Vol. 47

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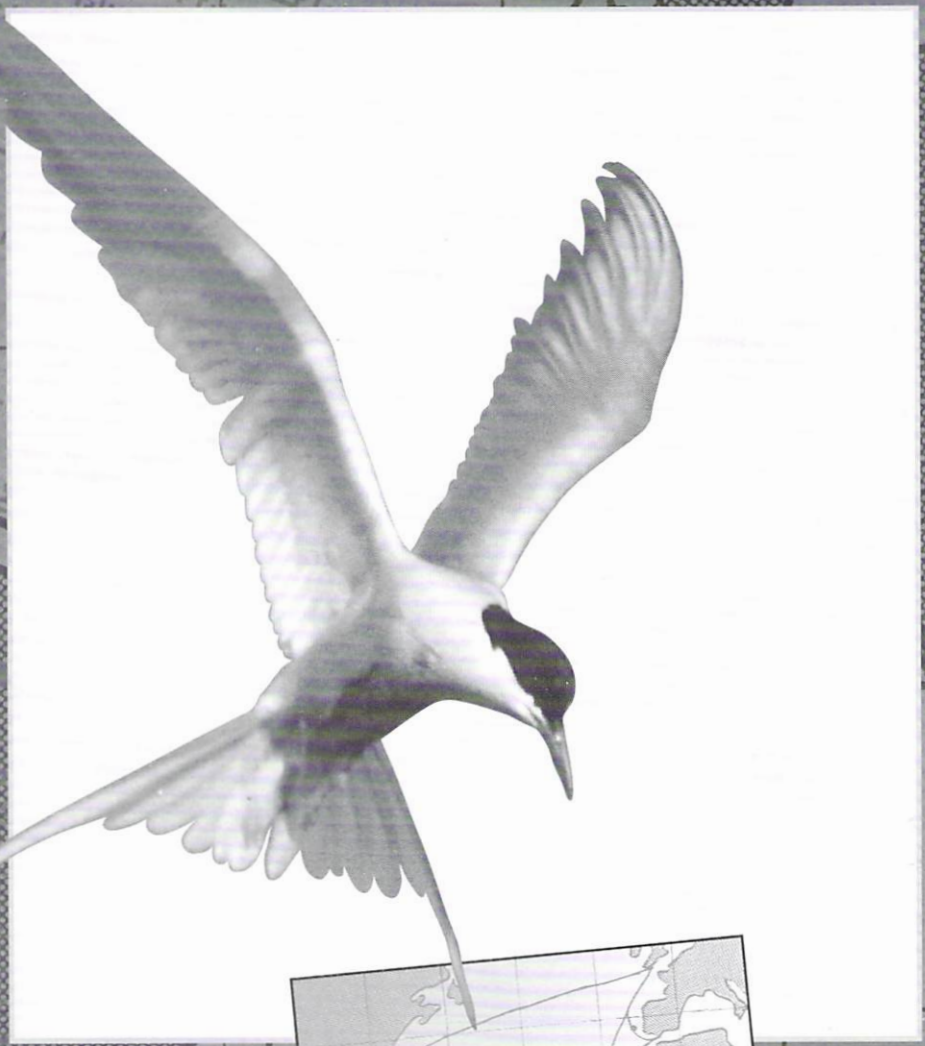
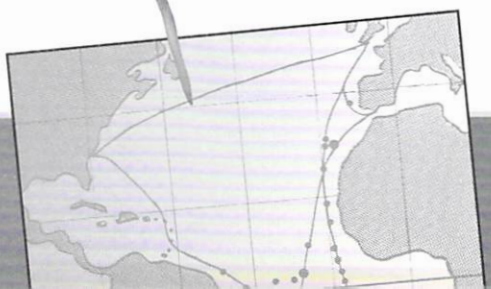
Sea Swallow

Annual Report of the Royal Naval Birdwatching Society





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OFFICERS OF THE ROYAL NAVAL BIRDWATCHING SOCIETY

(Registered Charity No. 207619)

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For details of local representatives and other useful addresses see page 77

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Library rates Cost of *Sea Swallow* (£8) plus postage.

Membership has been widened from the R.N. to include all those, regardless of nationality, who share a common background of the sea.

Aims and activines. The primary aim of the Society is to promote a forum for the exchange of information on seablrds, and of landbirds at sea, by members for whom birdwatching is a spare-time recreation and hobby. The secondary aim is to co ordinate the efforts of individual members using standardised recording methods so that observations can be of value to the professional ornithologist ashore. In addition to promotion of observations afloat, the RNBWS organises fieldwork and expeditions, usually in cooperation with the Army and RAF Ornithological Societies.

RNBWS Record Forms. Standardised forms for recording Seabirds and Landbirds at sea. Seabird Census sheets, Bird examined in the Hand (BEH) forms have been designed for use at sea. Stocks are kept by Warrant Officer C. A. R. Bailey, 8 Grange Close, Gosport Hants. PO12 3DX. (Tel. 01705-526264). Please give detailed requirements and enclose a large stamped and addressed envelope.

Completed record forms (both seabirds and landbirds) should be sent to Michael Casement.

Material for publication in *Sea Swallow* should be sent to the Editor
(see instructions to authors inside rear cover).

*An application form for membership is at page 76 of this edition of *Sea Swallow*.

Shy Albatrosses *Diomedea cauta cauta*.
Adults at 41.9°S 148°E, east coast Tasmania. 29 October 1988
Photo: Captain N.G. Cheshire MN

PRESIDENT'S FOREWORD

Sea Swallow Volume 30 emerged in 1981 under new editorship and with a new format with which we have all become very familiar. It included several detailed articles from locations as far apart as Ellesmere Island and Fiji, meticulous voyage records from such regular expert contributors as Captain Peter Chilman, and notes from a world cruise in SS *Canberra* and from an RN Group Deployment to the Far East. The Editor made full use of what was to become a powerful partnership with our Honorary Adviser, Dr Bill Bourne, whose unrivalled and encyclopaedic knowledge is much in evidence in Volume 30. This partnership brought even more substance and authority to the regular analyses of land and sea birds, the latter being coordinated by Stephen Chapman. The journal had increased in volume by at least a third, but it was easy to read and attractive to look at, with clear maps, and apt photographs and line drawings. The new dynamo behind this production was, of course, Michael Casement.

In the intervening years, during many of which he was also RNBWS Chairman and in full-time public service, Michael Casement has consolidated the reputation of *Sea Swallow* as a journal of reference. Those of you who attended our AGM last December will know that Michael asked to stand down after production of this volume. The magnificent Golden Jubilee edition (No. 45) is a very fitting memorial to his tenure of office, and the new cover design which it introduced will remind us of him. Those of you who have worked with him will witness to his courteous firmness, which was always allied to a determination to give visibility to the efforts of RNBWS' amateur membership. I know that you would want me to express our appreciation for all that he has done as Editor, and our hope that his busy life, including Hon. Secretaryship of the British Ornithologists' Club, will allow him time to continue as a contributing author.

DAVID DOBSON President

CHAIRMAN'S FOREWORD

As this edition of *Sea Swallow* goes to press the conclusions of the rigorous Strategic Defence Review will be announced. Sufficient open material exists, including the Secretary of State's development of the concept of defence diplomacy, to indicate that our members can expect to continue to voyage widely. Those of you serving in the Fleet will be aware of a number of interesting group deployments in the offing which will offer significant opportunities for the intelligent observer. Meanwhile well-established routine operations are no less important for monitoring the environment, as evidenced by the award of the AOS *Sea Swallow* Trophy to NP 1016 for their records from Home Waters in 1997. I understand that the Naval Party is out to retain the Trophy, and I trust that there will be plenty of challengers!

Another theme of the Strategic Defence Review is the enhancement of joint operations by the three services. Earlier this year I met with my fellow Chairmen of AOS and RAFOS and the MOD Conservation Officer to explore avenues to maximise our resources of people and to share activities. One of the most promising of the ideas which your Committee is now assessing would result in a coordinated calendar of field events, with a joint exercise in 2000 as a prominent landmark. This event will be supported by a training programme in mist-netting and other techniques. I would encourage you to get involved. There are some magnificent prospects ahead for travel. Please keep in touch with our Expedition and Fieldwork Member, Warrant Officer Peter Carr.

Finally, I warmly echo our President in saluting Michael Casement's outstanding tenure as Editor of this journal. Although marooned in MOD for the majority of this decade, my RNBWS life has been spent largely at sea, where *Sea Swallow* is RNBWS for many of us. It provides our guidance and our inspiration. On your behalf I would like to thank Michael most warmly for his selfless dedication, and also to welcome and pledge support to Gary Lewis as he picks up the reins. Please keep the material coming in.

MICHAEL BARRITT Chairman

EDITORIAL

I am grateful to the President and Chairman for their kind words. I have indeed offered my resignation as Editor, and this edition will be my last. After eighteen years I am certain that this was the correct decision for me, and for RNBWS, but I leave this desk with genuine sadness. I thank the many who have assisted me in this task, and especially to Bill Bourne for his continuing advice and painstaking care to ensure the high standard of accuracy we have together strived to achieve for *Sea Swallow*, over the years.

This edition again contains the usual seabird and landbird analyses, and further reports from David Simpson from the Fly River, and Indonesian islands. The major article on Ascension Island, by Bill Bourne and Ken Simmons, puts into perspective the complete past records of all RNBWS observations of this very interesting island, and Pete Carr's article summarises the seabird results of the RNBWS expedition "Diego Survey 97". I am especially pleased to include the article on Black Guillemots breeding in Orkney from Sub-Lieutenant Dan Gates, a new member. I am grateful to Captain Eddie O'Sullivan of the Meteorological Office for the continuing flow of Met. Log extracts, and to Captain Peter Chilman who handles the seabird records from this source. Included in the latest package, but not shown in this journal, is a seven page summary of bird sightings and mammals from RMS Queen Elizabeth's world cruise 1997-1998. Sadly these include no identification details, or positional information apart from the names of ports visited. It is clear that there are many more unique records from sea, which deserve mention in this journal.

But the number of RNBWS seabird and landbird record forms from sea continues to decline, and this is cause for concern, for the future. We also need more high quality photographs of seabirds at sea, suitable for publication. These are matters which I am sure my successor will address.

Meanwhile, I pledge my full support to Gary Lewis who will be taking over from me, as Editor next year, and I am happy to act as a post-box for all records and contributions. The instructions on the inside front and rear covers of this journal continue to apply, until he makes new arrangements. And of course I shall continue my analysis of landbird records, for as long as I can. Good luck, and many thanks to you all.

MICHAEL CASEMENT

The Computerisation of RNBWS records - a Progress Report

Note by the Editor

I am pleased to announce the progress of two initiatives.

Stan Howe and Lt. Cdr. Nick Bailey R.N.

At the Jubilee AGM, in December 1996, it was suggested that action should be taken to make RNBWS data more readily available to members and researchers, by establishing a computerised database. Several members have been working hard behind the scenes to implement this suggestion, and special thanks are due to Stan Howe who has been exploring these ideas, to identify suitable software to cover large geographic areas of ocean without specific site names, and to include an incorporated world list of bird names. Several members of RNBWS were discovered to be already using a programme entitled BIRDWIN*, which had these main attributes.

Stan gave a short presentation last December at the 1997 AGM, to show a trial application of the programme to a random selection of some 5,000 records, gleaned from past volumes of *Sea Swallow*, and illustrated with print-outs of the linked mapping facility. This showed the range of sightings of all, (or selected), species to be readily visualised.

Encouraged by the success of this preliminary trial, Nick Bailey kindly offered to assist with his technical know-how, and his long experience of birdwatching at sea. With the Chairman's approval, a meeting took place between them both, in March, at which I was present. It was agreed that RNBWS be licensed to use BIRDWIN*, and to proceed with the project to:

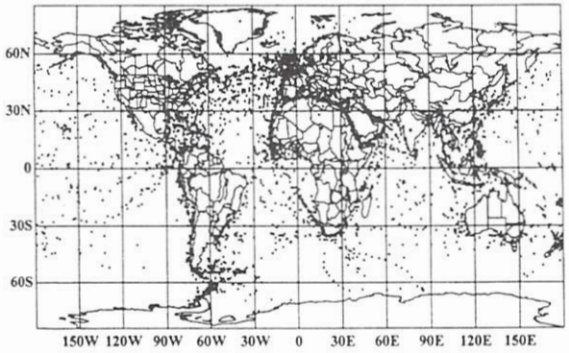
- Codify all records published in *Sea Swallow*,
- Codify all future records, as received, and
- Consider the feasibility/possibility of codifying other archived data.

The first aim is already well in hand, and will enable a complete index to *Sea Swallow* records to be published. This will include:

- Site by geographic coordinates & name,
- Observer/reporter by initials and name,
- *Sea Swallow* Vol/page reference, and
- A short precis of sighting notes (including weather, if published).

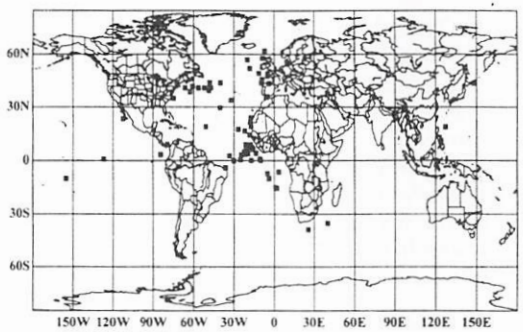
Stan has been steadily inputting all *Sea Swallow* records, and a total of over 13,000 has now been achieved - about half of the total to be processed. A second pass will subsequently be needed to verify accuracy.

The accompanying maps 1-4 indicate the broad sweep of records which RNBWS has already put into the public domain, over the past 52 years, by publishing in the pages of this journal. These include some records from diverse sites as the Greenland Icecap, and the Central Sahara! These are not errors - *Sea Swallow* has also covered expedition sightings by marine personnel to remote sites on land, little known to ornithologists of the day.

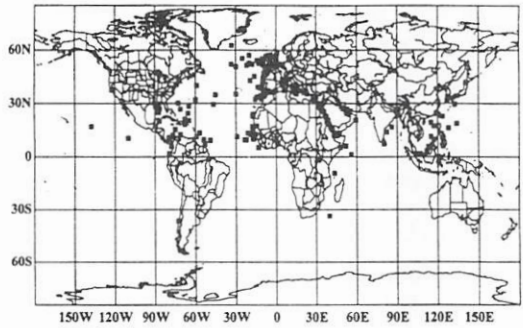


1. All species

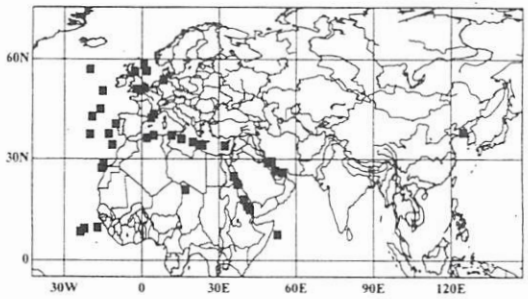
* **Note.** BIRDWIN is available from:
Wildlife Computing Services, 6 Fiddler's Lane, East Bergholt, Colchester CO7 6SJ.



2. Leach's Storm-petrel *Oceanodroma leucorhoa*



3. Barn Swallow *Hirundo rustica*



4. Common Kestrel *Falco tinnunculus*

Meanwhile, Nick Bailey hopes to find time to validate the usefulness of this programme for directly inputting his own extensive records from sea, over many years, which have hitherto not been published in *Sea Swallow*.

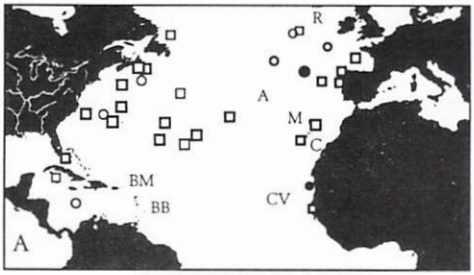
Captain P.W. Jackson MN

As a quite separate exercise, following his splendid article last year covering an analysis of landbird records in the Mediterranean (see *Sea Swallow* 46: 38-39), I invited Peter Jackson similarly to analyse all published records of raptors and owls in the North Atlantic.

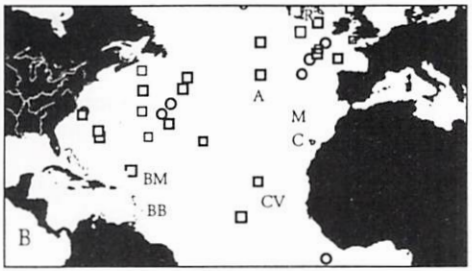
Peter kindly accepted my invitation, and I have great pleasure in showing a selection of his resulting graphics which summarise all raptor records from *Sea Swallows* 1-46.

This has clearly involved much time and effort, for which I am profoundly grateful - Peter tells me he enjoyed the challenge! - "the exercise has been interesting and depiction of results it's own reward." My only regret that space on these pages does not permit me to show the full set of his graphics, in a larger size.

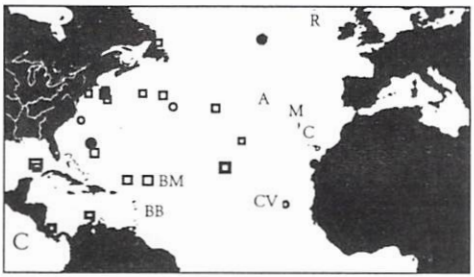
MAPS A to F.
RNBWS sightings 1947-1996 - *Sea Swallows* 1-46.



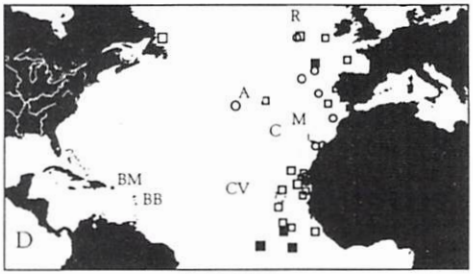
PEREGRINE FALCON



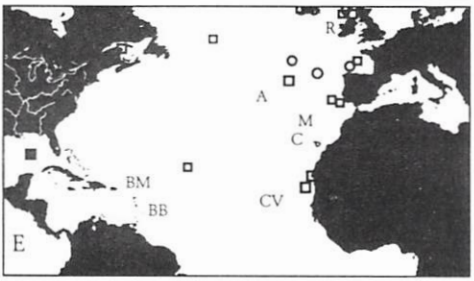
MERLIN



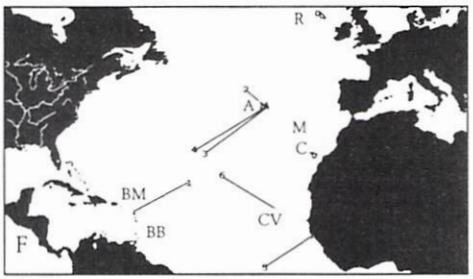
OSPREY



KESTREL



SHORT - EARED OWL



SOME NOTABLE OWL & RAPTOR SIGHTINGS

KEY. ○ SPRING
● SUMMER
❑ AUTUMN
■ WINTER

ABBREVIATIONS
R = Rockall
C = Canary Is.
BB = Barbados
A = Azores
CV = Cape Verde
BB = Bermuda
M = Madeira

A. PEREGRINE FALCON ***Falco peregrinus.*** A total of 37 sightings, ranging to about 1,200nm from land, mostly in autumn in the W. Atlantic.

B. MERLIN ***Falco columbarius.*** The most prolific raptor in the N. Atlantic, with a total of 73 sightings, mostly during spring and autumn throughout the temperate Atlantic, ranging out ot about 1,000nm from land.

C. OSPREY ***Pandion haliaetus.*** A total of 22 sightings, ranging out to 700nm from land, mostly in autumn in the W. Atlantic.

D. KESTREL ***Falco tinnunculus.*** A total of 57 sightings, mostly in the autumn, ranging out to about 50nm from nearest land.

E. SHORT-EARED OWL ***Asio flammeus.*** A total of 31 sightings, mostly during autumn in the E. Atlantic.

F. SOME NOTABLE OWL & RAPTOR SIGHTINGS

1. **Short-eared Owl** - Autumn - 23.2°N 48.4°W, - 890nm from Bermuda
2. **Long-eared Owl** - Autumn - 42.5°N 33.7°W - 345nm from Azores
3. **Merlin - Autumn** - 29.2°N 44.0°W, - 970nm from Azores
4. **Peregrine Falcon** - 30.3°N 47.2°W - 1,050nm from Azores
5. **Kestrel** - winter - 06.4°N 29.0¡W - 810nm from W. Africa
6. **Osprey** - autumn - 24.9°N 39.6°W - 910nm from C.Verde Is.

Conclusion. RNBWS owes much to the authors of both these two initiatives, and the way ahead is now much clearer. Computers are already with us, and are invaluable tools both to make best use of the past, and to prepare for the future. But time and care in getting the parameters right, is time well spent. I look forward to further progress reports. My appetite is already whetted, and maybe I am not too old, or too busy, to learn how to do it myself, one day!

But computers do nothing to reduce the essential need for accurate descriptions and identifications of all difficult birds recorded at sea - there are no substitutes for pencil and paper, for detailed notes and sketches. This compilation and presentation of raw data is intended merely to facilitate the expert vetting and selection of data for publication. People, not computers, must remain in the driving seat.

MBC

EXPEDITION REPORT DIEG0 SURVEY 97
4 -18 August 1997.

by Warrant Officer 2 Peter Carr Royal Marines

PART ONE - THE SEABIRDS

ABSTRACT

The Royal Navy Birdwatching Society (RNBWS) mounted its first official overseas expedition in 1997 to the Chagos Archipelago, Indian Ocean. Between 4-18 August six RNBWS members conducted census work on Diego Garcia (DG), its three offshore islets and Anniversary Island (AI). Surveys concentrated on population estimates of breeding seabirds. Three species of seabirds were found breeding: Red-footed Booby *Sula sula*, with over 16,000 breeding pairs was by far the commonest; Brown Noddy *Anous stolidus* and White Tern *Gygis alba* were breeding in much smaller numbers The effects of human interference on the numbers and distribution of breeding seabirds were assessed. Map I shows the study area.

INTRODUCTION

The historical effects of man on breeding seabirds in the Indian Ocean.

Human intervention has had a catastrophic outcome on the survival and breeding success of island seabird communities throughout the globe (Burger & Gochfeld, 1994). In the NE Indian Ocean, the islands of both East and West Indonesia have seen severe declines in the number of breeding pelecaniformes over the last century, with an increase in the rate of decline since 1960 (de Korte & Silvius, 1994). Until the 1980s the unique avifauna of Christmas Island, in the eastern Indian Ocean, was being devastated by open-cut phosphate mining and seabird harvesting (Reville & Stokes, 1994). In the western Indian Ocean, the seabird populations of the Republic of Seychelles have historically had to survive the negative influences of introduced predators, replacement of natural habitat by coconut plantations, guano mining and seabird harvesting (Feare, 1984, Diamond, 1994).

The effects of man in the Chagos Archipelago.

The Chagos Archipelago, situated approximately 1,800km east of the Seychelles and some 3,000km west of Indonesia, in the middle regions of the Indian Ocean, has not escaped having its seabird colonies devastated by the interference of man and his commensals, primarily rats and cats. Massive reductions of the seabird colonies have taken place, mainly in the last century. Most of the indigenous island vegetation has been replaced with coconut plantations, human populations increased, particularly in the 1800s, and rats and cats were established as alien predators (Bourne, WRPB. 1971).

Feare (1984) notes that the rate of change of habitat by man on most islands in the Indian Ocean has reached a nadir, while some islands are being allowed, or even encouraged, to revert to their former states. This is true for all the islands in the Chagos Archipelago, except certain areas of Diego Garcia. Therefore the seabird colonies that remain, after at least 100 years of adaptation to alien predators, are likely to have reached some form of (introduced) stability. Now the depredations of alien predators has reached some form of balance, the Chagos seabird colonies are at the stage where, with correct management and protection, they should remain at their present levels, or even enlarge.

The RNBWS survey

One of the starting points for any conservation management programme of island seabird populations is to establish a thorough knowledge of the populations and their life cycles, including, where possible, the numbers breeding and the period in the annual cycle when breeding occurs.

Despite the endeavours of the very limited number of ornithologists who have carried out research work in the Chagos Archipelago since at least 1886, (Bourne, G.C. 1886), the knowledge of the bird populations of the area is still at a very basic stage. This is especially true of the internationally important seabird colonies in the area. In ecological and conservation terms, the paucity of published seabird material, detailing accurate breeding numbers timings of breeding and locations of colonies is of great concern.

Feare, in Seabird Status and Conservation in the Tropical Indian Ocean, (1984) states that many islands in the Indian Ocean are still very poorly known and need visiting at different times of the year to establish what species are there, and their approximate numbers and breeding seasons. He then further notes the Chagos as one of the island groups from which information is particularly sparse.

To assist in building up a comprehensive picture of seabird populations and their life cycles in the Chagos Archipelago, the RNBWS expedition had as its primary aim the task of detailing numbers of seabirds present in August on Diego Garcia, AI, East (EI), Middle (MI) and West Island (WI), establishing exactly what species were breeding, in what numbers, and at what stage of the breeding cycle these birds were.

METHODS

TheSurvey Team members comprised, Captain Chris Peach RN, LA (Metoc) Chris Patrick, WO2 Pete Carr RM, Cpl. Colin Shannon RM, LWWtr. Marie Bennett and Lt. Christine Mayoh RN.

The designated nature reserve on DG, which runs from Minni Minni to Barton Point, was visited twice, on 5 and 12 Aug. WI was visited three times, on 6, 14 and 17 Aug. MI was visited twice, on 7 and 14 Aug. EI was visited once on 8 Aug. All visits to the islets lasted for four hours, from approximately 09-1300 hours. AI was visited once on 14 Aug. This islet, recorded as having breeding Crested Terns *Sterna bergii* in October 1992 (Cochrane, 1992), in August 1997 was very low lying and was washed by waves and spray at high tide, and therefore was unsuitable for breeding seabirds. The remainder of the time was spent surveying waders and other landbirds throughout DG. The following four methods were adopted for surveying the various areas:

Method One - Counts of islets WI, MI and EI.

