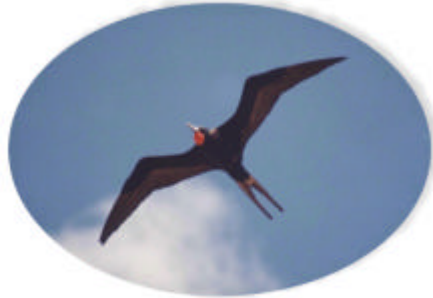


# Ascension Conservation Quarterly

Issue No: 02

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## Progress...

It's been an interesting three months on Ascension, with the advent of democracy taking most of the headlines. The Conservation Officers look forward to working with the Island council to ensure that the wishes of the Islanders are compatible with sustainable development of the unique environment of Ascension.

Once again, we have struggled to decide what to include from a varied and packed three months. We hope you enjoy our selection and invite any of you to contribute articles for the next edition.

We hope that 2003 will build on the successes experienced by the Conservation Office in 2002. With your continued support we are confident that this will happen.

It just remains to wish all our readers a happy and prosperous Christmas and the New Year.

Tara & Richard

## Recent Highlights

- Visit of HRH Princess Anne to Ascension
- Successful breeding season for sooty terns
- New post, Assistant Conservation Officer, created and advertised
- Three species of seabird fledge young from mainland locations for the first time in living memory
- Funding secured from USAF for Ascension Spurge research
- Roebuck Bell and Clam return to Ascension.
- Rat eradication specialist Derek Brown visits to advise on project feasibility.
- Nursery cultivation of Ascension spurge and *Pteris adscensionis* proves successful.
- Second edition of poster 'Ascension Island: a very special place' produced
- Conservation Fundraising Dinner attended by 40 islanders
- Conservation Group, Ascension Explorers and wildlife tours continue.

# Rare and scarce vagrant birds on Ascension, 2001-2002

Richard White, RSPB Ascension Island Conservation Officer

Ascension is a tropical island of some 95 km<sup>2</sup> lying approximately 600 km south of the equator. It is located approximately midway between West Africa and Brazil. The majority of vagrant landbirds noted have had an old world origin, no doubt borne on the invariable south-east trade winds. In the past, most reports of vagrants have been largely birds found moribund or killed by cats, with occasional records from visiting birdwatchers, few of whom have been resident for any length of time. Vagrancy on Ascension has been summarised by Bourne and Simmons (1998), who noted the familiar correlation between the number of active birdwatchers on an island and the number of vagrants reported.

As a result of the Seabird Restoration Programme, several birders have been present on the island throughout 2002, and a number of vagrant birds have been recorded. A peak in the number of occurrences was noted March-April and October-November, both months when Palaearctic migrants are on the move. This note provides a summary of these records and an update to Bourne and Simmons (1998). Thanks to Mike Bell and David Boyle for their records.

## **Little shearwater** *Puffinus assimilis*

In a bizarre sequence of events, one appeared on the patio of a house in Two Boats on three consecutive evenings, 15-17 August (Figure 1). This appears to be the first record for Ascension.



**Figure 1** Little shearwater, Two Boats, Ascension (Photo R. White)

## **Black-bellied storm-petrel** *Fregetta tropica*

Noted by RW as being regular about three miles off the coast in June.

## **Brown x masked booby hybrid** *Sula leucogaster* x *S. dactylatra*

A single bird was found on Boatswainbird Island during routine fieldwork there in February (Figure 2). It remained until August and was seen incubating

a two egg clutch, but the nest was unsuccessful and the bird was not seen again by the end of the year.



**Figure 2** Hybrid masked x brown booby, Boatswainbird Island (Photo R. White)

## **Cattle egret** *Bubulcus ibis*

Up to two birds were seen in all months between April and the end of 2002.

## **Squacco heron** *Ardeola ralloides*

An immature was present at North-east Bay on 16 October 2002, with up to two birds present at various locations between South-west Bay and English Bay Power Station Beach until early November. The fourth and fifth records for Ascension.

## **Curlew sandpiper** *Calidris ferruginea*

A single bird was found moribund at South-west Bay on 23 October. Probably the first record for Ascension.

## **Whimbrel** *Numenius phaeopus*

At least three birds (all of the nominate race) were present at a number of sites between South-west Bay and North-east Bay between November 2001 and January 2002.

**Ruddy turnstone** *Arenaria interpres*

A single bird was present at several sites on the west of the island from November 2001 to January 2002. Another bird was present in the same area in October-November 2002.

