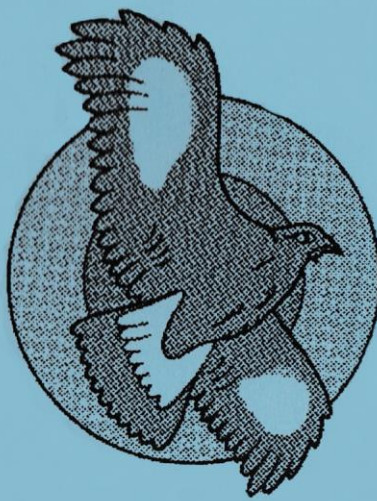


# The Royal Air Force Ornithological Society



## Journal

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The Royal Air Force Ornithological Society was formed in October 1965, primarily to fill the need within the Service for an organization wherein those interested in the study of birdlife could communicate and co-operate with each other, and publish the results of their activities.

The objects of the Society are:

1. To bring together, both at home and abroad, members of the RAF, their dependants, and retired members interested in birdlife.
2. To arrange for the circulation of members' current addresses, information on local ornithological societies, and a list of literature required for given areas.
3. To publish periodical reports and articles on the field activities of members.
4. To promote systematic observation at more isolated localities at home and abroad, and to assist in local ringing schemes and other field enquiries.
5. To stimulate interest in the study and protection of birds.
6. To build up a postal reference library.

Apart from individual studies and research, work in conjunction with other organizations, such as the Royal Society for the Protection of Birds and the Royal Geographical Society is actively encouraged. Work has been carried out on the problem of birdstrikes on aircraft. The Society regularly mounts expeditions.

Full membership is open to all serving and former members of the Royal Air Force and the other Armed Forces, to their dependants over 14 years of age, and to persons serving with or employed by the Royal Air Force. The annual individual subscription is £5.00, family membership being £8.00.

Associate membership (without voting rights) may be offered to anyone interested in the work of the Society at an annual subscription of £5.00.

This Journal is published by the Royal Air Force Ornithological Society

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**EDITORIAL NOTE** It is the policy of the Journal to give the fullest freedom to contributors to express their opinions. Only by doing so can the Society carry out the terms of its Charter. The views expressed in this Journal are those of the authors alone, and do not necessarily represent those of the Editor.

## THE RAFOS EXPEDITION TO THE UISTS - SPRING 1988

### GENERAL REPORT

By John Sims

A RAFOS team visited the Uists in late May 1988. This report summarises the expedition's aims and achievements and details its ornithological activities.

The Uists comprise the islands of North Uist, Benbecula and South Uist, and are covered by Ordnance Survey 1:50,000 map sheets 18, 22 and 31. The islands form that part of the Outer Hebrides also known collectively as the Southern Isles. All 3 islands are now joined by causeways. They are sparsely populated and contain large areas of moorland, machair, rocks, small lochs, mudflats and sandy beaches. The islands are rich in birdlife, particularly on the low-lying western coasts, and in May and June hold large numbers of breeding waders, ducks, gulls and terns. Counsell 1983(1) states that about 150 species occur in the Uists and approximately half that number breed on the islands.

RAFOS last visited Benbecula in June 1981 with the aim of carrying out an ornithological survey of Benbecula by 1 km squares to determine the distribution and status of species found. The aims of the 1988 expedition were broadened to include a study of the birds of North and South Uists in addition to Benbecula, and to undertake the following tasks:

Identify and study as many species as possible. Undertake specific tasks as requested by the local NCC/BTO/RSPB representatives.

Net and ring birds in accordance with licensed procedures and in conjunction with the BTO's local representative.

Photograph birds, especially those in the hand. Produce a report for the ornithological societies in England and Scotland, and for the NCC and NT for Scotland.

A small caravan/camp site at Linclate on the SW coast of Benbecula was chosen as the team's base because it was more or less central to the area studied. Transport to and from the Uists was by road and ferry, and up to 3 vehicles were required for daily transport. Most of the team travelled from Oban to Lochboisdale, but this is a long sea crossing (8 hours) and little of real interest was seen during the outbound and return journeys. Two members used the much shorter ferry sailing from Uig in Skye to Lochmaddy, and this is probably the better route to use.

The team comprised only 9 members who stayed for the whole period on the Uists of 7 full days, one of which was spent on the Monach Islands. Because time was short and manpower resources were limited, most sites visited were those of known ornithological interest. Many areas, particularly in North and South Uist, were either visited only briefly or remained wholly unexplored. Accordingly, the numbers of species recorded in the Annotated Systematic List are in the main "snapshots" and do not represent census figures.

The team did not include a qualified ringer, and therefore most of its activities were devoted to species identification and general study. Nevertheless, a total of 39 birds of 8 species, mainly Lapwing and Ringed Plover pulli, were ringed by Mick Lewis under the supervision of Paul Boyer, the resident BTO representative.

Each day the team operated in groups of 2 or 3 members which enabled visits to be made to a wide range of different habitats and allowed individuals as much variety as possible. Benbecula is the smallest of the 3 main islands and is virtually treeless. North Uist is mainly low-lying and watery. South Uist, the largest, has the highest hills rising to 620 m. The east coasts of all 3 islands are generally rocky and hilly, gradually shelving to the west coasts which are flat and sandy. Sand blown on to nearby land, and improved with animal manure and seaweed, forms an arable plain, the machair. Further inland, enclosed moorland which has been cleared and reseeded for rough pasture is known as blackland.

Some success was achieved in bird and habitat photography, but bird photography was limited considerably either by strong winds or rain, particularly on the day the team visited the Monach Islands.

The weather was, as expected, fairly windy for much of the time, usually with a southerly component and reaching either moderate to fresh or fresh to strong on 4 days. It remained dry with long sunny periods for the first 4 days. However, heavy and continuous rain or drizzle was experienced for most of 30 and 31 May.

It may be useful to reiterate the importance of the western seaboard of the Uists for breeding waders. A complete survey of these wader populations was carried out in 1983 by the NCC and Wader Study Group. (Buxton, Green and Langslow 1984). This survey estimated that approximately 12,200 pairs of 6 species of waders were breeding on 131 sq km of machair and blackland. This total was made up as follows: Oystercatcher 2017 pairs, Ringed Plover 2116 pairs, Lapwing 3400 pairs, Dunlin 2038 pairs, Snipe 509 pairs, Redshank 1974 pairs. Lack of time precluded any attempt by the RAFOS team to carry out a census of any of these breeding waders.

There were no problems of any note with administration, logistics and catering. excellent assistance and support were freely given by all the departments and agencies involved with the expedition. Particular thanks are offered to Major Jeff Gordon RAOC for all his help and advice on site.

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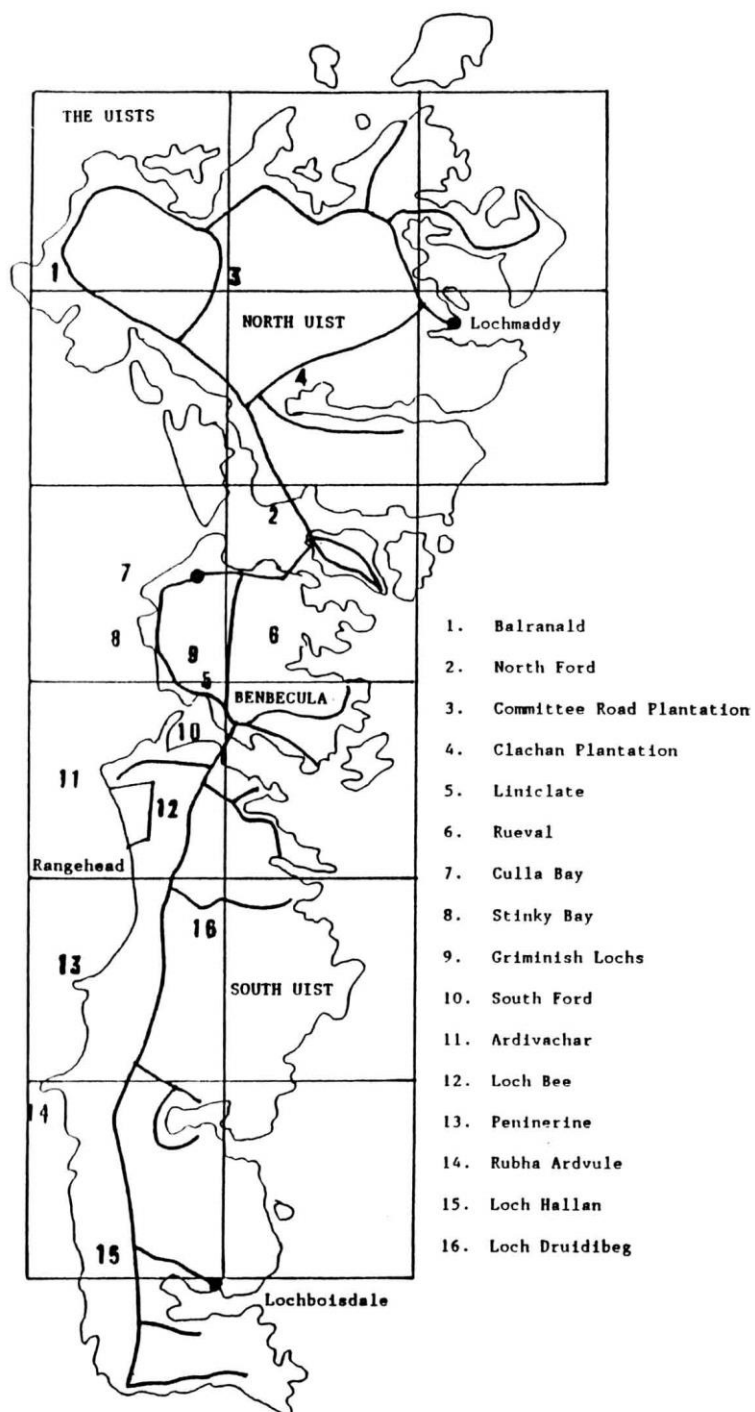
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Cunningham, Peter 1983. Birds of the Outer Hebrides. The Melven Press, Perth.

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Cramp and Simmons 1988. Handbook of the Birds of Europe, the Middle East and North Africa. The Birds of the Western Palaearctic Vol 5.



#### AREAS VISITED

The undermentioned areas of known ornithological interest, with grid references, were visited at least once with some of the more important sites being visited 3 or more times. For more detailed information on these and other locations see Counsell 1983(1).

##### North Uist

Balranald 7070, Clachan Plantation 8876, Committee Road Plantation 7970, Grimsay 8556, Lochmaddy Moor 9068.

##### Benbecula

Culla Bay 7653, "Stinky" Bay 7652, Griminish Lochs 7752, North Ford 8357, South Ford 8047, Liniclate 7849, Rueval 8253.

##### South Uist

Ardvachar 7445, Grogarry 7639, Loch Bee 7743, Loch Druidibeg 7937, Loch Hallan 7322, Peninerine 7335, Rutha Ardvule 7129.

Monach Islands 6461.

#### Notes on Selected Sites

##### Balranald

The habitat of this RSPB reserve includes acidic lochs, marsh, machair, sandy beaches and a rocky promontory at Aird on Runair which is probably the best sea-watching point on the Uists. This area was good for Corncrake which was present in patches of Yellow Iris (*Iris pseudacorus*), and held several species not seen elsewhere on the islands such as Storm Petrel, Pink-footed Goose, Pintail, Peregrine, Purple Sandpiper, Ruff, Pomarine Skua and Great Skua.

##### Clachan (Langass) Plantation

This conifer wood, planted by the Forestry Commission in 1969, is on an exposed site at an elevation of 90 m close to the Lochmaddy road. This was a good site for small passerines and appears to have attracted species either not seen or rare on the Uists prior to 1978, such as Wood Pigeon, Robin, Goldcrest, Greenfinch and Spotted Flycatcher.

##### Committee Road (Marrival) Plantation

This second conifer plantation, was also planted by the FC in 1969. Similar to Clachan, but at a higher elevation of 230 m, this wood was also attractive to passerines. Wood Pigeon and Goldcrest were not recorded elsewhere other than here and at Clachan.

##### Griminish Lochs

The 2 main lochs, Mor and Fada, can be watched from the road which bisects them. These lochs produced sightings of 2 species infrequently seen on the Uists, Little Gull and Black Tern. Other species recorded here included most species of duck and waders seen elsewhere, and a small colony of breeding Arctic Tern.

#### Loch Druidibeg

This area is a NNR managed by the NCC. It is one of the very few places to have a grove of mixed woodland and rhododendron, in which the team's only **Duncock** was recorded.

#### Monach Islands

The Monach Islands, otherwise known as Heisker, are a group of 5 islands which lie to the west of North Uist. Now a NNR, these islands are low-lying (maximum altitude 19 m) and consist of dunes and machair with a rocky coastline and long stretches of sandy and pebble beaches. A short history of the islands is contained in Counsell 1983(2). On the morning of 30 March, all members of the team together with Jeff Gordon, Paul Boyer and Bill Neill a local naturalist and artist, set off for the islands from Carinish in north Uist, some 20 km away, in a small fishing boat plus powered inflatable. Because of the low state of the tide, the shallow and narrow channels encountered before reaching open water east of Baleshare proved something of a problem. The vessel was grounded at one point and our boatmen had to stop engine and punt us through the shallows. During the 2 hour journey, numbers of **Grey Seal**, *Halichoerus grypus*, were seen. This seal breeds commonly on Stockay, one of the Monach Islands.

We landed at Port Ruadh (Roy) on the east coast of Ceann Ear (East Head) and because of the now flowing tide we were unable to walk across to the other 2 main islands. The weather continued to deteriorate and the entire period of our visit was spent in continuous, occasionally heavy rain and a moderate to fresh wind. The only building on the island which retains its roof is the old school house, now used by lobstermen from the Uists who live there from time to time during the summer months. This building which we shared with 3 passing **Swallow**, afforded us shelter in which to dry equipment and eat our packed meals.

The bad weather hindered our activities, but a total of 34 species were recorded on East Head plus a **Collared Dove** found dead on a beach. Nests containing either eggs or young of 10 species were found. Three separate small colonies of breeding **Arctic Tern** were located, one of which was part of a mixed colony with **Little Tern**. Seven adult **Fulmar** were ringed at their nests. Mick Lewis reported this to be a simple task because the birds, confined by broken stone walls, were unable to get airborne before being caught. The only problem was avoiding the regurgitated oil. Two other **Fulmar**, nesting in adjacent corners of one ruined croft, were found to be wearing consecutively numbered rings.

A cold and very wet party left Port Roy shortly after 6 pm for a 150 minute return journey to Carinish in a heavy sea and fresh wind, an experience relieved only by the sighting of 5 **Puffin** which proved to be our only record of this species on the Uists.

#### ANNOTATED SYSTEMATIC LIST

The sequence and nomenclature used follow the "List of Recent Holarctic Bird Species (1977)" by K H Voous. The 3 main islands referred to are North Uist, Benbecula and South Uist. For convenience and brevity the following abbreviations have been used for some locations:

NB	Balranald
NC	Clachan Plantation

NCR	Committee Road Plantation
BC	Culla Bay and Stinky Bay
BG	Griminish Lochs
SA	Ardivachar
SH	Loch Hallan
MI	The Monach Islands

#### Red-throated Diver

#### Gavia stellata

Recorded in small numbers on inland lochs on most days. Most sightings were on N Uist where a total of 9 birds all in breeding plumage were seen on 29 May. A pair was located on Benbecula and another pair on S Uist.

#### Black-throated Diver

#### Gavia arctica

Sightings of 4 single birds, all in breeding plumage, were recorded on inland lochs on Benbecula and N Uist. A pair was also observed at one loch on N Uist on 29 May.

#### Great Northern Diver

#### Gavia immer

Seen almost daily close to the shore on western coasts, with a total of 9 on 31 May. Recorded in a variety of plumages varying from winter through intermediate to full adult breeding. Favoured locations were at NB, BC and SA. One bird in non-breeding plumage was seen at an inland loch on N Uist on 29 May.

#### Little Grebe

#### Tachybaptus ruficollis

Recorded regularly on suitable lochs throughout the Uists with a total of 13 on 31 May.

#### Fulmar

#### Fulmarus glacialis

Numerous and widespread, estimated as order 3 on most days. Breeding observed on MI where several nests were found, each containing one egg, mainly on broken walls and ruined buildings near the old school house. One adult of the arctic dark form (blue phase) was seen and photographed on MI.

#### Manx Shearwater

#### Puffinus puffinus

Recorded offshore during sea watches. Maximum count c 250 at NB on 26 May and estimated as order 3 at Rutha Ardvule on S Uist on 27 May.

#### Storm Petrel

#### Hydrobates pelagicus

One seen at NB on 26 May and another near Baleshare when returning from MI on 30 May.

#### Gannet

#### Sula bassana

Seen daily offshore during sea watches on both N and S Uist. Maximum counts were c 50 at NB on 26 May, and c 35 there on 31 May and again on 1 June.

**Cormorant**

Phalacrocorax carbo

Recorded daily in small numbers on all 3 main islands. Maximum c 20 at NB on 1 June.

**Shag**

Phalacrocorax aristotelis

Single numbers seen on most days on coasts with maxima of 7 at NB on 28 May and 7 at BC on 29 May.

**Grey Heron**

Ardea cinerea

Widespread in small numbers and seen at most locations visited. Maximum total count of 19 on 29 May. Breeding was confirmed on the east coast of N Uist where 2 nests were found, one with 3 eggs and one with one egg and one young.

**Mute Swan**

Cygnus olor

Seen daily throughout the islands, including 2 on MI on 30 May. Most were non-breeding birds concentrated at Loch Bee in S Uist where 269 were counted on 29 May. Breeding was noted with families of 8 cygnets at Loch Bee, 6 at BC, and a total of 10 cygnets at various locations on N Uist.

**Whooper Swan**

Cygnus cygnus

Two were present at NB throughout the week. Two others seen on S Uist only on 27 May may have been the same birds.

**Pink-footed Goose**

Anser brachyrhynchus

A single bird was seen at NB on 27 May.

**Greylag Goose**

Anser anser

Recorded daily throughout the islands, but not on MI. Maximum counts were 49 at Liniclate on 28 May and 61 adults plus 26 goslings on N Uist on 31 May. Breeding was also noted at Loch Druidibeg.

**Shelduck**

Tadorna tadorna

Widely distributed throughout the islands and recorded as order 2 daily. Two birds seen on MI.

**Wigeon**

Anas penelope

Four males recorded at BC on 31 May, and 5 males plus one female there on 1 June.

**Teal**

Anas crecca

Recorded in small numbers on most days, with a maximum of 6 near BC on 26 May.

**Mallard**

Anas platyrhynchos

Widely distributed throughout the Uists, but not seen in any numbers and recorded as low order 2 daily. Only 2 broods noted.



**Pintail**Anas acuta

A male was recorded at NB on 31 May, and a pair also at NB on 1 June.

**Shoveller**Anas clypeata

Recorded mainly at NB and BG but also seen in S Uist. Total of 25 counted in N Uist on 28 May and 11 at BG on 31 May. One breeding record, a pair with 7 ducklings, was noted on Benbecula.

**Tufted Duck**Aythya fuligula

Seen daily and recorded as low order 2 on each of the 3 main islands. Twelve birds on MI on 30 May.

**Eider**Somateria mollissima

Commonly and widely distributed. Recorded as order 2 around costs including MI. Maximum of 74 at Liniclate on 27 May.

**Red-breasted Merganser**Mergus serrator

Recorded daily at most locations visited. Thirteen counted at Liniclate on 27 May. Thirteen on N Uist plus 7 on S Uist on 29 May.

**Hen Harrier**Circus cyaneus

A male was seen near Orasay, Benbecula on 26 and 27 May, and another on S Uist on 29 May. One male plus 3 ringtails recorded on N Uist on 31 May.

**Buzzard**Buteo buteo

One recorded over the camp site at Liniclate on the first 3 days, and 2 birds seen there on 1 June. Other single birds noted at NC, NCR and MI. A total of 8 were recorded on all 3 main islands on 31 May.

**Golden Eagle**Aquila chrysaetos

A total of 5 birds was recorded. A pair was seen on most days, a further single on 31 May and another 2 birds were seen on 29 May. Locations are omitted for obvious reasons.

**Kestrel**Falco tinnunculus

Single birds were recorded on Rueval on 27 May, on S Uist on the same day, and another, a male on N Uist on 31 May.

**Merlin**Falco columbarius

Recorded only twice during the week, a female over the camp site at Liniclate on 27 May, and a male at NCR on 31 May. Cunningham 1983 observed that Merlin may be found "in appreciable numbers" on Benbecula and S Uist, so our paucity of sightings may suggest this species to be in decline there.

**Peregrine**

Falco peregrinus

Only one record, a female at NB on 27 May.

**Red Grouse**

Lagopus lagopus

Four birds were seen near the east coast of N Uist on 31 May.

**Corncrake**

Crex crex

Located on all 3 main islands and seen usually in areas of Yellow Iris (Iris pseudacorus). See or heard calling daily especially at NB and near BC, with a total count of 11 on 27 May.

**Moorhen**

Gallinula chloropus

Not seen on S Uist, but up to 3 recorded at NB on most days, and singles seen at BG and BC.

