What better pastime could there be on my birthday than to go atlassing and birdwatching at my favourite place? None that I can think of, which is why, two hours before high tide on 23 January, I was to be found staring intently through my telescope from the low pindan cliffs bordering Roebuck Bay.

The flock of 4000 shorebirds below me was very relaxed. Comprising 14 species of shorebird, all bar the Pied Oystercatcher were migratory. Some Greater Sand Plovers and Red Knots were already starting to show some breeding plumage in preparation for their short intense breeding season in the high Arctic.

The larger species occupied the sea edge with Whimbrels and Bar-tailed Godwits dominating in number. The few rocks remaining above the incoming tide were occupied by Ruddy Turnstones and Grey-tailed Tattlers with a scattering of Terek Sandpipers. The Tereks' orange legs and upturned bill separated them easily from the abundant tattlers. A few stately Eastern Curlews dozed contentedly, their absurdly long bills tucked under their back feathers. Great Knots, Red Knots, Greater Sand Plovers and 1000 Red-necked Stints were higher up the beach unconcerned by my presence on the cliff top.

As I carefully scanned the flock I saw two Red Knots with individual colour combination bands. These birds were banded during a radio tracking project in February-April 2000. The bands are to assist in an effort to discover how these adaptable birds use their tropical non-breeding grounds for feeding and roosting during the vastly differing tidal conditions at Roebuck Bay. I noted the position of each band on the birds' tarsus and later forwarded it to the PhD student undertaking the research. During the forthcoming winter I will be looking out for blue, white and green bands on Great Knots, Red Knots and Bar-tailed Godwits. These bands are part of another study to establish the age at which these species first go north to breed. We have banded birds hatched in 1998, 1999, and 2000. The birds remain in Roebuck Bay until they are sexually mature, so sighting the bands during the southern winter while adults are breeding in the northern hemisphere summer, will add to our understanding of the population dynamics of these species.

After I had had my fill of this flock I returned to the car, listening to Mistletoebirds, Singing Honeyeaters, Peaceful Doves and the raucous calls of a Great Bowerbird. Red-winged Parrots 'jinked' their way over my head and I also flushed a Collared Sparrowhawk, much less common than the Brown Goshawk in the Broome area.

My next spot on the bay afforded some shade from the summer sun. I had great views of three additional shorebird species not present in the first flock: the beautiful Sooty Oystercatchers with their vibrant orange eyerings — in the north of Australia the race is ‘ophthalmicus’ so named
because of this very obvious feature. A Common Sandpiper was bobbing around in the rocks (I don’t think I have ever seen a stationary 'Common Sand'!) and a Golden Plover, the golden spotting on its upperparts and finer build setting it aside from the plainer and stockier Grey Plover. It is unusual to see Golden Plovers on the beaches of Roebuck Bay — they usually prefer the salubrious surroundings of the sewage works.

Crested and Lesser Crested Terns crowded the rocks. Little Egrets preened while an Eastern Reef Egret pretended to forage but was really just showing off its dagger-like bill to the terns who fluttered away a respectful distance every time the egret took a half-hearted jab at them.

This scene was disrupted twice during my 20-minute atlas survey. Once by a circling White-bellied Sea-Eagle, a very common sight. And once when a much less usual raptor for Roebuck Bay, a Wedge-tailed Eagle, flapped lazily by. It didn’t seem at all interested in a shorebird as a meal but it still put all and sundry to flight.

My third and final port of call was the aptly named Wader Beach. A small matter of 15 000 birds covered the eastern end of the beach in a spectacular swathe. As usual at this more easterly beach the Bar-tailed Godwits and Great Knots made up the majority of birds. However among them were four more shorebird species new for the morning: Black-tailed Godwits, Red-capped Plovers and two of the bay’s sought after species, Broad-billed Dowitcher through my Crested Pigeon, Magpie-lark, Blue-winged Kookaburra, pindan birds: Little Friarbird, Black-faced Cuckoo-Shrike, Grey-crowned Babblers, Red-backed Fairy-wrens, Pied Butcherbirds, Brown and Rufous-throated Honeyeaters. The most entertaining bird was a comical Pheasant Coucal who, while deciding which side of the road to exit, was on glorious show for about a minute!

All birds are lovely to see, but it’s the bay that enthrals me. Twenty-one species of shorebird in two hours at three roosts. Roebuck Bay is reputedly one of the top five shorebird sites in the world, but I would have to disagree — it is THE best in the world (but maybe I’m a little biased!).

Chris Hassell

Obituaries

JIM (JAMES ROY) MASTERS OF GLEN AVON, TOODYAY

Jim Masters died peacefully at Northam on 16 January 2001. His lifelong interest in birds began as a child when he explored the Avon River and the surrounding hills, distracted only by his formal education at “Katrine University”, as he called the little, wooden primary school by the river at Katrine. He joined the RAOU in 1934 and remained a supporter and friend of Birds Australia thereafter. Among his friends were many of the early ornithologists of the state, Clee Jenkins (for some time a neighbour of his at “Eagleiron”), Dom Serventy, Harry Shugg, Rica Erickson (with whom he was in correspondence at the time of his death), Ian Edgar and many others.

He made a great contribution to the recovery of the WA Group of the RAOU, attending with enthusiasm the pivotal campout at Wanjarri in 1970, and the many subsequent weekends and campouts. He organised one such weekend for members at the Victoria Hotel, Toodyay, and delighted in showing us the birds of the Northam Shire on which he and Lindsay Milhinch wrote a classic paper for the Emu in 1974. He was always eager to travel the state to see its birds. He participated extensively in the first bird Atlas, travelling to the Nullarbor and the Great Sandy Desert among other areas, and arranged numerous birding excursions around the Avon Valley. More recently he and Max Howard revisited many birding sites that he had known in younger days; many other members will have great memories of trips that Jim led or in which he participated.

Jim was not only a friend of Birds Australia. He was a friend of the whole conservation movement, serving on the Bird Committee of the Western Australian Wildlife Authority for many years, and providing thoughtful and, as it turned out, accurate forecasts on local government’s various endeavours to manage the flow of the Avon River. He promoted the formation of the Toodyay Naturalists Club and encouraged its many meetings, excursions and projects.

He farmed all his life and it is a tribute to his motto, “to strive, to seek, to find, and not to yield” (Tennyson; Ulysses), that the fourth generation of Masters, his grandson, is moving into his old house to take his turn on the Glen Avon farm. His memorial service at St Saviour’s Church, Katrine, saw the church packed with people representative of all the endeavours of his life - family, neighbours, birders, conservationists of various kinds, historians, worshippers and civic leaders.

Chris Hassell
Jim has left behind not only a wealth of memories, but a body of written and published records that document the changing ecology and sociology of the Avon Valley. His death at 83, after a very short stay in hospital, will leave a gap in many lives. We, in Birds Australia, send our sympathy to his children, John, Pam and Pat, and to his wider family, in gratitude for Jim's friendship and support over a lifetime of dedication to the natural world.

Stephen Davies

NORMAN WETTENHALL
With the death of Dr Henry Norman Burgess Wettenhall, AM — paediatrician, ornithologist, conservationist, collector, philanthropist — Australian ornithology has suffered a significant loss.

Although he was Melbourne based, his influence extended far beyond. He was a great supporter of various medical and conservation organisations. However, he had a particular interest in birds and was an especially strong supporter of the RAOU / Birds Australia. He became a member of the RAOU Council in 1975, and was President from 1978 to 1983. This was an extremely important time in the history of the organisation, being the time that the first Atlas was conducted. In fact, Norman was pivotal in the successful completion of this project — it was his network of influential contacts that enabled him to secure significant funding to complete the project at a time when funds appeared to be drying up.

Norman was also instrumental in the compilation of The Handbook of Australian, New Zealand and Antarctic Birds (HANZAB). He raised over $5 million (including significant personal funds) towards the production of this prestigious standard reference.

He also supported numerous other bird projects, including helping to establish RAOU observatories.

He was made a Member of the Order of Australia in 1983 when he became an Honorary Fellow of the RAOU.

In recognition of his contribution to conservation and becoming a Fellow of the RAOU in 1989, Norman was inducted into Exmouth Ballidu (Augusta), Peel Inlet (Mandurah), Jemala Island section, Gardenia Island, 600, 27/01/01, Creery Island lagoon, 8 adults and 5 goslings, 4, 29/01/01, Jemala Island section, Peel Inlet (Mandurah) — MS, BW, RD, 110, 26/12/00, Government House Lake, Rottnest Island — RD, MS, BW, LD, AD, FOC, Landscope Expedition — 8, 28/10/00, Flat Island, 67, 12/00, Lake Preston (BR) — 1, 24/01/01, Government House Lake, Rottnest Island — RD, FOC, Landscope Expedition — 1, 26/12/00, Thomson's Lake (Cockburn) — DA, MS, BW, AD.

His contributions to Birds Australia will be sadly missed.

Allan Burbidge

Observations

Compiled by the Observations Committee. Shires are in brackets.


Observers are reminded that, for rarely seen or difficult to identify species, adequate documentation is required for inclusion in WABN. For example, new records, or records of species rarely recorded in the southwest should be accompanied by a description of what was actually seen and reasons for the identification. Note that a statement to the effect that what was seen fitted a description in a field guide is a statement about what is in a field guide, and does not tell the editors what you actually saw. Providing extra details also assists the editors to provide extra information to readers.

SOUTH-WEST (Shark Bay to Cape Arid)

White-faced Heron — 260, 17/01/01, Forrestdale Lake (Armadale) — RD

Black Bittern — 1, 11/01/01, near Margaret River (Augusta - Margaret River) — CW, BW

Square-tailed Kite — 1, 28/01/01, near head of Ferguson River valley, c. 33 28S, 115 58E (Dardanup) — BB

Painted Button-quail — 2, 31/12/00, on roadside near entrance to Mt O'Brien, Wongan Hills road (Wongan-Ballidu) — DA

Bar-tailed Godwit — 68, 27/01/01, Creery Island (Mandurah) — MS * 70, 29/01/01, Jennala Island section, Peel Inlet (Mandurah) — RD

Banded Stilt — 600, 27/01/01, Creery Island lagoon (Mandurah) — MS

Hooded Plover — 67, 12/00, Lake Preston (BR) — 1, 24/01/01, Government House Lake, Rottnest Island — RD, FOC, Landscope Expedition — 1, 26/12/00, Thomson's Lake (Cockburn) — DA, MS, BW, AD

ARID ZONE (including the Pilbara, Gascoyne, interior and Nullarbor)

Brown Quail — 1, 23/10/00, Hermit Island, 7, 23/10/00, Gardenia Island, 4, 24/10/00, Trimouille Island and 2, 24/10/00, Alpha Island; all in the Montebello group — FOC & Landscape Expedition * 8, 28/10/00, Flat Island near Serrurier Island — FOC & Landscape Expedition

Domestic Goose — 8 adults and 5 goslings, 1/11/00, Exmouth sewage works (Exmouth) — FOC

Stephen Davies

Western Australian Bird Notes, vol 97 March 2001
Kimberley diamonds mine (5th record for Argyle) (Wyndham limit for this species)

Broome (Broome) and some Roseate Terns, just south of Point Coulomb species)

Near Limestone Creek near Argyle diamond mine (Broome) plains grassland (Broome)

Stubble Quail - 13/01/01, in short grass near Limestone Creek near Argyle diamond mine (Wyndham - East Kimberley) - FOC

Black Noddy - 1, 12/11/00, with 2 Common Noddies and some Roseate Terns, just south of Point Coulomb (Broome) - REJ (first record for mainland Australia)

Varied Lorikeet - 18 in 11/00 and 58+ in 01/01, Broome (Broome) - BBO (at or near southern limit for this species)

Fork-tailed Swift - 6000 moving east in one day, 12/00, Broome (Broome) - BBO

Ground Cuckoo-shrike - 2, 19/11/2000, near Argyle diamonds mine (5th record for Argyle) (Wyndham - East Kimberley) - MBa, FOC (at northern limit for this species)

Star Finch - 2, 13/01/2001, alluvials dam at Argyle diamond mine (Wyndham - East Kimberley) - FOC

Spinifexbird - 2-3, 24/11/00, track into Purnululu NP (17 23 32'S, 128 09 49'E) (Halls Creek) - MG (at northern limit for this species)
ASHMORE REEF
A pelagic trip to the Scott Reef / Ashmore Reef area in October 2000 resulted in a number of exciting reports, including Bulwer's Petrel, Matsudaira's Storm Petrel, possible Swinhoe's Storm Petrel and possible Jouanin's Petrel. Please note that some of these reports have been submitted to the Birds Australia Records Committee (BARC), but the outcome concerning acceptance or otherwise is as yet not determined.

