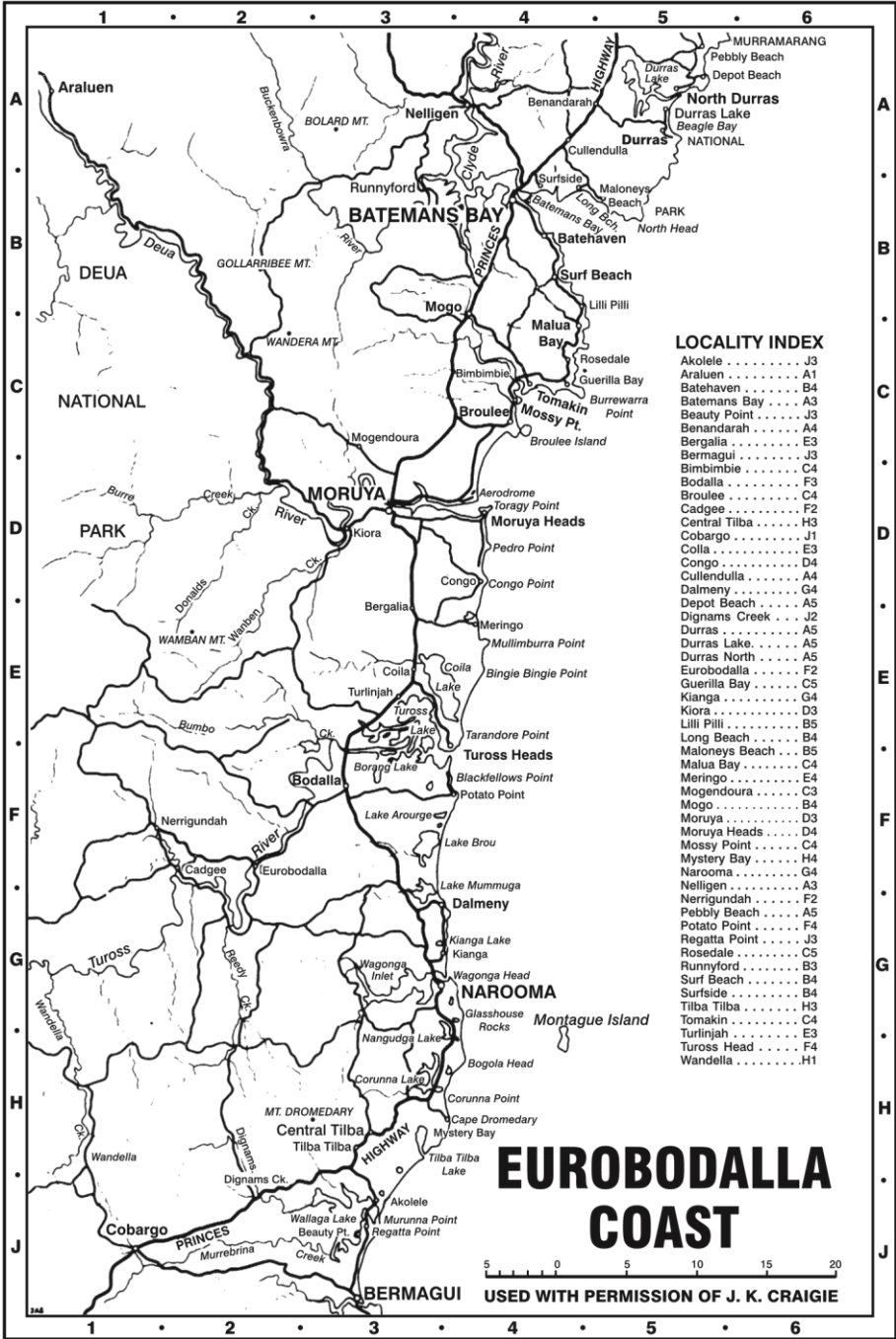


NATURE IN EUROBODALLA

Number 35 (2020)



Compiled by D Kay and J Morgan



LOCALITY INDEX

Akolele	.....	J3
Araluen	.....	A1
Batehaven	.....	B4
Batemans Bay	.....	A3
Beauty Point	.....	J3
Benandarah	.....	A4
Bergalia	.....	E3
Bermagui	.....	J3
Bimbimble	.....	C4
Bodalla	.....	F3
Broulee	.....	C4
Cadgee	.....	F2
Central Tilba	.....	H3
Cobargo	.....	J1
Colla	.....	E3
Congo	.....	D4
Cullendulla	.....	A4
Dalmeny	.....	G4
Depot Beach	.....	A5
Dignams Creek	.....	J2
Durras	.....	A5
Durras Lake	.....	A5
Durras North	.....	A5
Eurobodalla	.....	F2
Guerilla Bay	.....	C5
Kianga	.....	D3
Kiora	.....	D3
Lilli Pilli	.....	B5
Long Beach	.....	B4
Maloneys Beach	.....	B5
Malua Bay	.....	C4
Meringo	.....	E4
Mogendoura	.....	C3
Mogo	.....	B4
Moruya	.....	D3
Moruya Heads	.....	D4
Mossy Point	.....	C4
Mystery Bay	.....	H4
Narooma	.....	G4
Nelligen	.....	A3
Nerrigundah	.....	F2
Pebbly Beach	.....	A5
Potato Point	.....	F4
Regatta Point	.....	J3
Rosedale	.....	C5
Runnyford	.....	B3
Surf Beach	.....	B4
Surfside	.....	B4
Tilba Tilba	.....	H3
Tomakin	.....	C4
Turlinjah	.....	E3
Tuross Head	.....	F4
Wandella	.....	H1

**EUROBODALLA
COAST**

5 0 5 10 15 20
 USED WITH PERMISSION OF J. K. CRAIGIE

EUROBODALLA NATURAL HISTORY SOCIETY

ANNUAL RECORD FOR 2020

The objects of the Society are to:

- Foster and encourage the study, enjoyment and conservation of the natural environment of the area;
- Arrange indoor meetings and field excursions for these ends;
- Encourage and train members in the keeping of records of the wildlife of the area;
- Prepare reports of these records from time to time;
- Liaise with other societies, organizations and individuals with similar interests.

COMMITTEE

Chair/Recorder: Julie Morgan

Secretary: David Kay

Treasurer: Malcolm Griggs

Members: Fran Anderson

Mandy Anderson

Steven Benjamin

Nicola Clark

Annual Subscription

Single \$20, Family \$30, Under 18 \$5

Cover: Blue-billed Duck *Oxyura australis* at Barlings Swamp.

Photo G McVeigh

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CONTENTS

INTRODUCTION	5
SYSTEMATIC LIST	
Birds	9
Mammals	42
Reptiles	44
Amphibians	46
Insects	
Dragonflies and Damselflies	47
Bugs and Cicadas	47
Beetles	48
Flies	49
Moths	49
Butterflies	53
Wasps and Bees	54
Other Invertebrates	54
 M Crowley, P J Fullagar, and D Priddel 62nd Annual Assessment of Shearwater Breeding Success on Montagu Island.	 57
 M Guppy, R Marchant and S Guppy The Maulbrooks Road Bird Study Site: After 18 years of collecting data, what have we learned?	 67
 Contributors to this issue.	 72

INTRODUCTION

It is a pleasure to introduce this thirty fifth edition of *Nature in Eurobodalla*, a report on the status of the fauna of the Eurobodalla Shire compiled from records submitted to the Eurobodalla Natural History Society during 2020. This will be the last edition to be published in this form. It is planned that reports in future years will be published online on the Society's website (www.enhs.org.au).

The year 2020 began with large and severe fires causing extensive damage and persistent smoke throughout the Shire. These continued until significant rainfall in mid-February extinguished the threat, by which time an estimated 80% of the Shire had been fire-impacted. From that time on rainfall was above average, with the Bureau of Meteorology station at Moruya Heads recording 1282mm, the highest yearly total since 1992. Montagu Island recorded 980mm and Narooma 1143mm, both more than double the 2019 falls. February, July and December were particularly wet, with 317 mm at Maulbrooks Rd and 282mm at Comerang in February and 292mm at Bergalia and 296mm at Coolagolite in July. May was the driest month with 3mm at Lilli Pilli, 3.5 at Coolagolite and 4 mm at Comerang.

Temperatures in New South Wales in 2020 were generally above average. For the State as a whole, the annual mean temperature was 0.91°C above average, the coolest year since 2012. Moruya Airport recorded its highest ever daily minimum temperature in February.

Due to fires at the beginning of the year, followed almost immediately by restrictions due to COVID-19, there were far fewer field meetings held in 2020 than normal. Damage from the fires also greatly restricted access to western parts of the Shire for much of the year, so there were fewer reports from these areas. No off-shore field trips were undertaken during the year and records of pelagic species are therefore primarily from land-based observations. Members of the Society did once again participate in the NSW Parks and Wildlife shorebird monitoring programs and in BirdLife Australia surveys.

The year provided records of one new bird species for the Shire, the Blue-billed Duck (*Oxyura australis*) recorded at Bevia Swamp. Three

other species were recorded for only the second time, Red-necked Avocet (*Recurvirostra novaehollandiae*) at Brou Lake, South Island Pied Oystercatcher (*Haematopus finschi*) at Broulee and Beautiful Firetail (*Stagonopleura bella*) in the Deua River valley. Missing from the list this year are all 5 species of crakes and rails, something that has not occurred this century. Perhaps the widespread rains created better conditions elsewhere.

The Society had its first record of a Brush-tailed Phascogale (*Phascogale tapoatafa*) at Mystery Bay. This species is known to be present in the Shire but is likely to be overlooked. It was a busy year for moths and several new species were recorded, *Lepidoscia characota*, *Philobota latifissella*, *Catoryctis subparallela*, *Agriophara confertella*, Mourning Pyralid (*Catamola funerea*), *Stericta carbonalis*, Brown Pasture Looper (*Ciampa arietaria*), Dry-country Line Moth (*Dysbatus singularis*), Black-banded Wedge-moth (*Capusa senilis*), Frilled Bark Moth (*Pholodes sinistraria*) and Pome Looper (*Chloroclystis testulata*). The Shire also had an unwanted first record of a Cane Toad (*Bufo marinus*) at Catalina, which is presumed to have arrived with fire-fighting equipment from the north. Fortunately the animal, a male, was quickly captured and euthanased and there have been no further reports of the species to date.

This report is restricted to those species recorded during the year; species not recorded are not listed. An annotated list of all bird species recorded in the Eurobodalla since the inception of the Society in 1986 is available on the Society's website and is updated annually to reflect new sightings. As noted in previous years, the records reflect the distribution of observers and their interests as much as the distribution of the fauna. However, despite these shortcomings the records provide a valuable qualitative assessment of the status of species in the Shire, enabling trends over the years to be evaluated.

A map of the Shire is reproduced inside the front cover and a list of place name abbreviations used in the text appears inside the back cover.

The taxonomic sequence in which the bird species are listed follows the Birdlife Australia Working List of Australian Birds v3 published in August 2019. The taxonomic sequence used for other vertebrate species

basically follows Clayton *et al* (2006). Taxonomic references used in compiling this report are listed below. The conservation status ascribed to bird species (Critically Endangered, Endangered and Vulnerable) is that given in Schedule 1 of the NSW Biodiversity Conservation Act, 2016.

Once again, my thanks go out to all contributors who have made this report possible. I particularly thank my co-complier, Julie Morgan, for her work as the Society's Recorder during the year. Thanks also to Mike Crowley *et al* for the 62nd Annual Assessment of Shearwater Breeding on Montagu Island and to Michael Guppy *et al* for the contribution on the results of 18 years of research at the Maulbrooks Road Bird Study Site. A complete list of those who have contributed their observations during the year appears on the final page.

David Kay
September 2021

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BIRDS

CASUARIIDAE Emu.

Emu *Dromaius novaehollandiae*

Status: introduced in 1993, small wild population established.

Six at Bodalla in Oct, 3 in Jun; 1 at Cadgee in Apr. (DB/JC/MA)

PHASIANIDAE Quail, pheasants.

Stubble Quail *Coturnix pectoralis*

Status: uncommon breeding resident.

Up to 20 at Com in Nov-Dec, 10 in Oct, 5 in Jan-Apr and 1 in Sep. (JC)

Brown Quail *Synoicus ypsilophorus*

Status: uncommon breeding resident.

One at Com in Jan-Feb. (JC)

ANATIDAE Swans, geese, ducks.

Blue-billed Duck *Oxyura australis*

Status: Vulnerable; vagrant.

Ten reported at Barlings Swamp on 24 Sep, 4 on 30 Dec, first records for the Shire. (S Holliday/T LeBreton)

Musk Duck *Biziura lobata*

Status: uncommon breeding resident.

Six at PS in Dec, 3 in Aug and 1 in Sep; 1 at NA in Oct.

Breeding: juveniles at PS in Dec. (JM)

Black Swan *Cygnus atratus*

Status: common breeding resident and bird of passage.

Widely reported throughout the year; 100 at MHS in May, 60 in Apr; 100 at Bingie in May, 60 in Apr; 28 at Coila L in Jun, 14 in May; 8 at NA in Sep; no more than 6 at other locations.

Breeding: nesting at NA in Sep, cygnets at Com in Jun and at NA in Oct. (JC/MA/DHK)

Australian Shelduck *Tadorna tadornoides*

Status: vagrant.

One reported at Com on 10 Apr. (JC)

Australian Wood Duck *Chenonetta jubata*

Status: common breeding resident.

Widely reported throughout the year; up to 60 at Coila L in Jan; 50 at Com in Jun-Jul, 20-40 in other months; 31 at DS in Oct; 24 at Bergalia

in Jan; 20 at MO in Jan, at MYA in Feb and at NA in May; fewer than 20 at other locations.

Breeding: dependent young in Apr and Sep-Nov.

Hardhead *Aythya australis*

Status: common resident and bird of passage.

Two recorded at MO in Feb. (NM)

Australasian Shoveler *Spatula rhynchotis*

Status: uncommon winter migrant, has bred.

Six at Trunketabella in Oct; 2 at MO in Feb, 1 in Jan and Dec. (DB/NM)

Pacific Black Duck *Anas superciliosa*

Status: common breeding resident.

Widely reported throughout the year; up to 100 at Com in Jun-Jul, 30-80 in other months; 20 at MO in Jan and at MYA in Aug; 18 at Bingie in Jul; no more than 6 at other locations.

Mallard *Anas platyrhynchos*

Status: vagrant.

Five at BBWG on 10 Oct. (FM)

Grey Teal *Anas gracilis*

Status: breeding resident.

Reported throughout the year; 30 at MO in Feb and at Bingie in Jul; 30 at Com in Apr, Jun-Jul and Sep-Nov, 10-20 in other months; 6 at PS in Sep; no more than 2 at other locations.

Breeding: dependent young at Com in Apr and Sep-Oct. (JC)

Chestnut Teal *Anas castanea*

Status: common breeding resident.

Reported throughout the year; 80 at MO in Jan, 40 in Feb; 60 at Bingie in Jul; 50 at Com in Jun-Jul, 20-40 in other months; 40 at MYA in Aug; 30 at Coila L in May; no more than 12 at other locations.

Breeding: dependent young in Apr-May and Sep-Oct.

PODICIPEDIDAE Grebes.

Australasian Grebe *Tachybaptus novaehollandiae*

Status: common breeding resident.

Four at MO in Feb, 3 in Jan, 1 in Sep; 2 at DS in Jul; 1 at Com in Jun-Jul and Nov. (NM/JC/JCof)

Hoary-headed Grebe *Poliiocephalus poliocephalus*

Status: breeding resident.

Two at MO in Aug, 1 in Feb; 2 at Bingie in Jan, at Com in Jun and Bergalia in Aug.

COLUMBIDAE Pigeons, doves.

Rock Dove *Columba livia*

Status: common breeding resident.

Established colonies at BB, MYA and NA; up to 60 at MB in Jan; 40 at NA in Mar-Apr and Dec; 20 at MYA in Feb and Jul.

White-headed Pigeon *Columba leucomela*

Status: common breeding resident.

Recorded in all months; up to 20 at TS in Apr, 15 in Jun; 18 at MKS in Jan, 10 in Oct; 11 at DS in Mar; 10 at Malua Bay in Jan; 6 at Lilli Pilli in Mar; no more than 5 at other locations.

Spotted Dove *Spilopelia chinensis*

Status: breeding resident.

Recorded in all months; up to 5 at DS in Oct; 4 at Com in Jul and at MB in Oct; 1-2 at Broulee and MYA.