**Coot**

Fulica atra

Recorded daily in single numbers on machair lochs on Benbecula and N Uist. Maximum of 5 at BG on 31 May.

**Oystercatcher**

Haematopus ostralegus

Widespread and very common on all islands, recorded as order 3 daily. An attempted count on 29 May produced 544 birds. A flock of 70 was seen at Linclate on 1 June. Four nests found on MI, 2 with 4 eggs and 2 with 2 eggs.

**Ringed Plover**

Charadrius hiaticula

Common and widespread, order 3 recorded on most days. A nest with 4 eggs was found on a beach on MI, and 8 young ringed on the Uists.

**Golden Plover**

Pluvialis apricaria

Two birds recorded near Rueval on 26 and 27 May. A total of 8 was seen on N Uist plus another 14 on S Uist both on 29 May.

**Lapwing**

Vanellus vanellus

Widespread and numerous on all islands, order 3 recorded daily. A attempted count on 29 May produced a total of 726 birds, 450 of which were seen on S Uist. Three nests were found on MI, each with 4 eggs. Fourteen young were ringed on the Uists.

**Sanderling**

Calidris alba

Flocks were recorded on western coasts on most days. Seventy birds were seen on MI, 54 at Linclate on 28 May, and 41 at SA on 29 May.

**Purple Sandpiper**

Calidris maritima

One sighting of 4 birds on Aird an Runair at NB on 26 May.

**Dunlin***Calidris alpina schinzii*

This resident breeding species was difficult to count, but numbers seen were estimated as low order 3 on most days. *C a schinzii* is said to be slightly smaller and shorter-billed than the nominate race, with more yellowish-red fringes to the upperparts.

**Ruff***Philomachus pugnax*

One adult male in breeding plumage (white phase) seen at NB on 26 May.

**Snipe***Gallinago gallinago*

Recorded daily and numbers seen estimated as order 2 on each of the 3 main islands. One bird seen on MI.

**Black-tailed Godwit***Limosa limosa*

Two birds, a male and a female, were recorded at SH on 28 May.

**Bar-tailed Godwit***Limosa lapponica*

A flock of 32 was seen at SA on 29 May.

**Whimbrel***Numenius phaeopus*

Recorded in small numbers on most days with a maximum of 5 at SA and 4 on N Uist both on 29 May.

**Curlew***Numenius arquata*

Seen daily in small numbers on all 3 main islands with a total of 12 on 1 June which included 6 at Linclate. One bird was seen on MI. Four seen on N Uist on 26 May were showing territorial behaviour.

**Redshank***Tringa totanus*

Widespread and numerous throughout the Uists and recorded as order 3 daily. Breeding on the machair, young birds were seen at SA on 26 May.

**Common Sandpiper***Actitis hypoleucos*

One or 2 birds were recorded on N Uist on 3 days, and a further 2 were seen near Rueval on Benbecula.

**Turnstone***Arenaria interpres*

Seven were recorded at NB on 26 and 27 May. Forty were counted on MI on 30 May.

**Pomarine Skua***Stercorarius pomarinus*

One seen flying north at Aird an Runair at NB on 26 May, and another at the same place on 1 June.

**Arctic Skua****Stercorarius parasiticus**

Recorded on breeding territories in N Uist and Benbecula and offshore during sea watches at NB. Both dark and light phases noted with a total of 9 seen on 26 May.

**Great Skua****Stercorarius skua**

Single birds seen offshore at NB on 26 May and 1 June, and another recorded en route to MI on 30 May.

**Skua spp**

Three seen en route to MI and another 3 on the following day, 31 May, during a sea watch at NB.

**Little Gull****Larus minutus**

An unexpected sighting of 2 birds at BG on 31 May, one remaining until at least 1 June. Both were still in winter plumage, one an adult the other a first winter bird.

**Black-headed Gull****Larus ridibundus**

Common and widespread, recorded as low order 3 on N Uist, order 2 on the other islands, c 20 recorded on MI. Breeding colonies found on the 3 main islands.

**Common Gull****Larus canus**

Widely distributed throughout the Uists and recorded as order 2 on each of the 3 main islands. At a breeding colony on MI several nests were found containing either 4 or 3 eggs. Newly hatched young were also seen.

**Lesser Black-backed Gull****Larus fuscus**

Recorded usually only in single numbers. Maximum of 12 at NB on 1 June.

**Herring Gull****Larus argentatus**

Widespread and recorded daily as order 2 on each of the 3 main islands.

**Glaucous Gull****Larus hyperboreus**

A single, thought to be a second summer bird, was identified on Benbecula on 28 May. A second sighting, probably the same bird, was recorded at NB on 31 May.

**Great Black-backed Gull****Larus marinus**

Recorded daily throughout the islands, usually in single numbers, but with a total of 22 on Grimsay on 1 June. Two nests were found on MI on 30 May, one containing 2 eggs and 2 newly-hatched young, the other with one egg and 2 young.

**Kittiwake****Rissa tridactyla**

One at NB on 26 May, one at Rubha Ardvule on 27 May, and 12 offshore at NB on 1 June.

**Common Tern****Sterna hirundo**

Positive identification recorded only in single figures on 4 days. Maximum of 6 on 29 May which included 4 on S Uist.

**Arctic Tern****Sterna paradisaea**

Recorded as order 2 on each of the 3 main islands. A small breeding colony was noted at BG. On East Head on MI 3 breeding colonies were found with a total of c 65 pairs, but there could well have been more colonies on other islands in the group. Several nests were found each containing 2, 3 or 4 eggs.

**Little Tern****Sterna albifrons**

Ones or twos recorded on most days around coasts on all 3 main islands. A breeding colony of c 15 pairs, mixed with Arctic Terns, was found on East Head on MI, but to minimise disturbance the colony was not approached closely.

**Black Tern****Chlidonias niger**

An accidental visitor to the Uists, a single adult in summer plumage was recorded at BG on 1 June.

**Guillemot****Uria aalge**

One at Rubha Ardvule on 28 May, 8 seen en route to MI on 30 May, and 7 during a sea watch at NB on 1 June.

**Razorbill****Alca torda**

Two at NB on 26 May and 5 en route to MI on 3 May.

**Black Guillemot****Cepphus grylle**

This species breeds on MI but was recorded only in small numbers off the west coasts of the Uists, with a maximum of 4 at NB on 26 May. c 35 birds were recorded on MI plus 18 seen from the boat en route.

**Puffin****Fratercula arctica**

Five were seen at sea during our return from MI on 30 May.

**Rock Dove****Columba livia**

Recorded daily as order 2 on coasts and in ploughed fields. Fifty-seven at Liniclate on 28 May. Birds reassembling feral pigeons were recorded as follows: 2 at NB and 2 at SA on 29 May, 3 in N Uist on 31 May, and one at Liniclate on 1 June. However, Cunningham 1983 observed that although many racing pigeons turned up from time to time, feral pigeons are found only in Stornoway.

**Woodpigeon****Columba palumbus**

Two records, one bird at NC on 27 May and one at NCR on 31 May.

**Collared Dove****Streptopelia decaocto**

This species was not recorded in the Uists until about 1960 (Counsell 1983(1)). It is now well established and was recorded every day with maximum daily counts of 22 on S Uist, 20 on N Uist and 6 on Benbecula. Map references of the larger sightings are: 6 at 782502, 8 in Lochmaddy town, 8 at 768419, 14 at 771398, and 16 at 784733. A decomposed carcass was found on a beach on MI on 30 May.

**Cuckoo****Cuculus canorus**

Seen daily in small numbers on each of the 3 main islands with a total count of 7 on 31 May and on 1 June. One or 2 birds were seen during every visit to NC and 4 were recorded at NCR on 31 May.

**Short-eared Owl****Asio flammeus**

Seen in ones and twos on N Uist and Benbecula with a total of 3 on 31 May. A pair near the north coast of N Uist was holding breeding territory.

**Swift****Apus apus**

One recorded a Uiskevagh, Benbecula on 27 May and singles seen at NB on S Uist both on 31 May.

**Skylark****Alauda arvensis**

Very common and widespread. No counts attempted, but numbers seen estimated as order 3 on each of the 3 main islands. Recorded as order 2 on MI.

**Swallow****Hirundo rustica**

Seen daily on passage in small numbers with a maximum of 19 recorded on 28 May. Three birds were seen in driving rain around the old school house on MI on 30 May.

**House Martin****Delichon urbica**

One sighting of this vagrant to the Uists near Grogarry on S Uist on 31 May.

**Meadow Pipit****Anthus pratensis**

Very common and widespread. No counts attempted, but numbers seen estimated as order 3 on each of the 3 main islands, and order 2 on MI. This species, together with Hooded Crow, shared the distinction of being the only species recorded on all 8 of the tetrad counts on Benbecula. One nest containing 5 eggs was found near Rueval on 26 May.

**Rock Pipit****Anthus spinoletta meinertzhageni**

This resident Hebridean race was recorded daily in small numbers on rocky coasts on all 3 main islands and on MI.

**Pied Wagtail****Motacilla alba**

Recorded in small numbers daily on the 3 main islands, with a total count of 9 on 29 May.

**Wren****Troglodytes troglodytes hebridensis**

The resident Hebridean race was recorded daily in small numbers. An attempted count on Benbecula on 28 May produced 26 birds.

**Dunnock****Prunella modularis hebridum**

Another Hebridean "peculiar" species, a single was recorded at loch Druidibeg on 31 May.

**Robin****Erithacus rubecula**

Seen in small numbers, mostly in the 2 conifer plantations on N Uist. Up to 4 birds recorded at NC and 3 at NCR. Additionally, up to 4 were seen at Loch Druidibeg.

**Whinchat****Saxicola rubetra**

Single birds recorded at Liniclate on 26 May; and on N and S Uist, both on 29 May.

**Stonechat****Saxicola torquata**

Seen daily and present on the 3 main islands. Sixteen recorded on Benbecula on 28 May, and 9 on N Uist on 1 June. A nest containing 5 young was found near Rueval on 26 May.

**Wheatear****Oenanthe oenanthe**

Recorded daily as order 2 throughout the islands, with a total count of 56 birds on 29 May. Two seen on MI.

**Blackbird****Turdus merula**

Recorded every day on the 3 main islands with a total of 17 on N Uist, 7 on S Uist and 4 on Benbecula.

**Song Thrush****Turdus philomelos**

Seen in small numbers with a total of 3 on S Uist and 11 on N Uist. Some birds of the darker hebridensis race were identified, but others may have been the British race T p clarkei on migration.

**Sedge Warbler****Acrocephalus schoenobaenus**

Fewer sightings than expected, up to 4 recorded at SH on 27 and 28 May, one on Benbecula on 29 May and one at NB on 1 June.

**Garden Warbler****Sylvia borin**

A single bird on S Uist on 29 May was seen and heard singing.

**Chiffchaff****Phylloscopus collybita**

One heard singing at Grogarry on S Uist on 29 May.

**Willow Warbler**

**Phylloscopus trochilus**

Two seen at NC on 28 May, and singles recorded in S Uist on 29 and 31 May.

**Goldcrest**

**Regulus regulus**

Up to 4 birds seen in the conifers at NC on several dates, and another 4 recorded at NCR on 31 May.

**Spotted Flycatcher**

**Muscicapa striata**

A single recorded at NC on 27 May, and another at Grogarry in S Uist on 29 May.

**Jackdaw**

**Corvus monedula**

A flock of 7 at NB on 27 May. Other sightings of 6 on Benbecula on 27 May and 7 at Peninerine in S Uist on 29 May could have been the same birds.

**Hooded Crow**

**Corvus corone cornix**

Common and widespread, recorded daily as order 2 on each of the 3 main islands. Four birds were seen on MI and a nest was found there containing 2 newly hatched young. Four birds of the nominate race C c corone, (Carrion Crow) were seen around the rubbish tip at SA on 29 May.

**Raven**

**Corvus corax**

Seen daily throughout the islands with a total of 18 at SA on 29 May. Up to 4 birds were seen at NC, 6 on S Uist and 2 on MI.

**Starling**

**Sturnus vulgaris**

Very common and widespread, recorded daily as order 3 on each of the 3 main islands, and order 2 on MI. Total counts from 7 tetrad surveys on Benbecula produced 322 birds. One pair was observed attempting to nest in a GPO post box on N Uist. Similar behaviour was reported in Cunningham 1983.

**House Sparrow**

**Passer domesticus**

Recorded daily as order 2, usually near to human habitation. Not seen on MI.

**Greenfinch**

**Carduelis chloris**

Seen daily in small numbers. Up to 10 were recorded at NCR, 7 were seen on S Uist and a single was present at Liniclate on 26 and 27 May.

**Siskin**

**Carduelis spinus**

Two birds, a male and a female, were recorded at Grogarry in S Uist on 29 May.

**Twite**

**Carduelis flavirostris**

Seen daily in small numbers but probably under-recorded. Fifteen birds seen around NCR and 20 counted in 3 tetrads on Benbecula.



**Redpoll**Carduelis flammea

One bird, race unspecified, seen near the camp site on Benbecula on 26 May. According to Cunningham 1983, this was likely to have been Mealy Redpoll, C f flammea.

**Reed Bunting**Emberiza schoeniclus

Recorded daily in single numbers on all 3 main islands, with 9 at SH on 28 May.

**Corn Bunting**Miliaria calandra

Recorded daily, usually in single numbers. Size at NB on several dates and a total of 21 on S Uist on 29 May.

**NOTES ON HEBRIDEAN GEOGRAPHICALLY ISOLATED RACES**

Four, possibly 5, species found on the Uists are known to be geographically isolated races which are distinguishable from races of the same species found on the mainland. Some notes on these species are as follows:

**Rock Pipit**Anthus spinoletta meinertzhageni

This race, which occurs only in the Outer Hebrides, is similar to A s petrosus in non-breeding plumage, but in breeding plumage the underparts are slightly yellower and the head and upperparts darker than the mainland race.

**Wren**Troglodytes troglodytes hebridensis

This race also occurs only in the Outer Hebrides. It is slightly larger than the nominate race with darker rufous-brown upperparts and buffish underparts, giving an overall darker look than the mainland form.

**Dunnock**Prunella modularis hebridium

A noticeably darker looking bird than the British mainland race P m occidentalis, it occurs in West Scotland and the Outer and Inner Hebrides. Both upper and underparts are darker, with the crown and hindneck heavily mottled black-brown.

**Song Thrush**Turdus philomelos hebridensis

This race occurs in the Outer Hebrides and Skye. Its upperparts are darker brown and much less rufous than in the British mainland race, T p clarkei. The underparts are boldly and more thickly spotted with black-brown. The mainland race is said to occur on migration, and this belief was supported by several sightings of birds not as noticeably dark as T p hebridensis.

**Stonechat**Saxicola torquata

Macfarlane (1982) reports that the race theresae is found in the Hebrides and parts of West Scotland and tends to be darker than the mainland race. However, no mention of S t theresae is made in Cramp and Simmons 1988. It may be relevant to note that the British race S t hibernans is said to be darker than S t rubicola which occurs in most of continental Europe.

#### NOTES ON BTO FIELDWORK

Following a request by Paul Boyer a number of tetrads (2 Km x 2 Km squares) on Benbecula and Grimsay were surveyed in accordance with fieldwork instructions produced by the BTO/IWC/SOC for the New Atlas of Breeding Birds in Britain and Ireland.

The area selected for study was the 10 Km square NF 85 which covers most of Benbecula to the north of Liniclate and to the east of the main A865 road, plus most of the island of Grimsay. The habitat was primarily peat moorland and scattered small lochs, having little, if any, machair. The minimum number of 8 tetrads, lettered A, B, C, G, H, N, S and T, were each visited once for the specified period of 2 hours per tetrad, and every team member took part in at least one tetrad count. The counts were completed on either 28 or 29 May, and results were co-ordinated by Martin Wightman who gave a completed worksheet to Paul Boyer.

A total of 38 species were recorded from the 8 tetrads, of which 20 species were classified as breeding. Species found in each tetrad varied from 22 in square N (the western half of Grimsay) to only 12 species in square G (the high point Rueval and its surrounding moorland and lochs). Two species, **Meadow Pipit** and **Hooded Crow**, were found in all 8 squares. The commonest species was the **Starling** with a total of 322 birds in 7 squares. Other species found in 7 of the 8 squares were **Mallard**, **Oystercatcher**, **Skylark** and **Wheatear**.

#### EXPEDITION MEMBERS

Sqn Ldr J F Sims	Expedition Leader
Sqn Ldr A D Marter	
Flt Lt J P Orme	
Sgt M I Hayes	
Sgt D Osborn	Recorder
Cpl P Littler	
Mr M E Lewis	
Capt R N Phillips	
Mr R Raynor	
Mr M K Wightman	BTO Fieldwork Co-Ordinator

#### THE ROYAL AIR FORCE ORNITHOLOGICAL EXPEDITION TO NEGARA BRUNEI DARUSSALAM 1988

A team of 12 from the Royal Air Force Ornithological Society (RAFOS) visited Brunei in June and July 1988 and studied the birds in 2 main areas, Seria and Ulu Temburong. Three of the 1988 team had been part of the 1984 RAFOS expedition whose work the 1988 team continued. In ornithological terms, Brunei is important because it contains proportionately larger continuous tracts of primary rainforest than much of neighbouring Sabah and Sarawak whose logging industries have cleared wide areas of land. Brunei, by virtue of its oil revenues, has no economic need to pursue intensive forest clearance. The undisturbed rainforest in Brunei is therefore an increasingly valuable natural history resource, both in terms of a wide range of plant species whose importance to man is as yet little studied, and as a repository of surviving plant, animal and bird species representative of Borneo. This unique resource has become of great interest to scientists, researchers, and natural historians all over the world, and as a result many people want to study in Brunei.

Some time before the RAFOS 1988 Expedition the authorities in Brunei had decided to control and co-ordinate such studies and formed the Brunei Research Council (BRC) for this purpose. The 1988 RAFOS Expedition was the first to be subjected to BRC scrutiny.

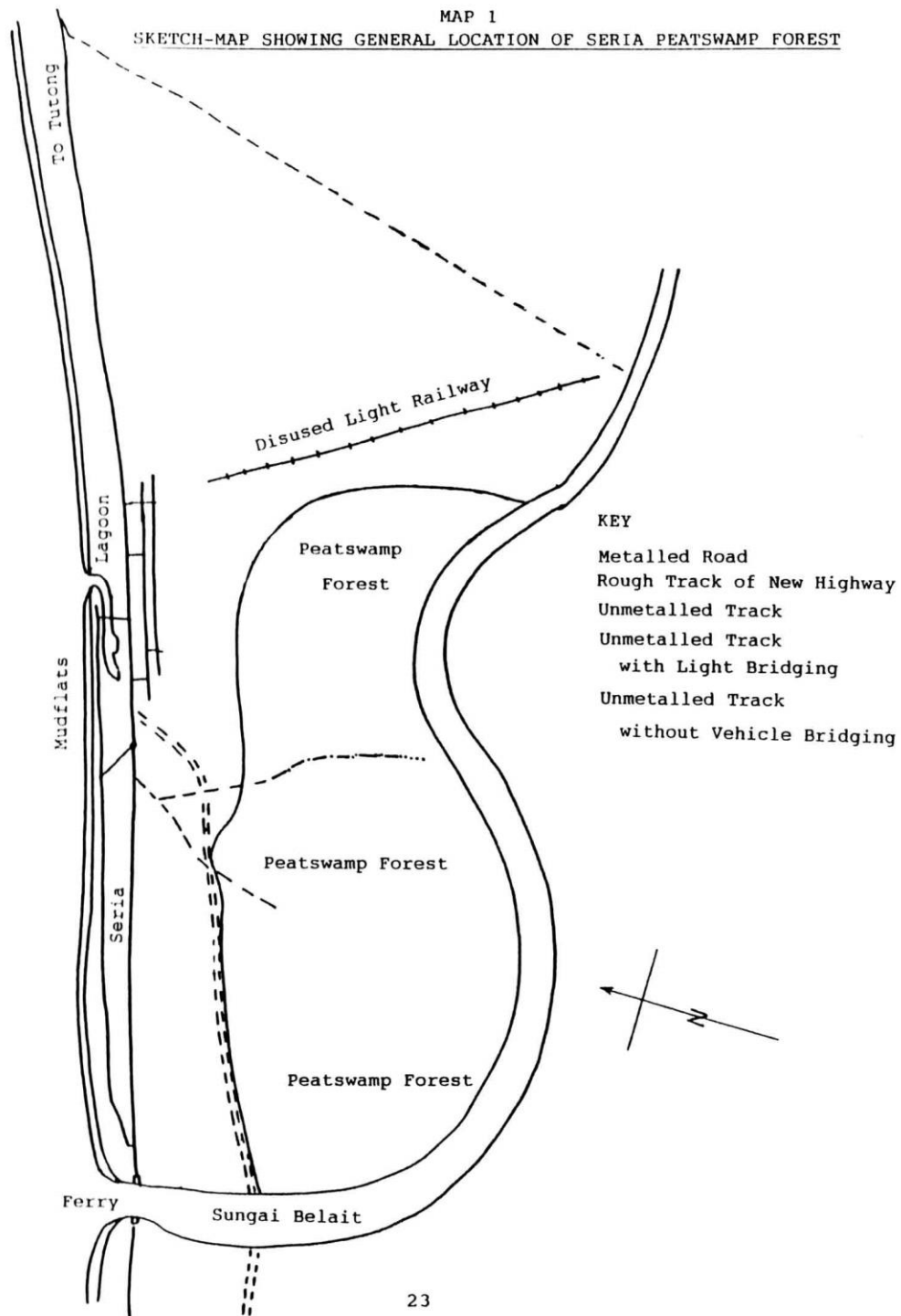
The plan agreed by the BRC was that the RAFOS team should acclimatise in the Seria area and then proceed to the Ulu Temburong to carry out studies in the vicinity of Kampong Batang Duri, the settlement at the end of the road from Bangar. During the acclimatisation period, the Expedition had to register with the BRC at Universiti Brunei Darussalam in Bandar Seri Begawan.

