*), apart from the difference in calls. The birds (either the same of a different pair) were noticed in the same locality three times in the following few days. This is thought to be the most southerly record of this species and suggests that its range overlaps that of the Australian Gannet. The author has since been informed by local fishermen that it can be met with at sea off Dirk Hartog Island, usually in August/September.