

NOTES ON HAWKSBILL TURTLE NESTING ON GOLDEN SEAS BEACH, ORACABESSA, JAMAICA

A.D. DARBY

36, Newton Crescent, Dunblane, Perthshire FK15 0DZ

In July 1993, I visited Jamaica for three weeks. My intention was to visit the Hope Zoo in Kingston, Cinchona Gardens in the Blue Mountains and also see the Jamaican Iguana (*Cyclura collei*) in the Hellshire Hills.

Partly due to the exorbitant cost of vehicle hire and partly due to a stiff neck caused by a maniac driving into the back of my car, writing it off and rearranging my neck muscles, a week before departure, I only managed a short visit to Hope Zoo. Four wheel drive is necessary, as all roads, except the A1, which runs from Montego Bay to Ocho Rios, have potholes - some of them very deep.

Our base was *The Golden Seas Beach Hotel*, Oracabessa. To find the hotel, take the A3 from Ocho Rios East, past developments like Huddersfield, plantations like the Prospect Estate and great houses like Harmony Hall and it is on the left at a dusty bend in the road opposite a petrol station. A few minutes walk along the road, over the Rio Nueva, is Oracabessa town, where Ian Fleming's house *Goldeneye* can be found. Here he wrote many of his 007 books, naming the hero after his friend, the ornithologist James Bond. You can visit James Bond Beach, but Goldeneye can only be viewed by boat. Not far away, high on a hill, is *Firefly*, with its "Room with a view" overlooking Port Maria. Here Noel Coward spent many of the last 23 years of his life until he died there in 1973 (Zach, 1989). This place can be visited and is well worth the trek up the hill.

Once it became clear that I was not going to be able to gallivant all over the island, we decided to visit Kingston. A visit to Jamaica's capital is not for the faint-hearted, and the bustle and apparent, if not actual, chaos can be frightening. There are parts even regular visitors do not enter, so a map is essential, and it is not advisable to look lost, *even if you are!*

On my visit to the Hope Zoo, I was delighted to see a group of juvenile iguanas that were being reared for eventual release. The iguanas all had numbers painted on them and had been electronically tagged. They had originated from a wild nest found in the Hellshire Hills and had been confined to give them a head start before release back into the wild (Rhema Kerr, pers. comm; Vogel & Kerr, 1992). There are many hazards for young iguanas, and not the least of these are the under-fed dogs brought in by local charcoal burners [it was one of these dogs belonging to such a person which had inadvertently rediscovered the Jamaican Iguana after it was thought to have been wiped out in the 1940s] (Vogel & Kerr, 1992). The zoo also had a fine collection of the Jamaican Boa or Yellow snake (*Epicrates subflavus*), but did not have facilities for breeding the snake. The animals are in the excellent care of senior curator Rhema Kerr, who was very helpful in providing answers to my many questions. Rhema also suggested I keep an eye out for turtles on the Golden Seas Beach. You hear all sorts of stories about travelling abroad, and when you say you are going to Jamaica, some people react as if you have

booked a one-way ticket to the end of the world! To be honest, I always take other people's stories, good and bad, with a large helping of salt, after all, a good friend told me they had flown home, at extra cost, 5 days early on a fortnight's break to Jamaica because they "had done everything"! Jamaica can be nerve-racking, especially if you are driving through Kingston, but, generally, the locals are very friendly. They can be *extremely* helpful if you are lost, although some of the directions can confuse. On our way back from Hope Zoo we decided to visit *World's End Distillery*, home of Dr Ian Sangster's liqueur factory. We were told to drive to Gordon Town and ask for directions. This we did and were told to "follow de road straight". Ten miles, thirty minutes and a hundred bends later the place was found - *closed*, although a very helpful employee did open up for us and we had a nice tasting session, coming away in, and with some, wonderful spirits!