The documentation stipulated by the BRC for the Expedition ensured that officials in the areas to be visited would know that the Expedition was formally supported by the Brunei authorities.

There were 2 fully qualified ringers on the team, Bill Taylor and Pete Carr. The others either acted as observers or on a roster basis as support party for the ringers. During the acclimatisation period at Seria, as much time as possible was spent in becoming familiar with the local avifauna, those with experience of Bornean birds guiding the others, but soon most of the newcomers to Brunei, using their years of experience with birds in general, rapidly became familiar with a wide range of species. Some time was spent in the mangrove and beach areas of Seria, and in the grassy areas between the houses and the forest, but it rapidly became clear that the peat swamp forest between Seria and the Sungai Belait was very rich in birdlife. This finding was in accord with observations and research carried out by Mr Clive Mann, a Brunei resident with a formidable and distinguished ornithological reputation. However, much of the literature about the peat swamp forest indicates that it is poorly served by birdlife. We can only conclude that this belief arose because many of the earlier bird reports from Borneo residents were compiled by foresters whose time was spent principally in areas of good timber, whereas peat swamp forest has a preponderance of slender, closely-packed, often crooked trees, of species more likely to thrive when immersed in water. Therefore the foresters spent relatively little time in peat swamp, where access is particularly difficult, and as a consequence peat swamp areas were seldom subject to ornithological observations. Map 1 shows the general outline of the Seria peat swamp area.

The birds in the peat swamp forest on the whole were most obliging and confiding, - a fact which assisted the newcomers. Crested Goshawk, disdainfully perched close by, were a source of admiration. The nervous energy of a Black-thighed

MAP 2  
SKETCH-MAP OF AREA OF SYSTEMATIC OBSERVATIONS CENTRED ON  
KAMPONG BATANG DURI, TEMBURONG



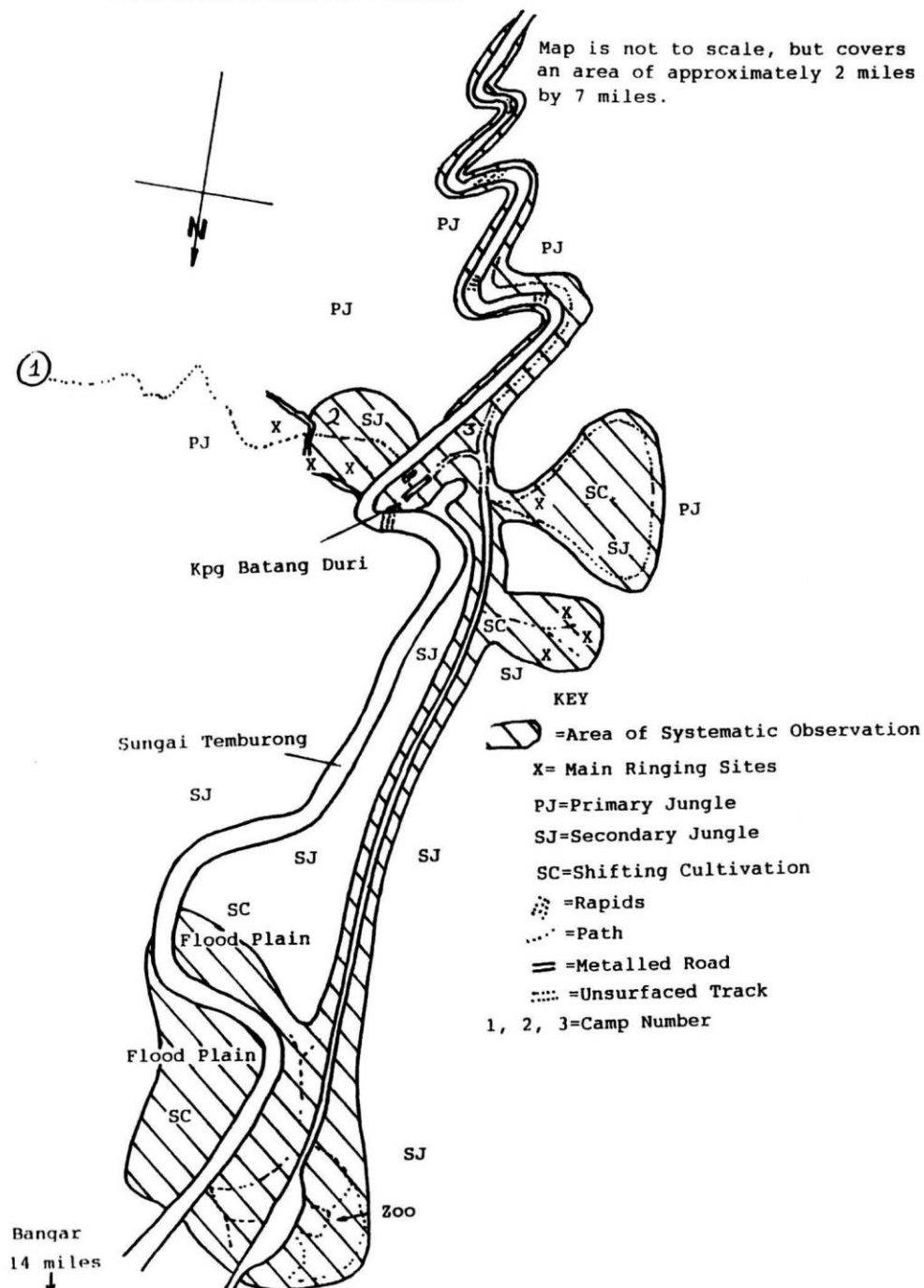
Falconet family was an original experience. The rich and varied colouring of Thick-billed Pigeon made British doves seem insipid. The raucous and memorable Long-tailed Parakeet wheeling above the Sungai Belait were easy to identify. The formidable appearance of the Chestnut-breasted Malkoha belies its predilection for insects as food. White-bellied Swiftlet and Silver-rumped Swift hurtled past our heads close enough to hear their wings. Of all the Bornean kingfishers, the Stork-billed most impressed with its size, its speed, its vivid colour, and its strident voice. However, the birds of Borneo are the hornbills, and in a short space of time Wrinkled, Wreathed, Black and Rhinoceros quickly made their presence known. The most characteristic, monotonous, and relentless noise of Borneo is that of the Little Barbet, very often heard, but seldom easily seen. The imposing White-bellied Woodpecker dwarfed all other woodpeckers in our experience. Greater Green Leafbird were admired, but hints of the difficulties facing the party came when the first babblers and bulbuls were encountered. Fleeting glimpses of little brown birds seemed to be the best one could hope for, because relatively few of them possess characteristics easily identified in their restless movements or flight. Puff-backed Bulbul proved to be the most co-operative and placid, enabling observers to spend ample time watching through telescopes.

A limited amount of netting was carried out in the peatswamp forest, principally to enable the ringers to get to know each another's working practices. It was during one of these forays that it was realised that the water level in the peatswamp forest reflects the state of the tide backing up the Sungai Belait. Removing a net when chest-deep in water is more difficult than setting it in an ankle-deep puddle!

We are firmly of the opinion that the peatswamp forest south of Seria is one of the richest areas of birdlife in Brunei, and as such can be regarded as a prized asset amongst all the natural history resources of that country. Access via tracks built along the edge of the area or into its interior is straightforward, but off-track access is exceptionally difficult. Further studies are certainly needed to increase knowledge of this unique habitat, but they will be beset by many difficulties. The birds tolerated our presence for as long as we were quiet. Movement off-track cannot be achieved without much noise and disturbance, but there is much to be gained from work close to these tracks. However, if more tracks were constructed, the flow of the water could be badly impeded and the unique peatswamp habitat could deteriorate to a stagnant remnant.

We departed for the Temburong with mixed feeling - great interest and excitement in getting to remote areas close to primary forest, but with reluctance to leave the newly-discovered riches of the peatswamp forest, where we could have worked usefully for the duration of the Expedition. We travelled by lorry to Bandar Seri Begawan, and by chartered water-taxi to Bangar in the Temburong. Two such boats took us and our supplies at about 60 kph through twisting waterways, an exhilarating ride! Another lorry took us on to Kampong Batang Duri. Soon after we had established what we had planned to be base camp, unseasonal heavy and continuous rains hit us. As the rivers and streams rose rapidly and violently, we were in danger of being cut off, and we had to retreat, first to a camp down the slope near the Sungai Temburong, and then back over the dangerously swollen river to safe ground. We received considerable assistance at this time from the Iban villagers, marshalled by our hired Iban guide, the remarkable Rabu Sapoh. He built superb bashas, guided us through forest paths, and provided several boat trips upriver.

MAP 2  
 SKETCH-MAP OF AREA OF SYSTEMATIC OBSERVATIONS CENTRED ON  
 KAMPONG BATANG DURI, TEMBURONG



Despite the difficulties, much mistnetting and ringing had taken place, but once settled in our third camp, we mounted an intense systematic programme of netting and observation.

It very quickly became apparent that many birds, never observed free flying, were present in fair numbers, for mistnetting revealed the beauties of such birds as Rufous Piculet, Black-and-Red Broadbill, Black-headed Bulbul, Grey-cheeked Bulbul, Short-tailed Babbler, Striped Tit-babbler, Black-throated Babbler and Crimson Sunbird. Perhaps a dozen Little Spiderhunter were seen - one hundred and thirteen were ringed!

Observations and ringing were carried out in a wide variety of habitats in the Temburong, and often on the borders between one type and another: riverine, grassed areas, cultivated areas, scrub, secondary forest and primary forest.

It remains the general case that bird activity is at its greatest from dawn, heralded by the song of the Sooty-capped Babbler, until about 4 hours afterwards. A further peak of activity occurs in the 3 hours before dark when the enormous variety of strident cicada and other insect noises take over and simply overwhelm the senses. Nevertheless, in areas where food was plentiful, subdued activity tended to continue throughout the day. Birds whose breeding cycle was at the courtship stage, whose behaviour was strongly territorial, or whose need to feed a growing family was pressing (especially among raptors) tended to be seen in small numbers in the middle of the day as well as during the cooler periods. Occasionally at any time of day we saw small birds, either as singletons or in small groups, which appeared to be foraging as they moved. Their strategy seemed to have meagre obvious success, but possibly it provided enough food to "top up" their energy until a more abundant source of food was discovered. Birds behaving in this manner appeared irregularly.

Clearly such erratic movement and behaviour would be enormously difficult to study, but it is a good example of how the unexpected crops up in a jungle environment when on most days little moves between 11 am and 3 pm.

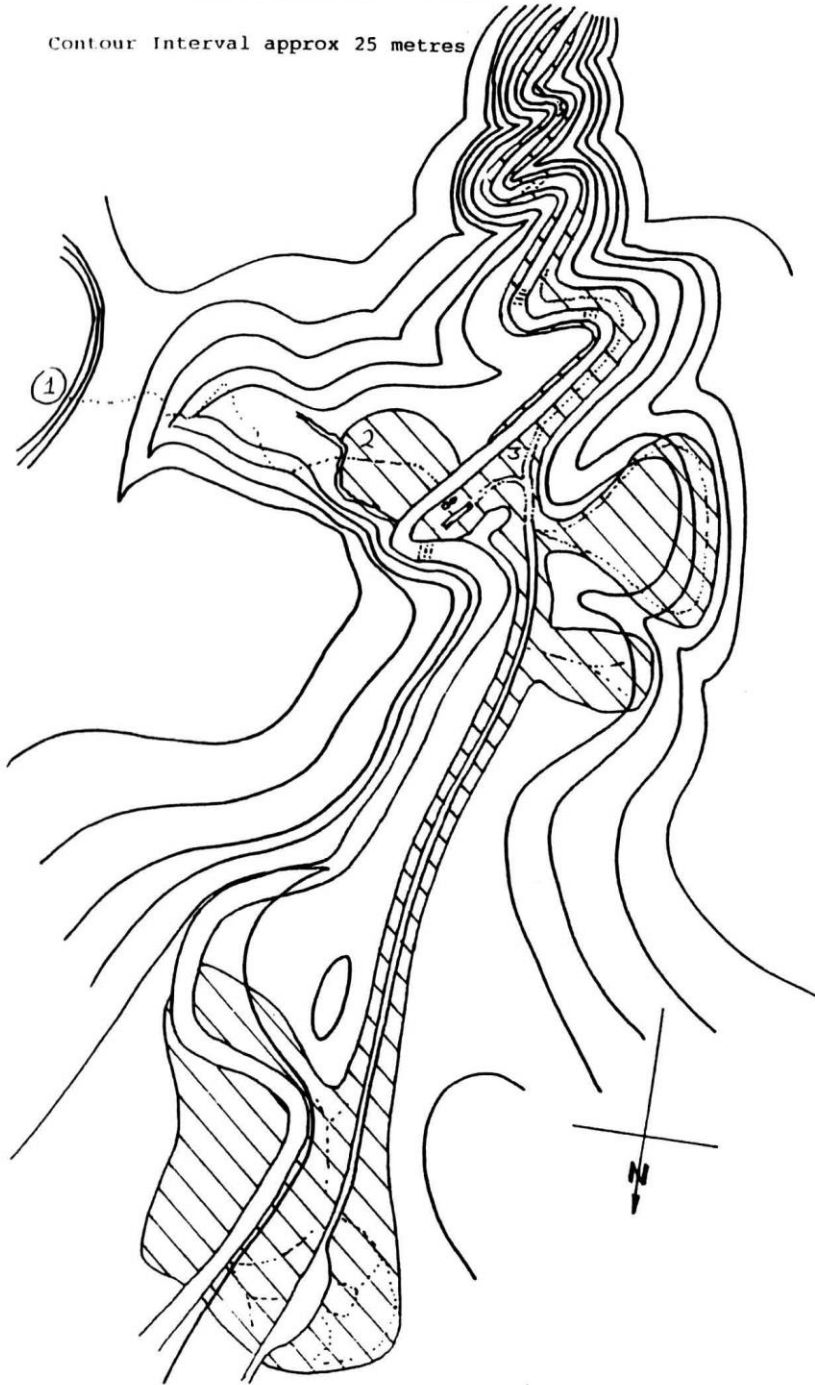
There were clear advantages in having several teams of 2 or 3 observers working systematically through an area such as that outlined in Map 2. Each team gained in a greater all-round coverage from each vantage-point. Greater concentration could be achieved over longer periods of time, and when several pairs of eyes are attempting to find an elusive bird which has briefly shown itself, a greater success rate in identification is achieved. Furthermore, each team member can advise on particular field-marks to be looked for on a half-hidden bird. Moreover, identification knowledge is rapidly acquired. Nevertheless, the number of unidentifiable glimpses will always remain high because of the instinctively skulking nature of many Bornean birds after they alight.

Another benefit of rotating teams through different parts of the area is that a consistent pattern of observations is achieved. Despite such success, mistnetting in the same areas will catch species rarely if ever seen by the observers! Map 3 shows how the open, relatively flat northern part of our area changes rapidly to steep-ridged tree-wooded terrain.

Clearing rides for the mistnets and carrying out ringing throughout the tropical day are energy-consuming activities. The ringers got through twice as much food as the observers. Despite the considerable physical effort required to carry out a continuous programme throughout days of intense heat and humidity, every single member of the team felt enriched by the experience, and would wish to return some day.

MAP 3  
SKETCH-MAP SHOWING APPROXIMATE CONTOURS

Contour Interval approx 25 metres





If there is one constant feature about observing birds in the jungle it is that when noise and movement are kept to a minimum, more birds are seen. To remain quiet requires discipline and concentration, easily eroded in intense heat and humidity. Although some species are confiding, many seem to appear only after long periods of quiet, or in places where natural noises, such as running water, mask the sounds of speech and movement. Our expedition could accomplish only brief coverage of a small part of the year's activities in a small area, but it did demonstrate what concentrated effort by a dedicated team could achieve. How much more, then, could be achieved by a long-term expedition, or perhaps eventually a permanent study centre? The proposed 1991/2 Royal Geographical Society Expedition should begin to provide some of these answers.

Our observations may help to build an understandable picture of what is happening in the area of natural history, for birds are not only good indicators of change when studied over a period, they are also relatively easy to observe, even in the jungle. The spur to investigation and exploration of the natural history of the world was the lead taken in the 19th century by the Royal Geographical Society. It is a paradox that as we learn more about natural history, we discover more and more that needs to be studied in detail. A prime example lies in the diversity of jungle plant species, where it is becoming clear that many plants possess properties which if studied could be useful in medicine and research, yet the destruction of tropical forests worldwide is robbing us of the chance to see how these plants can be of benefit. There is a great concern that these destructive changes may lead to severe and permanent climatic disturbance. It is also becoming apparent that both the diversity of tropical plants and the interdependency of plants, insects and birds are not only complex and poorly understood, but are also vital for the continuing existence of particular habitats. Extensive research is clearly needed to help devise a strategy to improve this situation. Natural history data is needed, whether from small expeditions like the 1988 RAFOS Expedition or whether from major scientific programmes. It would be particularly apt if Brunei, perhaps through the BRC, were to take the lead to set up a framework upon which this research, vital for the future of the rainforest countries, could be co-ordinated. It is not too difficult to imagine that, if such a policy were to be implemented, the formation of the Royal Brunei Natural History Society might follow, thus ensuring a source of invaluable practical information and inspiration to help other tropical countries restore their forests.

#### Acknowledgements

Our principal thanks go to his Highness, the Sultan of Brunei, for permission to visit Negara Brunei Darussalam. It was a privilege deeply appreciated by all members of the expedition. Various members of the British High Commission were extraordinarily helpful before and after the expedition. The 7th Duke of Edinburgh's Gurkha Rifles and Training Team Brunei at Seria gave wholehearted assistance with expedition equipment. Mr Clive C Mann gave us the benefit of his ornithological expertise in Brunei, loaning us equipment and critically reviewing our results. Mr Conrad Ozog was extremely generous with his time and advice during the early expedition preparation. Many Bruneian people treated us with great kindness and helpfulness, a memory we all treasure. We received much encouragement from members and staff of the Brunei Museum. We must also thank Awg Lim Chung Tat of the BRC Secretariat for his assistance, and the members of the Brunei Research Council itself, particularly Datin Hajah Azizah bte PADP Haji Abdullah whose patience and courtesy in correspondence we hope have been rewarded through the contents of our report. Lastly, every member of the Expedition

gained a friend in Rabu Sapoh, whose Iban knowledge was matched by his poise, courtesy and sheer hard work on our behalf.

#### Records of Observations and the Ringing Programme

There follows the Systematic List of observations of bird species. The Ringing Report was compiled by Bill Taylor. The short list of mammal species seen is included for completeness. The RAFOS Library has an indexed list of bird slides from the expedition. Colour slide photographs of birds from both the 1984 and 1988 RAFOS Expeditions are already in the possession of the Brunei Research Council as is a separate but similar report to this one.

#### RINGING REPORT

The ringing team consisted of one A and one C class permit holder who were assisted each day by one other expedition member. This arrangement allowed each member the opportunity to photograph birds in the hand and also gain some insight into ringing operations.

As with the 1984 expedition, poles for erecting nets were acquired on site and all species required the tarsus diameter measuring to determine correct ring size.

Ringing was undertaken at three sites: grassland and secondary forest around the first camp site on the east side of the Tamburong river, secondary and primary forest around the second camp site on the west side of the river, and abandoned rice fields with encroaching natural regeneration approximately one mile north of the second camp site. The latter site proved to be most successful in terms of both numbers of birds and diversity of species. Trapping of birds was carried out throughout the whole day with no substantial reduction in catching rate, but great care had to be exercised to ensure nets were never exposed to direct sunlight particularly around midday. A lesson learnt on this expedition was that in this part of the world nets erected over even very small watercourses should not be furlled in position overnight. On the third day of ringing three nets were furlled over a small stream which rose between 2-3 m that night. One net was lost completely and the two others brought down.

In all, 123 birds of 43 species were ringed and a further 34 birds of 10 species were processed without ringing due to the correct size of ring being unavailable or in the case of the smallest species, the rings being considered unsuitable. A full list of species and biometric data are shown in Tables 1 and 2.

Mr Clive Mann kindly provided rings from the University of Malaysia, and loaned us extra nets.