Two teams, of two and four, working as seprate entities, simultaneously censused the three offshore islets.

The team of four concentrated on breeding seabird numbers. The method adopted to assess the breeding seabirds was a direct count of "apparently occupied nests" (AON), (Bibby *et al*, 1992). The islets were broken down in to four approximately equal strips, and the boundaries of the territories to be counted marked with wooden stakes. The counter then took a methodical route through the designated area, counting each and every AON.

The team of two counted all other birds present on or around the islets that were not obviously taking part in breeding activities.

Method Two - Count of Designated Reserve Area.

The 14km section of DG, which forms the designated nature reserve running from Minni Minni to Barton Point, is a densely vegetated thin strip of habitat. For assessing breeding seabirds, the direct counting of AON on foot was not a feasible option. However, all the boobies breeding in the reserve were no more than 30m in from the lagoon or ocean. This allowed their total breeding area to be calculated by multiplying 30m by the number of kilometres the breeding colonies extended along the coastline. A series of random 100m length x 30m breadth quadrats were then counted, from which a mean was calculated The quadrat mean was then multiplied by the possible number of quadrats in the breeding area to produce an estimate of the total number of breeding birds. The same method was used for calculating White Terns breeding in the reserve.

Brown Noddies were only found breeding in the crowns of coconut trees at Barton Point. Their breeding numbers were calculated by totalling all of the nests located in this area.

Method Three - The census of Diego Garcia. The only seabird found breeding away from the offshore islets and the designated reserve area was the White Tern. The breeding population for this species on the remainder of DG was assessed by AON, where located.

Method Four - Non-breeding seabirds.

Non-breeding seabirds were recorded from two main observation stations, Point Marianne (PM) and Point Eclipse (PE). PM, at high tide held a tern roost, (mainly *Sterna*). This was counted at every opportunity. PE provided a suitable vantage point from which to witness seabirds departing the offshore

islets to fishing grounds, at first light. Other seabird records were collected around the island on an opportunity basis, as other expedition tasks were being tackled.

RESULTS

Table 1. Results of the breeding seabird census (breeding pairs). Three species of seabirds were recorded as breeding. All three were breeding on the islets and the nature reserve; only White Tern was recorded as breeding outside the nature reserve on DG.

	WI	MI	EI	Reserve	DG	Total
Red-footed Booby	472	309	936	14,350	0	16,067
Brown Noddy	450	10	40	4	0	504
White Tern	0	15	40	70	55	180

Red-footed Booby *Sula sula*

General. This was the commonest seabird, recorded as a breeding and non-breeding species. It nested in dense concentrations on all three islands, and for 20km of the 28km coastline of the nature reserve on mainland DG. Within the reserve, the densest concentrations of breeding pairs were located at Barton Point, the furthest point away from human habitation. The breeding density declined within the reserve area as it neared Minni Minni. It does not breed anywhere else on DG.

The Annual Cycle. Birds were found to be in all stages of the breeding cycle. Adults were observed copulating, gathering nesting material, sitting on empty nests, sitting on eggs and guarding downy young. Large feathered young capable of defending their nest territory were recorded; some were a accompanied by a parent.

Table 2. The breakdown of Red-footed Boobies' nests on the three islets were (%):

	WI	MI	EI
Empty	140 (30%)	110 (36%)	386 (41%)
Eggs	199 (42%)	74 (24%)	360 (39%)
Downy young		5 (2%)	13 (1%)
Feathered young	133 (28%)	120 (38%)	177 (19%)

Courtship. The only evidence of courtship was of one pair of birds at Barton Point, copulating on the nest.

Nest Building and Siting. The gathering of nest material was observed on all the islets. Several adult birds were watched walking around on the floor in dense patches of undergrowth, gathering sticks. A bird finding a choice stick would often be mobbed by up to five others - all birds would take hold of a piece of the stick and pull in separate directions. These struggles were very noisy and would last for several minutes. They would only end when one bird managed to break away with the stick through the dense scrub and lose his competitors. Nests were constructed of sticks, usually 20-40cm long and 1-2cm wide, woven together to form a loose lattice type platform up to 65cm wide. Nests were situated from 1-15m off the ground. Specific heights above ground were not measured, however, at Barton Point and all three islets, nests in *Scaveola* were as low as 1m off the ground. On the reserve, as the colony advanced down the coastline towards Minni Minni, the lowest point at which nests were sited became progressively higher. The nests nearest Minni Minni

were no lower than 10m above ground. Individual nests were never sited within pecking range of another nest.

Eggs. A single ellipsoid, light pale blue egg is laid similar to a washed out Grey Heron *Ardea cinerea* egg. No nests were found to contain two eggs. Adults sitting on an egg would not leave the nest, and to examine the contents of a nest the birds had to be coaxed into raising their bodies. The nest territory was guarded ferociously. The defence would commence with braying-type calls and much head bowing. This turned into stabbing and grabbing at the intruder, when within bill range. Roosting birds, and birds sitting on empty nests, would usually leave the nest at the vocalisation stage.

Chicks. Naked and downy young were always guarded at the nest by an adult, whereas large feathered young were left unattended. Some feathered but flightless young had wandered from their nests and were located sitting on the ground or in bushes without nests. These lone birds were very aggressive towards intruders.

Downy young were witnessed bathing in rain showers. The chicks would stand up on the nest and spread out their wings to soak them in the rain and then preen for up to two minutes before repeating the process.

The only evidence of chick mortality was a single small downy chick found dead at the base of a *Scaveola* bush on West Island. The back of its head was badly pecked and it may have been attacked by other boobies after falling from its nest, or straying too close to another nest.

Adult-chick interactions. Much contact was made between adults and downy young. This mainly involved nibbling each other. Adults would conduct a bowing motion from behind the chick and touch it on the crown with its lower mandible, the chick would respond by stretching up and nibbling at the adult's throat from underneath. Adults were witnessed shading small chicks under their wings. After a total of 18 daylight hours in the various colonies during mornings and early afternoons, no chicks were seen to be fed in any location on any visit. This was probably due to adults feeding far from the breeding colonies and not returning until evening or early morning.

Fledglings. Recently fledged birds were grouped together on the islands, perched in the taller trees in creches. They were very inquisitive of intruders onto the islands, leaving the tree-tops and flying down to inspect visitors. Some attempted to land on the heads of people who were stood still, others landed on tripod mounted telescopes. After five minutes or so they returned to their tree-top roosts.

Adults. All adults seen were of the typical white morph (Harrison, 1983)

Table 3. Biometrics of unsexed adults taken off nests from WI, MI, EI and Barton Point, Aug. 1997.

Measurement	Mean	Range Deviation	Standard Deviation	Sample No.
Wing Length (mm)	391	350-418	16	17
Bill length (mm)	117	106-129	7	10
Mass (g)	1,022	815-1,280	40	17

Wing length was measured as maximum chord (Svenson 1992). Bill length is from bill tip to the end of the gape.

Sea watches from the mainland indicate that birds from the islets, primarily adults, depart at first light for the feeding grounds. On 5 Aug between 0712-0737, 663 birds flew west past PE, on 6 Aug between 0705-0720, 718 birds departed west past EP, and on 12 Aug 5,158 passed EP heading west between 0650-0910. All of these were thought to have roosted on the three islets. No similar numbers were observed heading back to the islets.

A single adult was found in a moribund state on the beach beneath a coconut tree on East Island. It had a gash at the base of its wing where it joins the body. It is presumed that this was the result of an attack by frigatebirds *Fregeta* sp. There was no other evidence of adult mortality.

Moult. All 17 birds examined were incubating an egg or were sitting on an empty nest, presumably preparing to lay. Each bird had its primary moult scored and was further examined for evidence of secondary and tail moult. Where applicable, the number of moult centres (foci) in secondaries is recorded. Table 4 gives details of the moult present in the birds examined.

Table 4. Moult of adult Red-footed Boobies, taken from empty or nests with an egg, from WI, MI, EI and the reserve, Aug 1997. (Scoring of primary moult follows Ginn & Melville (1983)).

Sample bird	Moult Score	Remarks
1	0	Secondary moult from two foci
2	39	Only primary moult evident
3	34	Only primary moult
4	0	Secondary moult from one focus
5	0	No evidenceof moult
6	46	Only primary moult evident
7	0	No evidence of moult
8	0	No evidence of moult
9	14	Secondary moult from two foci
10	0	No evidence of moult
11	34	Secondary moult from one focus
12	24	Secondary moult from one focus
13	9	Secondary moult from one focus
14	0	Secondary moult from one focus and tail moult
15	0	Outer three primaries in suspended moult
16	39	No secondary moult
17	34	No secondary moult

All birds in primary moult were replacing a single feather

Brown Noddy *Anous stolidus*

General. As shown in Table 1, Brown Noddies were breeding on all three islands and the reserve area of mainland DG and no nests were located outside these areas. The small number of birds breeding on MI, WI and the reserve only nested in the crowns of coconut trees *Cocos nucifera*, most higher than 10m above the ground. On WI, where the majority of the breeding population were found, the noddies were nesting on the ground, or were in the lowest branches of emerging coconut trees, never more than 3m above the ground.

Brown Noddy Chick - West Island, Chagos.
Photo: L.A. (Metoc) Chris Patrick RN.

The Annual Cycle. Highly synchronised breeding was found throughout the entire study area. All nests located contained either a single egg or a very small chick. The mean mass of the noddy chicks on WI on 6 Aug was 64g (31-98g, s.d. 19, n=22). Assessed against growth plots of Ascension Island chicks, a mean mass of 64g gives an average age of seven days, (Dorward & Ashmole (1963).

Nest Siting. Little evidence of nest-building was found at arboreal or terrestrial nests. A depression created by the sitting bird on the shingle was generally all that surrounded the eggs found. Less than 5% of nests had a scant lining of dead vegetation On WI, nests were sited on stones at least 3m above the high tide mark, or within the undergrowth in the centre of the island. Up to 50 pairs were grouped into areas where the shoreline stones extended back into the scrub. Birds nesting in the undergowth were in less dense groups. Nests above ground on WI were in the flaps of bark of small emerging coconut trees. Up to ten nests could be situated in the same tree. In the remainder of the study area the nests were sited in the fronds of coconut trees.

Eggs and Chicks. Two morphs, as opposed to polymorphism noted by Dorward & Ashmole (1963), are present in roughly equal numbers of chicks. A dark sooty-brown and an ash-grey morph were noted. Brown Noddies generally only lay a single egg, (Higgins *et al,* 1996). One nest was located that contained two chicks, the chicks being small and helpless and were likely to come from eggs laid at the same time.

When disturbed by an intruder very small chicks freeze and rely on their cryptic coloration for defence. Larger chicks, at approximately 14 days old, run for cover into dense scrub when alarmed. The single chicks were roosted and shaded under the breast of adults.

Adults. The ground-nesting adults allowed an approach down to 5m. If disturbed, they would circle overhead before landing on the nearest exposed piece of land. Here they would wait before returning to their nest after the intruder had departed. The low arboreal nesters generally allowed an approach down to 1m; the high nesters sat tight.

Groups of up to seven were watched sitting on the main island tarmac road with either a single or both wings outstretched. No insects were found in the bathing areas, so it is presumed these birds were sunbathing rather than using insects to assist in cleaning plumage.

Table 5. Biometrics of unsexed adult Brown Noddies trapped on WI in August.

Measurement	Mean	Range	SD	Sample no.
Wing length (mm)	281	267-293	7	20
Bill length (mm)	44	42-56	3	7
Mass (g)	178	155-210	16	20

Every adult trapped was in primary moult. Body moult consisted of random feathers on the nape, back and rump being replaced.

Table 6. Primary moult scores of unsexed adult Brown Noddies trapped on WI in August. (Scoring of primary moult follows Ginn & Melville (1983)).

Sample Bird	Moult Score	Remarks	Samples Bird	Moult Score	Remarks
1	15		11	16	Tertial/ body moult
2	4		12	23	
3	5		13	16	
4	7	Body moult	14	21	
5	14	Body moult	15	15	
5	23		16	8	
7	8		17	6	
8	4		18	4	
9	21	Body/tail moult	19	11	
10	14	Body moult	20	11	

White Tern *Gygis alba*

General. Table 1 shows that the White Tern was found to breed all over Diego Garcia and the three survey islets. The birds are solitary nesters and no tree was found to contain more than one nest. Due to their solitary nesting habits and lack of nests, White Terns are extremely difficult to count with accuracy, particularly in areas with tall or densely packed trees. The totals for breeding pairs from the reserve and DG are likely to be under-estimates.

The Annual Cycle. There appeared to be no synchronisation of breeding for this species. Eggs, small helpless chicks and large partially feathered chicks were noted in all areas.

Nest. No nest is built. A single egg is laid, generally in the fork of a bough and branches, though some eggs were found laid simply on flattened stretches of branches.

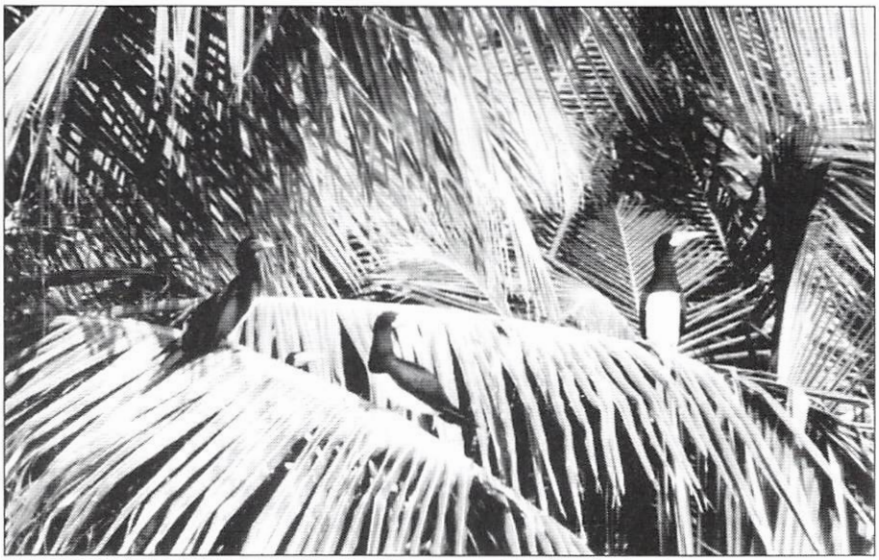
Eggs and Chicks. The chicks rely on their cryptic coloration and ability to remain
perfectly motionless on exposed branches, as their defence mechanism.

Adults. The White Tern is the most widespread seabird on Diego Garcia and can be seen or heard at any time of day or night. A count from Turtle Cove to the accommodation area on 9 Aug produced 160 birds. A sea watch on 16 Aug from Point Eclipse produced over 200, within two hours. The island population was estimated to be in the region of 1,000-1,200 birds.

Non-breeding Seabirds.

White-tailed Tropicbird *Phaethon lepturus*

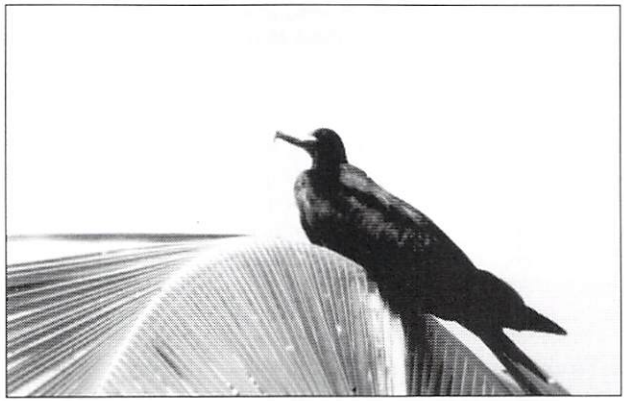
Noted on three occasions in groups of up to five. A group of five circled PM woods, from which one bird repeatedly entered the wood and tried to alight on a tree. This happened at least ten times. The area was checked for evidence of breeding but none was found. Two unidentified tropicbirds were seen flying high over PM on 11 Aug.



A gathering of Brown Boobies on Middle Island, Chagos.
Photo: L.A (Metoc) Chris Patrick RN.

Brown Booby *Sula leucogaster*

Six adults were watched on EI on 8 Aug. One adult flew west past PE on 12 Aug. One adult was present on MI on 14 Aug. Two adults were following a fishing boat on 15 Aug. It is possible that Brown Boobys breed in small numbers on or around DG.



Adult male Great Frigatebird on East Island, Chagos.
Photo: L.A (Metoc) Chris Patrick RN.

Great Frigatebird ***Fregata minor***
35 on MI on 7 Aug, 24 on EI on 8th, and four at Barton Point on 11 Aug. It is likely that this species breeds on or around DG.

Lesser Frigatebird ***Fregata ariel***
Six on WI on 6 Aug. two on MI on 7th, one over the Airfield lagoons, and ten with one sub-adult flying west past PE on 12 Aug.

Black-naped Tern ***Sterna sumatrana***
21 at roost on a sand bar at PM on 4 Aug, 30 on MI on 6th, and 24 on MI on 14th. Two birds behaved as though defending a nest or chick on MI on 6th; a thorough search was undertaken but no evidence of breeding was found.

Bridled Tern ***Sterna anaethetus***
Three flew past PE on 4 Aug, six flying past WI on 6th, four of which settled to roost with noddies on a sand spit. One of these was in juvenile plumage. One flying over EI on 8th, one east and one west past PE on 12th, one east and one west past PE on 13th, two west past PE on 16th, and two on WI on 17Aug.

Sooty Tern ***Sterna fuscata***
One on WI on 6th Aug. One flew west past PE on 12th, one east past PE on 16th. Two on WI on 17th.

Common Tern ***Sterna hirundo***
Two on MI on 7 Aug, four on MI on 14th., and two at PM on 14th. All were in summer plumage.

Arctic Tern ***Sterna paradisaea***
One adult at PM on 5 and 9 Aug, four adults at PM on 11th amongst a tern roost. Six birds on M I on 14th, and three adults at PM on 14 Aug. All recorded were in full summer plumage.

Roseate Tern ***Stema dougallii***
Two amongst Crested Terns at PM on 6th and again on 9th. Another four at

PM amongst a mixed tern roost on 14th, six on MI on 7th, and two more on 14th. All were in full summer plumage.

Crested Tern *Thalassseus bergii*
The commonest non-breeding tern during this period: 33 at PM on 4th, 42 on MI on 7th, 24 on EI on 8th, and 23 roosting on the sand bar at Barton Point on 11 Aug. At PM; juveniles were seen food begging from adults on several occasions. It seems likely that this species finished breeding in July. Several birds were watched at dusk washing in freshwater in the airfield lagoons. The airfield runway was used as an alternative roost when PM was disturbed.

Lesser Noddy *Anous tenuirostris*
One at PM throughout the survey period. One on the sea crossing from MI on 7th, four flying around EI on 8th, and three at PM on 11th. The largest flock was six foraging in Donkey Cove on 14th. 11 individuals were seen from a boat-trip on 15 Aug. This species appears to prefer the sheltered coves within the lagoon.

DISCUSSION

Red-footed Booby.

The breeding cycle of Red-footed Boobies has been adapted throughout its pan-tropical range to cater for either a seasonal abundance of food, or prolonged periods of impoverished feeding, and all variances in between. The cycle can last from eight months in seasonally abundant food supply areas such as Christmas Island, through to 16 months in the impoverished seas of the Galapagos (Nelson, 1978). In impoverished oceanic areas, the birds are thought to breed at any time throughout the year, with small surges in breeding activity reflecting local improvements in conditions. (Nelson, 1978).

S. sula has been recorded in the Chagos Archipelago in every month that ornithologists have visited it, and have been noted as breeding, or likely to have been breeding: in March (Carr, 1996), May (Hutson 1975), July (Bourne 1971, Symens, 1996), August (Carr, 1998) and September (Bourne 1886). This leads to the conclusion that the continuous breeding strategy appears to have been adopted by the Chagos Archipelago populations.

The Chagos Archipelago lies in an impoverished feeding area. This means it is likely that Red-footed Boobies nesting in the Chagos travel long distances daily to reach feeding grounds This could account for the massive movements away from the islands at dawn witnessed by Carr (1996, 1998).

Wing-length to body-weight comparisons highlights S. *sula* as having the longest winglength to the lowest body-weight of all *Sulids*, the subspecies *rubripes* which is present in the Chagos being on average the longest winged of all (Nelson, 1978). This adaptive strategy allows them to nest in large numbers in the Chagos, due to its ability to move long distances to feed.

Nelson (1978) suggests that most *Sulids* suspend moult during the early stages of breeding and that they often undergo primary moult from more than one focus. The Chagos populations of S. *sula* do not appear to follow this trait. All adults examined for moult were either on an egg, or sitting on empty nests apparently due to lay. Of the 17 birds examined, nine were in active primary moult from a single focus. The reason why a population that seemingly is required to travel long distances daily to acquire food for nestlings, moults and breeds simultaneously is unclear. However it is possible that due to the length

of time it takes S. *sula* to complete a full moult, it must moult continuously. The strategy of moulting from a single focus, that the Chagos birds appear to have adopted while feeding nestlings, could be to counter energy loss that flying long distances daily with two or three moult centres would incur.

The colony densities and preferential nesting areas cited by Nelson (1978) hold true for the Chagos birds. All nests were in trees or bushes, and never densely packed. On the small islets, lack of space will prevent the colonies expanding much further. On mainland DG, the colony extends along the coastlines away from Barton Point, some 12km, only petering out when it nears areas where man still has influence The numbers recorded breeding from the four study areas indicate that the Red-footed Booby populations in the Chagos are now the strongholds for this species in the Indian Ocean. If, as seems probable, breeding densities on the uninhabited islands throughout the rest of the Archipelago are found to be similar to the reserve on DG, then the Chagos may now hold the largest concentration of breeding Red-footed Boobies in the world.

The size of the Red-footed Booby population found within the study areas suggests that the Chagos populations are of vital international importance This is particularly important in conservation terms because of the demise (and probable loss for ever) of so many other former large colonies and breeding areas throughout its range, (Bourne (1971), Feare, (1984), Nelson, (1918), Wells, (1991), Burgher *et al*, de Korte *et al*, Diamond, Reville *et al*, (1994)).

Brown Noddy. *A. stolidus*

Like most other pelagic species, this times its breeding period with abundances of food. Although it is unclear what is triggering the breeding timings in the Chagos birds, the breeding throughout the study area was highly synchronised The WI data suggests that laying commences about mid-July and the last chicks would have fledged by mid-October, at the latest.

Studies on moult of *A. stolidus* carried out on Christmas Island bv Dunlop (1987), showed that adults of that population moult the inner three primaries before breeding or when incubating. They then suspend moult, resuming it in the later stages of chick rearing. From the limited number (20) of Chagos birds examined for moult, it appears they do not suspend the moult like the Christmas Island population. They adopt a strategy similar to the Bridled Terns of the Seychelles, where the primary moult coincides with time of hatching (Diamond, 1976). However, in the Chagos population it looks as though primary moult is synchronised with the laying of eggs rather than the hatching of chicks. This is potentially an interesting observation of moult, and could be linked to a subannual breeding cycle similar to the Seychelles Bridled Terns. Bourne (1971) gives records of this species breeding in the Chagos in several months, and it remains unclear as to whether *A. stolidus* is a subannual, seasonal or continuous breeder in the Chagos.

The Current Effect of Man and Alien Predators.

The historic effects of man on seabird colonies in the Chagos are well documented by Bourne (1971). The present effect of man on WI, MI and EI can be regarded as relatively small. The islands are kept strictly out of bounds, and can only be visited with permission from the British Military Representative on DG. Therefore they are being left undisturbed to regenerate. The same policy has been adopted for the reserve area on DG.

WI, MI and EI have seemingly remained rat and cat free, and we did saw neither species on the islets. However, two sets of wings of a storm-petrel type species were found on WI. If the islets are rat and cat free, it raises an interesting question as to why *A. stolidus* is only found as a ground nesting species on WI, when suitable breeding habitat is found on all three islands. One theory suggested by John Topp, of Friends of Chagos (*pers. comm*), who knows the area extremely well, is predation by Coconut Crabs *Birgus latro*. This seems likely; Amersom (*in* Atkinson 1985) and Clapp & Sibley (1911) have recorded *B. latro* eating the eggs and young of birds. The larger and more vegetated MI and EI are thought to support greater densities of larger *B. latro*, which prey on seasonally abundant noddy chicks. But it could be that rats have made their way onto MI and El, and have so far remained undetected.

The historical effects of alien predators in the reserve area are much more apparent, and have been recorded by Bourne (1971). The present day effects of alien predators on mainland DG are subtle and difficult to prove. The rats and cats of the reserve area probably now prevent re-colonisation of former breeding species, and expansion of current breeding species, rather than causing the decline of species that breed on the mainland today.

Rats were seen at least every kilometre when driving up the track that runs from Minni Minni to Barton Point. A single cat was seen at Minni Minni and there is no reason to believe they are not established in the reserve area. *A. stolidus* only breeds solitarily in the crowns of coconut tree, and this adaptation is probably a direct result of predation. The more robust S. *sula* appear to be able to cope with the rats and cats and there is no difference between nest site selection between Barton Point and the islets. Nest site selection alters dramatically as the colony extends away from Barton Point towards Minni Minni and human habitation. The closer the colony gets to man the higher the nests are sited in trees. No one theory at present explains this clinal disribution - a greater density of cats, forcing the birds in to the treetops is possibly the best put forward, so far.

The donkeys that are occasionally found in the dense *Scaveola* of the reserve probably only enter the area to give birth. One heavily pregnant female was noted some 4km inside the reserve on 14 Aug, but it is unlikely that they have any effect on the breeding birds.

