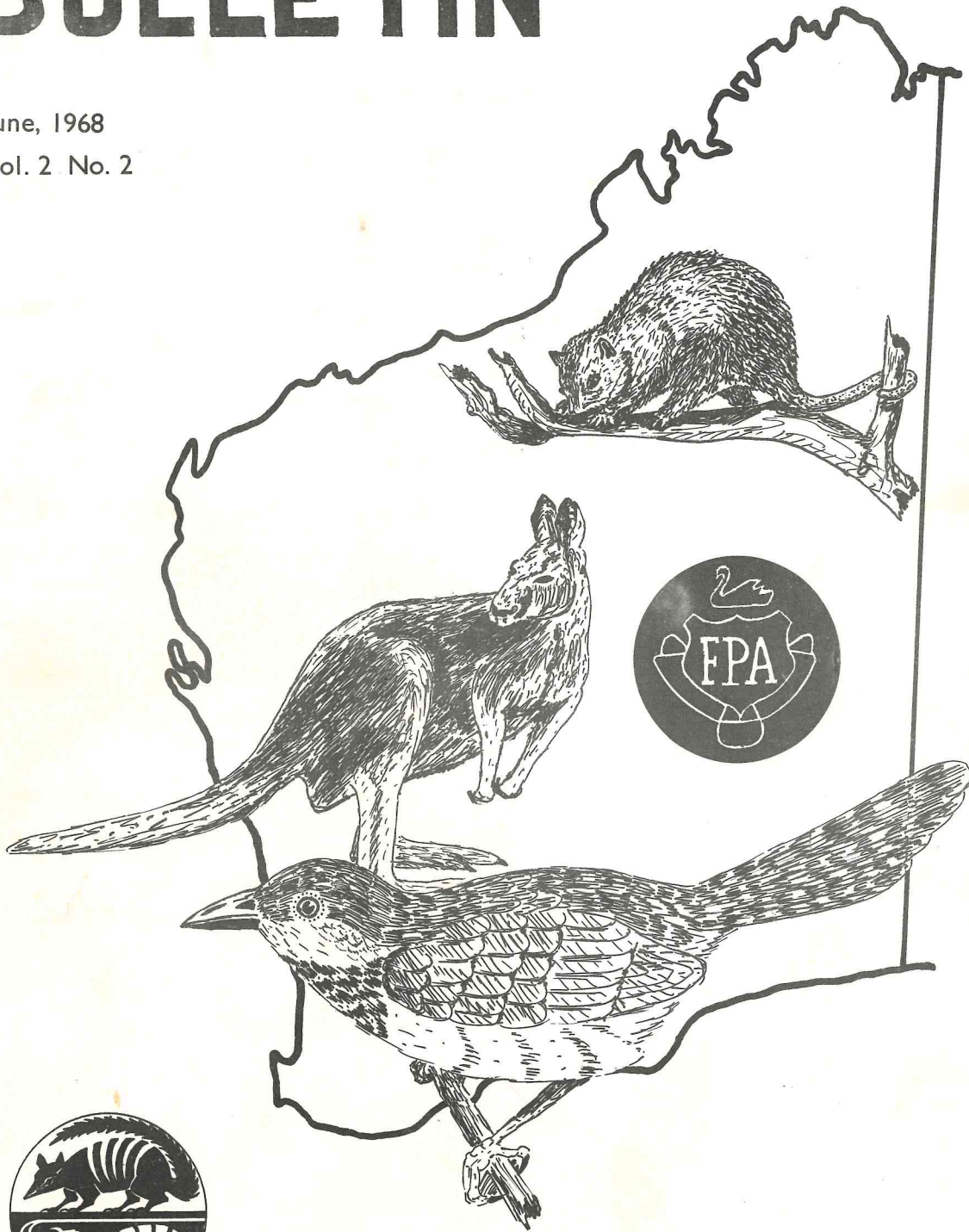


# FAUNA BULLETIN

June, 1968  
Vol. 2 No. 2



**DEPARTMENT OF FISHERIES AND FAUNA**  
108 Adelaide Terrace, Perth, Western Australia

MR. H. B. SHUGG APPOINTED TO  
CHIEF WARDEN OF FAUNA



Mr. H. B. Shugg.

During the last session of Parliament amendments to existing fauna legislation provided, among other things, that the position of Chief Warden of Fauna be separate from that of the Director of Fisheries and Fauna. It made provision for the appointment of the Western Australian Wild Life Authority with the Director as its Chairman and the Chief Warden of Fauna as its Deputy Chairman and Chief Executive Officer.

To meet these requirements the Public Service Commissioner has reclassified Mr. H.B. Shugg's item of Fauna Officer to that of Chief Warden of Fauna, as from March 1, 1968.

Mr. Shugg was born in 1919 and educated at Perth Boys' High School. His first appointment to the Public Service was as a messenger in the Correspondence Despatch Office in 1934. Subsequently he was appointed in turn to the Farmers' Debts Adjustment Branch of the Lands Department, to the Chief Secretary's Department and, before taking up his position as Fauna Officer with the Department of Fisheries and Fauna, to the Department of Native Welfare. During the war years he served with medical units in Australia and overseas in the South-west Pacific. On his return, he attended a C.R.T.S. course in Public Administration at the University of Western Australia and then completed study for the Diploma in Public Administration at the Perth Technical College.

Mr. Shugg is a foundation and life member of the Tree Society, and a member of the Royal Society, the Australian and New Zealand Association for the Advancement of Science, the Australian Conservation Foundation and natural history organizations. He is also a member of Rostrum.

In 1966 Mr. Shugg was sent overseas on a study tour of conservation agencies in Britain. The study was made to obtain information as a guide to future conservation measures in Western Australia. Specific areas of investigation included the organization, functions and staffing of the Nature Conservancy and its inter-relationships with other statutory, professional and semi-official organizations operating in the conservational sphere in Britain.

While overseas he represented the Department at the IX Congress of the International Union of the Conservation of Nature and Natural Resources held at Luzern, Switzerland.

NEWS IN BRIEF

Executive Council has approved the setting apart of Nelson Locations 12559 and 12561 (in the Shire of Cranbrook) as Reserve Nos. 28988 and 28989 respectively, for the purpose of "Conservation of Flora and Fauna". Notice to this effect was published in the Government Gazette of March 1, 1968.

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During the last quarter 34 new appointments to the position of Honorary Warden of Fauna were made effective. Of these 20 were for the North-West Fauna District.

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We congratulate Mr. F.H. Jolliffe, Honorary Warden and President of the Busselton Shire Council, who was awarded the M.B.E. in the last honours list, for services to the dairy industry.

