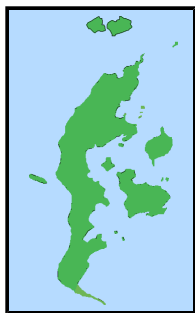


A WORKING VISIT TO HAWAR by HOWARD KING

Aerial photo mosaic of Socotra Cormorant colony

An estimate of numbers



As a member of a small survey party from the Ministry of Housing I was very fortunate that on November 26 - 27th 1994, I was able to visit the Hawar Islands for the first time. Travelling by helicopter courtesy of the Bahrain Defence Force (B.D.F) from the mainland, we arrived on Hawar just after dawn each morning. Our arrival on both occasions was heralded by the daily exodus, from the neighbouring island of **SAWAD AL-JANUBIYAH**. of the breeding Socotra Cormorants (*Phalacrocorax nigrogularis*) As we approached the Islands to land, we flew parallel to the main stream of departing birds. They were strung out in one huge line many kilometres long, heading northwest towards the fishing grounds that lie between Bahrain and Saudi Arabia. Their flight path seemed well defined as our pilot had no problem in keeping clear. The height of the main stream of departing birds above the sea was often no more than a few feet or so. Large groups could be seen breaking away from the procession to land briefly on the sea before rising again in a flurry of wings and water, to rejoin the departing hordes. Through the helicopter window I could also see other large groups congregating northeast of the main island, turning the sea black. Whether these birds were returning from a fishing foray or just congregating prior to departure, was not apparent. In all there must have been over fifty thousand birds on the wing at any one time, a truly spectacular sight. My first day's work covered the main Island of Hawar. Travelling around the island I noticed that pairs of Hoopoe larks (*Alaemon alaudipes*) were quite common, as were Mourning Wheatear (*Oenanthe lugens*). However, while working on the island's small Jebel, I observed a solitary Pale Rock Sparrow (*Arospiza brachydactyla*), its presence given away by its insect like call. This is only the second November record for this species (**Nightingale and Hill**). On completion of the day's work, in the late afternoon I had to return to the north end of the island for the flight home. As I walked to the Helicopter a Pomarine Skua (*Stercorarius pomarinus*) flew lazily overhead. With experience, it's surprising just how fast one can assemble a theodolite. With its thirty times magnification, I was able to follow the bird as it disappeared into the West. As I dragged my field guides out of my bag, this was a lifer for me, everyone present, much to my surprise, suddenly became interested. Most had a look through the scope as I panned the bay for birds for their benefit; all seemed suitably impressed. My antics had a surprising result, specifically for my benefit, our pilot on take off headed South, instead of North. The reason; to fly over the breeding Island of the Socotra Cormorants': **SAWAD AL-JANUBIYAH**. As we approached the Island at zero feet we turned back to the North to fly parallel to the out stretched colony to the East and slowly climbed to a height of approx. 1200 ft. Hovering briefly, the pilot banked to enable me to photograph the entire colony through the window. What a sight! The huddled mass of another fifty thousand plus, fledgling birds could be seen carpeting one corner of the Island. I was not prepared for the sheer size of the colony, it was far more extensive than I had ever imagined. What was really striking though was the colour, not black as I had anticipated, but mostly a dirty white, the colour of the fledglings. The lack of adults was quite obvious from the air, indicating that most of the young, at this stage of the breeding season, are left to fend for themselves throughout the day. About the periphery in particular, were a few black blobs, indicating the presence of some feeding or breeding adults. Through the window I quickly took a series of overlapping photographs, from which I have been able to create a mosaic covering nearly all the colony. A few small isolated groups could be seen just outside my field of vision.

Aerial Mosaic

LOOKING SOUTH

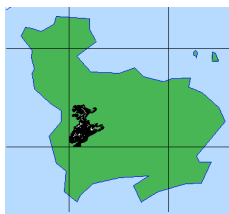


The following day, my work schedule was to take me to Sawad Al-Janubiyah itself. The nature of the work meant that I would be dropped off by boat and left alone on the island. I would be first out and last in - being a Land Surveyor has its drawbacks!! After transferring from the helicopter to a shoal draft boat, we sped off for a guided tour of the islands. As I approached my island, I have to admit work and its potential hardships were not uppermost on my mind. Landing on the opposite side of the Island to the Cormorant colony, the walk across the Island proved very interesting, even though I was carrying a large amount of equipment (plus, of course my Birding kit). Abandoned nesting sites cover a large part of the island. Individual nests are easily distinguishable (shallow circles in the hard shale surface), with their centres now filled with wind blown sand. The spacing between these old nests would seem to indicate a spacing factor equal to the pecking distance of a brooding bird. The large quantity of bones found around these sites is enormous. This could indicate a fairly high mortality rate but is probably more likely the result of an accumulation over time. **Dr. Mike Hill** who has visited the colony over a long period of time, was surprised one year when he found that the colony had up and moved from its previously well established annual site to its present location. Just how long the colony stays at a single location is not known. The colony is heavily infested by parasitic ticks that