Recommendations arising from the RNBWS Survey Work.

a. Further Ornithological Surveys. The RNBWS results have revealed that the area holds internationally important numbers of breeding seabirds. In a world where many seabird islands are being, or have been destroyed, often without a complete knowledge of what was breeding there, it is imperative that the Chagos islands are researched and recorded as soon as possible. This type of expeditionary survey work is ideally suited to an organisation such as RNBWS. It is recommended that RNBWS plan to survey an area of the Chagos, as agreed with Friends of Chagos, every two years.

b. Rodent Survey of MI and EI. The spread of alien predators throughout island systems, particularly where rat free islands are extremely close to rat infested areas, has huge conservation implications. It is recommended that priority should be given to confirm that MI and EI has remained rat free. This could be a task given to NP1002, with very strict guidelines on how best to conduct the survey.

c. Continued isolation of WI, MI, EI and the Reserve Area. The isolation of these areas is a positive step in restoring the islands to a habitat suitable for breeding seabirds. It is recommended that the policy of not allowing free access into these areas should remain.

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OBSERVATIONS OF SEABIRDS

by Dr W.R.P.Bourne

Sadly, the number of contributions has continued to fall this year, to about half the number expected in the past, probably more a reflection of a decline in the number of observers at sea than any loss of enthusiasm. Fortunately, much is done to retrieve the situation by two magnificent series of observations over ten-minute periods with adequate confirmatory notes. (It must be stressed that while it may be useful to have the more copious observations tabulated, it is still essential to have adequate descriptions of the more unusual or questionable items).

In the first series of records, from research voyages by Neil Cheshire around Australia, he continues to demonstrate how long-overlooked northern winter visitors such as Streaked Shearwaters *Calonectris leucomelas*, Bulwer's Petrels *Bulweria bulwerii* and Matsudaira's Storm-petrels *Oceanodroma matsudairae* occur all across the area to the north, and Tasman species such as eastern Great-winged and Gould's Petrels *Pterodroma macroptera gouldi* and *P. leucoptera* all across the area to the south. He also found a concentration of over 2,000 Brown Noddies *Anous stolidus*, 500 Sooty, 150 Black-naped and 50 Crested Terns *Sterna fuscata*, *S. sumatrana* and *S. bergii* and a frigate *Fregata* sp. feeding along the boundary between the turbid Sepik River plume and blue oceanic water off north Papua New Guinea on 31 July, and we need more careful observations from such sites.

The second case involves a voyage by Bill Curtis and R.S. Jay to join exercises over the outer edge of the Gulf Stream and shelf-break off the Carolinas, where they saw up to 70 "endangered" Capped Petrels *Pterodroma hasitata*, 25 Audubon's Shearwaters *Puffinus lherminierii*, 120 Sooty Terns and occasional Masked Boobies *Sula dactylatra* from the Caribbean, and 300 Cory's Shearwaters *Calonectris diomedea* and five Madeiran Storm-petrels *Oceanodroma castro* from the east. Anyone interested in seabird vagrancy may also care to study reports by Ned Brinkley *et al.* (1997) on "The Storms of '96", when a series of hurricanes brought a miraculous draught of these seabirds to the eastern USA, including scores of Capped Petrels, of which some forty reached the Great Lakes, at least four Herald and the first Fea's Petrels *Pterodroma arminjoniana* and *P. feae*, and a wide variety of other species including several Madeiran and two White-faced *Pelagodroma marina* Storm-petrels.

We have also received a number of observations from the Hydrographic Department, especially Naval Party 1016 during offshore surveys from East Anglia to the Gulf of St. Malo, also "Natural Penomenon Sheets" from HMS *Scott's* maiden voyage covering the period 14 Jun-19 Dec'97, which included seabird and many valuable cetacean sightings in the SW approaches and W. Atlantic areas; also a number of reports from the eastern Mediterranean area, updating Gabriel Banica's five years of observations in Romania, as summarised elsewhere (see page 72), from Henry Turner in Bulgaria and Judith Pentreath at Eilat, and Steven Lister at Sharm el Sheikh at opposite ends of the Gulf of Aqaba. Judith Pentreath also sailed from Greece up the Adriatic in the spring, and around western Greece again in the autumn, and from the Azores to Portugal in the spring of 1998.

Among other developments, I should particularly like to congratulate Peter Smith on the international news that he is now providing in the RNBWS *Bulletins*; nobody interested in seabirds can afford to miss them.

OBSERVERS (number of sheets in brackets)

Mrs Jean Abbott. MV *Hornbreeze*, Guadeloupe-Costa Rica-UK, May'97 (1).
Captain Gabriel Banica. Observations from the Romanian coast, '95-'97 (8)
Captain N.G.Cheshire.RVM *Franklin*,Fremantle-Shark Bay,Jan'96; Fremantle-Dampier-Darwin Nov'96; Cairns-Lord Howe I.-Sydney Jan'97; Townsville-Gulf of Papua-N. coast Papua New Guinea-Madang-Townsville Jul-Aug'97; Hobart-W. Tasmania-Adelaide Jan'98. (35, sea temp charts).
First Off. (C) W.F.Curtis and Chief Off. R.S.Jay. RFA *Brambleleaf*, Plymouth-Puerto Rico-Miami-Norfolk (Virginia)-Glen Mallen (Scotland), Jul-Sep'97 (100).
Captain P.W.Jackson MN. MV *Seki Cedar*, North Sea-W. Med., Mar-May'97 (4).
Messrs. Stephen Hales, Derek Hallett and Chris Sadd. Return trip Plymouth-Santander, 20-22 Aug'97 (5).
Hydrographic Department Surveys around Britain, especially Naval Party 1016 off SE England, Mar-Sep'97 (15), and HMS *Scott* 'Natural Phenomenon Sheets" (7)
Captain T. Johannssen & Ch. Off. Bloedorn. MV *Marine Ranger*, River Plate-Amsterdam, Jul'97 (4).
Mr S.M. Lister, MV *Poolster*, Sharm el Sheikh, Red Sea Jul'96 (2)
Lt L. Ohmann and Lt. Cdr. M. Waldmann, FGS *Freiberg*, Wilhelmshavn-Lisbon - Roosevelt Roads (Puerto Rico)-Santo Domingo-Nassau-Norfolk Va-Boston and return, Apr-Jun'97 (3)
Mrs Judith Pentreath. Eilat, March'97 (1); Yacht *Salvation Jane* from Prèvaza, Greece around the Adriatic, May'97 (6) and Prèvaza to Cephalonia, Sep'97 (2); Yacht *Fiskery*, around Azores and to Oporto, Apr-May'98 (3).
Captain D.M. Simpson MN. Notes from the Gulf of Papua, '97 .
Mr Henry Turner. Notes from Black Sea coast of Bulgaria, 15-16 May'97 (1).
CPO(Comms) G.H.Walton. RFA *Fort Victoria*, Plymouth-Clyde, Jan- Apr'97 (12).

OBSERVATIONS

Observers' initials are shown in ( ). Distances are given in nautical miles (nm); depths in metres (m) and water temperatures in°C are given, where available, in [ ]. All dates are 1997, unless indicated otherwise.

ALBATROSSES *Diomedeidae*

Royal Albatross *Diomedea epomophora*. One northern and four southern birds with eight of the next species at 44.1°S 144.8°E, [2,552m, 13.9°C], 60nm off Tasmania, on 18 Jan'98 (NGC).

Wandering Albatross *Diomedea exulans*. Up to ten seen ten times between 37.5-45°S and 136-147°E, [over 2,000m, 13.8-17.1°C], over 60nm from land south of Australia between 17-27 Jan'98 (NGC).

Black-browed Albatross *Diomedea melanophris*. Up to 16 with regular individuals of the eastern race *impavida*, [over 2000m, 13.6-17.6°C], 12 times between 36-45°S 136-147°E during 17-26 Jan'98; the total rose to 51 on moving inshore to 50m off Cape Nelson, Victoria on 22 Jan (NGC). One or two off S. Brazil four times between 22-35°S 40.5-57.4° W, 3-19 Jun (TJ & B).

Shy Albatross *Diomedea cauta*. Up to four, some immature, [114-5,470m, 13.8-17.6°C] nine times between 36-45°S 136-147°E during 17-27 Jan'98; the total rose to 255 including birds in moult off Cape Nelson on 22 Jan, with an adult of the eastern form *salvini* at 38.1° S 136.2°E on 27 Jan (NGC).

Wandering Albatross *Diomedea exulans*.
Adult at 34.9°S 133.7°E, eastern Great Australian Bight. 27 June 1994
Photo: Captain N.G. Cheshire MN

Yellow-nosed Albatross *Diomedea chlororhynchos*. Up to three, [1,315-5,280m, 14.7-17.6°C], eight times between 36.4-43.2°S 136.2-142.6°E during 19-27 Jan'98, rising to 8 adults and 15 immatures off Cape Nelson on 22 Jan (NGC).

FULMARS *Fulmarinae*

Northern Giant Petrel *Macronectes halli*. Three adults at 38.5°S 141.0°E, [32m, 17.6°C] 28nm WSW Cape Nelson, Victoria, 22 Jan'98 (NGC).

Northern Fulmar *Fulmarus glacialis*. Up to 100 seen nine times between 48.5°-58°N 06°E-12.2°W around Britain in Jan-Mar (GHW); returning across the N. Atlantic first four at 42.4°N 64.8°W, [8.9°C], 14 Jun, five at 43.1°N 48.4°W 16 Jun, one at 49.6°N 13.8°W 21 Jun and two at 49.7°N 8.4°W on 23 Jun (LO & MW); and at 44.7°N 33.3°W, [19°C] 9 Sep, and then 48.3°N 22.6°W, [17°C], 11 Sep, rising to 19 off Anglesey on 13 Sep (WFC & RSJ). It should be noted that these birds have a considerable capacity for diving which may or may not be related to their capture of deep sea squid, though they may alternatively catch them at the sea surface at night (Bourne 1997a); I should have mentioned that one bird that I saw from a North Sea oil platform dive nimbly down out of sight for a long period to retrieve a lost fish might possibly have followed it down to the sea floor at a depth of 150m; it would be interesting to learn more about this type of feeding behaviour.

Fairy Prion *Pachyptila turtur*. The first 45 seen at 44.8°S 146.6°E, 67nm south of Tasmania, [2,880m, 13.8°C] 17 Jan'98, then up to five four times 40.8-44.1°S 140.9-144.8°E, [2,552-4,860m, 13.6-15.1°C], during period 18-21 Jan'98 (NGC).

Tahiti Petrel *Pterodroma rostrata*. Two, 03.6°S 144.0°E, 8nm NE Richtofen Point, north Papua New Guinea, [400m, 27.7°C] on 10 Aug; six in wing moult, 03.3°S 143.0°E, 4nm north PNG coast, [620m, 27.7°C] on 12 Aug; one at 06.5°S 152.9°E, 83nm SE Cape Orford, New Britain, [4,580m, 27.7°C] on 15 Oct, 23.9°S 153.4°E, 42nm ENE Lady Eliot Is, Coral Sea, [1,126m, 23.2°C] on 11 Oct, and 19.6°S 152.9°E, 40 nm SE Marion Reef, [120m, 24.1°C] next day (NGC).

Great-winged Petrel *Pterodroma macroptera*. Two at 31.2°S 159.3°E, 19nm NE Lord Howe I., [2,050m, 21.0°C] on 21 Jan'97; up to 11 seen six times, [260-5,470m, 16.5-17.7°C] between 36.5-39.6°S 135.4-141°E during 22-28 Jan'98, which had grey faces from forehead to throat like the eastern race *gouldi*, were all in heavy wing-moult, as might be expected in this winter-nesting species, though it has seldom previously been recorded (NGC).

Atlantic Petrel *Pterodroma incerta*. Stan Howe wonders if early and usually uncertain RNBWS reports of "Schlegel's Petrel" from the eastern Indian Ocean (*Sea Swallows* 11: 6, 13: 15, and 31: 14) were really this species, and what else they might have been? These occurred before much was known about its distribution, and the most likely alternative seems to be the dark Indian Ocean form of Soft-plumaged Petrel *P. mollis*, which had received little attention then. Similar considerations apply to reports from the eastern Pacific (*Sea Swallows* 1: 11, 14: 49) except that it is quite impossible now to guess what they were!

White-headed Petrel *Pterodroma lessonii*. Up to six four times, south of Australia between 36.5-39.6°S 135.4-138.9°E, [2,118-5,760m, 16.5-17.7°C] during 24-28 Jan'98 (NGC).

Kermadec Petrel *Pterodroma neglecta*. A pale bird at 27.7°S 160.2°E, 235nm north Lord Howe I, [2,420m, 22.9°C] on 20 Jan, and a dark one next day at 31.2°S 159.3°E, 19nm NE Lord Howe I., [2,050m, 21.0°C] (NGC).

Providence Petrel *Pterodroma solandri*. Four with the last record (NGC).

Black-winged Petrel *Pterodroma nigripennis*. Three with the preceding species (NGC).

Bermuda Petrel *Pterodroma cahow*. A valuable account of this rarity (discussed in *Sea Swallow* 46: 71-75) is provided by Wingate *et al.* (1998); numbers have now been seen feeding around 37°N 63-66°W, 260nm NW of Bermuda, and one photographed off Cape Hatteras on 26 May'96. The growing information and myths about the closely-related Fea's Petrel *P. feae*, now also regularly recorded off the eastern USA, are summarised by Tove(1997).

Black-browed Albatross *Diomedea melanophrys*.
Immature at 52°S 152.3°E, Southern Ocean, November 1996
Photo: Captain N.G. Cheshire MN

Capped Petrel ***Pterodroma hasitata***. See previous comments about an influx to the eastern USA during storms in 1996 (Brinkley *et al* 1997); also seen 17 times between 31.9-35.3°N and 74.7-77.9°W off the Carolinas, [25-29°C] 5-30 Aug'97, maximum 70 at 33.8°N 76.3°W, [29°C], on the 21st (WFC & RFJ).
White-necked Petrel ***Pterodroma (externa) cervicalis***. Three at 27.7°S 160.2°E, 235nm north Lord Howe Island, [2,420m, 22.9°C], 20 Jan (NGC).
Gould's Petrel ***Pterodroma leucoptera***. Six with the preceding species; one at 40.8°S 141.5°E, 117nm WSW King Island, [4,860m, 14.7°C] 21 Jan '98, three at 38.5°S 140.0°E, 40nm SE Point MacDonnell on 23 Jan, two at 39.6°S 138.9°E, 122nm SW Point Macdonnell, 24 Jan, one at 38.1°S 136.2°E, 122nm SSW Kangaroo Island on 27 Jan, [all over 3,410m, 16.1-17.3°C] (NGC), seem most likely to be immature birds.
Bulwer's Petrel ***Bulweria bulwerii***. Four at 41.0°N 25.0°W, 150nm NNE Azores, then eight 40.0°N 27.2°W, [22°C] on 13 Jul, two 41.8°N 40.9°W, [23.5°C,] 8 Sep (WFC & RSJ). One 20.9°S 114.2°E, 51nm north North-west Cape, W. Australia, [587m, 25.9°C] 14 Jan'96, another 16.6°S 147.5°E, 12nm NW Flora Reef, Queensland, [1,246m 25.0°C] 2 Nov'97. While R.A.Hume has reported that it proved impossible to find birds moulting their tail-feathers in the manner postulated for the *Chalice* petrel off West Africa in August (Bourne 1997b, *Sea Swallow* 46: 77-78), one would not expect to find immature birds in moult there then.

SHEARWATERS *Procellariinae*
White-chinned Petrel ***Procellaria aequinoctialis***. Up to four seven times at 38.1-44.8°S 136.2-146.6°E, [over 2,552m, 13.6-17.1°C] off S. Australia 17-27 Jan'98, with 20 at 43.2°S 142.6°E, 127nm WSW Cape Sorell, Tasmania on 19 Jan (NGC).
Cory's Shearwater ***Calonectris diomedea***. Up to 23 seen on 20 occasions in the Ionian Sea and throughout the Adriatic in May, June and Sep [15-26°C] (JP). 22 at 36.4°N 07.4°W, 65nm west Straits of Gibraltar on 23 Mar, six 39.4°N 09.7°W, off the Berlengas, 17 Apr, one there 6 May, one 37.6°N 09.5°W off Cape St. Vincent, 16 May (PWJ), nine at 41.3°N 38.2°W off the Azores 19 May (JA), where JP saw *c.* 300 at 38.5°N 29.0°W on 27 Apr and 38.7°N 22.8°W on 12 May [16°C], also three at 39.6°N 19.6°W on 13 May and two at 40.8°N 13.9°W on 14 May'98; ten at 35.1°N 26.1°W on 20 Apr (LO & MW). Six at 20.9°N 21.8°W moving north off W. Africa 4 Jul, three 25.8°N 19.7°W 0800-1200 next day, eleven 30.5°N 17.3°W 6 Jul, one 35.3°N 14.8°W next day (TJ & B). Crossing the Atlantic, WFC and RSJ saw 36 over the shelf-break in the Bay of Biscay at 47.6°N 10.4°W, [16°C] on 11 Jul, five at 44.7°N and 23 43.6°N 19.7°W, [19°C], next day, six at 41.0°N 25.0°W, 150nm NNE Azores, and 129 40.0°N 27.2°W, [22°C] on 13 Jul, five at 38.4°N 30.5°W and 109 at 37.3°N 32.5°W, [23°C] on 14 Jul, and variable numbers 33 times between 31.9-36.1°N and 71.7-77.9°W, [25-30°C], during 5 Aug-3 Sep, most over 300 in a raft at 33.8°N 76.8°W, [28°C] on 27 Aug. Returning, six at 41.8°N 40.9°W and 18 at 42.2°N 40.0°W, [23°C] on 8 Sep, 49 at 43.4°N 46.6°W and 65 at 44.7°N 33.3°W, [19°C], next day, 59 at 47.0°N 26.7°W and 32 at 45.9°N 29.9°W, [17°C] on 10 Sep, and small numbers until the last at 50.7°N 11.5°W approaching the shelf-break off the English Channel, [16°C] on 12 Sep. SH, DH & CS saw 335 in the last 60nm approaching Santander in the Bay of Biscay on 21 Sep, and then 161 in the first 80nm on leaving again,and one 25nm off Plymouth next day.

Streaked Shearwater ***Calonectris leucomelas***. At least 30 at 12.2°S 124.9°E, 110nm east of Ashmore Reef, NW Australia, [110m, 31.2°C] on 20 Nov'96, and at least 160 at 13.1°S 127.0°E, 36nm north of Cape Londonderry, next day (NGC); DMS saw a flock of 150 in the Gulf of Papua, 7 May'97; 115 at 08.5°S 144.6°E in the Coral Sea, 55nm east Fly River Delta, [88m, 25.5°C] 25 Jul'97, three 09.8°S 150.3°E 20nm ESE C. Vogel, east PNG, [1180m, 25.9°C], 28th (NGC).

Wedge-tailed Shearwater ***Puffinus pacificus***. NGC saw five 24.7°S 113.0°E, 18nm WSW Juneau Bay, W. Australia, [64m, 22.9°C], 1 Nov'96, five 30.5°S 114.7°E, 10nm west Shark Bay, [63m, 23.0°C] on 13 Nov, three 20.9°S 114.2°E, 51nm north North-west Cape, [587m, 25.9°C], next day; ten 15.4°S 149.1°E, 88nm NW Willis Islets, Queensland, [1,102m, 28.5°C], 10 Jan'97, and four 15.8°S 150.0°E next day, two 23.9°S 155.2°E, 113nm ENE Sandy Cape, [3,900m, 24.9°C] on 18 Jan, 20 27.7°S 160.2°E, 235nm north Lord Howe I., [2,20m, 22.9°C] on 20 Jan, at least 64 31.2°S 159.3°E, 19nm NE Lord Howe I., [2,050m, 21.0°C], next day, 288 08.5°S 144.6°E, 55nm east Fly River Delta, Coral Sea, [88m, 25.5°C], 25 Jul, 20 dark and one pale phase, 10.9°S 148.0°E, 45nm SSW Cape Rodney, Coral Sea, [2,280m, 25.4°C] on 27 Jul, seven during a transect out to sea from 03.3°S 143.0°E, 4nm north PNG, [620m, 27.7°C, to 2,550m] on 12 Aug, ten 23.9°S 153.4°E, 42nm ENE. Lady Eliot Isles, Queensland, [1,126m, 23.2°C], 11 Oct, two 19.6°S 152.9°E 40nm SE Marion Reef, [120m, 24.1°C] on 12 Oct, two 15.0°S 152.5°E 128nm NE Lihou Reef, [4,465m, 26.1°C] on 13 Oct, and ten 00.8°N 143.0°E, 240nm NE Vanimo, north PNG, [3,190m, 28.9°C], on 14 Oct,

Great Shearwater ***Puffinus gravis***. J & B saw two at 26.0°S 44.5°W off Brazil on 4 Jun, LO & MW 12 at 37.4°N 34.9°W [19.0°C] on 6 Jun, five at 39.2°N 71.7°W [12.7°C] next day, and one at 40.4°N 69.0°W [10.3°C] on 8 Jun and 44.9°N 43.5°W [12.3°C] on 22 Jun; and WFC & RSJ saw 63 at 37.8°N 31.4°W and 20 37.3°N 32.5°W near the Azores, [23°C] on 14 Jul, up to 24 four times 34.2-36.1°N 74.6-76.2°W, 25-27°C, 6-27 Aug, eight 44.7°N 33.3°W, [19°C], 9 Sep, 52 45.9°N 29.9°W and at least 124 47.0°N 26.7°W, [17°C], next day, 56 49.3°N 18.8°W [17°C] on 11 Sep, and 35 at 50.2°N 14.9°W and 11 50.7°N 11.5°W, [16°C], 12 Sep on the way home. SH, DH & CS saw five in the last 60nm approaching Santander on 21 Sep. HMS *Scott* reported four flying NE at 47.6°N 21.8°W on 27 Sep and a flock of 30 at 45.9°N 29.8°W on 28th. Fifteen more were moving SW and 'on water, moulting (white patches)" and another 20 'circling whales" at 41.6°N 41.2°W on 30th.

Flesh-footed Shearwater ***Puffinus carneipes***. 11 at 24.7°S 113.0°E, [43m, 21.7°C] 18nm WSW Juneau Bay, W. Australia, 1 Nov'96, 13, [2,050m, 21.0°C], 31.2°S 159.3°E 19nm NE Lord Howe I. on 21 Jan'97, and one, [2,118m, 17.6°C], 37.5°S 138.4°E, 68nm WSW Kobe, Victora, on 25 Jan '98 (NGC).

Sooty Shearwater ***Puffinus griseus***. WFC & RSJ saw three in mid N. Atlantic at 44.0°N 36.5°W, [19°C], 9 Sep, and two in the Western Approaches at 50.7°N 11.5°W, [16°C], 12 Sep. NGC saw one 39.6°S 138.9°E, [5,190m, 16.5°C] south of Australia on 24 Jan '98 and 37.5°S 138.4°E, [2118m, 17.6°C] next day.

Short-tailed Shearwater ***Puffinus tenuirostris***. Up to 200 daily between 36.4-44.8°S, 135.4-146.6°E, [114-5,190m, 13.6-17.7°C] during 17-28 Jan'98 (NGC).

Manx Shearwater *Puffinus puffinus*. Five 51.8°N 06.1°W off Cornwall on 26 Mar (PWJ), four 08.1°N 27.6°W in the tropical Atlantic on 19 May (TJ & B). HMS *Scott* reported two at 46.3°N 08.9°W on 28 Jul. First seen returning across the Atlantic at 43.4°N 46.6°W, [19°C] on 9 Sep, the numbers increasing to 89 off the South Stack, Anglesey, on the 13th (WFC & RSJ.
Balearic Shearwater *Puffinus mauretanicus*. 20 around fishing vessels at 41.1°N 01.8°W off Tarragona, NE Spain, on 10 Apr (PWJ).
Levantine Shearwater *Puffinus yelkouan*. JP saw up to 11 on five occasions around the Adriatic [15-21°C] in May-June.
Hutton's Shearwater *Puffinus huttoni*. One, 24.7°S 113.0°E, 18nm WSW Juneau Bay, W. Australia, 43m, [21.7°C] on 1 Nov'96 (NGC).
Little Shearwater *Puffinus assimilis*. JP saw 40-50 at 38.5°N 29.0°W off the Azores on 5 May.
Audubon's Shearwaters *Puffinus lherminieri*. Seen 21 times between 19.0-35.3°N 66.6-77.9°W, [27.5-30°C], during 28 Jul-30 Aug, with maxima of 12 in the NE Providence Channel, Bahamas, on 31 July, 24 at 34.2°N 75.7°W on 6 Aug, and over 25 at 33.4°N 76.5°W on 21 Aug (WFC & RSJ).

DIVING-PETRELS *Pelecanoidinae*
Diving-petrel *Pelecanoides* sp. Two at 44.8°S 146.6°E, 67nm south of Tasmania, [2,880m, 13.8°C], 17 Jan'98 (NGC).