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On June 6, while travelling past Jogonalong Billabong, Mr. V.T. Nelson, the Department's Warden stationed at Wyndham, sighted 19 Green Pigmy Geese and 6 Burdekin Ducks. This was the biggest concentration of Green Pigmy Geese seen by Mr. Nelson for many years and was a very encouraging sight due to their rarity. Like many others, this species is said to congregate as surface waters dry up.

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A SUMMARY OF THE QUARTERLY REPORTS  
SUBMITTED BY  
HONORARY WARDENS

Fauna District	No. of Wardens	No. of Reports Received
1. Kimberley	24	5
2. North-West	37	2
3. Eastern	24	4
4. Murchison	13	5
5. Victoria	24	6
6. North Coastal	21	11
7. Northern Wheatbelt	52	12
8. Murray	63	15
9. Central Wheatbelt	65	8
10. Eucla	15	7
11. South-West	61	23
12. Great Southern	30	13
13. Metropolitan	167	26
TOTAL	596	137



Kimberley

Mr. R.A. Paterson, of Wyndham, reports the Wild Turkey as being plentiful in the more remote areas, but the Emu as practically unseen.

Most species of wallaby and kangaroo found in the Kimberleys are quite numerous. So reports Mr. L.G. Hill, of Hall's Creek.

Whilst on marsupials, Mr. J.H. Graysmark, of Broome, reports sighting several very small species of kangaroo or wallaby near Cable Beach and Light-House Point. Their height is about 8-9 inches, with dark grey fur. After conferring with Mr. R. Baird, the Department's Pearling Superintendent stationed at Broome, Mr. Graysmark is now of the opinion that the animal he has seen is the Dalgite or Rabbit-eared Bandicoot, also known as the Bilby. There has been a small colony in the Cable Beach area for quite some time, and positive identification has been made of a live animal which was brought to Mr. Baird and then released.

Reports were received from :

J.H. Graysmark - Broome  
R.A. Paterson - Wyndham  
J. Stuart - Derby

L.G. Hill - Hall's Creek  
Father J. McGuire - Balgo Mission

North West

Mr. M.J. McGrath, of Onslow reports sighting nine Wild Turkeys during the month of March. This was after the summer rains had ended.

Mr. J.K. Murdoch, of Exmouth, commented in particular on the decrease in number of turtles on the North West Cape over the last three years. He said that in 1964 and 1965 sightings were plentiful and turtles could be seen in fair numbers on the western shores of the Cape. In more recent times the number has decreased to the extent that sightings are comparatively few.

Mr. Murdoch also regaled us with an entertaining account of an incident that took place at a cricket match some weeks ago. While two local teams were playing, a pelican circled the field and then landed on the boundary. It became so interested in the match that it approached to short leg and later to silly point. In the interests of safety it was driven off, but refused to fly. It walked short distances and then returned to its place on the field. It stayed until the fielding side had routed the other team. Then, appearing satisfied, took off in a southerly direction. The fielding side, having as yet not named the club, held an on the spot meeting and decided the name should be Pelican. It was no bird of ill omen for the Pelican Club won the local pennant this year.

Reports from :

M.J.L. McGrath - Onslow

J.K. Murdoch - Exmouth

### Eastern

The Rev. R. Stewart, of Kalgoorlie, finds the Wild Turkey plentiful. He says that he has seen more during the last quarter than in the previous 18 years.

Two Wild Turkeys were reported by Mr. H.A. King, of Menzies, as being within one mile of his Homestead.

Mr. C.N. Collard, of Leonora, says that during a recent trip he found marked vegetational growth in the country east of Laverton. This was the result of the good rains experienced last summer. Observations made included an increase in the number of kangaroos and emus, as well as several wild turkeys.

Reports from :

Rev. R. Stewart - Kalgoorlie

H.A. King - Menzies

C.N. Collard - Leonora

H.L. Musk - Coolgardie

### Murchison

The hunting of the Red Kangaroos for pet food appears to be keeping them under reasonable control, reports Mr. H.H. Lee-Steere, of Meekatharra. He does not wish to see these animals exterminated but considers that this is not at all likely as the shooters do not take the medium and small-sized kangaroos.

The recent excellent rains in the Cue district have been followed by a very pleasing influx of birds, writes Mr. L.R. Anderson. Good numbers of small birds, including wrens, are evident in the Weld Range north-west of Cue.

Mr. Anderson also described a bird that could be, from the details submitted, the Crested Bellbird. This bird according to published information, is distributed pretty generally throughout the northern half of the State. Until recently, the Crested Bellbird was not usually found in the South-West corner and south and west of Mogumber and the Great Southern railway. However, the species appears now to be penetrating into the northern and eastern parts of the South-West block of forest country and honorary wardens might watch out for it.

Serventy and Whittell in their Handbook "Birds of Western Australia" describe it as follows: "Upper parts brown, the head being black with an erect crest. The wings and tail are darker and there is a chestnut shade on the rump. The lores and chin are white, chest black and abdomen white. The female has practically no black in the plumage. The chest is brown and there is no white around the head". Writing of its call, these authors say: "The celebrated ventriloquial call, which consists of two slow notes followed by three quicker ones is well syllabised by the bird's aboriginal onomatopoeic names such as 'pan-pan-panella'. These notes sound deceptively like a distant cattle bell..."

Similar views on the excellent season for birdlife, as a result of the good rains experienced, were expressed by Mr. V.G.P. Burt, of Meekatharra. He says it is not uncommon to see 3 or 4 Wild Turkeys at a time. Just before the rains fell last December, a great many plovers were evident. They were the first seen in any number during the past two years.

Until the end of March of this year, very little rain has fallen in the Sandstone area and the country in the vicinity is extremely dry, according to Mr. W.E. Lefroy.

Reports from:

D.B. Ross	- Sandstone	W.E. Lefroy	- Sandstone
V.G.P. Burt	- Meekatharra	L.R. Anderson	- Cue
H.H. Lee-Steere	- Meekatharra.		

Victoria

"The Wedge-tailed Eagle does more good than harm in my area", writes Mr. N.C. Summers, from the southern portion of the Irwin Shire.

Mr. J. Murray, of Mullewa, indicates in his report for the quarter that a farmer south of Mullewa may have seen the Ground Parrot on his property as well as a Numbat or Banded Ant-eater. He says that this report is still being investigated and is yet unconfirmed. The particular area known as the Coal Seam is very rugged and very few people have traversed it. Mr. Murray said it was only recently that he found fossils of shell fish in the coal seam which were estimated to be one hundred million years old.

Another report on the Wedge-tailed Eagle comes from Mr. R.A.C. Glass, of Kalbarri, who says that experienced stockmen are of the opinion that it does more good than harm. It is also locally agreed he says, that wild pigs (which are plentiful in the Murchison River area) kill more lambs and disable more sheep, than foxes.