Breeding: nesting at Com in Jun and Sep, dependent young in Nov. (JC)

Brown Cuckoo-Dove *Macropygia phasianella*

Status: uncommon breeding resident and bird of passage.

Up to 30 at MKS in Feb-Mar; 20 at NA in Jan; 4 at Lilli Pilli in Jun; 3 at DS in Feb and at Coolagolite in Sep; 1-2 or calls at other locations.

Breeding: juveniles at DS in Sep-Oct. (JCof)

Wonga Pigeon *Leucosarcia melaoleuca*

Status: common breeding resident.

Ten at NA in Jan; 4 at MB in Apr-May; 2 at MKS in Mar and Oct-Dec and at Coolagolite in Jul-Aug; 1 or calls at other locations.

Common Bronzewing *Phaps chalcoptera*

Status: common breeding resident.

Widely recorded in all months; up to 26 at MKS in Apr, 20 in Mar and May-Jun; 13 at Com in Jun; 6 at PS in Nov; 5 at Broulee in Jan and Nov and at MYA in Feb and Jun; no more than 4 at other locations.

Crested Pigeon *Ocyphaps lophotes*

Status: common breeding resident.

Recorded in all months; 17 at MO in Jan, 5 in Feb and Nov; 14 at Com

in Jan, 6-10 in other months; 5 at Bergalia in Jun; no more than 4 at other locations.

Breeding: dependent young at Com in Mar. (JC)

Peaceful Dove *Geopelia striata*

Status: breeding resident but becoming less common.

Two at Com in Jan-Feb, 1 in Apr-May and Sep-Oct; call at PDD in Mar. (JC/JF)

Bar-shouldered Dove *Geopelia humeralis*

Status: uncommon resident.

Eight at Coila L in May, 4 in Jun; 4 at TS in Oct; 2 at Surfside in Jun and Dec; 1 at Com in Mar-Apr and Jun-Sep and at Broulee in Sep.

Topknot Pigeon *Lopholaimus antarcticus*

Status: bird of passage.

Thirty five at DS in Oct, 12 in Sep; 25 at MO in Jan; 15 at Bergalia in Sep; 14 at Com in Sep; 4 at MKS in Jan; 2 at MB in Sep; 1 at Mossy Pt in Jan and at Surfside in Feb.

PODARGIDAE Frogmouths.

Tawny Frogmouth *Podargus strigoides*

Status: breeding resident.

Five at MB in Dec; 4 at Bergalia in Dec, 1 in Nov; single birds at MO in Feb, Aug and Dec and at Com in Feb-Apr.

Breeding: dependent young at Bergalia in Dec. (DHK)

EUROSTOPODIDAE Eared Nightjars.

White-throated Nightjar *Eurostopus mystacalis*

Status: summer breeding migrant.

Four at PS in Oct-Nov, 2 in Feb, 1 in Mar; call at MKS in Jan.

(JC/SMG)

AEGOTHELIDAE Owlet-nightjars.

Australian Owlet-nightjar *Aegotheles cristatus*

Status: breeding resident.

One at Com in Mar-May and Aug-Sep. (JC)

APODIDAE Swifts.

White-throated Needletail *Hirundapus caudacutus*

Status: summer migrant.

Reported in Jan-Apr and Nov-Dec; 100 at DS in Mar; 40 at MO in Jan and Dec and at Bergalia in Feb; 35 at PS in Dec; 15 at Com in Jan; no

more than 10 at other locations; last record at Surfside on 24 Apr, first return at MO on 14 Nov.

CUCULACIDAE Cuckoos.

Eastern Koel *Eudynamys orientalis*

Status: summer breeding migrant.

Reported Jan-Apr and Sep-Dec; 8 at Broulee in Dec, 6 in Feb and Nov; 4 at MYA in Feb and at DS in Oct; 3 at TS in Nov and at MO in Dec; 1-2 or calls at other locations; last record at MB in Apr, first return at Surfside on 22 Sep.

Channel-billed Cuckoo *Scythrops novaehollandiae*

Status: summer breeding migrant.

Reported Jan-Feb and Sep-Dec; 6 at MO in Nov; 4 at TS in Oct-Nov and at PS in Nov; 3 at Coolagolite in Nov and at Bergalia, MB and PDD in Dec; 1-2 or calls at other locations; last record at DS on 17 Feb, first return at MO on 14 Sep.

Breeding: dependent young at PS and TS in Jan, being fed by Pied Currawong, and at TS in Dec. (GM/JM/M Craig)

Horsfield's Bronze-Cuckoo *Chalcites basalix*

Status: summer breeding migrant.

One at PS in Apr and Sep, calls in Jul-Aug and Oct; 1 at MO in Dec; calls at MKS in Sep and Nov.

Shining Bronze-Cuckoo *Chalcites lucidus*

Status: summer breeding migrant and bird of passage.

Four at MO in Aug, 3 in Oct; 4 at PS in Sep, 2 in Aug; 1 or calls at 5 other locations.

Fan-tailed Cuckoo *Cacomantis flabelliformis*

Status: common breeding resident.

Recorded in all months; 7 at PS in May, 6 in Aug; 3 at Potato Pt in May and at MO in Aug and Oct-Dec; 1-2 or calls at other locations.

Brush Cuckoo *Cacomantis variolosus*

Status: summer breeding migrant.

Four at PS in Oct, 3 in Nov, 2 in Dec; 2 at MO in Dec, 1 in Oct-Nov; 1 at MB in Sep; calls at MKS in Oct-Nov and at Com in Oct-Dec.

Pallid Cuckoo *Heteroscenes pallidus*

Status: summer breeding migrant.

One at Belowra and Coolagolite in Aug and at Com in Sep; calls at

MKS in Sep-Nov and at Com in Oct.

RALLIDAE Rails, crakes, swampheens.

Purple Swamphen *Porphyrio porphyrio*

Status: common breeding resident.

Recorded throughout the year; 28 at Bergalia in Jan, 12 in Mar; 12 at MO in Jan-Feb; 8 at MB in Sep and Dec; 7 at BBWG in Oct; 6 at Com in Jun; no more than 5 at other locations.

Breeding: dependent young in May and Oct-Nov.

Dusky Moorhen *Gallinula tenebrosa*

Status: uncommon breeding resident.

Five at DS in Feb, 2 in Jul; 3 at BBWG in Oct; 1 at NA in Sep.

Breeding: dependent young at BBWG in Oct. (FM)

Eurasian Coot *Fulica atra*

Status: common breeding resident.

Six at PDD in Feb and at BBWG in Oct; 1 at DS in Jun and Oct. (JF/FM/JCof)

Breeding: dependent young at BBWG in Oct. (FM)

DIOMEDEIDAE Albatrosses

Indian Yellow-nosed Albatross *Thalassarche carteri*

Status: regularly recorded off the coast.

One off BP on 25 Jul. (NC)

Black-browed Albatross *Thalassarche melanophris*

Status: Vulnerable; common winter pelagic.

Two off Wasp Head in Nov; 1 off BP and Surfside in Jul. (DB/NC)

PROCELLARIIDAE Petrels, shearwaters.

Southern Giant-Petrel *Macronectes giganteus*

Status: Endangered; occasionally recorded in coastal waters.

One recorded off BP in Jul and off Wasp Head in Nov. (NC/DB)

Prion sp.

Up to 200 reported off Wasp Head on 1 Nov. (DB).

Gould's Petrel *Pterodroma leucoptera*

Status: Vulnerable; summer breeding migrant.

One reported off Wasp Head on 1 Nov. (DB)

Shearwater sp.

Six off CO in Feb and Mar and off MO in Feb; 2 off Bengello Beach in Mar. (FM/PG)

Wedge-tailed Shearwater *Ardenna pacifica*

Status: common breeding resident and summer migrant.

Hundreds reported off Wasp Head on 1 Nov. (DB)

Short-tailed Shearwater *Ardenna tenuirostris*

Status: common summer breeding migrant.

Thousands reported off MO in Oct and off Wasp Head in Nov; 200 off MHS in Oct; hundreds off MO in Oct. (DB/PG/NM)

Sooty Shearwater *Ardenna grisea*

Status: summer breeding migrant.

One reported off Wasp Head on 1 Nov. (DB)

Fluttering Shearwater *Puffinus gavia*

Status: common pelagic.

Thousands reported off Wasp Head on 1 Nov. (DB)

THRESKIORNITHIDAE Ibis, spoonbills.

Yellow-billed Spoonbill *Platalea flavipes*

Status: uncommon migrant.

One at Com in Jun and Aug. (JC)

Royal Spoonbill *Platalea regia*

Status: common resident.

Twelve at Coila L in Jan; 10 at NA in Apr, Jun and Dec, 8 in May and Oct; 9 at Com in Apr, 4 in Jul-Aug; 4 at MB in Mar; 1 at DS and MYA in Feb and at MO in Dec.

Straw-necked Ibis *Threskiornis spinicollis*

Status: winter-spring migrant and bird of passage.

Up to 180 at Com in Jul-Aug, 140 in Feb; 100 at MYA in Aug, 60 in Feb; 45 at Bergalia in Mar; 21 at MO in Sep; 19 at MB in Sep; 1 at Eurobodalla Rd in May.

Australian White Ibis *Threskiornis molucca*

Status: common resident and winter-spring migrant.

Twenty four at MYA in Feb and at BBWG in Oct; 12 at Nangudga in Jan; 10 at MYA in Jun; 8 at Com in Jul; 7 at Runnyford Rd in Feb; 6 at MB in Jul; no more than 5 at other locations.

ARDEIDAE Bitterns, herons, egrets.

Australian Little Bittern *Ixobrychus dubius*

Status: rarely recorded.

Call reported at BBWG on 28 May. (DB)

Striated Heron *Butorides striata*

Status: uncommon breeding resident.

One at NA in Mar and Oct-Nov and at MYA in Jul. (MA/FM/V Brown)

Cattle Egret *Bubulcus ibis*

Status: common autumn-spring migrant.

Sixty at MYA in Apr; 20 in Aug, 15 in Sep, 8 in Jan, 7 in Feb; 10 at MB in Sep; 6 in Jul; 6 at Tilba in Jun; 3 at Com in Nov, 2 in Dec; 2 at MHS in May.

White-necked Heron *Ardea pacifica*

Status: breeding resident.

Reported in all months; 3 at NA in Jan; 2 at MYA in Jan-Feb, Apr and Jun, at Bergalia and Com in Feb; single birds reported at 5 other locations.

Great Egret *Ardea alba*

Status: common resident.

Thirty at MHS in May; 8 at Com in Feb; 4 at MB in Mar and May; 3 at MO in Jan, at MYA in Feb and at Broulee in Sep; no more than 2 at other locations.

Intermediate Egret *Ardea intermedia*

Status: uncommon migrant.

Single birds at Com in Mar-Jun and Aug-Sep. (JC)

White-faced Heron *Egretta novaehollandiae*

Status: common breeding resident.

Widely reported in all months; 13 at MO in Jan, 5 in Nov; 6 at Com in Feb and Apr-May, 4-5 in other months; 4 at Broulee in Jun and at Coila L in Jul; no more than 3 at other locations.

Little Egret *Egretta garzetta*

Status: common resident.

Twelve at Nangudga L in Jan; 4 at NA in Apr and at MB in May; 3 at Brou L in Nov; 2 at Coila L and MHS in May; 1 at MO in Aug

Eastern Reef Egret *Egretta sacra*

Status: resident.

Two at NA in Jun, at MO in Sep and Nov; single birds at 8 other locations during the year.

PELICANIDAE Pelican.

Australian Pelican *Pelecanus conspicillatus*

Status: common resident.

Widely reported in all months; 50 at Potato Pt in May; 32 at Coila L in Jun; 25 at Brou L and MO in Nov; 20 at TS in May-Jun; 12 overflying Bergalia in Apr; no more than 10 at other locations.

SULIDAE Gannets, boobies.

Australasian Gannet *Morus serrator*

Status: common winter migrant and bird of passage.

Up to 75 off MHS in Oct, 5 in May; 50 off Wasp Head in Nov; 18 off Broulee in Jul; 6 off MO in Feb and DS in Mar and Jul; no more than 4 at other locations.

PHALACROCORACIDAE Cormorants.

Little Pied Cormorant *Microcarbo melanoleucos*

Status: common breeding resident.

Widely reported in all months; 40 at Brou L in May, 12 in Nov; 24 at Coila L in Jun; 20 at CO in Mar, 17 in Jun; 15 at DS in Jul; 11 at Broulee in Sep; no more than 10 at other locations.

Great Cormorant *Phalacrocorax carbo*

Status: common resident.

Widely reported in all months; 130 at Com in Jul, 120 in May; 30 at Potato Pt in May; 18 at MHS in Aug; 15 at MO in Jan-Feb and Aug-Nov; 12 at Coila L in Jul and at DS in Oct; no more than 10 at other locations.

Little Black Cormorant *Phalacrocorax sulcirostris*

Status: common resident.

Reported in all months; 50 at MYA in Jul; 45 at Brou L in May; 25 at MO in Nov, 20 in Jan; 17 at DS in Oct; no more than 10 at other locations.

Great Pied Cormorant *Phalacrocorax varius*

Status: uncommon resident.

Ten at MO in Sep, 7 in Feb; 7 at DS in Oct; 6 at CO in Feb; 2 at

Bergalia and Broulee in Oct; 1 at NA in Jun and at Coila L in Sep.

ANHINGIDAE Darter.

Australasian Darter *Anhinga novaehollandiae*

Status: breeding resident.

Single birds at Com in Jan and May-Oct, at DS in Feb, at BI in Apr and at NA in Jul.

HAEMATOPODIDAE Oystercatchers.

South Island Pied Oystercatcher *Haematopus finschi*

Status: vagrant from New Zealand.

Numerous reports of one in the Broulee, Candlagan Ck and Mossy Pt area in May-Jul, Sep and Dec.

Australian Pied Oystercatcher *Haematopus longirostris*

Status: Endangered; breeding resident.

Reported in all months; 120 at Coila L in Jan, 50 in Jun; 41 at Brou L in Sep, 30 in Oct; 6 at CO in Feb, at DS in Feb, Jul and Sep-Oct and at Broulee in Nov; no more than 5 at other locations.

Breeding: nesting in Sep-Oct, dependent young in Oct-Nov.

Sooty Oystercatcher *Haematopus fuliginosus*

Status: Vulnerable; breeding resident.

Reported in all months; 30 at CO in Mar, 22 in Feb; 8 at Broulee in Mar, at MB in May and at Mossy Pt in Jul; 7 at Candlagan Ck in Apr and at Mullimburra Pt in Nov; 6 at MO in Nov; no more than 5 at other location.

RECURVIROSTRIDAE Stilts, avocets.

Red-necked Avocet *Recurvirostra novaehollandiae*

Status: vagrant.

Two reported at Brou L on 3 Dec. (V Brown)

Pied Stilt *Himantopus leucocephalus*

Status: rare autumn-winter migrant and bird of passage.

Twenty four at Trunketabella in Oct; 3 at Com, 2 in Feb; 2 at MO in Feb. (DB/JC/NM)

CHARADRIIDAE Lapwings, plovers, dotterels.

Grey Plover *Pluvialis squatarola*

Status: uncommon bird of passage.

Four at Coila L in Jan; 1 at Tomago R in Oct and at Brou L in Dec. (DB/NC/P Martin)

Pacific Golden Plover *Pluvialis fulva*

Status: uncommon bird of passage.

Fifteen at Brou L in Oct, 2 in Nov-Dec; 5 at CO in Feb-Mar, 4 in Oct; 4 at MB in Nov, 2 in Apr.

Red-capped Plover *Charadrius ruficapillus*

Status: common breeding resident.

Up to 65 at Brou L in Oct, 50 in Nov; 60 at Coila L in Jul, 55 in Jun; 30 at CO in Oct, 25 in Nov; 20 at WL in Sep; 13 at Bengello Beach in Apr; no more than 10 at other locations.

Breeding: nesting in Jan and Sep-Oct, dependent young in Feb, Apr and Oct-Nov.

Double-banded Plover *Charadrius bicinctus*

Status: autumn-winter migrant.

Seven at Broulee in Apr; 6 at CO in May, 2 in Mar; 4 at Brou L in May; 2 at MB in May.

Lesser Sand Plover *Charadrius mongolus*

Status: Vulnerable; rare bird of passage.