Observers
AM = Adam Meyer  DA = Des Agnew
BB = Bruce Buchanan  FOC = Frank O'Connor
BBO = Broome Bird Observatory  JS = Jonny Schoenjahn
BR = Bill Russell  MBA = Mike Barnford
BW = Brian Wilson  MG = Martin Gole
CH = Chris Hassell  MS = Marcus Singor
CW = Chris Wilder  RD = Ray Downes
CWi = Carolyn Williams  REJ = Ron Johnstone

ERRATUM FOR OBSERVATIONS
In WABN 96 (December 2000), page 5, the following records were cited as having occurred in 2000, when in fact they were previously correctly recorded as being in 1999 (WABN 92, December 1999, p 5): Bar-tailed Godwit at Austin Downs, Barn Owl at Dalgaranga, White-browed Treecreeper on Milly Milly Station and Grey-crowned Babbler at Barnong and the northern end of Lake Monger.

The error was entirely mine, and I apologise for any confusion or inconvenience this may have caused.

Allan Burbidge

WHERE TO FIND BIRDS IN NORTH-EAST QUEENSLAND. By Jo Wieneke. (Jo Wieneke, Belgian Gardens, 2000) 3rd edition
This comprehensive and essential guide to anyone interested in birding in north-east Queensland describes sites in the area between Bowen to the south, the Daintree River to the north and west to Lawn Hill. This new edition covers more bird sites than previous editions, for instance the section on “further afield” covers the Gulf Savannah region. Although there is no map accompanying this section the information on tours and species to be found is useful.

Over 400 species are recorded in this area and most of these are seen regularly and easily. However the visiting bird watcher needs to be aware that there are both dry and wet season migrants in this area. Some of the mainly smaller passerines, such as whistlers, migrate from the southern states in the southern winter. For me it is worth visiting the area in summer just to see the migratory waders arrive on the Esplanade in Cairns. The other summer migrants, some not seen further south, are for example Koels, Channel-billed Cuckoos, Metallic Starlings and Pied Imperial-Pigeons.

The description of each area includes information on the various habitats to be found there, detailed maps plus directions of how to find the bird sites, and accommodation and transport data. Added to this is such vital information as “The Frosty Mango, 400 m north of Crystal Creek has the best selection of tropical fruit ice creams in Australia”. Where this new edition is again invaluable if visiting this area, is the detail it gives on accommodation. For instance, whereas the 1992 edition states that there is rental accommodation at Paluma, the new edition gives phone numbers and details on where to obtain camping permits.

The annotated list of species is in taxonomic order according to Christidis and Boles 1994. There is not a description or illustration of the species but it does suggest areas and habitats where the bird may be found. For example, on p.73 “# Great-billed Heron — Ardea sumatrana. Rare, usually solitary in coastal creeks and mangroves. Follow signs to boat ramps which will take you into mangrove areas. Try a boat cruise on the Daintree River or Hinchinbrook Channel.” The # denotes that the species is rare, vagrant or not in the southern states. Added to all this is a comprehensive index, guiding and tour details, plus a list of accommodation that caters specifically for birders and naturalists.

A word of warning, though. This book is not, nor is it intended to be, a field guide. It does what it sets out to do, point the birder in the right direction with clear and comprehensive details of where to find the birds of the area.

Even if you are not contemplating a trip to north-east Queensland a quick browse through this book may change your mind.

Available from Birds Australia WA at the book-sales outlet for $15.00 or directly from the publisher Jo Wieneke, 22 Bishop St, Belgians Garden, Qld 4810.

Suzanne Mather
REPORTS

BIRDS AUSTRALIA WESTERN AUSTRALIA INCORPORATED — CHAIRMAN'S REPORT FOR THE YEAR 2000

Another busy year has been negotiated with a number of notable results achieved by a dedicated and keen membership. Once again, my role as chairman has been made easier by the enthusiasm and hard work of the committee and the volunteers who manage and run the organisation.

The year 2000 was particularly significant for Birds Australia in the west, as indicated by our new title. After a long, and sometimes arduous campaign, the WA group finally achieved Incorporation under Western Australian legislation, and I register here my thanks to all of the people who contributed and helped to overcome the obstacles encountered along the way.

In most respects our incorporation should be transparent to our membership. Members will still be members of Birds Australia nationally, and by virtue of living in Western Australia, will be members of BAWA Inc. There should be no difference at all in the services offered to members in WA. This does not mean, however, that incorporation will not bring benefits to the group. One of the more important benefits, and one that helped spur on the committee in the face of seemingly insurmountable problems, is the ability to apply for larger grants from state bodies. In the past we have been restricted to comparatively small sums because we were not incorporated. We now look forward to successful applications for grants that may support significantly larger projects.

On the committee this year Dr Mike Bamford continued as Vice Chairman, and retained responsibility for Research and Conservation issues for the group.

We started the year with Dorothy Kingston as our secretary but unfortunately Dot had to relinquish the position for personal reasons. We were then fortunate to have Elizabeth Walker offer to take over the position. Liz took on the role while continuing as Office Manager and has managed a heavy workload with efficiency and good humour.

Mary Vaughan, as Bookkeeper, has again most ably managed our finances with assistance and advice from Treasurer Greg Wyllie. 2000 has been a particularly trying year with our newly acquired incorporated status and the introduction of GST. We appear to have successfully weathered the storm and we are most grateful to Mary and Greg for a job well done.

The other members of the year's committee were Wesley Bancroft, John Blyth, Michael Brooker, Sandra McKenzie, Rod Smith and Jennifer Wilcox.

The committee, of course, represents a very small number of the active contributors to the activities and successes of the group.

WA Bird Notes continues to provide a wealth of information to WA members and is an excellent example of what can be achieved by a team of people working together. Rod Smith again organised the distribution and maintained a tight control of the Bird Notes budget; John Blyth and Allan Burbidge, the joint editors, keep Bird Notes interesting and accurate, and Margaret Philippson provides her typesetting skills to format the publication. Of course, while this team is vitally important there would be nothing to publish without the contributions submitted by so many people from all around the state.

The Excursions subcommittee continues to meet regularly and has ensured a varied and active calendar of long-distance trips, weekend campouts and day excursions. Bryan Barrett started the year as coordinator but has now handed control of this sub-committee to Clive Napier, and it is appropriate to record a special vote of thanks to Bryan for his tireless efforts. Bryan, together with Margery Clegg, has accumulated an invaluable list of interesting birding sites around the state and the rest of us benefit greatly from their research effort.

We have enjoyed another year's selection of monthly meetings that have been consistently interesting and often thought provoking. The meetings continue to be well attended and appreciated, and thanks are due to Brian Wilson for the quality of the speakers and presentations arranged.

Allan Jones has continued to find ways of attracting funds to ensure that we are able to contribute to both research and conservation through an active program of local projects. Colin Davis still coordinates the Wader Studies Group in the west, and the pelagic trips organised by Frank O'Connor remain fully subscribed and most enjoyable.

Liz Walker has managed the group's office and Wendy Napier has looked after the roster of volunteers. Sue Mather took on the role of librarian and, together with Liz, reorganised both the library and the office layout to provide a more comfortable and practical use of our resources. Sue also encouraged Rob Mather to help with the management of the educational displays and a valuable resource is again under control. I should register our thanks to Judy Blyth who relinquished the role of Education and Publicity officer this year. Judy worked tirelessly for the group in previous years and has left us with a wealth of displays and posters that continue to be used to good effect.

Valerie Hemsley continues to look after the trading table and so helps supplement our income to cover our operating costs.

Projects taken up by our members have all continued through the year and have required a great deal of effort and dedication; none more so than the national Atlas project. Cheryl Gole has been the WA coordinator for the project since its inception, and she has managed to maintain a high level of enthusiasm and drive to keep the data records rolling in.

New projects under way this year include a further study of the Hooded Plover, a natural successor to our previous 'Hoodie' projects, and a study to identify significant breeding areas as the first stage of the recovery process for Carnaby's Black-Cockatoo. The intention of the Hooded Plover project is to identify important breeding and feeding areas and to then help the local shires in
conservation efforts for those areas. This project, undertaken with a grant from the Coasts and Clean Seas program of the Natural Heritage Trust, was run by Julie Raines and Brenda Newbey. The Carnaby’s Black-Cockatoo project has been run by Cheryl Gole and Tamra Chapman, and was funded by the WA Lotteries Commission.

In June, Shapelle McNee authored the ‘Search for the Western Ground Parrot in Cape Arid National Park and nearby areas’. This publication was a report on the implementation of a major action from the Western Ground Parrot Interim Recovery plan, and covered the period June 1999 to June 2000. This report is number 6 in the continuing series of supplements to WA Bird Notes.

As is the case each year, this report can only accommodate the more important events that occurred throughout the year. There were many other events that took place, and a number of volunteer-inspired activities, that I have not mentioned here. That makes those contributions no less valuable and I apologise for not being able to mention them here.

The group’s finances have been managed once again such that our income over the year has kept pace with our expenditure. I believe that we continue to provide maximum value to our fund providers, as we are able to cover most administrative costs through volunteer contributions. Our general revenue, again dependent largely on sales of our cards, has once again enabled us to run the office and to assist in other areas. The group provided $1000 to help the observatories attend the British Bird Fair in September, and we again provided funds to students who were attending Observatory Courses in Broome or Eyre.

We strive to provide an environment where our varied membership, ranging from dedicated professional ornithologists and scientists, through keen amateur birders, to those people who just enjoy birds, feels that they are catered for. I hope that such a balance has been achieved.

We now face a New Year that heralds in the national organisation’s centenary, and we look forward to taking part in the celebrations of that achievement. The main centenary-related project will be the construction of a new walk path in Bold Park adjacent to our office.

We are also looking forward to hosting the national organisation’s Annual General Meeting in May.

2001 will be a significant year for Birds Australia, and it should help us to focus on the issues that are important to improve the lot of Australian birds and to improve the reach and influence of Birds Australia.

Clive Nealon, Chairman

ASSISTANT WARDENS REQUIRED AT BROOME

Broome Bird Observatory requires an Assistant Warden for the current busy season (beginning March 2001) and again later in the year. Anyone interested should contact Bill Rutherford at the Observatory: telephone (08) 9193 8600, e-mail bbo@tpgi.com.au

HOODED PLOVER SURVEY SEPTEMBER 2000

Thanks to many participants, our wet season Hooded Plover survey, held 16–30 September 2000, was very successful. (Preliminary results were reported by Brenda Newbey in WABN 96, p. 9.) We achieved our ambitious goal — to survey the coast of southern Western Australia for Hooded Plovers in the wet season (winter-spring)! The survey was held to help answer two important management questions:

1. how many Hooded Plovers remain on the coast during the wet season, when many individuals have moved inland? and
2. when and where do these birds breed during this time?

The survey covered, or sampled thoroughly, nearly all accessible beaches between Mandurah and Esperance. This area of coastline lies within the stronghold of the Hooded Plover in Western Australia. Some coastal wetlands were also sampled including Yalgorup National Park. In addition, people contributed records for various wetlands in the wheatbelt and on the coast north of Mandurah.

Data have not been analysed thoroughly yet. A full analysis will not be conducted until after our dry season survey in summer-autumn 2002. The following is a preliminary overview of the data, which was manually collated and mapped by Brenda Newbey, Phyllis Bentley and Julie Raines. Thank you, Brenda and Phyllis.

The lake system in the Yalgorup National Park was surveyed thoroughly. A plane was flown over the lakes to identify areas with beaches. Volunteers were then dispatched to inspect suitable sites. The park contained 48 adults and one juvenile over ten sites. However, there was no evidence of breeding. In the past Yalgorup has supported reasonable amounts of reproduction. It appears that the birds simply might have started late this year, as nests and chicks have been detected since the survey, starting in November. One site had 18 birds. Interestingly, in December Bill Russell saw a congregation of 67 Hooded Plovers on Lake Preston in the Yalgorup National Park. Many thanks to John Osborne who piloted the plane and the efforts of the Mandurah Bird Watchers in co-ordinating this effort.

Forty-seven kilometres of ocean beach from Whites Road south of Mandurah to Leschenault Inlet was searched, yielding no Hooded Plovers. This is the first time this long stretch of beach has been systematically sampled. All participants noted that extensive 4WD activity takes place on this beach and wondered if this activity was driving the Hooded Plover away. This effort was also largely co-ordinated by the Mandurah Bird Watchers. We offer special appreciation to Jim and Verna Howell who covered 9 km of beach south of Preston Beach before getting seriously bogged! Thanks also to Steve Dutton (CALM) who helped with both the beach and Yalgorup Lakes surveys and extracted Jim and Verna from the bog! The Myalup to Leschenault section was sampled by Tom Wood (CALM) and Bruce Buchanan.