Three Wild Turkeys were seen during the last quarter by Mr. R.C. Salkilld of Three Springs.

Reports from:

L. Vinci	- Perenjori	J. McLaughlin	- Abrolhos Islands
N.C. Summers	- Irwin	J. Murray	- Mullewa
R.A.C. Glass	- Kalbarri	R.C. Salkilld	- Three Springs.

North Coastal

Mr. N.B. Russell, of Chittering, says that a large group of Black-faced Cuckoo-Shrikes have been around the vines this year.

This is one of the birds which is common all over the State and in a wide variety of country. Serventy and Whittell say that no migratory movements have been detected in this State, but there appears to be a strong tendency to flocking in mid and late summer.

Emus are still a menace and are present in parties up to 30 birds, so reports Mr. J.F. Roe, of Dandaragan.

Mr. J.J. Rome, of Chittering, claims that 28 parrots "completely destroyed 3 acres of watermelons".

Five White Ibis were seen on swamps south of Nammin by Mr. H.J. Horton. Positive identification was made as the birds could be approached within 30 feet.

Mr. A.F. Joyce, of Moora, had a pleasant visit from a Pelican. The bird landed on a dam and after a few hours' rest proceeded on its journey.

Four Wild Turkeys have been seen by Mr. C. Wedge, on Gingin, since last December.

The Red-tailed Black Cockatoo, according to Serventy and Whittell's handbook, ranges in its distribution throughout the State, but is now rare in the South-West, its most southern headquarters at present being the Midlands and Victoria Plains districts. Reports by Honorary Wardens from North Coastal and Victoria districts, are in general agreement that this bird is rather rare. It is all the more surprising, therefore, that we should receive a complaint from the Dalwallinu district of their causing damage to trees there. The complaint will be investigated.

Although there appeared to be fairly large numbers of wild ducks in the Nammin area, very small bags were obtained by shooters, reported Mr. A.R. Harris. He thought that this was due to the large water areas in the lakes and swamps in the surrounding country which offered the waterfowl plenty of refuge.

## Reports from:

A.E. Cooper	- Wannamel	T.C. Kilvington	- Gingin
K.F. Henneman	- Moora	G. Meadows	- Lancelin
C. Wedge	- Gingin	A.F. Joyce	- Moora
H.J. Horton	- Gingin	J.J. Rome	- Chittering
J.F. Roe	- Dandaragan	N.B. Russell	- Chittering
A.R. Harris	- Dandaragan		

Northern Wheatbelt

Mr. M. Prior, of Kalannie, sighted five Mallée Hens during the last quarter as well as two Dunnarts who made their home under a stone.

The Long-billed Corella is reaching such alarming numbers at Dalwallinu that householders are complaining, so reports Mr. R.A. Young.

Mr. B. Dickens, of Dalwallinu, writes that no Wild Turkey has been sighted for years by him in the Pithara district. They are also unseen by Mr. G.H. Evans, of Dowerin.

Mr. C.H. Potts, of Bencubbin, considers that a move should be made to protect the Wedge-tailed Eagle. During all his years of farming he has seen many nests and never was there a sign of lamb remains at the nests, but always an abundance of rabbit bones. A similar view was also expressed by Mr. C. Hind, of Merredin. (The declaration of this bird as "vermin" is being reviewed at the moment by the Agriculture Protection Board).

Kangaroos, whether the Red or the Grey, are now a very rare species in the Goomalling area, so reports Mr. F.E. Pryor, and most varieties of waterfowl are present, says Mr. L.J. Beard, of Cunderdin. He adds that an early breeding season in the area is evident. These summer rains have also caused the rabbit to breed earlier than normal in the Dalwallinu area, according to Mr. W.N. Carlhausen.

## Reports from:

M. Prior	-	Kalannie	R.A. Young	-	Dalwallinu
B. Dickens	-	Dalwallinu	G.F. Evans	-	Dowerin
C.H. Potts	-	Bencubbin	O.V. Cail	-	Kalannie
E. Hind	-	Merredin	F.E. Pryor	-	Goomalling
W.N. Carlhausen	-	Dalwallinu	M. Mills	-	Merredin
F.G. Myers	-	Dalwallinu	L.J. Beard	-	Cunderdin

Murray

Mr. J.F. Armitage, of Waroona, says that a large eagle was sighted by him, and that it appeared to be different from the Wedge-tailed Eagle. From the description given it would appear that the bird might have been a Swamp Harrier. A similar bird was reported upon by Mr. H.W. Norris, of Kojonup, in the previous issue of this bulletin.

There have been quite a few sightings of the Western Native Cat in the Collie area, according to Mr. I.R. Milroy.

Mr. A.R. Roche and Mr. R.L. Brown, both of Collie, report the Wedge-tailed Eagle as a rare sight in their district. Most other wardens who



reported on this bird from the Murray District also claim that the bird is practically unseen.

The increasing number of possums killed as a result of vehicle traffic, tallies with reports that this animal appears to be on the increase. Mr. G.A. Stewart, of Collie, wondered whether the mild summer made them more than usually active.

One honorary warden considers that most species of birds are becoming more accustomed to the changing environment brought about mainly by increased agricultural activities and a compensating decrease in shooting. Mr. F. Baldisserri, of Collie, in expressing this view, says that even the crow remains at the road side to watch the world roll by, whereas not so long ago, the crow could only be seen from a distance.

Mr. F.C. Edmondson, of Mandurah, says that Lake Clifton has been almost denuded of all kinds of bird life. He claims that this is not due to the early rains, but due to power boats racing up and down the lake. He says that there are reports that some shooting from boats is carried out. He suggested that boats be prohibited from using the lake and that the whole lake be proclaimed a reserve. The Department has notified the Harbour and Light Department of its belief that the northern part of Lake Clifton is a very important wildlife area and that we would not be in favour of ski-ing there. On the other hand, Mr. J.G. Palmer, of Yarloop, reports that most shooters seem to be obeying the law and there have been no complaints from local farmers. Generally speaking this was the opinion expressed by a considerable number of Wardens throughout the South-West.

Reports from:

J. Marshall	- Collie	P.B. Matthews	- York
E. Teede	- Bunbury	A. Caldwell	- Wandering
V.L. Cardon	- Murray	H.E. Carrotts	- Boddington
J.G. Palmer	- Yarloop	F.C. Edmondson	- Mandurah
A. Toussaint	- Mandurah	F. Baldisserri	- Collie
G.A. Stewart	- Collie	A.R. Roche	- Collie
R.L. Brown	- Collie	I.R. Milroy	- Collie
J.F. Armitage	- Waroona		

Central Wheatbelt

Mr. V. Haythornthwaite, of Quairading, says that quite a few Dunnarts can be seen, mainly at night. Animals rare in his area include the Emu, Wedge-tailed Eagle, Wild Turkey and the Red-tailed Black Cockatoo.