TABLE 1 – RINGED BIRDS

Species	Qty	Wing(mm)		Mean	Gape(mm)		Mean	Weight(gm)		Mean
		Min	Max		Min	Max		Min	Max	
Green-winged Pigeon	6	138.0	151.0	146.0	19.1	21.2	20.3	95.0	114.0	105.2
Blue-eared Kingfisher	3	65.0	67.0	65.7	47.4	48.4	47.9	19.2	20.6	20.0
Black/Rufous-backed Kingfisher	13	59.0	63.0	61.1	40.5	46.0	42.6	16.4	20.0	18.2
Blue-throated Bee-eater	2	111.0	112.0	111.5	38.0	38.7	38.4	35.9	37.9	36.9
Rufous Piculet	4	53.0	58.0	55.0	13.8	15.9	15.3	8.7	9.3	9.1
Rufous Woodpecker	2	107.0	115.0	111.0	27.8	27.9	27.85	67.0	72.0	69.5
Black-and-Red Broadbill	1			108.0			28.0			64.0
Black-and-Yellow Broadbill	1			83.0			27.8			36.5
Green Iora	1			58.5			-			13.1
Black-headed Bulbul	5	75.0	78.0	76.2	16.0	19.0	17.4	21.5	25.0	23.3
Ruff-backed Bulbul	8	91.0	98.0	95.4	19.7	23.2	21.6	25.0	38.4	33.2
Olive-winged Bulbul	19	80.0	89.0	84.8	19.1	23.3	21.5	27.0	35.2	31.3
Cream-vented Bulbul	2	75.0	90.0	82.5	17.9	21.2	19.6	20.7	23.4	22.1
Red-eyed Bulbul	3	80.0	84.0	82.3	16.2	17.3	16.8	20.7	26.3	22.7
Spectacled Bulbul	6	72.0	77.0	74.5	14.0	17.4	15.6	17.2	19.4	18.3
Grey-checked Bulbul	1			109.0			29.1			40.5
Yellow-bellied Bulbul	2	91.0	101.0	96.0	22.4	24.4	23.4	31.0	34.0	32.5
Whiry-backed Bulbul	4	74.0	83.0	77.5	16.8	18.3	17.6	14.0	16.2	14.8
Black-capped Babbler	3	71.0	75.0	73.0	19.9	21.9	20.9	26.7	32.5	28.8
Short-tailed Babbler	1			68.0			21.5			22.8
White-chested Babbler	3	72.0	79.0	76.0	20.5	23.9	22.7	18.8	23.2	21.5
Rufous-crowned Babbler	1			85.0			24.4			27.0
Grey-headed Babbler	2	67.0	71.0	69.0	17.3	19.5	18.4	20.8	24.5	22.7
Black-throated Babbler	4	67.0	75.0	70.8	19.5	20.7	20.2	23.2	27.1	25.4
Chestnut-winged Babbler	4	57.0	62.0	59.8	14.6	16.7	15.5	10.5	13.5	12.4
Striped Tit-Babbler	13	56.0	67.0	62.8	16.9	19.8	18.0	13.4	18.9	15.7

Species	Qty	Wing(mm)			Cape(mm)			Weight(gm)		
		Min	Max	Mean	Min	Max	Mean	Min	Max	Mean
Fluffy-necked Tit-Babbler	1			70.0			19.6			20.3
White-rumped Shama	3	90.0	102.0	97.0	24.4	25.1	24.7	33.7	42.7	38.9
Red-headed Tailorbird	1			45.0			18.1			8.7
Red-tailed Tailorbird	21	48.0	56.0	51.6	17.9	21.4	18.9	8.4	13.3	10.2
Yellow-bellied Prinia	2	45.0	50.0	47.5	16.4	17.1	16.8	7.9	8.5	8.2
Malaysian Blue Flycatcher	3	73.0	79.0	75.3	15.8	18.4	16.9	17.4	19.9	18.4
Pied Fantail	1			81.0			15.9			14.2
Black-naped Monarch	2	71.0	71.0	71.0	16.8	17.3	17.1	10.8	11.3	11.1
Plain Sunbird	3	58.0	65.0	61.3	15.4	17.6	16.5	8.4	9.6	9.0
Brown-throated Sunbird	14	62.0	69.0	66.1	18.2	20.7	19.4	10.2	12.9	11.7
Purple-naped Sunbird	2	64.0	68.0	66.0	20.0	22.8	21.4	11.5	13.1	12.3
Little Spiderhunter	113	61.0	74.0	68.0	33.4	45.9	38.8	10.4	15.5	13.2
Thick-billed Spiderhunter	1			79.0			33.6			15.5
Grey-breasted Spiderhunter	3	80.0	95.0	85.3	40.3	43.4	41.5	20.1	25.5	23.0
Dusky Munia	22	50.0	56.0	51.3	9.2	12.8	10.4	9.0	11.7	10.4
White-bellied Munia	4	50.0	52.0	51.3	10.8	11.9	11.3	10.5	11.3	10.9
Chestnut Munia	13	52.0	57.0	54.5	9.6	11.6	10.6	11.2	14.7	12.9
Species 43	323									

TABLE 2 - UNRINGED BIRDS

Species	Qty	Wing(mm)			Gape(mm)			Weight(gm)		
		Min	Max	Mean	Min	Max	Mean	Min	Max	Mean
Greater Coucal	1			231.0			50.4			350.0
Blue-eared Kingfisher	2	65.0	67.0	66.0	47.4	48.4	47.9	19.2	20.2	19.7
Stork-billed Kingfisher	1			151.0			98.4			188.0
Black-and-Red Broadbill	1			106.0			31.2			56.0
Dark-necked Tailorbird	1			45.0			18.7			7.5
Crimson Sunbird	3	47.0	51.0	49.7	16.2	16.8	16.5	4.4	5.6	5.0
Yellow-rumped Flowerpecker	10	47.0	57.0	51.4	9.7	12.3	11.1	6.5	7.9	7.3
Yellow-breasted Flowerpecker	12	50.0	56.0	52.7	11.7	13.1	12.4	6.6	8.5	7.5
Orange-bellied Flowerpecker	2	49.0	52.0	50.5	12.1	12.4	12.3	6.1	6.3	6.2
Scarlet-backed Flowerpecker	1			46.0			10.8			5.4
Species 10	34									

THE ROYAL AIR FORCE ORNITHOLOGICAL SOCIETY EXPEDITION TO  
NEGARA BRUNEI DARUSSALAM

22 JUNE TO 20 JULY 1988

SYSTEMATIC LIST OF SPECIES

Compiled by Flight Sergeant C J SPARKS, Expedition Recorder

During the Expedition, 190 species were positively identified. The following list records these 190 species and is followed by a list of sightings for which the identification is less than positive. The status of each species is taken from 'A Checklist of the Birds of Negara Brunei Darussalam' by kind permission of the author, Clive F Mann. Clive, who is based in the capital of Brunei, Bandar Seri Begawan, rendered considerable assistance to the Expedition and was kind enough to cast a critical eye over the records that follow. The sequence and nomenclature follow that in King, Woodcock and Dickinson 'A Field Guide to the Birds of South-East Asia' (1975), with the nomenclature used in Smythies 'The Birds of Borneo' (1981) in parenthesis where this differs. The sole exception is given in the text. Numbers after the name are the species number as given in King. Where birds are not covered by King, a number prefixed by 'S' indicates the Smythies page number.

**Oriental Darter** Anhinga melanogaster 19  
(Widespread in suitable localities)

Three birds were seen in the Ulu Temburong on 13 July and one in the same area on 14 July. The Seria area produced a single bird on 16 July and two birds on 19 July.

**Great-billed (Dusky Grey) Heron** Ardea sumatrana 24  
(Very uncommon)

One bird was seen at Seria on 23 June.

**Purple Heron** Ardea purpurea 26  
(Widespread, and not uncommon as a winter visitor; some over-summer)

The Wasan paddyfields proved to be an ideal habitat to observe this species: six birds were seen on 28 June and five birds were seen on 18 July.

**Little (Little Green) Heron** Butorides striatus 27  
(Common resident and winter visitor in suitable habitat)

A number of these attractive small herons were observed on the Seria mudflats over the period 27-30 June; the maximum count being five birds on 28 June. The Ulu Temburong produced one bird on 1 July; two birds on 10 July; one bird on 15 July and eight birds on 16 July.

**Cattle Egret** Bubulcus ibis 31  
(Uncommon winter visitor, October-April)

It was pleasing to substantiate the belief expressed in 'Smythies' that a few birds of this species remain in Borneo all the year round when two birds were seen together at Seria feeding on and amongst cattle on 19 July.

**Pacific Reef-Egret** Egretta sacra 32  
(Black-phase individuals occasionally seen; white-phase birds are overlooked, R F Ollington believes they occur at Seria)

Two white-phase birds were seen on the Seria mudflats on 23 June and a single white-phase bird was seen at the same location on 27 June, 28 June, 16 July and 19 July.

**Great (Large) Egret** Egretta alba 34  
(Widespread winter visitor, some over-summer)

Twenty-four birds were seen on the Wasan paddyfields on 28 June and eleven birds were observed at the same location on 18 July. The Seria mudflats produced one bird on 23 June, two birds on 28 June and one bird on 19 July.

**Little Egret** Egretta garzetta 36  
(Widespread. Mainly a winter visitor, but can be seen in any month)

Observations at the Seria mudflats results in the following birds being seen: one on 23 June, two on 27 June; ten on 28 June; six on 30 June; eleven on 16 July and seven on 19 July. The Wasan paddyfields produced ten birds on 26 June; three birds on 28 June and 10+ birds on 18 July. Two birds were seen in the Ulu Temburong on 10 July. A number of birds with black toes (not yellow) were observed and were thought to belong to the black-toed race, Egretta garzetta nigripes: four birds at the Seria mudflats on 23 June; a number of the ten birds recorded above at the same location on 28 June and two birds on 29 June.

**Cinnamon Bittern** Ixobrychus cinnamomeus 41  
(Widespread resident and possible migrant)

A few of these distinctive bitterns were seen in the Seria area over the period 23 June to 30 June; the maximum count being five birds on 27 June. Over the period 16 July to 19 July the maximum count was four birds on 19 July. A visit to the Wasan paddyfields on 26 June revealed 20+ birds with twelve birds being seen on both the 28 June and 18 July.

**Woolly-necked (Storm's) Stork** Ciconia episcopus (stormi) 49  
(Scarce; usually by water, but may be seen flying over almost anywhere)

Two birds seen flying over the Wasan area on 28 June and one bird was seen in the Ulu Temburong on 15 July.

**Lesser Adjutant** Leptoptilos javanicus 52  
(Very uncommon)

Just two birds of this species seen on 5 July; the pair were flying over a river in the Ulu Temburong.

**Brahminy Kite** Haliastur indus 102  
(Widespread, usually close to water)

The Kuala Belait area produced two birds on 26 June; four birds (two were immatures) on 29 June and one bird on 17 July. One bird was seen close to the village of Tutong on 28 June and the peat swamp forest three miles south of Seria produced two birds on 27 June. One bird was seen over the Wasan paddyfields on 18 July and one bird was seen in the Ulu Temburong on 10 July. The Seria area revealed one bird on 30 June and 16 July and two birds on 18 July.

**White-bellied Sea Eagle** Haliaeetus leucogaster 103  
(Present in small numbers on coast and tidal rivers)

One of the world's finest eagles which was seen on most days soaring majestically over the coast. It was encouraging to see a number of immature birds in the Seria/Kuala Belait area. The maximum count in this area was three birds on 29 June and 17 July. An immature bird was encountered outside the village of Tutong on 28 June and an adult bird was seen close to the capital, Bandar Seri Begawan, on 10 July. A single bird was seen in the Ulu Temburong on 1 July but a total of three birds were seen there on 15 July.

**Grey-headed Fish-Eagle** *Ichthyophaga ichhyaetus* 107  
(Scarce. Rivers, open waters, occasionally on the coast)

A single bird, sub-adult, seen on 14 July in the Kampong Batang Duri area of the Ulu Temburong.

**Crested Serpent-Eagle** *Spilornis cheela* 114  
(Common and widespread. Forests and wooded areas)

A most striking bird especially when observed perched on the branch of a dead tree. A single bird was seen in the peatswamp forests outside Seria on 29 June and 19 July. Single birds were seen in the Ulu Temburong on 10, 11, 13 and 14 July; one remaining at close range perched on a dead tree for over an hour.

**Crested Goshawk** *Accipiter trivirgatus* 124  
(Widespread in forested and wooded country)

Two birds were seen in the peatswamp forests outside Seria on 29 June and at least two birds were seen in the same location on 19 July.

**Black Eagle** *Ictinaetus malayensis* 133  
(Rare. Forested hillsides and wooded country)

Only one sighting of a single bird close to the road between Tutong and Seria on 26 June.

**Rufous-bellied Eagle** *Hieraaetus kienerii* 141  
(Uncommon forest species)

A superb view of an adult bird soaring above the camp in the Ulu Temburong on 6 July, and single immature birds seen there on both 5 July and 9 July. One adult was examined and photographed on 30 June at Seria where it was recovering in protective custody, having been temporarily disabled in a storm.

**Changeable Hawk-Eagle** *Spizaetus cirrhatus* 142  
(Widespread, but not numerous. Secondary forest and open country but can be seen almost anywhere. Dark-phase birds are common)

Most frequently seen perched close to the road between Bandar Seri Begawan and Seria: one bird on 22 June; two birds, both dark-phase, on 28 June and one bird on 18 July. Single birds were seen in the Ulu Temburong on 4 July and 11 July and two birds were observed there on 13 July.

**Blyth's Hawk-Eagle** *Spizaetus alboniger* 144  
(Uncommon, chiefly over forests)

One, sub-adult, seen soaring at close quarters in the Ulu Temburong on 8 July and one bird seen over Seria on 17 July.



**Black-thighed Falconet** Microhierax fringillarius 148  
(Common forest edge species)

This delightful tiny falcon is often conspicuous due to its habit of sitting on dead trees in clearings. A single bird was seen in the Ulu Temburong on 8 July and 14 July and the same location produced two birds on both 11 July and 13 July. A family group, consisting of a male, female and three juveniles were observed in the peatswamp forests outside Seria on 17 July.

**Blue-breasted Quail** Coturnix chinensis 164  
(Common in grassy areas, particularly where damp)

Single birds were seen in the Ulu Temburong on both 11 July and 12 July.

**White-browed Crane** Porzana cinerea 213  
(Occurs in paddyfields and swamps)

The Wasan paddyfields contained good numbers of this species, the maximum count being 12+ birds on 26 June. Three birds were seen at Seria on 19 July.

**White-breasted Waterhen** Amaurornis phoenicurus 215  
(Common in paddyfields, swamps and dense cover near water)

Good numbers on this species were seen on the majority of days. Highest counts were: three birds at Kuala Belait on 29 June; ten birds, which included three pulli at Seria on 27 June and thirteen birds there on 30 June; two birds in the Ulu Temburong on 13 July and five birds at the Wasan paddyfields on both 26 June and 18 July.

**Pacific Golden Plover** Pluvialis fulva (232)  
(Common winter visitor and passage migrant recorded in all months except July; coastal and inland). Nomenclature follows "Shorebirds", by Hayman, Marchant and Prater (1986) because of recent splitting of Golden Plover into three species.

The five birds seen together at the Wasan paddyfields on 18 July means that this species has now been recorded in Brunei in all the months of the year.

**Little Ringed Plover** Charadrius dubius 234  
(Common winter visitor and passage migrant; July-April; coastal and inland)

Four birds were observed at the Wasan paddyfields on 18 July.

**Malaysian Plover** Charadrius peronii 236  
(Uncommon and local; apparently resident; usually on beaches)

A male bird in full breeding plumage was seen near the Kuala Belait ferry on 26 June and the Seria mudflats produced one female bird on 16 July.

**Mongolian Plover** Charadrius mongolus 238  
(Common winter visitor and passage migrant to the coast; can be seen in any month)

The Seria mudflats are an ideal habitat for this species. Six birds were seen there on 29 June; four birds on 30 June and nine birds were seen on both 16 July and 18 July.

**Greater Sand-Plover** Charadrius leschenaultii 239  
(Common winter visitor and passage migrant to coast; can be seen in any month)

Observed on the Seria mudflats over the period 27 June to 29 June; the highest count being twelve birds on 27 June.

**Common Redshank** *Tringa totanus* 248  
(Chiefly August to April, but has been recorded in all months)

Small numbers watched on the Seria mudflats over the period 23 June to 30 June; the maximum being three birds on 29 June. The same location contained eight birds on 16 July and six birds on 18 July.

**Marsh Sandpiper** *Tringa stagnatilis* 249  
(Uncommon visitor to Seria, Wasan and Muara; chiefly August to February)

Superb view of a single bird feeding just a few feet away on the Wasan paddyfields on 18 July.

**Wood Sandpiper** *Tringa glareola* 253  
(Abundant winter visitor and passage migrant; has been recorded in all months)

Just one sighting of 27+ birds on the Wasan paddyfields on 18 July.

**Common Sandpiper** *Actitis hypoleucos* 255  
(Common and widespread winter visitor and passage migrant. Has been recorded in all months)

A solitary bird witnessed running about on a small sandbank way up river in the Ulu Temburong on 8 July.

**Grey-tailed Tattler** *Heteroscelus brevipes* 256  
(Winter visitor and passage migrant in small numbers. Has been recorded in all months)

A single bird frequented the Seria mudflats throughout the periods 27 June to 30 June and 16 July to 18 July.

**Long-toed Stint** *Calidris subminuta* 271  
(Common winter visitor and passage migrant, chiefly inland. Recorded in all months except June)

One bird seen on the Seria mudflats on 16 July and 18 July; a total of four birds recorded on the Wasan paddyfields on 18 July.

**Oriental Pratincole** *Glareola maldivarum* 286  
(Recorded from February to May and October to December)

Along with Conrad Ozog and Dave Diskin, resident birdwatchers, RAFOS shares first proof of breeding of this species in Brunei. An adult bird with two juveniles, one with chick tufts still visible, gave some excellent close-range views on the Wasan paddyfields on 26 June.

**Black-naped Tern** *Sterna sumatrana* 305  
(Coastal; recorded mostly in January, and May to July. Breeds on Pelong Rocks (laying presumed June).

Two birds were seen off Limbang (Brunei Bay) on 25 June. The Sungai (River) Temburong produced one bird on 9 July and a total of three birds on 10 July.

**Thick-billed Pigeon** Treron curvirostra 321  
(Common in primary rain forest; occasionally in secondary forest)

The peatswamp forests just south of Seria proved to be an excellent habitat to observe this species; one bird was seen on 29 June, fourteen birds were seen on 17 July and three birds were seen on 19 July. One bird was observed in the Ulu Temburong on 13 July.

**Cinnamon-headed Pigeon** Treron fulvicollis 323  
(Very uncommon; peatswamp and secondary forest)

A solitary example observed in the Ulu Temburong on 12 July.

**Little Green Pigeon** Treron olax 324  
(Common in all forms of forest, woodland, gardens)

The peatswamp forests south of Seria produced two birds on 29 June and four birds on 19 July. Hardly a day passed without this species, the smallest of the green pigeons, being recorded in the Ulu Temburong in good numbers.

**Pink-necked Pigeon** Treron vernans 325  
(Common in scrub country, mangroves, open woodland, gardens)

Although considered the commonest and most abundant of the green pigeons, this species was only observed in small numbers. The highest single count was of six birds seen close to the Tutong to Seria road on 22 June. Two birds were seen in the Ulu Temburong on 6 July and single birds were witnessed in the same area on 7 July and 10 July. The Seria area produced four birds on 19 July.

**Large Green Pigeon** Treron capellei 327  
(Common in primary rain forest)

Two birds seen close to the Tutong to Seria road on 22 June. Five birds were recorded in the Ulu Temburong on 5 July with nine birds and seven birds recorded on 11 July and 12 July respectively.

**Green Imperial Pigeon** Ducula aenea 330  
(Common in mangroves, forest, woodland. Most commonly near the coast)

With its red iris, red eyelids and base of bill plum on top, the pergam, as the species is known in Borneo, is easy to identify. Recorded on most days in twos or threes around Seria, the peatswamp forests outside Seria and in the Ulu Temburong.

**Mountain Imperial Pigeon** Ducula badia 332  
(A bird of lowland as well as highland forests)

Two birds observed from the Tutong to Seria road on 24 June. Single birds seen in the Ulu Temburong on 10 July and 11 July.

**Feral/Rock (Town) Pigeon** Columbia livia 334  
(Common around towns. Perhaps only truly feral in Bandar Seri Begawan)

Observed in large numbers on fourteen days of the Expedition. Counts in the region of Order 2 were recorded from Bandar Seri Begawan, Bangar in the Ulu Temburong and from Seria and its surrounding area.

**Red Cuckoo-Dove** Macropygia phasianella S137  
(Resident but sparingly distributed through Borneo (Smythies). One at Lamunin on 30 Mar 82)

Two birds of this species were seen in the Ulu Temburong on 13 July. The long tail and considerably larger size helped to distinguish from Little Cuckoo-Dove, Macropygia ruficeps. (339).

**Spotted Dove** Streptopelia chinensis 343  
(Widespread in gardens, open woodland and agricultural land)

Recorded virtually every day of the Expedition. Highest counts were of eight birds close to Kuala Belait on 29 June; fourteen birds in the Ulu Temburong on 12 July and fifteen birds around Seria on 19 July.