One reported at CO on 5 Jun. (GM)

Hooded Plover *Thinornis cucullatus*

Status: Critically Endangered; uncommon breeding resident.

Nine at MB in Jul; 5 at Bingie in Nov-Dec, 3 in Apr-May; 4 at Coila L in May and at CO in Oct; 3 at TS in May and at Brou L in Oct; 2 at Bogola Head in May.

Breeding: nesting at Brou L and Bingie in Oct, dependent young at Bingie in Nov-Dec.

Black-fronted Dotterel *Elseyaornis melanops*

Status: uncommon breeding resident.

Eighteen at MO in Dec, 10 in Nov; 1-4 in Jan-Mar and Aug-Oct; 2 at Com in Jan-Feb and Nov-Dec; 2 at Trunketabella in Oct and at Bingie in Nov.

Masked Lapwing *Vanellus miles*

Status: common breeding resident.

Widely reported in all months; 150 at Trunketabella; 80 at Coila L in Jan; 50 at MYA in Feb-Mar; 45 at Com in May, 40 in Jun-Jul; 33 at DS in Feb; 22 at Coila L in Jul; fewer than 20 at other locations.

Breeding: dependent young in Sep-Oct.

SCOLOPACIDAE Snipe, sandpipers and allies.

Whimbrel *Numenius phaeopus*

Status: summer migrant.

Up to 12 at MHN in Feb; 1 at NA in Mar. (W Nagle/MA)

Far Eastern Curlew *Numenius madagascariensis*

Status: common summer migrant, some overwinter.

Eighteen at MHN in Oct, 5 in Feb and 4 in Sep; 3 at NA in Jan and Mar, 2 in Nov; 1 at Coila L in Jan, at Cullendulla Ck in Feb, at TS in Aug and at Brou L in Oct.

Bar-tailed Godwit *Limosa lapponica*

Status: common summer migrant, some overwinter.

Up to 350 at NA in Jan, 200 in Mar, 160 in Nov; 145 at Brou L in Oct, 50 in Nov; 110 at TS in May; 110 at Coila L in Jun, 90 in Jul; 30 at MHN in Sep; no more than 2 at other locations.

Ruddy Turnstone *Arenaria interpres*

Status: summer migrant and bird of passage.

One at Brou L in Nov-Dec. (DB/S Pearson)

Great Knot *Calidris tenuirostris*

Status: Vulnerable; uncommon summer migrant and bird of passage.

One at Coila L on 19 Jan. (DB)

Red Knot *Calidris canutus*

Status: summer migrant and bird of passage.

Up to 45 at Brou L in Oct, 40 in Nov, 4 in Dec; 2 at Coila L in Jan.

Sharp-tailed Sandpiper *Calidris acuminata*

Status: summer migrant and bird of passage.

Up to 6 at Brou L in Oct, 5 in Nov; 5 at Coila L in Jan.

Curlew Sandpiper *Calidris ferruginea*

Status: Endangered; summer migrant and bird of passage.

Up to 4 at Brou L in Oct, 3 in Nov and 1 in Dec. (DB/NC)

Red-necked Stint *Calidris ruficollis*

Status: summer migrant and bird of passage.

Up to 200 at Brou L in Dec, 40 in Oct and 20 in Nov; 40 at Coila L in Jan, 2 in Jun; 2 at CO in Sep.

Sanderling *Calidris alba*

Status: Vulnerable; uncommon summer migrant and bird of passage.
Two at Brou L in Oct; 1 at Coila L in Jan and at CO in May.

Latham's Snipe *Gallinago hardwickii*

Status: uncommon summer migrant.
Two at MO in Sep, 1 in Jan-Feb. (NM)

Common Sandpiper *Actitis hypoleucos*

Status: uncommon summer migrant and bird of passage
Two at Cullendulla Ck on 30 Nov. (RSor)

LARIDAE Gulls, terns.

Silver Gull *Larus novaehollandiae*

Status: common breeding resident.
Widely reported in all months; 800 at MYA in Aug; 100 at Broulee in Jun and at MO in Nov; 60 at CO in Feb; 30 at DS in Feb; no more than 20 at other locations.

Pacific Gull *Larus pacificus*

Status: vagrant.
One juvenile at CO on 16 Mar. (PG)

Sooty Tern *Onychoprion fuscatus*

Status: Vulnerable; vagrant.
One juvenile recorded at Rosedale on 12 Feb. (MF)

Little Tern *Sternula albifrons*

Status: Endangered; summer breeding migrant.
Up to 80 at Brou L in Nov-Dec, 4 in Oct; 12 at Coila L in Jan; 2 at CO in Feb.
Breeding: nesting at Brou L in Dec and at Coila L in Jan, dependent young at Brou L in Dec.

Fairy Tern *Sternula nereis*

Status: rare summer breeding migrant.
Six at Brou L in Dec, 4 in Nov, 2 in Oct; 1 at Coila L in Jan.
Breeding: dependent young at Brou L in Dec. (GC)

Australian Gull-billed Tern *Gelochelidon macrotarsa*

Status: vagrant.
One at BB on 10 Jul. (DB)

Caspian Tern *Hydroprogne caspia*

Status: resident and bird of passage.

Up to 19 at DS in Jul, 12 in Sep; 11 at Brou L in May; 6 at NA in Mar; 2 at Coila L in May and at Broulee in Jul; 1 at MO in Feb, at MB in Jun and at WL in Sep.

Whiskered Tern *Chlidonias hybrida*

Status: uncommon summer migrant.

Two at Brou L on 5 Dec. (DB)

White-fronted Tern *Sterna striata*

Status: common winter migrant.

Two at MB on 11 Apr. (MA)

Greater Crested Tern *Thalasseus bergii*

Status: common breeding resident.

Up to 70 at DS in Mar; 50 at Coila L in May; 40 at CO in Jun; 30 at TS in Apr and Jun; 18 at Broulee in Jul; 15 at Brou L in Nov; no more than 8 at other locations.

Breeding: dependent young at MB in May. (MA)

STERCORARIIDAE Skuas, jaegers.

Arctic Jaeger *Stercorarius parasiticus*

Status: recorded off the coast, usually in summer.

One off Broulee on 26 Mar. (PG)

Pomarine Jaeger *Stercorarius pomarinus*

Status: recorded off the coast, usually in summer.

One off MHS on 14 Feb. (DB)

Brown Skua *Catharata antarcticus*

Status: regularly recorded off the coast in winter.

One off BP on 25 Jul. (NC)

TYTONIDAE Masked owls.

Greater Sooty Owl *Tyto tenebricosa*

Status: Vulnerable; uncommon breeding resident.

Calls at MB in Nov-Dec. (MA)

STRIGIDAE Hawk-Owls.

Powerful Owl *Ninox strenua*

Status: Vulnerable; breeding resident.

Two at MO in Jan and Nov-Dec, 1 in Aug; 2 at Murramarang NP in

Apr; 1 at Com in May; 1 at PS in Nov, calls in Aug-Sep.

Barking Owl *Ninox connivens*

Status: Vulnerable; uncommon breeding resident.

Calls at MB in Nov. (MA)

Southern Boobook *Ninox boobook*

Status: breeding resident.

Two at NA in Jan; 1 at Com in Jan and Apr, at Broulee in Sep and at MO in Sep-Dec; calls at 6 other locations.

PANDIONIDAE Osprey.

Osprey *Pandion haliaetus*

Status: Vulnerable; uncommon migrant.

Two at MHS in May-Sep, 1 in Jan; 1 at NA in Mar, at TS in Apr and Jun, at Cullendulla in Jul, at PS in Aug and Oct and at BBWG in Oct. Breeding: nesting at MHS in Jul and Sep. (JM/T&A Ross)

ACCIPITRIDAE Eagles, kites, goshawks.

Black-shouldered Kite *Elanus axillaris*

Status: breeding resident.

Recorded in all months; 2 at Bergalia in Jan-Feb, at MO in Jan, at Com in Jan-Feb, at MYA in Feb, at MB in May-Jun and at Tilba in Oct; single birds at 5 other locations during the year.

Square-tailed Kite *Lophoictinia isura*

Status: Vulnerable; uncommon spring-summer breeding migrant.

Recorded Jan-Mar and Aug-Dec; single birds at MKS in Jan and Aug, at MYA in Feb, at MO in Feb, Aug and Dec, at Bingie in Mar, at MB in Mar and Dec and at PS in Aug-Nov.

Pacific Baza *Aviceda subcristata*

Status: vagrant.

One recorded at Bumbo Rd on 2 Feb. (D McLaughlin)

Wedge-tailed Eagle *Aquila audax*

Status: common breeding resident.

Widely reported in all months; 3 at MKS in Feb; 2 at Belowra, Bergalia, Coila L, Com, Coolagolite, MO, MYA and Pedro during the year; single birds at other locations.

Little Eagle *Hieraaetus morphnoides*

Status: Vulnerable; uncommon breeding resident.

Single birds at Turlinjah in May, at Coila L in Jun, at NA in Jul and at MO in Nov.

Swamp Harrier *Circus approximans*

Status: breeding resident.

Two at MYA in Jan and at PDD in Aug-Sep; 1 at Bingie in Jan, at MO in Jan-Feb and Aug, at Com in Jan-Feb, Sep and Dec; at PS in Aug-Sep, at NA in Oct and at MB in Nov.

Grey Goshawk *Accipiter novaehollandiae*

Status: breeding resident, both grey and white morph occurring.

Single birds reported at Bergalia, Bodalla SF, CO, MB, MHS, MO, Mullimburra Pt, MYA, NA, PS, Surfside, TS and Tuross River Bridge.

Brown Goshawk *Accipiter fasciatus*

Status: breeding resident.

Two at Bingie Pt in Jan; 2 at MO in Aug, 1 in Jan and Sep-Dec; 2 at PS in Sep, 1 in Aug; 1 at Com in Jan-Apr and Sep, at Deua R in Feb, at Coila L and MB in Sep and at MKS in Oct.

Collared Sparrowhawk *Accipiter cirrocephalus*

Status: breeding resident.

Two at PS in Dec; 1 at MO in Jan, at Com in Mar, at Coolagolite in Apr, at MKS in Sep and at DS in Oct.

White-bellied Sea-Eagle *Haliaeetus leucogaster*

Status: Vulnerable; common breeding resident.

Widely reported throughout the year; 6 at Coila L in Jun; 4 at Lilli Pilli in Mar; 3 at Com in Jan-Feb, May-Aug, at MB in Jun-Jul and Nov, at MO in Aug and Oct-Dec; no more than 2 at other locations.

Breeding: juveniles and immatures in Apr-Aug.

Whistling Kite *Haliastur sphenurus*

Status: breeding resident.

Reported in all months; 5 at MO in Feb, 3 in Aug and Nov; 3 at Bergalia and MB in Jun and at Com in Nov-Dec; no more than 2 at other locations.

Breeding: nesting at DS in Feb-Mar and Jun, dependent young at Com in Nov. (JCof/JC)

CORACIIDAE Dollarbirds.

Oriental Dollarbird *Eurystomus orientalis*

Status: summer breeding migrant.

Recorded in Jan-Mar and Oct-Dec; 4 at Com in Jan and Oct, 2 in Nov-Dec; 3 at MB in Jan and at MO in Dec; no more than 2 at other locations.

Breeding: nesting at Com in Nov-Dec, dependent young in Jan. (JC)

ALCEDINIDAE Kingfishers.

Azure Kingfisher *Ceyx azureus*

Status: breeding resident.

Two at Com in Feb, 1 in all other months; 2 DS in Feb, 1 in Oct; 2 at MO in Oct, 1 in Feb and Nov; 1 at NA in Apr and Oct.

Sacred Kingfisher *Todiramphus sanctus*

Status: summer breeding migrant; some may overwinter.

Recorded Jan-Mar, May and Sep-Dec; 5 at PDD in Feb, 3 in Dec; 4 at PS in Oct and Dec and at Com in Oct-Dec; no more than 2 at other locations.

Breeding: nesting in Nov-Dec, dependent young in Feb and Dec. (JC/JF)

Laughing Kookaburra *Dacelo novaeguineae*

Status: common breeding resident.

Widely reported in all months as individuals or family groups; 12 at PS in Aug, 10 in Mar-May, Jul, Sep-Oct and Dec; 7 at MB in May; 6 at Broulee in Jun, at PDD in Oct and at Bergalia in Dec; 5 at NA in Jan and at Com in Nov-Dec; no more than 4 at other locations.

Breeding: nesting at Com in Oct, dependent young in Nov. (JC)

FALCONIDAE Falcons.

Nankeen Kestrel *Falco cenchroides*

Status: common breeding resident.

Reported throughout the year; 2 at Com in Jan-Feb and Nov, at TS in May, at MYA in Jun, Aug and Nov and at MB in Dec; single birds at 2 other locations.

Australian Hobby *Falco longipennis*

Status: breeding resident.

Two at Bergalia in Jul; 1 at DS and PS in Feb, at MO in Feb and Dec, at Com in Apr and Jun, at MHS in May and at WL in Nov.

Brown Falcon *Falco berigora*

Status: breeding resident.

One at Com each month, at MYA in Jan, at MO in Feb, at Potato Pt in May and at Belowra in Jul.

Black Falcon *Falco subniger*

Status: Vulnerable; vagrant.

One reported at Surfside on 31 Aug. (DB)

Peregrine Falcon *Falco peregrinus*

Status: uncommon breeding resident.

Four at BB in Nov; 2 at PS in Apr-May, 1 in Feb and Aug; 1 at Com most months, at MKS in Feb-Apr, at MB in Jun, at Cullendulla Ck in Jul and at MO in Nov.

Breeding: dependent young at BB in Nov. (GLM/RSor)

CACATUIDAE Cockatoos, corellas.

Glossy Black-Cockatoo *Calyptorhynchus lathami*

Status: Vulnerable; breeding resident.

Recorded throughout the year, normally in pairs or family groups of 3; 16 at PS in Jun-Jul, 8 in May; 14 at Pedro in Apr and Aug; 8 at MKS in Jan, at Broulee in Jul and at MB in Sep; 7 at TS in May; 6 at Bergalia and Surfside in Mar and at PDD in Aug; no more than 5 at other locations.

Breeding: juveniles in Mar, May-Jun and Nov.

Yellow-tailed Black-Cockatoo *Zanda funereus*

Status: common breeding resident.

Widely recorded in all months; 40 at MB in Apr; 30 at MYA in Jul; 25 at MKS in Apr; 23 at Coolagolite in May and at Broulee in Nov; 21 at TS in Jun; 16 at MO in Sep; 14 at Bergalia in Jun and Aug; no more than 12 at other locations.

Breeding: dependent young at Broulee in Nov, juvenile at DS in Oct. (GLM/JCof)

Gang-gang Cockatoo *Callocephalon fimbriatum*

Status: Vulnerable; breeding resident.

Up to 35 at PS in Jun; 22 at Pedro Pt in May; 18 at Bergalia in Jul; 15 at Mossy Pt in Jul; 11 at BBWG in Apr; 10 at BI in Mar, at MKS in Mar and May and at DS in Oct; fewer than 10 at other locations.

Breeding: juvenile at NA in Jun. (JMG)

Galah *Eolophus roseicapilla*

Status: common breeding resident.

Widely recorded in all months in pairs, small groups and large flocks; 120 at Com in May-Jun, 80 in Jan; 32 at Broulee in Aug, 30 in Oct; 20 at MO in Jan, 15 in Feb; no more than 10 at other locations.

Breeding: dependent young at Broulee and at Com in Nov. (GLM/JC).

Long-billed Corella *Cacatua tenuirostris*

Status: vagrant.

Two reported at Surfside on 2 Oct. (DB)

Little Corella *Cacatua sanguinea*

Status: common breeding resident.

Widely recorded in all months in pairs, small groups and large flocks; 200 at MYA in Jun, 100 in Feb, Apr-May and Aug; 80 at Com in May; 38 at Coolagolite in Oct, 20 in Sep; 22 at Broulee in Jul, 18 in Dec; no more than 10 at other locations.

Sulphur-crested Cockatoo *Cacatua galerita*

Status: common breeding resident.

Widely recorded in all months; 82 at Broulee in Oct, 24 in Jan and Aug-Sep; 60 at Com in Jun; 32 at MKS in Nov; 20 at MYA in Aug; no more than 12 at other locations.

Breeding: dependent young at Com in Mar. (JC)

PSITTACULIDAE Parrots, lorikeets, rosellas.

Crimson Rosella *Platycercus elegans*

Status: common breeding resident.

