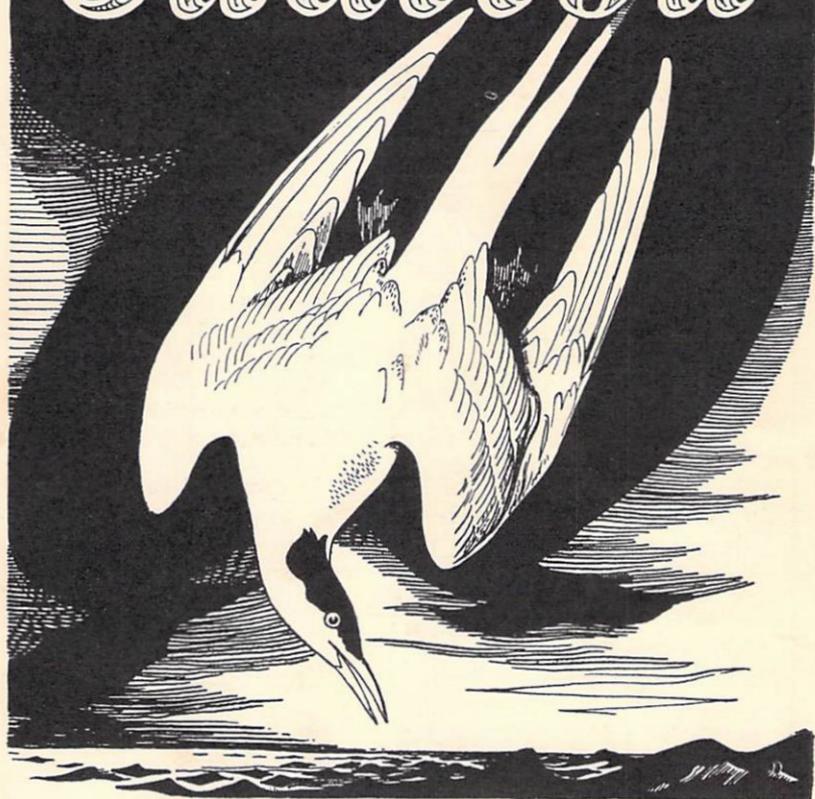


Vol. II

1958

the Sea Swallow



BEING THE ANNUAL REPORT
OF THE ROYAL NAVAL
BIRD WATCHING SOCIETY

Published December, 1958

ROYAL NAVAL BIRD WATCHING SOCIETY
(Affiliated to the British Trust for Ornithology)

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1958

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Male Great Frigate Bird on Nest — Christmas Island
(*North Pacific Ocean*)
Photo by Commander J. G. V. Holt, R.N.

FOREWORD

1958 has been a forward looking year for the R.N.B.W.S. I would like to thank Members for the interest and support they are showing in forwarding sea reports and bird notes to the Society.

Bird watching can give great interest to the individual, but in going further and passing on information for the benefit of others the individual can render a most useful service to ornithology.

I hope, therefore, that the proposal under discussion with our consultant ornithologists to provide expert comment upon members' sea reports, and a means for depositing members' reports in a central library available to other interested ornithologists will materialise.

Our Membership is still increasing and we welcome our first member from the Royal Australian Navy.

It is a matter of great interest too that R.N.B.W.S. has received a request to give its advice in the formation of a Birdwatching Society in the Indian Navy.

I am sure that with the help of our members the activities of R.N.B.W.S. will continue to increase. I would like to express my very real appreciation of the generous support given by Life Members to our recent appeal, and to the Seafarers Education Service and College of the Sea and other Bodies, for calling attention to our Society in their publications.

Good wishes for interesting bird watching in 1959.

A handwritten signature in cursive script that reads "Charles Spaupe". The signature is written in dark ink and is underlined with a long, horizontal stroke that extends to the right and ends in a small flourish.

ADMIRALTY HOUSE,
MALTA.

November, 1958.

Three

EDITORIAL

STATE OF THE SOCIETY

Twenty-four new members have joined during the past twelve months, bringing the total membership to 229. Of the new members, 13 come from the Royal Navy, 5 from the Merchant Navy, 5 from Reserve and Auxiliary Forces, and 1 from the Royal Australian Navy. We welcome our new members and hope that they too will encourage others to join us.

The society is much indebted to the generosity of the many original life members who responded to the Chairman's Appeal, subscribing a total of £82 16s. 6d. towards the Society's Funds.

REPORTS

The continuing inflow of valuable Sea Reports and contributions to Sea Swallow reflects the great interest and support which the society is receiving from members. The Sea Report Sheet Forms have been revised and separate forms provided for reporting sea and land birds.

The pink land bird sheets have certainly inspired more reports, and members will recall that these reports are ultimately forwarded to Mr. Ferguson-Lees of "British Birds." We would call special attention to the value of including the details quoted in the "Remarks" columns and, where desirable, the addition of a separate sheet for remarks on certain serial numbers.

STUDY OF REPORTS

Mr. W. R. P. Bourne, M.B.O.U., whose particular study of the order Procellariiformes is of special value to the Society, has kindly given much time in studying reports and has contributed some preliminary comments. Owing to limitation in the space available in this issue it has not been possible to publish his report fully.

At the same time a scheme is being explored with Mr. Bourne's co-operation, with a view to filing selected original sea reports of members, after all information has been noted by R.N.B.W.S., in the library of the British Museum (Natural History). This would enable these records, together with other similar information to be made available at a central source for students of ornithology as a whole. The scheme has not yet advanced beyond the planning stage.

PROGRESS IN PUBLICATIONS

At the request of the Elder Dempster Line, the Society has contributed an article illustrated by Commander Hamond, covering the sea birds on the company's route from Liverpool to Lagos. This article is being published in the forthcoming (Winter) issue of the company's magazine "Sea."

A start has also been made on the production of the first Sea Passage Bird List for the route Panama to New Zealand.

THE NATIONAL INSTITUTE FOR OCEANOGRAPHY BIRD RINGING
INVESTIGATION

H.M.S. PROTECTOR will be ringing birds during her forthcoming commission, and one or two individual members have also applied to participate. I hope that more will do so. Details are given in R.N.B.W.S. Bulletin No. 38.

LETTERS FROM MEMBERS

I take this opportunity of acknowledging the many letters I have received from members, often including delightful tit bits of bird news, not all of which it is possible to publish.

Finally, in my capacity as Chairman and Editor, I would like to express my thanks to Commander Hamond and to Lt. Commander Maclure for their unfailing assistance during the past year.

G. S. TUCK.

NOTES ON SEA REPORTS

(Received 1957-58)

SUMMARIES OF REPORTS OF PARTICULAR INTEREST

BY COMMANDER C. E. HAMOND, D.S.O., D.S.C., R.N.

Serial No. 2/57/8: CAPT. P. P. O. HARRISON (m.v. Cambridge)

Report of a voyage from Liverpool to Australian ports via Suez and return via Cape—August to December 1957.

The Log covers 73 sheets and 428 observations and the voyage covered 25,979 miles at an average speed of 15.32 knots.

On each sheet Harrison has drawn a sketch track chart and, in many cases, an attractive illustration of one of the birds mentioned. There can be no doubt that this is the most outstanding effort ever presented to us, only approached by previous contributions from the same observer. It is a document of great value in the study of the distribution of sea birds. Capt. Harrison was assisted throughout by his officers—Messrs. Jordan, McNeil and Howell.

The first part of the voyage through the Mediterranean produced nothing unusual. In the Gulf of Suez the observers were treated to a wonderful sight; a great mass of white storks, estimated at 100,000 crossing the Gulf from G. Hamman Sayidna Musa in a southerly direction towards Ras Shukheir. The migration was "concentrated in huge flocks as far as the eye could see in both directions. Most of the birds flew only a few feet above the water, and none above 100–150 feet."

Leaving Aden he records six Reunion Petrels (*Pterodroma aterrima*)—we have no previous note of this species. Steering S.E. across the Indian Ocean from C. Gardafui to Perth not much that was unusual came into the bag. Wedge-tailed Shearwaters were with the ship throughout, and Schlegels Petrel joined in at about 15° S.

Approaching the Australian coast, all the familiar members turned up and he added the White-headed Petrel (*Pterodroma lessoni*). So round C. Leewin and across the Great Bight through waters so thickly plotted on our chart that little more can be added. The Grey-backed Storm Petrel (*Garrodia nereis*) was much in evidence and is reported at various points off the South and South East coasts, including two observations of 1,000 between Adelaide and Melbourne. Harrison's field sketch hardly tallies with W.B.A.'s description, except for the whitish black tipped tail which proves its identity.

The depredations of the Bass Strait Islanders on the "Mutton Bird" do not seem to have affected their stock, as he reports "hundreds of thousands of Short-tailed Shearwaters off C. Howe. Otherwise, observations off the Australian coasts follow our records.

Taking a departure from C. Leewin for the Cape of Good Hope the ship steered near about the 35th parallel. Small numbers of birds were seen daily and have been plotted on noon positions, giving us a newly recorded track. Wandering and Yellow-nosed Albatross, Wedge-tailed Shearwaters, Shlegels and Kerguelen Petrels were seen right across. At 40° E. he reports Leach's Storm Petrel and it crops up from there on to the Cape. W.B.A. gives "occasional to the Cape of Good Hope" and no records for the Indian Ocean. We would, therefore, venture to query this report, knowing how tricky sight identification of these little birds is.

In the Atlantic the usual reduction took place as the course diverged from the land, but on the 12th December, crossing the Equator at 10° W., there were "thousands of Black Terns: flocks extended for miles." We would query the report of a Wedge-tailed Shearwater in 11°N. 17°W. W.B.A. does not record this species from the Atlantic. Could it not have been a Sooty? Thence observations, though regularly and carefully made, all tally with previous records. Harrison's report mentions 62 species of Sea birds as positively identified.

The ship arrived at Liverpool on the 22nd December, and deserved to!

Serial Nos. 3 and 3a: CHIEF RADIO OFFICER F. W. GREAVES (s.s. Leicestershire)

Another of this observer's careful and useful reports covering Rangoon, Colombo to U.K.

Nothing of a very striking character was seen. "Great Skua west of Ceylon in company with a (doubtful) Pomarine." "A large flock of Wilson's petrels in G. of Aden on 13th September." "Several hundred Brown-winged Terns in flock in 17°N. in the Red Sea." On 17th September, *one* Lesser Black back was the only gull in Suez harbour!

His second report comes from s.s. Derbyshire and covers a similar voyage in May and June 1958. Another typical report from this very competent observer.

A few notes of interest: A very close view of a White-winged Black Tern in Port Sudan, also Pink-backed Pelicans in the lagoon. White-winged Black Tern, two or three daily, at Colombo, Indian River Tern positively identified in Rangoon Harbour. "This is the first time in 30 years that I have seen terns passing freely among the ships and river craft in the harbour." Between the 20th and 25th June in Trincomalee Harbour there were a hundred Little Terns. On 11th July 7°S.E. of C. Gardafui there were very large numbers of Blue-faced Boobies, Crested Terns and Dusky Shearwaters following a shoal of fish moving South, all in one flock of over 500 birds. "This occurred on the edge of the current flowing out of the Gulf of Aden—sea temperature 71° which, on crossing the dividing line into Gulf inflow,

rose rapidly to 82° (Air 80°). This is interesting, showing the concentration of food which occurs on the edge of a cold current. Captain Landers notes the same thing off Ras el Hadd, Persian Gulf, and it is very remarkable off the West Coast of South America on the edge of the Humbolt Current and South of the Galapagos Islands. Further notes on this subject would be useful showing areas where an upsurge of plankton accompanied by concentration of birds and fish synchronises with a sharp change in sea temperature.