**Large skua** species *Catharacta* sp.

The bleached remains of a *Catharacta* skua were found on Letterbox on 29 January 2002.

**Kelp gull** *Larus dominicanus*

There were two records of kelp gull; one in November 2001 and one in June 2002.

**Common swift** *Apus apus*

One was recorded in Two Boats and in Georgetown between 15 January and the end of the month.

**Barn swallow** *Hirundo rustica*

Single birds were recorded at Devil's Ashpit on 14 April and in Georgetown on 26 and 27 April 2002.

**House martin** *Delichon urbica*

Single birds were in Georgetown on 29 April, Pyramid Point on 7 May and at Two Boats from 25-27 May 2002.

**House sparrow** *Passer domesticus*

There were no records of house sparrows during 2002. The small population introduced to Georgetown in 1986 (Packer 2002) appears to have died out.

**References**

Bourne, WRP & Simmons KEL. 1998. A preliminary list of the birds of Ascension Island, South Atlantic Ocean. *Sea Swallow* 47: 42-56.

Packer, JE. *A concise guide to Ascension Island, South Atlantic Ocean 2002 Edition*. Ascension Heritage Society, Georgetown.

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## A Royal visitor



*Conservation Officers Tara George and Richard White chat with HRH Princess Anne in the Conservation Centre*

HRH Princess Anne visited Ascension as part of her visit to St Helena for their Quincentenary celebrations. On 19 November, after a reception at the Residency, HRH was taken on a guided tour of the island which included a visit to the Conservation Centre. Here she met and chatted with the Conservation Officers, Mike Bell (WMIL), volunteers Julia Henshaw and Jackie Ellick (Ascension Island Turtle Group) and Jimmy Young (local marine specialist).

# The Roebuck Bell and Clam

*Dr Michael McCarthy, Western Australian  
Maritime Museum*

Much has happened down here since the Western Australian Maritime Museum team returned home from Ascension Island after the successful search for the site of what 'we' were all sure was William Dampier's famous command, HMS *Roebuck*.

First great pains were taken to ensure that the bell, the clam, and the beautiful ceramics found earlier by Jimmy Young in the same vicinity, were of the right age, type or style for the time. This was done after a great deal of advice was sought and received from across the world and after a great deal of comparative work was conducted looking at bells, clams and ceramics from a similar period.

It was also essential to prove beyond any doubt that the bell, though it carried a broad arrow, symbol of British Government ownership, could not have come from another RN ship. It was also essential to show that the clam and ceramics could have been recovered during Dampier's voyages and were not merely lost overboard or came from another ship that was wrecked nearby. We are now certain the clam came from an island on the NW coast of New Guinea and that the ceramics came from Batavia (now Jakarta).

All these conclusions were published in a detailed 107 page report that was sent back to the Island. It contained an analysis of Dampier's life and times, his career and that of his ship, a précis of all the evidence that led us to the site, a report on the site and much more. A CD of all our fieldwork and research images was also sent on and this should also be available for viewing in the Heritage Society records.

The report also presented a series of 10 recommendations for the Administration and the Ascension Heritage Society to consider. The recommendations were designed to ensure that the site remains protected now and in the future, that the bell and clam at least be exhibited to advantage on the Island and hopefully sent out on short-term loan to Australia, that the images and research materials found by the Museum be all gathered up and copies sent to the island and other places in the world for use by schools and researchers, and that

those involved be properly recognised (e.g. Jimmy Young, Flt Lt Richard Burke and the outgoing Administrator Mr Fairhurst).

A website was produced and linked to the island. It contains a shortened and much more attractive version of the report with lots of great images and anecdotes.

[www.mm.wa.gov.au/Museum/march/treasures/treasures.html](http://www.mm.wa.gov.au/Museum/march/treasures/treasures.html)

There are also hopes of returning to further delineate the site. Even if we succeed in gaining approval to again come from the Administration and the Admiralty, clearly we will need the same sort of luck that saw a remarkable shifting of sand from the bay during the 300<sup>th</sup> Anniversary of Dampier's being marooned on the island. Some will recall that this was the same time we were there and that the site is right where it is depicted in the Anniversary stamp series! If we do come, it would be to work with Ascension Island divers and with and on behalf of the Heritage Society, learning more about William Dampier and his famous ship.