carry a virus that can cause a severe fever in humans. It is possible that sudden movement from an old established site might be a way for the birds to reduce the level of this infestation. After completing my observations at the Trig station on the island, I walked across to the Cormorant colony. It currently lies close to the western shore, on a large open expanse of low lying, featureless gravel. Since no point on the island is more than a few metres in height, the birds could see my approach from a long way off. I was also aware of a small flock of gulls, Herring or Lesser Black-backed (types) waiting in the wings. So to minimise any disturbance caused by my visit and to lessen the chance of disturbed young being pounced on by gulls, I approached very slowly. At a point about 25 feet from the nearest nest, I settled down to watch. Movement, forward of this distance, caused a few birds to scurry off - backing off restored the calm. The first things I noticed were the huge creches of young cormorants packed tightly together in the centre of the colony. Secondly, all the current nesting sites were around the rim and closely grouped together in small pockets of several hundreds. It became apparent that late breeding birds run the risk of having their nest trampled by one of the creches, which as I watched proved to be very mobile and constantly on the move. Occupied nests contained up to four eggs, with only one I saw having five. However, most contained hatched young, with two but mostly three chicks present. Around the colony small groups of adults were constantly coming and going, but a good number of solitary birds could also be seen on the wing. I suspect that these birds had been fishing locally around the islands and had eggs or young that could not be left for long periods. I had the previous day studied the sea areas around the islands, considering just how many birds make up this colony. The number of locally fishing birds was very small in comparison. Local fishermen proclaim the islands good fishing and the large shoals of small fry visible in the shallows indicate a good local food source. Yet most birds seem to prefer to fly to the Western shores off Bahrain to fish. The attendant Gulls made no attempt while I was watching to pick off any of the chicks despite the large numbers left unattended. They did however pester incoming adults, in what seemed to be a vain effort to obtain a free meal. A quick count of the gulls visible from my location put their total number at less than 100. A very small number, with over ten thousand large Gulls wintering on the mainland of Bahrain not far away around the rubbish tip at Askar. !! In all, I spent about an hour walking around the edge of the colony, before walking back to the survey station to collect my equipment and onto the eastern shore to be picked up. On the way back, I disturbed three pairs of Hoopoe larks (*Alaemon alaudipes*) and watched another pair undertake their aerial display. A large flock of unknown larks kept just the wrong distance ahead of me, for quite a long time before disappearing into the distance. The most common bird seen amongst the low scrub of the island was the Desert Warbler, (*Sylvia nana*). Their pleasant song was a constant companion. In all I counted 32. I walked a fair distance around the eastern shore, awaiting the return of the boat. It was a total loss, not even a Kentish Plover, but a scan of the nearest small sea stack north of my position, more than compensated for the lack of waders. A pair of locally breeding Ospreys (*Pandion haliaetus*) soared about their isolated domain. A very pleasant sight to round off the trip.

Sawad Al-Janubiyah Hawar Islands Bahrain

North



(Cormorant Colony shaded black)

While working on Sawad Al- Janubiyah I noticed quite a few old, wooden boxes abandoned in the centre of the Island. I wondered about their possible use. By chance I discovered that the fishermen of Askar and Jaww, on the East coast, have traditionally at the start of each breeding season gone to the island to collect Cormorant eggs to eat. The boxes were a legacy of those visits. The eggs were considered a great delicacy, the birds themselves apparently were seldom eaten. When at its height (it started to decline about ten years ago), the men would take one egg from each nest. Today the majority of these fisherman are too old to go themselves and rely on others to collect eggs for them. Interestingly, it would seem that most of the present generation have not acquired a taste for the eggs. Just how and by whom the eggs are currently collected is not known. With many fishing boats manned by third country nationals, I doubt if they are as environmentally friendly as previous generations. However, the colony would appear not to have suffered or to have been adversely affected by the visits of these fishermen. With the development of the islands as a Tourist centre and all the evils that could bring, one wonders if future disturbances during the breeding season will be as passive as those of the past. Sawad AL Janubiyah is the last remaining major Socotra Cormorant breeding colony of any size left in the Gulf. Bahrain has only a limited land resource and has lost much to the pressures of modernisation. It would be a disaster if future generations could not enjoy the majesty of these small desert islands and the beauty that their wildlife has to offer. They have been designated a Wildlife Reserve, but will this be enough to preserve them from the planners and developers who cannot see any beauty or worth in things natural? Let's hope that future development on the islands, respects rather than destroys, the very things that make them worthy of protection in the first place.

THE SOCOTRA CORMORANT COLONY -- AN ESTIMATE OF NUMBERS

Over the years there have been numerous attempts to estimate the number of Birds making up the colony on **Sawad AL-Janubiyah**. These numbers have varied from a low of 5,000 to a high of 250,000 (**Nightingale and Hill** -- page 135). When I first pasted my aerial mosaic together I thought it would be an easy task to provide a definitive answer. However when I viewed the scanned image in

detail on my computer. I realised just why the previous figures varied so dramatically. I found the density of the birds on the ground varied enormously across the photographs, to a greater extent than I had anticipated. When visiting the colony on the ground this had not been so apparent. This would render estimates based on grid squares prone to gross error. The areas covered by the large creches' would have to be treated separately from the other areas where birds could be found scattered around at much lower and varying densities. This mosaic has no scale, its extent, as outlined below is based purely on guess work. The Topographical map of the Island had given no clue to assist on this matter, it is featureless. The few bushes to the north and south of the massed hordes outline and distinguish surface soil types only, gravel or sand. Even when I compared this mosaic to Aerial photographs taken by the Ministry of Housing for mapping the Islands (unfortunately always taken during periods outside the breeding season) I could not find any common features to tie the whole together. Using a paintbrush type program I was able to outline the complex shape of the colony and transfer that outline into a CAD surveying program. This outline excluded the many large bare patches within the whole so once scaled and rotated to fit my interpretation of its ground extent, calculating an overall ground area in square metres was relatively simply.

Calculated area 56000sqm with 12.5% creches' at 5 per sqm35000

balance at 0.5 birds per sqm49000

Total Number of birds on the ground84000

Numbers of birds (breeding pairs with average brood 3) ADULTS AWAY FISHING ...56000

plus 10% adults non breeding.....14000

GRAND TOTAL154000

Allowing for a +/- error a figure of between **140,000 to 160,000** would appear to be fairly realistic

