

SECTION 2: INTRODUCTION

Ascension Island is located in the middle of the South Atlantic at 7°55'S, 14°25'W. Of volcanic origin, it is 88km² in area. A dependency of St Helena, it is a separate UK Overseas Territory. Its wider natural history is reviewed in detail by Ashmole and Ashmole (1997; 2000 and references therein)

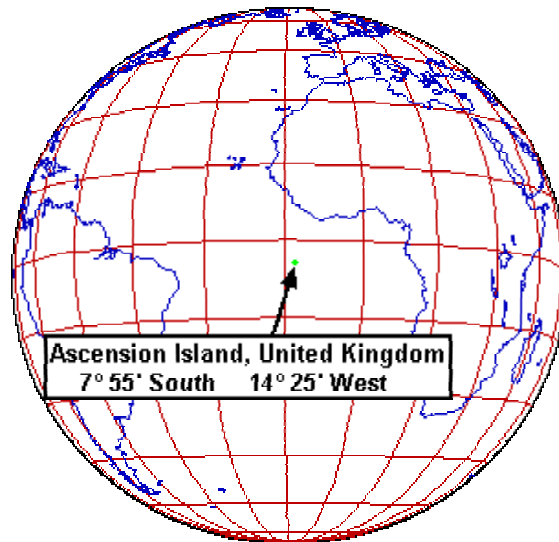


Figure 1. Location of Ascension Island.

The green turtle (*Chelonia mydas*) nests at Ascension Island in large numbers. In addition, the hawksbill turtle (*Eretmochelys imbricata*) and the leatherback turtle (*Dermochelys coriacea*) have been recorded in the waters around Ascension Island. It is likely that there is a small resident population of hawksbill turtles whilst the leatherback is a rare/occasional visitor. All three species are protected under international law and classified by the IUCN (World Conservation Union) as endangered or critically endangered.

Adult green (*Chelonia mydas*) turtles begin arriving at Ascension Island in November each year and are seen mating in the nearshore waters for the next 3-4 months (Godley *et al.* in 2002b). Females lay several clutches of eggs in a season at intervals of 10-16 days and mate approximately 30 days prior to laying their first clutch. Although low levels of nesting occur throughout the year, nesting largely occurs between December and July each year, peaking in March (Godley *et al.* 2001; Mortimer & Carr 1987). Hatching occurs from February until August with nests generally taking 45-70 days to incubate. At the completion of breeding adult turtles migrate back to foraging grounds in Brazil (Figure 2).

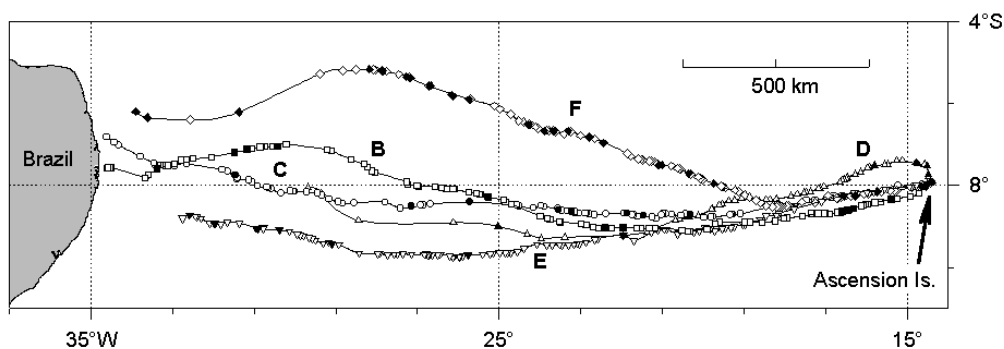
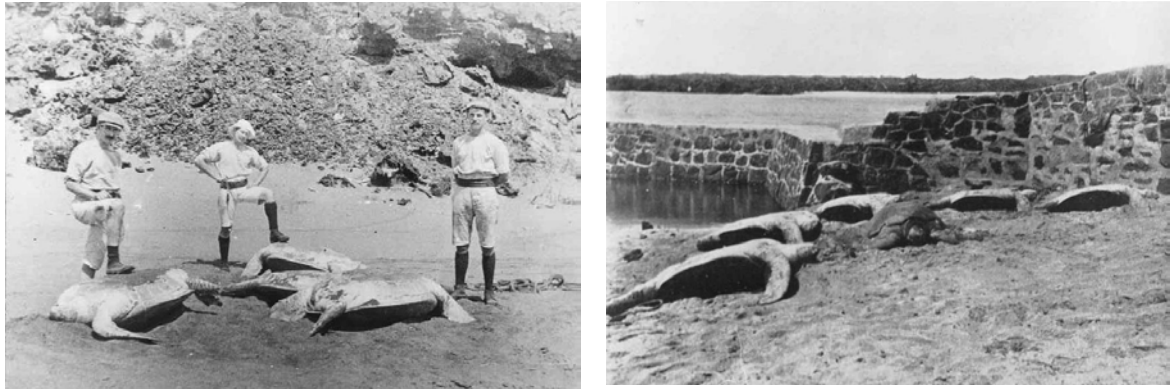


Figure 2. Satellite tracks from Luschi *et al.* (1998)

Since its discovery in 1501, Ascension Island has been famous for the green turtles (*Chelonia mydas*) which nest upon its beaches. These turtles provided fresh meat for passing ships. With the establishment of a marine garrison on Ascension in 1817, turtles became an important part of the diet of residents. In order for turtle meat to be available all year round, a Turtle Pond was built. In 1829 the Boat Harbour was converted to the second Turtle Pond to allow the storage of a greater number of turtles.