Serial No. 4: H. H. DAVIES

Voyage to and from Cape Town (to attend Ornithological Congress in Rhodesia).

Nothing of particular note until 20°N. 17°W.—over 20 Royal Terns. Comparing Great and Cory's Shearwaters, where both were present, he says that about one in a dozen Cory's show some amount of white flash above the tail. He records four species of Albatross from about 28°S. onwards; Wandering, Blackbrowed, Yellow-nosed and Shy. All South African records followed the usual pattern.

On the homeward trip he met with small numbers of White-bellied storm petrels almost daily till 4°N. A remarkable record is that of Grey Phalarope in 2° 23'S. on 21st August. Considering this bird breeds in the Arctic, starting in June, it must have travelled to get so far South by this date. Twenty Black Terns in 10° N. 16° W. on 23rd August is another early date.

Serial No. 5: CAPT. A. J. COLQUHOUN, M.B.E.—Anchor Line.

Voyage from U.K. to Karachi, Bombay, etc. and return.

An excellent report over ground thickly plotted on our chart, with little new to record. His most unusual record is of two Sabines Gulls on 23rd September, 1957, in 44°N. 9°W. off the Spanish coast. He says—"small birds, size of a Black-headed gull, recognised by black wing tips, brownish mantle with white triangular patch, white head with black markings behind the eyes." He doesn't mention the forked tail.

Colquhoun follows with two North Atlantic double crossings—February/March and April/May 1958. This is the class of work from which the Sea Passage Bird List was compiled.

Serial No. 6: CHIEF ENGINEER R. L. TUCKER (m.v. Foylebank).

Gulf Ports—Panama, Australia and return to U.K.

First report from this observer. After notes on Sea and Water-birds in Gulf Ports and Rivers, he notes Audobon Shearwaters, Elliotts and Galapagos Storm Petrels and Swallow-tailed Gull off Galapagos Islands. His notes from Australian waters are similar to Harrison's, but less extensive.

Serial No. 6a :

His second report covers the same waters to Australia and thence to several Copra Ports in New Guinea and the Solomons. Panama Bay—report of Kittiwakes mixed with Laughing Gulls, if accepted, must be very exceptional. Peale's Petrel was found on board in 31°S. 173°W., identified, and later released. Off Gozo Island, Solomons, several hundred White Terns in three flocks of 100 to 200 each were wheeling and circling in beautiful precision as a unified whole, close to the water." This must have been a satisfying sight.

The following piece of information is second hand but of considerable interest. In Brisbane was told by a Mr. Neil Bryce, a keen amateur ornithologist, that on Macquarie Island in late summer a fledgling Albatross turned the scale at 28lbs. while its mother weighed a bare 16lbs.

Serial No. 7: CAPT M. J. D'OYLY (m.v. Cornwall).

Voyage to Panama, Australia, Suez, U.K.

It is difficult to comment on this report from an experienced observer. Nearly all his observations check with those previously plotted. It is a careful record which will be used in conjunction with others in making Sea Passage Lists of the route.

Serial Nos. 8, 8a, 8b, 8c: A/B D. NEALE (H.M.S. Gambia).

This observer has sent us four reports, mainly from the Persian Gulf, Arabian Sea, Indian Coast, etc. He has gained confidence as he progressed and shows great care in identification, for which he has used W. B. Alexander's book. His observations refer to birds one would expect in an area which is now closely plotted. They are valuable checks and we shall be glad of any more that he can send us. We have not previously had notes of "many" Northern Red-necked Phalarope from Karachi in December. Northern Black-headed Gulls and Little Terns were in Berbera harbour.

Serial No. 9: A/E J. O. BRINKLEY.

Notes from Far East, Indian Ocean, Persian Gulf, Red Sea, etc.

This will be Brinkley's last report for a while as he has come ashore temporarily. He has been a very keen recorder and noticed at once the dark (Scandinavian) race of Lesser Black-backed Gull in the Red Sea, while those in the Persian Gulf are mainly of the lighter race. His Far East and Japan notes are valuable as we are very scantily covered in that area.

Serial No. 10: CHIEF OFFICER W. L. FISKEN (s.s. British Sovereign).
December 1957—January 1958. Persian Gulf - Cape - U.K.

In December the Gulf of Oman was deserted of birds; so was the Indian Ocean as far as 1°N . 49°E ., when 20 Greater Frigate Birds appeared. Four Red-footed Boobies joined on the equator and chased flying fish. "One of them caught a fish in flight and landed to gorge." On the next voyage (Serial No. 10a) on 27th March, 1958, Red-footed Boobies appeared in 9°S . 45°E . and he records one which landed on the foc'sle head and stayed there for two nights and most of three days. "Catching flying fish as they flew away from the bow." This is interesting, as we have watched Boobies taking off from the bow of a ship after flying fish and, in every observable case, the bird dived and caught the fish immediately after the latter's impact with the water. In our 1957 issue we published a record from a member of Sooty Terns catching flying fish "on the wing," overtaking them from behind. This is an interesting study and one on which we should like more evidence.

Serial No. 10b: CHIEF OFFICER W. L. FISKEN.

In his third report in July 1958, Fisken records four Cape Gannets in 17°S . 10°E ., an exceptional record, but must be accepted as the recorder has intimate knowledge of this species

7th July, 1958, in $13^{\circ} 12'\text{S}$. $2^{\circ} 15'\text{W}$. the most Northerly record of the Wandering Albatross, Fisken remarks "why should the Albatross just disappear? There was no change in weather conditions and yet, by the afternoon, it was gone. Can they sense a falling wind, because by nightfall there was a rapid drop in wind?"

Serial No. 11: LIEUT. A. CURREY (H.M. Ships Mounts Bay and Opossum).
General log of commission in South Atlantic.

The recorder corroborates the reports of others on the sparseness of birds in the Bight of Benin; only a single Sooty Tern being seen in the area. It was an interesting trip round the Cape and up the other side as far as Mozambique and a visit to Tristan da Cunha, where they did not even see a Great Shearwater! There were, however, great numbers off the Cape in November. There is nothing that one can pick out as unusual in the record which is carefully and accurately kept. He corroborates the records of other observers, that the winter range of the Northern Gannet meets that of the Brown Booby in 25°N .

Serial No. 12: CADET S. J. GOODCHILD (m.v. St. Merriel).

The first report from this observer.

It refers mainly to East Coast of South America and he identifies many of the birds which one expects in that region. From an excellent description of a land bird which came on board off Brazil, we were able to identify the Smooth-billed Ani or Tick-bird (*Crotophaga ani*).

Serial No. 13 and 13a: CAPT. J. B. MITCHELL (s.s. East Bank).

Two short reports—Panama - Auckland - Suva - Gilberts - Samoa, etc.

He describes his course from Panama by Rhumb Line 253° taking them N.E. of Tahiti, thence through Cook's, passing close to Raratonga. This takes them far North of the Great Circle track used by the Mail Boats and gives them much finer weather and a fair current. They pass north of the Galapagos Islands. There is, on the whole, a lack of birds on this route compared with the Southern one.

Serial No. 14: E.A. II DESMOND CAYWOOD (H.M.S. Mounts Bay).

South Atlantic - S. America - South Africa - Tristan, etc.

A really excellent clear report with a most interesting covering letter. It was disappointing that bad weather stopped observation at Tristan da Cunha, which has happened to so many visitors. Otherwise, his records of S. Atlantic Sea birds tally with the many reports we now have of the area. He made new acquaintances everywhere and had a particularly good chance of studying the gulls in Bahia Blanca. He saw, for certain, Southern Black-backed Simeon's and Patagonian Black-headed and, almost certain, Grey-headed.

Caywood answers a query from A.B. Gibbs in *Sea Swallow* 1957 as to whether it is usual for the Southern Great Skua to feed from the hand. Caywood fed one with bread in False Bay about a dozen times, the incident being filmed by Lieut. Currey of the same ship. This went on until the Skua bit his finger, and when Caywood insulted it by putting on a leather glove the bird went for his nose which had become red with the cold wind. They then "parted company."

Serial No. 15: SECOND OFFICER W. P. CRONE (s.s. Malayan Prince) and No. 15a—April 1958.

Two short reports—Charleston - Panama - Los Angeles and Los Angeles - Manilla.

The second report covers a route of which we have very few records. The main point of interest is the Albatross distribution, summarised as follows:—

Black-footed Albatross 33° N. 121° W. to 23° N. 165° W.

Black-footed and Laysan 23° N. 171° W. to 24° N. 180° W.

after that Black-footed only to 20° N. 150° E.

Serial No. 16: SUB-LIEUT. J. BRANNEGAN (H.M.S. Gambia).

U.K. to India - Persian Gulf - Arabian Sea, etc.

This very good report, taken in conjunction with those of D. Neale of the same ship, gives us a good transect of the area.

Main points to notice: Grey Phalarope—two lots of over a hundred off Portuguese Coast (October).

Northern Phalaropes—Over 4,000 in 21°N. 60°E. (November).
“Passing at about 1,000 per hour.” Also “long lines of Wilsons Storm
Petrels running into thousands.”

In Aden in January he attempted to classify the races of Lesser
Black-backed Gulls; without any claim to great accuracy, he puts
them as follows: *L. fuscus henghilini* 200; *L.f. taimyrensis* 40; *L.f.*
fuscus 80; *L. cachinnans* was also present. In his research he used
Meinertzhagen's Birds of Arabia, and some coloured photos.

In the Arabian Sea he makes several “uncertain” records of
Reunion Petrel (*P. aterrima*). While he does not claim certainty, it is
difficult to suggest what else an all dark petrel of this size could be.
Brannegan is much to be congratulated on his accuracy and keenness.

Serial No. 17: FIRST OFFICER T. B. SCOTT (s.s. *Laurentia*) and No. 17a.

Reports of N. Atlantic crossings following the pattern of his
previous records, which are probably the most complete and valuable
notes of this route ever produced.

Report 17a comes from T.S.S. COOK and takes us from U.K. to Caracas,
Panama, New Zealand, Australia, Colombo, Suez.

In this case Scott has kept his fair Log in a notebook with a
page for each day. The value of this work can only be compared with
that of Captain Harrison. Scott was lucky to meet both Harrison and
Dr. Falla in New Zealand and had his records up to date checked by
these two experts. Dr. Falla identified Scott's photos of a Black-winged
Petrel which came on board in 39°S. 172°W. Other birds which landed
on board and were photographed where required were Leach's and
Galapagos Storm Petrels, Red-tailed Tropic Bird, Sooty Shearwater,
Sooty Tern, White-headed Petrel, Brown Booby, White-faced Storm
Petrel and Pale-footed Shearwater—an interesting lot of visitors.