**Peaceful (Barred Ground) Dove** Geopelia striata 344  
(Originally introduced; now found around Kuala Belait, Seria, Tutong, Jerudong, Bandar Seri Begawan (common) and Muara)

Two birds were observed in wooded urban surroundings at Bangar Seri Begawan on 24 June and four birds were seen in the same area on 28 June. Two birds were recorded at Kuala Belait on 19 July.

**Green-winged Pigeon (Emerald Dove)** Chalcophaps indica  
(Widespread in secondary and primary forest)

Recorded in small numbers every day the Expedition was based in the Ulu Temburong; the maximum count was of eleven birds on 11 July. One bird was seen in the peat swamp forests of Seria on 19 July. A total of six birds was netted and ringed.

**Long-tailed Parakeet** Psittacula longicauda 350  
(Widespread; open woodlands, gardens, forest edge, mangroves)

Seen hurtling through the air at a great pace in compact flocks on three separate occasions; their loud and raucous cries are unforgettable: six birds together in the Seria peat swamp forests on 24 June; five birds in the Ulu Temburong on 13 July and a flock of seven birds over Seria on 17 July.

**Blue-rumped Parrot** Psittinus cyanurus 353  
(Uncommon, usually in primary rain forest)

There were three birds of this species seen in the Ulu Temburong on 11 July. The following day a superbly plumaged male bird was observed.

**Blue-crowned Hanging-Parrot (Malay Lorikeet)** Loriculus galgulus 355  
(Common in all types of forest and woodland, occasionally gardens)

A popular cage-bird, it was upsetting to see them on sale in such tiny cages and in such cramped conditions. The peat swamp forests outside Seria produced ten+ birds on 29 June, one bird on 17 July and four birds on 19 July. Small

numbers were seen on most days while in the Ulu Temburong, the highest count being six birds on 13 July.

**Plaintive Cuckoo** Cacomantis merulinus 367  
(Common in gardens, open woodland, forest edge and open country)

Two separate sightings of this species in the Ulu Temburong; one bird, at Bangar, on 11 July and one bird on 13 July.

**Common Koel** Eudynamys scolopacea 374  
(An uncommon winter visitor with few specific records)

Although the dates are very late in the season, three birds were identified close to Bandar Seri Begawan on 28 June the birds were being mobbed by Ioras. One bird was identified by its distinctive call in the peat swamp forests outside Seria on 29 June.

**Chestnut-bellied Malkoha** Phaenicophaeus sumatranus 376  
(Uncommon, usually in secondary forest)

Just one sighting of a single bird in the peat swamp forests outside Seria on 17 July.

**Raffles's Malkoha** Phaenicophaeus chlorophaeus 378  
(Common in a wide variety of forest and forest edge habitats)

Recorded in small numbers most days whilst in the Ulu Temburong, a maximum of five birds were seen on 9 July (three male and two female). Five birds were also seen in the peat swamp forests near Seria on 17 July.

**Red-billed Malkoha** Phaenicophaeus javanicus 379  
(Widespread but uncommon; forest and forest edge)

One record only of a single bird on 17 July during a visit to the peat swamp forests near Seria.

**Chestnut-breasted Malkoha** Phaenicophaeus curvirostris 380  
(Quite common; forests; forest edge; wooded country)

Single birds observed on two separate occasions; one in the peat swamp forests near Seria on 29 June and one in the Ulu Temburong on 12 July.

**Greater (Common) Coucal** Centropus sinensis 383  
(Common in dense scrub; forest; gardens)

Recorded in small numbers, usually in pairs, on virtually every day of the Expedition. A maximum of seven birds were seen in the Ulu Temburong on 12 July and again a maximum of seven birds were observed in the Seria area on 17 July where breeding was proved. One bird was netted but not ringed.

**Lesser Coucal** Centropus bengalensis 384  
(Common in tall grass, swamp edge, paddyfields, low scrub and gardens)

A maximum of three birds were seen in the Seria area on 16 July. Three, five and two birds were observed in the Ulu Temburong on 12 July, 13 July and 14 July respectively. Four birds were seen at the Wasan paddyfields on 18 July.

**Brown Wood-Owl** Strix leptogrammica 407  
(Recorded from Seria, Labi road, Sg. Rampayoh and bandar Seri Begawan)

Although not seen, this species was identified by its distinctive deep musical call of four syllables, goke, goke-galoo, with the emphasis on the first note, lasting about one second (Smythies). Single birds in the Ulu Temburong on 1 July, 12 July and 13 July. Two separate birds were heard in the same area on 11 July.

**Large-tailed Nightjar** Caprimulgus macrurus 419  
(Common in open country)

Nine nightjars were seen during the Expedition but only three could be positively identified as belonging to this species. Two birds were seen close to the Seria mudflats on 28 June and one bird was observed at close range beside the Tutong to Bandar Seria Begawan road on 1 July.

**Black-nest Swiftlet** Collocalia maxima 424  
(Possibly the commonest species)

There were days when the sky seemed full of them! Dozens and dozens, sometimes hundreds, were recorded on every day of the Expedition over all types of habitat. The birds roost in limestone caves.

**White-bellied Swiftlet** Collocalia esculenta 426  
(A common and easily identified species; almost ubiquitous)

Three birds were observed in the peatswamp forests outside Seria on 29 June. This species was recorded on each day the Expedition was based in the Ulu Temburong; highest numbers were of twenty+ birds on 5 July, Order 2 around Bangaron 9 July and twenty-two+ birds on 12 July. The Seria area produced eight birds on 16 July.

**Brown Needletail** Hirundapus giganteus 429  
(Brown Spinetailed Swift)  
(Widespread; usually, but not necessarily, over forest)

It has been said that this species is the world's fastest flying bird. The Expedition was able to witness the speed of this bird when small numbers were seen on most days. 9 July saw birds numbered in the region of Order 2 around Bangar in the Ulu Temburong.

**Silver-rumped Swift** Rhaphidura leucopygialis 430  
(Common over forest, particularly riverine and primary rain forest)

Birds numbering between one and seven were seen each day in the Ulu Temburong over the period 1 July to 14 July. The peatswamp forests near Seria, however, proved to be an ideal habitat in which to watch this species probably due to the profusion of flying insects that frequent this wet and humid environment. Hundreds of birds were seen on each visit to this area.

**House Swift** Apus affinis 433  
(Common in towns and around other man-made structures such as bridges. Occasional offshore)

Usually seen in small numbers around Seria and Bandar Seri Begawan although sixteen+ birds were observed around the latter on 1 July. Twenty+ birds were seen at the Tutong bridge on 28 June.

**Asian Palm-Swift** Cypsiurus batasiensis 434  
(Found chiefly in the vicinity of tall broadleaf palms; mostly on the coastal strip but also upper Temburong)

Recorded from the Seria peatswamp forests where over one hundred birds were seen on 26 June. Seen on three separate days in the Ulu Temburong, the best area being around Bangar on 9 July where dozens were observed.

**Grey-rumped (Crested) Treeswift** Hemiprocne longipennis 436  
(Common and widespread wherever trees occur)

Generally two or three birds would be seen on visits to the Seria peatswamp forests but ten birds were recorded there on 17 July. Reasonable numbers were observed on most days in the Ulu Temburong, the maximum count being of twelve birds on 13 July.

**Whiskered Treeswift** Hemiprocne comata 437  
(Widespread, particularly on the edges of primary rain forest)

A strikingly handsome and very tame bird that has the fascinating habit of closing its long wings 'by numbers' in three or four quick jerks after returning again and again to its favoured branch. The clearings in the Seria peatswamp forests were an ideal area to witness this spectacle; sixteen+ birds were seen there on 29 June and ten+ birds were observed on 17 July. Single birds, occasionally pairs, were encountered in the Ulu Temburong on five separate days.

**Diard's Trogon** Harpactes diardii 439  
(Primary rain forest)

One bird was rescued from a catching net put up by the Iban in the Ulu Temburong on 9 July.

**Scarlet-rumped Trogon** Harpactes duvaucelli 441  
(Widespread in primary rain forest, riverine forest, secondary forest and old rubber)

A male bird of this species was observed at fairly close range for a good few minutes in the Ulu Temburong on 12 July.

**Blue-eared Kingfisher** Alcedo meninting 449  
(Forested watercourses; widespread)

Two birds were seen in the peatswamp forests near Seria on 29 June and two more on 17 July. One or two birds were observed on most days in the Ulu Temburong where, on 12 July, three were netted and ringed. On 13 July two birds were caught but were not ringed.

**Black-backed/Rufous-backed Kingfisher** Ceyx erithacus/rufidorsus 451/2

(Forest close to water; mangroves. The Bornean population seems to be a hybrid swarm, with characters of the latter predominating (Smythies 1981). Migrants probably reach Brunei, but so far there is no evidence).

One or two birds were mist-netted every day the Expedition was based in the Ulu Temburong over the period 3 July to 14 July. Of the twenty-two birds recorded, thirteen were ringed. Most others were observed as a flash of yellow crossing a forest stream. Four of these birds had plumage which clearly indicated that they were at the C. rufidorsus end of the scale. The remainder showed varying amounts of black on the wing feathers all the way to C. erithacus.

**Stork-billed Kingfisher** Pelargopsis capensis 454  
(Widespread; usually, but not always, close to water)

This is a noisy bird; when caught and handled its piercing scream is enough to chill the blood! Being 13" in size with a huge bill it is easy to believe that it will fiercely attack other birds, up to the size of **Sea Eagle**, **Brahminy Kite** and **Adjutant Stork**. Single birds were observed on a number of days on the Seria Pools, the peat swamp forests outside Seria and the Ulu Temburong. The maximum count was of five birds along the Sungai Temburong on 14 July. One bird was caught, but not ringed, in the Ulu Temburong on 4 July.

**Ruddy Kingfisher** Halcyon coromanda 456  
(Waterside vegetation; uncommon)

One bird seen at Seria on 27 June and one in the peat swamp forests outside Seria on 29 June.

**(White) Collared Kingfisher** Halcyon chloris  
(Widespread. Coast, mangroves, swamps with trees, gardens)

The harsh voice of this bird gave its presence away. Very aggressive, it does not take kindly to intrusions into its territory. By far the most common kingfisher which was observed in good numbers in all habitats around Seria. The highest number was of sixteen birds counted in the area on 19 July. The species was also recorded at Kuala Belait, Tutong, Bandar Seri Begawan and the area close to Pungit Island. No birds were seen in the Ulu Temburong.

**Blue-throated Bee-eater** Merops viridis 464  
(Common in most habitats)

This graceful and sociable bird was often seen in flocks or small parties in all areas visited by the Expedition. The 1984 RAFOS Expedition to Brunei did not record this species in the Ulu Temburong but, on this Expedition, it was observed in the area on each day over the period 3 July to 14 July; the highest count being of between twenty and thirty birds on 10 July. Two were ringed.

**Dollarbird (Broad-billed Roller)** Eurystomus orientalis 468  
(Widespread resident and winter visitor in areas of open forest and areas of tall trees. Most numerous in winter)

The large white patch on the wing resembling a dollar piece, and which gives the bird its name, can clearly be seen in flight. A single bird was seen at Kuala Belait; the Ulu Temburong produced one bird on 9 July and at least three birds on 13 July; two were observed outside Bandar Seri Begawan on 15 July and a total of eight birds were seen in the Seria area on 17 July. By far the largest



count was of thirty-two birds along the roadside between Seria and Tutong where they would perch on electric cables between the pylons; the date was 28 June.

**Wrinkled Hornbill** Rhyticeros corrugatus 474  
(Widespread in primary rain forest, peatswamp forest, secondary forest and tall trees in open country)

At least five birds were seen in the peatswamp forests near Seria on 29 June. Records from the Ulu Temburong were of one bird on 5 July, two birds on 6 July and three birds on 10 July.

**Wreathed Hornbill** Rhyticeros undulatus 475  
(Uncommon rain forest species)

The peatswamp forests outside Seria produced one bird on 29 June and observations in the Ulu Temburong revealed five birds on 1 July and one bird on 11 July.

**Black Hornbill** Anthracoceros malavanus 477  
(Common in primary rain forest and secondary forest)

Recorded on twelve days as single birds or, more usually, in small parties in the peatswamp forests near Seria (maximum count was of five birds on 29 June) and in the Ulu Temburong where the maximum number was of five birds on both 5 July and 11 July.

**Southern Pied (Pied) Hornbill** Anthracoceros convexus 479  
(coronatus)

(Within its area of distribution it occurs almost anywhere there are trees)

Two birds were observed near to Seria on 17 July; one with plumage tending towards Southern Pied A. convexus and one with the plumage characteristics tending towards Indian Pied A. albirostris (478). Three birds were seen in the peatswamp forests nearby on 19 July.

**Rhinoceros Hornbill** Buceros rhinoceros 480  
(Widespread, but not numerous; primary rain forest and riverine forest)

The remarkable roaring call of this bird is one of the most characteristic sounds of the rain forests of Brunei. The sight of this magnificent bird is never forgotten. A visit to the peatswamp forests south of Seria on 29 June saw five of these large birds. Small numbers ranging from between two and seven birds were seen in the Ulu Temburong on 3, 4, 5, 7 and 12 July. Four Expedition members who were lucky enough to be given a helicopter flight saw six birds whilst they were flying over Labi on 17 July.

**Helmeted Hornbill** Rhinoplax vigil 482  
(Primary rain forest; uncommon)

The largest hornbill in country; some 50" (including a long tail of 20" to 28"); it is unmistakable to eye and ear. Just a single sighting of one bird in the Ulu Temburong on 12 July.

**Red-crowned (Many-coloured) Barbet** Megalaima rafflesii 489  
(Widespread and common in primary rain forest and secondary forest)

Observed in the Ulu Temburong on each day of the period 7 July to 15 July, usually as a single bird or in pairs although four birds were recorded on 12 July. One bird was heard calling in the peatswamp forests near Seria on 19 July.

**Red-throated (Gaudy) Barbet** Megalaima mystacophanos 490  
(Widespread and common; chiefly primary forest, but also at times in secondary forest)

One bird was seen in the Ulu Temburong on 14 July.

**Yellow-crowned Barbet** Megalaima henricii 495  
(Common in primary forest, occasionally in secondary forest)

Only the one bird seen on 19 July in the peatswamp forests outside Seria.

**Blue-eared (Little) Barbet** Megalaima australis 496  
(Common wherever tall trees grow)

This is the most abundant Barbet in Brunei and was encountered in all areas visited. Between fifteen and twenty birds were counted in the peatswamp forests near Seria on 29 June.

**Brown Barbet** Calorhamphus fuliginosus 498  
(Common in forested and wooded areas)

One bird seen at Seria on 30 June was of the local race C.f. tertius which has the red of the underparts restricted to the chin and throat, and the abdomen more washed with sulphur-yellow. A total of six birds were observed over three days, 9/10/11 July, in the Ulu Temburong. The peatswamp forests near Seria produced a further three birds on 17 July.

**Rufous Piculet** Sasia abnormis 504  
(Occurs in primary rain forest and secondary forest)

Single birds were seen on a number of days in the Ulu Temburong but on 12 July a total of four birds were recorded. Four birds were netted and ringed. One bird was observed in the Seria area on 19 July.

**Rufous Woodpecker** Micropternus brachyurus 505  
(Common in wooded and forested areas)

A single bird was seen in the peatswamp forests south of Seria on 29 June. Three birds, including one juvenile, were recorded in the Ulu Temburong on 10 July and a further bird was seen there on 12 July. Two birds were mist-netted and ringed on 14 July.

**Checker-throated Woodpecker** Picus mentalis 515  
(Uncommon species of primary rain forest)

One bird seen in the Ulu Temburong on 8 July.

- Banded Woodpecker** Picus miniaceus 516  
(A widespread forest edge and woodland species)
- Just two sightings of this species in the Ulu Temburong; one bird on 8 July and one bird on 13 July.
- Buff-necked Woodpecker** Meiglyptes tukki 525  
(Quite common in primary rain forest, secondary forest and mangroves)
- One was seen on 9 July in the Ulu Temburong.
- Great Slaty Woodpecker** Mulleripicus pulverulentus 526  
(Widespread in primary rain forest and peat swamp forest)
- This large woodpecker looks almost prehistoric when observed flying overhead. Two birds were seen at close quarters in the Ulu Temburong on 10 July and a further bird was seen in the same area on 13 July. One bird was heard calling in the peat swamp forests near Seria on 17 July.
- White-bellied (Great Black) Woodpecker** Dryocopus javensis 527  
(Widespread, occurring in all types of forest except mangroves)
- Unmistakable; a large and most attractive bird. The peat swamp forests close to Seria proved to be an excellent habitat in which to observe this species; four birds, including two juveniles, were seen on 24 June, three were seen on 26 June and two birds were observed on both 29 June and 17 July.
- Grey-capped Woodpecker** Picoides canicapillus 535  
(Not common. Wooded and forested areas)
- One at Seria on 30 June and one in the peat swamp forests outside Seria on 17 July.
- Brown-capped Woodpecker** Picoides moluccensis 536  
(Common and widespread, particularly in coastal areas. Gardens, secondary forest, peat swamp forest, mangroves, occasionally primary rain forest)
- A single sighting in the peat swamp forests south of Seria on 24 June of one bird which was eventually chased away by a **Greater Green Leafbird**, Chloropsis sonnerati. (603).
- Maroon Woodpecker** Blythipicus rubiginosus 540  
(Uncommon; primary rain forest and peat swamp forest)
- Two separate sightings of this species; three birds were observed in the peat swamp forests close to Seria on 26 June and a single bird was seen in the Ulu Temburong on 14 July.
- Orange-backed Woodpecker** Chrysocolaptes validus 541  
(Uncommon, usually in primary forest)
- One male bird seen in the peat swamp forests near Seria on 24 June and a pair of birds seen there on 29 June. A pair were also seen in the Ulu Temburong on 11 July.

- Black-and-Red Broadbill** Cymbirhynchus macrorhynchus 544  
(Widespread in riverine forest and secondary forest usually not far from water)  
With a black and deep red body with a bright white streak down each wing, a green iris and a large wide bill with the upper mandible of bright blue and the lower mandible a vivid yellow, this bird is absolutely stunning. All the Expedition's sightings come from the Ulu Temburong where one or two birds were seen on eight separate days. At least three birds were recorded on 2 July. Two birds were mist-netted. One was ringed.
- Black-and-Yellow Broadbill** Eurylaimus ochromalus 546  
(Widespread, chiefly in primary rain forest, but also in riverine forest, peat swamp forest and secondary forest)  
Three birds were seen in the peat swamp forests south of Seria on 27 June. Two separate sightings came from the Ulu Temburong; single birds on 7 July and 13 July, the latter being mist-netted and ringed.
- Barn (Common) Swallow** Hirundo rustica 572  
(Abundant winter visitor but has been recorded in all months. Can be seen almost anywhere)  
The period 23 June to 30 June recorded this species in small numbers around Seria and Bandar Seri Begawan. July saw the numbers steadily increase; at least eight birds were observed at the Wasan paddy-fields on 18 July and the number had built up to between twelve and twenty birds around Seria by 19 July.
- Pacific Swallow** Hirundo tahitica 573  
(Common and widespread in open areas, forest edge, habitation, mangroves, rivers)  
Recorded in fair numbers at Bandar Seri Begawan, Kuala Belait, Seria, Ulu Temburong (especially around Bangar (Order 2)) and the paddy-fields at Wasan. The Seria area produced the highest counts, generally in the region of Order 2 over the period 17 July to 19 July.
- Black-winged Flycatcher-Shrike** Hemipus hirundinaceus 580  
(Widespread in most types of forest except mangroves)  
One or two birds were seen on six separate days when visits were paid to the peat swamp forests outside Seria; the maximum count being of five birds on 29 June. A pair were observed in the Ulu Temburong on 7 July.
- Large Wood-Shrike** Tephrodornis virgatus 581  
(Very uncommon; primary rain forest edge, secondary forest)  
Single birds were seen in the peat swamp forests near Seria on 17 July and 19 July.
- Bar-bellied Cuckoo-Shrike** Coracina striata 584  
(Primary rain forest)  
A male, female and juvenile were observed in the Ulu Temburong on 12 July and a further two birds were seen there on 13 July.

- Lesser Cuckoo-Shrike** Coracina fimbriata 587  
(Common, gardens and forest edge)
- One seen at Seria on 23 June and two birds seen in the peatswamp forests close by on 17 July.
- Pied Triller** Lalage nigra 589  
(A common bird of gardens and open areas with trees and bushes)
- Common around Bandar Seri Begawan, Kuala Belait and Seria. The highest count was of at least fifteen birds in the Seria area on 16 July. A nest containing two pulli was found in the Gurkha camp in Seria at which the Expedition was initially based.
- Green Iora** Aegithina viridissima 599  
(Widespread in primary rain forest and secondary forest)
- Two birds of this species were seen in the Ulu Temburong on 25 June and a single bird was seen there on 10 July. Four birds were recorded in the peatswamp forests near Seria on 17 July and the Seria area produced a further four birds on 19 July. One bird was ringed.
- Common Iora** Aegithina tiphia 600  
(Common wherever trees occur, but avoids the interior of rain forest)
- Seen as single birds or in pairs in the area close to Pungit Island, in the Ulu Temburong, in the peatswamp forests outside Seria and in the area of Seria itself. Five birds were observed mobbing three Common Koel, Eudynamis scolopacea (374) close to Bandar Seri Begawan on 28 June. One bird was mist-netted and ringed in the Ulu Temburong on 13 July.
- Lesser Green Leafbird** Chloropsis cyanopogon 602  
(Common in forested areas)
- Recorded every day in the Ulu Temburong over the period 9 July to 13 July, usually as single birds or in pairs although a total of four birds were observed on 9 July.
- Greater Green Leafbird** Chloropsis sonnerati 603  
(Common in forested areas)
- A female bird was seen in the peatswamp forests outside Seria on 24 June and a further three birds were seen there on 17 July. Single birds were seen in the Ulu Temburong on 7 July, 10 July and 11 July. The same area produced two birds on 13 July.
- Blue-winged Leafbird** Chloropsis cochinchinensis 605  
(Scarce; forested areas)
- The combination of blue and green gives this bird a most striking appearance. One was observed at close range in a clearing in the peatswamp forests just north of Seria on 17 July.