STORM-PETRELS *Hydrobatidae*
Wilson's Storm-petrel *Oceanites oceanicus*. One at 30.4°S 114.7°E, 18nm WSW Juneau Bay, W. Australia, [117m, 21.4°C], 1 Jan'96, and 24.6°S 113.0°E, 11nm WSW Shark Bay, [59m, 23.1°C], 13 Nov'96 (NGC); three 03.0°N 29.5°W in the tropical Atlantic, 20 May'97 (TJ & B); up to 14 four times 33.2-36.1°N 74.6-76.8°W in NW Atlantic, [25-28°C], 6 and 27 Aug '97, eight at 44.7°N 33.3°W, [19°C], 9 Sep, and one 48.3°N 22.6°W, [17°C], 11 Sep (WFC & RFJ).
White-faced Storm-petrel *Pelagodroma marina*. At least 346 at 30.3°S 114.6°E, 19nm W Juneau Bay, W. Australia, [160m, 21.4°C], 13 Jan'96, three at 24.6°S 113.0°E, 11nm WNW Shark Bay, [59m 23.1°C], one at 31.2°S 159.3°E, 19nm NE Lord Howe I., [2,050m, 21.0°C], 21 Jan'97, up to 13 seven times 36.5-42.6°S 135.4-141.5°S, [114-5,470m], south of Australia, [13.6-17.7°C], 20-28 Jan'98 (NGC).
White-bellied Storm-petrel *Fregetta grallaria*. One pale phase and another "*Fregetta*" storm-petrel, 31.2°S 159.3°E, 19nm NE Lord Howe I., [2,050m, 21.0°C], 21 Jan (NGC), and 2-3 in the Gulf of Papua, 1 Aug (DMS).
Black-bellied Storm-petrel *Fregetta tropica*. Four at 10.7°S 145.3°E, 40nm SSW Eastern Fields Reef, Coral Sea, [1,195m, 25.0°C], 19 Jul, one 10.9°S 148.0°E, 45nm SSW Cape Rodney, PNG, [2,280m, 25.4°C] on 27 Jul, one 44.1°S 144.8°E, 60nm SW South-west Cape, Tasmania, [2,552m, 13.9° on 18 Jan'98 (NGC).
British Storm-petrel *Hydrobates pelagicus*. Five following the ship 10nm off Plymouth, 22 Sep (SH, DH & CS).
Madeiran Storm-petrel *Oceanodroma castro*. One at 32.5°N 36.0°W on 22 Apr [18.2°C] (LO & MW), five at 38.7°N 36.0°W, off the Azores on 12 May'98, three at 40.8°N 13.9°W on the 14th, and one at 41.3°N 8.8°W on the 16th (JP), up to eight seen on five occasions between 31.8-36.1°N 74.6-76.0°W, [25-30°C], off the Carolinas during period 6-25 Aug, ten around

42°N 40°W, [23.5°C] on 8 Sep, 22 at 44.7°N 33.3°W, [19°C], next day, and 12 at 44.7°N 33.3°W, [17°C], on the 10th passing the Azores (WFC & RSJ).
Leach's Storm-petrel *Oceanodroma leucorhoa*. One at 39.2°N 36.0°W [18.2°C] on 7 Jun (LO & MW), three at 44.7°N 33.3°W, [19°C], in mid N. Atlantic, 9 Sep. (WFC & RSJ). An egg and chick were found on Dyer Islet off South Africa in February (Ryan & Whittington 1997) - first proof of breeding in the Southern Hemisphere, although it has also been found visiting the Chatham Islands. A bird with a dark rump as in some Pacific populations and Swinhoe's Storm-petrel O. *monorhis* has now also been found in the Atlantic, complicating their identification there (Bourne & Simmons 1997).
Matsudaira's Storm-petrel *Oceanodroma matsudairae*. Two at 02.8°S 145.1°E, 70nm NE Sepik River, north PNG, [1,705m, 28.4°C] on 6 Aug, described as "Large blackish-brown storm-petrels following in the wake about 50m astern of the ship for about 5 minutes. Paler brown diagonal upper wing bar across greater coverts, also pale whitish patches at bases of primaries on leading edge of wing. Tail forked, but this feature hard to see." (NGC).

TROPICBIRDS *Phaethontidae*
Red-tailed Tropic-bird *Phaethon rubricauda*. Two at 31.2°S 159.3°E, 19nm NE. Lord Howe I., [2,050m, 21.0°C] on 21 Jan (NGC).
Yellow-billed Tropicbird *Phaethon lepturus*. One at 23.9°S 155.2°E, 113nm ENE Sandy Cape, W. Australia, [3,900m, 24.9°C] on 18 Jan; at 08.5°S 144.6°E. 55nm east Fly River Delta, Coral Sea, [88m, 25.5°C] on 25 Jul (NGC); in the Gulf of Papua, where it is often seen singly and occasionally in pairs (DMS), and in the NW Atlantic at 17.8°N 68.7°W [27.5°C] on 27 Apr (LO & MW), at 29.2°N 47.7°W, [27.5°C] on 17 Jul; at 21.5°N 61.7°W, [26°C] on 20 Jul; 15nm north US Virgin Is.,[27.5°C] on 21 Jul; two at 17.6°N 66.2°W, [28°C], 23 Jul; one five times 33.3-36.6°N 53.6-74.4°W [28°C] 2-6 Sep; three at 39.3°N 46.9°W [25.5°C] on 7 Sep (WFC & RAJ).

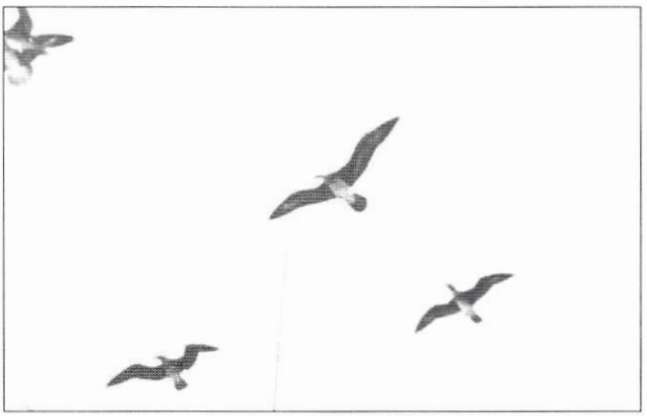
PELICANS *Pelecanidae.*
Dalmatian Pelican *Pelecanus crispus.* One at Levkas, 38.9°N 20.7°E 3 May (JP).

GANNETS and BOOBIES *Sulidae*
Northern Gannet *Morus bassanus*. Eighteen reports of up to 50 around Britain and Ireland (GHW, PWJ, WFC & RSJ, and HMS *Scott*), many old and young birds at 39.4°N 09.7°W off the Berlengas, Portugal, 17 Apr (PWJ), an immature at 40.8°N 13.9°W and two adults and nine immatures at 41.3°N 8.8°W the next day off Portugal, and two immatures at 41.6°N 16.5°E and 42.5°N 16.1°E [16°C] in the Adriatic on 11 and 12 May (JP).
Australasian Gannet *Morus serrator*. One at 44.8°S 146.6°E, 67nm south Tasmania, [2,880m, 13.8°C] on 17 Jan'98; 12, from 38.7°S 141.0°E, 28nm WSW C. Nelson, Victoria, [1,315m, 17.3°C, inshore to 60m], 22 Jan, one at 37.5°S 138.4°E, 68nm WSW. Robe, [2,118m, 17.6°C] on 25 Jan'98 (NGC).
Masked Booby *Sula dactylatra*. Four 31.2°S 159.3°E, 19nm NE Lord Howe I., [2,050m, 21.0°C] on 21 Jan (NGC), 31 catching flying fish, 02.3°S 31.6°W, off Fernando Noronha, 21 May, then sailing south off S. America one 07.5°S 33.6°W 22 May, four 32.5°S 51.2°W 20 May, five 27.9°S 48.1°W 21 May, five 23.7°S 41.7°W 25 May, six 15.2°S 35.1°W 27 May, 12 03.4°S 32.0°W 29 May (TJ & B); and off NE. America, eight at 17.5°N 65.8°W [27.4°C] on 27 Apr (LO & MW); one at 27.7°N 79.4°W, [29°C], 4 Aug, 32.8°N 75.6°W, [27.8°C], 31 Aug, 33.0°N 66.8°W, 5 Sep (WFC & RSJ).

Brown Booby *Sula leucogaster*. Up to five on five occasions around Sharm el Sheikh, in the northern Red Sea 13-17 Jul'96, and one off Eilat 14-18 Mar (JP); 14 at 13.1°S 127.0°E, [85m, 30.0°C], 36nm north C. Londonderry, NW Australia, 21 Nov'96, one at 10.9°S 148.0°E, 45nm SSW C. Rodney, Coral Sea, [2,280m, 25.4°C] on 27 Jul'97, four 15.8°S 150.0°E, 16nm NW. Willis Islets, [698m, 28.3°C] on 11 Nov'97, four from 03.3°S 143.0°E, 4nm off north PNG, [620m, 27.7°C, out to 2,550m] on 12 Aug (NGC); two at 03.4°S 32.0°W near Fernando de Noronha on 29 Jun (TJ & B), four at 18.7°N 65.5°W [26.7°C] 15 May (LO & MW); three 17.4°N 65.4°W 22 Jul, and eight off Vieques Island, Puerto Rico, late Jul (WFC & RSJ).

Red-footed Booby *Sula sula*.
1st year bird at Christmas Island, Indian Ocean, 12 October 1987.
Photo: Captain N.G. Cheshire MN

Red-footed Booby *Sula sula*. Two immatures 15.8°S 150.0°E, 16nm NW. Willis Islets, Coral Sea, [698m, 28.3°C] on 11 Jan (NGC), one 19.4°N 64.8°W [26.3°C] 21 May, and 100 at 18.6°N 65.4°W [26.8°C] next day (LO & MW), and two, at 14.2°N 67.9°W in Windward Is, 4 May (JA).



Red-footed Booby *Sula sula*.
1st year birds at Christmas Island, Indian Ocean, 12 October 1987.
Photo: Captain N.G. Cheshire MN

CORMORANTS and SHAGS *Phalacrocoracidae*
Great Cormorant *Phalacrocorax carbo.* 9-11 at Eilat 14-18 Mar, and three at 38.0°N 21.0°E, off W. Greece, [26.0°C] 23 Sep (JP).
European Shag *Stictocarbo aristotelis.* Up to 50 seen on ten occasions along the Dalmatian coast between 42.7-45.1°N in May-June, and one at 38.5°N 20.8°E off Levkas, Greece on 8 Oct (JP).

FRIGATEBIRDS *Fregatidae*
Magnificent Frigatebird *Fregata magnificens*. A party of five, with white breasts, flying high north at 39.6°N 19.6°W between the Azores and Portugal on 13 May (JP).
Lesser Frigatebird *Fregata ariel.* Two females at 15.4°S 149.1°E, 88nm NW Willis Islets, Coral Sea, [1,102m, 28.5°C] and ten at 09.8°S 150.3°E 20nm ESE C. Vogel, [1,180m, 25.9°C] on 28 Jul; one unidentified frigate 03.8°S 144.6°E 7nm SE Sepik River Mouth, north PNG, [940m] on 31 Jul (NGC).

PHALAROPES *Phalaropopidae*
Red Phalarope *Phalaropus fulicarius*. Seen both sides of the N. Atlantic - 15 at 34.2°N 75.7°W, [25°C] on 6 Aug, nine at 33.8°N 75.9°W, [30°C] on 20 Aug, two 48.3°N 22.6°W, [17 C] on 11 Sep, and one 50.7°N 11.5°W, [16°C], next day (WFC & RSJ).

SKUAS and JAEGERS *Stercorariinae*
Large Skuas *Catharacta* sp. Six reports of one or two Great Skuas C. *skua* 48-51°N 05-13.3°W around Britain (JA, GHW, WFC & RSJ), two at 38.7°N 22.8°W off Portugal on 14 May (JP), one of a possible McCormick's (South Polar) Skua C. *maccormicki* at 33.8°N 75.9°W, [30°C], off the Carolinas, on 20 Aug, and one of a Southern Skua C. *(s.) antarctica* at 36.5°S 135.4°E, 66nm SW Kangaroo I., S. Australia, [4,164m, 17.7°C] on 28 Jan'98 (NGC).
Pomarine Skua *Stercorarius pomarinus*. Birds seen in the west N. Atlantic at 27.7°N 50.5°W on 17 Jul (immature), and at 35.3°N 74.7°W on 6 Aug (WFC & RSJ).
Arctic Skua *Stercorarius parasiticus*. Two (dark and light) off Kaliakra Peninsula, Bulgaria, 15 May (HT), two in the W. Approaches at 51.2°N 07.7°W on 13 Sep (WFC & RSJ), and two supposed immatures twice off Tawilah, 27.6°N 33.7°E. Red Sea, 14 & 17 Jul'96 (SML).
Long-tailed Skua *Stercorarius longicauda*. Up to 15 in the central N. Atlantic between 43.9-50.2°N 14.9-35.2°W seven times between 9-12 Sep, also 16 unidentified small skuas at 44.7°N 33.3°W on the 9th (WFC & RSJ).

GULLS *Larinae*
Audouin's Gull *Larus audouinii*. Two at 40.0°N 01.3°E, 27nm east of the Columbretes, E. Spain, on 18 May (PWJ). One bird among immature Yellow-legged Gulls at 40.9°N 17.6°E [15°C] on10 May; it had a redder bill and eye and may have been this species (JP); now is greatly increasing in the western Mediterranean, it seems likely to disperse much more widely.
Common Gull *Larus canus.* GB comments that the number wintering along the Romanian coast, where it is very numerous, is decreasing.
Lesser Black-backed Gull *Larus fuscus*. Four, 51.8°N 06.1°W off Cornwall on 26 Mar, 22 groups 160 adults low NW 45.2°N 08.4°W, S. Bay of Biscay on 3 Apr (PWJ). GB remarks that the well-known concentrated migration up the

Red Sea past Suez and along the south coast of Cyprus in the first half of April can be seen continuing up the coast of Romania.
Yellow-legged Gull *Larus cachinnans*. JP saw birds on at least 24 occasions around the Ionian and Adriatic Seas, with flocks reaching at least 1,000 in the ports. GB also reports there are thousands in Romania, with about 100 pairs nesting on the roofs of Constanta.
Iceland Gull *Larus glaucoides*. There are doubtful old reports of breeding in the Old World and, following the influx early in 1993, birds nested in Novaya Zemlya again for at least two years (Kalyakin & Bourne 1997).
White-eyed Gull *Larus leucopthalmus*. SML saw about 250 around Tawilah, and lesser numbers elsewhere in the northern Red Sea over 14-17 Jul'96, and JP saw 25 at Eilat on 14-18 Mar.
Sooty Gull *Larus hemprichi*. One or two were usually seen with the preceding species.
Mediterranean Gull *Larus melanocephalus*. GB reports large numbers pass through Romania on migration. An adult and a first summer bird flew east with Little Gulls at 41.5°N 03.4°E, off NE Spain, on 10 Apr, but somewhat higher at about 20m (PWJ). JP saw 22 at 41.6°N 16.5°E on 5 Jun [20°C].
Black-headed Gull *Larus ridibundus*. JP saw up to 50 around the Ionian and Adriatic Seas in May and Sep.
Slender-billed Gull *Larus genei*. GB reports only small numbers are seen in Romania, on spring passage. JP saw about 30 at Eilat over 14-18 Mar.
Little Gull *Larus minutus*. GB reports a few are present in Romania all year, with thousands in Aug-Sep, when it becomes the commonest gull. There were 30 in the last 60nm approaching Santander, NW Spain on 21 Sep (SH, DH & CS). At least 500, only occasionally with dark heads, passed singly low over the water on a bearing of 25° at 41.5°N 03.4°E, 20nm off NE Spain, between 0700-0900 on 10 Apr (PWJ).

TERNS *Sterninae*
Gull-billed Tern *Gelochelidon nilotica*. Single birds at Eilat on 14-18 Mar and 45.3°N 18.3°E near Brindisi on 18 May (JP).
Caspian Tern *Sterna caspia*. Up to five around Tawilah, N. Red Sea 14-17 Jul'96 (SML) and four at Eilat on 14-18 Mar (JP).
Common Tern *Sterna hirundo*. Four on an islet south of Tawilah, N. Red Sea 17 Jul'96 (SML), two at Eilat 14-18 Mar (JP). 30 in Livorno Harbour, Italy, on 12 Apr (PWJ), and two at 51.2°N 07.7°W in W. Approaches, 13 Sep (WFC & RSJ); also *c.*200 resting and nesting on the beach formed by the 1957 eruption at the west end of Faial, and up to 24 elsewhere around the Azores, in Apr'98 (JP).
Arctic Tern *Sterna paradisaea*. 12 possible birds off Tubarao, S. Brazil, 25-30 May (TJ & B), up to 11 Arctic Terns on six occasions between the central Atlantic at 43.9°N 35.2°W and 52.9°N 05.1°W off Anglesey on 9-13 Sep (WFC & RSJ), ten in the last 60nm approaching Santander, N. Spain, on 21 Sep, with 40-50 in the first 80nm returning next day (SH, DH & CS), and unidentified 'comic' terns, possibly also this species, off the Carolinas at 33.8°N 76.3°W on 21 Aug and 33.0°N 66.8 W on 5 Sep (WFC & RSJ).
White-cheeked Tern *Sterna repressa*. 3,000 birds and *c.*1,150 nests on an islet south of Tawilah in the N. Red Sea on 17 Jul'96, and up to 300 elsewhere in the vicinity of Sharm el Sheikh during 14-18 Jul'96 (SML).

Black-naped Tern *Sterna sumatrana*. 150, with other terns, along a front at 03.8°S 144.6°E, 7nm NE. Sepik River, north PNG, [940m], 31 Jul (NGC).

Black-naped Tern *Sterna sumatrana*
at Gove, Northern Territory, Australia, 19 November 1987.
Photo: Captain N.G. Cheshire MN

Aleutian Tern *Sterna aleutica*. The winter range and appearance is discussed by Kennerley & Ollington (1998). They have now been found as far south as the Malacca Strait between Sep-Apr. In winter they resemble the 'comic' terns, but have more white on the forehead and crown with a black band around the nape, a slightly darker back than the Common Tern, and a dark line along the underside of the tips of the secondaries. Juveniles have dark brown backs which are apparently moulted by the time they move south, after which they become similar to the winter adults; there is no comment on any summer '*portlandica*' plumage. They have a distinctive 'chit' call.
Bridled Tern *Sterna anaethetus*.Up to 65 seen in the N. Red Sea in the vicinity of Sharm el Sheikh during 14-18 Jul'96 (SML). Off W. Australia,16 at 30.5°S 114.7°E, 10nm west Shark Bay, [63m, 23.0°C] on 13 Jan'96, and 232 at 24.7°S 113.0°E, 18nm WSW Juneau Bay, [43m, 21.7°C] on 1 Nov'96 (NGC); in the West Indies, WFC & RSJ saw two 15nm north of the US Virgin Is, [27.5°C] on 21 Jul, 58 17.4°N 65.4°W, [28°C], next day, 27 while anchored 2nm off the NW corner of Vieques Island, Puerto Rico, later that month, seven on leaving, 18 at 19.0°N 66.6°W, 29°C, on 28 Jul, and five in NE. Providence Channel in the Bahamas, [30°C] on 31 Jul (WFC & RSJ).
Sooty Tern *Sterna fuscata*. In the N. Atlantic, LO & MW saw 30 at 19.4°N 64.3°W [26.3°C] on 21 May and one at 18.6°N 65.4°W [26.8°C] next day. WFC & RSJ saw ten at 25.5°N 75.3°W and 21 in NE Providence Channel in the Bahamas, [30°C] on 31 Jul, and up to at least 171 between 31.8-33.4°N 75.4-76.9°W, [28-29°C] off the Carolinas, period 19-30 Aug. Around Australia, NGC saw five at 13.1°S 127.0°E, 36nm north Cape Londonderry in the NW, 21 Nov'96, and in the east 50 at 15.4°S 149.1°E, 88nm NW Willis Islets, [1,102m, 28.5°C], on 10 Jan, six at 15.8°S 150.0°E, 16nm NW Willis Islets, [698m, 28.3°C], next day, two 23.9°S 155.2°E, 113nm ENE Sandy Cape, [3,900m, 24.9°C], on the 18th, 77 at 31.2°S 159.3°E, 19nm NE Lord Howe I., [2,050m, 21.0°C], on the 21st, then 73 at 08.5°S 144.6°E, 55nm east of the Fly River Delta in the Coral Sea, [88m, 25.5°C], on 25 Jul, 150 at

10.9°S 148.0°E, 45nm SSW Cape Rodney, [2,280m, 25.4°C], on the 27th, 50 09.8°S 150.3°E, 20nm ESE. Cape Vogel, [1,180m, 25.9°C], next day, at least 500 03.8°S 144.6°E, 7nm NE the Sepik River Mouth on the 31st, 15 from 03.3°S 143.0°E, 4nm north PNG, [620m, 27.7°C, out to 2,550m], on 12 Aug, five 00.8°N 143.0°E, 240nm NE Vanimo, north PNG, [3,190m, 28.9°C] on 14th, two at 15.0°S 152.5°E, 128nm NE Lihou Reef, [4,465m, 26.1°C] on 13 Oct.

Little/Saunders'Tern *Sterna albifrons/saundersi.* SML saw 83 small terns on an islet south of Tawilah in the N. Red Sea on 17 Jul'96 and up to 20 elsewhere in the vicinity of Sharm el Sheikh during 14-18 Jul'96, including at least two *saundersi.*

Least Tern *Sterna antillarum.* Two 6nm north of Vieques Island, Puerto Rico, 28 Jul (WFC & RSJ).

Swift Tern *Sterna bergii.* up to 20 around Sharm el Sheikh, in the N. Red Sea, during 14-18 Jul'96 (SML).

Royal Tern *Sterna maxima*. Five 2nm off NW corner of Vieques Island, Puerto Rico, late Jul, and one 6 nm NW on the 28th (WFC & RSJ).

Lesser Crested Tern *Sterna bengalensis.* 1,000 on an islet south of Tawilah in the N, Red Sea on 17 Jul'96 and up to 70 elsewhere in the vicinity of Sharm el Sheikh during 14-18 Jul'96 (SML).

Sandwich Tern *Sterna sandvicensis*. Seven with the Royal Terns off Puerto Rico, late July (WFC & RSJ); 11 during the first 60nm leaving Santander on 21 Sep (SH, DH & CS), and ten at 38.8°N 20.7°E on 9 Sep, and three at 38.5°N 20.8°E [25°C] on 8 Oct off western Greece (JP).

Brown Noddy *Anous stolidus*. Ten at 15.4°S 149.1°E, 88nm NW Willis Islets, Queensland, [1,102m, 28.5°C], 10 Jan, one at 15.8°S 150.0°E, 16nm NW Willis Islets, [698m, 28.3°C] next day, two at 31.2°S 159.3°E, 19nm NE Lord Howe I., [2,050m, 21.0°C] on 21 Jan, 25 feeding on surface prey 08.5°S 144.6°E, 55nm east of Fly River Delta, Coral Sea, [88m, 25.5°C] on 25 Jul, 120 at 10.9°S 148.0°E, 45nm SSW Cape Rodney, [2,280m, 25.4°C] on 27 Jul, over 2,000 off the Sepik River Mouth 31 Jul, one 03.3°S 143.0°E, 4nm off north PNG coast on 12 Aug (NGC). In the West Indies, a probable bird 26.3°N 53.1°W, 27.5, 18 Jul and one 15nm north US Virgin Islands on the 21st (WFC & RSJ).

Lesser Noddy *Anous tenuirostris*. 30 at 30.5°S 114.7°E, 10nm west of Shark Bay, W. Australia, [63m, 23.0°C], on 13 Jan'96 (NGC).

White Tern *Gygis alba*. One at 31.2°S 159.3°E, 19nm NE Lord Howe I., [2,050m, 21.0°C], 21 Jan, two at 10.7°S 145.3°E, 40nm SSW Eastern Fields Reef in Coral Sea, [1,195m, 25.0°C] on 19 Jul, nine at 10.9°S 148.0°E, 45nm SSW Cape Rodney, [2,280m, 25.4°C] on 27 Jul (NGC).

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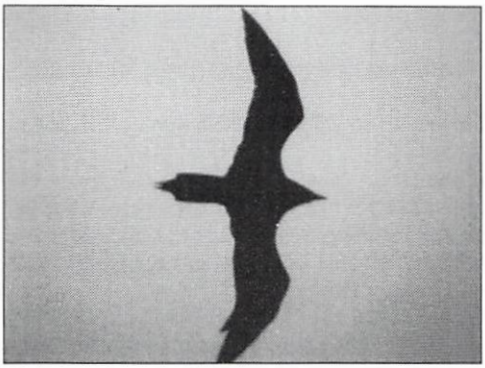
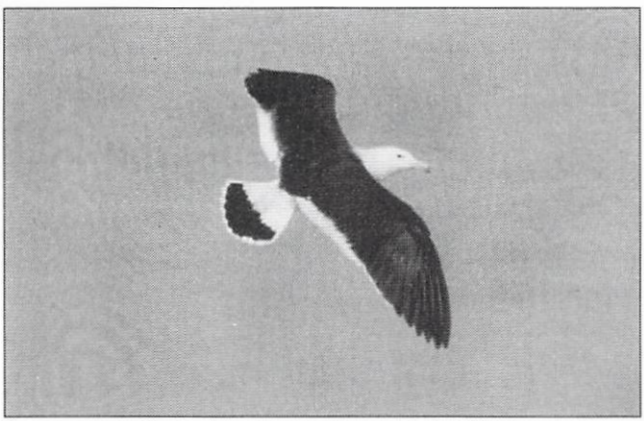


Arctic Skua *Stercorarius parasiticus* (silhouette)
eastern Bass Strait, Australia, 11 October 1986.
Photo: Captain N.G. Cheshire MN



Belcher's (Simeon or Band-tailed Gull) *Larus (b.) belcheri*
Off Peru, December 1975
Photo: P. Meeth.

LANDBIRDS FROM SHIPS AT SEA

Analysis by Michael Casement

The following landbird report sheets (numbers shown in brackets) were received during the last year. Extracts are shown in the appropriate geographical sections using the observer's initials:

Captain N.G. Cheshire, MN, RV Franklin 6 Aug-20 Oct'97: Bismarck & Coral Seas (1).
Petty Officer S.C. Copsey, RN, H.M.S. *York*, 6-27 Oct'97, East Med. (3).
Stephen Hales, Derek Hallett and Chris Sadd, return trip Plymouth to Santander 20-22 Aug (few landbirds with seabirds (3).
Nigel Millis, RRS *Bransfield*, Adeliade Is. - Argentina - South Orkneys - Falklands - Grimsby (UK), 23 Mar-3 May'98 (3 sheets + 14 35mm colour slides).
Mrs Judith Pentreath, Yacht *Salvation Jane* 1 May-15 June and 8 Sept-21 Oct'97, Ionian, Adriatic (a number of landbirds, on seabird census sheets).

This list is the lowest total I can remember, due to many of our most prolific RNBWS observers currently serving ashore, but these records are augmented by records from other sources. My thanks are also due, once again, to Captain Eddie O'Sullivan MN, who continues to keep Peter Chilman and myself supplied with Met. Log extracts of seabirds and landbirds. Significant landbird records are indicated here by (Met).