Two Wedge-tailed Eagles nest every year on the property of Mr. J.D. McLean, of Beverley. It takes the young about three months to fly from the time hatching begins. He considers that this bird should be protected in his region.

Mr. S.R. Stanes, of Pingelly, expresses a similar opinion. He also says that he has observed them very closely over a period of years and has seen only one lamb taken by this eagle.

Waterfowl generally were rather rare in the Corrigin-Kulin area during the last quarter according to a report from Mr. D.M. Mathews.

A pair of Mallee Fowl was seen by Mr. D. Bradford, of Narrogin. These were the first sighted by him in three years.

Ringneck Parrots and Galahs seem to be very plentiful through the Pingelly district, and Mr. G.W. Curtis, of Pingelly, claims that they are still on the increase. The main offence committed by them, according to him, appears to be the ringbarking of ornamental trees.

Mr. J. Trott, of Corrigin says, that he has never sighted the Red-tailed Black Cockatoo during the 40 years he has been in the district. (See earlier comments on its distribution).

Reports from:

J. Trott	-	Corrigin	S.R. Stanes	-	Pingelly
G.W. Curtis	-	Pingelly	J.D. McLean	-	Beverley
D. Bradford	-	Narrogin	H.G. Hall	-	Dangin
D.M. Mathews	-	Corrigin	V. Haythornthwaite	-	Quairading

Eucla

Mr. R.M. Polkinghorne, of Esperance, reported a number of interesting observations, these included, seven Wild Turkeys some 34 miles east of Esperance, Cape Barren Geese on the shores of Duke of Orleans Bay and the rarity of the Wedge-tailed Eagle.

Two Cape Barren Geese were sighted on two separate occasions in the Cape Arid area by Mr. B.W. Taylor, of Eucla.

Mr. A.G. Powell, of Jerramongup, says that the Tammar is now very rare in his area. This marsupial once ranged from about Geraldton to Hopetoun and is still found in the Abrolhos Islands. It is now confined to isolated pockets of suitable habitat.

All species of wild ducks were less numerous this season than in previous years, reports Mr. R. Douglas, of Esperance. A similar opinion was expressed by Mr. W.M. Scott, also of Esperance. He considers that less surface water is available as land is cleared and prepared for agricultural purposes.

## Reports from:

A.R. Wolfenden	- Ravensthorpe	W.M. Scott	- Esperance
R. Douglas	- Esperance	A.G. Powell	- Jerramongup
K.J. Guest	- Esperance	B.W. Taylor	- Eucla
R.M. Polkinghorne	- Esperance		

South West

Some birds are increasing in number in the Kent River area according to Mr. R. Loveridge, of Denmark. These include the Bronzewing Pigeon, Squeaker and Emu. On the other hand, Mr. J.D. Hettner, of Kojonup, reports Bronzewing Pigeons as well as Quail, Emus, Wedge-tailed Eagles, White-tailed and also Red-tailed Black Cockatoos, wild ducks generally, and Grey Kangaroos are rare in his area.

Mr. F. Connor, from the Upper Blackwood area, includes in his observations for the last quarter Tammar, Quokka, a few Dunnarts, also the Numbat, plenty of Ringtail Possums, Kangaroo-rats and a number of Native Cats.

Mr. H.A. Parker, of Busselton, records as unseen the Emu and the Wedge-tailed Eagle, whereas Mr. A.J. Ewart, of Balingup, records Emus in pest proportions and ~~the~~ Wedge-tailed Eagle as plentiful. It is interesting to note that the distance between these two centres is only about 40 miles as the crow flies.

From the Manjimup area, Mr. A.D. Jones says that Tammar and Quokka appear to be on the increase. Occasional sightings of the Honey and the Pigmy Possum, the Wambenger, the Numbat and the Water-rat are made, while Ringtail Possums and Bandicoots are quite common and sightings are made regularly by him.

"The Grey Kangaroo and the Wallaby seem to be falling victims to motor traffic at an increasing rate", writes Mr. D.R. Honey, of West Arthur.

The biggest flock of White Egrets reported in years was seen by Mr. P.V. Brilliant, of Boyanup. The birds estimated to number about 500, were sighted on a creek in the Wonnerup Estuary. The White Egret nests in colonies and occurs all over the State in suitable areas. Serventy and Whittell in their handbook "Birds of Western Australia", state that a small colony was discovered on the coastal plain south of Bunbury in 1939. This had increased to nearly 100 pairs in 1967.

Mr. L.T. Knapp, of Upper Blackwood, says that the Wallaby seems to be on the increase in his area.

Mr. G. Blythe, of Balingup claims that the Grey Kangaroo will soon be rare in the South-West.

A Wambenger was recently seen in the Boyup Brook area, so reports Mr. F.A. Gifford. He says that the animal was caught by a bull-dozer driver and then released.

A number of wardens report considerable damage to fruit trees by the Ringneck Parrot, the King Parrot and by the White-tailed Black Cockatoo. They included Mr. H.J. Runkorf, of Margaret River, Mr. A.R. Kelly, of Manjimup, and Mr. W.G. Pearce, of Plantagenet.

Mr. A.C. Corker, of Upper Blackwood also suggested that the Wedge-tailed Eagle be removed from the list declaring it vermin, as they do very little damage. He also states that there are only a few of these birds left.

Black Cockatoos with yellow tails were seen in the Jingalup and Frankland district towards the end of last January by Mr. H.W. Norris, of Jingalup. These would have been juveniles of the Red-tailed bird as the true yellow tailed does not occur in this State. It takes the Red-tail nearly four years to reach full adult plumage.

Due to the early summer rains and the heavy rains experienced in March, numerous reports were made by Honorary Wardens of waterfowl pairing off for breeding.

Reports from:

R. Loveridge	- Denmark	J.D. Hettner	- Kojonup
F. Connor	- Upper Blackwood	H.A. Parker	- Busselton
A.D. Jones	- Manjimup	A.J. Ewart	- Balingup
P.V. Brilliant	- Boyanup	D.R. Honey	- West Arthur
G. Blythe	- Balingup	L.T. Knapp	- Upper Blackwood
H.J. Runkorf	- Margaret River	F.A. Gifford	- Boyup Brook
		A.R. Kelly	- Manjimup
		W.G. Pearce	- Plantagenet
L.G. Wilkinson	- Busselton	S.G. Gardiner	- Dardanup
W.H. Pinninger	- Denmark	A.V. Corker	- Upper Blackwood
K. Rooney	- Manjimup	H.W. Norris	- Jingalup
J.R. Schinzig	- West Arthur	C. Mitchell	- Cranbrook
		F.A. Lilford	- Peaceful Bay

### Great Southern

The clearing of big areas of mallee scrub is threatening the survival of the Tamar in parts of the Tambellup area. This view was expressed by Mr. P.E. Newing, who says that big areas would have to be set aside as reserves to assure their survival.