Serial No. 18: LIEUT. DUPPA MILER (H.M.S. *Protector*).

November 1957— May 1958.

Apparently a Log was kept on the bridge and an extensive report
of 193 observations was made from it. It covers South Atlantic to
Antarctic, with South Georgia and other Islands. The observers had no
previous experience and Alexander and Murphy were the Authorities
used. The lists tally very well with Captain Wilkinson's of the previous
commission, and with other records of the area. A supplementary
report from South Georgia was received from Lieut. Strumbles of the
same ship.

Serial No. 21: CAPT. J. S. LANDERS (Halal Shipping Co., Aden).

Red Sea—Persian Gulf.

A short report of what he calls a disappointing voyage.

“Over ten Blue-faced Bobbies . . . zig-zagging across the swell
and working to windward. One made a vertical banked turn of about
150° at 10 feet at a flying fish—just missed—wind SSW 5-6.”

In a covering letter Landers says " May I suggest that for trips trading continuously in this area reports of first and last sightings of the commoner species at different times of the year would be of greater value than a lot of reports of the same birds all along the route.

I am thinking particularly of gulls, terns, petrels and shearwaters. The main dividing lines appear to be in Lat. 28° - 29° in the Persian Gulf, off Ras al Hadd and above the Hamish Islands in the Red Sea. In the vicinity of Ras al Hadd there is usually a marked drop in the seawater temperature; this voyage it dropped from 91° to 77° in two hours." We agree, and further suggest that day to day records of the commoner birds in this area might cease and that observers concentrate on:

- (i) Exceptional concentrations, especially having regard to lines where sharp changes of sea temperature take place;
- (ii) Unusual birds;
- (iii) Seasonal changes;
- (iv) Behaviour and other points of interest.

Serial No. 23: CAPT. A. FOWLER (m.s. Oredian—Houlder Lines).

A short report covering voyage from Freetown to U.K. March 1958. The usual birds seen. Fowler gives several observations of Skuas, which he identifies as either Arctic or Pomarine. The birds were almost certainly Pomarine, which is the prevalent Skua on this route.

This is a first report and it is hoped we may have more.

Serial No. 24: LIEUT. N. BAILEY (H.M.S. Burghead Bay).
South Atlantic—6 sheets, 58 groups of observations.

This is a very carefully kept Log and is the first instalment of a complete report. In a covering note Bailey says that he was building up his watching organisation and that in later serials the greater bird watching experience will be apparent. They were fortunate on their trip to Tristan da Cunha in having Lieut. A. B. Crawford, of the South African Naval Reserve on board. He had lived several years on Tristan and knew the birds well. He was a great help in instructing the team and in confirming early reports.

This is undoubtedly the result of very keen and careful work.

LANDBIRD REPORTS

The following have been received and a selection of them have been sent on to Mr. I. Ferguson-Lees of British Birds. Space does not allow full comment on them.

J. O. Brinkley, A/E. M.N.—Far East and to Suez Canal.
A.A. II K. Brightwell, R.N.A.S., Ford—5 Avocets over Barnham, Sussex.

Capt. E. F. Aikman, C.P.S. Co., Ltd.—2 from N. Atlantic.

H. H. Davis—U.K. to West Africa.

Capt. A. J. F. Colquhoun—U.K. Bombay, Med. and Red Sea. 2 N. Atlantic.

Ch. Eng. R. L. Tucker—N. Orleans, Panama, Australia.

Capt. G. E. Hodgson—Baltic, Persian Gulf, Cape.

W. P. Crone—2 N. Atlantic.

A/B D. Neale—Berbera, Aden, Karachi.

W. L. N. Fiske—1 Rollers off Mozambique; 2 U.K.—Durban.

Cdr. J. N. Humphreys—U.K. to Suez and East.

Capt. R. P. de R. Openshaw—Red Sea, Med., etc.

T. B. Scott—N. Atlantic.

R. L. Tucker, s.s. Foylebank—Report on racing pigeon on board in $47^{\circ} 53'N$, $7^{\circ} 31'W$. Number on rings enabled Hon. Secretary to trace through National Homing Union to owner Mr. Bayers in Scarborough.

Lt. M. C. Powys Maurice—English Channel.

A/B G. C. B. Melvin—N. Sea to Arctic.

Ord. Seaman M. D. Wortley—H.M.S. Surprise—See note.

A really remarkable contribution has come to hand from Ordinary Seaman M. D. Wortley of H.M.S. Surprise.

The period covered is March 1957 to April 1958 and the area the Mediterranean. The passage reports are good but typical and space does not allow detailed comment. An excellent description of Yellow-browed Warbler on board the ship is so clear as to remove all doubt. The very small size, green upper parts and the very conspicuous eye stripe and two white wing bars are diagnostic.

Off the East coast of Italy they passed through a very large migration of Short-toed Larks; at the peak period passing at the rate of 100+ a minute, with 20-30 resting on the awning. The majority of his observations were taken during migration times in Malta.

He speaks of his gratitude for the kind help and advice of Dr. A. de Lucca without which his records would not have been possible. He records the Spectacled Warbler as the most numerous breeding species, followed by Sardinian and the Little-ringed Plover as the commonest wader. Some of his "high lights" were 2 Collard Flycatchers, both males; Melodious Warbler at close range and described

in detail ; 5 Temmincks Stints one of which was shot by a sportsman while under observation and was later examined in the hand ; 16-18 Black-winged Stilts in Grand Harbour ; a Firecrest which allowed a very close approach and a " marvellous view of head markings." Also among them Eastern White Pelican Night Heron, Little Bittern, Woodchats, Alpine Swift, Wryneck.

On April 7th, 1958, at Salinas Salt pans large migration of wagtails all afternoon and evening in flocks up to 40 birds. Maltese were netting them and the following species were identified in the hand. Blue-headed, Black-headed, Ashy/Grey-headed; White were also present.

The greatest prize was a Yellow Shank on the same date. This must be an extremely rare occurrence. The bird allowed approach to within a few yards and was shot while under observation. It was afterwards examined in the hand.

We congratulate Wortley on a work of unusual merit.

SOME NOTES FROM THE OCEANS

A RECORD JOURNEY

Captain G. E. Hodgson (m.v. *British Reliance*) tells of two uninvited but none the less welcome ship visitors that flew aboard off the Skaw and finally reached Capetown, probably the first Blue Tit and Chaffinch ever to have been carried so far. Both birds alighted on the for'ard superstructure and in due course entered the captain's cabin attracted by a canary in a cage. They spent much time perched on the cage and were fed with tit bits and flies provided by the captain during the long voyage.

MIGRATION OF WHITE STORKS

It was a curious coincidence that the day after Captain Harrison had seen the great migration reported in notes on sea reports Commander J. N. Humphreys passed through the identical position en route to Hong Kong in s.s. *Nevassa*. The migration was still in progress and *Nevassa* intercepted a formation of some 500 birds flying 15 abreast six feet above the sea on a S.W. course. Some birds lifted to pass over the ship, others turning forward to escape the funnel gases so it seemed and then passed close ahead.

CONGREGATIONS OF SEA BIRDS

The assembling of sea birds to prey on shoals of fish is one of the most fascinating sights falling to the lot of the bird watcher at sea. We receive many interesting reports.

Second Officer W. P. Crone describes an incident off the west coast of Mexico in these words:—"The largest group we passed consisted of 500 plus birds, mainly Brown Boobies. Other birds identified in this mixed group were Pomarine, Skuas, Magnificent Frigate Birds, Cormorants and unidentified Terns. The sea was boiling with small fish being harried from below by shoals of Tuna, and from above by screaming, diving birds. I had the radar (a Decca 159 B) operating at the time, and the echo from jumping fish and diving birds remained visible to a distance of 5 miles. At the nearest approach to the ship the echo was $\frac{1}{2}$ -mile long and $\frac{1}{4}$ -mile wide.

FLYING SPEED OF SEA BIRDS

Lt. M. C. Powys Maurice, R.N., writes:—"While serving in H.M.S. "*Bold Pathfinder*" (M.T.B.) I have had a unique opportunity to assess some flying speeds. *Bold Pathfinder* normally cruises at 35 to 38 knots. Careful regard has been paid to wind speeds and the following notes have taken this into account.

Puffin: Held position on boat at 38 knots for over 3 miles; then gradually drew ahead.

Razorbill: Gained on boat at 36 knots. No wind.



Part of a concentration of Short-tailed Shearwaters (Puffinus Tenuirostris) in the Tasman Sea.
Photo by 3rd Officer R. N. Jordan. MV "Cambridge" *Kindly supplied by Captain P. P. O. Harrison.*

Cormorant : Held position 20 yards ahead for over 3 miles—speed 36 knots.

Gannet : Easily overhauls boat in any wind speed. Gliding speed must be over 50 knots.

Gulls : Nearly always misjudge speed of approach of boat. When they take off they seem unable to fly at more than 20 to 25 knots.

SEA BIRD CHARACTERISTICS—Great and Cory's Shearwaters

G. S. Willis (m.v. *British Patrol*) has this to say about the Great and Cory's Shearwater:—"There is a marked contrast between the flight characteristics of these two species, very apparent when they are seen together. The Great Shearwater's flight is rigid with stiff wing beats and intermittent glides. Cory's or North Atlantic Shearwater on the other hand has a loose mobile flight with leisurely flaps, and long undulating glides more typical of the Petrels.

YOUNG RED-FOOTED BOOBY

M. J. D'Oyly describes the bird thus:—"Head, neck and underparts whitish, suffused with grey, darker on head. Band of light brown round chest. Upper surface of wings dark brown, mantle mottled with light brown. Pale centres to under surface of wings. Tail dark brown with white tips. Upper tail coverts mottled pale brown, under tail coverts white. Bill pink with dark tip. Feet pink. Skin of face bluish The bird took passage on board for 640 miles.

SOME NOTES FROM HOME

Hoopoe.—A Hoopoe visited Capt. Tuck's garden three times at Bury, Sussex, during the first week in April, 1958.

On 30th August, 1958, Captain Casement, who had not played golf since the war, disturbed a Kestrel from one end of a bunker on St. George's, Sandwich, and what he took to be a Jay from the other end. Ill (or was it good?) fortune led him to the next bunker when out flew an unmistakable Hoopoe.

Bittern.—At Lympstone, Devon, March, 1958. R. F. Tuck flushed a Bittern from the marshland bordering the River Exe.

DANGER—KEEP OUT!

A member writes of a pair of Pied Wagtails which took no chances from human marauders this year. They built their nest inside a brick transformer station, the gates of which bore the notice "Danger—Keep Out—3,000 Volts"!!

BIRD WATCHING FROM A CAR—Birds on the bonnet

Admiral Sir G. N. Oliver writes: "On the morning of 14th January we drove our car off the Storrington—Chichester road near Amberley, Sussex, on to a grass verge skirted by a thick coppice, and started to eat our picnic lunch.

Within five minutes every branch and twig of the coppice came alive with small birds, and soon each driving mirror was adorned by an inquisitive blue tit. We threw crumbs on to the flat bonnet and through the windscreen could watch blue, great, coal and marsh tits, blackbirds, chaffinches and a pair of nuthatches eating blue cheese, crumbs and gingerbread with the greatest relish. The nuthatches managed to spear the gingerbread as they clung to the driving mirrors. Over 25 birds enjoyed this unexpected meal, fluttering back to their twigs as lorries thundered by on the main road a couple of yards away.