Widely reported in all months, usually in groups up to 6; 20 at PS in Apr, 10 in May-Jul, Sep and Nov; 12 at Broulee in Jan and Nov, at Com in Aug; 10 at Coolagolite in Mar, fewer than 10 at other locations.

Eastern Rosella *Platycercus eximius*

Status: breeding resident.

Recorded in all months; 10 at MO in Jan; 7 at Com in Nov-Dec; 5 at MYA in Apr; 4 at Bergalia in Jan-Mar and at MB in Apr; 1 at Surfside in Feb and at Coila L in Sep.

Breeding: dependent young at Com in Nov. (JC)

Swift Parrot *Lathamus discolor*

Status: Endangered; uncommon bird of passage.

Ten at NA in Apr; 6 at BB in Sep; 3 at BP in May; 2 at Surfside in May;

1 at PS in Apr and at BBWG in May.

Musk Lorikeet *Glossopsitta concinna*

Status: common breeding resident.

Recorded each month except Nov; 20 at DS in Jun, at MYA in Aug and at MB in Sep; 10 at Malua Bay in Jan and at PS in Apr; 6 at MO in Aug; calls at TS in Dec.

Little Lorikeet *Glossopsitta pusilla*

Status: Vulnerable; resident, has bred.

Recorded each month except Jul; 16 at Bergalia in Jan; 12 at PS in Jan, 10 in Apr; 12 at PDD in Mar; 6 at DS in Feb and Apr; 2 at TS in Nov; calls at MB in Mar and Jun.

Rainbow Lorikeet *Trichoglossus moluccanus*

Status: common breeding resident.

Widely recorded in all months; up to 100 at Broulee and PS in Jan, at MHS in Feb, at DS in Apr and MB in Jun; 60 at Broulee in Dec; 30 at MO in Jan; 21 at MKS in Mar; no more than 20 at other locations.

Australian King-Parrot *Alisterus scapularis*

Status: common breeding resident.

Singles, pairs and small groups widely recorded in all months; 20 at Com in Feb and at TS in May; 12 at MKS in Mar and May-Jun; 9 at Bergalia in Feb; 8 at Coolagolite in Jun, at MO in Aug and at MB in Oct; no more than 6 at other locations.

Breeding: dependent young at Bergalia in Feb and at Com in Sep. (DHK/JC)

MENURIDAE Lyrebirds.

Superb Lyrebird *Menura novaehollandiae*

Status: breeding resident.

Recorded in all months; 5 at Tilba in Jul; 4 at NA in Jan, 3 in Apr; 2 at Belowra in Apr and Jul and at Coolagolite in Dec; 1 or calls at other locations.

PTILONORHYNCHIDAE Catbirds, bowerbirds.

Green Catbird *Ailuroedus crassirostris*

Status: breeding resident.

Two at NA in Jan. (JMG)

Satin Bowerbird *Ptilonorhynchus violaceus*

Status: common breeding resident.

Widely reported in all months, usually one to six; 20 at Com in Mar, 12 in Jun; 13 at Coolagolite in Aug; 10 at MB in Oct and at Broulee in Oct-Nov; 8 at NA in Jan and at MKS in Feb; no more than 6 at other locations.

Breeding: dependent young at DS in Feb, juvenile at PS in Dec.
(JCof/JM)

CLIMACTERIDAE Treecreepers.

White-throated Treecreeper *Cormobates leucophaea*

Status: common breeding resident.

One or two widely reported in all months; 6 at PS in Aug and Dec, 4 in Apr-May, Jul and Sep-Nov; 3 at Com in Jan-Feb and at MO in Sep; no more than 2 at other locations.

Red-browed Treecreeper *Climacteris erythroptis*

Status: uncommon breeding resident.

Two at PS in Aug, 1 in May and Nov, calls in Sep; 1 at DS in Feb and at MO in Nov.

MALURIDAE Fairy-wrens, emu-wrens.

Variigated Fairy-wren *Malurus lamberti*

Status: breeding resident.

Reported in all months except Feb; 12 at PS in Dec, 10 in Aug; 10 at CO and at TS in Jun; 8 at MO in Aug; 5 at Bergalia and NA in Jan and at MYA in Jul; no more than 4 at other locations.

Superb Fairy-wren *Malurus cyaneus*

Status: common breeding resident.

Widely reported in all months in family groups up to 10; 40 at Com in Oct-Dec; 33 at Broulee in Jun, 30 in Nov; 30 at CO in Jun; 20 at PS in Apr; 12 at Bengello Beach in Mar and at MYA in Jul; no more than 10 at other locations.

Breeding: nesting in Jul and Sep, dependent young in Jan and Oct-Dec.
(JC/JM)

Southern Emu-wren *Stipiturus malachurus*

Status: uncommon breeding resident.

Six at PS in Aug; 4 at Broulee in Jan-Feb and Jul, 3 in Jun-Aug and Nov, 2 in Sep; 2 at Cullendulla Ck in Mar.

MELIPHAGIDAE Honeyeaters, chats.

White-cheeked Honeyeater *Phylidonyris niger*

Status: breeding resident in small, localised colonies.

Six at PS in May and at Broulee in Nov; 5 at DS in Feb; 4 at NA in Jan; 1-2 at 4 other locations during the year.

New Holland Honeyeater *Phylidonyris novaehollandiae*

Status: common breeding resident.

Widely reported in all months; 30 at Broulee in Nov, 26 in Oct; 10 at NA in Jan, at Lilli Pilli in Feb, at PS in May, at CO in Jun, and at TS in Nov; 9 at DS in Oct; no more than 8 at other locations.

Breeding: dependent young at MO in Nov. (NM)

White-naped Honeyeater *Melithreptus lunatus*

Status: breeding resident and bird of passage.

Recorded in all months; 10 at PS in Jan, May and Jul-Aug and at NA in Jan; 6 at DS in Feb; 5 at MB in Jan; no more than 4 at other locations.

Brown-headed Honeyeater *Melithreptus brevirostris*

Status: uncommon summer breeding migrant.

Eleven at Com in Feb, 5-10 in other months; 10 at PS in Aug, 8 in May; 6 at MO in Dec; 1 at Coolagolite in Jun.

Breeding: nesting in May and Jul, dependent young in Oct, juveniles in Jan-Feb. (JC/JM/MA)

White-eared Honeyeater *Nesoptilotis leucotis*

Status: autumn-winter migrant.

Reported in Jan and Apr-Aug; 3 at PS in May, 2 in Apr and Jun; 2 at NA in Jan; 1 or calls at 4 other locations.

Noisy Friarbird *Philemon corniculatus*

Status: summer breeding migrant and bird of passage, often overwinters.

Recorded Jan-Apr and Aug-Dec; 20 at PS in Dec, 16 in Oct; 6 at Bergalia in Jan and at MO in Sep; 5 at Com in Dec; no more than 4 at other locations.

Breeding: nesting in Oct-Nov, dependent young in Dec. (JC/JM)

Scarlet Honeyeater *Myzomela sanguinolenta*

Status: summer breeding migrant and bird of passage.

Reported in Jan-Apr and Jul-Dec; 40 at MB in Oct; 12 at MO in Sep, 10 in Jan; 11 at DS in Feb; 10 at NA in Sep; 6 at TS in Oct-Nov and at MYA in Nov; no more than 5 at other locations.

Eastern Spinebill *Acanthorhynchus tenuirostris*

Status: common breeding resident.

Widely reported in all months; 8 at Broulee in Jan and at PS in Aug; 6 at NA in Jan, at Com in Jan-Feb, at Bengello Beach in Mar, at TS in Apr-Jun and Oct; 5 at MYA in Jul; no more than 4 at other locations.

Breeding: dependent young in Feb and Nov-Dec, juveniles in Dec. (GM/JM)

White-fronted Chat *Epthianura albifrons*

Status: Vulnerable; breeding resident.

Five at Coila L in May, 2 in Jun; 4 at Brou L in Nov; 2 at MB in Jun; 1 at Corunna L in Apr.

Lewin's Honeyeater *Meliphaga lewinii*

Status: common breeding resident.

Widely reported in all months; 6 at NA in Jan, at PS in May and at DS in Oct; 4 at MB in Oct; 3 at MO in Aug and Dec; 1-2 or calls at other locations.

Little Wattlebird *Anthochaera chrysoptera*

Status: common breeding resident.

Reported in all months; 24 at Broulee in Oct, 20 in Sep and Nov; 12 at Coila L in Sep; 10 at DS in Feb-Mar and Oct and at MO in Aug; 6 at TS in Apr and Oct-Nov and at MYA in Jul; no more than 5 at other locations.

Breeding: dependent young at TS in Oct and Dec. (GM)

Red Wattlebird *Anthochaera carunculata*

Status: common breeding resident and bird of passage.

Widely reported in all months; up to 56 at Broulee in Jun, 32 in Oct; 50 at PS in Apr, 30 in May; 20 at Com in May; 15 at MO in Jan; 12 at Coila L in Jun; no more than 10 at other locations.

Breeding: dependent young in Oct and Dec, juveniles in Dec. (GM/JM)

Fuscous Honeyeater *Ptilatula fusca*

Status: uncommon winter migrant and bird of passage.

One at PS in Apr-May, calls in Jun; calls at MKS in May and Jul. (JM/SMG)

Yellow-faced Honeyeater *Caligavis chrysops*

Status: common breeding resident and summer migrant.

Widely reported throughout the year; up to 100 at Com in Apr; 50 at

Belowra in Apr; 20 at DS in Feb and at PS in Apr-May and Aug; 14 at Broulee in Sep; 12 at MYA in Aug; no more than 10 at other locations. Breeding: nesting in Aug-Sep, dependent young in Aug and Dec, juveniles in Dec.

Yellow-tufted Honeyeater *Lichenostomus melanops*

Status: uncommon breeding resident.

Recorded at Belimbla in Jun. (E Kincaid)

Bell Miner *Manorina melanophrys*

Status: common breeding resident.

Colonies reported at Brou L, Comerang, Moruya and Narooma.

PARDALOTIDAE Pardalotes.

Spotted Pardalote *Pardalotus punctatus*

Status: common breeding resident.

Reported in all months; 10 at PS in Apr-May and Aug; 6 at DS in Feb; 4 at Potato Pt in May; 3 at Belowra in Jul, at MO in Aug and at Broulee in Oct; 1-2 or calls at other locations.

Breeding: nesting in Jul-Oct.

Striated Pardalote *Pardalotus striatus*

Status: breeding resident.

Two at Com in Jun-Dec, 1 in Apr-May; 2 at PS in May, 1 in Apr and Jul; 1 at MO in Aug-Oct, calls at TS in Nov.

ACANTHIZIDAE Thornbills, gerygones.

Brown Gerygone *Gerygone mouki*

Status: common breeding resident.

Reported in all months; 20 at CO in Jun; 10 at Coila L in Jun; 6 at PS in Aug; 5 at MO in Dec; 4 at MB in Apr; 1-2 or calls at other locations.

Breeding: nesting at DS in Jul. (JCof)

White-throated Gerygone *Gerygone olivacea*

Status: summer breeding migrant.

Two at Com in Jan, calls in Sep; 1 at Deua R in Feb; calls at CO in Feb and at MYA in Nov.

Weebill *Smicrornis brevirostris*

Status: vagrant.

One at Brou L on 6 Sep; possible call at PS on 26 Dec. (MA/JM)

White-browed Scrubwren *Sericornis frontalis*

Status: common breeding resident.

Widely reported in all months; 6 at Bengello Beach in Mar; 5 at Com in Jan and Nov-Dec, at PDD and MO in Feb; 4 at Broulee in Feb, at PS in May; 3 at TS in Nov-Dec; no more than 2 at other locations.

Breeding: dependent young at Com in Nov. (JC)

Yellow-rumped Thornbill *Acanthiza chrysorrhoa*

Status: breeding resident.

Reported in all months; 12 at Com in Jan-Feb, 10 in other months; 10 at Broulee in Jul; 5 at MYA in Feb; 4 at MO in Jan and Oct; 3 at Belowra in Jul; no more than 2 at other locations.

Breeding: dependent young at Com in Sep. (JC)

Yellow Thornbill *Acanthiza nana*

Status: breeding resident.

Reported in all months; 15 at Potato Pt in May; 10 at Com in each month, at PS in May and at MYA in Jul; 8 at Bergalia in Feb; 6 at Broulee in Jan and Nov, at MO in Feb and at DS in Jul; no more than 4 at other locations.

Breeding: dependent young at Com in Jan and Nov. (JC)

Striated Thornbill *Acanthiza lineata*

Status: breeding resident.

Widely reported in all months; 20 at PS in Apr-May and Oct-Dec; 10 at Com each month; 10 at MO in Feb; 8 at DS in Feb and at MB in Sep; no more than 6 at other locations.

Breeding: nesting in Jul, dependent young in Sep-Oct and Dec. (JC/JCof/JM)

Brown Thornbill *Acanthiza pusilla*

Status: common breeding resident.

Widely reported in all months; 20 at PS in May and Dec; 15 at NA in Jan and at MYA in Jul; 12 at Bengello Beach and Bergalia in Mar; 10 at Com each month, at Coila L in Jun, at MO in Aug and Nov and at Broulee in Nov-Dec; no more than 6 at other locations.

Breeding: nesting in Aug, dependent young in Oct, juveniles in Dec.

NEOSITTIDAE Sittellas.

Varied Sittella *Daphoenositta chrysoptera*

Status: Vulnerable; breeding resident.

Fifteen at BBWG in Mar; 10 at PS in Mar; 7 at Com in Apr; 4 at MO in

Aug and Oct; 1 at MYA in Sep.

Breeding: dependent young in Oct and Dec. (NM/JC)

ORIOLIDAE Orioles, figbirds.

Australasian Figbird *Sphecotheres vieilloti*

Status: breeding resident and summer breeding migrant.

Ten at TS in Sep; 6 at MYA in May-Jul and Oct; 2 at BBWG in Oct and at NA in Nov; 1 at PS in Oct.

Breeding: nesting at BB in May. (DB)

Olive-backed Oriole *Oriolus sagittatus*

Status: summer breeding migrant; some overwinter.

Recorded each month; 10 at PS in Sep, 6 in Oct and Dec; 9 at MYA in Jul; 4 at Bodalla SF in Nov; 3 at Bergalia in Jun and at MO in Aug, Oct and Dec; 1-2 or calls at other locations.

Breeding: juveniles in Mar and Dec. (JC/JM)

CINCLOSOMATIDAE Quail-thrushs.

Spotted Quail-thrush *Cinclosoma punctatum*

Status: breeding resident.

Eleven at MYA SF on 20 Jul. (D McLaughlin)

FALCUNCULIDAE Shrike-tits.

Eastern Shrike-tit *Falcunculus frontatus*

Status: breeding resident.

Two at NA in Jan; 1 at MO in Sep and at MYA in Nov. (JMG/NM/FM)

PACHYCEPHALIDAE Whistlers, shrike-thrushes.

Rufous Whistler *Pachycephala rufiventris*

Status: summer breeding migrant.

Recorded Jan-Apr and Jul-Dec; 15 at MYA in Nov; 10 at PS in Dec; 8 at Com in Oct, 6 in Sep and Nov-Dec; 8 at MO in Nov; 4 at Brou L in Oct and at Bodalla SF in Nov; no more than 2 at other locations.

Breeding: dependent young at Com in Jan. (JC)

Golden Whistler *Pachycephala pectoralis*

Status: common breeding resident.

Widely reported in all months; 10 at PS in May-Jul and Sep and at MYA in Nov; 6 at MO in Oct-Nov; 4 at Com in Mar-Apr, at MKS in Jul, at DS in Oct and at Bodalla SF in Nov; no more than 2 at other locations.

Breeding: juvenile at Com in Jan. (JC)

Grey Shrike-thrush *Colluricincla harmonica*

Status: common breeding resident.

Widely reported in all months; 6 at PS in Dec, 4 in Apr-May and Jul-Sep; 4 at NA in Jan; 4 at MO in Nov, 3 in Aug and Dec; no more than 2 at other locations.

Breeding: juvenile at PS in Dec. (JM)

PSOPHODIDAE Whipbirds.

Eastern Whipbird *Psophodes olivaceus*

Status: common breeding resident.

Reported in all months; 17 at Broulee in Nov, 13 in Aug; 7 at DS in Oct, 6 in Feb; 3 at PS in Aug; 1-2 or calls at other locations.