**Straw-headed Bulbul** Pycnonotus zeylanicus 609  
(Riverine forest; wooded areas near water)

Recorded every day the Expedition was based in the Ulu Temburong over the period 3 July to 14 July, the numbers each day ranging from between three and fourteen birds. One bird was seen in the peatswamp forests near Seria on 17 July and two were observed at the Wasan paddy-fields on 18 July.

**Black-and-White Bulbul** Pycnonotus melanoleucus 611  
(Widespread in areas with trees, with a preference for forest edge)

Observed most days in the Ulu Temburong over the period 3 July to 14 July. Numbers ranged each day from one bird to twelve birds. Small numbers were also seen on each of four visits to the peatswamp forests around Seria.

**Black-headed Bulbul** Pycnonotus atriceps 612  
(Widespread in wooded and forested areas)

Recorded only in the Ulu Temburong where the species was common. Good numbers were seen every day; the highest count was of twenty-one birds on 12 July. A total of five birds was mist-netted and ringed.

**Grey-bellied Bulbul** Pycnonotus cyaniventris 615  
(Rain forest species recorded at Lamunin)

Now recorded in the Ulu Temburong! Three of these distinctive birds were seen there on 9 July two on 10 July and three on 14 July.

**Puff-backed Bulbul** Pycnonotus eutilotus 621  
(Primary forest)

A single bird was seen at Seria on 30 June. One, two or three birds were seen on most days in the Ulu Temburong. A total of eight birds was mist-netted and ringed.

**Yellow-vented Bulbul** Pycnonotus goiavier 624  
(Very common; open areas with trees. Sometimes roosts in hundreds).

Small numbers were recorded on most days in the Ulu Temburong and at Bandar Seri Begawan, Kuala Belait and the Wasan paddy-fields. The area around Seria, however, painted a totally different picture; hundreds were observed. There is believed to be a large roost close to Seria as early each morning hundreds would fly over heading eastward and return heading westward late in the afternoon.

**Olive-winged Bulbul** Pycnonotus plumosus 625  
(Common and widespread. Gardens; forest edge; wooded areas)

One bird was seen at Seria on 30 June. All other records come from the Ulu Temburong where it was observed in small numbers on most days. The maximum count was of sixteen birds on 13 July. A total of nineteen was mist-netted and ringed.

**Cream-vented Bulbul** Pycnonotus simplex 627  
(Forest edge)

Single birds were seen in the Ulu Temburong on 8 July, 11 July and 12 July. Three birds were observed there on 9 July, one with white eyes which is characteristic of the Malaysian races of this species. Two birds were mist-netted and ringed. One bird was seen in the peatswamp forests near Seria on 17 July.

**Red-eyed Bulbul** Pycnonotus brunneus 628  
(Common in primary rain forest and secondary forest)

Recorded in fair numbers on most days of the Expedition in the peatswamp forests around Seria, in the Ulu Temburong where a total of three birds was mist-netted and ringed, at Bandar Seri Begawan and in the area close to Pungit Island.

**Spectacled Bulbul** Pycnonotus erythrophthalmos 629  
(Widespread in primary rain forest and secondary forest)

The vivid orange-yellow orbital eye-rings help considerably to identify this species. One to five birds were recorded on most days in the Ulu Temburong where a total of six birds was mist-netted and ringed. Two birds were seen in the peatswamp forests near Seria on 19 July.

**Grey-cheeked Bulbul** Criniger bres 634  
(Primary rain forest)

Only one bird, which was mist-netted and ringed on 4 July in the Ulu Temburong.

**Yellow-bellied Bulbul** Criniger phaeocephalus 635  
(Primary rain forest)

Recorded on five separate days in the Ulu Temburong only. Single birds were seen on 3, 8, 11 and 14 July. A total of four birds was seen on 9 July. Two birds were mist-netted and ringed.

**Hairy-backed Bulbul** Hypsipetes criniger 636  
(Widespread in secondary and primary rain forest)

Seen only on seven days in the Ulu Temburong usually in small numbers but, seven birds were seen on 9 July. Four birds were mist-netted and ringed.

**Buff-vented Bulbul** Hypsipetes charlottae 639  
(Primary rain forest)

A single sighting of just two birds in the Ulu Temburong on 8 July.

**Streaked Bulbul** Hypsipetes malaccensis 641  
(Primary rain forest)

Being the only bulbul with boldly streaked underparts helped to identify this species. Seen only in the Ulu Temburong on two separate occasions; two birds on 7 July and one bird on 11 July.

- Bronzed Drongo** Dicrurus aeneus 649  
(Primary rain forest, usually on the edge)
- One sighting of a single bird in the peatswamp forests near Seria on 24 June.
- Spangled Drongo** Dicrurus hottentottus 651  
(A sub-montane and montane forest species. Recorded in the Ulu Temburong)
- Like most drongos, it prefers the areas around man-made clearings in forests. It was in such a clearing in the peatswamp forests near Seria that the only bird of the Expedition was sighted on 26 June.
- Greater Racket-tailed Drongo** Dicrurus paradiseus 652  
(Common in all types of forest)
- Birds with their rackets fully developed are quite spectacular. Two or three of the five birds observed in the peatswamp forests south of Seria on 29 June had rackets fully grown. Two birds were seen in the Ulu Temburong on 13 July.
- Dark-throated Oriole** Oriolus xanthonotus 653  
(Chiefly in primary rain forest)
- One record only of a single female in the peatswamp forests north of Seria on 17 July.
- Asian Fairy Bluebird** Irena puella 660  
(Widespread in forested areas)
- Brilliant blue above and black below, this species is stunning. Single birds were seen in the Ulu Temburong on 4, 7, 8 and 14 July; two were seen on 13 July; three were observed on both 11 July and 12 July and four birds were recorded on 10 July.
- Black Magpie** Platysmurus leucopterus 675  
(Widespread, but not particularly common, in forests and wooded areas, occasionally gardens)
- Four birds were recorded close to Bandar Seri Begawan on 28 June. The species was seen in small numbers on four consecutive days, 10 July to 13 July, in the Ulu Temburong; the highest count being of five birds on 12 July. The peatswamp forests near Seria produced two birds on 17 July.
- Slender-billed Crow** Corvus enca 678  
(Forests; wooded areas; gardens)
- Common; recorded in fair numbers at Bandar Seri Begawan, the peatswamp forests and area around Seria, in the Ulu Temburong where the highest count was of fourteen birds on 11 July, and at Tutong.
- Velvet-fronted Nuthatch** Sitta frontalis 699  
(Primary rain forest, peatswamp forest and secondary forest)
- The only species of nuthatch to be found in Borneo. Two of these beautiful birds were seen at Seria on 16 July and three birds were seen in the same area on 19 July.



**Black-capped Babbler** Pellorneum capistratum 712  
(Primary rain forest and secondary forest)

Recorded in the Ulu Temburong as single birds on 5, 11 and 13 July with two birds being seen on 12 July. Three of these five birds were mist-netted and ringed.

**Short-tailed Babbler** Trichastoma malaccense 715  
(Primary rain forest and secondary forest)

Seen on one day only, 10 July, in the Ulu Temburong where two birds were recorded; one was mist-netted and ringed.

**White-chested Babbler** Trichastoma rostratum 716  
(Forested water courses, including mangroves; occasionally coastal vegetation. Widespread and quite common)

Single birds were observed in the Ulu Temburong on 4, 10 and 14 July; two birds were seen in the same locality on both 6 July and 11 July. Three of these birds were mist-netted and ringed.

**Sooty-capped (Plain) Babbler** Malacopteron affine 721  
(Primary rain forest, riverine forest and secondary forest)

This species has an unmistakable song; an errand-boy type tune that rises and falls in pitch, consisting of about eight slow, distinct notes. Birds in full song were heard at dawn in the Ulu Temburong; one bird on 11 July and three separate birds on 12 July. One bird was seen in the same area on 25 June.

**Rufous-crowned Babbler** Malacopteron magnum 723  
(Primary rain forest)

One bird was mist-netted and ringed in the Ulu Temburong on 7 July. A further bird was seen there on 11 July.

**Black-throated Babbler** Napothera atrigularis S322  
(Rain forest; Ulu Temburong)

This species is endemic to Borneo. A skulking bird that was only seen thanks to the mist-nets. One bird was ringed in the Ulu Temburong on 6 July, three birds were ringed there on 13 July and a further two birds were seen on 14 July.

**Grey-headed Babbler** Stachyris poliocephala 754  
(Primary rain forest)

Two birds were mist-netted and ringed in the Ulu Temburong on 3 July.

**Chestnut-winged Babbler** Stachyris erythroptera 759  
(Widespread in primary rain forest, peatswamp forest, secondary forest and old rubber)

Single birds were seen on most days in the Ulu Temburong; two birds were seen on 6 July and the same area produced three birds on both 9 July and 12 July. A total of four birds was mist-netted and ringed.

- Striped Tit-Babbler** *Macronous gularis* 760  
(Common and widespread in scrub, forest edge and overgrown gardens)
- Recorded in small numbers on most days in the Ulu Temburong; the maximum count being of five birds on 11 July. A total of thirteen birds was mist-netted and ringed.
- Fluffy-backed Tit-Babbler** *Macronous ptilosus* 762  
(Widespread in primary rain forest and secondary forest)
- Single record, one bird was mist-netted and ringed in the Ulu Temburong on 8 July.
- Maggie Robin** *Copsychus saularis* 879  
(Widespread and common in open areas with trees, gardens and forest edge)
- A common species recorded in fair numbers at Bandar Seri Begawan, in the peatswamp forests and area around Seria, and in the Ulu Temburong where the highest daily count of all was of eight birds on 11 July.
- White-rumped Shama** *Copsychus malabaricus* 880  
(Widespread in forested areas, mangroves and coastal scrub)
- Its powerful and beautiful song, rivalling that of the **Nightingale**, was heard on a number of mornings at dawn in the Ulu Temburong. One or two birds were seen on five separate days over the period 3 July to 12 July and three birds were observed on 14 July. Three of these birds were mist-netted and ringed.
- Rufous-tailed Shama** *Copsychus pyrrhopygus* 881  
(Primary rain forest and peatswamp forest)
- The rarer of the two shamas was only recorded once; a single bird in the Ulu Temburong on 11 July.
- Dark-necked (Black-necked) Tailorbird** *Orthotomus atrogularis* 976  
(Widespread; forest edge, particularly primary rain forest, but has been recorded in lush scrub at Jerudong)
- Single birds were observed on 7, 8 and 12 July and three birds were seen on 10 July. The bird seen on 7 July was mist-netted but not ringed. These sightings came from the Ulu Temburong only.
- Ashy (Red-headed) Tailorbird** *Orthotomus ruficeps* 977  
(Very common in gardens, forest edge and coastal scrub)
- Recorded near Bandar Seri Begawan, the peatswamp forests and area around Seria and in the Ulu Temburong. The highest count in the Ulu Temburong was of six birds on 13 July and one bird was mist-netted and ringed there on 11 July. The maximum number recorded in a day around Seria was seven birds on 19 July.
- Rufous-tailed (Red-tailed) Tailorbird** *Orthotomus sericeus* 978  
(Common in gardens, forest edge and coastal scrub)
- The loud cheerful song of this species was heard more often than any other species in the Ulu Temburong; on occasions birds seemed to sing non-stop all day! Recorded every day in the Ulu Temburong where the species is very common; a total of twenty-one birds was mist-netted and ringed. Single birds were seen in the peatswamp forests near Seria on 17 July and 19 July.

**Yellow-bellied Prinia (Wren-Warbler)** Prinia flaviventris 0983  
(Common in gardens, tall grass, scrub and swamp edge)

A common resident around Kuala Belait, Seria and the Wasan paddy-fields. Recorded on four days only in the Ulu Temburong and then only in the tall grass where forest had been cleared. Two birds were mist-netted in this habitat and ringed.

**Malaysian Blue Flycatcher** Cyornis turcosa 1042  
(A forest edge species, usually close to water)

Single birds were mist-netted and ringed in the Ulu Temburong on 3, 4 and 13 July. Single male birds were also seen there on 5 July and 6 July.

**Spotted Fantail** Rhipidura perlata 1050  
(Uncommon in primary rain forest and secondary forest)

Only one sighting during the whole Expedition; a single bird was observed near Seria on 24 June.

**Pied Fantail** Rhipidura javanica 1051  
(Common and widespread in riverine forest, forest edge, coastal vegetation and wooded areas around habitation)

Single birds were seen at Seria on 27 June and 16 July, seven birds were seen in the Seria area on 30 June and four birds were observed there on 19 July. Four birds were recorded in the Ulu Temburong on 12 July, one of which was mist-netted and ringed.

**Black-naped Monarch** Hypothymis azurea 1052  
(Widespread in primary rain forest and secondary forest)

The azure-blue plumage of the male bird, crowned with a black skull-cap, is very striking. Both male and female birds were seen in the Ulu Temburong in small numbers; the highest count being of four birds on 10 July. Two birds were mist-netted and ringed. A single female was seen in the peatswamp forests near Seria on 17 July.

**Rufous-winged (Jungle) Flycatcher** Philetonoma pyrhoptrum 1054  
(A scarce primary rain forest species)

Two sightings of single birds in the Ulu Temburong on 9 July and 11 July.

**Asian Paradise Flycatcher** Terpsiphone paradisi 1056  
(Uncommon forest species)

With two very long white tail feathers (up to 18"), the adult male is unmistakable. Single males, probably the same bird, were seen each day in the Ulu Temburong over the period 9 July to 15 July however, two separate males were observed on 12 July.

**Richard's Pipit** Anthus novaeseelandiae 1067  
(Winter visitor and resident in open country. RAFOS Expedition of 1984 confirmed breeding at Binturan)

Recorded in small numbers at Seria; the highest count being of six birds on 16 July. One bird gave Expedition members excellent close range views when it spent long periods of time feeding on the sportsfield at the Gurkha base camp at Seria. Two birds were also seen at Bandar Seri Begawan on 28 June.

**Ruby-cheeked Sunbird** *Anthreptes singalensis* 1103  
(Uncommon forest species)

Two separate sightings firstly, of two birds in the Ulu Temburong on 11 July and secondly of a single male bird at Seria on 19 July.

**Purple-naped Sunbird** *Hypogramma hypogrammicum* 1104  
(Primary rain forest and riverine forest)

Only encountered in the Ulu Temburong where single birds were observed on five separate days. Two birds were seen on 8 July. A total of three birds was mist-netted and ringed.

**Purple-throated Sunbird** *Nectarinia sperata* 1106  
(Forest edge; woodland)

The Expedition concurred the comment made by the 1984 RAFOS Expedition that this species is not as common as Smythies (1981) states. Only four birds were seen; two in the Ulu Temburong on 7 July, with a further bird recorded there on 14 July, and one bird was observed in the peatswamp forests near Seria on 17 July.

**Olive-backed (Yellow-breasted) Sunbird** *Nectarinia jugularis* 1108  
(Common in gardens and open areas with trees)

Observed in small numbers at Bangar in the Ulu Temburong, in the area close to Pungit Island but, more commonly in the Seria area where the highest count was of five birds on 30 June. A nest containing pulli was found at Seria on 29 June.

**Crimson Sunbird** *Aethopyga siparaja* 1114  
(Widespread in scrub, wooded country and forest edge)

The Ulu Temburong produced small numbers of these very attractive birds on most days. However, twenty birds were recorded on 11 July. A total of three birds was mist-netted but not ringed. The species was also encountered in small numbers in the peatswamp forests and area around Seria.

**Little Spiderhunter** *Arachnothera longirostra* 1117  
(Common and widespread in primary rain forest, riverine forest and secondary forest)

This species was very common in the Ulu Temburong; one hundred and thirteen birds were mist-netted and ringed with a further twenty-seven being mist-netted but released without being processed or ringed. Three birds were seen in the peatswamp forests near Seria.

**Thick-billed Spiderhunter** *Arachnothera crassirostris* 1118  
(Forest edge species)

Single birds were observed on four separate days in the Ulu Temburong and two birds were seen there on 9 July. One bird was mist-netted and ringed.

**Spectacled Spiderhunter** *Arachnothera flavigaster* 1120  
(A scarce forest species recorded at Sg. Benutan and Lamunin)

The fact that this is believed to be the rarest of the Brunei spiderhunters is justified by the reality that only one bird was seen. Positive identification was made possible in the Ulu Temburong on 8 July thanks to some excellent close range views.

**White-breasted Wood-swallow** Artamus leucorhynchus 5280  
(Common and widespread in open country with trees, overhead cables etc. Sometimes seen on man-made structures in rivers some distance from shore)

This species is not mentioned in King, Woodcock and Dickinson (1975). It is common around Seria and alongside the road between Seria and Bandar Seri Begawan. Only one bird was seen in the Ulu Temburong close to Bangar on 9 July.

**Philippine Glossy Starling** Aplonis panayensis 1032  
(Common wherever there are trees, but avoids the interior of primary rain forest. Frequently nests and roosts on buildings).

An abundant species recorded at Bandar Seri Begawan, around Bangar in the Ulu Temburong, at Kuala Belait, along the roadside between Bandar Seri Begawan and Seria and around Seria itself. On 30 June at Kuala Belait between one and two hundred birds were observed in one tree just before midday, probably roosting from the intense heat experienced around noon.

**Crested Myna** Acridotheres cristatellus 1097

(Gadong: two birds from January to September 1982, in March and May 1983 and February and March 1986. These were possibly escapes)

Five birds, probably escapes, were observed beside the Tutong to Bandar Seri Begawan road on 28 June.

**Hill Myna (Grackle)** Gracula religiosa 1099  
(Common in open forests and areas with tall trees)

These noisy and raucous yet, at times, melodious birds were numerous in the Ulu Temburong where the highest daily count was of twenty-five birds on 1 July. The species was also recorded near Tutong, in the peat swamp forests and area around Seria, and at the Wasan paddy-fields.

**Plain Sunbird** Anthreptes simplex 1100  
(Found in primary rain forest and occasionally secondary forest; not common)

Recorded each day in the Ulu Temburong over the period 5 July to 13 July, except 11 July. Although in the main single birds were sighted, three were observed on both 9 July and 10 July. A total of three birds was mist-netted and ringed. One bird was seen at Bandar Seri Begawan on 24 June.

**Brown-throated Sunbird** Anthreptes malacensis 1101  
(Common in gardens, forest edge and open areas with trees)

This beautiful little bird was seen in small numbers every day in the Ulu Temburong over the period 3 July to 14 July; the maximum count being six birds on 11 July. Fourteen were mist-netted and ringed. One bird was seen at Seria on 23 June and a further four birds were seen there on 19 July.

**Red-throated Sunbird** Anthreptes rhodolaema 1102  
(Uncommon species of forest edge. Recorded at Lamunin)

A single male bird was seen in the Ulu Temburong on 12 July.

**Yellow-eared Spiderhunter** Arachnothera chrysogenys 1121  
(Forest edge species)

Just two sightings only of single birds in the Ulu Temburong on 9 July and 10 July.

**Grey-breasted Spiderhunter** Arachnothera affinis 1122  
(A scarce forest edge species recorded at Lamunin and in the Ulu Temburong)

One or two birds were observed on six separate days in the Ulu Temburong over the period 3 July to 14 July. A total of three birds were mist-netted and ringed.

**Scarlet-breasted Flowerpecker** Prionochilus thoracicus 1124  
(Uncommon species of peatswamp forest and forest edge)

One of these gorgeous birds were seen in the peatswamp forests near Seria on 17 July.

**Yellow-breasted Flowerpecker** Prionochilus maculatus 1125  
(Uncommon; chiefly primary rain forest, occasionally peatswamp forest)

The flowerpeckers are such tiny birds (3"-3½") making them very tricky to handle when caught in a mist-net. At first, it was felt that the species was too small to ring so the third primary was clipped. With handling experience, however, a total of seven birds was mist-netted and ringed in the Ulu Temburong where the species was observed in small numbers on most days. One bird was seen in the peatswamp forests near Seria on 29 June.

**Yellow-rumped Flowerpecker** Prionochilus xanthopygius S376

(Widespread; chiefly in primary rain forest, but occasionally in peatswamp forest and secondary forest)

This species is confined to Borneo and the North Natunas. It is fairly common in the Ulu Temburong where small numbers were encountered each day over the period 3 July to 15 July. Three birds were mist-netted and ringed and a further three were processed but not ringed. Two birds were observed at Seria on 16 July and the peatswamp forests close by produced one bird on 17 July.