After the rains which were experienced during February, most wild ducks particularly the Grey Teal, moved away from the district, so says Mr. T. Catling, of Woodanilling. He also reports large numbers of Blue-winged Shovelers being present in the Lake Dumbleyung area.

A considerable number of wardens, including Mr. J.N. Berger, of Katanning, consider that the reaction by most duck shooters to the new opening date for the duck shooting season was very pleasing indeed. Many wardens were of the opinion that it achieved the aim to conserve waterfowl. One warden reported the suggestion made last year, that there should be a complete closure for one season. Other wardens expressed alarm at the increased water skiing and speedboat activities on lakes generally regarded as waterfowl habitat.

Mr. I.J. Allam, of Albany, said that there were fewer Pelicans on Princess Royal Harbour this year. The most present at any one time was 19, and only one group of 7 stayed for any lengthy period. On the otherhand, he said, there seemed to be increase in the number of Black Ducks present, 327 birds being counted on one occasion.

Mr. A.R. Jury, of Gnowangerup, reports the Wild Turkey as being rather rare in his area. He also found the wild duck population less plentiful than previous years.

Recent sightings made by Mr. W.J. Packard in the lakes and swamps in the Katanning area included the White Ibis.

The Wedge-tailed Eagle is considered to be rare in the opinion of Mr. L. W. Bell, of Wagin, Mr. L.C. Luff, of Katanning, and Mr. B. E. Lange, of Albany. Mr. Bell, also commented on an abundance of insects, of a type normally found in lake country, during last December, January and February. These insects appeared to remain in the foliage of the trees and bushes during the day and became active in the evening. We would like to know what these were.

Mr. N.A. Beeck, of Katanning, comments on the abundance of waterfowl present on the lake system east of Katanning. Most species are plentiful, with Black Swans being especially so.



During a recent patrol along the Coblinine River, Mr. A.J. Bertram, of Dumbleyung, observed amongst other birds, about 100 Musk Ducks, about 1000 Coots, 3 Crested Grebes and 70 Little Grebes.

Reports from:

J.N. Berger	-	Katanning	L.W. Bell	-	Wagin
T. Catling	-	Woodanilling	N.A. Beeck	-	Katanning
P.E. Newing	-	Tambellup	A.J. Bertram	-	Dumbleyung
I.J. Allam	-	Albany	P.S. Dawson	-	Dumbleyung
A.R. Jury	-	Gnowangerup	E. Simmons	-	Albany
L.C. Luff	-	Katanning	B.E. Lange	-	Albany
W.J. Packard	-	Katanning			

Metropolitan

Mr. J.H. Turner, of Bassendean, in reporting observations made in the vicinity of Lake Joondalup, records as unseen the Wild Turkey, the Wedge-tailed Black Cockatoo is becoming scarce.

Mr. W.A. Crowle, of Perth, says that he found the White-tailed Black Cockatoo quite common in the Augusta-Margaret River district. Large flocks of these birds were also noted by Mr. C.E. Brindley, of Armadale, in the Byford - Wongong area during late January and early February.

The usual small flock of White Cockatoos was sighted by Mr. F.A. Rogers, of Claremont.

The Brush Wallaby is plentiful and the animals are very tame, reports Mr. W. Le Vaux, of Mundaring.

The rookery of the shags nesting on Carnac Island is much bigger this year, so reports Mr. R.E. Stewart, of Perth. Most nests had 4 eggs in them and some young had already hatched by the beginning of April.

Due to the good rain experienced in summer and early autumn and also the more limited shooting season, waterfowl seem to be more common in the lakes north of Wanneroo, comments Mr. C.E. Gibbs, of Wanneroo.

A few Bronzewing Pigeons seem to be present in the Swan View area, according to Mr. J. Harris.

The Banded Stilts which migrate every summer to Government House Lake, Rottneest Island, were this year in larger numbers than have been seen for many years, says Mr. W.A. Farmer. He added, that the flock of these birds possibly numbered more than 5000. In the last few years the flock usually left the island in January or February. This year a few hundred left after the early rains in March but the rest stayed until early April, when the general rains alerted them to prospects of food and water in their distant nesting places.

According to Serventy and Whittell, the distribution of this bird is correlated with that of the salt lakes and brackish estuaries. They add :- "Although it was first scientifically named in 1816, its nesting habits eluded investigators in W.A. until 1930, when the first known nesting colony was discovered at Lake Grace. The nesting of the Banded Stilt is evidently controlled by rainfall over the extensive salt lake system of inland Western Australia, and the birds gather to those lakes where optimum conditions exist - these must be related to the period of maxima attained by their main food items, the brine shrimps, - which are probably controlled by water-levels and relative salinity".

A very interesting report was submitted by A.Y. & J. Pepper of Scarborough. Species considered rare by them in the Scarborough area were the Splendid Wren, the Magpie-Lark, Australian Pipit, the Marbled Gecko and the Boobook Owl. They also commented on the number of White-winged Wrens that can be seen most mornings in the sand dunes in the vicinity of Scarborough Beach.

Many Honorary Wardens of Fauna commented on the abundance of the Ringneck Parrot, Mr. R. Sheen, of Perth says they are very common, Mr. G. Candeloro, of Swan View says they are plentiful, so also did Mr. J.A. Fetzer, of Bassendean.

Reports from:

D.L. Humberston	-	Rivervale	C.J. Wright	-	Victoria Park
V.A. Lewis	-	Victoria Park	J.H. Turner	-	Bassendean
W.A. Crowle	-	Perth	J. Johnston	-	East Bullsbrook
C.E. Brindley	-	Armadale	K. Wright	-	Perth
F.A. Rogers	-	Claremont	W. La Vaux	-	Mundaring
C.E. Gibbs	-	Wanneroo	N.E. Stewart	-	Perth
E.H. Day	-	Armadale	J. Harris	-	Swan
W.A. Farmer	-	Rottnest Is.	A.D. Sieber	-	Perth
J & A. Pepper	-	Scarborough	R.J. Sheen	-	Perth
G. Candeloro	-	Swan	J.A. Fetzer	-	Bassendean
L.R. Frizzel	-	South	R. Shoosmith	-	Armadale
		Guildford			
J. Dell	-	Kalamunda	R.G. Little	-	Serpentine
D.F. Mercer	-	Armadale	R.A.P. Noak	-	East Bullsbrook

REPORT AND FINDINGS OF THE INVESTIGATION INTO THE  
DEATHS AND SICKNESS OF WATERFOWL ON LAKE MONGER,  
DURING JANUARY AND FEBRUARY 1968.