The journey back from Kingston in the dark, by a "short cut", actually took an hour longer than the other route because the road must have had 90% of Jamaica's pot holes in it! This did not do my neck much good, so, apart from the organised trips, most of the holiday was spent at Oracabessa. This meant plenty of time exploring the local area, and, especially, the Golden Seas Beach. I did find plenty of *Anolis lineatopus* in and around the hotel and one *Typhlops jamaicensis* under a stone across the road. I only saw one *Anolis garmani*, and that was at the University Marine Station at Discovery Bay.

During the first week the weather was very hot and the sea very calm. One night a plague of flying termites appeared and covered the patio and our room with discarded wings. Ants had removed all trace of any termites which failed to survive their wedding night by the next morning. A few days into the holiday, I found a set of turtle tracks on the beach. They ended in what must have been a nest, but the turtle had not gone far up the beach due to a large washed up log barring its way. Hawksbill (*Eretmochelys imbricata*) turtles usually nest at the back of beaches, often under vegetation, but this one was out in the open. I quickly covered the tracks as I was not sure whether turtle eggs were safe or not. I know turtle eggs are eaten on the south coast and large numbers of turtle shells are illegally exported (Grohall & Jones, 1992), so it was better to be safe. I thought the nest was high enough up the beach as there were some small almond tree (*Terminalia catappa*) seedlings between it and the sea.

Grohall & Jones (1992) state that "there are seven species of turtle found in Caribbean waters. These are the Green Turtle (*Chelonia mydas*), the Loggerhead (*Caretta caretta*), the Olive Ridley (*Lepidochelys olivacea*), the Hawksbill (*Eretmochelys imbricata*) and the Leatherback (*Dermochelys coriacea*). The most frequently observed nesting on Jamaican beaches is the Hawksbill, followed by the Loggerhead with less than half the number of nesting events, followed by the Green with even fewer nestings." I had not seen the turtle, but it was most likely to be a Hawksbill. Bustard (1972) states "In this species, nesting is more diffuse than in most other species both seasonally and geographically with the result that a substantial proportion of the natural egg production is not molested."

Also during the first week preparations for Jamaican Independence Day took place. Golden Seas Beach extended beyond the Golden Seas Beach Hotel, and most of it was accessible to the locals. The public area was backed by a steep wooded slope with some fine houses perched some way up. Part of the beach had been developed into a garden with tropical flowers visited by Doctor birds (streamer-tailed humming birds - *Trochilus polytmus*) and butterflies during the day and by bats (large moths!) and rat bats (bats!) at night. Peeny Wallies and Blinkies (luminous click beetles and fireflies) could also be seen flying along the beach at night. Some of the bigger fireflies flew very fast, and were

seen to great effect when returning from the Blue Mountains, in the dark, through Fern Gully, a picturesque wooded valley leading down to Ocho Rios on Jamaica's north coast. Near the beach garden a large tree had crashed down the sheer face of the cliff backing the beach, from the road above. Here it lay, a tangle of branches, covering a large part of the back of the beach. As independence day approached, a lone Jamaican began to tidy up the beach, sweeping up almond seeds, leaves and all sorts of flotsam into neat piles. One by one the piles were either burned or removed to the back of the beach, until the beach was clear. The fallen tree was set alight, but the burned remains were just left. The far part of the beach by the turtle's nest was not disturbed. Independence Day was a holiday; everybody was on the beach and Reggae music boomed out. The source of the music was Oracabessa town nearly 3 miles away! The bank of loud speakers was bigger than some of the houses there! The day following the local holiday the weather turned for the worse and it rained for a day and a half. Then the weather cleared but the sea became rough and the beach became covered in dead leaves, which must have been washed down the nearby river. During this time the sea reached my turtle nest, and over the next week the almond seedlings on the beach died. Relating this in a telephone conversation with Rhema Kerr later in the week, she said the eggs would not hatch. Bustard (1972) states that both the salt and saturation with water kills eggs of turtles. The rough weather also dumped, or exposed, large numbers of flint pebbles on the beach in front of the hotel. These were removed by beach boys with rakes, shovels, and wheelbarrows and dumped at the back of the beach at each end of the hotel. This process was reducing the area above the high tide mark and rendering this area of the beach useless for turtle nesting. This had been going on for years, judging by the volume of pebbles along the back of the beach! There was now more area covered by dumped pebbles than exposed beach. In front of the hotel, a wall prevented any turtle nesting and at the far end, about 500 yards from the hotel, the wooded slope came down to the sea, with no dry exposed sand.