In the meantime we have had a replica of the bell and clam made at the Mary Rose Laboratories in Portsmouth and when they arrive here in the new year we will use them as the basis of an exhibition on a man noted as a pirate, privateer, gifted author, hydrographer and as Australia's first natural historian. In developing that exhibition mid next year, we also plan to make duplicate panels available to the Ascension Heritage Society to go with the display of the original bell and clam that returned recently to their Island home.



*The team of divers with their discoveries  
on Long Beach*



# Kids Konservation

Two Boats School children between years 2-7 go on holiday outings with:



A favourite activity is snorkelling at Comfortless Cove where the Explorers unravel the mysteries of the ocean, and build up confidence to go further and further finding more and more species of fish. Sand castle competitions usually round up the ocean exploration.



*Turtle sandcastle builders at Comfortless Cove*

Another of the Explorers' activities was a bike ride around Georgetown. Clues were given that related to historical sites of interest, and the keen bikers found their way to the end of long beach with great skill and agility.



*Explorers after Georgetown bike ride*

*Ascension Explorers is held once a week in the school holidays for children in years 2-7. All children in this age range are welcome.*

## Coming Soon

### **BirdWatch 2003**

Ascension's Annual Birdwatch  
20<sup>th</sup> – 27<sup>th</sup> January

*Learn to identify the land and seabirds of Ascension*

**Open to all Two Boats School students**

**Exciting prizes  
to be won**

# Marine Turtle Mating at Ascension

*Produced by Ascension Island Turtle Group and Marine Turtle Research Group, University of Wales Swansea.*

The green turtle (*Chelonia mydas*) is found around the world in the tropics and subtropics and its reproductive efforts display a marked seasonality in all populations. Nesting usually occurs in the warmest months and even in the few populations that nest year-round, there is a marked annual peak. The majority of the adult life cycle is spent in foraging grounds, which are often great distances from the nesting grounds. For our population on Ascension, these are up to 2,000km away in Brazil. Both sexes make cyclical remigrations to the breeding grounds, usually at the interval of 3-4 years or more in females and possibly with a greater frequency in males. Genetic studies have shown that both males and females return to the same area as they themselves hatched after taking some 20-50 years to mature.

In all marine turtle species there are marked differences in the sexes. Breeding males have a long prehensile tail with terminal nail; larger, recurved claws on the front flippers and soft, concave plastron (lower shell). All of these help the male secure matings. Additionally, perhaps surprisingly, in general males are smaller than females.

As mating occurs in the sea, knowledge of the mating rituals is rudimentary. Although records exist of males intercepting receptive females *en route* to nesting sites, courting and copulation generally occurs close to nesting beaches, often in lagoonal habitats. On Ascension, hot-spots are found off Long Beach, SW Bay and NE Bay.



*Mating green turtles off Long Beach*

Males competitively search for receptive females in a sometimes brutal process that causes injuries to both sexes. On close inspection of nesting females, the damage left by the male's large claws can be seen on the

shoulders. Males have been observed mating with several females per season in a process that can last 24 hours. Satellite tracking of two males at Ascension showed them to stay in the mating grounds for 29 and 48 days, respectively before heading off to Brazil.

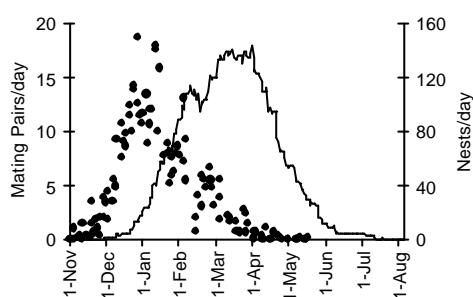


*Male with satellite transmitter being released in 1998  
(see Hays et al. 2001)*

However, it is not only the males that have several partners, as paternity analysis of hatchlings has suggested that multiple paternities of clutches may be common. It was once thought that the sperm was stored from mating in one year for the successive breeding season, and although it is possible that sperm could be stored, it is now widely felt that mating is primarily directed at fertilising the clutches in the same season, with copulation being undertaken prior to the start of the repeated laying cycles of individual females. Following this she retreats to an area where the water is approximately 20 metres deep and rests on the bottom returning to the surface less than twice per hour for air. At this depth she is neutrally buoyant and is able to minimise her metabolism as there is nothing for her to eat at Ascension.