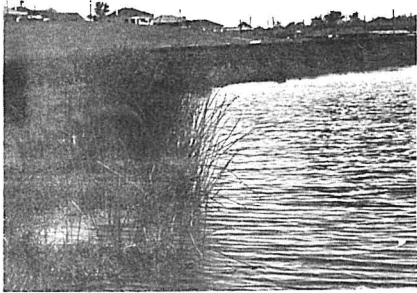
By

David Wright

Technical Officer,

Department of Fisheries and Fauna.

On Wednesday, January 31, 1968, at 4.30 p.m. a Mr. B. Bridges reported sickness and deaths of wild ducks on Jackadder Lake, Woodlands, over the Christmas Holiday period. His son, Paul Bridges, had treated several of the sick birds and achieved a very good recovery rate. Mr. Bridges had thought that the birds had been afflicted by Botulism. On the same day Fauna Wardens Messrs. A.R. Marshall and G.J. Hanley reported sickness and deaths of waterfowl on Lake Monger, Leederville. They brought sick birds with them. Warden Hanley offered to look after the sick birds and administer treatment prescribed for food poisoning by Miss Lexie Nicholls of the C.S.I.R.O.



Western shore of Lake Monger

On February 1, a visit to Lake Monger was made with Warden Hanley and Cadet Warden R. Emiliani, to see what could be done. A considerable number of dead and dying wild ducks was found. A rough count around the perimeter totalled 50 odd dead birds. These consisted of Black Duck (Anas superciliosa), Grey Teal (Anas gibberifrons), Black Swans (Cygnus atratus), Musk Duck (Biziura lobata), Coot (Fulica atra), Blue-winged Shoveler (Anas rhynchos).

Several of these species in the centre of the lake appeared to be in a distressed condition.

The appearance of the water looked quite clear, except for particles of green planktonic algae. Several samples of water containing algae, as well as dead and dying ducks were collected. A number of birds that were sick were taken by hand net to see if any could be saved with treatment.

Water samples and dead and sick birds were handed into Dr. J. Dickson, Veterinary Pathologist, Department of Agriculture, South Perth, for post mortem and other examination.

On Friday, February 2, several birds were collected and delivered to Mrs. I. Bradley, of Herne Hill. Mrs. Bradley, who is an Honorary Warden of Fauna, had offered to assist after seeing the sick birds on television news.

On Saturday, February 3, another inspection was made of Monger's and Jackadder Lakes. On Lake Monger the surface of the water at the northern end was covered by an emerald green scum. On closer inspection this scum appeared to be of similar substance to the algae collected earlier. This material ranged from 1 ft. to 8 ft. in width and  $\frac{1}{2}$  inch thick. Sick swans and ducks, covered with green scum and gasping for air were a pitiful sight. Several swans and ducks were captured and treatment commenced. After a complete inspection around Jackadder Lake, two dead birds were found - one Black Duck and one Grey Teal. These had been dead for some time. Birds seen on this lake were Coot, Grey Teal and Black Duck.

Several species of Dotterels were seen but not identified except for one which was seen to be the Red-capped Dotterel (Charadrius alexandrinus).

Mr. Brian Hutchinson, of 11 Birchwood Parade, Woodlands, reported that Jackadder Lake had been in a similar condition to Lake Monger several weeks earlier, and that he had treated many sick birds. The symptoms described were similar to ailing birds collected at Lake Monger.

On Sunday, February 4, a further visit was paid to Lake Monger. Attempts were made to capture sick birds by hand net from a boat. However ducks which could not fly, easily escaped by diving and thus eluded capture. The incidence of sickness appeared to be decreasing considerably. Several dead birds were found lodged in the rushes on the islands in the Lake.

Mr. Dickson, Department of Agriculture, advised that a species of "blue-green" algae (Anacystis cyanea) was present in large quantities in samples of water collected from Lake Monger. Mr. T.E. Aplin has described (A. cyanea) as a toxic algae that causes rapid death in domestic animals (Journal of Agriculture Vol. 8 Nov. 1967). Liver sections from ducks dosed with disintegrated algae showed congestion and haemorrhage, characteristic of algal poisoning. Faecal material from a sick Black Duck was examined microscopically and revealed that quantities of (A. cyanea) were present.



Waterfowl affected by algal poisoning.

This indicated that death and sickness in waterfowl could be attributed to algae poisoning prior to and during algal "water bloom" stage.

Below are listed species of waterfowl affected on Lake Monger.

1. Black Duck (A. superciliosa)
2. Black Swan (C. atratus)
3. Grey Teal (A. gibberifrons)
4. Musk Duck (Biziura lobata)
5. Blue-winged Shoveler (A. rhynchotis)
6. Coot (Fulica atra)
7. Swamphen (Porphyrio porphyrio)
8. Blue-billed Duck (Oxyura australis)
9. Pelican (Pelicanus conspicillatus)

(No. 8 had been reported, the remainder had been seen).

Persons who assisted by treating sick birds at home were :-

Mr. and Mrs. T. Bradley	
Herne Hill	- 9 Black Swans
	4 Black Duck
	2 Coot
	1 Grey Teal

(of these 16 birds 13 recovered )

Mrs. B. Hammond	
289 Railway Rd,	
Subiaco.	- 3 Black Swans

Mr. G. Hanley,	
Warden,	
Department of Fisheries	
and Fauna.	- 2 Black Swans

Mr. D. Wright,	
Technical Officer,	
Department of Fisheries	
and Fauna.	- 6 Black Swans
	12 Black Duck
	1 Pelican

(of these 19 birds 14 recovered).

Most of these birds were banded and released within fourteen days of capture.



Cont'd

SYMPTOMS AND TREATMENT:Symptoms:

1. Birds were generally found trying to leave the water.
2. Legs and wings partially paralysed, neck weak and birds have difficulty in keeping neck and head erect.
3. Nictating membrane (the third eyelid) very sluggish.
4. Dilation reflex of the eyes very slow.
5. Throat, upper and lower air passage fouled with heavy opaque mucus. In severe cases mucus was whitish, and appeared in the eyes. This mucus restricted breathing and gave the appearance of gasping for air.
6. Bowel movement and swallowing reflexes affected.



It was noted with Black Swans the upper mandible lost the normal bright scarlet colouring and took on a purplish violet hue.

Treatment:

The following treatment was administered with good results.

Administering a dose of salts As soon as the affected bird was captured, the air passages, eyes and throat were cleared of mucus with fresh water and clean cotton buds. A dose of salts (Epsom or Glaubers) was then fed by tube into the proventriculus.