Geographe Bay was not sampled. We have never received any records of Hooded Plovers from the bay despite the fact that many people regularly use its beaches including many retired bird watchers and naturalists.
Thanks to the effort of some hard working individuals, all beaches lying between Cape Naturaliste and the Augusta township were surveyed on foot. This area yielded 30 adults and three breeding records (2 clutches of eggs and 1 runner) from 15 sites. Special gratitude is extended to Peter Simmonds (CALM), who must be very fit by now!

The remote stretch of coastline between Augusta (east side of Blackwood River) and Broke Inlet was well sampled, despite great difficulty of access, thanks to Chris Wilder and her helpers. It yielded six adults and one breeding record (1 very small runner with an unhatched egg) at six sites. Subsequently in November another clutch of eggs was found.

The survey of the Broke Inlet-Denmark area produced 19 adults and four breeding efforts (3 clutches of eggs, 1 pair of runners). Our appreciation goes to Carl Beck and his staff (CALM) and the Walpole-Nornalup National Parks Association who co-ordinated most of the effort in the Walpole-Denmark area.

Interestingly the coastline between Denmark and Beaufort Inlet produced relatively few birds compared to the coastline west of Denmark, despite the hard working efforts of Tim Hunt and the Albany Bird Watchers who searched all the easily accessible beaches east and west of Albany. This area produced six adults at four sites, but no breeding records.

The coastline immediately east and west of Bremer Bay supported 69 adults and three juveniles during the survey from 14 sites. Interestingly this area has been important for Hooded Plover breeding in the past, but no breeding evidence was detected during the survey. Perhaps they, like their counterparts at Yalgorup National Park, had not begun to breed, or had they 'decided' to give breeding in the Bremer Bay area a miss this year? Notably, Anne Gadsby says, "a number of beaches such as Bremer Bay, Trigelow and Torregullup have been searched monthly since our September survey, but no eggs or chicks have been found". Two locations had more than 20 individuals during the survey. These two locations are therefore classed as sites of particular importance to Hooded Plovers. Thank you, Anne Gadsby and members of the Hooded Plover working group for co-ordinating the survey effort in this region and the Fitzgerald River National Parks Association for assisting.

Thanks to Phyllis Bentley, Viv Dare and Viv McCormick, a large stretch of remote beach from Hopetoun to Quagi Beach (just east of Stokes Inlet National Park) was well sampled. This stretch of coastline had been very poorly sampled before. It produced 12 adults and three juveniles at four sites, one site having more than 10 birds.

The stretch of coastline from Quagi Beach to Esperance was not sampled. Most of the coastal salt lakes in the Esperance area, which had been previously very important to Hooded Plover, were flooded. A few wetlands were, however, sampled in this area and a nest found incidentally at Fourth Beach, just west of Esperance. Allan Rose (CALM) sampled Yokinup Beach in the Cape Arid National Park yielding 19 adults and five juveniles. Since this location had more than 20 birds, it is considered a site of particular importance to Hooded Plovers. Thanks, Esperance Bird Observers for your assistance.

In addition five sites were searched between Mandurah and Perth with no Hooded Plovers found. Thirty-five wetlands were sampled in the inland region of the southwest biogeographical province. Eight of these sites had Hooded Plovers and one, in the Cranbrook and Pingrup area had more than 10 individuals per site. Evidence of breeding was found in the form of a pair of runners at Yarra Yarra Lakes. Three sites were also sampled in the arid zone, but only two Hooded Plovers were found. Interestingly, this record was from the Lake Austin complex, which lies between Mt Magnet and Cue. Records from this far north are very rare. Thank you all.

The 'on ground' part of the September survey involved over 600 volunteer hours and over 12 500 km of travel. This provided about $10 000 of 'in kind' contribution to this project, and that is not counting the time people may have taken to organise other people or to actually get out there. The project as a whole has provided over $33 000 of 'in kind' contribution to conservation and the community in its first six months!

In a nutshell!
A total of 300 Hooded Plovers, including 15 juveniles, were discovered during our survey. Evidence of breeding was detected at ten sites. Two hundred and twenty three Hooded Plovers, including 12 juveniles, were found on beaches and coastal wetlands in the south-west. Breeding occurred at nine of these sites. During the period of the survey all breeding occurred between Cape Naturaliste and Denmark, except for one record at Esperance.

But what does this all mean?
Hooded Plover sightings were concentrated in the Yalgorup National Park, the Cape Naturaliste-Augusta area, the Walpole-Denmark area and around Bremer Bay and thus these sites appear to be more important to the Hooded Plover species. These data are likely to reflect the real distribution of the Hooded Plover, but the apparent concentrations of birds are likely to be exaggerated by the more intensive survey effort that was conducted in these areas.

The Walpole-Denmark coastline had not been previously identified as important Hooded Plover habitat. A re-analysis of the data collected between 1995-1998 indicated that the Walpole area might be important. Our recent survey supports this conclusion. A workshop will be held in the near future to discuss Hooded Plover management with the local Walpole and Denmark communities to determine the management issues in this area and the feasibility of implementing management.

Yalgorup National Park and the Bremer Bay area had previously been identified as important Hooded Plover locations. The coastline between Margaret River and Augusta had also been identified, but not the coastline north of Margaret River to Cape Naturaliste. A re-analysis of the data at the beginning of this project indicated that this latter area had been poorly sampled. Further sampling has revealed that the beaches in the northern Cape to Cape region may be as important as that coastline south of...
Margaret River. It would be appropriate to collect further data in this area as soon as possible.

How many 'Hoodies' remain on the coast during the wet season?
The answer is, plenty and certainly enough to justify the implementation of effective management during the wet season. There are at least 300 birds, but many would have been missed by observers, or because they were not on a particular beach or wetland at the time an observer conducted a survey. There were also a number of beaches and many coastal wetlands that were not surveyed, particularly the inaccessible ones. As substantial numbers of Hooded Plovers were found on our coastline during the wet season, we would expect many more in the dry season, when the inland wetlands dry up and birds move to the coast.

The September survey was the most comprehensive Hooded Plover survey of the south and west coasts of Western Australia held to date. We now have much more information about the distribution of Hooded Plovers along the coastline. The difference in designs between the 1995/96 and the 1998/99 surveys and our 2000 effort, means we cannot make a direct comparison of whole survey data sets. However, a more direct comparison should be possible between the 2000 and 2002 wet and dry season data sets later. Please 'stay tuned to this channel' and help us during our next big survey in 2002. Specific information about individual areas will be provided to our Hooded Plover working groups and managers as our database is developed in the second 12 months of funding.

When and where do these birds breed on the coast?
In September breeding was limited to the coastline from Cape Naturaliste to Denmark with the exception of one sighting at Esperance. Breeding has since occurred in the Yalgorup National Park, but not Bremer Bay. Since the September survey we now have much more information than we had before. We know more about where they will and will not breed. However, we need to find a lot more evidence of breeding. I encourage you to adopt a beach or wetland soon.

Adopt a beach or wetland
Large-scale surveys like our recent September survey are of limited value to managers if they are not supported by the collection of more intense, seasonal information on specific areas. With respect to Hooded Plovers, managers need to know when and where Hooded Plovers are breeding. This is the time when the species is most vulnerable. The eggs take approximately four weeks to hatch and the flightless chicks take 5-6 weeks to grow flight feathers. During this time they have a high probability of being crushed, hunted or eaten. Managers find it hard to justify erecting signs, closing car parks, getting money to produce education material etc. without hard data.

So let's get in to it! Adopt a beach or wetland now, record what you see and make your next visit count! Please call Julie Raines to obtain more information and register.

Other Activities
"Whose beach? Whose wetland?" — this was the subject of our recently published Hooded Plover brochure. On the front cover it features a Hooded Plover family being chased by a dog and almost being crushed by an oblivious beach user and a four-wheel drive vehicle. Eleven thousand brochures were produced, most of which have been sent to the Hooded Plover Regions where they will be distributed through local clubs, newsletters, tourists outlets etc.

Newspaper and radio articles have also been written and released over the holiday period. Signs are being produced in the Yalgorup and Esperance Hooded Plover regions. The Bremer Bay Hooded Plover Region has convinced the Shire of Jerramungup to provide some fencing and 'no vehicle access' signs and Birds Australia will provide some complementary fences and signs.

By the time you read this, we will have conducted a detailed survey of Yalgorup National Park. Details will be reported in the next issue of WABN.

Julie Raines (Project Officer)

Red-capped Plover eggs in nest among samphire, seen during the Albany Campout reported elsewhere in this issue. Drawing by Pam Agar

LIBRARY REPORT
Library reviews
Adams, George M. Foliage birds: Australian birds and their favoured plants, published in 1981 (so not a new publication) has recently been donated to the Library. This is a beautiful edition and well worth browsing through. The 50 birds selected are those most commonly seen in urban areas.

A double-page format is used to show each bird in a coloured photograph, a line drawing of the bird in one of the plants it frequents, and information on that bird. This book is to be found at 598.0994/ADA

Corella
The Library is going to subscribe to Corella, a journal published by the Australian Bird Study Association. If any members have back copies of this journal that they no longer want to keep, we would be very grateful for them. This journal will be treated in the same manner as Emu, that is, available for the use of members and available for borrowing.
The two latest Emus, vol 100, Parts 4 and 5, December 2000, have arrived in the Library. They are not available for borrowing but are housed at 598.0723. Following is a copy of the Contents pages. In part 4, of particular interest to Western Australians is the article by Chris Surman and Ron Wooller on seabirds off south-western Australia.

**Part 4**

Clifford B. Frith and Dawn W. Frith  
Fidelity to bowers, adult plumage acquisition, longevity and survival in male Golden Bowerbirds *Prionodura newtoniana*  
249

Dirk H.R. Spennemann and L. Richard Allan  
The avian dispersal of olives *Olea europaea*: implications for Australia  
264

Brett D. Cartrell, Susan M. Jones, Raymond N. Brereton and Lee B. Astheimer  
Morphological adaptations to nectarivory of the alimentary tract of the Swift Parrot *Lathamus discolor*  
274

Kathryn E. Arnold  
Strategies of the cooperatively breeding Noisy Miner to reduce nest predation  
280

Jack Baker  
The Eastern Bristlebird: cover-dependent and fire-sensitive  
286

P.L. Dostine and S.R. Morton  
Seasonal abundance and diet of the Comb-crested Jacana *Irediparra gallinacea* in the tropical Northern Territory  
299

C.A. Surman and R.D. Wooller  
Seabirds off the south-western coast of Australia  
312

D.G. Nicholls, M.D. Murray, E.C. Butcher and P.J. Moors  
Time spent in Exclusive Economic Zones of southern oceans by non-breeding Wandering Albatrosses (*Diomedea* spp.): implications for national responsibilities for conservation  
318

Allen Keast  
Intraspecific variation studies in Australian birds, subspecies, isolates and ultrataxon concepts: how close are we to a final designation of forms?  
324

**Short Communications**

W.J. Sullivan, K-J. Wilson and A. Paterson  
Influence of artificial burrows and microhabitat on burrow competition between Chatham Petrels *Pterodroma axillaris* and Broad-billed Prions *Pachyptila vittata*  
329

Timothy D. Male  
Evidence for cooperative breeding in the Pale Yellow Robin *Tregellasia capito*  
333

Bruce C. Robertson, Craig D. Millar, Edward O. Minot, Don V. Merton and David M. Lambert  
Sexing the critically endangered Kakapo *Strigops habroptilus*  
336

Xiaolin Chen, Zhihong Chen and Wenzhen Fang  
New record of the White-faced Heron *Egretta novaehollandiae* in Xiamen (Amoy), China  
340

**Book Reviews**

**Part 5**

These papers are from the invited plenary speakers at the recent Southern Hemisphere Ornithological Congress in Brisbane. The speakers were from around the world, but included Western Australian Eleanor Russell, who focussed on the question of why Australian birds often have different breeding systems from those in the Northern Hemisphere.