Also received from the RN Hydrographic Department were a number of "Natural Phenomenon Sheets" (NPS), which included a few landbird records, notably from Naval Party 1016 during offshore surveys from East Anglia to the Gulf of St. Malo, HMS *Bulldog*, in the North Sea, HMS *Roebuck*, on passage from the Gulf to the UK, and from HMS *Scott*, in the N. Atlantic. Relevant extracts from these are indicated with the notation (NPS).

SECTION A - EAST ATLANTIC (EAST OF 30°W), BAY OF BISCAY and IBERLANT

1996

At 0715 on 15 Nov HMS *Bulldog* recorded (NPS) an unidentified 'large owl" flying around and landing aboard at 49.1°N 06.3°W, 52nm south of Scillies, and a Greenfinch *Carduelis chloris* aboard, which later died.

1997

At 1600 on 25 Apr, FRV *Scotia* (Captain J.B. Nicholls, RNBWS member) photographed a male Snow Bunting *Plectrophenax nivalis* in full summer plumage just east of the Shetlands. It was exhausted after NE'ly gales the previous day. It was given fresh water and bird seed, and departed an hour later. A flock of about 20 Meadow Pipits arrived overnight on 29 Apr, whilst off the Moray Firth, during SSE winds force 4-5 with rain and fog. Captain Nicholls commented "It was thought the birds would continue their migration once the visibility improved, but all remained aboard and died within 24 hours".

A Wheatear *Oenanthe oenanthe* was photographed aboard FPV *Vigilant* (Met) on 12 May in position 59.0°N 07.5°W. It remained for 30 mins, before resuming its passage north.

On 16 May FPV *Vigilant* (Met) recorded three "ring doves" (no details, so presumed to be *Columba palumbus*, might may have been Collared Dove *Streptopelia decaocto*). One departed during 17th, but the other two were still aboard when vessel anchored Isle of Mull on 18th.

On 9 Aug, whilst fishing in the Barents Sea, MV *Arctic Ranger* (Met) identified a Kestrel *Falco tinnunculus* (F) aboard at 73.4°N 32.3°E, 175nm NW North Cape.

Early am on 20 Aug, SH, DH & CS recorded at least two Willow Warblers *Phylloscopus trochilus* in S. Biscay, also a possible Pintail *Anas acuta* in flight at 0650 and a Grey Heron *Ardea cinerea* flying west at 0720.

On 26 Sep, HMS *Scott* forwarded a photograph of a Goldcrest *Regulus regulus* aboard at 49.2°N 10.4°W, SW of Ireland.

SECTION B - ENGLISH CHANNEL, NORTH SEA and BALTIC

1997

In the Baltic, MV *Baltic Tern* (Met) reported an "early morning dawn chorus" on 29 Apr, whilst anchored off Jasmund in reduced visibility. Numerous small birds, of at least eight distinct species, were seen flying round the containers on deck. Tentative identifications included Robins *Erithacus rubecula* (about 6), Pied Wagtails *Motacilla alba* and "wrens".

On 9 Jul, NP1016 recorded (NPS) "flying in steady straight flight" a Swallow *Hirundo rustica*, and a Grey Heron *Ardea cinerea*, at 51.3°N 01.5°E.

On 3 Aug, whilst on passage to Jersey, a Turnstone *Arenaria interpres* was aboard 30 mins at 49.5°N 02.0°W and a Yellow Wagtail *Motacilla flava* was seen flying SW; 15 unidentified geese were seen flying SE and 10-15 swallows flying SE at 49.1°N 02.0°W.

On 10 Sep, NP1016 recorded (NPS) a Long-tailed Duck *Clangula hyemalis* "floating on sea surface", in the approaches to the Needles Channel (50.6°N 01.6°W) and 15 Canada Geese *Branta canadensis* flying south.

On 28 Sep, FPV *Sulisker* (Met) identified a small bird as a Goldcrest *Regulus regulus* (F) at 57.6°N 00.8°W, approx. 30nm ENE Peterhead.

1998

On 2 May, whilst heading east (at 13 kts) in the English Channel (noon posn. 49°N 02.7°W), NM recorded a Collared Dove *Streptopelia decaocto* aboard all day (0600-at least 1815). It took off several times, but always returned. Last seen at 1815. Two Swallows *Hirundo rustica* flew past, heading west, at 1455.

SECTION C - WEST ATLANTIC (WEST OF 30°W)

1997

(no records)

SECTION D - GULF OF MEXICO AND CARIBBEAN

1997

MV *Maersk Somerset* photographed (Met) a Great Blue Heron *Ardea herodias*, whist at anchor off Galveston (29.2°N 94.6°W) on 24 Mar, and a Baltimore (Northern) Oriole *Icterus galbula* found dead on 8 Apr, whilst in the Yucatan Channel (22°N 85.5°W) on 8 Apr.

On 14 Apr (1530 local), whilst on passage Luanda to Nola (course 325°T), BT *Navigator* recorded (Met) a remarkable fall of birds aboard following a violent thunderstorm, and torrential rain, in position 24.6°N 86.9°W, 175nm

north of C. Catoche, Yucatan: "As visiblity improved numerous flocks of birds descended on the vessel, ranging from small humming-birds (approx 2.5" in length), chaffinch-like birds, bluetits, thrushes, swallows as well as small white wader type birds (white with brown crest, approx 14" in height and a large heron (white)".

SECTION E - MEDITERRANEAN

1997

On 19 Apr, in the Tyrrhenian Sea, HMS *Roebuck* recorded (NPS) a Housemartin *Delichon urbica*, two Robins *Erithacus rubecula* and a Yellow Wagtail *Motacilla flava*, briefly aboard at 40.3°N 13.5°E, 75nm SW Salerno.

On 2 May, JP saw a group of six Grey Herons *Ardea cinerea* at 38.9°N 20.7°E flying N from Levkas I. towards Préveza, and on 3 May a Marsh Harrier *Circus aeruginosis* (F) being mobbed by a group of Common Terns *Sterna hirundo* at 38.9°N 20.7°E off Levkas. Two single Turtle Doves *Streptopelia turtur* were observed flying low into a fierce ESE wind force 7 towards the Greek island of Othoni, apparently coming from Italy. She comments that Turtle Doves were currently being shot in Paxos, where they are considered a great delicacy. Two Swallows *Hirundo rustica* were noted on 13th at 42.5°N 16.1°E 35nm NE Gargano Hd. on 12th, and another mobbing two Common Terns on 17th at 44.8°N 13.8°E 10nm SW Istria. Eight probable Booted Eagles *Hieratus pennatus* flew over the yacht towards Croatia on 18th.

MV *Seki Cedar* recorded (Met) a number of Swallows on passage from Livorno to Barcelona, with five at 42.0°N 04.9°E, 75nm east of C. St. Sebastion, around the ship towards sunset on 1 May. They remained overnight and four were seen to fly off towards Barcelona at 0500 on 2nd. The ship left Barcelona at 1300, and a single Swallow was noted around the accommodation areas. It was still aboard at nightfall, and again during the morning of 3rd, behaving as if apparently "looking for its lost family".

JP noted six Swallows, whilst on passage from Cephalonia to Zakinthos on 23 Sep, and a small falcon, almost certainly a juvenile Hobby *Falco subbuteo* was seen feeding on a swarm of flying ants off Port Vathi, Petali Is, on 24th. On 25 Sep, a probable Short-toed Eagle *Circaetus gallicus* flew low past close the yacht, to land on the cliffs of Cephalonia.

On 6 Oct SCC reported 'numerous (20+) Robins aboard at 33°N 25°E, 120nm south of Crete, also a Song Thrush *Turdus philomelos*, also a first winer Red-breasted Flycatcher *Ficedula parva* aboard, "numerous" Pied Wagtails *Motacilla alba* flying south (very few landed), also *ca.* 100 unidentified hirundines circling the ship.

On 26 Oct SCC recorded a probable Glossy Ibis *Plegadis falcinellus* reported briefly aboard at 32.0°N 28.3°E 50nm north of Libya, and he saw two Bluethroats *Luscinia sverica* (one adult F and one juv) in the same area at 1700 on 27th, also a single Chaffinch *Fringilla coelebs* (F) aboard at 1720. At 17.30 he identified a Pallas's Warbler *Plylloscopus proregulus* at 32°N 28.3°E at 1730. For a more detailed account of this period of landbird migration, see page 71.

On 19 Nov MV *Seki Cedar* (Met) recorded a number of birds aboard at 41.3°N 06.9°E (60nm WNW Sardinia. These were identified by the Master - Captain P.W. Jackson (RNBWS member) as: Meadow Pipits *Anthus pratensis* (3), White Wagtail (1F), Redstart *Phoenicurus phoenicurus* (1F), Black Redstart *Phoenicurus ochruros* (1F), Spectacled Warbler *Sylvia conspicillata* (1F), and Chaffinch (1M & 1F).

1998

On 1 Feb MV *Seki Pine* (Capt. P.W. Jackson) (Met) reported a number of birds aboard at 39.9°N 01.2°E, 55nm east of Valencia, including Starling *Sturnus vulgaris* White Wagrail and Blackcap *Sylvia atricapilla*. The weather was overcast with rain, winds ENE/5, and cold weather dominated to the north.

Shortly after exiting the Suez Canal late on 26 Apr, MV *Peninsular Bay* (Met) recorded a bird in an exhausted state aboard early am. on 27th. From the description and drawing this was identified as a Moorhen *Gallinula chloropus*.

SECTION F - RED SEA AND GULF OF ADEN

1997

On 4 Apr, in the Central Red Sea, HMS *Roebuck* recorded (NPS) an unidentified falcon on deck at 20.9°N 38.5°E, and 20 flamingoes *Phoenicopterus* sp. in the Gulf of Suez at 29.9°N 32.5°E, on 8 Apr.

SECTION G - INDIAN OCEAN AND ARABIAN SEA

1997

On 14 Mar MV *British Resource* recorded (Met) three European Bee-eaters *Merops apiaster* perched in the rigging at 22.1°N 60.3°E, off Ras el Hadd.

SECTION H - PERSIAN GULF AND GULF OF OMAN

1997

On 16 Mar, HMS *Roebuck* recorded (NPS) a "black & white wagtail" (presumably a White Wagtail *Motacilla alba*) at 25.3°N 53.9°E, and a Hoopoe *Upupa epops* at 25.2°N 53.7°E, 60nm NW Oman, on 20 Mar.

On 19 Apr, SS. *Lima* recorded (Met), a large container-sized wooden pallet in the water, shortly after passing the Strait of Hormuz, in posn. 18.7°N 59.4°E, on which a "number of white heads appeared to be bobbing". Approaching to within half a mile, 50-60 large "vulture-like" birds flew off - described as "mainly white in colour black primaries", these were probably Egyptian Vultures *Neophron percnopterus*.

SECTION I - PACIFIC, CHINA SEA, YELLOW SEA, CORAL SEA AND PHILIPPINE SEA

1997

NGC recorded a Barn Swallow *Hirundo rustica* which settled briefly aboard on 6 Aug at 02.1°S 145.1°E, 62nm NE Sepik River Entrance, NE coast of PNG. On 20 Oct, a Nicobar Pigeon *Caloensis nicobarica* settled on signal mast at 03.7°S 151.7°E , 22nm SW C. Kanambumbu, south coast of New Ireland, PNG. It flew away NW when disturbed. NGC comments: "A large unusual pigeon - dark blackish green with long iridescent bronze green neck hackles extending to back and breast - conspicuous white tail, large robust pink legs and feet - not easily confused with other species".

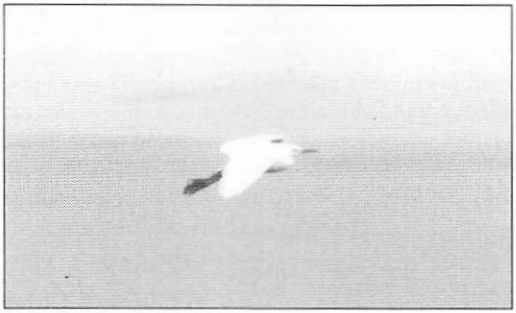
A Barn Owl *Tyto alba* was photographed aboard MV *Mairangi Bay* (Met) on 10 Sep, soon after berthing at Adelaide (34.9°N 138.5°E. It remained for 6.5 hours.

Heading east across the Pacific, MV *Pacific Sandpiper* (Met) recorded a Peregrine Falcon *Falco peregrinus* aboard, on 7 Nov, when 430nm NW Midway I., (32.9°N 176.6°E). It was first observed eating a small bird at 0200z, and

remained all day eating small birds until last seen at 0200z on 8th. On 13 Nov, another Peregrine was sighted aboard when 900nm NE of Hawaii (28.1°N 140.3°W eating numerous birds, and was last seen at 1400z on 22nd.

SECTION J - SOUTH ATLANTIC
1998

At 1130 on 30 March, NM recorded a Cattle Egret *Bubulcus ibis* flying around the vessel at 52.8°N 57.4°W *c.*50nm SE of E. Falkland. From the slight yellow/brown tinge on the forehead, he deduced it was an adult. It remained for over three hours before departing west.



Cattle Egret *Bubulcus ibis* 30 March 1998 off E. Falkland
Photo: Nigel Millis

Cattle Egrets *Bubulcus ibis* 5 April 1998, NE. Falkland Is.
Photo: Nigel Millis

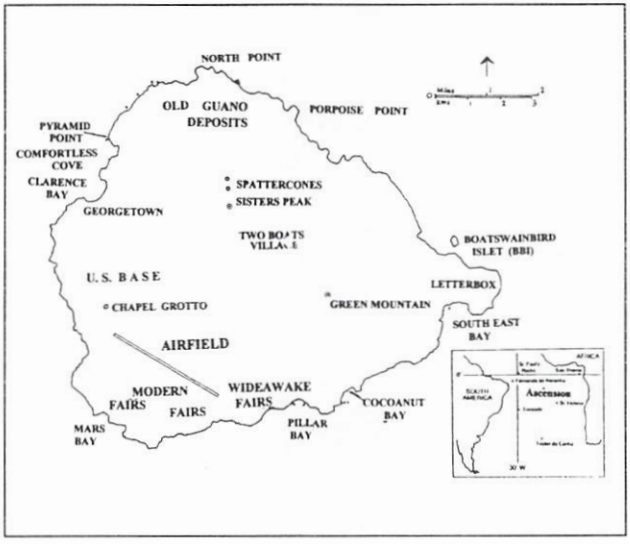
On 5 Apr NM photographed a group of 12 Cattle Egrets at 48.1°S 54.2°W, about 250nm NE Falklands, which were around the ship for about six hours. A single bird was first seen at 0645 and numbers built up to nine by 0800, with 12 at 1300, but disppeared soon after this at 47.1°S 53.4°W; they were thought to have departed SW. A watchkeeper reported seing a flock of white birds at 2200 the previous evening, which was probably the same group. The winds during this period were NNW/4. A single was again aboard 1300-1800 on 6 April.

MBC

A PRELIMINARY LIST OF THE BIRDS OF ASCENSION ISLAND, SOUTH ATLANTIC OCEAN

by Dr W.R.P. Bourne and Dr K.E.L. Simmons

Ascension is a recent volcanic island measuring some 14 by 11 km lying at 7°57'S 14°22'W in the central tropical Atlantic. The nearest mainland is Liberia *ca.*750nm to the NNE, and Brazil *ca.*1,250nm to the west; St. Helena is *ca.*700nm to the SE. The low ground is very arid, but moisture condenses from the prevailing SE trade wind on the 859m peak of Green Mountain. It was first reported by the Portuguese in the early sixteenth century, and at that time had a vast breeding seabird population, but only two landbirds and four flowering plants. Its ecology has now been transformed by the introduction of alien species; goats were common by 1656, Ship Rats *Rattus rattus* may have arrived in 1701 and were also numerous by 1752, and cats were therefore introduced to control them when the British occupied the island in 1815. In consequence, the more accessible seabirds are now much reduced, and largely



confined to Boatswain Bird Islet (BBI) and other outlying stacks, whereas the terrestrial fauna and flora have been greatly augmented (Murphy 1936, Packer 1983, Cronk 1980, Ashmole *et al* 1994, on, Ashmole & Ashmole, 1997 and Duffey 1964).

The main seabird colonies originally seem to have been in the north, and guano began to be exploited there in the last century (Hutchinson 1950a). The birds were first systematically investigated when the Wideawakes or Sooty Terns *Sterna fuscata*, which now breed socially in the south of the main island every tenth lunar month, and then leave entirely so that the cats have never been able to increase enough to exterminate them, caused a hazard to aircraft during World War II (Chapin 1946, 1954, Hutchinson 1950b). This was followed by a British Ornithologists' Union Centenary Expedition in 1958-59 (Stonehouse 1960, Ashmole 1961, Dorward 1961, Moreau 1962-63), and Simmons in 1962-64, Apr'66, Dec-Jan'71-72, Dec-Jan'72-73, Mar'90, Sep-

Oct'93, Jan'96, and Oct-Nov'97, on the last three occasions with Robin Prytherch, (Simmons 1967a, 1970, Simmons & Prytherch 1994, in press). At this time the birds were also found to contain small amounts of toxic chemicals (Johnston 1973).

The Royal Naval Birdwatching Society have made observations offshore since the 1940s (Mayo 1948, R.O.Morris *in* Bourne 1963, Rose 1974, Bourne & Curtis 1985, 1986, Morgan 1990, Rowlands 1994). When the island became a staging-post on the way to the Falklands in 1982 the Royal Air Force and Army Ornithological Societies also started to make first visits (Hubert 1982, Bourne 1984), and then expeditions in Feb'87 (Blair 1989, Hortop 1989), Nov'88 (Osborn 1994), Mar'90 (Howells 1990, Nash *et al* 1991), July'92 (Nash *et al* 1992, Battenbough 1993), Apr'94 (Hughes *et al.* 1994), and Oct-Nov'96 (Dickey *et al.* 1997).

In consequence, while the subfossil remains of the original avifauna (Ashmole 1963a, Olson 1977, and *in prep.*) and resident birds are now well known, there are also a growing number of records of passing seabirds and landbird vagrants from both the Old and New Worlds which clearly often arrive on ships and are more difficult to assess. Therefore at present we are merely placing on record a preliminary list of the species reported within the 200 nautical mile Exclusive Economic Zone surrounding the island as a basis for further investigation, for which we are grateful to N.P. and M.J. Ashmole, W.R.P. Bourne, P.W.G. Chilman, W.F. Curtis, J. de Korte, R. Hannay, A.J.M. Hayward, M. Howells, B.J. Hughes, T. Hutchinson, W.T. Jones, F.E. Lowry, B.A.E. Marr, K. Morgan, P.R. Messent, R.O. Morris, D. Osborn, K. Pearce, R.J. Prytherch, K.E.L. Simmons, M. Simmons, N. Sylverwood-Browne, J. Walmsley, C.P. Wearn, R.W. Woods and R. Whitla, hereafter referred to by their initials; more details of some of the earlier records will be found in Bourne (1994).

BIRDS RECORDED WITHIN 200 NAUTICAL MILES OF ASCENSION

KEY - * = sub-fossil remains, ( ) = inadequately documented,
[ ] = doubtful records BBI = Boatswainbird Islet.

[Cape Petrel ***Daption capense***. Two reported off Ascension in Jan'59 by Stonehouse (1960: 185), which is rather far north at an unexpected season].

Herald Petrel ***Pterodroma arminjoniana***. Seven seen at 10.5°S 16.1°W, 180nm SSW Ascension, 2 Oct'82 (Bourne & Curtis 1985).

Bulwer's Petrel ***Bulweria bulwerii***. One on board HMY *Britannia* at 12.5°S 09.4°W, 24 Jan'57 (Bourne 1995), and seen at 05.6°S 15.0°W, 200nm north, on 1 Feb'85 (Bourne & Curtis 1985), 70nm north on 16 Apr'86 (WRPB), 10.0°S 10.0°W, 150nm SE, on 17 Nov'88 (KM), from North Point on 17 Nov'88 (Osborn 1994), and on 31 Oct'97 (KELS).

[Grey Petrel ***Procellaria cinerea***. Said to have been taken in the area by the Scottish National Antarctic Expedition (Godman 1907-10), but this seems more likely to be a mis-labelled specimen from Gough Island.]

Cory's Shearwater ***Calonectris diomedea***. Birds seen off Ascension on 11 and 17 Mar'87, and 18 Nov'88, with four on 23 Nov and two on 27 Nov'88 (Howells 1990, Osborn 1994); at least 23 seen at 04.5°S 15.5°W on 16 Feb'83 (HMS. *Active*), 43 from 05.2°S 14.9°W north on 29 Nov'83, 28 south to 05.6°S 15°0'W on 10 Feb'85 (Bourne & Curtis 1985, WRPB), and two at 02.8°S 17.9°W 23 Nov'88 (KM), all *ca.* 200nm to the north.

Great Shearwater ***Puffinus gravis***. Seen off Georgetown 10 Oct'89 (TH).

Sooty Shearwater ***Puffinus griseus***. One off North Point, 22 Nov'88 (Osborn 1994).

Audubon's Shearwater ***Puffinus lherminieri****. N.P. Ashmole and D.F. Forward, and R.G. Allan heard possible calls at night on BBI in July'58, and R.G. Allan caught one in a hole there on 18 Mar'59 (Stonehouse 1960: 185, Bourne & Loveridge 1977).

Wilson's Storm-petrel ***Oceanites oceanicus***. Seen 10nm to north on 28 Nov'83 (Bourne & Curtis 1985) and north from 05.2°S 14.9°W, 200nm to the north, next day (WRPB). Flocks of hundreds of storm-petrels most likely to be this species on migration said to occur at times off Georgetown (Blair 1989).

Black-bellied Storm-petrel ***Fregetta tropica***. Reported by *Terra Nova* on 17 July 1910 to NW, 19 Jul to west, and 20 Jul at 10.3°S 24.9°W (Lowe & Kinnear 1930). One at 01.2°S 21.5°W, to NW, on 22 Sep (1941?) (Mayo, 1948). Two about 30nm to south 10 Aug'70 (PRM); one 50nm to north 24 Jun'82 (WFC), 30nm to south 6 Aug'83 (Bourne & Curtis 1985).

White-bellied Storm-petrel ***Fregetta grallaria***. Probable bird about 70nm to north 17 Jul'70, and one *ca.*10nm south 10 Aug'70 (PRM). Two at 10.0°S 10.0°W on 17 Nov'88, three next day, and one approaching Ascension on the 19th (KM). Four offshore 13 Sep'97 (AJMH),

[**British Storm-petrel** ***Hydrobates pelagicus***. A storm-petrel with much white under the wing seen off North Point on 15 Nov'88 provisionally identified as this species seems more likely to have been a Black-bellied Storm-petrel?]

Madeiran Storm-petrel ***Oceanodroma castro****. Reported regularly at sea, sometimes from the shore, and a set egg on BBI in Jan 1878 (Penrose 1879), where *ca.* 3,000 breed in Nov (Stonehouse 1962a, Allan 1963). A petrel burrow-call also heard by KELS at Pyramid Point in Dec'71, and a petrel heard at Letterbox in Mar'90 (MH). Many seen south to 12.5°S 17.3°W on 15 Jan'83 (WFC), up to 30 followed vessels off Georgetown on 29 Nov'83 (RWW), 12 seen during sea-watches and one on BBI in Feb'87 (Blair 1989), up to 25 on 11 days in Nov'88 (Osborn 1994), and 13 offshore on 6 Nov'96 (Dickey *et al.* 1997).

Leach's Storm-petrel ***Oceanodroma leucorhoa***. Mayo (1948) reported his most southerly bird off Ascension on 11-12 Dec (1941?), but did not mention *O. castro*. One seen at 06°S 14°W, *ca* 120nm north, 9 May'61 (ROM). One at

08.2°S 14.5°W, 50nm south, 28 Nov'83, seen within 200nm north next day and on 10 Feb'85, one around the ship off Georgetown on 11 Feb'85 (Bourne & Curtis 1985), and one 10nm to SSW 16 Apr'86 (WRPB). Birds seen around ships off Georgetown on 11 Feb'85 (Bourne & Curtis 1985) and 6 Nov'89 (TH), and two on 30 Jan'90 (CPW). A Storm-petrel with a dark rump resembling Swinhoe's Storm-petrel O. *monorhis* brought ashore from a ship on 22 Jan'64 proves to be a dark Leach's Storm-petrel (Bourne & Simmons 1997) and three more were reported offshore on 13 Jul'97 (AJMH).

Red-billed Tropicbird *Phaethon aethereus**. Reported to be numerous on main island in 1752 by Osbeck 1771), so Ascension is treated as the Linnaean type locality, although he merely said "Habitat in Pelago inter tropicos. Osbeck.". About 1,000 breed BBI, adjacent cliffs and in the SE during the whole year, with a maximum about Aug, complete cycles lasting about 11 months (Stonehouse 1962a,b). Over 50 BBI, one Coconut Bay Feb'87 (Blair 1989), up to 29 BBI and seven elsewhere, probably not more than 50 pairs, Nov'88 (Osborn 1994); *ca* 30 pairs BBI, Letterbox, Pillar Bay, Mar'90 (Nash *et al* 1991); 119 nests found BBI 3-5 May'92 (Nash *et al* 1992); breeding at two locations on Letterbox Oct-Nov'97 (Dickey *et al* 1997).

(Red-tailed Tropicbird *Phaethon rubricauda*. Some tropicbirds were said to be pink by Huckle (1924), and a pink tropicbird with a largely dark bill and legs was first reported at the American Camp, and then seen in Georgetown on 16 May'92 (Sylverwood-Browne (1992)).