**Yellow-vented Flowerpecker** Dicaeum chrysorrheum 1129  
(Forest edge, woodlands)

Two birds were seen in the peatswamp forests outside Seria on 17 July.

**Orange-bellied Flowerpecker** Dicaeum trigonostigma 1131  
(Common in gardens and on forest edge)

Mainly one or two birds were recorded on a number of days in the Ulu Temburong although six birds were seen there on 9 July. Two birds were mist-netted and ringed. One bird was seen at Seria on 19 July.

**Scarlet-backed Flowerpecker** Dicaeum cruentatum 1134  
(Common in gardens and on forest edge)

Single birds were observed at Seria on 22 June and 27 June. The peatswamp forests close by produced three birds (one male and two females) on 29 June. A single bird was seen at Bandar Seri Begawan on 28 June. One bird was mist-netted and ringed in the Ulu Temburong on 6 July and a further bird was observed there on 8 July.

**Eurasian Tree Sparrow** Passer montanus 1140  
(Occurs commonly in urban areas along the coastal strip, inland to Lamunin and Wasan Rice Scheme)

It is strange to see this bird behaving like the House Sparrow, Passer domesticus, (1143) of Europe; it forms large flocks which can be seen feeding on grassland, lawns and open spaces. It is at home in towns or wherever there is human habitation. The species is abundant all along the coastal strip from Kuala Belait in the South, through Seria, Tutong and all the way to Bandar Seri Begawan in the North. Numerous birds were also seen around the town of Bangar in the Ulu Temburong.

**White-bellied Munia** Lonchura leucogastra 1152  
(A scarce species of open areas and forest edge)

Ten birds were observed in the peat swamp forests near Seria on 27 June. Ten to twelve birds were seen in the Ulu Temburong each day over the period 11 July to 14 July where two birds were mist-netted and ringed. A further two were mist-netted, processed but not ringed. One bird was seen at the Wasan paddy-fields on 18 July.

**Dusky Munia** Lonchura fuscans S412  
(Common in gardens and on forest edge)

This species is confined to Borneo. It was found to be common around Seria and the peat swamp forests close by, in the Ulu Temburong wherever there was open grassy country, and in the paddy-fields at Wasan. Fourteen birds were mist-netted and ringed in the Ulu Temburong and a further seven birds were mist-netted, processed but not ringed.

**Chestnut Munia** Lonchura malacca 1155  
(Common in open country, long grass, swamps, gardens)

This species is by far the commonest of the Munias. They are very social birds almost always encountered in large flocks. They were abundant around Seria, in the Ulu Temburong and at the Wasan paddy-fields. Smaller numbers were also seen close to Bandar Seri Begawan and at Kuala Belait.

#### RECORDS FOR WHICH THE EVIDENCE IS NOT CONCLUSIVE

The following list contains species for which the record is probable but not definite. The list is included not only for the sake of completeness and for interest, but also because further observation and further discussion may help to shed light on the reliability of the reports and assist in extending our knowledge of the status of the species in question.

In addition to those below, of course, many doubtful sightings were rejected.

**Frigate Bird Sp.** Fregata sp. (20-22)

On the morning of 6 July in the Ulu Temburong what appeared to be a large seabird with very long wings and a long tail was seen at a good distance off flying away from the observers. One of the observers had been a member of the RAFOS Expedition to Ascension Island in 1987 and therefore had experience of frigate birds. He felt the bird may have been a **Lesser Frigate Bird**, Fregata ariel, (22) but unfortunately the bird was too far away for positive identification. The **Christmas Frigate Bird**, Fregata andrewsi, (20) and the **Great Frigate Bird**, Fregata minor, (21) have both been recorded in Brunei only once whereas the **Lesser Frigate Bird**, Fregata ariel, has been recorded in small parties along the coast of Brunei in January, March, April and December. The identification was rated as no better than highly probable.

**Jerdon's Baza** Aviceda jerdoni 96

On 29 June in the peat swamp forests just south of Seria, five Expedition members were together in a clearing when a medium-sized hawk alighted on a tree just below the luxuriant canopy some ten feet away and approximately twenty-five to thirty feet up. After comparing field identification notes later, two of the five observers identified the bird as a **Jerdon's Baza**, Aviceda jerdoni, but the other three identified it as a **Crested Goshawk**, Accipiter trivirgatus, (124). The bird was certainly goshawk size but it appeared less chesty. Overall the underparts were buffy in colour with the upperparts grey-brown but, the latter was difficult to fully determine as the viewpoint was from below. The crest was assessed as 2"-3" in length, somewhat longer than Ac. trivirgatus but the white tip of Av. jerdoni was not evident. The eye was described as large with some yellow visible. The bill was that of a medium-sized raptor and was dark horn in colour. The single 'pencil' stripe down the centre of the throat, present in both species, was recorded but no mention was made of the pale panels on either side of the 'pencil' stripe which is present in Ac. trivirgatus. The bird possessed a pale coloured chin which is applicable to both species. The heavy streaking on the upper chest was clearly visible which would suggest Av. jerdoni but some Ac. trivirgatus have this streaking but to a lesser degree. The rufous bars on the under-parts were well documented but identification of these as broad as in Av. jerdoni and medium as in Ac. trivirgatus is very difficult to determine in the field. The belly to vent area was buffy to pale as in Ac. trivirgatus whereas the broad rufous barring on the belly of Av. jerdoni is continuous to the vent. The under-tail was white with broad bands which is common to both species. The diagnostic white on the tips of the upper tailcoverts of Ac. trivirgatus was not noted. The wings appeared long when the bird was at rest. The legs were described as pale yellow which, again, is applicable to both these species of bird. The view of the bird when it took to flight was far from ideal which again lead to conflicting field notes being taken. In one case, the wings were recorded as long, broad and spatulate with heavy barring in the outer webs; the black or dark bars being broader than the pale interspaced colour as in Av. jerdoni. In another case the wings were described as short and rounded with barring on the underside tending towards Ac. trivirgatus. There are only a few records of **Jerdon's Baza** in Brunei whereas the



**Crested Goshawk** is widespread in forested and wooded country. After detailed study of the field identification notes and all current literature available on these two species the evidence is much stronger in favour of **Jerdon's Baza** but it is not totally conclusive.

**Pitta Sp.**

Pitta sp. (550 et seq)

On 13 July in the Ulu Temburong a colourful plump bird with a short tail was observed on the ground for a second or two but, being startled, it quickly bounded out of view. Although clearly a pitta, field identification notes were not taken at the time nor shortly after the observation therefore, positive identification was not possible. The **Blue-winged Pitta**, Pitta moluccensis, (554) and the **Fairy Pitta**, Pitta nympha, (554.1) are only winter visitors to Borneo; the **Blue-headed Pitta**, Pitta baudi, (S256) has only been recorded once in Brunei at Sungai Rampayoh (RAFOG 1984) and the **Garnet Pitta**, Pitta granatina, (555) has been recorded in primary rain forest at Lamunin and Tasek Merimbun. The feeling at the time was that the bird most resembled the **Blue-headed Pitta**.

#### LIST OF ANIMALS IDENTIFIED

Many more animals were seen than are listed below, but because positive identification could be made only with difficulty, especially amongst squirrels, rats, shrews and monkeys, the list is short.

**Large Flying Fox, *Pteropus vampyrus***

**Short-nosed Fruit Bat, *Cynopterus brachyotis***

**Western Tarsier, *Tarsius bancanus***

**Crab-eating Macaque, *Macaca fascicularis***

**Plantain Squirrel, *Callosciurus notatus***

**Slender Squirrel, *Sundasciurus tenuis***

**Bearded Pig, *Sus barbatus***

#### EXPEDITION MEMBERS

Squadron Leader Mike Blair	Leader
Flight Lieutenant Steve Williams	Deputy Leader and Fund Holder
Flight Sergeant Chris Sparks	Ornithological Recorder
Flight Sergeant John Ball	Jungle survival adviser
Sergeant Bill Taylor	Senior Ringer (A-class)
Corporal Pete Carr, RM	Deputy Ringer (C=class)
Corporal Ken Heron	Ringing party (T-class)
Corporal Kev Haigh	Photographer
Corporal John Green	First Aid
Junior Technician Jon Curtis	Sound Recordist
Junior Technician Merv Roberts	Assistant to the Recorder
Senior Aircraftsman Tony South	First Aid

#### EXPEDITION GUIDE

Rabu Sapoh, of Kpg Batang Duri	Iban Guide and Expedition Friend
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#### ORNITHOLOGICAL ADVISERS TO THE EXPEDITION

Mr Clive F Mann, distinguished authority on the birds of Brunei.  
Mr Conrad Ozog, staff member of Universiti Brunei Darussalam and keen amateur birder.  
Mr David Diskin, keen amateur birder.

#### Ornithological and other References Consulted

**A Field Guide to the Birds of South-East Asia** (Collins) - King, Dickinson and Woodcock as the primary field authority on Nomenclature and Taxonomy.(1975)

**The Birds of Borneo**, Third Edition, (Sabah Society and Malayan Nature Society) - Smythies, as the field authority for endemic species.(1981)

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**A Field Guide to the Mammals of Borneo**, The Sabah Society with World Wildlife Fund Malaysia - Payne, Francis, and Phillips.

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RAFOS EXPEDITION TO HERM ISLAND  
1989

By Andrew Seymour

RAFOS mounted an expedition to the Island of Herm, Channel Islands, in 1984 with the aim of extending the ornithological knowledge of the island. The expedition was successful and it was agreed by the RAFOS Committee that a further expedition should be mounted in 1989 to make a comparison with the 1984 findings. As in 1984, the expedition was to be self-supporting.

The aim of the expedition was to extend further ornithological knowledge of Herm by a programme of observation and ringing. A full description of Herm, together with its recent history, was given in the report of the first expedition in Journal No 16. However, an outline summary is useful for a better understanding of the 1989 visit. Herm lies 3 miles to the east of Guernsey and much the same distance from Sark. The land area is some 500 acres, and the island measures about 1½ miles in length and is about ½ a mile wide. It lies in a north-south altitude, with cliffs at the southern end and sandy beaches to the north; there is a spinal ridge running down the centre of the island. The habitat varies from clusters of pine, broad leaved woodland, furse, bracken and grass-covered common to sand dunes and farmland. There is a permanent population of about 40 people, working either on the farm or for the tourist industry. A map of the island is at Annex A.

A team of 8 was selected, 5 of whom had been on the 1984 expedition (Annex B). Once again, accommodation was in one of the visitors' self-catering cottages, which was provided by the Island Administration at half price. Travel to Guernsey, the setting-off point, was varied: Bearnie Priaulx, being a Guernseyman, was there already; Eric and Gwynneth Robinson flew in early to arrange catering supplies; and the rest of the team caught the ferry from Poole, arriving at St Peter Port early on 29 April, where they met the rest of the team. They were given back-up support by Tim Earl, a local ornithologist and reporter on the local newspaper, who had been closely involved with the previous expedition. The whole team then travelled to Herm in the Trident ferry, a catamaran. The journey takes 20 minutes and those with heavy baggage hoped for high tide as the ferry can land at the harbour; it was low tide, and the ferry landed at Rosiere Steps, which involved an initiating climb up 72 steep steps.

As in the 1984 expedition, Warrant Officer Frank Smith was appointed the ornithological leader, and he agreed to 2 principal activities: ringing and systematic coverage of the island. Although areas were allocated for the pre-breakfast period (0600-0930, which was particularly useful as the birds were undisturbed by visitors, with the first ferries arriving at 0900), no other rigid programme was adhered to. The constant coverage, combined with counts of particular species, and the evening call-over provided a very adequate system, with all members of the team being able to follow their own particular interests and to observe all the various habitats.

Sea Watches. Sea watches proved disappointing in 1984 and were abandoned after a couple of days, although the very nature of Herm, particularly with its coastal path round the whole island, meant all the coast line was observed most of the time. This ad hoc watching was followed during the 1989 expedition.

Ringing. Frank Smith was the only BTO ringer, although Flt Lt Alex Smith and Eric Robinson had experience. The 1984 expedition had its hopes raised on the first day with big falls of passerines only to find birds were scarce thereafter;

this was a big disappointment. The dates for the 1989 expedition had been chosen deliberately to coincide with the 1984 period, so as to give a direct comparison of data, and exactly the same pattern occurred. The first day showed great promise, but the next morning there was a dearth of birds, with this continuing for the remainder of the week. One principal ringing site was used, with an area at the end of the spine road near the Common providing the best results. It is probable that the expedition would have provided better results if it had been mounted a fortnight earlier, and this will be kept in mind for any return visit. The ringing report is at Annex C.

Special Counts. Special counts were made of the **Wren** population and **Oystercatcher**, both of which were given special attention in 1984. There appeared to be a decrease in **Oystercatcher** (1984 - 145: 1989 - 120), but the account of singing **Wren** (1984 - 86: 1989 - 146) showed considerable increase. Some Herm residents commented on the apparent increase in the **Wren** population.

Birds of Special Interest. Two male **Snow Bunting** (later joined by a third male), a single **Dotterel** and a **Tawny Owl** caused particular interest, and there were outstanding views of **Grey Plover**, **Bar-tailed Godwit** and **Knot** in breeding plumage. The wintering flock of **Brent Geese** was present, although increased in size. Raptor sightings were less than expected and, once again, the team found no evidence of the presence of the **Dartford Warbler** on Herm.

Photography. Sgt Bill Noble was appointed expedition photographer and recorded expedition activities. Eric Robinson used his video camera extensively and a 'clip' was used for the 1989 AGM.

Call-Over. Ornithological activities were concluded each day with call-over by the Recorder (Frank Smith). The results, which appear in Annex D, are compiled from information provided at the daily call-over and totalled 96 species (subject to confirmation). This brings the RAFOS Herm systematic list to over 100 species, with 94 birds being netted, ringed and recorded (Annex E).

#### WEATHER

The weather was variable with some rain, some sea mist, 2 quite cold days and 2 days of very hot sunshine. Visibility was also variable, with the foghorn continuing even on the very hot days (Annex F).

#### ADMINISTRATION

Daily administration, including cooking, shopping and cleaning of the cottage, was undertaken by team members in rotation.

#### PUBLICITY

Newspapers. Pre-expedition cover and publicity was given in the Guernsey Evening Press by Tim Earl and a further article appeared on 2 May during the course of the visit.

Television. In addition, the team was visited by a reporter from BBC Southern on 2 May and a short article appeared on BBC 1 on 3 May. This provided favourable local interest in the activities of the team. Additionally, Anglia TV had a team on Herm on 2 May filming for a travel programme which was screened on ITV in

June; the team leader and Eric Robinson, both being regular visits to Herm, were asked to give their thoughts about Herm to the presenter. It was an unusual experience, for those who have never appeared on television previously, to be filmed by both BBC and ITV on the same day.

It was interesting that the island had made use of the 1984 RAFOS expedition report. The White House Hotel (the island hotel) provides guests with a check list based on the 1984 systematic list and has a copy of the report available to guests; it seems to have encouraged guests to take an interest in the birds of the island. The society is quoted in at least one guide book when extolling the virtues of Herm to would-be visitors; this is flattering and it is hoped similar use may be made of this report.

#### COMPARISON WITH 1984

A principal aim of the expedition had been to compare results, at exactly the same time of year, with the 1984 expedition. The provisional comparisons, although of limited use being based on 2 visits only, are interesting. In particular:

- a. The main passerine migration pattern, especially for ringing purposes, appeared to be at its end by the beginning of May.
- b. Spotted Flycatcher were not seen.
- c. The Wren population seemed to have increased significantly.
- d. There was a decline in the number of Oystercatcher seen.
- e. The Magpie population seemed to be increasing.

#### CONCLUSIONS

We said in the 1984 report that the activities of the team were unlikely to make any major contributions to world ornithology, but it was hoped a useful contribution had been made to Channel Islands ornithological knowledge, and particularly to that of Herm. Those sentiments are expressed again for the 1989 expedition and it is certain that the team members spent a delightful week on a beautiful island; all have expressed the intention of returning, both privately and with any future expedition.

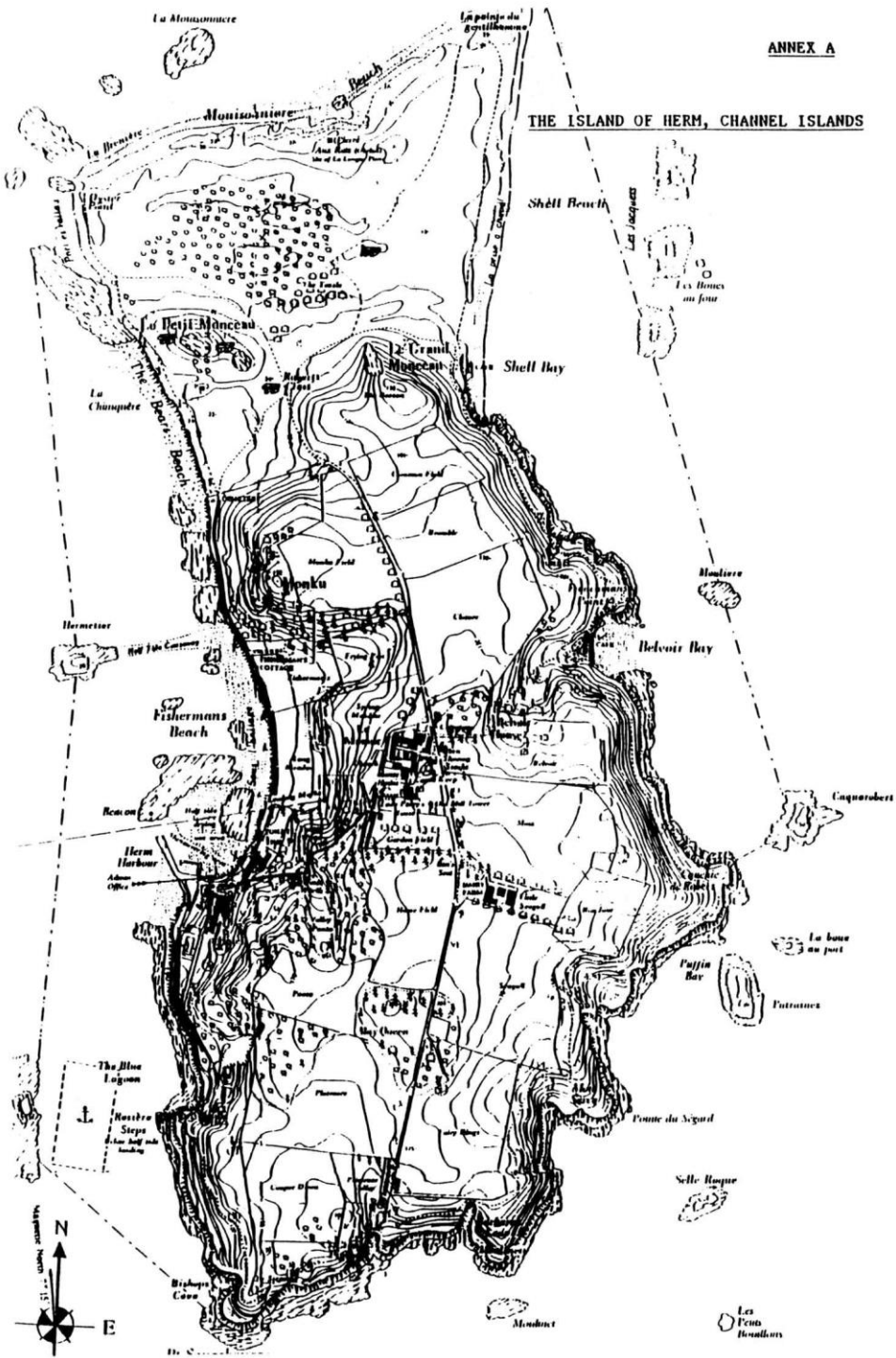
#### ACKNOWLEDGEMENTS

Particular thanks for their assistance and co-operation in making this expedition such a success are due to:

- a. Major Peter Wood for welcoming us to and allowing us to visit his beautiful island.
- b. Adrian Heyworth and his staff for their assistance and advice on Herm.
- c. Time Earl for his help and benevolent publicity.
- d. Mr and Mrs Long, the Channel Islands joint ringing secretaries, who gave help to Frank Smith by supplying rings.

## ANNEX A

THE ISLAND OF HERM, CHANNEL ISLANDS



## ANNEX B

### EXPEDITION MEMBERS

Gp Capt A C P Seymour	Leader
WO F G Smith MBE MBOU	Recorder and Ornithological Leader
Flt Lt A Smith MISM	
Sgt N Lonsdale	
Sgt W A J Noble	
Mr B T Priaulx	
Sqn Ldr E Robinson OBE RAF (Retd)	
Mrs G Robinson	

## ANNEX C

### RINGING REPORT

#### Organisation and Trapping Method

On arrival, an immediate survey was carried out to identify suitable ringing sites. It was soon evident that the main ringing area used in 1984, that at Panto Valley, was no longer suitable. Some changes in land usage, and the fact that no bird activity was witnessed, forced the ringing co-ordinator to search elsewhere for a suitable site or sites. A walk down the Spine path towards the Common produced the desired result; significant numbers of warblers were feeding in low vegetation, scrub and trees in a shallow valley and indeed in a comparatively short time 32 birds mostly **Willow Warbler** and **Chiffchaff** were caught and processed.