Michael F. Clarke and Lee B. Astheimer  
Introduction  
345

Mark A. Burgman  
Population viability analysis for bird conservation: prediction, heuristics, monitoring and psychology  
347

Alan Kemp  
The sustainable utilisation of birds  
355

Pablo Yorio  
Breeding seabirds of Argentina: conservation tools for a more integrated and regional approach  
367

Eleanor M. Russell  
Avian life histories: is extended parental care the southern secret?  
377

Philip A.R. Hockey  
Patterns and correlates of bird migrations in sub-saharan Africa  
410

Manuel Nores  
Species richness in the Amazonian bird fauna from an evolutionary perspective  
419

Obituary  
Henry Norman Burgess Wettenhall 1915-2000  
431

2000 Index
Members’ contributions

WOOLEEN IN THE WET
Anne and I drove southwards to Wooleen Station on leaving Erong Springs Station on 31 July 2000. Knowing it had been a good rainfall year we planned to visit Breberle Lake (on Curbur Station) and Woolgorong Marsh (on Mt Narreyr Station) en route. On my only previous visit to Breberle I drove on the track through the lake centre, finding only high water markings on the trees above my head to indicate a lake was ever there. In July 2000 close approach to Breberle Lake was impossible. The lake edge, normally about 1.5 km from the Mullewa-Carnarvon Road, overflowed the road and closed it to traffic, necessitating an easterly detour along station tracks around both Breberle and Woolgorong Marsh.

With so much water present it was no surprise to find Wooleen Lake full, making a body of water some 18 km long and over 3 km wide. I decided to concentrate on the bushbirds (while noting the waterbirds) with a view to returning when the water levels had fallen somewhat. Among a total of 91 species observed we were rewarded by two bushbird species additional to our 1996 and 1997 visits, Sacred Kingfisher and Grey Fantail. Among the waterbird species present on Lake Wooleen, Black Swan, Little Pied and Little Black Cormorant, Grey Teal and Pacific Black Duck were breeding. The two cormorant species were breeding in the same water bound tree, with over 100 birds present on the branches.

On returning on 25 and 26 November the water level of the lake had fallen considerably, dividing it in two parts, north and south. It was evident the number of birds had increased substantially since early August, particularly White-winged Terns, which had more than doubled in numbers. In November the northern lake was fairly shallow and crowded with birds, while the southern lake, by remaining rather deeper was relatively sparsely populated, other than with terns. Four species present in August (numbers shown) were absent in November: Blue-billed Duck 12, Australian Wood Duck 6, Hardhead 17 and Little Grassbird 2. The fall in the lake level may have been a factor in their November absence.

Immediately prior to driving to Woolen I met a friend who had just returned from a visit to Lake Eyre in South Australia. After Lake Eyre flooded there was much advertising in WA about the once in a lifetime opportunity and the like. My friend said that it was only possible to stand 200 metres from the water (because of intervening mud) and at the time of his visit (at the ‘tourist’ southern end of Lake Eyre) few birds were to be seen, they being — by local report — largely at the northern end and only visible with the use of a (costly) air flight. Woolen Lake was clearly the superior site for visiting. It was possible to stand at the waters’ edges of both parts of the lake and in the northern one to see within a 400 metres radius over 20 waterbird species exceeding 5000 birds in number.

It was hot during the day. Consequently we were at the water’s edge before the sun came up and returned to base...
by 11:00 am, sheltering until about 4:30 pm when we drove out with the air-conditioning on. It was noticeable how waterbird activity decreased as the heat increased. During the cool early morning most waterbirds were active and moving, frequently intermingling, which complicated counting. Most numbers over 150 were ‘estimated’ rather than individually counted.

Being out before sunrise gave opportunity, not only to see two fine sunrises across the lake, but also to add Australian Bustard to our Wooleen list. I had previously seen a maximum of three bustards elsewhere and most sightings in long grass such that little was visible but the neck and raised beak. Despite travelling many kilometres at Wooleen I had not previously seen the Australian Bustard there. On both mornings in November bustards ‘grazed’ at the side of the lake in the open. Eight birds at less than 50 metres examined our car the first morning and six the second. All the bustards walked off into the bush shortly after sunrise.

Muggon is some 85 km nor-west of Wooleen and WABN No. 96 gives an account of the birds observed there in September. The Muggon observers recorded 25 waterbird species, all in low numbers. In November Wooleen had 33 species, most in good to generous numbers. Had Muggon been visited later in the year it is possible both the total waterbird species and their numbers would have increased, as at Wooleen.

The Olympic Games familiarised many with the ‘personal best’ approach of athletes and for me Wooleen in November 2000 provided personal best numbers for eight species (in southern Western Australia). These were: Plumed Whistling-Duck 20 (only my second SW sighting: the first was during the SW Waterbird Survey, 2 at Mungal), Glossy Ibis 73, Yellow-billed Spoonbill 59 (some were at the nest), Common Greenshank 127 in one grouping, Black-fronted Dotterel 201 in one flock, Banded Lapwing 80 in one flock, Whiskered Tern 300, White-winged Black Tern 2000 (in two flocks which coalesced from time to time).

The Wooleen waterbird species seen in November (excluding those above) with numbers following, were: Black Swan 22; Australian Shelduck 200; Pacific Black Duck 150; Australasian Shoveler 14; Grey Teal 3000+; Pink-eared Duck 100; Hoary-headed Grebe 175; Darter 6; Little Pied Cormorant 58; Little Black Cormorant 110; Great Cormorant 6; Australian Pelican 18; White-faced Heron 22; White-necked Heron 2; Great Egret 32; Australian White Ibis 5; Straw-necked Ibis 50; Swamp Harrier 1; Eurasian Coot 115; Common Sandpiper 1; Red-necked Stint 3 (among the flock of Black-fronted Dotterel); Black-winged Stilt 250; Banded Stilt 590; Red-necked Avocet 300 and Red-kneed Dotterel 6.


Additionally, I have been informed (by Simon Nevill) that the Ground Cuckoo-shrike* was present in 2000.

Wooleen is an attractive location to see bushbirds. The filling of the lake is an irregular event, but when it fills and as it dries (for those who can rise early to miss the heat) it is good bird observing indeed.

Our thanks to Helen and Brett Pollock for their assistance.

Bruce Buchanan
TAWNY FROGMOUTHS NESTING NEAR ALBANY

The pair of Tawny Frogmouths that have nested in Goode Beach for several years (WABN 89: 9-10), nested again in 2000, in spite of the male bird being blinded in one eye the previous year.

In 1999, the pair chose to nest in precisely the same site they used in 1998, on a horizontal fork of a jarrah sapling. On the night of 16/17 October, when the young were a week old, one youngster disappeared. Concurrent with this, the male Tawny Frogmouth was injured in the right eye. A pre-dawn raid by a Grey Currawong nesting nearby was suspected, the male getting pecked and injured while trying to defend the nest. The injury was first detected on photographs, but during the following few days I was able to cautiously and silently approach him several times at his daytime roost, which was low down, and give the eye a clinical veterinary inspection at close quarters by natural light, not an easy thing to do when you cannot handle the patient.

He seemed unable to close the eye that was swollen. The iris was a normal colour but appeared as a thin rim as the main feature apparent was a widely dilated pupil. No superficial damage or corneal ulceration could be detected, but he had no vision on the right side, or at the best could barely distinguish between light and shade. On one occasion he probably felt the movement of my hand and turned to face me, so he could see me with his good left eye. He was horrified at my close proximity and needless to say, I backed off hurriedly.

Only by direct frontal spotlight or electronic flash did the nature of the injury become apparent, an opacity of the lens with luxation, in other words a traumatic cataract possibly sustained by a blow to the eye through closed eyelids, which was not likely to resolve, causing permanent blindness on his right side. For a bird with binocular vision, blindness in one eye is a handicap, particularly when judging distance. This is especially important when the bird flies down to catch prey on the ground. Be that as it may, he still seemed to perform his share of the duties at the nest, rearing the surviving nestling, brooding and providing regular meals. The younger left the nest on 6 November and the family group moved into the national park towards the end of the month.

I did not expect to see the male in 2000, but first noticed him one night at the end of August. His right eye looked grotesque in car headlights, but he was preening himself at the roadside and appeared quite relaxed. The injured eye subsequently allowed the male to be readily identified in poor light when his smaller size or dark crown were not obvious. Later I found his daytime roost, but he never seemed to move far from it at night. When the female reappeared in mid-September, they were seen together several days, near last year’s nest-site, but nothing would induce him to go there (perhaps he had unpleasant memories from last year), in spite of the female trying to coax him to the former nest site with lots of seductive “Kooorooooos”. At other times they seemed disinterested in nesting and I was becoming convinced he thought himself past it.

Then one evening late in September and long after the date when they had started nesting in former years, the female called persistently from the site they had used four years previously in 1996 (WABN 83: 9-10). A flimsy platform of twigs was built over a few nights, they were seen copulating at dusk, and on the last day of September the female was first seen on the nest during the day (day 0), denoting the first egg had been laid. She never left the nest voluntarily during daylight hours for the following two months, which is understandable with such conspicuous eggs (shiny white) or young (downy white for the first ten days, gradually turning grey as feathers grew through).

The tree, Eucalyptus lehmannii, alongside my driveway and only five metres from the roadside, was within the territory of the dominant male Red Wattlebird and guarded well from intruders, though two pairs of Common Bronzewing juveniles also moved in and were often seen either in the tree or beneath. This was not considered a bad omen at the time.

During the first week of incubation, the male spent the day at his regular roost, 100 metres from the nest, but then moved closer, though I was unable to find where in spite of comprehensive searches within a 50-metre radius of the nest. However, regularly every night about an hour after sunset he arrived at the nest. The delay probably gave him time to preen and feed himself before assuming duties. The changeover, witnessed on several occasions from the base of the tree and photographed once, took less than a minute, but was very carefully performed. The male (unmistakable with his damaged eye) arrived on the nest branch and sidled up to the female until touching her. She stood up, carefully freed her feet and ‘dived’ off retracting her feet adroitly. The male then settled on the eggs and probably remained on the nest most of the night, though I suspect that later, as the young grew older, he may have left them unattended in the early morning. The female probably took over before sunrise. On the few occasions when I checked the nest at dawn, the female was already on the nest.

Downy young were first seen on 28 October 2000 (incubation 27 days ± 1) when the male appeared bearing food at dusk. The only food seen carried by either adult, and in some cases photographed, were mole crickets, stick insects and ‘Christmas’ beetles, Scarabaeidae, the male making about two visits to every five of the female, which was on a par with the rate observed in previous years. Crepuscular feeding activity went on for half an hour or so until it was too dark to see, but one of the adults usually remained at the nest, and when the young seemed satiated, the male would remain while the female went off to feed herself. This went on for three weeks, the growing young taking longer to settle down, but generally replete by an hour after sunset. This cycle of events was only broken on two nights of gale force winds, when the male had not appeared by 2300 hours and the female remained on the nest that was swaying up and down almost a metre. Wind and/or surf noise were considerable and may have disrupted feeding, which made me wonder whether their hunting techniques use echolocation and depend on acute hearing. Mole crickets stridulate.
Whenever seen flying, the male flew confidently and seemed to have little difficulty in judging distance or missing objects. In fact he performed his duties admirably. The male roosted in the nest tree during the day from 12 days after the young hatched until day 22, when something happened, though he continued to appear at the nest at dusk.

During that afternoon, 22 days after hatching, a bird was seen to dive into the nest tree. A few minutes later I found the startled female out at the end of the nest branch looking down, one chick on the ground beneath and one still in the nest in a very exaggerated begging posture, stretched out upright ‘like a piece of rope’. I thought at the time either a Brown Falcon or a Collared Sparrowhawk had made a pass at one of the bronzewing juveniles. During the next 24 hours the chick, which could not fly but branch-hopped to beneath the nest, was assisted back to the nest with a long pole and all went well for the following week. Each evening the two young indulged in strenuous wing-flapping exercises and were ready to leave the nest.

Sad to relate, 28 days after hatching, the nest was empty, but beneath were the remains of the two young; one had been decapitated but unplucked and the other had been plucked and carried off. It looked like an early morning (pre-dawn?) raid by some bird of prey, when the male should perhaps have been in attendance, because at dusk the same evening the female Tawny Frogmouth, seemingly unaware of the tragedy, called for 20 minutes from the roof, 25 metres from the nest. She then moved in a wide circle, her calls fading into the distance. Neither adult has been seen since. A Collared Sparrowhawk was seen in the tree five days later, apparently after the one surviving bronzewing youngsters.

Vic Smith

RAINBOW BEE-EATER TEMPERATURE CONTROL
On 26 December 2000 at Piesse Brook (31°58' 116°03'), two Rainbow Bee-eaters were busily delivering wasps down their burrow. The temperature that day as reported by the Weather Bureau was 42°C and the two previous days approximately 38°C and 36°C. I feared for the young bird(s) in this mini-heatwave but one at least safely fledged.