Yellow-billed Tropicbird *Phaethon lepturus**. About 2,000 bred with the above (with some interference) on BBI, complete cycles lasting about 9 months, with a maximum about August (Stonehouse 1962a,b). At least 250 nesting there and probably also south stacks Feb'87 (Blair 1989). Up to 100 BBI, 20 elsewhere on eight days, with a pair on the NE cliffs, total 200-300 pairs, Nov'88 (Osborn 1994); *ca* 300 pairs all round the island, Mar'90 (Nash *et al* 1991); at least 75 nests BBI 3-5 May'92 (Nash *et al* 1992). Seen at sea at 10.5°S 16.5°W, 200nm SSW, 26 Jun'83 (WFC).

Masked Booby *Sula dactylatra**. Ascension is the type locality. About 9,000 breed on BBI and (SE?) outlying stacks, peak Aug (Stonehouse 1962a, Dorward 1962); it also tried to nest on the mainland opposite BBI, where it is killed by cats. Estimated 8,000 Feb'87 (Blair 1989), 5-10,000 pairs Nov'88 (Osborn 1994), 24 nests found at Letterbox Oct-Nov'96 (Dickey *et al* 1997). Widespread at sea; seen 11.5°S-6.0°S at 14°W during 12-14 May'62 (ROM). A pair bred on Thornton Hill, Georgetown 1993-6.

Brown Booby *Sula leucogaster**. About 2,000 breed on BBI and most or all NW and SE outlying stacks when there is food, successful cycles lasting *ca* 43 weeks after which the juvenile returns for an average of 25 weeks, the adults waiting 49 weeks between cycles. Unsuccessful breeders have peaks of laying every 8 months (Stonehouse 1962a, Dorward 1962, Simmons 1965, 1967b,c, 1968, 1970, 1977). Under 2,000 were breeding in Feb'87 (Blair 1989), 1,500-2,000 1988 (Osborn 1994), *ca* 1,000 1990 (Nash *et al* 1991). Proved breeding Oct-Nov'97 at three, and suspected at two places Letterbox (Dickey *et al* 1997). Seen feeding inshore and occasionally with Masked Boobies at sea.

Red-footed Booby *Sula sula**. Ascension has been considered the type locality, but Grant & Mackworth Praed (1933) show it was Barbados. Originally numerous (Osbeck 1771), it appears from the old guano that, in the absence of trees, it must have nested instead on the lava-flows, which have a similar configuration. Numbers were last reported in the 1940s (Tomlinson 1947), and since then up to 30 have bred BBI and on stacks (Hartog 1987, Simmons 1968, 1990, Hughes *et al* 1992, Dickey *et al* 1997), about twice as many white morphs as brown; they appear to feed to west or NW at night.

Ascension Frigatebird *Fregata aquila**. An endemic species (Collar & Stuart 1985) which may be related to the Lesser Frigate *F. ariel* (Lowe 1924a). It is normally dark when adult, but a pale phase is also described by Lowe (1931). *Ca.* 9,000-12,000 breeding all year on BBI, with a maximum of nearly 1,000 pairs Apr-Nov (Stonehouse & Stonehouse 1963); at least 1,100 birds Feb'87, 2,500 birds, 1,000 nests Nov'88 (Blair 1989), at least 2,750 roosted BBI, 90 north face Letterbox 1988 (Howells 1990, Nash *et al* 1991); about 2,500 around BBI 25 Nov'88 (Osborn 1994), 350 nests and 100 fledglings there 3-5 Jul'92 (Nash *et al* 1992). First two 110nm north Ascension, at least 30 off Georgetown 17 Jul'70 (WTJ), one with Sooty Terns over fish shoal at 06.6°S 04.6°W, 600nm to ENE, 9 Mar'73, one at 00.9°S 07.4°W, over 600nm to NE, 22 Jun'75 (PWGC), stage 3 bird seen 10.0°S 10.0°W, 150nm SE Ascension, 17 Nov'88 (KM). Clearly it disperses widely at sea, but it seems doubtful whether frigates reported along the African coast are this species or the Magnificent Frigate *F. magnificens*. Immatures are seen mainly around the island with some adults, some preying on the Sooty Tern colony, and females parasitising other birds (Simmons 1967, thesis). They were not seen chasing other birds out at sea, where several adults which came down out of the sky were the first birds to arrive over a fish-shoal to the north (WRPB).

Night Heron *Nycticorax* sp.*. Bones of birds smaller than *N. n. nycticorax* found in Sisters spatter-cones (Olson 1977) and Chapel Grotto (NPA).

Squacco Heron *Ardeola ralloides*. One Nov'76-end Jan'77 (KP, KELS, RJP), one caught by a cat 10 Sep'89 (RW, FEL, NS-B) and one reported by Mrs Judy Hodgson 16 Oct'92 (NS-B).

Cattle Egret *Bubulcis ibis*. Seen at intervals for at least 50 years, including 1960, 1962, 1963 (Packer 1983); 27 May, 21 Oct'62 (KELS), two "egrets" for nearly three months in late 1972, a number of "white birds" (some thought larger than others) Oct-Dec'74; two 5 Jan'75 (RH), two 1985 (RW), one from 21 Jan'87 (Blair 1987), two 1-11 May, maximum three from 15 July until 24 Nov in that year, and seen again in 1988, 3 & 16 Nov'89 (TH), one 20 Apr'90 (CPW, NS-B, two 25 Nov'90 and three immatures Apr, two Jul-Oct'92 (NS-B), who has seen up to ten, Nash *et al* 1992, Battenbough 1993). One photographed 5 Apr'98 (AJMH).

(**Grey Heron *Ardea cinerea***. Large grey and white herons possibly of this species were reported May-Jun'75 and Oct'76 (Packer 1983)), Oct'90 (NS-B) and 8 Feb'97 (AJMH).

Purple Heron ***Ardea purpurea***. An immature photographed early 1980s (NS-B), one 1982 (RW, Blair 1987), one photographed 1 Apr-4 May'89 (NS-B and FEL), an immature 9 Feb-5 Mar'91 (NS-B) and 4 & 21 Jan'96 (KELS, RJP).

White Stork ***Ciconia ciconia***. One reported 13-28 Apr'87 (NS-B and FEL); and a bird with distinctive black markings below, possibly due to pollution on a ship, at intervals 11 Apr'97-18 Jan'98 (photographed AJMH; KELS, RJP).

(Ducks. 25 present, uncertain status, 1870s (McLachlan 1878)).

Domestic Chicken ***Gallus gallus***. Reported to have gone wild by Power (1835), with 1,100 of uncertain status present 1878 (McLachlan 1878). There were feral birds in the woods on the west side of Green Mountain in Mar'90, with at least six crowing cocks with families; one shy hen was pale brown (WRPB). They were still crowing there on 1 Nov'93, and a hen with chicks was reported early Oct'96, when none had been kept for some time (KELS).

Red-necked/ throated Francolin ***Francolinus afer***. "Partridges" introduced with little success soon after colonisation (Brandreth 1835), with 400 of uncertain status present in 1878 (McLachlan 1878). A "Cape Partridge" was introduced unsuccessfully to St Helena early in 1867, but survived on Ascension (Melliss 1875). About six pairs seen on Green Mountain in 1957-59 (Stonehouse 1960: 159); they were heard over 1,000 ft, the total estimated at 80-250 birds, increasing, Feb'87, and had the white supercilium, cheeks and belly of *F. a. cunenensis* from N. Namibia (Blair 1989). Seen down to 900 ft (274m) several times Nov'88 (MH); four records, possibly *ca* 50 pairs Nov'88 (Osborn 1994), up to four seen Mar'90 (Nash *et al* 1991, WRPB).

Guinea Fowl (*Numida mealeagris*?). Three brace turned out in 1820s, nearly 2,000 killed 1830 (Mundy 1858), last seen 1877 (Gill 1878, Penrose 1879).

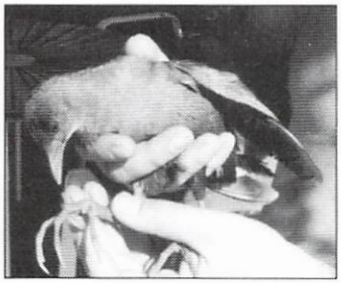
Pheasant ***Phasianus colchicus***. Introduced soon after colonisation, unsuccessful (Brandreth 1835); 25 present, uncertain status, 1870s (McLachlan 1878).

(***Falco* sp.** Unwin reported several hawks resembling small Kestrels *F. tinnunculus* frequented Georgetown about Sep 1876 (Penrose 1879)).

Ascension Rail ***Atlantisia elpenor****. A medium-sized endemic species with mottled plumage and red eyes caught on Green Mountain on 7-8 June 1656 (Mundy 1936, Ashmole 1963a, Olson 1973).

Moorhen ***Gallinula chloropus***. In the past, gallinules were reported by shepherds; an immature Moorhen was caught Jun'58 (Stonehouse 1960: 58, 152), and a possible bird reported late 1962 (Packer 1983). An adult caught on 25 Feb'93 was photographed, released two days later, and last seen the following day (TH).

American Purple Gallinule *Porphyrio martinica*. Immatures seen 10-11 Jun'70 and 22 Jul'71 (Olson 1971, corrected 1972), a bird "the size and colour of a hen pheasant" in 1974 (RMH). A subadult photographed 15 May'91, and deported to Antigua (NS-B), and an immature caught by a cat photographed on 9 Jan'94 (RH). (See Photos A & B). (An "almost certain" Purple Gallinule handled Aug'84 by Cindy Buxton may also have been this species?).



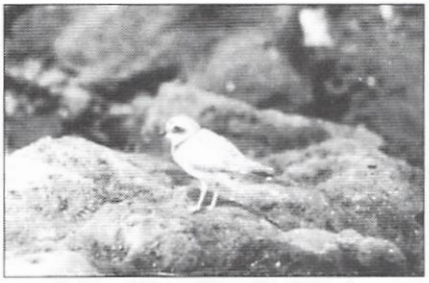
A. American Purple Gallinule *Porphyrio martinica*, subadult - 16 May 1991, *Photo:* Newlyn Sylverwood-Browne

B. American Purple Gallinule *Porphyri martinica*, immature - January 1994, *Photo:* Tim Hutchinson

Lesser (Allen's) Gallinule *Porphyrula alleni*. A possible subfossil femur found by Olson (1973, 1977), an immature collected by Darwin (1841: 134) July 1836, one collected 27 May 1920 (Lowe 1924b), and one caught and photographed 29 Dec'97 (AJMH).

Oystercatcher *Haematopus ostralegus*. One Jan'86 (R.W., Blair 1987).

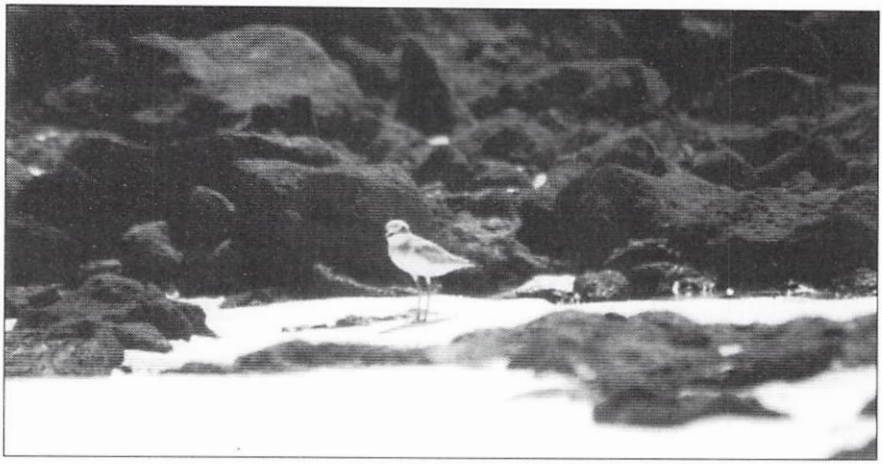
Ringed Plover *Charadrius hiaticula*. An immature 9 Jan until at least 30 Nov'87, and probably the same on 20 Mar'88 was photographed several times (JdeK, Blair 1987, FEL, NS-B - see Photos C & D), one 15 Nov'88 (Hortop 1989, Osborne 1994).



C. Ringed Plover *Charadrius hiaticula*, immature *ca.*20 February 1987. *Photo:* J de Korte

D. Ringed Plover *Charadrius hiaticula*, 20 March 1988, possibly the immature of the previous year (Photo C), after it adopted male plumage. *Photo:* Newlyn Sylverwood-Browne

Greater Sandplover *C. leschenaultii.* One 30 Aug-1 Sep'89 was photographed several times and identified by R.J.Chandler as probably an adult in autumn moult, resembling Hayman *et al* (1988) fig. 108b. (See Photo E).



E. Greater Sandplover *Charadrius leschenaultii* - 20 March 1989,
Photo: Newyln Sylverwood-Browne

(St. Helena Wirebird *C. sanctahelenae*. One was reported by Jeff Appleby to fly off a northbound ship in late Oct'69 (NS-B); the Saints identify most small shorebirds as this species, and its similar smaller mainland ancestor Kittlitz's Plover *Charadrius pecuarius* seems at least as likely to occur.)

Lesser Golden Plover ***Pluvialis dominica*** A golden plover in Jan'59 (Stonehouse 1960: 185), and a "medium-sized golden plover" on 25 Nov'62 (KELS, Packer 1983) may have been this species. An adult moulting into winter plumage seen 26 Oct-4 Nov'97 (RFP, KELS, AJMH).

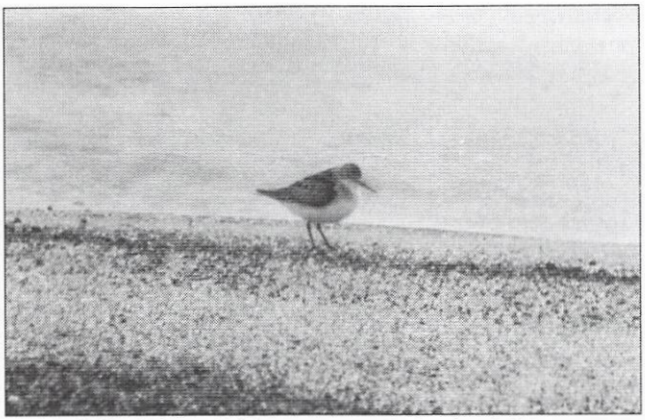
Grey Plover ***Pluvialis squatarola***. One photographed by RH 18 Nov'74, one Nov-Dec'76 (KP, RFP, KELS), 13 Jan-25 Feb'89 (NS-B, FEL).

Sanderling ***Calidris alba***. At least one 1957-59 (NPA), one Dec'61-16 Apr'62, two Feb'63 (KELS, Packer 1968), up to three 12-25 Jan'96, two in Jan'97, one 26 Oct-14 Nov'97, 28 Dec'97 (AJMH).

Little Stint ***Calidris minuta***. An immature photographed 18 Oct-5 Nov'90 (NS-B). (See Photo F).

Semipalmated Sandpiper ***Calidris pusilla***. One seen repeatedly and photographed 16 Oct-5 Nov'97 (KELS, RJP, AJMH, Dr John Ahrens).

Bar-tailed Godwit ***Limosa lapponica***. One Dec'61-3 Jun'62 (Packer 1983, KELS), one photographed early 1970s (KELS), one 17-27 Nov'88 (NS-B, FEL, Hortop 1989, Osborn 1994). One photographed 3 Oct-10 Nov'91 (NS-B).



F. Little Stint *Calidris minutus* - 18 October 1990,
Photo: Newyln Sylverwood-Browne

Whimbrel *Numenius phaeopus*. Two "Curlews" reported 7-8 Nov'74; seen 13 Jan'75 (RH), 1984, 1985 (RW), 11 Nov'86, 3 and 7 Aug'87, 19-23 Mar'88, 16 Sep'89-31 Jan'90 (NS-B and FEL), 22-24 Sep'93 (TH, KELS, RJP), 17 Jan, 5 Oct-28 Dec'97 (KELS, RJP, AMJH). Several were photographed.

Upland Sandpiper *Bartramia bartrami*. One photographed 1974 (RH).

Common Redshank *Tringa totanus*. One 17 Jan'97 (AJMH).

Greenshank *Tringa nebularia*. One 27 Dec'72 (KELS).

Wood Sandpiper *Tringa glareola*. Immature 5 Oct'63 (KELS).

Common Sandpiper *Tringa hypoleucos*. One 15 Feb, 27 Nov-18 Dec'62, 15 Feb'64 (KELS), 31 Oct-18 Nov'90, 4, 15 Feb'91 (NS-B).

Ruddy Turnstone *Arenaria interpres*. Seen 1957-59 (Stonehouse 1960: 185), notably on 23 Jan'59 (NPA), 27 Nov'62 (KELS, Packer 1983), three 2 Feb, 7 Apr'63, two 16 and 25 Nov'63, four 21 Dec'63 and 15 Feb'64 (KELS), one 15 Jun-13 Jul'70 (Olson 1971), one 19 Mar'77 (KP), one 9 Oct, 11 Nov'86, 9 Jan-19 Apr'87 (sometimes two from 23 Jan.; one seen to be ringed 13 Mar), one 27 Dec'88, 26 Feb'89, two 25 Jan'90 (NS-B and FEL, Blair 1989), one 27 Sep'93, up to four 6-25 Jan'96, one 26 Oct-14 Nov, 28 Dec'97 (KELS, AJMH); the latter thought a bird with no white on the chin seen on 6 Oct'97 resembled fig. 155b in Hayman *et al* (1988) of a Black Turnstone *A. melanocephala* from the Pacific.

Large Skua *Catharacta* sp. Seen twice at sea 1957-59 (Stonehouse 1960: 185), and offshore Apr'77 (KP), two 18 Feb'87 (Blair 1989), three miles off Georgetown 18 Sep'93 (photographed TH), 6 Nov'96 (Dickey *et al.* 1997), and going south 10 Oct'97 (KELS, RJP).

Pomarine Skua *Stercorarius pomarinus*. One at 04.5°S 15.5°W on 16 Feb'83 (HMS *Active*), 05°11'S 14°52'W on 29 Nov'83, and 05.6°S 15.0°W 10 Feb'85, all about 200nm north of Ascension (Bourne & Curtis 1985). One harrying Black Noddies offshore Dec'93 (Brian Hill).

Arctic Skua *Stercorarius parasiticus*. Two at 10.5°S 16.1°W, 180nm SSW, on 2 Oct'82, three 70nm to north, on 8 May'84, three at 05.2°S 14.9°W, 200nm to north, on 29 Nov'83 (Bourne & Curtis 1985), at least four 200nm to north on 23 Nov'88 (KM), and up to 37 daily offshore 20-24 Nov'88 (Osborn 1994). One chasing noddies off North Point on the evening of 11 Mar'90 (WRPB).

Long-tailed Skua *Stercorarius longicaudus*. 11 at 10.5°S 16.1°W, 180nm SSW, 2 Nov'82 (Bourne & Curtis 1985), four 02.8°S 17.9°W 23 Nov'88 (KM), and a pale immature seen by telescope going south offshore 16 Oct'89 (TH).

(**Large Gull *Larus*** sp. An immature resembling a Lesser Blackback *L. fuscus* 18 Nov'88, one "too large for a Lesser Blackback, so probably a Greater Blackback *L. marinus* or Kelp Gull *L. dominicanus*" on 13-14 Nov, three adults photographed inconclusively 20 Nov'89, one immature at a Wideawake Fair on the day after two ships arrived from the Falklands 18-19 Feb'90 (NS-B, FEL, TH, CPW).

Arctic Tern *Sterna paradisaea*. Nineteen at 10.5°S 16.1°W, 180nm SSW, 2 Nov'82 (Bourne & Curtis 1985), and one seen well at 08.4°S 13.1°W offshore 19 Nov'88 (Morgan 1990 and *in litt.*), (and three black-capped, grey-backed terns offshore 18 Oct'90 (NS-B).

(**Antarctic Tern *S. vittata*.** A specimen in the Natural History Museum is said to come from between St.Helena and Ascension (Saunders 1877)).

Sooty Tern *Sterna fuscata.** In the early 19th century, 120,000 eggs could be collected in a week, and they were said to breed for 2-3 months about three times in two years (Brandreth & Power 1835). Sperling (1868) saw a fair two miles from Comfortless Cove about 1867, and ten years later the Gills reported three fairs, including one in the centre of the island holding twice as many birds as the others put together, and also a "considerable settlement" on BBI (Gill 1878, Penrose 1879). Chapin (1954) and Chapin & Wing (1959) report that in the 1940s there were an estimated 1-2 million breeding in the SW around the new airfield every tenth lunar (9.6 calendar) month. There were estimated to be 750,000 with a few on BBI in the late 1950s (Stonehouse 1962a, Ashmole 1963), at least 100,000 in 1987 (Blair 1989), 340,000 with 174,400 eggs in the south, but none on BBI in 1990 (Nash *et al* 1991), and 388,000 in 1996 (Dickey *et al.* 1997). The first eggs in 1990 were recorded on 8 Feb (FEL).

Brown Noddy *Anous stolidus*. A thousand were breeding on the smaller outlying stacks mainly in Dec-Jan in the late 1950s (Stonehouse 1962a, Dorward & Ashmole 1963), at least 200, mostly off the NW coast, Feb'87 (Blair 1989), *ca* 100 at BBI, 35 on a stack in Pillar Bay, and some at ten other places in 1988 (Osborn 1994), *ca* 1,000 in 1990 (Nash *et al* 1991).

Black Noddy *Anous minutus*. BBI was covered with breeding birds not seen a year before in 1878 (Penrose 1879). There were thought to be some 75,000 breeding there and on other stacks and the cliffs, perhaps mainly in June with occasional irregularities, in 1957-59 (Stonehouse 1962a, Ashmole 1962), *ca*

6500 in Feb'87 (Blair 1989), up to 1,000 on BBI, North Point and SE Bay, and some on South Stacks, up to 5,000 pairs in all, in 1988 (Osborn 1994), and most recently 20,000 (Ashmole *et al* 1994).

White Tern *Gygis alba.** Although the type locality has been designated as Ascension, Sparrman (1786) gave its range as the East Indies, Cape of Good Hope, and islands of the Pacific Ocean, and is not known to have visited Ascension. A few were first found breeding on BBI in 1877 (Penrose 1879), and there were estimated to be some 2,000 breeding there, on other stacks, inland cliffs and trees in the late 1950s (Stonehouse 1962a), though Dorward (1963) thought it was 1,400. There were possibly 500 pairs in 1988 (Osborn 1994), and over 600 in 1990 (Nash *et al* 1991).

(Pigeon/Dove?. A bird similar to a Turtle Dove *Streptopelia turtur* was seen briefly on 7 Oct'85, a ringed racing pigeon in Jul-Aug'86, and birds variously reported as a "sparrowhawk" on 3 Dec, a "dove" two days later, and "brown above, paler below and the size of a Mynah" on 15 Dec in 1991 (NS-B)).

Common Cuckoo *Cuculus canorus*. One 11 Nov'97 (M. de L. Brooke, A. Jackson).

European Nightjar *Caprimulgus europaeus*. One killed Nov'73 on the day after the arrival of a ship (Packer 1983).

Common Swift *Apus apus*. Up to five reported at intervals, in Oct'42 (Chapin 1954b), Oct'58 (Stonehouse 1960: 185), 25-26 Dec'71 (KELS, Packer 1983), Dec'76, 1 Mar'77, 3 Oct and 5 Dec'97, three 6-7 Jan, and one-two 14-25 Oct'89, 9 & 18 Jan'90, five 3 Jan, three next day and two 1 Nov, two 16 Oct'96, one 8 Jan, up to four 13 Sep-20 Oct'97 (KELS, FEL, NS-B, TH, AJMH, Dickey *et al* 1997); one examined was definitely *A. apus* (FEL, NS-B), (but two seen by NS-B on 28-30 Oct'88 might have been Pallid Swifts *A. pallidus*?).

European Roller *Coracius garrulus*. One 20-21 Dec'89 caught by a cat next day and photographed (NS-B, FEL). (See Photo G).

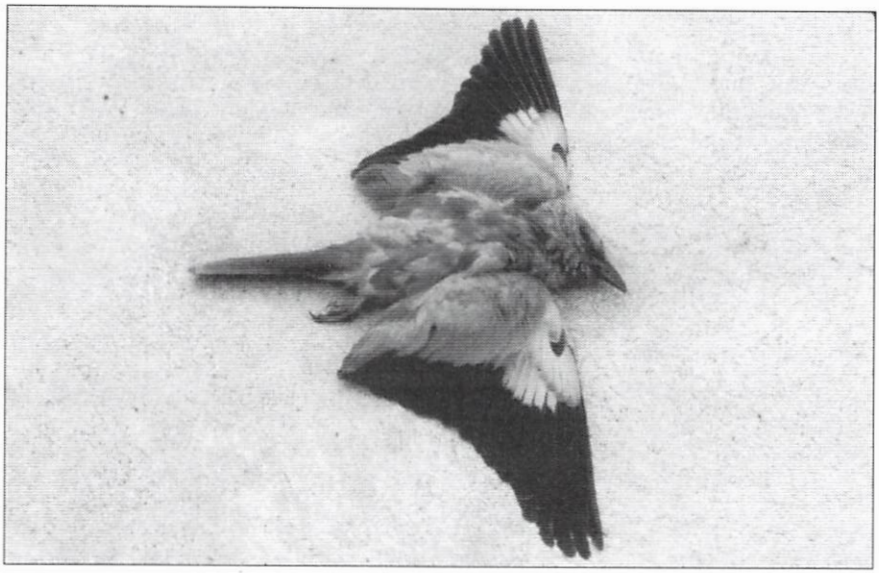
Swallow *Hirundo rustica*. Seen May'63, Feb'68 (Packer 1983), 8 Oct, two 12 Nov'76 (NS-B), Jan'86 (RWW), 18 Sep'88, 13, 14 Apr'89 (FEL, NS-B), 3 Apr'90, two 16 Apr'94 (TH).

House Martin *Delichon urbica*. One caught after arrival of a ship 2 Nov'46, also seen 5 and 7 Nov'46 (Chapin 1954b), two 1 May'63 (KELS, Olson 1971), and one 15 Sep (AJMH), 14 Oct.'97 (KELS, RJP).

Sand Martin *Riparia riparia*. One 16-21 May'90 (NS-B).