PIGEONS IN ST. JAMES'S PARK—ONE WING UP!

Captain Casement, while walking through the park in a sudden shower of rain on 9th September, noticed a pigeon on the path ahead lying on a list on, its weight on one folded wing. It then unfolded its other wing and held it upwards apparently intentionally to let in the rain; almost an advertisement for Amplex! It struck him as curious that even one pigeon should want to get these particularly soft feathers wet, and on looking round he was amazed to see literally dozens of pigeons doing precisely the same thing. In some cases the birds held one wing almost inside out, so that the inside pointed straight at the skyline. He writes: "I was getting too wet to wait to see if they 'Changed Arms,' but I feel that they probably did. (Editor—Was this a form of "Anting"?)

COMMENTS ON THE R.N.B.W.S. SEA REPORTS

By W. R. P. BOURNE, M.B.O.U.

For several years the Committee of the Royal Naval Bird-watching Society has been kind enough to assist me with a study of the distribution and natural history of the petrels by allowing me to examine their sea reports and extract any observations of interest. They have now shown me their reports for the last year and asked me to write notes on them from the point of view of a specialised ornithologist who wishes to make use of them. I am very pleased to do this, since I think it may be of interest to members to know the use which is made of their reports, and the opinion of an armchair ornithologist of their work, its virtues, its defects, and the ways in which they could be remedied.

I think I had better start by saying that I have the very highest opinion of the work carried out by the members of the R.N.B.W.S. in compiling these sea reports. In the past our knowledge of the appearance and distribution of sea birds has mainly been derived from a study of very inadequate series of preserved specimens in museums, combined with a few isolated field notes made by travelling ornithologists, few of whom had any previous experience of sea birds or the opportunity to spend much time at sea. In consequence, the published information on the appearance, behaviour, and distribution of birds at sea has been and remains incomplete, patchy, and frequently frankly incorrect.

The work of the R.N.B.W.S. in collecting regular observations throughout the year from all parts of the oceans is therefore now making it possible for the first time to collect full and accurate information about sea birds and their distribution; in addition, members of the society can perform other useful work in examining birds which come on board ship at sea, keeping those which die for museums, and ringing those which live so that their subsequent movements can be traced. These activities have never been undertaken on a global scale at sea before; in consequence, knowledge of sea birds has lagged behind that of land birds, and the work being carried out by the R.N.B.W.S. is breaking completely new ground and should yield outstanding results as it develops over the next few years with the increasing experience of its members.

The main constructive activity being carried out by the Society at the present time is the collection of "Sea Reports" recording the birds seen during the course of a voyage. These range from casual notes of single observations through routine lists of birds seen during voyages through well known waters to detailed reports from little known areas which provide completely new information on the distribution, appearance and behaviour of little-known species never watched alive before. The quality is noticeably improving with time, but since even the best of them frequently contain some errors, omissions

and mis-identifications, they all require expert interpretation. With experience it becomes possible to assess the incidence and significance of the errors in different reports, and extract the reliable observations from them to build up a composite picture of the sea bird community of different parts of the ocean. The first results of this procedure are already visible in the R.N.B.W.S. sea passage lists, but these are only the product of a first analysis of the earlier reports, and very much better results should be obtainable following the accumulation of further material.

The best work already compares favourably with anything carried out by the most experienced ornithologists in the past. There are, however, certain points which interest a specialised observer particularly which are not always covered adequately in all reports, and I should like to call attention to some of them.

ROUTINE INFORMATION

The basic routine information, with one important exception—water temperature—(this is very valuable)—is covered in the report sheets supplied by the society, but it is useful if it can be expanded somewhat by supplementary information.

INFORMATION

The standard report sheets include a space for remarks. The addition of supplementary information here very greatly increases the value of the notes, preferably summarised under species headings to simplify the task of analysis. Information which comes under this heading includes the weather, state of the sea, colour of the water and presence of noticeable currents, weed, or flotsam, and the occurrence of congregations of plankton, fish, marine mammals, and birds, and the species which occur together. Notes on appearance, voice, peculiarities of behaviour (including manner of flight), swimming and feeding, food, state of moult, ratio of young to adults, numbers occurring together, associated species, and the attitude of the birds to members of the same or other species and to the ship.

BIRDS OCCURRING ON BOARD

Birds occurring on board ship present unusual opportunities for collecting information, and some may be overlooked. If they can be captured before leaving, a detailed description should be made, starting above and working from head to tail, then including the underparts, wings, and legs. The colour of the soft parts in life is very valuable, since it is altered in skins; it includes the eye, eye ring, outside and inside the bill and legs. The state of moult is important; whether there are obvious new feathers on the body and whether wing or tail feathers are missing, or have not fully grown. Measurements may be very important in distinguishing between species and sub-species; you should know how to measure the bill from the feathers above, the

flattened wing from the carpal joint (angle) to the tip; the tail from the base of the central feathers; the tarsus (leg) and middle toe; all should be recorded to the nearest millimetre. Birds should be searched for insect parasites, and these, and any food which may be vomited, should if possible be preserved for identification in alcohol or formalin.

Many people hold strong views on the collection of specimens, and I would be the last to advocate indiscriminate slaughter, which has brought collectors into a very bad odour in the past: none the less, it must be recognised that a great deal of information about birds, including the identity of some species and most sub-species, can only be obtained from skins, while there are still far too few sea birds in collections. Any which can be collected, therefore, even if only those which kill themselves in the rigging, should be saved and given to one of the larger museums of the world. If the birds are skinned the skeleton and stomach contents should be kept; if they cannot be skinned, the wings, legs and tail should be kept, or the birds may be preserved in a refrigerator until it can be handed over to a museum for preservation. A new species, Jouanin's Petrel (*Bulweria fallax*) discussed later, has been found in this way within the last five years. The place of origin, date, colour of soft parts and, where relevant, sex, condition and size of gonads, should always be written on a label attached to the bird at the time of capture, in order to be sure that this essential information is not lost or misplaced.

It is also worth examining birds washed up on foreign shores or blown aboard for rings, since an increasing number of seabirds now carry them. R.N.B.W.S. have a unique opportunity for ringing birds themselves.

IDENTIFICATIONS

Finally, I should like to comment on this greatest problem, identification, one which none of us can solve entirely. Adequate descriptions of many sea birds *in life* have never been published, descriptions in even the best books such as Alexander's "Birds of the Ocean" being compiled from skins. While it is probably quite possible to recognise most of them at sea, there is still no information on the best methods. Members of the society would, therefore, be performing a very valuable service in compiling accurate field descriptions of living birds and working out ways to tell them apart. Some markings which are very conspicuous on dried skins (and quoted in all the books) are almost invisible in the field: the yellow webs of Wilson's Petrel are an example; others, on the other hand, which are hidden in skins become more conspicuous in life, such as the white flash on the wing of a skua. Many apparently similar sea birds, notably the dark, white-rumped Storm Petrels, are best told apart by such characteristics as their manner of flight. Some of the Terns are best told apart by their voices. These characters will not be found in books, and good descriptions of them are required very urgently to provide a sound basis for the identification of birds at sea.

An example of the complexity of the problem presented by identification are the dark petrels of the Arabian Sea. The records have recently been analysed by Christian Jouanin, who has shown that in fact at least four species are involved. The new species, *Bulweria fallax* (Jouanin's) in appearance a large version of Bulwer's Petrel ; the Wedge-tailed Shearwater itself ; the Pale-footed Shearwater and occasional stray Short-tailed Shearwaters—the last two migrants from Australia. All are medium-sized dark petrels. The Pale-footed Shearwater alone has a pale bill with a dark tip, that of the other three being dark (long and slender in the Wedge and Short-tailed Shearwaters and thick in Jouanin's Petrel). Jouanin's Petrel and the Wedge-tailed Shearwater have a distinctive swooping, skimming type of flight and long, wedge-shaped tails, the other two a fluttering, gliding flight with short round tails. Thus, if we take these characters together each species shows a distinctive combination :

Jouanin's Petrel :

Short, thick, dark bill ; long wedge-shaped tail, swooping flight ; rather small.

Wedge-tailed Shearwater :

Long, slender, dark bill ; wedge-shaped tail ; swooping flight ; medium in size.

Short-tailed Shearwater :

Massive, straw coloured bill with a dark tip ; short round tail ; fluttering flight ; large.

Other difficult groups, such as the terns or storm petrels, can be told apart by a similar analysis of key characteristics, although at the present time they are only too commonly confused with each other.

BIRD NAVIGATION

BY COMMANDER J. N. HUMPHREYS, R.N.

Bird navigation is part of the bigger problem of migration. It therefore seems wise to state a few assumptions about migration before discussing a theory for navigation.

ASSUMPTIONS

These are :—

- (a) That birds have an inborn sense which indicates the direction to the place of their birth ;
- (b) That, by means of this sense of direction, they are in general attracted to their birthplaces in the spring and summer and repelled from them in the autumn and winter ;
- (c) That a land bird will not blindly follow this sense of direction to the extent of flying out over the open sea, unless there is no other land in sight ahead in the general direction of advance.

To these should be added the "law" expounded by Captain Bernard Acworth in his various books—that birds feel no wind other than that of their own making "straight down the beak" and, like any other aerial bodies, are entirely subject to the speed and direction of the air current in which they find themselves. Their way made good over the ground must therefore be the product of a triangle of forces.

A FLIGHT OF FANCY

Without going into the basic *reasons* for migration, we might now take the case of a Swallow who heads away from his birthplace in Denmark one day in late August. Initially with variable winds he may not wander far in his search for food, but as prevailing northerlies set in he moves south through Germany, takes the Alps in his stride and meets the Mediterranean near Genoa.

His basic urge to "get away from home" would here take him out to sea, but the coast stretches to south-east and south-west. The slant of the wind decides the issue and he follows on down the Italian coast to Sicily. Now he must take the plunge—no more land in sight to the south but the urge is still there!

He is truly at the mercy of the wind, for once out of sight of land he can only go on heading "away from Denmark." A south-westerly gale, carrying him away to the east out of sight of Malta, might so lengthen his time of flight that he would fall exhausted into the sea before reaching the African coast somewhere in Cyrenaica.

But suppose he sights a ship before this happens. If he sees it soon after leaving land he may ignore it or continue on his way after circling a few times. A ship is not a well-known object to a landbird ;

in fact its strangeness, noise and human activity would normally repel rather than attract. But to a bird at the limit of its endurance a ship may well represent a piece of land ; something solid on which to perch and search for food, and at least more attractive than the sea itself.

So our Swallow may perch in the rigging for a while, catch a few insects if he is lucky and perhaps sleep. After a time the urge to continue will overcome the need for rest and he will fly on to the south, still guided by the inborn sense of direction away from Denmark.

OTHER CONSIDERATIONS

This has been a flight of fancy, but it is based on recorded observations in the Mediterranean and may not be far from the truth.

It seems unnecessary to suppose that birds have the power of sensing the direction in which the nearest land lies. It would not necessarily help them if they had. The nearest land geographically might lie in quite a different direction to that of the nearest on a migrant's curve of flight in the wind at the time.