The Rainbow Bee-eaters this year arrived from the north at Piesse Brook around 23 September 2000. Many burrows were dug. But these burrows are regularly predated by monitor lizards through the tunnel and by foxes that excavate directly down from above the egg chamber. These burrows at Piesse Brook are in loam. The tunnels are 45° to the surface reaching down to a metre from the surface where the egg chamber is formed.

This was a late breeding. Why do these birds migrate to the south to breed? Apart from the increased wasp food supply there is the optimal egg chamber temperature avoiding parental incubation. But what is too hot? When the atmospheric temperature is around 40°C the ground surface in direct sunlight is very much hotter. What would be the temperature variation in the egg chamber one metre underground with air circulation through the tunnel entrance?

Mary Bremner

A HARRIER A' HARRYING
On a trip to Thomson’s Lake in late November 2000, water levels were reasonable high and there were large numbers of waterbirds. Our arrival at the lake was greeted by a Swamp Harrier circling overhead. We walked over to a sandy ridge with a clear view of the lake and became aware of a disturbance in the centre of the lake. Our Swamp Harrier was hovering one to one and a half metres above the water where a Pacific Black Duck was in a state of siege. The duck would dive for a few seconds; when it surfaced the harrier would dart at it — sometimes it would drop only 20 or 30 cm but at other times it would drop right to the water level. The duck would then dive again and the harrier would resume its hovering position. This continued for three or four minutes when the duck, obviously exhausted, remained on the surface. The harrier then decided to ignore the easy prey and soared up and away from the duck. The duck remained stationary and still isolated from its fellows.

The harrier performed a high circular sweep over the lake and returned. The exercise then resumed. The duck dived for a few seconds and surfaced, the harrier hovered and darted at the duck. This continued for another three or four minutes when, as before, the duck surfaced and remained stationary and very vulnerable. Again the harrier lifted up and soared to another part of the lake, this time not to return. The game was over, the duck, harried but intact, was left in peace.

In 1997 Clive Nealon reported a similar but shorter occurrence at Joondalup but with the result that the harrier killed the prey, a grebe.

This Swamp Harrier was very dark in colouring with a not very distinct rump patch and so was probably not an adult. It was very apparent that the duck could have been taken at almost any time. So was this a session of play or training for the predator as it apparently was not a serious attempt at a kill?

Bob Fergie and Bob Sammells

AN INFLUX OF PARDALOTES
The Striated Pardalote is an infrequent and irregular visitor to Maylands, and only occurs here singly or in pairs at the best of times. But in mid August 2000 there was an influx of pardalotes here and they remained until mid October 2000, then they disappeared as suddenly as they came, in just a few days.

Their loud, persistent calling came from all directions around my residence and they only called their “chip chip” call, their other “pick wick” and “choo choo” calls not being heard at all. Even my wife Fely, who after 13 years of marriage can only just differentiate between a Magpie, a Magpie-lark and a Willie Wagtail, commented on their presence and the loudness of their calls.

Bob Fergie and Bob Sammells
I confess that I identified them as Striated Pardalotes from their calls only and not by sight, other than they were definitely pardalotes, so there is a possibility of error. But the only alternative is the Spotted Pardalote, a species I haven’t yet recorded at Maylands. I would be very interested to learn if anyone else saw these pardalotes, too, and if they sighted the birds and subsequently identified them to species.

Robert H Stranger

CURRAWONGS ON THE SWAN COASTAL PLAIN

In WABN 96, page 10, Mike Bamford referred to some recent sightings of Grey Currawongs on the Swan Coastal Plain. These sightings were interesting in light of the historical decline of this species in the Perth area. Some further observations have since become available.

John Barnett has been observing the currawong referred to by Mike Bamford at Victoria Park since about July 1999 and is it is still present (see photo). Although another resident has reported two birds, John has only ever seen one at a time. He hears it calling several times each day, mostly in the early morning and evening.

In late January this year Mike Bamford and I heard currawongs just south of the Dawesville channel and also just north (Cox Bay). This was in the same area we heard them at a similar time last year.

It would be interesting to know of any other records of currawongs on the Swan Coastal Plain.

Allan Burbidge

FREMANTLE’S NIGHT HERONS

A small breeding colony of Nankeen Night Herons (Nycticorax caledonicus) can be found in the centre of Fremantle.

A large Morton Bay Fig stands opposite the Esplanade Hotel. Its branches extend above Marine Terrace. Nankeen Night Herons can often be seen standing on these branches totally oblivious to the traffic and pedestrians passing underneath. They seem to prefer the Morton Bay Fig as their roost and if you look long enough you can find several scattered throughout the tree.

Marine Terrace is lined with tall Norfolk Pines, the aforementioned Morton Bay Fig and some smaller conifer species. The Nankeen Night Heron can be found breeding in the two conifer trees. There are several nests right in the canopy. The conifer tree opposite the Esplanade Hotel is the main breeding site, while the other smaller conifer tree further down Marine Terrace (opposite Essex Street) also holds a few nests.

Some observations are: eight birds seen roosting in trees on 26 August 1999, and six adults roosting in Morton Bay Fig and five in top branches of conifer tree on 20 February 2000.

Night herons have been using the trees at this location for some time. Tony Kirkby has told me that he remembers them being there at least 15 years ago, around 1985.

Other records show that the Nankeen Night Heron has had a much longer association with the City of Fremantle.

D L Serventy first mentions Fremantle’s night herons in “Birds of Western Australia”, in which he states that Nankeen Night Herons “may be seen roosting in companies of varying strength in the trees lining river banks or in swamps, but sometimes even in suburban street trees, as at Osborne Road, East Fremantle ...”.

Gordon Baker (personal communication) vividly recalls his experiences around this roost. He states: “The Nankeen Night Herons' roosting place was in East Fremantle in Osborne Road just near Canning Highway. As you leave the highway going into Osborne Road, there was a line of large Carob Bean trees just inside the large property on the corner. The herons used to roost in these trees for quite a few years. I think the birds used to fly over to the Swan River in the evening, as they seemed to always go to the northwards. As to the numbers of birds, I have the impression of perhaps 50 or more herons. The flock was quite large from my childhood memory of it. They used to roost at this site from at least 1938 to 1948.”

Visits were made to Osborne Road in February and September 2000. The property on the corner named “Wood Lawn” now has three huge pine trees on the boundary. There was no trace of night herons; however, there were four unoccupied nests in the top of the pine trees.

It is interesting to see that Nankeen Night Herons to this day continue their association with Fremantle by roosting and breeding within the city’s precinct. They have maintained this tradition for at least 60 years and, who knows, maybe even longer.

Marcus Singor

Reference:
PROBABLE LITTLE BUTTON-QUAIL AT BROKE INLET

We saw what we believe to be a Little Button-quail at Broke Inlet (34° 55' 59"S 116° 24' 04"E) on 19 January 2001.

A small quail or button-quail was flushed from an inter-dune area covered by sparse sedges and a lower layer of grasses on the SE margin of the inlet channel of Broke Inlet, 30 km west of Walpole on the south coast. We saw the bird separately and at different times on the same morning. The bird flew with a weak zigzag course for 60-100 m and provided a view of white flanks and light brown body and slightly darker wing tips.

SR identified the bird as a Little Button-quail upon sighting based on numerous observations of Little Button-quails in the Pilbara. Identification by MG was after discussion and checking several field guides immediately after the sighting. The small size, the white flanks and the light brown colour all suggested a Little Button-quail. The field guides all show the Little Button-quail to be present in the SW corner of WA whereas the Western Australian Museum Handbook and the first Atlas show it to be absent in this area. All sources note, however, that the Little Button-quail is highly nomadic.

Martin Gole and Steve Reynolds

BIRDS AT COCKLEBIDDY SEWAGE PONDS

On 18 January we passed through Cocklebiddy on our westward journey away from Eyre and drove to the sewage ponds. We practically always check Crystal Ponds for birds but the last few visits have been disappointing. This day was shaping up to be particularly hot again (50°C the previous day at Cocklebiddy) but it started well with a sighting of about 20 Budgerigars not far from the motel. Then two Brown Falcons appeared, one from the ponds. While watching their encounters with Black-faced Woodswallows a quail or button-quail suddenly moved on the grassy track ahead. With great patience in the steadily warming car, we waited. It appeared again and hid. Then it flew across our line of sight and dropped into the dry grass beyond. It was a wonderful view – a Little Button-quail offering a clear opportunity to make sure of its identity.

No sooner was that over when a flock of birds settled at the side of the water. We counted 40 Banded Lapwings, many more than we had ever seen before. Still outside the fence, we noticed a small waterbird swimming but were unable to identify it. So we braved the stifling heat and walked inside the fenced area for a closer look. No luck, but some of the lapwings returned, and with them a Whiskered Tern. It stayed for a long foray over the water while we continued our watching from our air-conditioned vehicle.

The previous Saturday morning we’d seen three Fork-tailed Swifts while at the Cocklebiddy bowser, so we’d been well treated by the birds for that trip.

Rod Smith and Joyce Hegney

NESTING WHITE-WINGED TRILLERS

In early January, I did a quick bird survey at the battery recycling yard at the Argyle diamond mine in the north east Kimberley of Western Australia. I found a female White-winged Triller sitting on a nest about four metres up in the fork of a eucalypt tree. There were no young visible. A male White-winged Triller came in and they swapped over. The male appeared to have something in its bill but it did not feed anything in the nest. The male then flew out about 15 seconds later into another tree about 10 metres away. I looked over there and there was another nest about 5 metres above the ground in the fork of the eucalypt. I went closer and saw three nestlings about three quarter size and very striated. When I got close the male and a female flew out of the tree and circled around, so I left the area and didn’t observe them for any longer to see how often the male went between the two nests. I assumed that it was a different female, as I didn’t observe where the first female went when she changed over with the male. In the 15-minute survey I saw one male and two or three others (presumably females) in the area.

Seven days later the nest with the three nestlings was empty. I assumed that the young fledged, as they were fairly large when I last saw them. The other nest had at least two very small beaks pointing up (I couldn’t see any more of the nestlings!) as the parents came in to feed them.

I haven’t heard of male White-winged Trillers having multiple breeding partners before, although you often see a group of five or six trillers together. Another possibility is that there were two pairs nesting in close proximity, but only one male was present at the times of observations. In four visits to this site, I have only ever seen one male at a time.

Frank O’Connor

Editors’ note: This report is interesting whether it relates to multiple breeding partners or two pairs nesting in rather close proximity. Have other readers noted such behaviour in nesting trillers?

LESSEER CRESTED TERN ON CHRISTMAS ISLAND

At around 3:00 pm on 22 November 2000 I was walking to Flying Fish Cove to do some snorkelling when my attention was caught by a medium-sized tern about 200 metres from me and over the bay. It was patrolling up and down the bay and doing the occasional dive after a fish. I did not have my binoculars with me but I could see a partial black cap and the size looked too large for a Fairy Tern and too small for a Crested or Caspian Tern.

I returned with my binoculars and 'scope and by now the bird was resting on a mooring buoy about 100 m from the nearest point to it that I could reach. It was alongside several Common Noddies (Anous stolidus) and appeared to be the same size as or even slightly smaller than those birds. Through the maximum magnification (60x) on the
Nikon 'scope I could see an orange bill and dark legs (legs not totally clear as it was overcast but the colour looked slightly reddish). The black cap was absent at the forehead/crown to well behind the eye, giving it a bald look. There was a suggestion of a crest at the nape of the neck. The bird continued to rest on the buoy and I observed it preening for ten minutes before it flew off to do some more fishing. I did not hear it call.

I am familiar with the two crested terns in Western Australia, and on the basis of the above observations, decided this one was a Lesser Crested Tern (Sterna bengalensis).

In the Birds of Christmas Island, by Barry Reville, the list only mentions Crested Tern (S. bergii). HANZAB (Vol. 3) shows the Lesser Crested Tern as occurring near most mainland coasts in the western, northern and eastern Indian Ocean, south to about Shark Bay.

Ray Downes

A raptor study on a string and a prayer
A talk to be given by Victor Hurley on Tuesday 20 March, Herdsman Lake Wildlife Centre at 7:00 pm
Victor is the national secretary, Australasian Raptor Association and national judge for the Banksia Environmental Awards. So come along, this should be an interesting presentation.