Red-backed Shrike *Lanius collurio*. One photographed 24-27 Nov'90 (NS-B).

Starling (*Sturnus vulgaris*?). Said to have been introduced in 1852, with 200



G. European Roller *Coracias garrulus* - 25 December 1989,
Photo: Newyln Sylverwood-Browne

in 1861 (Packer 1983), but apparently gone by 1878 (McLachlan 1878)?

Common Mynah ***Acridotheres tristis***. 12 pairs introduced from Mauritius 1879; there were 25 pairs the next year, 400 in the late 1950s (Stonehouse 1962a), over 1,000 in Feb'87 and 1990 (Blair 1989, Nash *et al* 1991).

House Sparrow ***Passer domesticus***. One appeared in Georgetown Dec'85, and six were then introduced from the UK (RW, NS-B, FEL). There were 12-16 in Feb'90 (FEL), and still at least five on 17 Apr'98 (BAEM).

Common Waxbill ***Estrilda astrild***. Introduced from South Africa, probably via St. Helena, about 1851; identified as nominate race by Haydock (1964). Said to be 1,500 in 1870s, only 300-400 in late 1950s (Stonehouse 1962a), hundreds on middle slopes Oct'84 (WRPB), at least 800 Feb'87 (Blair 1989). Scarce on middle slopes, but flocks of scores frequenting especially *Buddlea davidii* on high ground, with scattered parties elsewhere Jan-Mar'90 (WRPB), when also flocks *ca* 100 Mars Bay (Nash *et al* 1991).

Yellow (Swainson's) Canary ***Serinus flaviventris***. Introduced from South Africa, probably via St. Helena, where apparently established by 1870; said to be 50 canaries on Ascension in 1870s (McLachlan 1878), identified as this species by Haydock (1954). Only 100-200 late 1950s (Stonehouse 1962a), and never seen on the low ground in the 1960s and 1970s (KELS). Hundreds Oct'84, over 800 Feb'87 (Blair 1989), over 1,000, not seen on peak but common on middle slopes with parties on the low ground, Jan-Mar'90 (WRPB).

(Sandpipers resembling Dunlin have also been reported by Huckle (1924), a sandpiper by KP on 19 Mar'77; two in Mar'88, one in Aug'88, "small waders" in

Mar'89, and swifts and swallows on other occasions).

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PROBLEMS WITH THE RECLASSIFICATION OF THE PETRELS AND GULLS

by Dr W.R.P.Bourne

While the proposal by Sibley & Monroe (1990) to consolidate the higher categories of waterbird is welcome, the vogue for reclassifying and renaming the lower groups seems more questionable (*Sea Swallow* 40: 65-67). It may be useful to summarise some of the complex issues involved for four of the groups of seabirds concerned: the shearwaters, gadfly petrels, albatrosses and larger gulls, which have recently been the subjects of discussion.

The shearwaters appear to be an ancient group which evolved both in the south and the great Tethys Ocean of the northern hemisphere tens of millions of years ago in the Tertiary period. Most modern types were already present in force in the north by the middle Miocene (Olson 1985); while many look rather similar, they differ in their structural adaptations for either soaring flight or diving (Mayaud 1932, Kuroda 1954). In the North Pacific, this has recently been found to involve a marked difference in the sternum of the similar white-breasted Manx-type Townsend's *Puffinus auricularis* and Newell's *P. newellii* Shearwaters, currently often treated as races of the same species, while the uniformly dark Christmas Shearwater *P. nativitatis*, is also structurally rather similar (Wragg 1985). Evidence for the relationship between these birds is now also becoming available from study of their DNA (Austin 1996), which in addition to confirming the position of the Christmas Shearwater now also indicates that the North Atlantic form *baroli* formerly included in the Little Shearwater *P. assimilis* actually appears more closely related to Audubon's Shearwater *P. lherminieri*.

While the structure of such birds may sometimes shed light on their affinities, any differences also need to be treated with caution, since they may either be adapted for variations in their habits and food, or interactions with competitors (Grant 1972). Thus for example the local representatives of both the Manx (*Puffinus*) and Cory's (*Calonectris*) groups of shearwaters in the Mediterranean are small with small bills, possibly either because of the absence of smaller competitors, or the pursuit of smaller prey, which is likely to be a much more recent development since much of the Mediterranean was dry for part of the Tertiary. There is still some overlap between the forms concerned (Fig. 1), so it seems more doubtful if it is useful to treat them as distinct species.

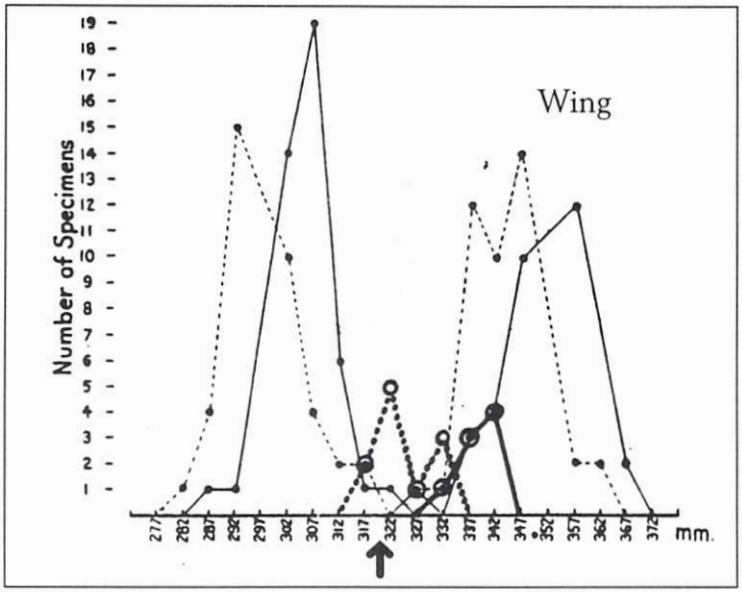
Similar problems also occur with the gadfly petrels of the genus *Pterodroma*, which however stay further out to sea, and breed on oceanic islands subject to erosion, so that they have left fewer fossils. Some progress has been made with distinguishing peripheral groups on structural grounds, including the lightly-builT subgenus *Cookilaria* (Fleming 1941), large-eyed genus *Lugensa* (Harper 1973), and *Pseudobulweria* with a downward-pointing bill (Olson 1975), but most species are structurally similar. Attempts have therefore been made to use alternative characters, including first their feather-lice by Timmermann (1951), and then the twisting of their guts by Imber (1985), who both

allocated the similar Pacific Herald Petrel *P. heraldica* and Indo-Atlantic Trindade Petrel *P. arminjoniana*, to different species. Since they now prove to have a very similar molecular biology (Brooke & Rowe 1996), it seems more likely that it is the lice rather than the petrels that have evolved differently in different oceans, while the shape of petrel guts may be more dependant on their diet than their past history.

Particularly interesting results have also emerged from the study of the molecular biology of the albatrosses, whose relationships were formerly unclear, so that most were included in a wide genus *Diomedea* which now turns out to be polyphyletic (i.e., with different origins; Nunn *et al.* 1996). In consequence some old genera need to be revived, including *Thalassarche* for the southern mollymawks which prove to be more closely related to the southern sooty albatrosses of the genus *Phoebetria* than the other species, and *Phoebastria* for the northern species which prove to be more closely related to the southern great albatrosses which retain the name *Diomedea*.

While the petrels have apparently survived unmodified for vast periods of time in the stable environment out at sea, the situation is different with the big, white-headed gulls of the Herring *Larus argentatus* group in coastal habitats. They seem likely to have been much more severely affected by the changes in climate and sea-level over the last million years of Pleistocene glaciations. These led to the isolation of many very similar populations that have now come into contact again, following the subsequent improvement in climate, and the recent increase in their numbers and ranges due to human activity, when they sometimes interbreed, but may also remain distinct (Haffer 1982). This has provided an increasing number of opportunities to recognise distinct species; thus not only has it become clear that North Atlantic Herring Gulls seldom interbreed with the rather distinct Mediterranean "Yellow-legged Gull" *michahellis* where their breeding ranges have begun to overlap in western France, but now this form apparently also remains distinct from the Black Sea form *cachinnans* or "Pontic Gull" where they breed alongside each other in the eastern Balkans (Klein & Gruber 1997).

There are currently two schools of taxonomists locked in a Germanic theoretical confrontation over the classification of such birds. The biologists following Ernst Mayr (1969) try to distinguish between varying degrees of physical difference, which has led to the description of a confusing proliferation of poorly-defined superspecies and races. The phylogeneticists following Willi Hennig (1966) are more interested in lines of descent, and treat all the products similarly, recognising a profusion of species more popular with twitchers. This is not a new phenomenon, since the Victorians were already aware of such considerations, but they preferred the first approach because there was not yet much evidence for the second and it left them vulnerable to accusations that they were disrespectful to the Book of Genesis, a primitive stage of taxonomy still found among other branches of natural history which provide fewer opportunities for elaborate distinctions.



The consequences of excessive species-splitting:

Comparison of the wing-length of a *Calonectris* shearwater found dead off Cape Verde and identified as the local race or species C. *(d.) edwardsi* by Porter *et al.* (1997, arrow ↑) with those of the Cape Verde (*edwardsi*, left), Mediterranean (*diomedea*, centre), and northern Atlantic (*borealis*, right) representatives of Cory's Shearwater C. *diomedea:*

males - lines ———, females - dashes------- (Murphy & Chapin 1927).

While a population of the order of ten thousand *edwardsi* breed in the Cape Verde Islands, over 100,000 *diomedea*, which was not mentioned, also migrate through the area twice a year (*Sea Swallow* 44: 49-52, 46: 13).

The problem with such academic disputes is that they inconvenience uninvolved bystanders who find the classification of birds reversed at regular intervals as first one side and then the other scores debating points during academic arguments involving little addition to knowledge, and fashionable folk leap on the bandwagon. The reasons for some of these decisions are hardly scientific, involving, for example, changes in the names of shearwaters because the grant-hungry conservationists and tourist industries of small islands claim that they have endemic species; or gadfly petrels because students of feather-lice and gut morphology wish to attribute additional importance to their activities; or gulls when their expanding ranges lead to encounters with neighbours of varying promiscuity. It seems time to exercise more critical judgement in assessing the implications of such proposals before automatically accepting them.

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BLACK GUILLEMOT CHICK FEEDING ON PAPA WESTRAY, ORKNEY

By Sub Lieutenant D.A. Gates Royal Navy

The Black Guillemot, *Cepphus grylle*, or Tystie as it is more eloquently known, belongs to the Auk family *Alcidae*. It is a pigeon-sized bird with a striking black breeding plumage, with white wing-patches and bright red feet. Furthermore they fly with a characteristic "whirring" motion of the wings, which also aids identification. Tysties have several features that are exceptional among the Atlantic Auks: they breed in small scattered colonies (5-100 pairs), feed close inshore on the seabed, and have a clutch of two eggs. They have been found breeding on rocky shores right round the North Atlantic and Polar seas, where they usually nest in crevices or under boulders. They overwinter close to their breeding sites, and indeed are the only seabird to overwinter in the high Arctic regions (Nettleship and Birkhead, 1985)

For six weeks in the summer of 1997, I studied Tysties on the island of the Holm, off Papa Westray, Orkney (59°21'N, 002°53'W) as part of my Undergraduate Cadetship degree course. I was fortunate to be able to join the Applied Ornithology Unit of the University of Glasgow, in a project led by Professor P. Monaghan. The team was looking at the breeding and foraging behaviour of the Black Guillemots. To get the full picture we had several studies running concurrently. Tom Sawyer had radio tagged adults and thus could track them at sea to see how and where the adults are foraging. Scottish Natural Heritage aided Tom in a full diving survey of the seabed to map potential feeding sites for the Black Guillemots. Back in the colony, Mark Cook [illegible] set up infra-red video cameras in the Tystie chick's nests and thus could unobtrusively observe them. He is particularly interested in seeing if the chick's aggression changes with lack of food. These studies are still being written up in their PhD theses, but initial results look promising.

My study was to record what food was being brought to the chicks by the parents returning to the colony. This data was useful to both the other studies at sea, and back in the chick nests. I did this by observing, from hides, the prey types brought to each nest in the colony at different periods of the day from 0600 till 2200 (plenty of daytime during the Orcadian summer!). Linda Wilson and others also recorded the weight of the chicks at each occupied nest, approximately every three days throughout the study period. This was so we could see how the chicks were growing.

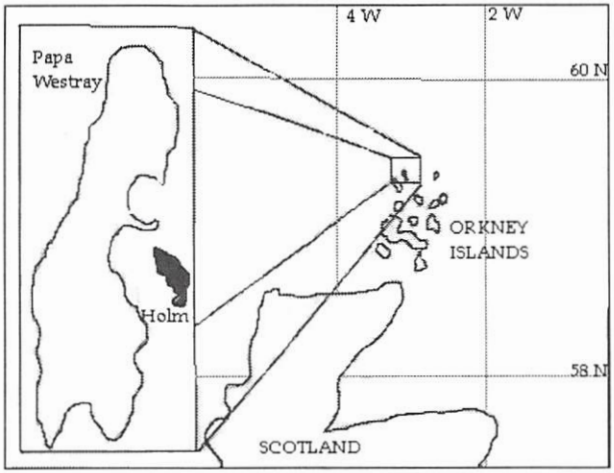
I found that in this colony each chick relied substantially on being fed on Butterfish *Pholis gunnelis*, an inshore, sea-bottom dwelling fish of high calorific value in terms of chick food. One supposes that Black Guillemots, being efficient divers, can catch these easily. I found a rough match between when the parents were feeding most to the chicks, and the mid-way point in their fledgling period. This is supposed to be when the chicks have the highest energy demands (see Konarzewski and others, 1993). One might expect the fastest growing chicks to be receiving the most food, however, my study could not show this.

As the Black Guillemots lived in a typical mixed seabird colony, they had a high chance of their food being stolen. Arctic Skuas *Stercorarius parasiticus* and Herring Gulls *Larus argentatus*, equally shared the blame. The conspicuous nature of the stealing, which was normally a high speed aerial chase, made this amenable to investigation. In this colony, I found that each adult which

brought in food for it's young had a substantial amount stolen (around 15%). Such losses are likely to have a significant negative impact on the chicks (Furness, 1987).

As a final point, I found that the Black Guillemots were constrained by the state of tide (as sailors themselves often are!). The parents would follow the tidal cycle when they conducted foraging trips for their offspring, with a low period of activity during low water.

Although much of the data has still to be looked at, such studies are developing our knowledge of the marine environment. In the future, such



information may be useful in setting up protected reserves for seabirds that encompass the foraging areas that they rely on, not just the breeding spaces they need.

Papa Westray was a fantastic place to work and live, mostly because the residents were so friendly. The character of the islands was almost magical at

Adults with a Butterfish *Pholis gunnelis*,
Photo: Tom Sawyer

times, and the richness of wildlife most memorable. I would recommend anyone to spend time there.

Acknowledgements
P. Monaghan, T. Sawyer, M. Cook, and L. Wilson.

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(**Comment by Dr W.R.P. Bourne**. At other seasons, Black Guillemots have a more varied diet. One shot in the entrance to Stornoway Harbour at 1100 on 26 Jan 1972 contained various fish remains including otoliths of a Common Dab *Limanda limanda* and Poor Cod *Tristopterus minutus*, 29 crustacean parts including two claws probably from crabs, 17 mollusc shells including 14 *Lacuna vincta*, one *Nessarius incrasantus* and two others, four small octopus beaks, and a stone - quite a good breakfast!)

FLY RIVER 1997 - THE "BIG DRY"
by Captain D.M. Simpson MN

This was an "el Niño" year, the most severe in living memory. The highest ever seawater temperatures recorded in the tropical Eastern Pacific resulted in a severe drought in the tropical Western Pacific - New Guinea and Indonesia being the worst hit areas.

The Ok Tedi copper mine was shut down during the second half of the year, due to a shortage of diesel fuel and other essentials. Ships were anchored and/or stranded in various parts of the river, for months at a time.

My ship, MV *Obo Chief*, was anchored for six weeks from mid-May until the end of June. In July, the river came up and we were able to get going again, but not for long. Early in August, *Obo Chief* was on passage from Port Moresby with a full load of oil and containers, when the river dropped again. We finally ran out of water whilst still 100 miles short of Kiunga, and the ship was doomed to remain thereabouts between ARM 344 and ARM 360 until early December. I went on leave to Indonesia for two months and came back to find that *Obo Chief* had managed to struggle a mere 10 miles further upstream, during that period! In December we had some rainfall, but not much - enough to get everyone on the move again, albeit with only part-cargoes.

During this long period of severe drought, emergency supplies were flown into Kiunga by RAAF *Hercules* aircraft, and *Chinook* helicopters ferried relief assistance to the starving people in the New Guinea highlands, whose crops had failed because of the drought.

All in all, it was a drastic year for PNG, and even worse for Indonesia. They experienced the same drought, massive forest fires, food shortages, and also had to suffer the consequences of the enormous loss of value of the Rupiah, the national currency.

Life on the *Obo Chief* was not so bad, the main inconvenience being the shortage and rationing of potable water. We were never "high and dry", and always had sufficient river water available for cooling our machinery. Some other ships were less fortunate, and several container-loads of freezer and chilled goods were lost when vessels "blacked out".

Boredom might have been a problem, but our crew entertained themselves playing rugby and soccer on the sandbanks, after finishing work each afternoon. Others made vegetable gardens in the nearby forest, whilst yours truly was in his element wandering through the jungles in search of birds, particularly the ever-elusive "New Guinea Flightless Rail" *Megacrex inepta*, a species which continues to elude me, to this day.

The "Big Dry" appears to have ended now, and things are back to normal. In the past, "el Niño" years have tended to occur once in seven to ten years or so. But the experts are now telling us that, thanks to increased "global warming", this phenomenon is likely to happen more frequently.

BIRDING HIGHLIGHTS ON THE FLY RIVER 1997

by Captain D.M. Simpson MN

Only birds of special interest are noted here, particularly those species I have not previously recorded along the river, birds which are becoming scarce, or species that are not often observed here. (see records in previous *Sea Swallows*. Ed).

There are now some 310 species on my Fly River list, but space here does not allow a complete report.

Shovel-billed Kingfisher *Clytoceyx rex.* A single on 9 Jan at ARM 433, my first record of this species. The habitat in this part of the river has greatly changed since mining operations began. Thanks to several years dumping of mine tailings into the Ok Tedi river, the Fly river bed has risen. This means that the river bursts its banks during periods of heavy rain, and floods large areas of lowland forest. The result is that the forest here is dying, with many trees already dead, and the whole forest floor now largely replaced by silt and mud. This changed habitat might account for the appearance of this strange Kookaburra. According to the field-guide, it forages in ground devoid of leaf litter, where it digs for arthropods, grubs, worms and small invertebrates.This species is sparsely and patchily distributed throughout PNG forested habitats, from sea-level to 2,100m.

Osprey *Pandion haliaetus.* One seen on 26 Jan at Umuda (ARM 0). This species was quite common on the river ten years ago, but is not often seen these days.

Grey-headed Goshawk *Accipiter poliocephalus.* Another hawk which has declined in recent years. One seen on 3 Feb in the forest at ARM 345 - the first for a long time.

Southern Crowned Pigeon *Goura scheepmakeri.* A pair of birds was found in deep forest at ARM 360 (west bank, Irian Jaya) on 18 Nov. This is the world's largest pigeon and is becoming quite uncommon.

Long-billed Cuckoo *Rhamphomantis megarhynchus*. At ARM 344 (west bank Irian Jaya) on 28 Aug'97, Jeff Caroll (Chief Engineer) and I observed one at close range, feeding on hairy black caterpillars gleaned from the leaves of a small tree at the edge of a forst clearing. This is a rare and local bird, found only in New Guinea.

Marbled Frogmouth *Podargus ocellatus.* A good look at one on 6 Jan'98 at ARM 458 (Kiunga), observed by the vessel's spotlights in trees on the riverbank.. This is the smallest of the two resident frogmouths in New Guinea, and seems to be much less common than the Papuan Frogmouth *P. papuensis*, which I often see.

Hooded Pitta *Pitta sordida.* One of this beautiful species seen on the forest floor at ARM 360 (West Bank, Irian Jaya) in 16 Nov'97.

Yellow-legged Flycatcher *Microeca griseoceps.* One at ARM 360 16 Nov'97 - a confirmed sighting. I have probably seen this species on numerous occasions, but found it difficult to distinguish from similar members of this genus.

Torrent Flycatcher *Monachella muelleriana.* This single bird frequented the riverbank for over a week at ARM where my ship was anchored. This is an unusual record, as the species is normally found along rocky fast-flowing mountain streams. I have never seen it on the Fly River before, and this lowland alluvial river habitat is not at all characteristic. Perhaps its presence here is something to do with the drought?

King Bird of Paradise *Cicinnurus regius*, Twelve-wired Bird of Paradise *Seleucides melanoleuca*, Flame Bowerbird *Sericulus aureus*. These three exotic species were all found in the forest, close to where my ship was anchored at ARM 388 during May/June'97.

Spotted Honeyeater *Xanthotis polygramma*. One observed in trees by pond at ARM 344 on 20 Aug'97 - my first record of this species.

Southern Cassowary *Casuarius casuarius*. At ARM 360 in Nov'97. It is always exciting meeting this great bird. Several singles met with along forest trails on the Irian Jaya side of the river, usually in the morning.

Uncommon Seabirds observed in the Gulf of Papua in 1997

White-bellied Storm Petrel *Fregata grallaria.* Two or three seen on 1 Aug'97 - not following ship.

White-faced Shearwater *Calonectris leucomelas*. A flock of about 150 on 7 May'97, seen in the Gulf. (I think it is a much more numerous visitor to the north coast of PNG - it breeds in Japan).

White-tailed Tropicbird *Phaethon lepturus.* One observed at sea in the Gulf on 20 Jul'97. Although this species is described as a vagrant to PNG in the fieldguide, I have often seen it in the Gulf of Papua, usually singly, occasionally in pairs.

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BIRD OBSERVATIONS IN THE YAMDENA TANIMBAR ISLANDS, INDONESIA.

17 September to 4 October 1997

by Captain D.M. Simpson MN

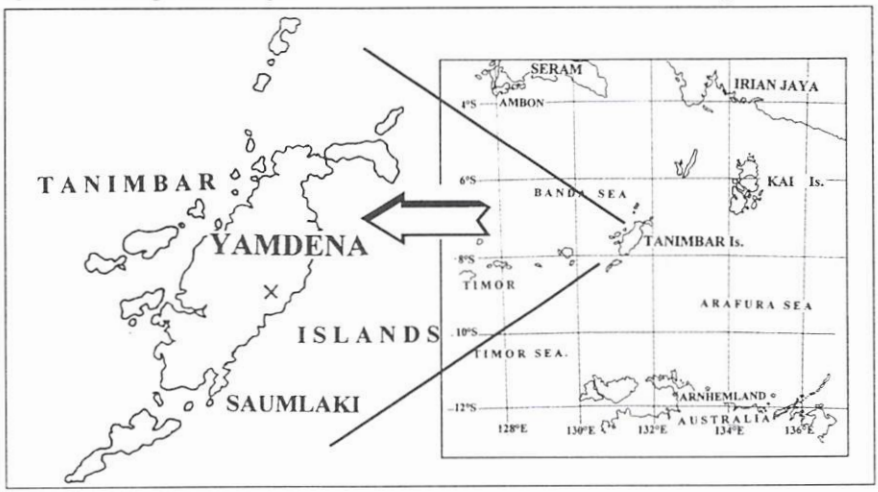
The Tanimbar Group is one of the remotest group of islands in the Indonesian Archipelago. They are however the nearest Indonesian islands to Australia, being less than 400 miles from the coast of Arnhemland. Saumlaki is the capital town, situated on Yamdena, which is by far the largest and most important island of the group (see map).

Saumlaki is served by two "Merpati" Pioneer flights per week from Ambon (on the island of Seram), the main transportation hub of this section of Wallacea. I had intended spending just one week there but, due to a succession of cancelled flights I was actually on the island for 18 days.

Due to the "el Niño" effect, New Guinea and Indonesia are undergoing a severe drought this year, which has given rise to numerous forest and bush fires causing a thick haze throughout the region - hence the many flight cancellations. Prospective visitors to the islands should however be warned that these flights are never reliable, at any time, and ferry boats are few and far between. One must take plenty of cash as credit cards and even travellers cheques are of no use here.

The island is still largely forested although this is slowly being eaten away as more and more farms are created. Even in areas of pristine forest, one particular tree is targetted and felled by the locals. I do not know the species but it is a large tree with a deeply vertically fissured bark. This tree yields a hard red wood which is used throughout the island for building and furnishings.

Yamdena is a birdwatcher's paradise as it boasts several birds endemic to the island and many more that are endemic to Wallacea. I do not think the island has been thoroughly surveyed from an ornithological viewpoint, and the identification of new species is a real possibility. During my short stay I observed at least one bird, which at the time I thought was an unknown species, though it later proved not to be so. I have been watching birds for 30



years and this was the first time I (almost) encountered unknown species, so it was an exciting trip for me. I concentrated all my time on forest birds and ignored the beaches and mangroves etc. which I am sure would have yielded a large number of waders.

Yamdena is not a mountainous island, but many limestone hills and ridges, none of them more than 250m above sea level. This gentle terrain was a welcome relief for me as I am finding it increasingly hard to haul my ageing carcass up the steep mountains, which characterise so much of Indonesia.

Any RNBWS members who happen to pass through Ambon on their way to these or other out of the way islands might like to pay a visit to the Commonwealth war cemetery on the island. Here is the final resting place of many RN personnel who lost their lives on HMS Exeter, and other ships during World War II.