Sometimes landbirds stay with a ship for several days and it will often be found that this is when the ship is heading in the general direction of migration. A ship on passage down the Red Sea in the autumn is an example.

It is doubtful whether the sun or moon has any direct bearing on the matter. Migrating birds seem to have an urgency which sometimes carries them on into the night even over land. Over the sea they must continue when darkness falls if there is nothing in sight to perch on, and on a moonlight night one would expect more to be able to see a ship and thus have the opportunity to come aboard.

CONCLUSION

It is suggested that migrating birds find their way over the sea in exactly the same way as they do over land—by following their sense of direction based on their place of birth, subject always to air currents and their ability to head visually for an object should they require to do so.

THE BIRDS OF CHRISTMAS ISLAND (PACIFIC)

BY COMMANDER J. G. V. HOLT, R.N.

I have recently returned to this country after a year on Christmas Island, just north of the Equator and 1,200 miles due south of the Hawaiian Islands. It is the largest coral atoll in the world, having a coastline of over 100 miles and covering 35 miles between its furthest points. Life for the two or three thousand odd Servicemen stationed on the Island to carry out the Nuclear Tests can be hard work, but there is a considerable variety of pursuits available when spare time allows.

I provided myself with a new camera on leaving this country, and having been delayed, on my second day on the Island, by a Sooty Tern Colony stretching for half-a-mile along the road, it was natural that I should take to bird photography. Furthermore, as the majority of birds, especially during the breeding season, become very tame, or perhaps brave, one did not require to be more than an amateur at either bird study or photography.

There are about twenty varieties of bird that either inhabit the Island or migrate through it, and all except one are seabirds or waders.

Of the Tern family, Sooty Terns arrive by their thousands, nest and disappear twice a year. The single egg, laid on bare ground, is preyed on by wild cats and rats, and by the Gilbertese, who call the Sooty the "Egg Bird." Frigate Birds often hover over the colonies when the young arrive, presumably to snatch the regurgitated food brought by the parents, or even to grab the young themselves and it is a wonder that the Sooties ever bothered to return to the same inhospitable spot each time.

The Crested Tern is much more wary and only nests on one small Island in the Lagoon in relatively small numbers. The White or "Love" Tern, with its bright blue beak and delicate blue sheen on its white feathers makes a peaceful contrast to the noisy Sooties. It lays its single egg precariously on a branch of a tree, and presumably it builds a nest later, as young White Terns have been found in well-made nests in trees and bushes.

Three types of Noddy, which are members of the Tern family, breed on the Island in nests in bushes and low trees. The Common or Brown Noddy has an unfortunate habit of being curious and flying straight at a visitor, which can be quite alarming to a newcomer. The White-capped Noddy which breeds in the same colonies as the Brown Noddy can only really be distinguished from the latter by its smaller size as their white caps are not always white, and the Brown Noddies' cap is often light grey. Blue Grey Noddies which are not so common, are delightful little birds, and breed locally. Their nests are built on the ground in tufts of grass and are difficult to find.

Of the three types of Booby that live on the Island, the Red-footed is by far the most common, most tame, and most stupid. It breeds all the year round—perhaps it doesn't know whether it is Christmas or Easter—in an untidy nest of sticks in low trees and bushes in small colonies anywhere on the Island. The Blue Faced Booby which is less common, breeds on the ground, while the Brown Booby is relatively rare, but joins up with the Red-footed colonies when breeding.

By far the most attractive resident is the Red-tailed Tropic Bird, which breeds very discreetly on the ground under bushes, usually near Booby or Frigate colonies. Their display flight is entertaining and as they seem unable to obtain much aerodynamic control from their long red spike-like tails, they make full use of their small webbed feet. The immature birds are speckled black and white with a white bill and have no red tail at all.

If the Tropic Bird is the most attractive, the Frigate Bird is the most spectacular. The Great Frigate is fairly common on the Island, and it is possible that the Lesser Frigate also lives there but it has not been positively identified. The Great Frigates breed in definite colonies in the early summer, and the male develops a large red pouch under its chin which is inflated when the bird is excited. Although these large birds look black from a distance, their plumage has a green iridescent sheen, and their alarming looking beaks and eyes, and the necks of the females, vary considerably in colour. Their nests are untidy and precariously perched on low bushes. It is common for these birds to be seen "hanging on the wind" in the evenings over the lagoon, waiting for some unfortunate Booby or Tern to catch a fish. The Frigate then "falls out of the sky" at great speed and chases the alarmed catcher until he releases his fish.

Christmas Island has only one bird named after it—the Christmas Shearwater. This bird nests in burrows in soft sand on the Islands in the lagoon and can often be seen flying through the coconut plantations. It shares its colony with the Phoenix Petrel and the ground is riddled with burrows which are very handy for the local rats and large land crabs. The moaning cries of these birds at night in the breeding season are most disturbing.

The two local waders are the Pacific Golden Plover and the Wandering Tattler. Although both of these birds are relatively common on the beaches, the Golden Plover can often be found on the roads, scavenging on the remains of land crabs which have been slow to develop any road sense.

Migrants include Pintails, Bristle-thighed Curlews and occasionally Turnstones, though various other types of birds have been reported passing through.

The only "land bird" on the Island is known locally as the Christmas Island Warbler or Kokikokiko by the Gilbertese (*Conopodas aequinoctialis aequinoctialis*). It is relatively rare and difficult to approach, and breeds in hollows in the trees.

Although numbers of species of birds are limited, Christmas Island can be said to be a bird watcher's paradise owing to the closeness to which birds can be approached. For this fact it must be regretted that it has been inevitable that a number of birds, mostly Boobies, have been killed or maimed in the recent Nuclear Tests. It is impossible to avoid this happening. Indeed before one test a naval-inspired expedition removed some 135 birds of four species from an area of the Island where they might be affected. This expedition, which flew the quite unofficial and temporary flag of the non-existent Royal Naval Society for the Prevention of Cruelty to Animals, consisted of a combined party of sailors and soldiers, well gloved, who caught and removed the birds to a place of safety until after the test. The birds were then released and all except the very young survived, but it would, of course, have been impossible to ensure that any given area of sea, land and air was free of birds before a test. Some sacrifice must always be made in the cause of Science.

THE WANDERING ALBATROSS

BY REAR ADMIRAL SIR WILLIAM JAMESON, K.B.E., C.B.

A careful search of the published information about the Wandering Albatross showed that there are still many gaps in our knowledge of *Diomedea exulans*. Important points upon which more data is needed are these.

1. Are the young birds abandoned by their parents in June to sit out the winter on the nests, living on their own fat?

They cannot fly and forage for themselves, and it is only when the breeding birds return in November that the youngsters take to the air. So far as I know it has not yet been possible to keep nests under constant observation throughout the Antarctic winter, but when the sites have been visited no old birds have been seen. They may return at infrequent intervals to feed the young. The presence or absence of adult birds in fairly large numbers within two or three hundred miles of the sites—South Georgia, Gough Island, the Prince Edward and Crozet Islands, Kerguelen, Macquarie, Auckland, the Antipodes and Campbell Islands—in July, August, September and October would throw some light on this problem upon which expert ornithologists at present disagree.

2. Do adult birds breed every year or bi-annually? Only extensive ringing will prove the point, but if adolescent (half-white, half-dark), middle-aged (more white than dark) and old (mostly white) birds are often sighted at a considerable distance from the nests from December to April, when eggs are being incubated and young birds fed at frequent intervals, it would suggest that many older birds are bi-annual breeders. In December, January, February and March cock and hen are frequently seen together at the sites. Birds over the open ocean more than 1,000 miles from the nearest breeding ground are probably non-breeders; e.g. between 90 and 150 degrees W. or 90 and 120 degrees E.

3. Do the predominantly dark juvenile birds wander far from the nest whilst still in this plumage? Have youngsters in the black-brown phase been recorded more than 500 miles from a nesting site?

4. What happens to the birds in really bad weather? It has been frequently noted that, at the height of a storm, no Wandering Albatrosses can be seen. The birds which have been following a ship disappear, but they come back again very quickly when the weather moderates. Do they sit out the gale on the water? Maximum wind-strengths when birds are still flying around would be of value.

5. Is there any evidence that Wandering, as opposed to Royal, Albatrosses continue to associate when at sea? Royals are thought to mate for life (Richdale), but most experts consider that Wanderers pair for the breeding season only. Hens are readily distinguishable by their dark crown-patch.

6. Does the Wandering Albatross usually fly at night as well as by day?

Some must be airborne in the dark hours for there are many instances of birds with distinctive marking accompanying ships steaming at comparatively high speeds for 4 or 5 successive days. It is notable that most of the followers vanish during the dark hours, numbers in sight being lowest at dawn and a maximum at, or just before, dusk. It is often light enough to see so large a bird throughout the night, and reports of sightings in the dark hours would be of value.

7. Some Wanderers have a narrow collar of rusty pink round their necks, or pink staining on one or both sides of the head. During which months of the year have birds with this pink marking been seen? It is thought by some to denote breeding birds, but observations on the southern nesting sites fail to confirm this.

Notes on the colour of the eyelids, which varies from greenish-white to bright blue and bright pink would be useful in sighting reports.

It is also suggested that the four general plumage phases as in question 2 above—old, middle-aged, adolescent and juvenile should, if possible, be used. As is well known the *under* side of the wings is white in all phases except the very youngest juveniles.

WILLIAM JAMESON.

AUKS IN THE NORTH ATLANTIC

BY CAPTAIN E. F. AIKMAN, S.S. "BEAVERCORE"

W. B. Alexander, in "Birds of the Ocean" says of Auks that "they spend their time at sea . . . usually not occurring very many miles from land." It is this latter remark that prompts me to write this note.

For the past five years, on voyages between Great Britain and adjacent European ports, and the east coast of Canada, I have kept a daily bird note-book at sea (the first Auk records are in November, 1952) and have a number of records of Auks very far from land. In the accompanying track chart only those records occurring outside the 100-fathom line are plotted as this seems to me to form an approximate boundary between the habitat of "coastal" and "pelagic" birds.

With the exception of breaks between August, 1954, to March, 1955 (inclusive) and January to March, 1956, I have been fairly constantly at sea and my daily observations have been kept between 0800 and sunset.

So far as I know there are no birds in this part of the North Atlantic which could be mistaken for Auks. Dovekies (*Plautus alle*) are recognisable by their small size and very rapid wing movements, and Puffins (*Fratercula arctica*) should also be recognisable if a reasonably good view is obtained. My difficulty has been when observing under average conditions at sea to distinguish between Guillemots (Common, *Uria aalge* and Brunnick's, *Uria lomvie*) and Razorbills (*Alca torda*), and I have never yet definitely identified Razorbills on my voyages.

Whenever certain recognition has been possible between these two the birds have always been Guillemots.

It will be seen from the chart that the majority of the records are west of longitude 30°W, with the greatest concentration in the vicinity of the Flemish Cap. (This is a bank about 50 miles North/South and 35 miles East/West, with a least depth of 60 fathoms). There is a notable gap between 19° and 28°W, and all records east of 28° W., except number seven, are of Guillemots (with reservation as to accuracy of identification regarding Razorbills).