Crossword No 24

by Pam Agar

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CLUES
Across
1. Having two toes facing forwards and two backwards.
2. Bony projection on leg.
8. It's unpleasant in a large nesting colony.
9. Ring of skin surrounding the eye.
10. Position in which a bird carries it may aid identification.
11. An uninterrupted one helps if watching birds.
12. Often kept in captivity.
13. Roadside edges, subject of past surveys.
14. To search along shoreline with telescope.
15. Seldom seen.
16. Famous chorus.
20. WA hills, site of Mallee-fowl observations.
21. Breeding birds may show this behaviour.
22. To seek food among leaves, bark, etc.
23. An Osprey's nest is certain to be ... than a Silvereye's.
25. Moved to alternative location.

1. Centre for display and breeding of animals.
2. Could be useful when banding parrots.
3. To move suddenly.
4. Area controlled by a pair of birds.
7. Elusive marsh bird.
11. Often applies to colours during breeding.
12. To move from side to side.
14. Black and white bird of forests.
15. Employs.
18. A Magpie probably prefers its meal this way.
22. Avian form of reproduction.
23. Small bird of undergrowth.
26. Egret named for its size.
27. Area within state.
28. Most birds may be ... by their colouring.
29. Locality.

Notices

BIRDS AUSTRALIA MEMBERS DAY AND ANNUAL GENERAL MEETING
Saturday 26 May 2001
Birds Australia Members Day will be held in Perth this year. It is an opportunity for you to be briefed on the progress of conservation projects undertaken by Birds Australia, to hear something about other research being undertaken in Western Australia and to help celebrate the 100th birthday of RAOU. Details and registration forms
will be included in the next edition of Wingspan and can also be obtained from Perry House.

This is an opportunity for BAWA to ‘showcase’ its projects and activities, so please come along and support the Members Day. Presentations will include updates on the Atlas project in WA, as well as the Hooded Plover, Ground Parrot and Carnaby’s Black-Cockatoo projects, together with summaries of several current student projects.

BURSWOOD MEETING PLACE (STATE TENNIS CENTRE) ROAD CLOSURE
As of 10 February 2001, the Burswood Casino Access Road to the State Tennis Centre will be closed permanently. The ONLY access will be via the Graham Farmer Freeway — off the access road to the Belmont Racecourse and Burswood Golf Course.

CAMPOUT at KINGSTON REST JULY 2001
Kevin Coate is planning a trip to Kingston Rest from 11-18 July 2001. Organisations involved include the Kimberley Society, Birds Australia, The Naturalist Club and the Wildflower Society. Kingston Rest is a farming property 70 km south of Kununurra on the Great Northern Highway. The road is suitable for 2-wheel drives and caravans though 4-wheel drive is required around much of the property.

He plans to have available a fully catered Coate’s Tour, a tag-along option available at no cost, with others able to join with their own vehicles (self supporting) and a fly/ drive/ fly option from Kununurra including a local tour operator offering safari type camping. Register an expression of interest soon with Sue who will be sending out details of the itinerary in February. Cost at Kingston Rest $100 pp plus $50 camping fee.

Sue Abbotts a/h 94441607

REQUEST FOR ASSISTANCE – NOISY SCRUB-BIRD MONITORING
Over the last four years 53 Noisy Scrub-birds have been translocated to five sites in the Darling Range. Results to date have been very encouraging, but we really need assistance with monitoring, to determine how many birds are still present at each of the release sites.

This year monitoring of the Noisy Scrub-bird release sites in the Darling Range will take place between 25-29 April. Up to ten volunteers are needed to assist with the surveys of translocation sites. A reasonable degree of fitness is required. However most of the walking is on tracks. Chalet accommodation and food will be provided.

Further details are available from Sarah Comer at CALM Albany — telephone 9842 4500 (wk), 9841 3009 (ah), email sarahc@calm.wa.gov.au.

ATTENTION HILLS BIRDWATCHERS — I NEED YOUR EYES!
Do you watch birds in the Darling Range? If so, I would very much appreciate some help.

I have been running a capture-release, colour-banding study of the introduced Red-browed Finch (Firetail) Neochmia temporalis in Kalamunda for over a year now. My goal is to assess simple demographic features such as life-spans, sex-ratios, range, breeding sites and breeding success. Other commitments prevent me from devoting as much time as I would like to the project.

I’d like to get an idea of their current distribution so I’m very interested in hearing from anyone who has seen Red-browed Firetails in the hills in the last decade. I’ve seen them through Helena Valley, Piesse Brook, Kalamunda, Bickley and Carmel but I believe they range out to Mundaring, Lesmurdie, Pickering Brook, Karragullen and Roleystone.

Also, it would be quite exciting if anyone sees any of my colour-banded birds. They wear a metal band on their left tarsus and combination of either red or yellow with one of light green/light blue/black on the right tarsus. The bands are quite obvious. The birds spend a lot of their day feeding on the ground and make a high-pitched call that can be confused with some Silvereye calls. My main banding site is in Carmel so if anyone is planning a trip to the Bickley/Carmel area then please keep an eye out for the little guys.

If you have ANY information (no matter how insignificant it may seem), or would like to know more please do not hesitate to contact me via my e-mail (wesbancroft@hotmail.com) or on 9389 7939.

Thank you.

Wes Bancroft

One of the most widespread birds in Australia, the Tree Martin is abundant around many of Perth’s wetlands.

Drawing by Judy Blyth

Western Australian Bird Notes, vol 97 March 2001
BROOME BIRD OBSERVATORY

Return shorebird passage was well under way by mid August 2000, with up to 15 000 shorebirds on the beaches close to the observatory. The highest count for the northern end of the bay was c. 30 000 shorebirds, of which 12 000 were Bar-tailed Godwits. Other shorebird highlights included up to 54 Broad-billed Sandpipers most days on the observatory beach and an adult male Ruff at the sewage farm in early October. Of particular interest this year was the good run of colour flag sightings of birds banded elsewhere in Australia and the world, including a Black-tailed Godwit sporting double blue leg flags, which it picked up from a freshwater lake in Japan. This was one of only four Black-tailed Godwits ever leg flagged in Japan. A Korean banded bird was also noted recently in the bay.

A marked passage of seabirds started in October 2000 and lasted until roughly mid November. Lesser Noddies became a regular feature around the port and Gantheaume Point. Other highlights included Streaked Shearwater on a number of dates and Wilson’s Storm-Petrel. Pride of place must go to the Bulwer’s Petrel that turned up exhausted on Cable Beach and later died, despite the best attempts of the local rehabilitation team. It represents the first mainland record for Western Australia.

October and November 2000 were great birding months at the observatory last year with just about all of the interesting sites in the area being open to access due to low water levels. Yellow Chats were regular in the log from tours run by the observatory for that purpose. A Grey Falcon was seen by a lucky few on a number of occasions around this time, and the first Barn Swallows and Yellow Wagtails turned up during this period, too. The mangrove endemics seem to have recovered their numbers somewhat from the cyclone last year. Good numbers of Broad-billed Flycatchers, Mangrove Grey Fantails and Yellow White-eyes have been seen most days since about November last year and judging from the banding totals for Dusky Gerygone, they must have had a terrific breeding season.

Vast movements of Fork-tailed Swifts were associated with the cyclonic weather conditions in early December 2000. On one day alone a staggering 6000 were recorded moving east. With them came two very unusual swifts. Sadly, both were seen so briefly that positive identification will probably be impossible. What might have been Australia’s first Edible Nest Swiftlet and Silver-rumped Spinetail were tantalisingly brief views in atrocious weather conditions at the port on 8 December. Other rare visitors to the observatory, but of a far less dramatic nature, include Varied Lorikeet, with 18 seen last November and recently in January 58+ in one day, accompanied by 120+ Rainbow Lorikeets. Large numbers of lorikeets were also noted in other parts of the observatory recording area. Of local interest has been a Grey-headed Honeyeater, banded in early January and still around at the time of writing.

Bill Rutherford

EYRE BIRD OBSERVATORY

Since May last year an extraordinary number of wardens has taken charge of Eyre Bird Observatory while the search went on for more permanent staff. From early January, Carol and Derek have looked after it in fine style, coping well with the large number of tasks required. By the time of the publication of this issue it is expected that Carol and Derek will be able to continue their interrupted travel arrangements to WA before returning to NSW, and that a permanent couple will have been appointed.

Much-needed work was continued at Eyre in January, with more dune stabilisation (under the direction of George Agar) and George’s extended stay to assist with accounting procedures. The roof interior received a further spring cleaning with the removal of the equivalent of 80 buckets of sand and swallow droppings, and the kitchen received a good going-over as did the outside chairs, which look almost new again. The RFDS medical supplies were checked and re-ordered where necessary.

An attempt was made to install a large shadecloth against the verandah ceiling on the beach side of the house. This is necessary to reduce the perching and entry opportunities for the hundreds of swallows that roost in the roof every night. However we were beaten by strong winds and the urgency of other routines that interrupted the work. It still needs to be done.

Eyre Bird Observatory needs plenty of work done on it to bring it up to a respectable standard. To help this to be achieved the committee seeks assistance. If you have an opportunity to travel to Eyre for a stay of three or four days, and are reasonably fit and willing to work, please contact Rod Smith (9447 3804) for the opportunity to have a cheap holiday in a beautiful place. Eyre needs all the help it can get. Please help us to look after it.

Stop Press

New full-time wardens have just been appointed. They are Helen and Paul Evans, members of Birds Australia and enthusiastic naturalists. They will take over from Derek and Carol in mid-March. Welcome to Eyre, Helen and Paul!
NEERABUP NATIONAL PARK, 2 December 2000
Fourteen members met at the 10th Light Horse Heritage Trail to see what birds they could find in this area which has not been visited for several years. It was very still and quiet with only 16 birds being seen. A Grey Butcherbird and a beautiful male Mistletoebird were the best views we had in the area.

The group then decided to go on to Lake Joondalup where the birds were much more obliging. We were amused to see two Great Crested Grebes in full plumage waving their heads backwards and forwards and up and down displaying to each other. Out on the jetty we looked down and thought a big tortoise was swimming below us. However, it was a Musk Duck feeding along the bottom. There were lots of Sacred Kingfishers flying and perching on nearby trees, and two persistent Whistling Kites kept unsettling both the waterbirds and bushbirds. In all, 47 different species of birds were seen for the day.

Lyn Sellers

WEEKEND CAMPOUT, JULIMAR FOREST, 18–19 November 2000
Camped in the forest with Scarlet Robin families hopping around, and a well camouflaged Tawny Frogmouth lurking nearby — what a great way to spend a weekend. Les Harris organised and led the campout which also involved him in finding the toilet, digging the hole and getting covered in ticks. But it was all appreciated by the 20 people who attended. Fifty-two species were sighted including Crested Shrike-tits and a Square-tailed Kite.

This is an interesting area to visit because there are different habitats in the reserve. As it is so close to Perth, a day trip there would be worthwhile provided it were not too hot. We had lovely weather for the weekend.

Sue Mather

FLYNN ROAD, THE LAKES, 26 November 2000
Once more an excellent day was held at Flynn Road. Eighteen members and visitors from Canada and Japan attended. We thought we would do our spotting in reverse, and started the day by going to the end of Flynn Road first, where the trail bikes are usually seen, before the birds were disturbed. We were rewarded with good views of Scarlet Robins, Rufous Treecreepers and Dusky Woodswallows that seemed to be everywhere and as keen to be seen as we were to see them. The Brown Honeyeaters were on all the Grass Tree spikes busily drawing on the nectar.

One of the highlights of the day was the sighting of two Crested Shrike-tits sitting on a branch waiting for the fortunate group of birders to see. After lunch we were once more treated to a wonderful sight when we came across a juvenile Pallid Cuckoo sitting on a branch being fed by a beautiful male Golden Whistler that had to climb on the chick’s back to pop the food in the ever-open hungry mouth.

No Painted Button-quail were sighted, but plenty of platelet scratchings were seen, evidence that they were in the area.

The only dampener for the day was that the leader, Bryan Barrett, was not well enough to lead us on the walk. However, Les Harris very capably took over as leader.

Lyn Sellers

STAR SWAMP, 7 December 2000
A good turn-up of members and three visitors (total 16) was a pleasant surprise for this mid-week walk. The weather was fine, warm and windless, so ideal for birding.

The swamp itself had only a few common species with the highlight being an immature night heron.

However, the excitement started when two Australian Hobbies were seen soaring, swooping and exchanging food in mid air. Thanks to John Stuart we found the nest. But to our surprise we found later that the birds seemed to be using two nests. Not certain but we thought there were two adults and two juveniles. At one time a juvenile was seen standing in the lower nest while another bird seemed to be in an incubating position in a nest about a metre higher.