Breeding: juveniles at DS in Oct. (JCof)

CAMPEPHAGIDAE Cuckoo-shrikes, trillers, cicadabird.

Black-faced Cuckoo-shrike *Coracina novaehollandiae*

Status: common breeding resident.

Widely reported in all months; 6 at PS in May, 4 in Apr, Jun-Aug and Oct-Nov; 5 at MKS in Oct; 4 at Bergalia in Feb-Mar and at Com in Feb; 3 at MYA in Feb, at Coolagolite in Apr and at MO in Sep; 1, 2 or calls at other locations.

White-bellied Cuckoo-shrike *Coracina papuensis*

Status: uncommon breeding resident and bird of passage.

Four at Com in Apr; 2 at PS in Apr-May, 1 in Mar, Jul-Aug and Nov; 1 at Surfside in Jan and at MB in Mar; calls at MKS in Oct and Dec.

Common Cicadabird *Coracina tenuirostris*

Status: summer breeding migrant.

Recorded Jan-Feb and Oct-Dec; up to 10 at PS in Nov-Dec, 6 in Jan; 1 at Com in Jan, at Bumbo Rd in Feb, at Surfside in Oct and at MO in Dec; calls at MKS in Nov-Dec.

White-winged Triller *Lalage tricolor*

Status: summer migrant.

One recorded at MYA on 14 Jan. (JM)

ARTAMIDAE Butcherbird, magpie, currawongs, woodswallows.

Pied Currawong *Strepera graculina*

Status: common breeding resident.

Widely reported all year; 35 at Broulee in Jul; 30 at PS in Apr, 10-20 most other months; 13 at Belowra in Jul; 10 at Com in Jun; 8 at

Coolagolite and DS in Jul; 7 at Bergalia in Aug; 6 at TS in Apr-Jun and Bodalla SF in Nov; no more than 5 at other locations.
Breeding: dependent young at PS in Dec. (JM)

Grey Currawong *Strepera versicolor*

Status: uncommon resident and winter migrant to coast.
Two at Coolagolite in Jul; 1 at Com in Apr. (DO/JC)

Australian Magpie *Gymnorhina tibicen*

Status: common breeding resident.
Widely reported throughout the year; 60 at MYA in Aug; 50 at Com in Mar and Sep, 30-40 most other months; 25 at PS in Dec; 16 at Broulee in Dec; 12 at MO in Feb and Nov; no more than 10 at other locations.
Breeding: nesting in Jul-Sep, dependent young in Sep-Dec.

Grey Butcherbird *Cracticus torquatus*

Status: common breeding resident.
Widely reported with 1-2 at most localities throughout the year; 8 at PS in May-Jun; 6 at ERBG in Nov; 4 at MO in Aug and at Bergalia in Nov-Dec; 3 at DS in Mar, at Coila L in Jun and at Com in Dec; no more than 2 at other locations.
Breeding: dependent young in Jan and Nov-Dec.

Dusky Woodswallow *Artamus cyanopterus*

Status: Vulnerable; summer breeding migrant.
Twenty at Com in May, 10 in Jan-Feb; 5 at DS in Feb-Mar and Oct and at Coolagolite in Aug-Sep; 4 at Eurobodalla Rd in May and at Belowra in Aug.
Breeding: dependent young at Com in Jan-Feb, juvenile at DS in Feb. (JC/JCof)

White-breasted Woodswallow *Artamus leucorhyn*

Status: vagrant.
Six at PS in Nov, 4 in Aug and Dec; 5 at MO in Aug. (JM/NM)

RHIPIDURIDAE Fantails.

Willie Wagtail *Rhipidura leucophrys*

Status: common breeding resident.
Widely reported in all months, 1-4 at most sites; 20 at Com in Dec, 15 in Oct-Nov; 8 at MYA in Feb; 5 at MO in Feb and Sep; 4 at Belowra and Coila L in Jul; no more than 3 at other locations.
Breeding: nesting at Com in Sep-Nov, dependent young in Jan, Oct and

Dec. (JC)

Rufous Fantail *Rhipidura rufifrons*

Status: summer breeding migrant.

Recorded Jan-Apr and Oct-Dec; 2 at NA in Jan, 1 in Nov-Dec; 2 at DS in Feb; 1 at Com, Deua R and PS in Jan, at MO in Jan-Feb and Oct; at PDD and Lilli Pilli in Feb, at MB in Mar and at Bergalia in Apr.

Grey Fantail *Rhipidura albiscapa*

Status: common breeding resident.

Widely reported throughout the year; up to 40 at Com in Jan-Feb, 10-30 in other months; 20 at MYA in Apr and at PS in May; 12 at DS in Oct; 10 at NA in Jan, at MB in Mar and at MO in Aug; fewer than 10 at other locations.

Breeding: nesting in Oct-Nov, dependent young in Jan, Oct and Dec; juveniles in Dec.

MONARCHIDAE Monarchs, flycatchers.

Leaden Flycatcher *Myiagra rubecula*

Status: summer breeding migrant.

Recorded Jan-Mar and Oct-Dec; 4 at PS in Oct-Nov, 2 in Jan; 2 at Bergalia in Jan; 1 or calls at 8 other locations.

Satin Flycatcher *Myiagra cyanoleuca*

Status: vagrant.

One at Brou L on 6 Nov. (DB)

Restless Flycatcher *Myiagra inquieta*

Status: breeding resident and winter migrant to coast.

One at Com in Jan, Mar-Apr and Sep, at MO in Feb and at Coolagolite in Aug. (JC/FM/DO)

Magpie-lark *Grallina cyanoleuca*

Status: common breeding resident.

Widely reported throughout the year; 18 at Coila L in Jul; 8 at Com in Jan-Feb; 5 at MO in Oct; 4 at MYA in Jan and Jun, at Bergalia in Jan, Mar, Sep-Oct and Dec and at MB in May; no more than 3 at other locations.

Breeding: nesting at Com in Oct, juvenile at MB in Oct. (JC/MA)

Black-faced Monarch *Monarcha melanopsis*

Status: summer breeding migrant.

Recorded Jan-Mar and Sep-Dec; 4 at MO in Dec, 2 in Feb and Nov; 2 at

PS in Jan and Nov and at NA in Jan; 1 or calls at 6 other locations.

CORVIDAE Ravens.

Little Raven *Corvus mellori*

Status: uncommon resident and winter migrant to coast.

Up to 200 at MKS in Apr, 50 in Feb; 180 at Com in Aug, 160 in Sep; 100 at MYA in Mar and at PS in Apr; 80 at Belowra in Aug; 60 at Coolagolite in Feb; 15 at Brou L in May; 2 at MO in Feb.

Australian Raven *Corvus coronoides*

Status: common breeding resident.

Widely reported throughout the year; up to 250 at Com in Mar; 140 at MYA in Aug; 60 at MO in Feb; 40 at Bergalia in Feb and at MB in May; 20 at Belowra in Apr; 11 at Malua Bay in Jan; no more than 10 at other locations.

CORCORACIDAE White-winged Chough.

White-winged Chough *Corcorax melanorhamphos*

Status: breeding resident.

Twenty-five at MKS in Jul, 10 in May; 18 at Coolagolite in Jun-Jul; 15 at PS in Jun; 12 at Com in Jun; 7 at MO in Aug; no more than 6 at other locations.

PETROICIDAE Robins.

Rose Robin *Petroica rosea*

Status: uncommon local breeding resident and winter migrant to coast.

Two at Com in Mar, at Coolagolite in May and at PS in May-Jun; 1 or calls at 5 other locations.

Breeding: juveniles at Com in Apr and at PS in May. (JC/JM)

Scarlet Robin *Petroica boodang*

Status: Vulnerable; uncommon breeding resident and winter migrant to coast.

Two at Belowra in Jul; 1 at Bergalia in Jun and Aug. (JC/DHK)

Red-capped Robin *Petroica goodenovii*

Status: vagrant.

One immature male at Com on 18 Jan and 11 Feb. (JC)

Jacky Winter *Microeca fascinans*

Status: breeding resident.

Recorded in all months; 8 at Com in Jan-Feb; 5 at MO in Aug; 4 at Coolagolite in May; 3 at Bergalia in Mar and May-Jun and at

Eurobodalla Rd in May; 1-2 at other locations.

Eastern Yellow Robin *Eopsaltria australis*

Status: common breeding resident.

Widely reported in all months with 1-2 at most locations; 8 at MO in Aug and at PS in Dec; 6 at NA in Jan and at DS in Jun and Oct; 5 at Broulee in Jul; no more than 4 at other locations.

Breeding: dependent young at MO in Nov and at PS in Dec. (NM/JM)

CISTICOLIDAE Cisticolas.

Golden-headed Cisticola *Cisticola exilis*

Status: uncommon breeding resident.

Up to 10 at Com in Nov-Dec, 8 in Jan-Apr and 6 in Sep-Oct.

ACROCEPHALIDAE Reed-Warblers.

Australian Reed-Warbler *Acrocephalus australis*

Status: summer breeding migrant.

Four at BBWG in Oct; 4 at Com in Oct-Dec, 2 in Jan-Mar, 1 in Sep; 2 at MO in Feb. (FM/JC/NM)

LOCUSTELLIDAE Grassbirds, songlarks.

Rufous Songlark *Cincloramphus mathewsi*

Status: uncertain.

Four at Belowra in Nov, 2 in Jul; 1 at Com in Feb. (JC)

Little Grassbird *Poodytes gramineus*

Status: uncommon resident, probably breeding.

One at MO on 6 Feb. (NM)

HIRUNDINIDAE Swallows, martins.

Fairy Martin *Petrochelidon ariel*

Status: spring-summer breeding migrant.

One at MO in Aug. (NM)

Tree Martin *Petrochelidon nigricans*

Status: resident and summer breeding migrant.

Up to 30 at Com in Feb, 20 in Aug; 20 at MB in Jun; 10 at Belowra in Aug; 8 at BBWG in Oct; 6 at MO in Aug.

Breeding: nesting at MO in Sep and at Com in Dec. (NM/JC)

Welcome Swallow *Hirundo neoxena*

Status: common breeding resident and summer breeding migrant.

Widely reported throughout the year; up to 60 at Com in Dec; 50 at DS

in Jul; 40 at Broulee in Nov; 30 at Bergalia in Apr; 20 at MO in Jan and Dec, at MYA in Feb and Aug, at Belowra in Aug and at TS in Dec; fewer than 20 at other locations.

Breeding: nesting in May, Aug and Oct-Nov, dependent young in Aug-Dec.

ZOSTEROPIDAE Silvereyes.

Silvereye *Zosterops lateralis*

Status: common summer breeding migrant and bird of passage.

Widely reported in all months; no more than 20 at any location in Jan-Mar; up to 100 migrating north at PS in Apr-May; 40 at Com in May; 30 at DS in Jul; 25 at Bergalia in Apr; 20 at MYA in Jul and at MO in Sep; fewer than 20 at other locations.

Breeding: nesting at Com in Sep, dependent young in Oct and Dec. (JC)

STURNIDAE Starlings.

Common Starling *Sturnus vulgaris*

Status: common breeding resident.

Forty at MYA in Feb; 20-40 at Com each month; 2-3 at MB in Sep-Oct.

Breeding: nesting at Com in Oct, dependent young in Nov. (JC)

Common Myna *Acridotheres tristis*

Status: breeding resident.

Six at Com in Jan, 2 in Feb-May, Sep-Oct and Dec; 5 at MB in Jun; 1 at NA in Dec. (JC/MA)

TURDIDAE Thrushes.

Bassian Thrush *Zoothera lunulata*

Status: uncommon breeding resident.

Single birds at Lilli Pilli in Jan-Feb, at NA in Jan, at Com in Apr, at MO in Aug and at Bevian Rd in Sep.

Breeding: juvenile at Bevian Rd in Sep. (FM)

Common Blackbird *Turdus merula*

Status: breeding resident.

Two at MB in Jul, Oct and Dec, 1 in Mar and Jun; 1 at Lilli Pilli in Jan and Aug, at Broulee in Jun and Oct-Dec; calls at MYA in Jul and at TS in Oct-Dec.

DICAEDAE Mistletoebird.

Mistletoebird *Dicaeum hirundinaceum*

Status: breeding resident and bird of passage.

Six at MYA in Nov, 2 in Oct and Dec; 4 at PS in Dec, 1-2 most other months; 2 at Com in Sep-Oct, calls in Jan-Feb.

Breeding: nesting at MYA in Nov. (FM)

ESTRILDIDAE Weaver-finches

Beautiful Firetail *Stagonopleura bella*

Status: vagrant.

One at Deua R on 6 Jun, window strike, later died. (A Cram)

Red-browed Finch *Neochmia temporalis*

Status: common breeding resident.

Widely reported throughout the year; up to 40 at Com in Jun-Nov, 20-30 in other months; 20 at NA in Jan and at PS in Apr-May and Jul; 10 at MKS in Feb-Mar and at MYA in Jul; fewer than 10 at other locations.

Breeding: nesting in Feb-Mar and Sep-Nov, dependent young in Feb-Mar and Oct-Nov.

PASSERIDAE House Sparrow.

House Sparrow *Passer domesticus*

Status: common breeding resident.

Up to 10 at Tilba in Jan and Oct, 8 in Mar, 6 in Jul and Nov; 3 at NA in Dec. (MA)

MOTACILLIDAE Pipits.

Australasian Pipit *Anthus novaeseelandiae*

Status: breeding resident.

Eleven at Com in May, 4-10 in other months; 3 at MB in Mar, at Bingie Pt in May, Aug and Nov-Dec, at Coila L in May and Jul and at Belowra in Nov; 2 at DS in Feb and Jul; 1 at MO in Dec.

European Goldfinch *Carduelis carduelis*

Status: uncommon breeding resident.

Five at Belowra in Jul, 2 in Aug. (JC)

MAMMALS

TACHYGLOSSIDAE

Short-beaked Echidna *Tachyglossus aculeatus*

Widespread and recorded Jan-Mar and Jul-Dec: 2 at MB in Mar and Oct, 1 in Sep, Nov-Dec; singles at Bergalia in Jan and Sep-Oct, at CO, MO and Bingie in Jan, at DS in Feb, at PS in Jul and Sep-Dec, at Coolagolite in Jul-Aug and Nov-Dec.

DASYURIDAE

Spotted-tailed Quoll *Dasyurus maculatus*

Signs at PS in May. (JM)

Brush-tailed Phascogale *Phascogale tapoatafa*

One at MB in Jul, first record for the Society. (R Golding)

PERAMELIDAE

Long-nosed Bandicoot *Perameles nasuta*

Signs at Mossy Pt in Jul and at MB in Dec. (HR/MA)

VOMBATIDAE

Common Wombat *Vombatus ursinus*

Activity reported throughout the year: adult with young at MB in Oct, 1 in Sep, signs in Jan; 1 and active burrows at Coolagolite in all months; 1 at Belowra in Apr, and signs at Com in May and Aug-Dec. (DO/JC/MA)

PETAURIDAE

Yellow-bellied Glider *Petaurus australis*

Two at MKS in Jul, calls in Mar, May, Aug and Oct; 1 or calls at Mossy Pt in Apr and Jun-Jul. (SMG/HR)

Sugar Glider *Petaurus breviceps*

Usually common, however fewer reports for the second consecutive year: 2 at PS in Jun, calls in Apr; 1 or calls at Com in Jan, May-Jun and Nov; 1 at Mossy Pt in Mar. (JM/JC/HR)

PSEUDOCHEIRIDAE

Common Ringtail Possum *Pseudocheirus peregrinus*

One at Mossy Pt in Jul. (HR)

PHALANGERIDAE

Common Brushtail Possum *Trichosurus vulpecula*

Widespread and regularly recorded throughout year in resident groups: 4 at Com in Jan-Feb, 2 in Mar-Dec; 3 at Lilli Pilli in Aug, 2 in Jan-Apr

and Jun-Jul; 3 at Coolagolite in Feb, 2 in Jan and Nov, 1 in Mar-Apr and Jun-Jul; 2 at Mossy Pt in Jan, Apr and Jun, 1 in Jul; recorded at MB in Jan and Nov-Dec.

MACROPODIDAE

Eastern Grey Kangaroo *Macropus giganteus*

Widespread and regularly recorded throughout the year: Up to 78 at Coolagolite throughout the year; up to 38 at DS in Feb-Mar, Jun-Jul, Sep-Oct; up to 20 at Com throughout the year; 20 at MO in Feb, up to 15 at Mossy Pt in Jan-Apr and Jun-Jul and Oct; up to 15 at PS throughout the year; fewer elsewhere.