Periods during which the various ocean tracks are in use

- D. February to April.
- E. December to February, April and May.
- F. May to opening of Belle Isle Strait.
- G. Opening of Belle Isle Strait (usually June or early July, but may be latter end of May) to November.

D track, though not often used, is of interest in that it skirts the extreme southern edge of the Grand Banks, and at times meets the Gulf Stream.

Number of passages made

Via Inishtrahull: G track 7, F track 3, E track 8, D track 0;

Via Bishop Rock: G track 30, F track 6, E track 16, D track 3.

Total: 73 voyages.

Number of records each month (in brackets, number of times each month has been observed):

January 2 (3), February 2 (2), March 4 (2), April 7 (4), May 9 (2), June 3 (5), July 0 (5), August 0 (3), September 0 (3), October 5 (3), November 9 (4), December 2 (4). Total 43.

Most of the observations are of individual or very few birds, but the following are perhaps worth recording here:

(6) 14th March, 1953—Many Guillemots in groups up to two dozen;

12th April, 1955—Numerous Guillemots and Dovekies.

(15) 3rd May, 1955—Eighteen Dovekies in two groups.

(16) 13th May, 1955—Groups of Auks up to $1\frac{1}{2}$ dozen each. Dovekies certain and some Guillemots (probable).

(21) 17th June, 1955—Approaching open field ice. Many Auks in groups up to 20 each, all Dovekies. Two Guillemots.

(27) 22nd April, 1956—The most easterly Dovekie record. Several groups about $\frac{1}{2}$ to 1 dozen each of Dovekies. A few Guillemots.

(28) 1st May, 1956—Very large numbers of Dovekies. Few Guillemots.

(30) 31st May, 1956—Several groups of Dovekies in small and large groups. A few Guillemots.

(32) 12th November, 1956—Several groups of Dovekies, about $\frac{1}{2}$ -dozen each.

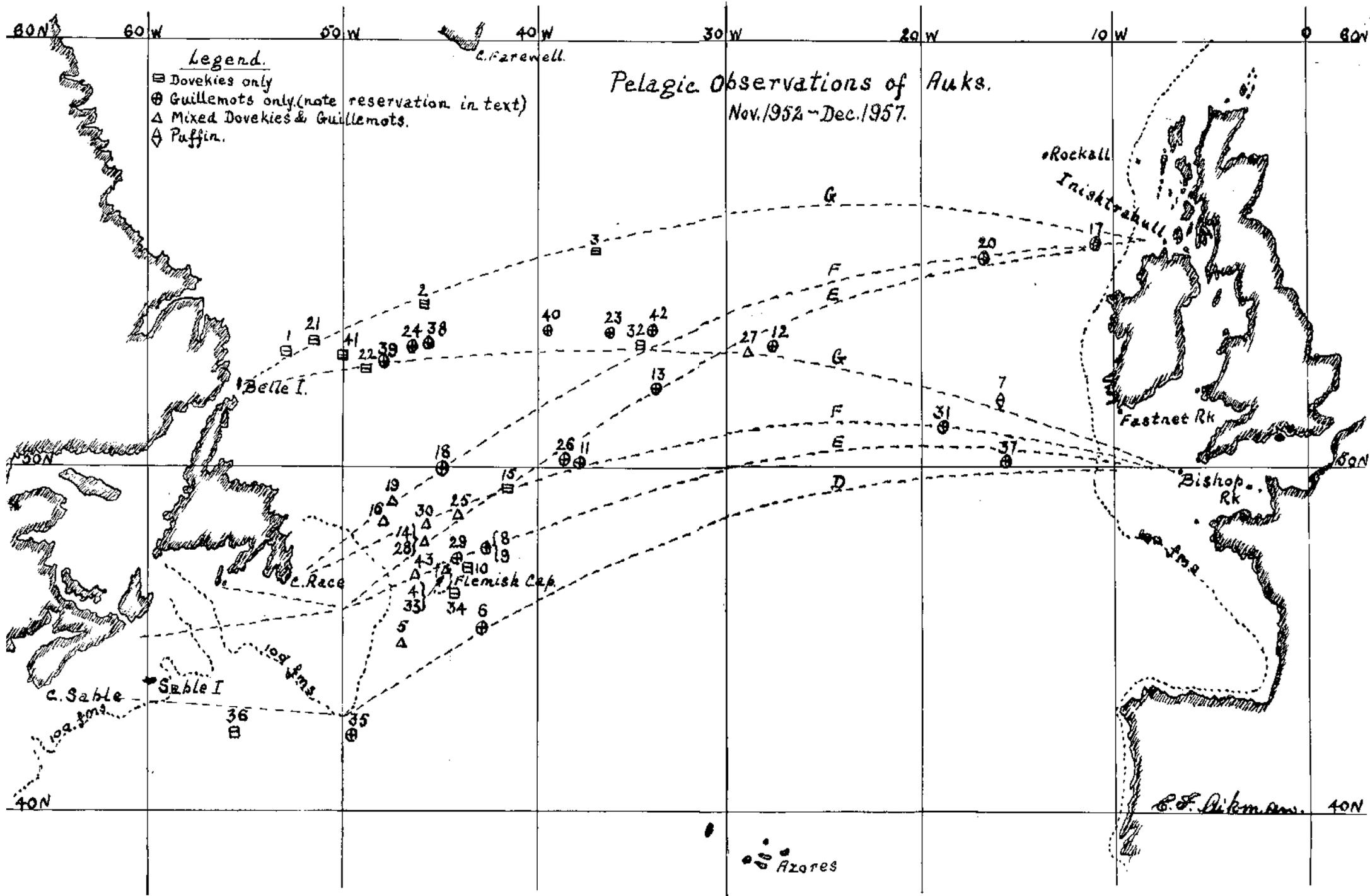
(40) 10th November, 1957—Guillemots in groups up to $\frac{1}{2}$ -dozen.

(43) 17th December, 1957—Guillemots and Dovekies.

Seventy-five per cent. of all records include Guillemots and 50 per cent. Dovekies, but in numbers the Dovekies are greater.

Record number 7 represents the only Puffin record (2nd November, 1953). The bird was washed on deck! and stranded.

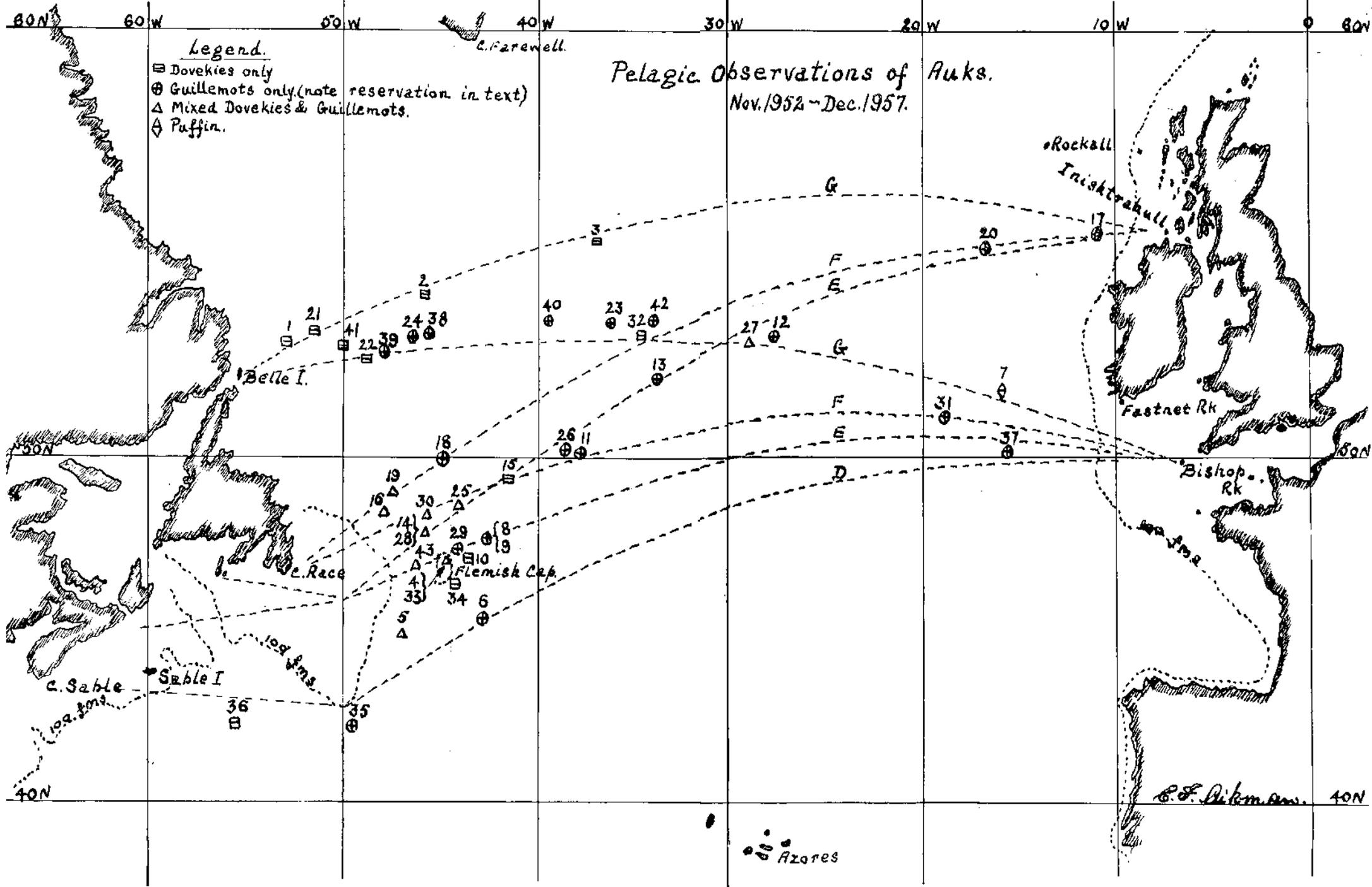
The 100-fathom line of the Newfoundland Banks is in parts over 200 miles from the coast. Flemish Cap is separated from the Grand Banks by about 100 miles of deep water and seems to have some influence on local bird population, but I have crossed this area without seeing any birds over it.



Legend.

- ☐ Dovekies only
- ⊕ Guillemots only (note reservation in text)
- △ Mixed Dovekies & Guillemots.
- ◇ Puffin.

Pelagic Observations of Auks.
 Nov. 1952 - Dec. 1957.



Whilst I myself have noted and others have confirmed that the presence of gulls outside the 100-fathom line almost always seemed to be associated with bad weather, in the case of Auks the coincidence of bad weather and Auks in pelagic areas seems to have no relation.

I do not offer any definite conclusions from these observations. They represent the work of a single observer (and one that does not claim to be an expert). Although all months of the year have been covered two or more times no one region has been completely covered throughout the year, due to seasonal variations in the ocean routes. My work will be of no value if I do not express some degree of doubt in my notes when, positive identification has not been possible. I think that the Dovekies are generally positive identifications, but of Guillemots I think the records noted have been in the main Guillemots, but I cannot be sure of Razorbills.