An hour could have been spent trying to work out what was going on.

About 100-200 metres down the track we saw a Nankeen Kestrel feeding a young bird. Red Wattlebirds were also feeding young.

We were surprised by the lack of small birds like the New Holland and White-cheeked Honeyeaters, also no Tree Martins or Welcome Swallows. We theorised that constant hunting by the hobbies had scared them away!

A very exciting and intriguing walk. Total species 32.

Tom Delaney

Reminder: Members’ Day
Birds Australia (national)
26 May 2001
Don’t forget Members’ Day and the Annual General Meeting are in Perth this year. Come along and meet BA members from other states as well as learn more about the wide range of BA activities.
WOODMAN POINT, 9 December 2000
A clear, blue sky and a pleasant sea breeze welcomed about 20 walkers to Woodman Point on the morning of Saturday 9 December.

The beach area rewarded us with sightings of many seabirds including Little Pied and Pied Cormorants as well as Crested, Fairy and Caspian Terns. There were several species of waders including dozens of scurrying Red-capped Plovers, a family of Ruddy Turnstones exhibiting the white bars under their wings as they soared in flight, a few Grey Plovers, a pair of Pied Oystercatchers, several Sanderlings and some Red-necked Stints. Some excellent sightings of three different raptors were made — a Nankeen Kestrel, a Swamp Harrier (which seemed to be out of its usual territory) and a Black-shouldered Kite that hovered so low over where we were standing that he might have had us in his sights!

After morning tea, we moved to the fenced CALM reserve that is rich in the history surrounding both World Wars. The sea breeze did not penetrate into this bush land and the birds seemed to be sheltering from the morning sun. Among the birds we saw were a pair of Red-capped Parrots, Rufous Whistlers, hearing their song several times, the elusive Western Gerygones, Grey Butcherbirds and a Goshawk.

In all, we saw 40 species, 22 on the beach and 18 in the bush. Thanks to Bryan and Sue for leading and for sharing their expertise with us all.

Molly Angus

AMARILLO POOL, BALDIVIS, 17 December 2000: Report 1
About 16 people led by Les Harris turned up at Amarillo on Sunday the 17th December. Once through the gate just after 9 o’clock, and along the limestone track, we parked cars in the big shed and elsewhere in the shade and prepared for the walk ahead. Led by our intrepid leader in a somewhat wayward fashion, we ambled our way towards the lake checking out the bushbirds as we went. Amongst the usual Australian Ringnecks, Brown Honeyeaters, Striated Pardalotes, Australian Ravens and Black-faced Cuckoo-shrikes, we picked up several thornbills, Fan-tailed Cuckoos, Crested Pigeon (just one), Grey Fantails, Splendid Fairy-wrens and Little Wattlebirds. Western Spinebills were common in amongst the woollybush. Raptors were the order of the day with Nankeen Kestrel, Brown Falcon, Whistling Kite (at least 6), Swamp Harrier and Brown Goshawk. And all this before we had reached the shores of the lake.

The lake, ‘Amarillo Pool’, was initially a bit of a letdown after the excitement of the bushbirds, but after some searching we found Darter, Australian Shelduck, Great Egret, Australian Pelican, White-faced Heron, Sacred Kingfisher and Yellow-billed Spoonbill, amongst others. We were finally greeted by some waders when someone spotted several small brown objects amongst the roots of a Melaleuca. These turned out to be Long-toed Stints, a first for myself and I think several others on the excursion. The Stints were then followed by quite a number of Black-fronted Dotterels around the muddy edge of the lake, then three or four Wood Sandpipers and several Greenshanks. Colin Davis informed us that he had also seen a single Common Sandpiper and a Red-necked Stint.

We headed back along the Serpentine River after some time at the lake seeking ever elusive waders, and came across several fairly large flocks of waterbirds. These included Black Swan, Great, Little Pied and Little Black Cormorants and Eurasian Coot. Ducks were the most numerous group, with Grey Teal and Pacific Black Duck being particularly common, but also a fair few Pink-eared Ducks, with just a few Australasian Shovelers and Musk Ducks, and a single Wood Duck.

Heading back finally (tummies rumbling) across the paddock towards the homestead we saw a Magpie at last, the first for the day. After lunch we made a further foray along the river, but without adding any new species until someone spotted a Shining Bronze-Cuckoo. We also managed to see a nest with a Darter sitting on it just near the house. Les went through the checklist and we ended up with a total of 65 species, making me think that it had been definitely worth it despite my sunburnt legs.

Steve Reynolds

AMARILLO POOL, 17 December 2000: Report 2
A group of 18 people gathered for what promised to be a very hot day. We made our way across the paddocks towards the lake, seeing good numbers of Sacred Kingfishers perched on exposed branches. There were some good bushbird sightings including a juvenile Fan-tailed Cuckoo and a Shining Bronze-Cuckoo. Six Western Spinebills were observed feeding in a Woollybush (Adenanthos sp), together with numerous Brown Honeyeaters.

At Amarillo Pool the water level was dropping, exposing some good areas of mud, and it looked promising for waders. We were soon rewarded with a sighting of two Long-toed Stints, their pale leg colour hard to discern when covered in mud, but longish necks and taller, more upright appearance distinguishing them from any likely contenders. There were also five Wood Sandpipers and numerous Black-fronted Dotterels amongst the Melaleucas. A Common Sandpiper was also seen by one of the group.

There were good numbers of Yellow-billed Spoonbills in the area, with up to 40 being recorded, along with most species of duck that one would expect from such an area, with the exception of Blue-billed Duck. We followed the river back for a well-earned lunch and a bird call that yielded 65 species.

Many thanks to Les Harris for leading an enjoyable trip.

Pam Agnew
CANNING RIVER REGIONAL PARK, WILSON, 31 December 2000

On the last day of the year it was surprising to have 24 members on this walk around the Canning River, including several who had recently joined us. However, everyone was very keen to see what could be seen and they were not disappointed. The morning was pleasantly cool and a lot of birds were heard calling, including a very large, noisy mixed flock of corellas that we think included both Western Long-billed and Little Corellas.

We walked across the Kent Street Weir and slowly made our way upstream, stopping whenever birds were seen. It was rewarding to find a pair of Mistletoebirds feeding in the mistletoe in a large casuarina tree. Everyone had good views as the birds were quite active and vocal. We walked as far as the first foot bridge over the river and then walked back to the car park. A pair of Sacred Kingfishers was seen as well as a Rainbow Bee-eater and a male Red-capped Parrot.

Altogether 45 species were counted and everyone enjoyed a relaxing walk after the busy festive season.

Margery Clegg

PELLICAN POINT, CRAWLEY, 6 January 2001

On what promised to be a rather warm summer’s morning, some 33 people met for a 7.30 am walk at Pelican Point. The early start proved to be good planning, as it ensured that the walk was completed before the temperature rose too high. At the meeting point, by the gazebo, the nearby trees were well populated with Red Wattlebirds and White-cheeked, Singing and Brown Honeyeaters as well as Striated Pardalotes. We had not walked far into the reserve before we encountered a family of Variegated Fairy-wrens that included a male in breeding plumage. This isolated group has existed happily in this small area for many years.

At the point were many Silver Gulls, a few pelicans and cormorants, but strangely, no terns. Also there were Red-capped Plovers and small flocks of Red-necked Stints, two of the latter wearing leg flags. We had many sightings of Rainbow Bee-eaters, either flying or perched on bare branches, which delighted the several visitors among us who had never seen them before, especially when they were able to view them through 'scopes.

As we continued walking close to the beach, a Buff-banded Rail was spotted some way ahead, foraging between the water line and scrub. The longer we watched, the more appeared, with most seeing two or three and one member counting four.

Our final count totalled 23 species. Although the list for the area contains many more species, this was about an average day’s total.

Many thanks to Charles Merrian who stood in for Max Bailey as the leader of this well attended walk.

Mavis Norgard

ASCOT WATERS, 17 January (formerly part of Grove Farm Reserve)

Fifteen members enjoyed the walk around Ascot Waters although birding is rather frustrating in that what looks like good birding areas turns out to be almost devoid of birds. What waterbirds there were occurred in very small numbers. It is not known whether the water is polluted, lacking in food or there is some other cause but compared with some other Perth wetlands it is almost dead.

Pleasant views of the city skyline and the Swan River made up for the short, dried grass cover of “The Mound”. “The Mound” is the huge mound of an old rubbish tip on a former swamp on the Swan River and now adjacent to the Ascot Waters housing development. The tip was closed 10-15 years ago. It is hoped “The Mound” will be turned into a pleasant park that will give more cover and more birds. The area is now surrounded on one side by an artificial canal and marina and the other by a thick band of rushes.

Watching for the re-appearance of the Spotted Crake on North’s farm, Elleker, during the Albany Campout.

Photo by Molly Angus
The latter area should contain the birds, but seems almost empty.

We circumnavigated "The Mound". Highlights were lovely views of a male Mistletoebird, numbers of bee-eaters and a flashing display of speed over the rushes by a hunting hobby. A total of 44 species were seen, including a wing of a Barn Owl — RIP.

We were pleased to welcome David Secomb, a visitor from Katanning, whose sharp eyes were first to pick up a number of species.

Tom Delaney

ALBANY CAMPOUT, January 2001

Thirty people from Perth and Katanning gathered at the Rotary Youth Camp south of Albany for what proved to be one of our most enjoyable and productive campouts. We were joined by about ten Albany birders lead by Viv McCormick. A most interesting and varied programme had been arranged for us. We were guided by notable birders such as Ray Garstone, Wayne Zadow and Tim Hunt. The campout got off to a great start with some members seeing a pair of Crested Shrike-tits in the karri trees in the camp ground.

On Friday we went to North’s farm at Elleker near Torbay Inlet and saw many waterbirds including Osprey and White-bellied Sea-Eagles as well as Yellow-billed Spoonbills, all the cormorants, Black Swans and many bushbirds. A second group went to Rushy Point on Princess Royal Harbour where there were flocks of waders including Great and Red Knots, Red-necked Stints, Marsh Sandpipers and a small group of Pacific Golden Plovers.

Saturday’s excursion took us to Morley Beach on Wilson’s Inlet and the mouth of the Hay River where there were Banded Stilts and avocets among many other birds. Emu-wrens were seen in heath land nearby. On Saturday night we were treated to an excellent slide show of Ray Garstone’s nesting Western Australian birds and Michael Neild’s colourful photos of birds of Kenya.

Lake Seppings on Sunday morning was a peaceful and bird rich area as was Lower King bridge. We went out to Little Beach on Two Peoples Bay but the Noisy Scrub-bird and Western Bristlebird eluded us.

Many people had to return to Perth on Monday but a small group went to Russell’s Farm near Mt Manypeaks and were rewarded with sightings of Wood Sandpipers on a lake on the property. On returning to Albany and stopping at one of the small ponds near the harbour a few lucky people saw a Buff-banded Rail with two chicks. These are a recent addition to the Albany Bird List. A total of 140 species was identified, which we think is a record for any campout.

We were all most appreciative of the lovely campsite set among karri trees with views over the Princess Royal Harbour. Our thanks to Viv McCormick and Liz and Charlie Davies for arranging this and also to Ray, Wayne and Tim for their leadership.

Wendy Napier

Magellan GPS 300

An ideal present either for someone special, or for yourself.

This popular basic GPS model is being phased out. Ideal for birdwatchers, atlissers and travellers, it is small, light and easy to use.

After the current stock is sold, this GPS model may no longer be available.

Buy Now - Only $280!!!

(price includes bonus car adapter and carry pouch)

Postage anywhere in the state: $10

Available from: Birds Australia WA office at Perry House, 71 Oceanic Drive, Floreat 6014.

Tel: 9383 7749. Open 9.30-12.30 Mon-Fri.

Wilson Inlet, near mouth of the Hay River, 27/01/01

Drawing by Pam Agar
Coming events

Important note re campouts
Members anticipating attending campouts must notify the BA Office of the number in their party and when they will arrive. With this information we will be able to make sure the group will be together and when to expect people.

Saturday—Monday 3–5 March — Campout at Leschenault Inlet, Australind
We will be based at the Leschenault Inlet Caravan Park, 2 Cathedral Avenue (Scenic Drive), approximately 10 km north of the Australind post office. The park has chalets and on-site vans as well as places for tents and campers.

Saturday 17 March — Half-day excursion, Wellard Wetlands, Baldivis
Meet at 8:00 am at the entrance to Wellard Wetlands on the northern side of Zigzag Road, 1 km from St Alban’s Road, Baldivis.