List of birds observed on Yamdena

*** = Endemic to Tanimbar (U) = Identification uncertain
** = Endemic to Wallacia sp = Species of
* = Endemic to Indonesia

Brown Booby *Sula leucogaster*. A few seen fishing in Saumlaki harbour.
Great Frigatebird *Fregata minor*. Many frequenting Saumlaki harbour - over 150 present on some mornings.This species outnumbered the Lesser Frigatebird *F. ariel* here, in contrast to the Gulf of Papua, where I have found the Lesser to be the more common.
Lesser Frigatebird *Fregata ariel*. See above. I surmise that these frigatebirds breed on Manuk Island, in the Banda Sea some 175nm to the NW. I visited Manuk in October 1969 (see *Sea Swallow* 21:40), and my figure of 80,000 total seabirds may then have been an over-estimation, but it is now generally recognised that this island holds the most important seabird colony in Indonesia.
Skua Sp. *Stercorarius* sp. One or two seen off Saumlaki harbour. Not identified.
Whiskered Tern *Chlidonias hybridus*. 200+ present at Saumlaki harbour.
Gull-billed Tern *Gelochelidon nilotica*. Several seen in the harbour at Saumlaki.
Roseate Tern *Sterna dougallii*. A few seen in Saumlaki harbour.
Black-naped Tern *Sterna sumatrana*. A few seen in Saumlaki harbour.
Greater Crested Tern *Sterna bergii*. Many seen in Saumlaki harbour.
Little Pied Cormorant *Phalacrocorax melanoleucus*. One or two birds frequenting Saumlaki harbour and others sighted amongst mangroves from the coastal road.
Little Black Cormorant *Phalacrocorax sulcirostris*. One observed (21 Sep) to alight onto the small freshwater pond (a cattle drinking pond), on the farm where I was staying, at the forest edge.
Great Egret *Egretta alba*. Several seen on farmland.
Lesser Egret *Egretta intermedia*. Also seen on farmland.
White-faced Heron *Egretta novaehollandiae*. One only seen in flight 18 Sep.
Pied Heron *Egretta picata*. One around the farm where I was staying.
Pacific Reef Egret *Egretta sacra*. Fairly common along the coral shoreline.

Osprey ***Pandion haliaetus***. Not seen by me, but a visiting Australian fisheries inspection officer assured me he had watched one in Saumlaki harbour. (I was away in the jungle that day).
Brahminy Kite ***Haliastur indus***. Common, but not numerous.
White-bellied Sea Eagle ***Haliaeetus leucogaster***. A single adult observed several times soaring over Saumlaki harbour on 28 Sep., and again later. As far as I know this is the first record for Tanimbar. I am familiar with the species from other parts of Asia. (Philippines and Hong Kong etc.). The give-away feature is the white underwings with contrasting broadly black-tipped flight feathers. A migrant from Asia.
Variable Goshawk ***Accipiter novaehollandiae***. One seen at the forest edge on 18 Sep.
Spotted Kestrel ***Falco moluccensis.**** Not uncommon. Several seen, usually at the forest edge.
Australian Hobby ***Falco longipennis***. One only seen, on 21st.
White-headed Shelduck ***Tadorna radjah.*** I came across a single bird by a small stagnant water pool in an otherwise dry forest river-bed. Due to the long drought, there is virtually no running fresh water on the island. I observed the same bird in the same place, on the following day.
Tanimbar Scrubfowl ***Megapodius tanimbarensis.****** I came across this species twice, both times observed on the ground in thick forest. I also found one large incubating mound, again in dense forest.
Little Curlew ***Numenius minutus.*** On the day I left (4 Oct), there were two very confiding birds on the airstrip. They approached to within inches of me, seemingly unafraid.
Whimbrel ***Numenius phaeopus***. Several seen at the airstrip.
Common Sandpiper ***Actitis hypoleucos.*** Present on the shoreline at Saumlaki.
Australian Pralincole ***Stiltia isabella***. Many on the airstrip throughout this period.
Dusky Cuckoo-Dove ***Macropygia magna.**** I found this to be a common forest bird on Yamdena.
Emerald Dove ***Chalcophaps indica***. Common.
Timor Zebra Dove ***Geopelia maugei.*** ** Common.
Wallace's Fruit-Dove ***Ptilinopus wallacii.*** ** One of my prime reasons for visiting this remote island was to see this beautiful dove, and I am pleased to report that it is still common here.
Rose-crowned Fruit-Dove. ***Ptilinopus regina***. Common. The race "*xanthogaster*" which inhabits Yamdena has a "silver-grey" not a "rose" crown.
Yellow-eyed Imperial-Pigeon ***Ducula concinna.**** This lovely pigeon is much less wary than other members of the genus. This is a pity, as it is the prime target of the local "shooters". Still very common but how long can this state of affairs last?
Blue-streaked Lory ***Eos reticulata.**** Fairly cornmon in forest and at the forest edge.
Tanimbar Cockatoo ***Cacatua goffini.****** Once abundant, this endemic cockatoo has been much reduced due to trapping for the illegal cage-bird trade. I still found it reasonably common in the remotest forests, but not in big numbers.
Eclectus Parrot ***Eclectus roratus.*** Uncommon - only one or two sighted.
Red-cheeked Parrot ***Geoffroyus geoffroyi.*** *Common.*

Great-billed Parrot *Tanygnathus megalorhynchos*.* Only one sighted.
Moluccan Boobok *Ninox squampila*.(U) I did not get a satisfactory look at this species, though I did hear it every night around the farm where I was staying.
Glossy Swiftlet *Collocalia esculenta*. Very common.
Collared Kinglisher *Halcyon chloris*. Common.
Cinnamon-banded Kingfisher *Halcyon australasia*. One or two sightings, and others heard, but I found this species to be more common on Timor and Sumba.
Azure Kingfisher *Alcedo azurea*. One bird well seen, along a forest riverbed.
Broad-billed Roller *Eurystomus orientalis*. Several seen.
Barn Swallow *Hirundo rustica*. Several seen.
Pacific Swallow *Hirundo tahitica*. A very common resident.
Pied Bronze-Cuckoo *Chryscoccyx crassirostris*. ** Quite a common bird of the forest edge. Much more easily heard than seen.
Australian Koel *Eudynamys cyanocephala*. Several seen.
Channel-billed Cuckoo *Scythrops novaehollandiae*. Several seen - probably visitors from Australia?
Wallacian Cuckoo-shrike. *Coracina personata*. ** A fairly common forest bird here.
Black-faced Cuckoo-shrike Coracina *novaehollandiae*. Common.
Brush Cuckoo *Cacommantis variolosus*. (U) I observed in the canopy, a "small cuckoo that was all dark ash-grey, almost black above. Underparts grey with fine blackish barring, slender black down-curved bill." Not finding anything matching this description in my field guide, I wondered if it might have been a melanistic phase of Pied Bronze-Cuckoo, but after consultation with Brian Coates I came to the conclusion it was probably a juvenile Brush Cuckoo.
Kai Cicadabird *Coracina dispar*. ** Uncommon - only one or two seen.
Black-browed Triller *Lalage atrovirens*. Fairly common. Some authorities consider this race an endemic species - the "Tanimbar Triller" *Lalage moeata*.
Wallacian Drongo *Dicrurus densus*.** Common forest bird.
Black-eared Oriole *Oriolus bouroensis* .** Not uncommon, several seen.
Torresian Crow *Corvus orru*. Only two or three seen, others heard.
Slaty-backed Thrush *Zoothera schistacea*.** Supposedly common on Yamdena, according to the Guide, but it took me a long time actually to get a good look at one. It was feeding in a small tree about 6m above the ground. Maybe I had spent too much time searching the forest floor for this superb endemic thrush.
Fawn-breasted Thrush *Zoothera machiki*. *** That one island should boast two endemic thrushes is remarkable. This species favoured the leaf littered dry river-beds in dense forest. Once I had learned its habits, I was able to locate it quite easily, and saw several in different parts of the island, but always in the same habitat.
Rufous-sided Gerygone *Gerygone dorsalis*. ** A very common forest bird here.
Tanimbar Bush-warbler *Cettia carolinae*.*** An undergrowth skulker that is difficult to get a good look at. I did eventually have a good sight of one. A tape-recorder would be a big help with this species.
Tawny Grassbird *Megalurus timoriensis*. One or two sighted.
Golden-headed Cisticola *Cisticola exilis*. (U) Small warblers glimpsed in rough grassland were probably this species.
Rufous-chested Flycatcher *Ficedula dumetoria*. Often encountered in the undergrowth of thick forest.

Loetoe Monarch ***Monarcha custus.*** ** Small flocks encountered several times in the forest. Formerly considered as a race of the White-naped Monarch *M. pileatus.*
Black-bibbed Monarch ***Monarcha mundus.*** ** Also seen in small groups in the forest, but only encountered on two occasions. I took detailed notes of a bird, which I could not identify from my fieldguide. This led me to hope that I had found a new species, but after consulting Brian Coates, co-author of *Birds of Wallacea*, I am persuaded that it was a juvenile of this species.
Broad-billed Flycatcher ***Myiagra ruficollis.*** Several seen - not uncornmon,
Shining Flycatcher ***Myiagra alecto.*** Fairly common in the forest understorey. These Yamdena birds have a noticeably longer-tail than the birds I am familiar with along the Fly River, PNG.
Cinnamon-tailed Fantail ***Rhipidura fuscorufu.*** ** A very common forest bird here.
Long tailed Fantail ***Rhipidura opistherythra.******* Another superb Tanimbar endemic. Fairly common, I usually encountered it singly amongst the rocks and leaf-litter of the dry creek-beds.
Rufous Fantail ***Rhipidura rufifrons.*** The first one I saw was keeping close to the ground amongst cassava plants on the farrn. Later I observed other singles at the forest edge in the mid and upper storey
White-bellied Whistler ***Pachycephala leucogastra.*** ** This attractive bird was quite common here.
Little Shrike-thrush ***Colluricincla megarhyncha.*** (U) I twice observed single birds that I took to be this species - a bird that I am familiar with on the Fly River. I mark it uncertain as, according to the guide, it is not known from this area.
White-breasted Woodswallow ***Artamus leucorhynchus.*** Fairly cornmon.
Tanimbar Starling ***Aplonis crassa.*** *** Quite common at the forest edge, usually in small flocks.
Black-faced Friarbird Philemon moluccensis. ** Common.
Scaly-breasted Honeyeater ***Lichmera squamata.*** ** Common.
Scarlet Honeyeater ***Myzomela sanguinolenta.*** Observed only once or twice.
Mistletoebird ***Dicaeum hirundinaceum.*** Fairly common.
Ashy-bellied Wbite-eye ***Zosterops citrinellus.*** Fairly common.
Tricoloured Parrot-Finch ***Erythrura tricolor.******* This beautiful finch is not uncommon and I came upon it several times.
Scaly-breasted Munia ***Lonchura punctulata.*** Common.
Five-coloured Munia ***Lonchura quinticolor.******* I found it common at one particular area of recently cleared forest close to the farm where I was staying.

Reference

Coates, B.J. & Bishop, K.D. 1997. *A Guide to the Birds of Wallacea.* Dove Publications, Queensland.

Captain D.M. Simpson MN. c/o 4 Ruswarp Lane, Whitby, N. Yorkshire YO21 1ND.

NOTE by Editor. Dave Simpson tells me he plans to continue with his contract with Ok Tedi Mining on the Fly River, PNG, until October (1998), and then to retire "for real". He plans further leave-breaks in Indonesia, and trips to other islands, so I hope we can look forward to more similar reports, from out of the way places.

MBC

LANDBIRDS IN THE EASTERN MEDITERRANEAN - AUTUMN 1997

by Petty Officer S.C. Copsey R.N.

In the autumn of 1997 H.M.S. *YORK* spent several weeks operating in the Mediterranean. After a brief stay in Gibraltar, where I observed 72 Honey Buzzards and 53 Booted Eagles, among other overflying raptors, the ship sailed for an exercise to the south of Crete. For a few hours during this period (6-27 October) I was a fortunate spectator of some spectacular landbird migration.

Certain species were numerous throughout, as one would expect, including (on 6th) over 20 Robins, (many of which were rather partial to the odd NAAFI tit-bits), swallows and swifts, circling the ship but not actually landing, and Pied Wagtails, with the odd Chaffinch and Song Thrush.

Several other species really caught my eye:

On the evening of 6 Oct, a Juvenile **Red-breasted Flycatcher** ***Ficedula parva*** hopped down the starboard "waist" to within 3-4 feet of me. The black-and-white tail was clearly visible, and fequently cocked (like a Wren).

On 27 Oct two **Bluethroats** ***Luscinia sverica*** (one adult male and a juvenile) spent the best part of an afternoon tucked up in the foc'sle. Both looked exhausted, so were left in peace. From their close proximity, I guessed they were related?

Perhaps the best sighting of the period was a **Pallas's Warbler** ***Phylloscopus proregulus***, at 1730 on 27th. This landed briefly on the foc'sle guardrail, about 15 ft from where I was sitting, and remained for about 10 seconds, allowing me to view it with binoculars. I clearly saw two yellow wing-bars and very noticeable yellow crown-stripes. Although tiny, it seemed quite long-bodied, in proportion - tail also long. I mentally noted the bird's features, to distinguish it from the similar Yellow-browed Warbler *P. inornatus*, and am 90% sure it was the former.

Possibly a more unusual sighting, though not actually seen by myself, but by the Petty Officer, who rang me with the news that a "big brown bird the size of a turkey" was strutting around his launcher. Needless to say, even with my olympic sprint, the bird had flown by the time I arrived. He informed me of the bird's features, particularly a 'red down-turned bill". After a browse through Lars Jonsson's *Birds of Europe*, we concluded he had seen a **Glossy Ibis** ***Plegadis falcinellus*** (he was quite confident of this). But unfortunately I never saw the bird, so it will have to go down in the "oh so nearly" column of my notebook.

It goes without saying that I missed many more birds than are recorded here. HMS York is due back in the Med. next year, and therefore I will attempt to make amends for what I missed in 1997.

Petty Officer WEM (R) S.C. Copsey RN, HMS *YORK*, BFPO 430.

SEABIRDS ON THE ROMANIAN BLACK SEA COAST 1994-1997

by Gabriel Banica

The following updates the table published in *Sea Swallow* 45: 106. Many of the place names mentioned, will be found on the map on page 107 of that issue.

Season of observation, max: no. of birds seen 1994-1997

Black-throated Diver *Gavia arctica*:	Feb-May, Dec, max 6 at Vama Veche, 6.3.95, 29.3.97.
Levantine Shearwater *Puffinus yelkouan*:	One at Constanta, 18.8.95.
EasternWhite Pelican *Pelecanus onocrotalus*:	Mar-Nov, max 365, Lake Sinoie, 20.6.97.
Dalmatian Pelican *Pelecanus crispus*:	Jun-Aug, max 6, Dunarea River, 20.8.97.
Great Cormorant *Phalacrocorax carbo*:	All year, max 3,000, Constanta 2.12.95.
Pygmy Cormorant *Microcarbo pygmaeus*:	Sep-Apr, max 800, Lake Techirghiol, 18.1.96.
Red-necked Phalarope *Phalaropus lobatus*	Aug-Sep, max 14, Lake Sinoie, 23.8.96.
Common Gull *Larus canus*:	Nov-Mar, max 6,015, Mamaia, 20-22.1.97.
Lesser Black-backed Gull *Larus fuscus*:	Feb-May, Jul-Sep, max 30, Constanta, 17.4.96.
Yellow-legged Gull *Larus cachinnans:*	All year, max 6,236, Mamaia, 16.9.97.
Mediterranean Gull *Larus melanocephalus*:	All year, max 5,530, Lake Techirghiol, 15.11.96.
Black-headed Gull *Larus ridibundus*:	All year, max 6,100, Dunareni Lake, 15.11.97.
Slender-billed Gull *Larus genei*:	Mar, max 7, Hergheliei and Saturn, 29.3.97.
Little Gull *Larus minutus*:	All year, max 2,300, Lake Techirghiol, 2.9.96.
Black-legged Kittiwake *Rissa tridactyla*:	At Constanta, one 4.1.96, two 31.1.97.
Whiskered Tern *Chlidonias hybridus*:	Apr-Oct, max 100, Lake Saraturii, 25.6.95.
White-winged Black Tern *Chlidonias leucopterus*:	Apr-Sep, max 30, Lake Istria, 20.6.97.
Black Tern *Chlidonias niger*:	Apr-Oct, max 75, Constanta, 7.8.95.
Gull-billed Tern *Gelochelidon nilotica*:	Mar-Jun, Aug-Oct, max 24, Constanta, 27.9.96.
Caspian Tern *Sterna caspia*:	7, Constanta,18.8.95.
Common Tern *Sterna hirundo*:	Mar-Sep, max 600, Lake Saraturii, 25.6.95.
Little Tern *Sterna albifrons*:	Apr-Oct, max 8, Constanta, 7.8.95.
Sandwich Tern *Sterna sandvicensis*:	Apr, Jun-Nov, max 13, Constanta, 3.8.95.

Reference

Banica G., 1996. Seabirds on the Romanian Black Sea Coast. *Sea Swallow* 45: 106-107

Gabriel Banica, Harbour Master's Office, Str. Stefan cel Mare nr. 79, Sc.B, et. IV, ap.22,8700-Constanta, ROMANIA.

SPECIAL REVIEW: BIG EXPENSIVE BIRD BOOKS

Publishers have regarded birdwatchers as fair game ever since Benjamin White persuaded his clerical brother Gilbert to write a *Natural History of Selborne*. Initially bird books took two forms, lists of birds of particular groups or areas adorned with first woodcuts and then hand-coloured prints, and dictionaries. The better picture-books were expensive to begin with, and have become more so since dealers began to cut them up so that they could sell their illustrations; thus when Edinburgh University recently sold its copy of Audubon's *Birds of America* for £2 million, it is said to have been dismembered within 48 hours. Fortunately the text of the more interesting pioneer works, including this and John Gould's *Birds of Australia*, was often also published separately, so that it remains available.

As knowledge of birds and the ease of reproduction of illustrations grew, the text began to play a more important part in such works, but was usually presented as rambling formless essays which might sometimes contain important observations usually rather difficult to extract, in the manner of the

late David Bannerman, who remains an important mine of useful if opinionated older information of variable reliability. When another publisher, H.F.Witherby, convened a team of leading British ornithologists between the wars to provide a more concise, authoritative and better-organised text in first the *Practical Handbook*, and then the extended *Handbook of British Birds*, it therefore made a welcome change.

Imitations are now being produced everywhere. The main deficiency in the original *Handbook* lay in the absence of documentation, and in the 1960s Ralph Palmer's *Handbook of North American Birds* broke further new ground by giving condensed references at the end. It received inadequate support so never got beyond the raptors, and individual species are now being dealt with piecemeal in the *Birds of North America*. Subsequently, larger teams have been convened to deal with the Western Palearctic, Africa, Australasia, and then the whole world (where most descriptive material is given under the higher categories since little is known about many bird species), in innumerable volumes costing about £100 each. Therefore most people now prefer "field guides" (which might be better styled "handbooks" instead?).

It is curious that there has been so little comment on the quality of these huge, costly "handbooks". In order to complete them it became necessary to coopt casual labour, and impossible for the busy editors to maintain proper quality control, so that they have become rambling, repetitive, erratic, uneven and uncritical compendia of most local and some other information, lacking any coherent synthesis of the results. The attempt to compress the nine-volume *Birds of the Western Palearctic* (BWP) into a two volume Concise Edition (to be known as the BWPC) is also disappointing, because, apart from updating the regional maps and including some recent developments, it merely repeats routine material while omitting the useful descriptions and references. Fortunately the latest continental atlases of breeding distribution seem more useful; the first, for Australia, was just a series of maps, but its South African and European successors also include handy summaries of information and lists of key references for each species.

Sadly, the treatment of seabirds is poor throughout. The accounts of the birds' appearance and distribution at sea are often remarkable exercises of creative imagination, distribution ashore is normally copied uncritically from unreliable local lists, many popular fallacies are repeated again without critical examination, and there are some strange illustrations. Possibly serious observers would do best to stick to Gerald Tuck and Hermann Heinzel's pioneer *Field Guide to the Seabirds* (which nowhere receives recognition for the production of the first accurate global range maps), or Peter Harrison's *Seabirds* (whose author at least took the trouble to travel round the world canvassing local opinion), while taking out insurance against the day when some publisher produces a proper *Seabird Handbook*, copying out everything ever published in ten heavy volumes costing £1,000 each. W.R.P.B.

REVIEWS
ICES TAKE UP SEABIRDS

Hunt, G.L. & Furness, R.W. (Eds.) 1996. Seabird/Fish Interactions, with Particular Reference to Seabirds in the North Sea. *ICES Cooperative Research Report* No. 216, pp. 87, ISSN 1017-6195, price 110 Danish kroner, obtainable from ICES Secretariat, Palaegade 2-4, DK-1261, Copenhagen K, Denmark.

Reid, J.B. (Ed.) 1997. Seabirds in the Marine Environment. Proceedings of an ICES International Symposium held in Glasgow, Scotland, 22-24 Nov. 1996. *ICES J. Mar. Sci.* 54 (4): 505-739, and *ICES Marine Science Syposium* 204, ISSN 1054-3139, also obtainable as above.

It used to be the perennial complaint of seabirders that marine scientists refused to take them seriously. As a result of the repeated involvement of seabirds in the debate about the consequences of pollution, overfishing and climatic change an interest in them has finally become fashionable, and a plentiful source of grants. In consequence the scientific literature is now flooded with abstruse contributions bearing a debatable relation to reality that only extreme specialists can follow. Some larger publications have now begun to emerge from this academic jungle largely through the initiative of Roger Bailey, who reported to *Sea Swallow* on the International Indian Ocean Expedition in the 1960s, and now occupies an important position with the International Council for the Exploration of the Sea (ICES).

The first is notable for its central discussion of recent fluctuations of NW European seabirds; in general it appears that despite temporary local failures of the fish supply, which are often hard to assess owing to the broad nature of ICES statistics, seabird populations are still at their highest level in historic times, and while it is difficult to measure any effect it seems likely that the birds are causing more harm to fisheries than the fisheries are to the birds. Anyone who enjoys such literature will also find a particularly rich feast in the second symposium. It seems rather a pity that while much attention is now being paid to the temperate seabirds who are doing so well, less is being given to the tropics at a time when they are being hit by an unprecedented *El Niño Southern* Oscillation (or ENSO). W.R.P.B.

Ogilvie, M. 1998, *Photographic Handbook of the Widlfowl of the World,* Pp 175, ISBN 1 85368 625 5, £29.99.

This book by Malcolm Ogilvie is a very worthy successor in a series which includes *Seabirds of the World.* Over 700 photographs cover the major plumage variations of the world's wildfowl, providing a useful back-up to existing identification guides. Each species has detailed notes on plumage, species with which it might be confused, status and distribution. The seaduck section has good coverage of birds on the water and, for some species, valuable in-flight photographs. P.J.S.S.

Winn M. 1998. *Red-Tails in Love*, Bloomsbury Publishing Plc, Pp 307, ISBN 0 7475 4042 X, £13.99.

If you have time on your hands in New York this entertaining story by Marie Winn of the first Red-tailed Hawks to nest in Central Park contains a background of the Park's natural history, which will enable you to make the best use of your time. Seabirds are represented by an occasional cormorant or gull, but there are a surprising variety of landbirds. The story of how the author becomes a hawk-watcher, and its effects on her life, is as entertaining as the book is useful. **P.J.S.S.**

Richardson, Colin & Aspinall, Simon, 1998. *The Shell Birdwatching Guide to the United Arab Emirates*. Pp 96, ISBN 1 872839 05 3. £10.00 (inc p&p), Hobby Publications, Liverpool & Dubai, obtainable from Colin Richardson, Hobby Publications, P.O. Box 50394, Dubai, UAE.

This contains travel information, 44 site guides and an annotated checklist for a fascinating and increasingly accessible part of the world, often visited by RNBWS. Local knowledge of seabirds is still incomplete; for example, the only dark petrels fully accepted yet are vagrant Sooty Shearwaters, and there is still sad confusion over the Herring-type gulls. **W.R.P.B.**

Erritzoe, Johannes & Helga, 1998. *Pittas of the World* - A Monograph of the Pitta Family. Pp 207 + 32 colour plates. ISBN 0 7188 2961 1. £30.00, The Lutterworth Press, PO Box, Cambridge, CB1 2NT.

This is a lavish and comprehensive book by the Danish Ornithologist Johannes Erritzoe, and superbly illustrated by his wife, wildlife artist Helga Boullet, about one of the most beautiful bird families of the world - the pittas. The 30 species occur mostly in the tropical rainforests of South-East Asia, and two in Africa, and many are endangered due to threats to their habitats.

Distribution maps for each are given, together witha biography of 1,300 references. Of special interest to RNBWS members to the Indian Ocean and Pacific is the table (at Appendix 2) listing the islands, and the status of pitta species in each. Like kingfishers and bee-eaters, most pittas are brightly coloured, and a glimpse of a "living jewel" flash past in a rain-forest is an unforgettable memory, but they do frequently turn up aboard ships, where they immediately attract the attention of crew members with cameras. Over the years, several species have been recorded in the Met. Logs and landbird records, and a photograph of an Indian Pitta *Pitta brachyura* aboard HMS ***Invincible*** in October 1983, is shown in *Sea Swallow* 33.7.

This book is scientifically based, with a comprehensive list of museum holdings of skins and specimens world-wide. It will be an invaluable reference guide for conservationists and researchers with a special interest in pittas, but all serious ornithologists will value this beautiful book of reference on their bookshelf. **M.B.C.**

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Scotland: Faslane and **Rosyth**: Vacant.
Humber Area: Vacant.
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INSTRUCTIONS TO AUTHORS

Interested persons are invited to submit contributions for *Sea Swallow*, authors do not need to be RNBWS members. Material rnay take the form of papers, notes progress reports, letters or reviews.

The style used in *Sea Swallow* should be followed, with the standard abbreviations, nomenclature and use of references.

Manuscripts should ideally be typed in double spacing, together with figures and diagrams Those with facilities to do so are encouraged to send on IBM compatible 3.5"diskette, (specifying the word processing software used), together with a print-out. ASCII back-up text is also desirable,

Contributions are welcome at any time, but if for inclusion in the next edition must reach the Editor by **31st May.**

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