Finally, to wind up this note, I have this day (17th December, 1957) crossed the Flemish Cap 320 miles East of Cape Race and during the forenoon Guillemots and Dovekies were present in numbers, all flying West and North West.

ON BIRD NAMES

BY N. BAILEY

A recent voyage to the Tristan da Cunha archipelago proved to be interesting in an unexpected way. What impressed me was the knowledge and keen interest the Tristan Islanders took in their indigenous avifauna, and more particularly, their use of Bird Names not commonly associated with the birds themselves. The authorities on these isolated islands include these local names in parenthesis, but venture little comment upon them, and I was fortunate in being accompanied by A. B. Crawford, F.R.G.S., who pointed out the existence of such names. He had spent several years on Tristan, and subsequently, during his survey of Marion Island, where he named the prominent landmarks after the local birds, he used some Tristan vernacular.

The interest of the Tristan vernacular names lies in the fact that they often preserve the bird-labels used throughout the ages, as opposed to the arbitrary designation of the ornithologist, who of necessity, could only make a cruise or two in the Southern Seas. Consider the Tristan name for the Storm Petrel—Skip-jack—The various species to be found near the Islands have vernacular names as follows :—

	<i>Storm Petrel</i>	<i>Vernacular</i>
Oceanites oceanicus	Wilson's	Skip-jack
Garrodia nereis	Grey-backed	Littlest Skip-jack
Fregetta grallaria melanoleuca	Tristan	White-bellied Skip-jack
Pelagodroma marina	White-faced	White-faced Skip-jack

Those, who have seen the massive cloud-capped pyramid of rock rising out of the sea, and near the ship, the black and white fluttering flash of birds skipping and dancing on the waves, will appreciate how evocative is the name Skip-jack, and how descriptive of the birds themselves. Skip-jack is a description, both memorable and concise, that could be used with little difficulty ; and I turned my Rough Bird Log over to this and other vernacular names with considerable benefit.

The Tristan Islanders have distinctive names for their Albatrosses, and it is not surprising that they perpetuate the traditional names. The vernacular names are as follows :—

	<i>Albatross</i>	<i>Vernacular</i>
Diomedea exulans dabbenena	Tristan Wandering	Gony
Diomedea chlororhynchos	Yellow-nosed	Molly
Diomedea melanophrys	Black-browed	Cape Molly
Phoebetria fusca	Sooty	Peeoo

Most interesting is the possible derivation of Peeoo ; Murphy when referring to the Light Mantled Sooty Albatross (*P. palpebrata*) says the vernacular names such as Piew and Pee-arr are taken from its

peculiar call at the breeding grounds, and Captain Comer is quoted as describing the Sooty Albatross on Gough Island as keeping a continual cry whilst on its nest; this cry he compares with that of a young goat. I note, however, another vernacular name is Stinkpot, and it may be that another sense organ than the ear was disturbed. These names have the virtue of brevity, individualism, and tradition. The Yellow-nosed Albatross admittedly has a yellow nose, but so does the Grey-headed; and the Black-browed has a *wholly* yellow bill. It should be remembered that the birds can be accurately identified by the Linnæan system—*D. chlororhynchos* - *chrysostoma* - *melanophrys*—and the use of a lay-language for description should have certain additional objectives. These are: to identify accurately; to be the most commonly used identification and therefore the most widely understood; and to be an identification inspired or suggested by the bird itself. An example is Shearwater, and later observation was to suggest that White-collared Skip-jack was a better description for *Oceanodroma hornbyi*, than Hornby's Storm-petrel.

The Tristan Petrels have the more unusual name of Haglet in various forms, though the Greater Shearwater (*Puffinus gravis*) is simply called the Petrel because of its overwhelming numbers. The Rock-hopper Penguin (*Eudyptes crestatus*) is known as the Pinnamin and the Tristan Skua (*Catharacta skua hamiltoni*) as the Sea Hen. This last description labels the Skua excellently, with its dun colour, scraggy back-yard appearance, and ungainly heavy flight. The Giant Petrel (*Macronectes giganteus*) retains his common names of Nellie or Stinker, and the Brown Noddy (*Anous s. stolidus*) surprisingly becomes the Wood-pigeon, though this is perhaps explained by what I saw on Nightingale Island, where a pair of Noddies were ferrying twigs, and what I thought was kelp-weed, up to their nest on the cliff.

The other vernacular names used by the Tristan Islanders for their sometimes unique avifauna, were generally only of passing interest. An exception might be the King Bird for the Tristan Tern (*Sternav. vittata*) which I occasionally saw far out to sea. As I have said, I turned my Log over to vernacular when I discovered the existence of less 'bookish' bird-names, and a typical entry runs as follows:—

- 6 Gonyes
- 1 Peeoo
- 20 G. Shearwaters
- 4 Whale Birds
- 1 Sea Hen.

I noticed that more interest was soon forthcoming in the sea-birds round the ship, and I concluded from my experiment, that this increase owed much to the new labels which now smacked of salt-water and not the formalin of the dissecting table.

TIBESTI—A BIRD SANCTUARY IN THE SAHARA

BY LIEUTENANT RODERICK TUCK, ROYAL MARINES

In the centre of the great Sahara Desert there is a range of mountains extending over an area as large as Ireland. The plateau stands at four thousand feet but some of the higher peaks rise to over ten thousand feet. Owing to the altitude and comparatively heavy rainfall, the vegetation in this region is very different from that in the surrounding desert. The mountains themselves jut upwards in grotesque, rocky outcrops, but the waddis are full of acacias, doum palms and fig trees. Hidden in the gorges many waterholes remain full even in the driest seasons and running streams are occasionally found. There is no scarcity of animal life in these parts; mouflon live in the lonely heights of the mountains, gazelle graze in large numbers in the waddis and the rocks are alive with lizards and scorpions. Baboons have been seen near the oasis of Zouar and at Lake Ounianga five-foot crocodiles infest the waters.

This remarkable but little known mountain range is called Tibesti.

In the summer of 1957 I was lucky enough to go with a Cambridge University expedition to this area. Ornithology was not one of the party's aims, but such an opportunity could not be missed and a careful record was kept of all the birds we saw.

A number of lists had already been made of the birds of Tibesti. Of the more recent records probably those of R. Malbrant and K. M. Guichard are the most complete. Some of the birds are resident, but a large number simply visit for nourishment and rest during their long migratory flights. In all, about seventy different species had been recorded and I was fortunate enough to see a further four.

The birds of Tibesti divide themselves naturally into three groups according to their habitat. Some keep themselves exclusively to the mountains, others remain in the waddis, whilst a number are of general distribution. As the mountains are a great deal more barren and open than the waddis, the birds recorded were fewer. Of the larger ones, the Tawny Eagle (*Aquila rapax*), Lanner (*Falco biarmicus*), Kestrel (*Falco tinnunculus*) and Crowned Sandgrouse (*Eremialector coronatus*) were in particular evidence. They rely less on the proximity of the lush oases for their livelihood, although they undoubtedly know the whereabouts of all the local gueltas. The only small birds that kept to the mountains were the Bar-tailed Larks (*Ammonanes cinctura*) and Desert Larks (*Ammomanes deserti*). Neither species were common, but when they were seen they were usually in pairs.

Naturally enough, the greatest bird population is found in the rich vegetation of the waddis. The palmeries are full of doves which were either of the Pink Headed (*Streptopelia decaocto*) or Laughing (*Stigmatopelia senegalensis*) varieties. The other pigeon in Tibesti is the Rock Pigeon (*Columbia livia*) which was seen in great numbers

flying high up in the cliffs of many of the mountain waddis. In similar rocky areas Crag Martins (*Ptyonoprogne obsoleta*) were often noticed gliding and planing about on their delicate, almost transparent, wings. Swifts were seen on two occasions, but it was never possible to identify them. This was unfortunate, as they had not been listed before and it would have been interesting to confirm a definite species. Two handsome birds often found in the oases were Tibesti Bulbuls (*Pycnonotus barbatus*) and Grey Shrikes (*Lanius excubitor elegans*). Less noticeable because of their quieter habits were the charming little Black Tailed Chat (*Cercomela melanura*) which I often noticed feeding in the shrubs and bushes. Fulvous Chatterers (*Argya fulva*) often accompanied them, chasing each other from one bush to another or skulking noisily in the undergrowth. The most interesting discoveries were made at two ponds near a small mountain oasis called Yebbi-Bou. Moorhens (*Gallinula chloropus*) were found nesting and a Glossy Ibis (*Plegadis falcinellus*) was recorded for the first time in Tibesti during the summer. The existence of a breeding colony of Moorhens is remarkable, but is probably a relic of a period five or six thousand years ago when the climatic conditions of the Sahara were a lot more favourable to animal life. Three other migrants besides the Glossy Ibis were seen during the summer, namely the European Roller (*Coracias garrulus*), Hoopoe (*Upupa epops*) and Rufous Warbler (*Erythropgyia galactotes*). The Roller was probably returning south rather earlier than is normal, but the sight of the other two species in pairs suggests that they breed in Tibesti. Of the remaining birds, Golden Sparrows (*Auripasser lutea*) and Buntings (*Fringillaria striolata*) were both recorded, the former being very common.

Of the birds that could be seen regularly in both the waddis and the mountains, the vultures and ravens were most noticeable. The vultures are the very common Egyptian species (*Neophron perenopterus*) and the huge Nubian (*Torgus tracheliotus*). The two local ravens are the Brown Necked (*Corvus corax ruficollis*) and Fan-tailed varieties (*Rhinocorax rhipidurus*). I saw only one Denham's Bustard (*Neotis denhami*) in Tibesti and these birds must be considered rather uncommon. Quail were found for the first time, which was exciting. They were of the European species (*Coturnix coturnix*), but were expected to be found in Tibesti before long. Finally, there was the Black Wheatear (*Oenanthe leucopyga*). In habits this charming little chat reminds one of the English Robin, lingering near people and flying from one favourite perching place to another.

I found Tibesti a marvellous place to watch birds. Like the sea, the limits of the desert often seem endless and the appearance of a living thing is a great joy. There is not great scope for ornithology, but walking amongst the palmeries in a mountain oasis, hearing the calls of many birds one already got the impression of tropical Africa, and it is hard to believe that there are still eight hundred miles of waste and desolation before the luxuriant vegetation of Central Africa is reached.

BOOK REVIEWS

"PORTRAIT OF A WILDERNESS."—The story of the Coto Donana Expedition by Guy Mountfort, illustrated by ERIC HOSKINS. Hutchinson 30/-. (Note by Editor : Lieutenant Colonel A. J. S. Tuke, who will be remembered by many members who have visited Gibraltar, has prepared the following review).

"Portrait of a Wilderness" is a description of the vast area forming part of the delta of the Guadalquivir known as the Coto Donana and Las Marismas. The owners of this naturalists' and sportsmen's paradise kindly put the whole area at the disposal of three parties of scientists who went there in 1952, 1956 and 1957 under the leadership of Guy Mountfort.

The book is chiefly an account of the ornithology of the district, but it is not entirely confined to birds, and there are most interesting descriptions and photographs of the whole area itself, its history, the people who inhabit it, and of its whole fauna and flora.