Bustard (1972) states, "the Hawksbill nests very rapidly", and Grohall & Jones (1992) indicate that turtles return almost fortnightly to nest, so after I had first seen the tracks in the sand I had a nightly walk along the beach with a torch to see if any turtles returned to the beach, or if any nests hatched. No turtles were seen until two days before departure, then, at around midnight, a Hawksbill turtle was found. She had dug a hole at the bottom of the woody slope under an almond tree and, from the tracks she had left, it was clear she had come up the beach to the back, followed the curve of the cliff in a clockwise direction and was now facing the sea. I rushed back for my video and still cameras and filmed her laying eggs using torch light. I was careful not to shine the light in her face, and she completed her egg laying. So as not to disturb her with my flash gun, I refrained from using the still camera until she had started her journey back to the sea. Her care in covering the nest was very thorough and she was fully two metres from the nest before she stopped arranging the sand, then a slight pause and she started down the beach. I knew the batteries in the flash gun were low, but I had not taken her speed into consideration. I only managed three shots before she vanished under the waves.

The next day I visited the spot, only to find sets of human foot prints right over the nest. The nest did not appear to have been disturbed, but there were turtle eggshells in the sand. I met a local who said, "a turtle visit de beach and dig up another nest", and I suppose that is what had happened. There are some white objects in one of my photos and these could be eggs? I could not see anything in the dark, and did not think to check with the torch. With space at a premium, especially on such a small, and ever-shrinking, beach it is little wonder that nest sites coincide. A brief check of the beach revealed four other sets of turtle tracks. One at the far end where there was no suitable sand above the high tide mark and two in front of the dumped stones, again just above the high tide

mark. These were just horse-shoe shaped sets where the turtle had come ashore and gone straight back into the sea. Perhaps these were "exploratory beachings". This is where the turtle beaches the night before she intends to lay, takes a view and "so having made a Semi-circular March", returns to the sea (Bustard, 1972). The fourth set ended in an excavated "scrape" - by the steps down to the beach from the hotel's pool. I saw no tracks from the scrape, but there were plenty of dog paw prints. The hotel guards had a dog, so this might have disturbed the turtle, or she may have given up, as the site was only about a metre from the high tide mark. There was no way of knowing whether any or all of these sets of tracks were made by one or more individuals.

On Golden Seas Beach the area suitable for turtle nesting was reduced naturally at one end due to the topography, it being a rocky promontory leading round to the mouth of the Rio Nuevo. The hotel was reducing what was left not only by being there, but by the management of the hotel beach. No one likes a stony beach, but, by dumping the stones (5-10 cm in diameter) along the beach from the hotel, the turtles are being forced into nesting closer together, and consequently increasing the chances of nests being dug up by later nesting females. If the nests on Golden Seas Beach are left undisturbed, there should be a good chance of hatchlings reaching the sea, as the suitable areas are well away from the lights of the hotel, and the beach is relatively steep, giving a short journey to the water. As Jamaicans eat a lot of the big ghost crabs, the beach has few of these predators.

This was my experience from just a short stay in Jamaica. With competition for beach space, there can be little doubt that turtles have an uphill struggle to nest successfully as more and more hotels are built. I thoroughly enjoyed my stay at Golden Seas as it was away from the noise and bustle of Mo'bay or Ocho Rios. Most of the tourists kept to the beach in front of the hotel, or the pool side, so what was suitable for turtles remained relatively undisturbed most of the time. Time will tell if this remains the case.

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