Red-necked Wallaby *Macropus rufogriseus*

Widespread and regularly recorded throughout the year: up to 8 at Coolagolite throughout the year; up to 5 at Bergalia in Jan, Mar and Sep-Oct; 1 or 2 at Mossy Pt in Jan-Feb; 1 at DS in Feb. (DO/DHK/HR/JCof)

Swamp Wallaby *Wallabia bicolor*

Widespread and regularly recorded throughout the year: up to 15 at MB in Jan, Mar, Jun and Oct-Dec; up to 5 at Coolagolite throughout the year; up to 3 at PS throughout the year; up to 3 at Com throughout the year; up to 3 at Bergalia in Jan and Sep-Oct; 2 at Mossy Pt in Jan; singles elsewhere.

PTEROPODIDAE

Grey-headed Flying Fox *Pteropus poliocephalus*

Camp at MHS active in Jan with 100 counted moving out over PS; 300 in Broulee in Jan, 20 in Feb; 10 at Com in Jan, 2 in Oct-Nov; up to 3 at Mossy Pt in Jan-Apr; 2 at Coolagolite in May; recorded at MB in Apr.

MOLOSSIDAE

Microbat sp.

Recorded at Com in Mar and May, and at Coolagolite in Nov. (JC/DO)

MURIDAE

House Mouse *Mus musculus*

One at Coolagolite in Feb and Jul. (DO)

OTARIDIDAE

Seal sp. Six off MHS in May, Aug-Sep. (JM)

CANIDAE

Dingo *Canis lupus dingo*

Heard at Com in Jun and Sep. (JC)

Red Fox *Vulpes vulpes*

Two at Com in Apr-Jun and Sep-Nov, 1 in Feb, Jul and Dec; 1 at Mossy Pt in Jan-Feb, at Runnyford Rd in Feb, at PDD in Mar; signs at PS in Dec.

LEPORIDAE

Rabbit *Oryctolagus cuniculus*

Up to 6 at Broulee in Jan-Feb, Jun and Nov-Dec; up to 3 at Com in Jan, Sep and Nov; 2 at Mossy Pt in Jan, 1 in Feb-Mar.

CERVIDAE

Fallow Deer *Dama dama*

Recorded at West Flat (Bodalla) in May-Jul. (JC)

DELPHINIDAE

Bottle-nosed Dolphin *Tursiops truncatus*

Up to 16 off DS in Apr, Jul, Sep-Oct; up to 10 off Broulee in Jan and Jul; 10 off MHS in May. (JCof/GLM/JM)

BALAENOPTERIDAE

Humpback Whale *Megaptera novaeangliae*

At least 40 off DS in Oct; 5 off BP in May; 2 off MHS in Oct and 1 in Sep.

BALAENIDAE

Southern Right Whale *Eubalaena australis*

Mother and calf off BP in Oct; 1 off Wasp Head in Jul. (GLM/M Burk)

REPTILES

CHELIDAE

Snake-necked Turtle *Chelodina longicollis*

Recorded in Jan-Apr, Sep-Dec: up to 10 at Com in Dec, 6 in Feb, 5 in Mar-Apr, Sep and Nov, 4 in Oct, 3 in Jan; 1 at Mossy Pt in Feb-Mar, at BBWG and DS in Oct, also recorded at MB. A total of 7 found dead at Coolagolite over Sep-Dec.

Breeding: laying eggs at DS in Oct. (M Burk)

SCINCIDAE

Yellow-bellied Water-skink *Eulamprus heatwolei*

Six at Com in Feb, 3 in Jan, Apr and Nov, 2 in Sep and Dec. (JC)

Eastern Water-skink *Eulamprus quoyii*

One at Lilli Pilli in Jan-Mar. (IAG)

Barred-sided Skink *Concinnia tenuis*

One at Mossy Pt in Jan. (HR)

Dark-flecked Garden Sunskink *Lampropholis delicata*

Up to 6 at Mossy Pt in Jan-Apr, Jul and Oct, and at Broulee in Sep-Nov. (HR/GLM)

Pale-flecked Garden Sunskink *Lampropholis guichenoti*

Up to 3 at Mossy Pt in Jan, Mar-Apr and Oct.

Eastern Blue-tongue *Tiliqua scincoides*

Two at Com in Jan-Apr and Sep-Dec; 2 at Mossy Pt in Oct; 1 at Coolagolite in Sep-Oct and at Broulee in Oct-Nov. (JC/HR/DO/GLM)

AGAMIDAE

Jacky Lizard *Amphibolurus muricatus*

Five at MO in Feb; up to 4 at PS in Feb, Apr-May and Aug-Dec; up to 3 at Coolagolite in Jan-Mar and Aug-Sep and Nov-Dec; singles at DS in Feb-Mar and at Mossy Pt in Feb-Mar and Oct.

Gippsland Water Dragon *Physignathus lesueurii howittii*

Up to 10 at Com in Jan-Apr and Sep-Dec; 1 at Malua Bay in Jan. (JC/MW)

VARANIDAE

Lace Monitor *Varanus varius*

Three at Coolagolite in Oct, 2 in Nov, 1 in Jan-Mar, Sep and Dec; 2 at PS in Oct-Dec, 1 in Feb; 2 at Com in Jan, 1 in Feb and Sep-Oct; 1 at Lilli Pilli in Feb, at Belowra in Mar-Apr, and at Brou L in Nov.

BOIDAE

Diamond Python *Morelia spilota*

One at Coolagolite in Apr, and at MB in Jan and Oct-Dec.

ELAPIDAE

Eastern Small-eyed Snake *Cryptophis nigrescens*

One at Coolagolite in May. (DO)

Mustard-bellied Snake *Drysdalia rhodogaster*

One at DS in Feb-Mar. (JCof)

Red-bellied Black Snake *Pseudechis porphyriacus*

Seen in all months: up to 3 at Com in Jan-May and Aug-Dec; 2 at Murrumbidgee NP in Jun; 1 or 2 at PS in Mar, May, Oct and Dec; 1 or 2 at MB in Jul and Oct; singles at Mossy Pt in Feb-Mar, at Coolagolite in Feb-Apr, Sep-Oct and Dec, at Belowra in Apr and at PDD in Oct.

AMPHIBIANS

MYOBATRACHIDAE

Common Eastern Froglet *Crinia signifera*

Common and widespread in coastal lands, woodland: recorded from Jan-Dec at BBWG, Mossy Pt, PS, Com and Belowra.

Brown-striped Frog *Limnodynastes peronii*

Widespread and common on coast: recorded from Jan-Apr and Jun-Dec at BBWG, Mossy Pt, PS and Com.

Spotted Grass Frog *Limnodynastes tasmaniensis*

Calling at PS in Dec. (JM)

Brown Toadlet *Pseudophryne bibronii*

Up to 6 at Mossy Pt in Mar-Apr, Jun-Jul and Oct; calls at PS in May, Aug-Sep and Dec. (HR/JM)

Smooth Toadlet *Pseudophryne laevigata*

Calls at PS in Feb.

Tyler's Toadlet *Uperoleia tyleri*

Up to 4 at Mossy Pt in Jan-Feb, Apr, Jul and Oct; calls at PS in Feb and Sep.

HYLIDAE

Keferstein's Tree Frog *Litoria dentata*

Six at DS in Apr; 1 or 2 at Mossy Pt in Jan-Feb, Apr, Jul and Oct; calls at Com in Jan-Feb, Apr, and Oct-Dec and at PS in Feb and Oct-Dec.

Brown Tree Frog *Litoria ewingii*

Calls at PS in May-Jul.

Eastern Sedgefrog *Litoria fallax*

Up to 20 at Mossy Pt in Jan-Apr, Jul and Oct; first records for MYA,

MO and PS. (HR/JM/J Taylor-Mills)

Jervis Bay Tree Frog *Litoria jervisiensis*

Singles at Mossy Pt in Apr, Jun-Jul and Oct; calls at PS in Sep. (HR/JM)

Peron's Tree Frog *Litoria peronii*

Common and widespread in coastal areas: recorded throughout the year at Mossy Pt, Broulee, PS, MYA, Com and Coolagolite.

Tyler's Tree Frog *Litoria tyleri*

One or two at Mossy Pt in Jan-Feb and Oct; calls PS in Jan-Feb, Apr, Jun-Jul, Sep and Nov.

Verreaux's Tree Frog *Litoria verreauxii*

Common and widespread in coastal areas: recorded throughout the year at Mossy Pt, PS and Com.

BUFONIDAE

Cane Toad *Bufo marinus*: A male found at Catalina in Feb. First record for the shire. Presumed to have arrived with fire-fighting equipment from the north. (SB)

INSECTS

DRAGONFLIES, DAMSELFLIES

Blue Ringtail *Austrolestes annulosus*: Dec.

Wandering Ringtail *Austrolestes leda*: Oct.

Aurora Bluetail *Ischnura aurora*: Oct, Dec.

Common Bluetail *Ischnura heterosticta*: Jan-Apr, Oct.

Australian Emerald *Hemicordulia australiae*: Jan-Mar, Oct-Dec.

Tau Emerald *Hemicordulia tau*: Feb, Nov-Dec.

Blue Skimmer *Orthetrum caledonicum*: Apr, Dec.

Scarlet Percher *Diplacodes haematodes*: Apr.

Wandering Percher *Diplacodes bipunctata*: Jan-May, Oct-Dec.

Black-faced Percher *Diplacodes melanopsis*: Apr.

BUGS, CICADAS

Green Vegetable Bug *Nezara viridula*: Mar-May.

Bronze Orange Bug *Musgraveia sulciventris*: Jan-Feb, May, Oct-Dec.

Glossy Shield Bug *Cermalulus nasalis*: Mar.

Yellow-dotted Shield Bug *Notius consputus*: May.

Orange Assassin Bug *Gminatulus australis*: Oct-Nov.

Two-horned Treehopper *Ceraon sp.*: May.

Water Strider Family *Gerridae*: Jan, Mar, Nov-Dec.
Water Boatman Family *Corixidae*: Jan, Mar-May, Dec.
Razor Grinder *Henicopsaltria eydouxii*: Jan-Feb, Nov-Dec.
Black Prince *Psaltoda plaga*: Jan.
Greengrocer *Cyclochila australasiae*: Jan, Oct-Dec.
White Drummer *Arunta perulata*: Jan, Dec.
Double Drummer *Thopha saccata*: Dec.
Black Squeaker *Atrapsalta encaustica*: Dec.
Double-spotted Cicada *Galanga labeculata*: Jan-Feb, Nov-Dec.

BEETLES

Repsimus Beetle *Repsimus aeneus*: Jan, Dec.
Green Scarab *Diphucephala colaspidoides*: Jan-Feb, Apr-May, Oct-Dec.
Argentinian Scarab *Cyclocephala signaticollis*: Jan-Mar, Nov-Dec.
Dung Beetle Family *Scarabaeinae*: Jan-Feb, Apr, Dec.
Small Flower Chafer *Microvalgus sp.*: Nov.
Beautiful Jewel Beetle *Castiarina bella*: Nov.
Click Beetle *Megapenthes sp.*: Jan.
Net-winged Beetle *Porrostoma rhipidium*: Jan, May-Jul, Oct-Dec.
Tricolour Soldier *Chauliognathus tricolor*: Dec.
Clerid Beetle *Eleale pulchra*: Nov.
White-spotted Pintail Beetle *Mordella leucosticta*: Oct.
Honeybrown Beetle *Ecnolagria grandis*: Jan-Mar, Dec.
Australian Eucalyptus Longhorn *Phoracantha semipunctata*: Mar.
Dotted Paropsine Leaf Beetle *Paropsis atomaria*: Jan
Spotted Paropsine Leaf Beetle *Paropsis maculata*: Oct, Dec.
Varirole Paropsine Beetle *Paropsis variolosa*: Dec.
Eucalyptus Leaf Beetle *Paropsisterna chloelia*: Sep, Dec.
Aerarium Leaf Beetle *Paropsisterna octolineata*: Jun-Jul, Sep.
Eight-spotted Leaf Beetle *Paropsisterna sexpustulata*: Sep.
Metallic Green Acacia Beetle *Calomela ruficeps*: Mar-Apr, Sep-Oct, Dec.
Leaf Beetle *Peltoschema oceanica*: Mar-Apr.
Small Leaf Beetle *Peltoschema tetraspilota*: Feb.
Acacia Leaf Beetle *Dicranosterna immaculata*: Jan-May, Aug-Dec.
Small Blue Leaf Beetle *Nisotra breweri*: Dec.
Pittosporum Paropsine Leaf Beetle *Lamprolina sp.*: Dec.
Three-lined Potato Beetle *Lema daturaphila*: Jan-May, Oct, Dec.

Belid Weevil *Rhinotia brunnea*: Dec.
Botany Bay Weevil *Chrysolopus spectabilis*: Jan.
Transverse Ladybird *Coccinella transversalis*: Jan-May, Oct, Dec.
Variable Ladybird *Coelophora inaequalis*: Jun.
Mealybug Ladybird *Cryptolaemus montnouzieri*: Jul-Aug, Oct-Nov.
Twenty-six Spotted Ladybird *Epilachna vigintisexpunctata*: Jan-May, Oct, Dec.
Steelblue Ladybird *Halmus chalybeus*: Feb, Apr, Oct, Dec.
Common Spotted Ladybird *Harmonia conformis*: May-Aug, Oct-Nov.
Spotted Amber Ladybird *Hippodamia variegata*: Jan, Mar, Jul, Nov-Dec.
Fungus-eating Ladybird *Illeis galbula*: Feb-Jun.
Striped Ladybird *Micraspis frenata*: Jan-May, Jul, Sep, Dec.
Orange-spotted Ladybird *Orcus australasiae*: Sep.
Orcus bilunulatis: Apr, Jun, Sep.

FLIES

Hoverfly *Melangyna sp.*: May.
Native Drone Fly Family *Syrphidae*: Oct-Dec.

MOTHS

HEPIALIDAE

Variable Oxycanus *Oxycanus dirempta*: May-Jun.
Pale Oxycanus *Oxycanus silvanus*: Jun.

PSYCHIDAE

Lepidoscia characota: Apr.
Saunders's Case Moth *Metura elongatus*: Larva in Sep.

PLUTELLIDAE

Diamondback Moth *Plutella xylostella*: Oct-Nov.

OECOPHORIDAE

Philobota hypocausta: Oct.
Philobota latifissella: Oct.
Concealer Moth *Isomoralla curriculata*: Sep.
Catoryctis subparallela: Oct.
Agriophara confertella: Sep-Oct.

TORTRICIDAE

Conchylis subfurcatana: Oct.

Light Brown Apple Moth *Epiphyas postvittana*: Jul.

CHOREUTIDAE

Small Thistle Moth *Tebenna micalis*: Dec.

LIMACODIDAE

Four-spotted Cup Moth *Doratifera quadriguttata*: Sep.

Pale Cup Moth *Doratifera pinguis*: Sep, Nov.

PTEROPHORIDAE

Plume Moth sp.: Mar, May, Jul, Oct.

THYRIDIDAE

Agloopus pyrrhata: Sep-Nov.

PYRALIDAE

Mourning Pyralid *Catamola funerea*: Nov.

Stericta carbonalis: Dec.

Meal Moth *Pyralis farinalis*: Feb, Oct, Dec.

Scirpophaga imparellus: Nov.

Tipanaea patulella: Oct.

Cabbage Centre Grub *Hellula hydralis*: Mar, Oct.

Beet Webworm *Spoladea recurvalis*: Apr-May.

Nacoleia rhoeoalis: Feb-May, Oct.

Eggfruit Caterpillar *Sceliodes cordalis*: Feb, Oct, Dec.

GEOMETRIDAE

Brown Pasture Looper *Ciampa arietaria*: Apr.

Dry-country Line Moth *Dysbatus singularis*: Sep.

Black Geometrid *Melanodes anthracitaria*: Feb, Aug-Dec.

Black-banded Wedge-moth *Capusa senilis*: Oct.

Clara Satin Moth *Thalaina clara*: May.

Dashed Geometrid *Dissomorphia australiaria*: Apr-May.

Friiled Bark Moth *Pholodes sinistraria*: Sep-Oct.

Buff Bark Moth *Gastrinodes bitaeniaria*: Oct.

Twig Looper *Ectropis excusaria*: Jul, Oct-Dec.