Very little has been written about the area since Chapman and Bucks' "Wild Spain" at the end of the last century.

This magnificent book, with its wonderful photographs, many in colour of rare and beautiful birds, including the Spanish Imperial Eagle and Azure Winged Magpie, neither of which have ever been photographed before, will be widely sought after by all who are interested in this fascinating part of Andalucia. Many of the birds mentioned can also be seen in other parts of the Mediterranean, including Malta, during seasonal migration.

"THE WANDERING ALBATROSS" by William Jameson. Rupert Hart-Davis 16/-.

In this handy-sized monograph Rear Admiral Sir William Jameson, a member of R.N.B.W.S., has delved deeply for every source of information not only into the habits, breeding cycle, plumage and extent of ocean travels, but has included an illuminating study of flight technique, and a chapter on the history of the Fables about this mightiest of ocean birds.

This very readable little book contains many extracts from the logs of the early explorers sailing the Southern Oceans, and is admirably and profusely illustrated with photographs by the Duke of Edinburgh, Niall Rankin, L. Harrison Matthews and others, with delightful drawings by Peter Shephard.

NEW MEMBERS 1957-58

ALLEN, E. A.*	... ..	Chief Wren, W.R.N.S., R.N. Air Station, Abbotsinch.
BIRNIE, A. (M.B.E., J.P., B.SC.)	... ..	Lieut. Commander, R.N.V.(W.)R.
	(Agr.) ...	
BRACKENBRIDGE, W.	... ..	Able Seaman, M.N., T.S.S. "Captain Cook."
CLARKE, R. A.	... ..	Lieutenant R.A.N., H.M.A.S. "Voyager."
CRONE, W. P.	... ..	Second Officer, M.N. (Sub-Lt. R.N.R.), S.S. "Malayan Prince."
DANNREUTHER, H. H.	... ..	Captain, R.N., Amphibious Warfare H.Qs.
ELLIS, A. E.	... ..	Ldg. S.B. (O), R.N., H.M.S. "Owen."
FOWLER, A.	... ..	Captain, M.N., M.V. "Oredian."
GILCHRIST, W. L. R. E.	... ..	Lieutenant, R.N., H.M.S. "Floriston."
GOODALE, W. T.	... ..	Chief Officer, M.N., C.S. "Mirror."
HOLT, J. G. V.	... ..	Commander, R.N., H.Qs. Task Force "Grapple."
HUGHES-GAMES, G. M.	... ..	Sub-Lieutenant, R.N., H.M.S. "Carysfort."
JAMESON, SIR WILLIAM		
	(K.B.E., C.B.) ...	Rear-Admiral.
KERR, M. W. B. (D.S.C.)	... ..	Commander, R.N., H.M.S. "Armada."
KNELL, V. G.	... ..	Able Seaman, R.N., H.M.S. "Owen."
LOGAN, J.	... ..	Chief Officer, M.N., R.F.A. "Airsprite."
NEALE, D. M.	... ..	Able Seaman, R.N., H.M.S. "Gambia."
NEWNHAM, I. F. M.	... ..	Captain, R.N.
PITT-KETHLEY, R. S.	... ..	Reverend, Hon. Chaplain, Sea Cadet Corps.
SENDALL, R. G., Esq.	... ..	Clerical Officer (Admiralty), R.N., Aircraft Yard, Fleetlands.
STOKES, E. H. G.	... ..	Commander, R.N.
SWIFT, J. C.	... ..	Apprentice, M.N., M.V. "British Pioneer."
WHITE, P. J.	... ..	Second Officer, W.R.N.S.
WILLING, D., Esq.	... ..	(Ex-Lieutenant, R.N.V.R.).
WRIGHT, D.	... ..	Lieutenant, R.N., H.M.S. Eagle.

* Denotes Original Life Member.

R.N.B.W.S. REFERENCE BOOK LIST

(REVISED 1958)

AREA	TITLE	AUTHOR	PUBLISHER
WORLD'S OCEANS	<i>*Birds of the Ocean</i> <i>*Supplied to Ships'</i> Reference Libraries.	W. B. Alexander.	Putnam & Co., 42 Great Russell St., London, W.C.1. Rev. edition 21/-.
NORTH ATLANTIC.	<i>Sea Birds</i>	J. Fisher. R. M. Lockley.	25/- Collins 14 St. James Place London, S.W.1 1954.
BRITISH ISLES	1. <i>The Popular Handbook of British Birds.</i> 2. <i>Collins Pocket Guide to British Birds.</i> 3. <i>Bird Recognition.</i> Vols. 1, 2 (3).	P. A. D. Hollom. R. S. R. Fitter. R. A. Richardson. J. Fisher.	45/- H. F. & G. Witherby, Ltd., 5 Warwick Court, London, W.C.1 1952 21/- Collins. 1952. Pelican Series. 1947-1951.
IRELAND	<i>The Birds of Ireland.</i>	Kennedy. Rutledge. Scroope.	42/- W. & G. Foyle, Ltd., 119 Charing Cross Road, London, W.C.2. 1954
BRITAIN AND ALL EUROPE	<i>A Field Guide to the Birds of Britain and Europe.</i>	R. Peterson. G. Mountfort. P. A. D. Hollom.	25/- Collins. 1954
SOUTHERN SPAIN AND GIBRALTAR	<i>An introduction to the Birds of Southern Spain and Gibraltar.</i>	A. J. S. Tuke.	5/- Garrison Library Printing Offices, 2 Library Gdns., Gibraltar. 1953.
PORTUGAL	<i>The Birds of Portugal.</i>	W. C. Tait.	16/6 H. F. & G. Witherby Ltd. 1924.
SOUTH AFRICA	<i>The Birds of South Africa.</i> <i>A First Guide to South African Birds.</i>	A. Roberts. E. L. Gill.	35/- H. F. & G. Witherby Ltd. 1942. 17/6. Maskew Miller Ltd., Capetown.
WEST AFRICA	1. <i>Handbook of the Birds of West Africa</i> 2. <i>The Birds of West and Equatorial Africa</i> (2 Vols.)	G. L. Bates. D. A. Bannerman.	30/- John Bole & Sons & Daniels Ltd., London. 1930. £6 6s. Oliver & Boyd. 1953.
CEYLON	1. <i>Manual of Ceylon Birds.</i> 2. <i>Bird Life in Ceylon.</i>	W. E. Wait. Mrs. Cicely Lushington.	15/-.
INDIA	1. <i>Popular Handbook of Indian Birds.</i> 2. <i>The Book of Indian Birds.</i>	H. Whistler. S. Ali.	22/6 Gurney & Jackson, London. 1941. Bombay Nat. Hist. Society. 1944.
SOUTHERN OCEANS	<i>The Wandering Albatross.</i>	William Jameson	16/- Rupert Hart-Davis, London, 1958.

AREA	TITLE	AUTHOR	PUBLISHER
HONG KONG	<i>Birds of Hong Kong.</i>	G. A. C. Herklots.	
MALAYA, SINGAPORE, PENANG	<i>The Birds of the Malay Peninsula, Singapore and Hong Kong.</i>	A. G. Glenistor.	35/-.
PACIFIC	<i>Birds of the Southwest Pacific.</i>	Ernst Mayr.	22/6. The Macmillan Coy., New York. 1945.
JAPAN	<i>Handlist of Japanese Birds.</i>	M. Hachisuto.	5/9. Ornith. Soc., Japan, c/o Zool: Inst. Science College, Japanese University, Tokio.
AUSTRALIA	<i>What Bird is that? (A guide to the Birds of Australia).</i>	N. W. Cayley.	12/6. Angus & Robertson Ltd., Sydney. 1931.
NEW ZEALAND	1. <i>New Zealand Birds.</i>	W. R. B. Oliver.	30/- Fine Arts (N.Z.) Ltd., Wellington, N.Z. 1930.
	2. <i>New Zealand Birds and how to identify them.</i>	P. Honcricff.	Whitecombe & Toombe Ltd., Auckland, N.Z. 1928.
U.S.A.	1. <i>Handbook of Birds of Eastern N. America.</i>	F. M. Chapman.	21/- D. Appleton & Co., New York.
	2. <i>A Field Guide to Western Birds.</i>	R. Peterson.	14/6. Houghton Mifflin & Co., Boston, U.S.A. 1939.
	3. <i>A Field Guide to Birds.</i>	R. Peterson.	
	4. <i>The Audubon Water Birds.</i>	R. H. Pough.	Doubleday, U.S.A.
CANADA	<i>Birds of Canada.</i>	P. A. Taverner.	Nat. Museum of Canada, Ottawa. 1931.
WEST INDIES	<i>Birds of the West Indies.</i>	J. Bond.	22/- Academy of Nat. Science, Philadelphia. 1936.
MALTA	<i>The Birds of Malta.</i>	E. L. Roberts.	12/6. Progress Press Coy., Ltd. 1954.
JAMAICA	<i>Introduction to the Birds of Jamaica.</i>	Lady Taylor.	3/- Macmillan & Co., Ltd. 1955.

ABOUT OBTAINING BOOKS ON BIRDS

The B.T.O. run a book agency for bird books. Order through the Secretary, B.T.O., 2 King Edward Street, Oxford. W. and G. Foyle Ltd., 119 Charing Cross Road, London, W.C.2 will usually obtain any book, new or secondhand. In both cases pay when you receive your order and include postage. H. K. Lewis and Co., Ltd., P.O. Box 66, 136 Gower Street, London, W.C.1, and Weldon and Wesley Ltd., Lytton Lodge, Codicote, Nr. Hitchin, Herts., are also booksellers of bird books.

LAND BIRDS

Year..... Observer (*Capitals*).....H.M.S./S.S. Sheet No.

Serial Number	Date and Time	Ship's Position (Lat. & Long.)	Course/Speed	LAND BIRDS		Identification		Direction		Wind from Direction Force	Remarks To include:— (1) Duration of stay if alighting. (2) Behaviour—Food taken. (3) Visibility. (4) Sketches to support observations are always valuable.
				Number	Common Name Latin Name	Positive/ Uncertain	Adult/ Immature	Arrived From	Departed Towards		
1	2	3	4	5	6	7	8	9	10	11	12

- Notes*—1. Use separate serial number for each observation.
 2. In columns 7 and 8 use first letter only, e.g., P—Positive. A—Adult.
 3. In columns 9, 10 and 11 use points of compass for direction, e.g., NNE, SW.
 4. Send completed sheets to:—The Editor, R.N.B.W.S., Prattenden's, Bury, Pulborough, Sussex.
 5. To assist filing of records Always Render Sea Reports in the Standard Form shown above.

SEA BIRDS

Year..... Observer (*Capitals*).....H.M.S./S.S. Sheet No.

Serial Number	Date and Time	Ship's Position (Lat. & Long.)	Course/Speed	SEA BIRDS		Identification		Remarks
				Number	Common Name Latin Name	Positive/ Uncertain	Adult/ Immature	
1	2	3	4	5	6	7	8	9

- Notes*—1. Use separate serial number for each observation.
 2. In columns 7 and 8 use first letter only, e.g., P—Positive. A—Adult.
 3. Send completed sheets to:—The Editor, R.N.B.W.S., Prattenden's, Bury, Pulborough, Sussex.
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