As part of ongoing research initiatives on Ascension, in 1999/2000 we set out to assess

the cycle of mating through a systematic programme of direct observations from the historical cannon placement behind Long Beach which commands an excellent view over Clarence Bay. Observations were made between 08.00 and 10.00. The time of day was standardised to control for differences in glare and sun direction. Using 10 x 40 binoculars in a standard scanning pattern, the whole bay could be observed to enumerate the number of mating pairs of turtles. This was repeated at 5 minute intervals a total of 5 times on each survey day. A mean of the count of mating pairs was taken as an index of mating occurring on that day. This allowed the first elaboration of the cycle of mating



Seasonality of mating and nesting of green turtles at Ascension in the 1999/2000 nesting season. Line plots daily estimated number of nests throughout Ascension Island and filled circles represent the mean number of mating pairs observed in Clarence Bay on each survey day.

It can be seen that mating starts before nesting, peaks and declines to a low level before the maximum nesting levels are reached but continues well past the peak of nesting. The last mating activities were observed when the nesting had decayed to a low level. This pattern has been consistently followed in recent seasons. The significance is discussed in Godley *et al.* (2002).

There may be a long way to go before all the secrets of the biology of Ascension Island marine turtles are revealed, but step by step we are starting to put the parts of the jigsaw together!

#### References

(Available at Conservation Centre and in electronic format upon request by e-mail to MTN@swan.ac.uk)

Godley BJ, Broderick AC, Frauenstein R, Glen F, Hays GC (2002) Reproductive seasonality and sexual dimorphism in green turtles *Mar Ecol Prog Ser* 226: 125-133.

Hays GC, Godley BJ, Broderick AC, Glen F, Nichols WJ (2001) The movements and submergence behaviour of male green turtles at Ascension Island. *Mar Biol* 139: 395-399.

#### Acknowledgements

All the work detailed above was supported by grants from the Natural Environment Research Council of the UK (NERC), the Department of the Environment, Transport and Regions (DETR) Darwin Initiative programme, Foreign and Commonwealth Office Environment Fund for the Overseas Territories. It was carried out by the Marine Turtle Research Group and Ascension Island Turtle Group in conjunction with the Ascension Island Administrator's Office with the logistical support of a wide variety of organisations and individuals: Ascension Island Government, Cable and Wireless, Computer Services Raytheon, First Ascension Scout Group, Johnny Hobson, Merlin Communications Ltd., Dave Rayney, Reed Family, Royal Air Force, the United States Air Force.

## Turtle Tours

An exciting opportunity to see female Green Turtles nesting on the beaches of Ascension Island.

**Time: 9pm**

**Place: Conservation Centre**

**Fee: £2.50**

*You will be given background information on the turtles of Ascension by Turtle Wardens and/or Conservation Officers and then taken to Long Beach to see nesting turtles. Please book at the Conservation Centre, telephone 6359 or 6781 (evenings).*

# Feral cat eradication project... update....

*Mike Bell (WMIL Project Manager)*

Centuries ago, Boobies, Frigatebirds, Storm-petrels, Terns, and Tropicbirds used to breed in their millions amidst the lava across much of Ascension island. The guano-covered rocks remain, but the breeding birds have long disappeared. The introduction of cats in 1815 rapidly diminished these massive colonies to such an extent that most seabird species now can only nest on offshore rock stacks and inaccessible cliffs.

In February 2002, a feral cat eradication programme was started which aimed at restoring the island's devastated seabird breeding colonies.



Although not yet completed the project is having instant success with several species of seabird returning to breed successfully on the mainland.

During an intensive trapping and poisoning programme run over the past 10 months, 700-750 feral cats have been removed. The focus now is on finding surviving cats and dealing with these, and at present the Wildlife Management International Ltd

team is carrying out an island wide monitoring programme aimed at detecting cats. A variety of methods have located several cats, which have then had to be poisoned. This will continue until April 2003 to ensure the success of the project.

To date three species of seabird which previously could only breed successfully on off-shore stacks or cliffs have moved on to accessible mainland sites and are raising young. At North-west Point seven pairs of Brown Boobies fledged two young. Two pairs of Yellow-billed Tropicbirds also fledged young in the same area. A Masked Booby chick has flown from a Coconut Bay nest.



*Masked Booby chick at Coconut Bay*

These chicks are likely to be the first seabirds of these species to fledge from mainland sites in over 100 years.

With the removal of feral cats from Ascension it is hoped that these sites will develop into major breeding colonies. Some time in the future the island may again be the home to vast flocks of birds raising their young in safety amongst the old lava flows.

**Edited by:** Tara George & Richard White, Ascension Conservation Officers

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**Contact:** Georgetown, Ascension Island ASCN 1ZZ

email: [conservation@atlantis.co.ac](mailto:conservation@atlantis.co.ac)