Loop-line Bark Moth *Ectropis bispinaria*: Jul.

Painted Geometrid *Picromorpha pyrrhopa*: Oct.

Hakea Moth *Oenochroma vinaria*: Mar, Jun, Sep-Oct.

Antictenia punctunculus: Feb, Sep-Nov.

Fallen Bark Moth *Gastrophora henricaria*: Aug, Oct.

Pink Arhodia *Arhodia lasiocamparia*: Feb, Sep-Nov.

Twisted Moth *Cicopetes obtusata*: Sep-Oct.
Spring Taxeotis *Taxeotis perlinearia*: Sep-Oct.
Oval-spot Taxeotis *Taxeotis stereospila*: Oct.
Neat Epidesmia *Epidesmia tryxaria*: Mar, Oct-Nov.
Wilson's Grey *Cyneoterpna wilsoni*: Sep.
Red-lined Geometrid *Crypsiphona ocularia*: Jun-Jul, Oct.
Double-fringed Emerald *Chlorocoma dichloraria*: May, Jul, Sep-Nov.
Cream-fringed Emerald *Chlorocoma melocrossa*: Oct.
Cream Wave *Scopula perlata*: Jan, Mar-Jun, Sep-Dec.
Plantain Moth *Scopula rubraria*: Jan-Apr, Sep-Oct, Dec.
Varied Wave *Scopula optivata*: Oct.
Mecynata Moth *Chrysolarentia mecynata*: Oct-Nov.
Dark-patch Carpet *Xanthorhoe anaspila*: Jan, Apr.
Sodaliata Moth *Epyaxa sodaliata*: Mar.
Subidaria Moth *Epyaxa subidaria*: Jul.
Apple Looper *Phrissogonus laticostata*: Oct.
Pome Looper *Chloroclystis testulata*: Sep.
Red-spotted Delicate *Epicyme rubropunctaria*: Nov.
Native Cranberry Moth *Poecilasthena pulchraria*: Jun, Oct.

LASIOCAMPIDAE

She-oak Moth *Pernattia pusilla*: Jun.
Elusive White-spot *Opsirhina lechriodes*: Oct-Nov.
Rufous Snout Moth *Pararguda rufescens*: Feb.
Banded Porela *Porela vitulina*: Oct.

ANTHELIDAE

White-stemmed Gum Moth *Chelepteryx collesi*: May.
Grey-headed Anthelid *Anthela excellens*: Feb.
Common Anthelid *Anthela acuta*: Mar, Jul, Oct.
Eyespot Anthelid *Anthela ocellata*: Sep.
Grass Anthelid *Pterolocera ferruginea*: Oct.

SATURNIDAE

Emperor Gum-moth *Opodiphthera eucalypti*: Sep-Oct; larvae in Apr, Nov.
Helena Gum-moth *Opodiphthera helena*: Sep.

SPHINGIDAE

Convolvulus Hawk Moth *Agrius convolvuli*: Oct.
Privet Hawk Moth *Psilogramma menephron*: Mar.

Hawk Moth *Tetrachroa edwardsi*: Oct.
Coprosma Hawk Moth *Hippotion scrofa*: Feb, Oct, Dec.

NOTODONTIDAE

Sparshall's Moth *Trichiocercus sparshalli*: Feb, Oct.

LYMANTRIIDAE

Iropoca Moth *Iropoca rotundata*: Jun, Sep-Oct.
White Cedar Moth *Leptocneria reducta*: Mar, Oct.
Mistletoe Browntail Moth *Nygmia edwardsii*: Jun.
Pink Browntail Moth *Urocoma baliolalis*: Jun, Dec.

ARCTIIDAE

Snowy Footman *Termessa nivosa*: Oct.
Favoured Footman *Termessa gratiosa*: Oct.
Hook-wing Footman *Termessa discrepans*: Nov-Dec.
Lydia Lichen Moth *Asura lydia*: Oct.
Fair Footman *Thallarcha sparsana*: Mar.
Variable Halone *Halone sejuncta*: Mar-Apr, Sep, Nov.
Reticulated Footman *Scaptesytle dichotoma*: Nov.
Lichen-eating Caterpillar *Brunia (Manulea) replana*: Feb-Apr, Oct-Nov.
Heliotrope Moth *Utethesia sp.*: Mar-Apr, Sep-Oct.
Magpie Moth *Nyctemera amicus*: Jan-Feb, Jun, Oct-Dec.
Crimson Tiger Moth *Spilosoma curvata*: Mar-Apr, Aug-Oct.
Tiger Moth *Amata nigriceps*: Mar, Oct-Nov.
Tiger Moth *Amata aperta*: Apr.

NOCTUIDAE

Garden Snout *Arrade leucocosmalis*: Oct.
Double-line Snout Moth *Lophotoma diagrapha*: Nov.
Calathusa hypotherma: Nov.
Meranda susialis: Oct.
Plain Pantydia *Pantydia sparsa*: Oct-Nov.
Northern Old Lady Moth *Dasypodia cymatodes*: Oct.
Old Lady Moth *Dasypodia selenophora*: Mar.
Tobacco Looper *Chrysodeixis argentifera*: Nov-Dec.
Dark Euteliid *Pataeta carbo*: Jun.
Gum-leaf Skeletoniser Moth *Uraba lugens*: Nov.
Whistling Moth *Hecatesia fenestrata*: Oct.
Vine Moth *Phalaenoides glycinae*: Oct-Nov.

Mistletoe Moth *Comocrus behri*: Jan-Mar, Oct-Nov.
Black Noctuid *Neumichtis nigerrima*: Feb, Oct, Dec.
Green-blotched Moth *Cosmodes elegans*: May-Jun, Aug-Dec.
Beautiful Double-spot *Epicyrtica docima*: May.
Black-bar Noctuid *Proteuxoa hypochalchis*: Oct.
Southern Armyworm *Persectania ewingii*: Oct.
Double-lined Noctuid *Leucania diatrecta*: Mar, Oct.
Black Cutworm *Agrotis ipsilon*: Oct.
Bogong Moth *Agrotis infusa*: Apr-Jun, Oct.
Brown Cutworm *Agrotis munda*: Jan, Apr, Oct.
Variable Cutworm *Agrotis porphyricollis*: Mar, Oct.
Chevron Cutworm *Diarsia intermixta*: Oct.
Ectopatria sp.: Oct.
Native Budworm *Helicoverpa punctigera*: Jan-Feb, Apr-May, Jul, Oct-Dec.

BUTTERFLIES

HESPERIIDAE

Splendid Ochre *Trapezites symmomus*: Feb-Apr.
Lilac Grass-skipper *Toxidia doubledayi*: Mar, Oct.
Painted Sedge-skipper *Hesperilla picta*: Nov.
Narrow-brand Grass-dart *Ocybadistes flavovittata*: Jan-May, Nov-Dec.
Greenish Grass-dart *Ocybadistes walkeri*: Oct, Dec.

PAPILIONIDAE

Macleay's Swallowtail *Grampium macleayanus*: Apr.
Blue Triangle *Graphium sarpedon*: Jan, Oct.
Orchard Swallowtail *Papilio aegeus*: Jan-May, Sep-Dec.

PIERIDAE

Lemon Migrant *Catopsilia pomona*: Mar.
Imperial Jezebel *Delias harpalyce*: Jul, Sep-Oct.
Black Jezebel *Delias nigrina*: May, Jul-Nov.
Caper White *Belenois java*: Mar-Apr, Oct-Dec.
Cabbage White *Pieris rapae*: Jan-Dec.

NYMPHALIDAE

Dusky Knight *Ypthima arctous*: Feb-Apr.
Brown Ringlet *Hypocysta metirius*: Feb-Mar, May, Oct, Dec.

Varied Swordgrass Brown *Tisiphone abeona*: Jan-May, Oct-Dec.
Marbled Xenica *Geitoneura klugii*: Apr.
Common Brown *Heteronympha merope*: Jan, Apr-May, Oct-Dec.
Banks Brown *Heteronympha banksi*: Apr.
Meadow Argus *Junonia villida*: Jan-Dec.
Australian Painted Lady *Vanessa kershawi*: Jan-Feb, Oct-Dec.
Yellow Admiral *Vanessa itea*: Jan, May-Jun, Sep-Dec.
Lesser Wanderer *Danaus chrysippus*: Apr, Oct.
Monarch *Danaus plexippus*: Apr-Jun, Sep-Dec.

LYCAENIDAE

Varied Dusky-blue *Candalides hyacinthina*: Sep-Nov.
Cycad Blue *Theclinesthes onycha*: Oct-Nov.
Common Grass Blue *Zizina labradus*: Jan-Dec.

WASPS, BEES

Blue-banded Bee *Amegilla cingulata*: Jan-Apr.
Teddy-bear Bee *Amegilla bombiformis*: Feb, Apr-May.
Masked Bee *Hylaeus nubilosus*: Mar, Oct.
Neon Cuckoo Bee *Thyreus nitidulus*: Feb, Dec.
Golden-tipped Leafcutter Bee *Megachile maculariformis*: Feb, Apr.
Small Metallic Banded Bee *Lasioglossum sp.*: Apr.
Black (Blue) Flower Wasp *Discolia sorrowi*: Jan-Feb, Dec.
Orange Caterpillar Parasite Wasp *Netelia producta*: Jan-Feb, May-Jul, Sep-Dec.
Common Paper Wasp *Polistes humilis*: Jan-Feb, May-Dec.
White-faced Brown Paper Wasp *Ropalidia plebeian*: Jan-Feb.
Mason Wasp *Abispa splendida*: Jan-Feb.
Yellow Sand Wasp *Bembix palmata*: Jan.

OTHER INVERTEBRATES

SPIDERS

Species of spider commonly recorded:
Huntsman Spider *Delena cancerides*
White-tailed Spider *Lampona cylindrata*
Black House Spider *Badumna insignis*
Red-back Spider *Latrodectus hasselti*
St. Andrew's Cross Spider *Agriope keyserlingi*
Leaf-curling Spider *Phonognatha graeffei*
Daddy Long-legs *Pholcus phalangoides*

Water Spider *Dolomedes australiensis*
Giant Water Spider *Megadolomedes australianus*
Wheel-weaving Garden Spider *Eriophora transmarinas*
Golden Orb-weaving Spider *Nephila sp.*
Slender Leaf-shaped Orb Weaver *Araneus talipedatus*
Little Striped Wolf Spider *Lycosa furcillata*
Wolf Spider *Tasmanicosa sp.*
Spiny Spider *Austrocantha minex*
Flat Rock Spider *Hemiocloea major*
Jumping Spider *Opisthoncus sp.*
Jumping Spider *Jotus minutus*
Lucrida Jumping *Sandalodes superbus*
Common House Spider *Parasteatoda tepidariorum*
Two-tailed Spider *Tamopsis fickerti*
White-spotted Swift Spider *Nyssus albopunctatus*
White-porch Spider *Cryptachaea gigantipes*
Magnificent Spider *Ordgarius magnificus*

62nd ANNUAL ASSESSMENT OF SHEARWATER BREEDING SUCCESS ON MONTAGU ISLAND, MARCH 27 – 1 APRIL 2021

Mike Crowley, Peter J. Fullagar, and David Priddel

A study of the breeding productivity of shearwaters (*Ardenna* spp.) co-existing on Montagu Island has continued annually since 1960. Before 1959 it was thought that only one species of shearwater bred on Montagu. In that year the discovery of two other species breeding on the island raised questions regarding the dynamics of this mixed colony.

In this long-term study we measure breeding productivity each year by counting the total number of chicks of each species within three fixed-area plots. This is completed in late March towards the end of the breeding season, thereby avoiding disturbance to breeding adults, eggs and young chicks. Results have been published annually since 1998 in *Nature in Eurobodalla* (e.g., Fullagar *et al.* 2019).

The format of this report and the abbreviations used are consistent with those in our previous annual reports (e.g., Fullagar *et al.* 2019). Montagu Island is divided into two parts by a steep gulch and a beach that is passable at all tides. We refer to these two portions as north island and south island. Replanting of south island with taller vegetation, using plants known to have been on the island in the past, has occurred following systematic control of Kikuyu Grass *Cenchrus clandestinus*. This aborted programme, aimed at restoring seabird nesting habitat, was undertaken progressively between 2001 and 2014 across designated zones, and these zones (numbered 1–9 or assigned as Asset A, B or C and Accidental) are used in this report for reference purposes. They are briefly described (condition in March 2013) and shown on a map in Fullagar *et al.* (2013).

Our shearwater colony study site on the SE side of north island (zone 9) is known as NISA (293 m²); the two study sites at the N end of south island are known as SISA (428 m²) and THISA (293 m²) and are located at the N end of zone 8. The exact location of each study site is shown in Fullagar and Heyligers (2006). The vegetation on each site is mapped annually in March.

Bird records for the island have been reviewed by Fullagar (1989), but many subsequent records are included in annual reports (similar to this one) dating back to 1998. The names and taxonomic order of birds follow the latest available IOC World Bird List (Gill *et al.*, 2020); all other vertebrates follow Clayton *et al.* (2006), except for seals where we follow the recommendations of Shaughnessy and Goldsworthy (2015). Names of butterflies follow Braby (2016); moths follow Common (1990); and vascular plants follow Heyligers and Adams (1989, 2004).

No annual survey was possible in 2020 due to the COVID-19 pandemic. Previously no surveys were conducted in 1961 and 1966, thus this is only the third time since 1960 that an annual survey has been missed.

Survey Team

This year's team comprised Peter Fullagar, Mike Crowley and David Priddel (MIPartners); Penny Beaver, Harvey Perkins, Vanessa Place, and Lesley Priddel. We were also assisted by Gabrielle Hunt, Yuna Kim and Prys Alexander.

Weather and Habitat Conditions

Due to an East Coast Low creating extreme weather conditions our passage to the island was delayed by 5 days. We eventually departed Narooma at 0630 on Saturday 27 March. The early start enabled us to begin work at 0900 and complete a full day surveying before a late afternoon thunderstorm moved in from the west producing some light rain (5.4 mm). The following day we finished work on north island just before a strong southerly change developed. Fine weather on Monday 29 March allowed us to complete all three plots by late afternoon. The following Tuesday and Wednesday were both warm clear days. Monthly rainfall figures (mm) from April 2020 to end of March 2021 are as follows: 116.4, 15.2, 37.8, 165.4, 70.8, 12.2, 79.8, 80.0, 138.2, 24.6, 12.4 and 112.4. Following recent heavy rains, many of the pathways to the south of the island were saturated, often with running surface water.

The vegetation on all study sites was exceptionally dense and lush, more so than any of us had witnessed previously. Spiny-headed Mat-rush *Lomandra longifolia* was such that it made it difficult to locate burrows. Scarlet Runner *Kennedia rubicunda* continues to thrive on all sites and

Kikuyu Grass *Cenchrus clandestinus* has spread extensively throughout the island since our last visit; there are currently large infestations on SISA. Alarmingly, Kikuyu has consolidated along the extensive network of pathways that now criss-cross the island and is rapidly spreading laterally into the surrounding vegetation. Morning Glory *Ipomoea cairica* has also continued to increase dramatically in many areas, often smothering other vegetation or covering formerly exposed rock surfaces; this is particularly evident on the west coast of south island. Coastal Saltbush *Rhagodia candolleana* continues to spread. In the woodland areas on south island there has been noticeable salt damage to the upper canopy of numerous eucalypts. The now senescent *Acacia sophorae* has largely disappeared along the eastern side of the woodland between the north and south landing; this area is now a mature woodland dominated by *Banksia integrifolia* and several *Eucalyptus* species. It now provides habitat for a number of coastal woodland birds, significantly increasing the number of new species recorded on the island, five of which appear in this report. One woodland bird, the Yellow-faced Honeyeater was formerly rare but is now a permanent breeding resident.

Coverage

We started work on THISA at 0930 on Saturday 27 March, completing this site by 1250. We resumed work at 1450 and completed half of SISA by 1640. On 28 March we worked NISA from 1000 until lunch (1300 to 1415) and completed the site at 1615. On 29 March we finished SISA between 0930 and 1300. On 30 and 31 March we made general observations along most tracks on the south island. On the morning of 1 April observations were made on the north island. We returned to Narooma on 2 April at 1100 on a flat sea with little to no wind, the only species seen were a few Silver Gull, Greater Crested Tern and an immature Australasian Gannet.

Survey Results

1. Shearwaters

The results of this year's survey, together with those for 2019, are summarised in Table 1.