There should be plenty of bushbirds and waterbirds, and several species of raptors are often seen here.
Leader: Bryan Barrett

Sunday 25 March — Half-day excursion, Lake Joondalup
Meet at 8:00 am at Neil Hawkins Park, in the car park at the end of Boas Avenue. Lots of waterbirds and bushbirds can be seen on and around this large lake.
Leader: Tom Delaney

Burswood Meeting Place
(State Tennis Centre)
Road Closure
As of 10 February 2001, the Burswood Casino Access Road to the State Tennis Centre will be closed permanently. The ONLY access will be via the Graham Farmer Freeway — off the access road to the Belmont Racecourse and Burswood Golf Course.

Monday 26 March Meeting — State Tennis Centre, Burswood, 8:00 pm
Dr Ian McLean, consultant zoologist, will speak about the birds of Kings Park.

Sunday 1 April — Half-day excursion, Big Carine Lake
Meet at 8:00 am in the car park off Beach Road, Carine. Over 80 species of birds have been recorded in this area, including the three ibis, eight species of duck, Buff-banded Rail and several raptors. Don’t forget to bring your telescopes.
Leader: Clive Nealon

Thursday, 15 March — Mid-week Excursion, Bayswater Bird Sanctuary
Meet at 8.00 am at the Swan River end of King William Street, Bayswater. Parking is available in Slade Road, off King William Street.

This reserve was created in 1977 by Eric Singleton in conjunction with the Bayswater Council. It consists of waterways, paved paths (suitable for wheelchairs), a bird hide and an artificial island. Many waterbirds breed in the reserve, and we could see crakes and rails, as well as some raptors. The total species list is about 100.
Leader: Gordon Elliott
Friday—Monday 13–16 April — Easter campout, Stirling Range Retreat (Caravan Park)
Ideal weather conditions should prevail for this long weekend. The area has a long bird list and we will visit local lakes and different habitats.

The Retreat has a variety of accommodation, details of which are available from the BA Office. It is essential for you to book AS SOON AS POSSIBLE as Easter is a very busy period. Do not forget to advise the office of the number in your party.

Come equipped for some wading and cool weather.
Stirling Range Retreat Phone 9827 9229
Leader: Clive Napier

Saturday 21 April—Half-day excursion, Blackwall Reach, Bicton
Meet at 7:30 am at the junction of Kent Street and Blackwall Reach Parade. A new area to look for waders along the river and also for bushbirds.
Leader: Eric Pyatt

Saturday—Monday 2–4 June, Campout at Mount Gibson Station
The turnoff to Mt Gibson Station is 74 km north-east of Wubin along the Great Northern Highway heading for Paynes Find. The homestead is 27 km from the main road. Please ensure that you leave gates as you find them. Fill your fuel tank at Wubin. Bring warm clothes and sleeping gear as it gets cold inland at this time of the year.
Some accommodation is available in excellent units at the Emu Farm that is not far from the main camp area. Closer to the time we will know if there will be space available in the shearer's quarters and some beds can be arranged at the homestead.

Thursday 17 May—Mid-week walk at Ellis Brook Reserve, Gosnells
Meet at 8.30 am at the corner of Gosnells Road and Bygum Lane, Martin. This interesting site for bush birds close to Perth may have species not often seen in the metropolitan area.
Leader: Les Harris

Saturday—Sunday 19–20 May — Short weekend campout, Dumbleyung
The Blackwood Catchment Group have asked us to conduct a bird search in the Dongolocking area to assist with their work in revegetation and reducing salinity.

There are numerous lakes in the area including Lake Toolibin and several remnant bush areas that will be examined.

Dumbleyung Caravan Park has powered sites and a chalet with two bedrooms each with two beds. Phone the Shire Office to book on 9863 4012. Please advise the BA Office if you intend coming.

Leaders: Clive Napier and Ryan Taylor of the Blackwood Catchment Group

Saturday 26 May—Members Day and AGM —CSIRO Auditorium, Floreat, 9.00 am to 4.00 pm.
Details and registration forms will be included in the next edition of *Wingspan* and can also be obtained from Perry House. See also Notice in this issue of WABN.

Sunday 27 May—Half-day excursion, Lake Gwelup
Meet at 8:30 am in the car park at the corner of Stoneham Street and Huntriss Road (north of Karrinyup Road). Plenty of both waterbirds and bushbirds.
Leader: Bryan Barrett

Monday 28 May meeting — State Tennis Centre, Burswood, 8:00 pm
Perry de Rebeira, formerly of the CSIRO, will speak on "Changes in Bander Training — A World-view".

Saturday—Monday 2–4 June, Campout at Mount Gibson Station
Birding can be excellent with many of the dryland species such as quail-thrush, Ground Cuckoo-shrike and Major Mitchell’s Cockatoo being recorded. 65 species were recorded at the last campout two years ago.

Contact the Emu Farm on 9963 6519 for details and costs of accommodation.

Ring Clive Napier on 9332 7265 for information on alternate camping and accommodation.

Leader: Clive Napier

Sunday 10 June—Full-day excursion, Walyunga National Park
Meet at 8:30 am in the car park at the end of Walyunga Road (off Great Northern Hwy, Upper Swan, near Bungarah Pool). Please be advised that there is a park entrance fee.

The National Park lies along the Darling Scarp. The Avon River bounds one part of the planned walk, and there are some good stretches of Wandoo. We should see a good variety of birds.

Leader: Clive Nealon

Thursday 14 June—Mid-week walk, North Lake
Meet at the car park on Progress Drive at 8.30 am. Nearly 80 species of birds have been seen here.

Leader: Bryan Barrett

Saturday 16 June — Bickley Brook, Half-day walk
Meet at 8.30 am at the car park just past the children’s camp at the reservoir. Follow Maddington Rd and Hardinge Rd to reservoir.

Good prospects of seeing both Red-browed Finches and Red-eared Firetails, emu-wrens and a fair selection of other bushbirds.

Leader: John Stewart

Sunday 24 June—North Herdsman Lake
Meet at 8:30 am at the northern end of Herdsman Lake, off Jon Sanders Drive, in the car park of the Perth Pony Club. There should be lots of waterbirds to be seen here.

Leader: Claire Gerrish

Monday 25 June meeting — State Tennis Centre, Burswood, 8:00 pm
Speaker to be announced.

Saturday 30 June—Half-day excursion, North Mole, Fremantle, and Woodman Point
Meet at 8:30 am at the end of North Mole, near the lighthouse. We will look for seabirds here, and may go on to look at the birds at Woodman Point. Don’t forget your telescope.

Leader: Ian Standring

FOURTH CORELLA COUNT
Saturday 7 April 2001
Starting 3:30 pm

The first three counts, in June 1998, April 1999, and April 2000, gathered useful data about the spread and numbers of feral corellas around Perth. The number of Long-billed Corellas at Lake Joondalup, up from 12 to 20 last year, seems to have undergone another big jump and other populations may also be increasing. We need to continue to track distribution and numbers that will, among other things, strengthen the case for control of these pest species.

See WABN 86, June 1998 for background information and identification hints and WABN 87, (September 1998), 90 (June 1999) and 94 (June 2000) for reports on the first three corella surveys.

If you know of a place that you regularly or often see corellas, or would be happy to be assigned to an area we already know about, please take part in an organised count at as many places as possible throughout the metropolitan area on 7 April. Counting begins at 3:30 pm and ends when it gets too dark to identify corellas.

We will identify the species of all corellas seen, and count the number of each species, at each site at approximately the same time on the same day. Please record details of roosting sites, location and number of birds.

If you would like to take part in this survey please contact John Blyth
by phone
(work 9405 5100 – home 9381 6193),
facs 9306 1641
or email johnbl@calm.wa.gov.au

Monday 23 July meeting — State Tennis Centre, Burswood, 8:00 pm
Speaker to be announced.

Monday 27 August meeting — State Tennis Centre, Burswood, 8:00 pm
Simon Nevill of Falcon Tours will speak on “Dryandra Woodland Reserve” and “The Wheatbelt from a layman’s perspective”.

Western Australian Bird Notes, vol 97 March 2001
# Publications available through

**Birds Australia Western Australia Inc.**

Perry House, 71 Oceanic Dr, Floreat WA 6014  
Tel: (08) 9383 7749 Fax: (08) 9387 8412 Email: birdswa@starwon.com.au

Note: Postage extra.

<table>
<thead>
<tr>
<th>Publication</th>
<th>Author/Publisher</th>
<th>Price $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birdwatching — Perth &amp; Environs</td>
<td>RAOU WA Group</td>
<td>1.00</td>
</tr>
<tr>
<td>Australian Birds of Prey</td>
<td>CALM</td>
<td>5.50</td>
</tr>
<tr>
<td>How to attract birds to WA gardens</td>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td>Birding Sites Around Perth (2nd ed)</td>
<td>Van Delft/WA Group</td>
<td>15.00</td>
</tr>
<tr>
<td>Birdlife of Rottnest Island</td>
<td>Saunders &amp; de Rebeira</td>
<td>13.50</td>
</tr>
<tr>
<td>Birds of Broome — Annotated List</td>
<td>Collins</td>
<td>10.00</td>
</tr>
<tr>
<td>Birds of Queensland's Wet Tropics and Great Barrier Reef</td>
<td>Neilson</td>
<td>24.00</td>
</tr>
<tr>
<td>Check List of Birds of WA</td>
<td></td>
<td>6 for 1.00 OR each 20¢</td>
</tr>
<tr>
<td>Field Guide to Birds of Australia, new ed</td>
<td>Pizzey &amp; Knight</td>
<td>35.00</td>
</tr>
<tr>
<td>Field Guide to Australian Birds</td>
<td>Slater</td>
<td>30.00</td>
</tr>
<tr>
<td>Field Guide to Australian Birds</td>
<td>Morcombe</td>
<td>32.00</td>
</tr>
<tr>
<td>Index to WA Bird Notes</td>
<td></td>
<td>3.50</td>
</tr>
<tr>
<td>Out of the Bush</td>
<td>Breeden</td>
<td>2.00</td>
</tr>
<tr>
<td>Western Australian Bird Notes</td>
<td></td>
<td>per issue 3.50</td>
</tr>
<tr>
<td>Which bird of prey is that?</td>
<td>Beruldsen</td>
<td>12.00</td>
</tr>
<tr>
<td>Where to find birds in NE Queensland</td>
<td>Wieneke</td>
<td>15.00</td>
</tr>
</tbody>
</table>

---

Banded Stilts have been reported from coastal sites at Mandurah and Albany in this issue of WABN.  
Drawing by Judy Blyth

---

*Western Australian Bird Notes, vol 97 March 2001*
Chris Hassell & Adrian Boyle
Of Broome are NOW!!

TURNSTONE NATURE DISCOVERY

Running a regular full and half-day tour programme throughout the year, you will have the opportunity to share their enthusiasm and intimate knowledge of the birds of the Broome area.

Join Chris and Adrian for some exciting birdwatching experiences

♦ On the Bay
♦ In the pindan woodlands
♦ At the wetlands

Chris and Adrian are also available for private charters and have devised some excellent short itineraries out of Broome.

Contact them for more details:
Tel: (08) 9192 8585
E-mail: turnstone@wn.com.au
PO Box 3089, Broome, WA, 6725

We look forward to hearing from you.

---

Crossword Answers No 24

Across
1 zygodactyl, 5 spur, 8 odour, 9 orbital, 10 tail, 11 view, 13 finch, 17 verges, 19 scan, 20 rare, 21 dawn, 24 Wongan, 25 aggression, 30 glean, 31 bigger, 32 dates, 33 relocated

Down
1 zoo, 2 glove, 3 dart, 4 territory, 6 pelagic, 7 rail, 11 vivid, 12 wag, 14 currawong, 15 uses, 16 endangered, 18 raw, 22 eggs, 23 wren, 26 great, 27 shire, 28 aged, 29 area

SILENT GROVE COTTAGE
♦ Spacious, self-contained
  2 bedroom cottage — everything supplied
♦ 2 hectare bushland fringing Princess Royal Harbour
♦ Over 30 birds visit including Red-eared Firetail, Red-capped Parrot, Western Spinebill, Golden Whistler
♦ Adjacent to National Park, walk trails
♦ Adult accommodation, private and secluded
♦ Discount for members

Contact Merrilyn & Ron Dom
Silent Grove Cottage
PO Box 5226 (612 Frenchman’s Bay Rd)
Albany WA 6332

Tel: (08) 9844 4950
Mobile: 0438 844 950
Email: merron@iinet.net.au

Printed by Executive Press: Tel (08) 9275 8044