Mixture: 1 teaspoon of salts to 100 c.c for swans. This was repeated in one hour if no bowel movement occurred.

After bowel movement a dose of mixed Glucose and Pentavite was given 3 to 4 times daily. (Clean freshwater was given when required).

Mixture: 1 level teaspoon Glucose and 4 drops of Pentavite to 100 c.c of freshwater.

Dose: 3 c.c. for ducks 5 -10 c.c. for swans depending on the size of the bird. Administered by soft rubber tubing down into the gullet and allowed to gravity feed.

The liquid food was given until the bird could drink water without aid. After this a very sloppy mash of fowl pellet food was prepared to meet the birds requirements.

NOTE: Fresh mash and fresh "Glucose/Penta-Vite" mixture was prepared daily.

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THE LAND OF THE KANGAROO

This article is adapted from an address given recently by the Chief Warden of Fauna, Mr. H.B. Shugg, to the Claremont/Cottesloe Rotary Club.

Most people living in the northern hemisphere have a peculiar ignorance of Australia and things Australian. They don't know what time it is here, they don't know how big it is and they scarcely know where it is. What they do know though, is that it is the land of the kangaroo!

Kangaroo is a universal word - everyone understands it and knows what it is. To so many Australians, the poor old kangaroo is an insignificant animal of no importance whatsoever. But not to the rest of the world. To them it signifies all the uniqueness, strangeness and appeal of the weird and wonderful Australian animals.

The kangaroo is not the only remarkable animal we have. Most people have heard of a few more - the kookaburra and koala, echidna and Noisy Scrub-bird, but not too much else. We have 823 kinds of vertebrate animals including 145 mammals, 447 birds and 233 reptiles. No one knows how many of each we have. We have a fair idea of the population of Short-necked Tortoises and Noisy Scrub-birds, but no idea whatever of how many others we have. The world looks to us to preserve representative populations of each of these 823 species because so many of them are absolutely unique and if we lose them they will be lost to the entire world, forever.

Would it matter if we did lose them? There should be no person so uninformed as to question the need, or the duty, call it what you will, for us to preserve our wildlife - our native animals.

Nevertheless there are probably some who say they go along with preserving kangaroos, koalas and kookaburras, but not all that "useless" stuff like those jolly tortoises which the government spent thousands of dollars on. Despite that unfortunate and uninformed attitude, the Short-necked Tortoise is one of the success stories of conservation. It was thought likely to become extinct only 9 years ago. Today it seems likely to survive on the 600 acres reserved for it. When it was first rediscovered to science we knew almost nothing about it. It really was not so surprising that the sceptics should comment - "So what?" What is so wonderful about, and what use is a tortoise?

Contrary to general opinion, tortoises can teach us much. They are really remarkable animals. They evolved some 2 or 3 hundred million years ago and must be one of the oldest land vertebrate designs in the world. What a superb one it must have been when you think of all it has survived - floods, ice ages, predators, aeons of desiccation.

It has seen the marvels of nature perform through the pageant of history and disappear - Archyopteryx, Tyrannus rex, the Aastodon, the Sabre-toothed Tiger and ten thousand others have come and gone while the tortoise has shuffled down the sidelines of history relatively unchanged and unnoticed.

Why has it survived when so many other stronger, more intelligent, faster, bigger and more beautiful animals have succumbed to the scythe of time?

The tortoise is an engineering masterpiece. In what has been described as the greatest piece of legerdemain in natural history, the tortoise's ancestors got their shoulder girdles inside their rib cages - a feat not achieved before nor since. Tortoises range all over the world except the Arctic and Antarctic regions and the high mountains. Seas, rivers, swamps and deserts are their habitats. They have condescended to grow flippers in the sea but that is about the only great difference in their kind. Tortoises have been shown to be able to survive at least 24 hours in an atmosphere of pure nitrogen. They are satisfied to breathe air once every two hours if activity is not required. Some species can survive apparently indefinitely in pools completely frozen over. Others live in the hottest deserts in the world. If it becomes too hot, or too cold, the Short-necked Tortoise simply crawls into a safe place and shuts down the whole works until conditions improve. It is something like a gas hot water system - the little flame of life burns away, ready to leap into activity when the need arises, but consuming practically no fuel in the meantime.

Man is currently on the verge of venturing into space. Space is hostile. The range of temperatures there is tremendous. There is an utter lack of oxygen. Don't you think we have something to learn from the insignificant tortoise that might be of inestimable advantage to Man should he venture into space? It has the ability to withstand extremes of temperatures and to exist for periods without oxygen and to hibernate or aestivate. Using a little imagination we will have to admit that the tortoise may yet play an extremely valuable role in Man's own survival. We cannot sit idly by and let even an insignificant animal as the Short-necked Tortoise appears to be, disappear from our world.

It must be remembered, too, that other native creatures are likely to prove to be just as valuable. The progress being made in the understanding of that dread disease of children known as muscular dystrophy is generally known. The research work that has been carried out for quite a few years on the quokka has made possible in the near future, the development of a cure for this disability that has blighted the lives of so many children throughout the world. This goes to show that we just never know what animals are suddenly going to become invaluable to Man's well-being for it is impossible to foresee the future.

The need to protect our fauna from disturbance is acknowledged. No protected fauna is allowed to be taken and most species are protected by law and this law is, by and large, respected. It is sometimes asked why are exceptions made for science and scientists. The answer is simple—because there is a need for scientific research in conservation.

The need to set aside an area like the Tuttanning Fauna Reserve east of Pingelly is accepted. People understand that admittance into the reserve might have to be controlled and curtailed and they accept that not even natives should be allowed to take any of the fauna in it. These people react differently, unfortunately, when the Government spends something like \$10,000 on a research station there and permits scientists to catch and mark the animals on it and even take some away for experimental purposes. Why, they ask, should scientists be so privileged?

There are two main reasons. The first is that the work of the scientists adds to a better understanding of the world we live in. If we do not know how a thing ticks, and what makes it tick, we never really understand it and cannot draw on the knowledge to apply to some other circumstance. The research work on the quokka, throwing light on a human disease is an example of this.

The second is closely related to the first but this time the emphasis is on the good of the animals. Unless we know precisely what their needs are and how they can be supplied we will not be able to maintain the species on the reserves. Every piece of land is a dynamic entity. It changes with time and seasons and conditions. All animals have preferences and some very specific requirements for their survival. Unless those requirements can be met, those animals will die. For an example, take just one of the kinds of animals on the Tuttanning Reserve — the Tammam. The tammam needs three different kinds of vegetation to survive. The first is food. The tammam eats the grasses and certain plants that grow on the little sandplains on the reserve. Near its feeding place on the sandplain it needs cover — a particular type of cover which is supplied by sheoaks of a certain age that have reached a certain height. The tammam must be able to retreat into this high cover where it squats and looks about below the branches of the sheoaks. The air can circulate under this cover and the tammam can rest and keep watch and see in all directions far enough to be able to escape from predators.