The nets were left in a furled state overnight and the same site was utilised for early morning and late afternoon ringing throughout the period of the team's stay on the island. Returns, however, diminished as the week continued and passage migrants moved on.

Opportunity ringing was also utilised and single nets were erected at a number of other sites for short durations only. Again, in most cases this ploy paid dividends and small numbers of birds were trapped at each site.

#### Results

In total 94 birds of 18 species were processed and one **Blackbird** controlled. The ringing result was somewhat disappointing. The first afternoon's totals gave the team hope that with the weather conditions as they were, further falls could be expected; these hopes unfortunately did not materialise.



Wing Lengths and Weights of Birds Ringed

Species	Wing Length mm	Weight Grams	No	Wing Length	Weight Mean	Age	Sex
Swallow	123	21.3	1			4	M
House Martin	114	18.0	1			4	
Wren	44	11.2				4	
	51	10.5				4	
	47	11.0				4	
	45	12.5				4	
	47	12.0				4	
	47	12.0	11	47.5	11.3	4	
	46	11.5				4	
	47	10.5				4	
	49	11.0				4	
	50	11.0				4	
	50	11.2				4	
Dunnoek	74	24.0				4	F
	70	22.5	4	72.5	22.6	4	M
	74	23.5				4	F
	72	20.4				4	F
Robin	71	25.5				4	
Blackbird	130	92.5				6	M
	125	97.5				4	F
	131	90.0				5	M
	129	95.0				4	M
	133	90.0	9	130.2	93.1	4	M
	129	94.0				4	M
	135	103.5				4	M
	129	86.0				4	F
	131	90.0				4	M
Sedge Warbler	67	12.2				4	
	63	12.0	3	64.6	12.1	4	
	64	12.0				4	
Whitethroat	70	14.0				4	F
	73	13.2				4	F
	69	14.2				4	F
	72	15.0				4	M
	72	15.2	8	71.1	14.2	4	M
	71	14.9				4	M
	70	13.5				4	M
	72	14.0				4	M
Garden Warbler	56	16.3	1			4	

Blackcap	56	19.0				4	M
	55	16.5				4	F
	54	19.8	6	73.8	17.8	4	M
	53	15.8				4	F
	51	18.8				4	M
Chiffchaff	56	8.5				4	
	56	8.0				4	
	55	7.5				4	
	56	8.2				4	
	55	7.0				4	
	61	8.2				4	
	56	7.2	14	56.5	7.8	4	
	57	8.5				4	
	54	6.5				4	
	56	8.0				4	
	54	7.8				4	
	63	7.5				4	
	57	8.5				4	
	56	8.2				4	
Willow Warbler	59	8.0				4	
	64	10.0				4	
	65	10.0				4	
	62	9.5				4	
	62	9.5				4	
	62	9.5				4	
	62	9.5				4	
	62	9.2				4	
	62	8.0				4	
	63	8.5				4	
	65	10.0				4	
	64	9.3				4	
	65	9.8	25	63.4	9.2	4	
	64	9.0				4	
	64	8.0				4	
	65	10.5				4	
	63	10.0				4	
	64	9.5				4	
	64	8.5				4	
	63	9.6				4	
	70	9.5				4	
	63	10.2				4	
	66	9.0				4	
	62	8.5				4	
	61	8.0				4	
Pied Flycatcher	78	12.7	1			4	M
Great Tit	17	16.5				4	M
	79	19.2	4	74.7	17.5	4	M
	73	16.0				4	M
	70	18.5				4	F

House Sparrow	80 78	24.5 27.5	2	78	26.0	4 4	M F
Goldfinch	77	16.0				4	F
Chaffinch	83	21.5				4	F
Linnet	75	17.5				4	F

Daily Ringing Totals

Species	Date							Total
	29.4	30.4	1.5	2.5	3.5	4.5	5.5	
Swallow					1			1
House Martin							1	1
Wren	3			5	1		2	11
Dunnoek	2	1					1	4
Robin					1			1
Blackbird	1	1		4	1		2	9
Sedge Warbler			1		1	1		3
Whitethroat	1	2			5			8
Garden Warbler				1				1
Blackcap			3		2	1		6
Chiffchaff	4	2	1	2	2		3	14
Willow Warbler	18	1	2	1	2	1		25
Pied Flycatcher	1							1
Great Tit	1	1		2				4
House Sparrow				2				2
Goldfinch	1							1
Chaffinch				1				1
Linnet						1		1
TOTAL	32	8	7	18	16	4	9	94

## ANNEX D

### RECORDER'S REPORT

As has been previously stated, the main aim of this second RAFOS visit to Herm, was to continue the work initiated in April and May 1984. To this end, the manner in which the survey was conducted was almost identical.

The Island was divided into 4 roughly equal areas, with the Spine Patch running north-south and the path from Belvoir Bay to the Harbour running east-west acting as the demarcation lines. As on the earlier visit these designated areas were covered by expedition members daily, between the hours of 0600 and 0930; teams alternated between areas on a day-to-day basis. Informal coverage of all the Island's varied habitat and the surround seas were then carried out by the team members throughout the remainder of the day. Using this method of formal and informal scrutiny, the whole Island was covered 2 to 3 times per day, and a reasonable consensus of the bird life present recorded. Each day culminated in the evening call-over, resulting in the compilation of the following systematic list.

### SYSTEMATIC LIST

The order of common and scientific names used in this systematic list follows 'List of Recent Holarctic Bird Species 1972-1977, K H Voous.

#### Fulmar

#### Fulmarus glacialis

Up to 20 birds recorded daily on east coast cliff. Probable breeder.

#### Gannet

#### Sula bassana

Three seen offshore on 5 May, further 4 recorded on 6 May. Misty conditions precluded sea watches up to 4 May.

#### Shag

#### Phalacrocorax aristotelis

Seen daily 29 April to 5 May, in varying numbers. However in excess of 50 birds present on most days.

#### Cormorant

#### Phalacrocorax carbo

Daily sightings, 29 April to 5 May. Never more than 2 birds seen.

#### Grey Heron

#### Ardea cinerea

Two seen on rocks, north of the Common on 1 May. Single birds seen in same area 4 and 5 May.

#### Brent Goose

#### Branta bernicla

Recorded daily, 29 April to 5 May. Counts varied from 34 to 29 April to 113 present on 4 May, all appeared to be (B b bernicla).

#### Mallard

#### Anas platyrhynchos

A male was seen on a small freshwater pool on the Common, 4 May. Two males were seen overlying the Island on 6 May.

<b>Marsh Harrier</b>	<u>Circus aeruginosus</u>
A female seen overflying at low altitude on 5 May.	
<b>Hen Harrier</b>	<u>Circus cyaneus</u>
One female was reported overflying the Island on the 4 May.	
<b>European Sparrowhawk</b>	<u>Accipiter nisus</u>
A female was seen on the 30 April and again on the 2 May.	
<b>Common Kestrel</b>	<u>Falco tinnunculus</u>
Male and/or female recorded daily, throughout period 29 April to 5 May. Possible breeder.	
<b>Pheasant</b>	<u>Phasianus colchicus</u>
Recorded daily. 30 plus birds seen regularly. A female with brood of 5 young observed on 4 May.	
<b>Oystercatcher</b>	<u>Haematopus ostralegus</u>
Daily counts of up to 120 birds recorded.	
<b>Ringed Plover</b>	<u>Charadrius hiaticula</u>
Two to fifteen birds recorded daily throughout period 29 April to 4 May.	
<b>Grey Plover</b>	<u>Pluvialis squatarola</u>
Present in small numbers 29 April to 4 May. However on 5 May a total of 39 birds was recorded.	
<b>Dotterel</b>	<u>Charadrius morinellus</u>
A single bird in partial summer plumage was recorded on 1 and 2 May at the Common.	
<b>Sanderling</b>	<u>Calidris alba</u>
Up to 6 recorded daily, 1 May to 5 May.	
<b>Knot</b>	<u>Calidris canutus</u>
Three to 8 recorded daily, 1 May to 5 May.	
<b>Dunlin</b>	<u>Calidris alpina</u>
Between 5 and 50 plus reported daily 29 April to 5 May.	
<b>Ruff</b>	<u>Philomachus pugnax</u>
One seen feeding with Whimbrel on the Common, 3 May. A further 3 were present on the foreshore at Mouisonniere on 4 and 5 May.	

<b>Bar-tailed Godwit</b>	<u>Limosa lapponica</u>
Three recorded at Mouissonniere beach on the 29 April. This figure had risen to 44 in the same location by the 5 May.	
<b>Whimbrel</b>	<u>Numenius phaeopus</u>
Five reported on 29 April, with a maximum count of 45 on 5 May.	
<b>Curlew</b>	<u>Numenius arquata</u>
Between 2 and 8 present 29 April to 5 May.	
<b>Turnstone</b>	<u>Arenaria interpres</u>
Daily counts in excess of 50 birds, 29 April to 5 May.	
<b>Redshank</b>	<u>Tringa totanus</u>
One reported on 29 April. Further sightings on 3, 4 and 5 May of 4, one and 3 birds respectively.	
<b>Greenshank</b>	<u>Tringa nebularia</u>
One sighting only, of 2 birds at Mouissonniere on 1 May.	
<b>Common Sandpiper</b>	<u>Actitis hypoleucos</u>
One to 6 seen daily throughout period of visit.	
<b>Black-headed Gull</b>	<u>Larus ridibundus</u>
Thirteen birds were present for most of the day at Mouissonniere and Shell beach on 3 May. A further sighting of a single bird was made in the same area on the 5 May.	
<b>Herring Gull</b>	<u>Larus argentatus</u>
Resident breeder, recorded daily. Confirmed nesting.	
<b>Lesser Black-backed Gull</b>	<u>Larus fuscus</u>
Up to 15 birds recorded daily, throughout period 29 April to 5 May.	
<b>Great Black-backed Gull</b>	<u>Larus marinus</u>
Four to 8 birds recorded daily. Possibility of breeding on Jethou.	
<b>Common Tern</b>	<u>Sterna hirundo</u>
Two recorded daily, 30 April through to 6 May.	
<b>Tern Sp</b>	
Daily sightings of up to 6 unidentified terns reported 29 April to 5 May.	

**Sandwich Tern** Sterna sandvicensis  
Two to 5 birds recorded daily, 29 April to 5 May.

**Guillemot** Uria aalge  
Daily sightings of one or 2 birds, usually seen off eastern coast, recorded throughout expedition period.

**Razorbill** Alca torda  
Recorded daily. Maximum number of 8 reported on 3 May.

**Puffin** Fratercula arctica  
Daily sightings. Peak figure 22 on 29 April. Small nesting colony on Jethou.

**Stock Dove** Columba oenas  
Up to 4 recorded daily.

**Wood Pigeon** Columba palumbus  
Twenty plus birds sighted daily. Indications are that present population is smaller than that in 1984. Confirmed nesting.

**Collared Dove** Streptopelia decaocto  
Ten to twelve recorded daily. Confirmed nesting.

**Turtle Dove** Streptopelia turtur  
Single birds recorded on 1 and 2 May, 2 reported on 3 May, with a further 4 recorded on 5 May.

**Cuckoo** Cuculus canorus  
Up to 6 birds recorded daily. Majority of sightings were made in the vicinity of the Common.

**Tawny Owl** Strix aluco  
A number of fresh owl pellets were found around the northern end of the island on the first 3 days of the survey. On 3 May an in-depth search of the Elm scrub beyond Fisherman's Cottage paid dividends when an owl was disturbed from its daytime roost.

**Skylark** Alauda arvensis  
Up to 6 sightings daily. All recorded were from the common. Probable breeder.

**Swift** Apus apus  
Small numbers. Up to 10 birds recorded passing through daily.

**Sand Martin**

Riparia riparia

Reported overflying daily with maximum counts of 100 plus at the latter end of the week.

**Swallow**

Hirundo rustica

Considerable numbers passing through daily. Four pairs nesting at Le Manoir.

**Red-rumped Swallow**

Hirundo daurica

A very good sighting of a single bird was recorded on 30 April and an equally good sighting of a further single bird was made on the 3 May.

**House Martin**

Delichon urbica

Seen in small numbers daily 29 April to 1 May. There were 5 pairs nesting in the Le Manoir area. Considerable numbers of passage birds recorded 3 to 5 May.

**Tree Pipit**

Anthus trivialis

Two birds seen daily 3 May to 5 May in Elm trees at Primrose Valley.

**Meadow Pipit**

Anthus pratensis

Recorded daily 29 April to 5 May. 30 plus birds present. Confirmed nesting.

**Rock Pipit**

Anthus spinoletta

One or 2 birds recorded daily throughout period 29 April to 5 May.

**Yellow Wagtail**

Motacilla flava

Daily sightings reported, with a maximum of 15 mixed male and female on the Common on 1 May. Most sightings were of M f flavissima. However, some M f flava were present on 4 May.

**Pied Wagtail**

Motacilla alba

One or 2 M a yarrellii seen daily, with up to 6 M a alba present also, throughout period 29 April to 5 May.

**Wren**

Troglodytes troglodytes

Anyone arriving on Herm in April or May is certain to be struck by the numbers of singing Wren. A census of this species carried out through the period 2 May to 5 May confirmed at least 146 singers present, so the Island population of this resident breeder may well be in excess of 350 birds. This is an apparent increase over the 1984 population.

**Dunnock**

Prunella modularis

Recorded daily. Possibly as many as 100 pairs present. Confirmed nesting.

**Robin**

Erithacus rubecula

Ten to 12 recorded daily. Breeding resident.



**Black Redstart** Phoenicurus ochruros  
A solitary female reported on the 29 April was the only sighting.

**Redstart** Phoenicurus phoenicurus  
Single males and females reported on 29 April, 30 April, 1 May and 4 May.

**Whinchat** Saxicola rubetra  
One female present on Common 29 April to 3 May. A male and female present at same location on 5 May.

**Stonechat** Saxicola torquata  
One male observed on the Common, on 2 May and 5 May.

**Wheatear** Oenanthe oenanthe  
Recorded daily throughout the survey period. 30 plus present on 30 April. There was a decline in numbers after that date.

**Ring Ouzel** Turdus torquatus  
Single males were seen on 29 April, 1 May and 4 May. A female was recorded on 2 May.

**Blackbird** Turdus merula  
Up to 5 reported daily throughout period 29 April to 6 May. Breeding confirmed.

**Song Thrush** Turdus philomelos  
Daily records. Not more than 12 birds on any count. Confirmed breeder.

**Mistle Thrush** Turdus viscivorus  
Two birds early on 30 April, and a further sighting of 2 birds on 2 May were the only records.

**Grasshopper Warbler** Locustella naevia  
A bird was heard and seen daily, at a point above Belvoir Bay, 29 April to 5 May. A second bird was heard and seen on the Common, 1 May to 5 May.

**Sedge Warbler** Acrocephalus schoenobaenus  
Small number mist-netted 1 May to 5 May.

**Whitethroat** Sylvia communis  
Five singing males reported on 29 April. 20 plus singing males were being seen regularly by 5 May. Confirmed nesting.

**Garden Warbler**

Sylvia borin

Two were seen on 2 May, and one was heard and seen singing daily 2 May to 5 May, in trees below Le Manoir.

**Blackcap**

Sylvia atricapilla

Sightings of up to 25 were reported daily, throughout the period of the survey. Probable breeder.

**Chiffchaff**

Phylloscopus collybita

Between 5 and 10 reported daily. Confirmed nesting.

**Willow Warbler**

Phylloscopus trochilus

Small numbers were recorded daily. There was a marked decrease in the number present after 30 April. Confirmed nesting.

**Pied Flycatcher**

Ficedula hypoleuca

Three males and 3 females recorded on 29 April. One or 2 of both sexes seen daily thereafter.

**Blue Tit**

Parus caeruleus

The number seen varied between 2 and 6 recorded daily after 30 April.

**Great Tit**

Parus major

Up to 8 recorded daily. Confirmed nesting.

**Short-toed Treecreeper**

Certhia brachydactyla

Sightings of single birds recorded daily from 30 April to 5 May.

**Magpie**

Pica pica

Up to 10 reported daily. Resident breeder.

**Carrion Crow**

Corvus corone

Six to 8 birds seen daily. Confirmed breeder.

**Raven**

Corvus corax

Two birds reported daily, 30 April to 5 May. Confirmed breeder.

**Starling**

Sturnus vulgaris

Counts varied between 20 plus and 50 plus daily. Resident breeder.

**House Sparrow**

Passer domesticus

More than 50 seen daily. Resident breeder.

**Chaffinch****Fringilla coelebs**

Recorded daily. Maximum reported sightings 12 on 4 May. Confirmed nesting.

**Greenfinch****Carduelis chloris**

Between 10 and 20 reported daily. Resident breeder.

**Goldfinch****Carduelis carduelis**

Up to 10 recorded daily. Confirmed nesting.

**Linnet****Carduelis cannabina**

Fifty plus seen daily, usually in the Common area. Indications of nesting.

**Bullfinch****Pyrrhula pyrrhula**

Two males and a female seen on 3 May, and a single male and/or female reported thereafter.

**Snow Bunting****Plectrophenax nivalis**

An adult male was present on the Common from 29 April to 5 May. 2 further males (one immature) were in company with it from the 3 May.

**ANNEX E****WEATHER**

DATE	CONDITIONS			TEMP (°C)	CLOUD (OKTA)	WIND	FORCE (BEAUFORT)
29 Apr 90	Cloud and Showers	Cold	am pm	10-15	8	NE	1-2
30 Apr 89	Cloud Early Morning Mist	Cool	am pm	10-15 14-18	8	E	1-2
1 May 89	Cloudy with Sunny Period	Cool	am pm	10-12 14-18	4	E	2-3
2 May 89	Cloudy	Cold		10-15	8	N	2-3
3 May 89	Cloud with Sunny Periods	Cool	am pm	10-12 16-18	-	N	3-4
4 May 89	Sunny Early Morning Mist	Warm		18-21	0	-	-
5 May 89	Sunny	Warm		18-20	0	-	-
6 May 89	Overcast			14-16	8	E	2-3

TOTAL RAFOS HERM LIST

- |                              |                             |
|------------------------------|-----------------------------|
| 1. Black-throated Diver      | 53. Swift                   |
| 2. Fulmar                    | 54. Sand Martin             |
| 3. Gannet                    | 55. Swallow                 |
| 4. Cormorant                 | 56. Red-rumped Swallow      |
| 5. Shag                      | 57. House Martin            |
| 6. Grey Heron                | 58. Tree Pipit              |
| 7. Brent Goose               | 59. Meadow Pipit            |
| 8. Mallard                   | 60. Rock Pipit              |
| 9. Shelduck                  | 61. Yellow Wagtail          |
| 10. Marsh Harrier            | 62. White Wagtail )         |
| 11. Hen Harrier              | Pied Wagtail (White) )"     |
| 12. Sparrowhawk              | 63. Wren                    |
| 13. Kestrel                  | 64. Dunnock                 |
| 14. Hobby                    | 65. Robin                   |
| 15. Peregrine                | 66. Black Redstart          |
| 16. Pheasant                 | 67. Redstart                |
| 17. Oystercatcher            | 68. Winchat                 |
| 18. Ringed Plover            | 69. Stonechat               |
| 19. Grey Plover              | 70. Wheatear                |
| 20. Dotterel                 | 71. Ring Ouzel              |
| 21. Knot                     | 72. Blackbird               |
| 22. Sanderling               | 73. Song Thrush             |
| 23. Curlew Sandpiper         | 74. Mistle Thrush           |
| 24. Dunlin                   | 75. Grasshopper Warbler     |
| 25. Ruff                     | 76. Sedge Warbler           |
| 26. Bar-tailed Godwit        | 77. Whitethroat             |
| 27. Whimbrel                 | 78. Garden Warbler          |
| 28. Curlew                   | 79. Blackcap                |
| 29. Redshank                 | 80. Wood Warbler            |
| 30. Greenshank               | 81. Chiffchaff              |
| 31. Common Sandpiper         | 82. Willow Warbler          |
| 32. Turnstone                | 83. Goldcrest               |
| 33. Little Gull              | 84. Firecrest               |
| 34. Black-headed Gull        | 85. Spotted Flycatcher      |
| 35. Herring Gull             | 86. Red-breasted Flycatcher |
| 36. Lesser Black-backed Gull | 87. Pied Flycatcher         |
| 37. Great Black-backed Gull  | 88. Blue Tit                |
| 38. Sandwich Tern            | 89. Great Tit               |
| 39. Common Tern              | 90. Short-toed Treecreeper  |
| 40. Little Tern              | 91. Magpie                  |
| 41. Guillemot                | 92. Carrion Crow            |
| 42. Razorbill                | 93. Raven                   |
| 43. Puffin                   | 94. Starling                |
| 44. Stock Dove               | 95. House Sparrow           |
| 45. Woodpigeon               | 96. Chaffinch               |
| 46. Collared Dove            | 97. Greenfinch              |
| 47. Turtle Dove              | 98. Goldfinch               |
| 48. Cuckoo                   | 99. Linnet                  |
| 50. Hoopoe                   | 100. Bullfinch              |
| 51. Wryneck                  | 101. Snow Bunting           |
| 52. Skylark                  |                             |

\*One Species - Pied is British race of White Wagtail.