Table 1. Number of shearwater chicks and burrows found in the three study sites in 2021 (2019 data in brackets).

	NISA	THISA	SISA	Total 2021	Total 2019
Wedge-tailed Shearwater	41 (55)	13 (21)	41 (43)	95	119
Short-tailed Shearwater	19 (20)	30 (30)	29 (39)	78	89
Sooty Shearwater	0 (0)	0 (1)	0 (0)	0	1
Number of burrows	130 (144)	99 (85)	129 (158)	359	387
Occupied burrows (%)	46 (52)	43 (61)	54 (52)	48	54

Compared to 2019, there were fewer burrows on two of the three sites, and both the overall number of burrows and percentage of occupied burrows were lower. The density of chicks this breeding season was 2238 per hectare, slightly above the long-term average of 2193 per hectare (1967–2021). Above average densities have been seen in 13 of the past 20 years of data.

The average weight of chicks this year was 363 g (120–535 g) for Wedge-tailed Shearwater and 570 g (105–906 g) for Short-tailed Shearwater. These average weights are lower than those of 2019: 426 g and 737 g respectively. Wedge-tailed Shearwater comprised 68% on NISA, 30% on THISA and 59% on SISA, giving an overall figure of 55%, continuing the trend towards a gradual increase in the ratio of Wedge-tailed to Short-tailed Shearwaters. NISA continues to be heavily dominated by Wedge-tailed Shearwater.

2. Penguins

No landing site surveys were conducted and no penguins were seen or heard ashore. A fresh carcase was found at a Sea Eagle butchering site at the south of the island (zone 8) on 28 March.

3. Frogs

Striped Marsh Frogs *Limnodynastes peronii*. Adults were heard calling in the well at the kitchen garden (zone 6). Tadpoles ca. 1cm long were present in the water. One desiccated adult was located in a courtyard of the light station.

Unidentified tadpoles. Numerous small tadpoles were present in several slightly saline pools in the upper splash-zone at the north-east end of north island. Attempts to identify this species will be made on future trips.

General Observations of Birds, Mammals, Reptiles and Butterflies

BIRDS

Thirty-three species were recorded this year and 6 eBird lists were submitted.

Brown Quail *Coturnix ypsilophora*. Heard or seen on all days with a maximum of 12 on 28 March on south island and 13 on 31 March on north island.

Shining Bronze Cuckoo *Chrysococcyx lucidus*. One immature in woodland thicket (Accidental zone) on 28 and 30 March.

Bar-shouldered Dove *Geopelia humeralis*. Two birds seen in zone C on 31 March.

Buff-banded Rail *Hypotaenidia philippensis*. Few seen or heard; three on 27 March and 2 adults with one small downy chick on 30 March. All recorded on south island.

Sooty Oystercatcher *Haematopus fuliginosus*. Maximum of 2 seen on most days.

Brown Noddy *Anous stolidus*. One seen on 28 March at NE corner of south island and again on 29 March on eastern side of the gulch.

Silver Gull *Chroicocephalus novaehollandiae*. Present in low numbers on all days with a maximum of 70 at seal landing on NW of north island on 31 March.

Greater Crested Tern *Thalasseus bergii*. Present in low numbers on all days with a maximum of 23 seen at seal landing on north island on 31 March.

Little Penguin *Eudyptula minor*. None seen or heard. A fresh carcass located on a Sea Eagle butchering site at the S end of south island on March 25. Some footprints present on sandy tracks on south island.

White-faced Storm-Petrel *Pelagodroma marina*. Due to the COVID-19 pandemic and adverse weather conditions no monitoring was carried

out on this species during the 2020–21 breeding season. An artificial nest site on the NE side of north island was visited during daytime on 20 January 2021. The vegetation was overgrown, nest entrances were difficult to detect and two unoccupied burrows were located (Y. Kim, pers. comm.).

Gould’s Petrel *Pterodroma leucoptera*. A survey carried out in January 2021 located 26 nests, 7 of which were new. In total, 17 nests had chicks (13 from known nests and 4 from the new nests). In addition, 9 known nests had adults present, of which 4 were probably sitting on eggs. A bird banded as a chick in a nest box on Cabbage Tree Island (CTI) in 2002 was located in a nest box—the first definitive record of a CTI bird being present on Montagu Island. A further inspection, delayed due to adverse weather, was carried out on 27 March 2021. Fourteen chicks were located; 10 were banded, 4 chicks were visible but unable to be reached. Additionally, 2 nests had clear evidence that chicks had recently fledged (Y. Kim, pers. comm.).

Wedge-tailed Shearwater *Ardenna pacifica* and **Short-tailed Shearwater** *Ardenna tenuirostris*. See Table 1 for this year’s chick count. Individuals and small groups of fewer than 10 of both species seen at sea on most days.

Sooty Shearwater *Ardenna grisea*. No records.

Australasian Gannet *Morus serrator*. Present in low numbers on all days with a maximum of 13 on 31 March, almost all were juveniles. Several adults showed up with the southerly change on 31 March.

Great Cormorant *Phalacrocorax carbo*. Seen on all days, with a maximum of 18 observed on 31 March.

Brown Goshawk *Accipiter fasciatus*. One on 31 March on south island (Accidental zone).

Swamp Harrier *Circus approximans*. One dark-plumaged bird, seen on 28 March on south island.

White-bellied Sea Eagle *Haliaeetus leucogaster*. Maximum of four (two adult, one sub-adult and one immature) seen on most days.

Nankeen Kestrel *Falco cenchroides*. Two seen on 27 March near the lighthouse; one on 1 April.

Peregrine Falcon *Falco peregrinus*. One male and one female adult seen occasionally.

Crimson Rosella *Platycercus elegans*. Three adults seen on track alongside woodland on western side of south island (Accidental zone) on 31 March; one adult in same place on 1 April.

Scarlet Myzomela *Myzomela sanguinolenta*. A male heard and seen perched and in flight on south island on 29 March (just S of SISA, zone 8). First record for the island.

New Holland Honeyeater *Phylidonyris novaehollandiae*. Small group of up to 5 in wooded area on west side of south island (Accidental zone) on all days. First record for the island.

Yellow-faced Honeyeater *Caligavis chrysops*. Common throughout all wooded areas on south island with an estimate of 50–100 on 30 March.

Grey Fantail *Rhipidura albiscapa*. Seen on most days in the Accidental zone with a maximum of 3 on 28 March.

Leaden Flycatcher *Myiagra rubecula*. One female seen in zone 6 on 28 March.

Australian Raven *Corvus coronoides*. Two seen and heard around the light station most days.

Flame Robin *Petroica phoenicea*. An adult female at light station on 29 March.

Welcome Swallow *Hirundo neoxena*. Seen daily. Maximum number estimated at 13 on 30 March on south island and 11 on north island on 31 March.

Tree Martin *Petrochelidon nigricans*. One seen with Welcome Swallows on south island on 30 March.

Little Grassbird *Poodytes gramineus*. Relatively inconspicuous at this time of year but calls heard throughout on all days and several seen.

Golden-headed Cisticola *Cisticola exilis*. Not particularly vocal and difficult to detect, but a few seen and heard.

Silvereye *Zosterops lateralis*. Unusually scarce. A few calls heard, and one group of 4 seen near the old vegetable garden (zone 6) on 30 March.

MAMMALS

Seals.

A count on 1 April gave a figure of 233 individuals on north island and a maximum of 13 on south island on previous days. We did not attempt to distinguish **Long-nosed Fur Seal** *Arctocephalus forsteri* from **Brown (Australian) Fur Seals** *Arctocephalus pusillus doriferus*. Almost all seals were along the W and N shores of north island between the gulch and the centre of the northern rock platform. No seals were present at the ‘traditional’ haul-out area for seals in the NE of north island.

REPTILES

Green Sea Turtle *Chelonia mydas*. One reported to have been seen from north landing jetty on 21 February (T. Blackburn NPWS, pers. comm.).

White's Skink *Egernia whitii*. Seen commonly at rock outcrops, amongst *Lomandra* and along the edges of mown tracks.

Grass Sun-skink *Lampropholis guichenoti*. Observed occasionally.

BUTTERFLIES

Dingy Grass-skipper *Toxidia peron*. Seen commonly.

Orchard Swallowtail *Papilio aegaeus*. A female seen on 27 March.

Cabbage White *Pieris rapae*. A few seen every day.

Monarch *Danaus plexippus*. One seen on 28 March.

Common Brown *Heteronympha merope*. A few seen most days, only females.

Meadow Argus *Junonia villida*. A few seen on south island.

Long-tailed Pea-blue *Lampides boeticus*. Commonly seen.

Common Grass-blue *Zizina otis*. A few seen.

OTHER ARTHROPODS

In total, 96 arthropod species were recorded (by Harvey Perkins under scientific licence SL102341). Of these, 50 are repeat records of species identified during the 60th survey in March 2019 (Perkins 2019), and include 6 of the butterflies listed above. Forty-six records were new: 1 millipede (Diplopoda), 1 slater (Isopoda), 5 spiders (Araneae), 3 dragonflies (Odonata), 3 bugs (Hemiptera), 2 wasps and 1 ant (Hymenoptera), 4 beetles (Coleoptera), 19 moths (Lepidoptera), and 7 flies (Diptera).

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us all, which was much appreciated. We thank Yuna Kim for supplying information on two species mentioned in our bird list.

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The Maulbrooks Road Bird Study Site: After 18 years of collecting data, what have we learned?

Michael Guppy, Richard Marchant and Sarah Guppy

Stephen Marchant (Sarah and Richard's father) studied the breeding ecology of the bird community on this 10ha site from 1975-1984 inclusive. He set up the original 50m grid, he was out on the site most days during the breeding season, he colour-banded the birds, he found and monitored their nests, and he recorded everything in terms of co-ordinates on the grid. He left the property in 1998.

Sarah and I arrived in Moruya in 2004, and eventually found all the reinforcing rod markers that marked the intersections of the tracks on the site. We re-established the grid, which was completely overgrown, and set about teaching ourselves how to repeat Stephen's study of 30 years earlier. By the breeding season of 2007 we considered ourselves suitably accomplished and proceeded to collect data (and ticks!) for the next eight years.

Much of Stephen's data was available in Occasional Publication No.1, which was published under the auspices of the ENHS in 1992. However, many of his observations were written on Nest Record Cards, which included the colour bands of the pair at each nest, nest co-ordinates on the grid, and the progress of the nests. At the end of each season these cards were sent to the Nest Records Scheme, run by what was then called the Royal Australasian Ornithological Union, which has since become BirdLife Australia. Stephen started the Nest Record Scheme in 1964, soon after he arrived in Australia, basing it on a similar (and highly successful to this day) scheme in the UK. We managed to get hold of all of his Nest Record cards from BirdLife Australia, which gave us access to a lot more of Stephen's observations, as well as access to a lot more detail. His Occasional Publication, and his Nest Record cards, were crucial in enabling us to add his data to ours, therefore producing a comprehensive set of data that comprised up to 18 years of observations, over a period of 39 years.

Before we summarise the conclusions, it is important to draw attention to several aspects of the studies, which render them reliable, significant and informative. First, separately, and especially when combined, the

two studies would be considered long-term. Long-term studies are often the only way of uncovering links between the environment and the biology, as many environmental changes either happen very slowly, in small increments, or occur in cycles which can have long periods. Long-term studies are rare, as they require a commitment which is usually not practical, or even feasible. Second, the study was focussed on the breeding biology of the birds, which necessarily requires a lot of time and effort; again, luxuries which are often not practically or feasibly available. But despite the problems involved, it is important to study breeding stages. It is the most important part of a bird's life cycle, it is the *raison d'être* of their existence, as it is for all species on the planet. So, the ecology of breeding, and the place and habitat in which breeding occurs, are of unique significance, and every other activity is directed at increasing the success of breeding. Third, the study is unusual not only because it covers a long period. It is also unusual in that daily observations were made which produced a level of detail seldom seen in published work. There are certainly no comparable studies which have been done in Australia, and few, if any, world-wide.

What can we conclude from the data accumulated during these studies? In summary, the two studies have identified a variable that predicts when the birds will start breeding, and how many of them will breed. The data have also shown what determines the success rates of the nests when they do breed. We therefore understand what influences three processes (there are others) which are fundamental in determining how many fledglings are produced on the site each season. We will look at each of these processes in turn.

First, the timing of breeding. One factor that has a significant effect on when the various species lay their first egg, is the average SOI (see Footnote ENSO) over the four months before the beginning of the season, from April-July inclusive. The SOI varied from -13.4 to 14.3 over the course of the two periods of study, and the timing of breeding changed by about one day for each change in the SOI by one unit. Second, the same is true for the numbers of pairs that breed on the site. 70% of the change in the numbers of breeding pairs from one season to the next, was explained by changes in the SOI. Third, when nesting did occur, success (to fledged young) was almost entirely determined by nest predation; 90% of nest failures were the result of predation.

The combined study, however, offers more than insights into the breeding ecology of the community on Maulbrooks Road. Due to the long-term nature of this study, the data can also offer an insight into the vexed question of the effect of climate change on biological systems. During both studies, temperature (in a Stevenson Screen) and rainfall were measured, under conditions that approximated those required for an official BOM meteorological site. Stephen's measurements ceased in 1997, and ours did not start until 2004, so there was about a 7-year gap in the records from our site. But, serendipitously, the Moruya Pilot Station meteorological site is one of the oldest in Australia, with measurements going back over 100 years. Since global surface temperature change is one of the most obvious results of climate change, we used the long-term data from the Pilot Station, which of course contains no gaps, to investigate the effects of long-term temperature change on two of the aspects of breeding ecology on the site discussed above, i.e., the timing of breeding and the numbers of breeding pairs.

Mean monthly maximum and minimum temperatures at the Pilot Station, calculated over a year, increased between 1975 and 2014 by about 1 °C. Neither the timing of breeding, nor the numbers of breeding pairs was related to the increases in temperatures, maximum or minimum. Similarly, they were also not related to time, which itself is related to temperature. The lack of correlation with time or temperature is predictable, as the data on both the timing of breeding and the numbers breeding are strongly related to the SOI, which itself is not related to time.

So on this site, neither the timing of breeding, or the numbers that breed each season, were affected by the temperature component of climate change, between 1975 and 2014. There may be some other aspect of climate change that is affecting the breeding ecology of the birds on this site, but it is not related to temperature or time. ENSO itself might be in the process of being affected by climate change, but it is difficult to imagine such a process that is not related to time. There are almost certainly other factors, not related to either SOI or climate change, that affect breeding on our site, but they are unknown at this time.

We think our conclusions are important when considering conservation strategies for the bird community of the NSW Spotted Gum forests. The

numbers of breeding birds, the timing of breeding, and the numbers of fledglings produced, will fluctuate over time. But if one is to determine acceptable limits to any of these changes, fluctuations due to ENSO must be considered, just as tidal fluctuations must be taken into account when trying to estimate changes in mean sea levels.

We are left with two questions, the answers to which are essential for a complete understanding of the breeding ecology of the bird community on the site. First, what is it that the birds are sensing, in the four months before the breeding season starts, which determines how many of them will initiate breeding, and when they will start? Second, we know the nesting success rate, to fledgling production, and we know what determines it, but we have no information on how many of these fledglings survive to become breeding birds. These two questions expose a gap in our understanding of this community which urgently needs filling.

ENSO. The rainfall of southern and eastern Australia is associated with oscillations in the wind patterns in the tropical and subtropical Pacific Ocean. This is called the El Niño Southern Oscillation (ENSO). The state of this oscillation is quantified using the Southern Oscillation Index or SOI. ENSO cycles repeat every 5-7 years, and generally, more rainfall occurs when the index is positive and less when it is negative. The average April-July SOI was not related to linear time over the period of the two studies.

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Field Meeting (FM)

Place Name Abbreviations.

BB	Batemans Bay.
BBWG	Batemans Bay Water Gardens.
BI	Bermagui.
BP	Burrewarra Point.
Com	Comerang.
CO	Congo.
DS	Durras.
ERBG	Eurobodalla Regional Botanic Gardens.
MB	Mystery Bay.
MHN	Moruya Heads North.
MHS	Moruya Heads South.
MKS	Maulbrooks Road South, Moruya.
MO	Meringo.
MYA	Moruya.
NA	Narooma.
PDD	Percy Davis Drive, Moruya.
PS	Pedro Swamp
TS	Tuross.
WL	Wallaga Lake.
NP	National Park.
NR	Nature Reserve.
SF	State Forest.