Turtles were also taken back to the UK where turtle soup was considered a great delicacy. The turtles were kept alive onboard the ship for the journey home, given no food and only had the occasional bucket of water thrown over them. Sometimes few survived the journey but it seems that the majority did.



Photos 1 & 2. Turtles being turned on the beach and stored in the Turtle Ponds
(Photographs Courtesy of Ascension Island Heritage Society).

In 1822 alone, over 1500 turtles were harvested and by the 1860's the population had been affected and less than a few hundred were harvested on average each year (Figure 3; Huxley 1997; 1999). By the 1920's the trade in turtles had virtually stopped, and the ponds were no longer used for this purpose, although a few were still caught for Island residents. The last documented capture of a turtle on Ascension was in the 1950's. The turtles of Ascension Island are now protected under local law and it is illegal to disturb or harm them in any way.

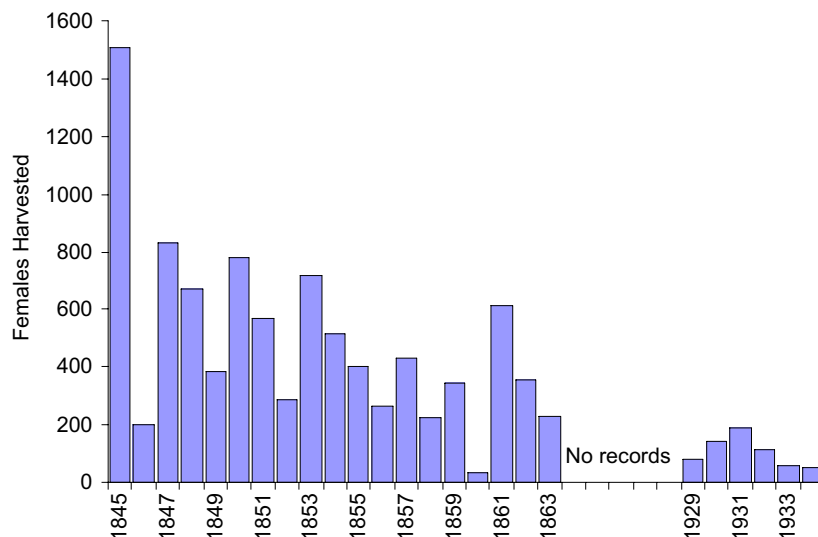


Figure 3. Records of number of females harvested each year on Ascension Island (Huxley 1999).

Historical harvest records provide a strong indication that the green turtle nesting population of Ascension Island was significant, confirmed by work of Carr and colleagues (Carr 1975; Carr & Hirth 1962). The first comprehensive scientific survey however was not undertaken until 1976/7 and 1977/8 (Mortimer & Carr 1987) when the annual number of nests was estimated as 7910-10764 and 5257-7154, in the two seasons, respectively.

In the Atlantic, although there are numerous areas where small numbers of green turtles still nest. Evidence suggests that the major nesting colonies for the green turtle are: Tortuguero, Costa Rica (Bjorndal *et al.* 1999); Ascension Island, UK (Mortimer & Carr 1987); Suriname (Shulz 1975); Aves Island, Venezuela (Sole & Medina 1989); Poilão, Guinea Bissau (Fortes *et al.* 1998); and Trindade, Brazil (Moreira *et al.* 1995). Although these are arranged in an approximate order of decreasing magnitude (as per Bowen *et al.* 1989), quantitative status surveys are often lacking, making rigorous inter-colony comparisons difficult. Given that by 1998 no comprehensive surveys of marine turtle population size at Ascension had been carried out for 20 years, the need for updated status information was acute, especially for a population which had been shown to feed in the waters of Brazil where there had been directed fisheries in recent decades (Marcovaldi & Marcovaldi 1999; Marcovaldi *et al.* 1998; Pritchard 1976).

The current Ascension Island Turtle Project was established in 1998 through a grant from the former Department of the Environment, Transport and the Regions (DETR) Darwin Initiative for the Survival for Species. After two successful years of monitoring (the nesting seasons of 1998/1999 and 1999/2000) a grant from the Foreign and Commonwealth Office (FCO) Environment Fund for the Overseas Territories enabled monitoring to continue for a further two seasons (2000/2001 and 2001/2002). The results of both of these projects to date are used in the synthesis of this management plan.



Photo 3. Tracks on Long Beach, January 2002.



Photo 4. Hatchling green turtle