The third type of vegetation it needs is dense thickets where it keeps warm on cold nights and where it retreats when danger approaches. Each of these three vegetational types must be growing in close proximity to the other two, otherwise the tammam will not survive.

Vegetation does not persist indefinitely. It changes, in succession until it reaches what is called a climax.

In the normal course of events the sheoaks that the tammar squats under will grow tall and open and become useless to the tammar, and then die. The dense thickets will also age and die and be replaced in any one locality by other plants. The sandplains where the tammar feeds are sometimes invaded by sheoaks and other shrubs which overgrow the tammars food plants.

These successions have always occurred and it might well be asked, "Is the tammar not adapted to them?" The tammar is not, because man has altered the situation. Previously, when one type of vegetation became unsuitable in one area, the tammar probably gradually shifted to some other piece of country where favourable arrangements of vegetation existed. Or else that population of tammar died out to be replaced eventually by another group when conditions became favourable again in that spot in perhaps ten or fifty or a hundred years' time.

But nowadays there are no alternative pieces of habitat that the tammar can move to because they have been cleared for farming. Or else there is a fence in between and many fields to cross where they will be taken by dogs, cats, eagles or animal collectors or even by someone wanting to relive his childhood and eat some tammar pie!

The reserve is the only little piece of bush that is available and if it becomes unsuitable, the tammar die out. If and when it becomes good tammar habitat again it will not be repopulated unless other tammars can get to it. So, we have to make sure that it remains suitable or that another suitable area is available close by. If we did not know, and if we hadn't had the research station on the Tuttanning Reserve we would not have known, we would not be able to supply those needs. To do this we have to know a great deal about the tammar, and a great deal about the vegetation. We have to have management officers to divide the potential habitat into areas sufficient in number to ensure that each can be burnt in turn at the right periods to guarantee that there are always sheoaks 7 years old, near dryandra 5 to 10 years old, near sandplains containing suitable grasses and other food plants.

It is not an easy job. It is not one that can be studied, done once and forgotten. The need for it will always be with us.

Conservation in Western Australia has, so far, been done on the cheap. This has been possible because there has been so much untouched wild land in this big and wonderful State of ours. But we are alienating and bulldozing the wild lands at the rate of more than a million acres a year. In the last 10 years we have alienated 3 times more than all the land we have set aside as wildlife reserves since the State was founded.



Our knowledge not only of the fauna's needs, but also of its distribution and movement, is not much better than elementary. Consequently, if we are going to do our job, if we are going to keep this unique wildlife in trust for the rest of the world, we need more reserves to save the remaining remnants, more staff to protect and study and manage those reserves and we must set aside more money for research and other equipment.

Australia is the land of the kangaroo. The kangaroo is certainly a marvellous animal but, fortunately, at least in Western Australia, none of the species of kangaroos seem to be immediately threatened. We need to maintain the different species over as much of their ranges as possible, but, more urgently, we need to take further steps to ensure the preservation of all our other wildlife wonders. We must maintain the full diversity of our natural heritage, not only for the sake of the fauna itself, but for our own welfare and, perhaps even for our own survival. A world without wildlife would be a poor world indeed. The loss of any one species would represent another nail in the coffin we sometimes seem to be so busily making for our own interment.

#### LOCKER ISLAND BECOMES A RESERVE FOR CONSERVATION OF FLORA AND FAUNA

The Government in Executive Council has approved the recommendation that Lyndon Location 64 (Locker Island) be set apart as a Class "A" reserve (No. 29011) for the purpose of "Conservation of Flora and Fauna". Locker Island has an area of 75 acres and is located some 24 miles south-west of Onslow. It is one of a very attractive group of islands off the north-west coast of Western Australia.

This proposal originally emanated from a report received from the Chief of the Biological Services Division of the Department of Agriculture, Mr. C.F.H. Jenkins, in his capacity as chairman of the Royal Society's Standing Committee on Conservation. Mr. Jenkins suggested that it should be declared a sanctuary as it is one of the nesting islands of several sea birds and together with the other islands in the area, offers refuge to various types of flora and fauna which are disappearing from the mainland.

#### HUGE COD CAUGHT AT KALBARRI

Honorary Warden of Fauna Mr. R.A. C. Glass of Kalbarri, reported in his Quarterly Report for March 1968, that a cod weighing 369 lbs. was caught on March 23, 1968. The fish caught on a handline was a record catch for Kalbarri.

MAN FINED FOR TAKING GREY  
KANGAROOS IN PROTECTED AREA.

The ranger for the Walyunga National Park apprehended two men who shot two Grey Kangaroos on the morning of August 20, 1967. The matter was reported to the police and then to this Department. As a result of this co-operative action one man appeared in the Midland Police Court on March 6, 1968. He was convicted on a charge of taking fauna in a protected area and fined \$20. with \$13. costs. The other man could not be contacted as he had left for the Eastern States.

SHOOTING WILD DUCKS DURING CLOSED SEASON  
BRINGS MAN TO COURT.

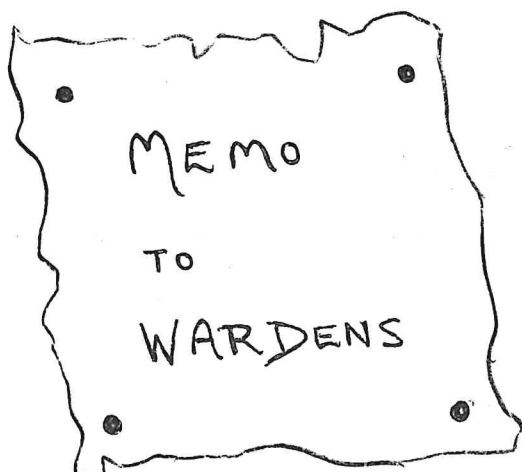
A man who appeared in the Midland Police Court on March 3, for a breach of Section 16 of the Fauna Protection Act, was fined \$5 and ordered to pay costs amounting to \$9.40. The offender took wild ducks during the close of the duck shooting season. Two officers of this Department were travelling along the Scott River Road, via Alexander Bridge, in the Augusta-Margaret River Shire, at 5.35 p.m. on January 9. On approaching Carney's Crossing, a man was observed carrying a shot gun and two wild ducks.

This was the first offender convicted for shooting wild ducks during the close of the season since the new season was proclaimed.

HONORARY WARDEN INITIATES SUCCESSFUL PROSECUTION.

A man was convicted in Midland Police Court on April 3, for taking a Grey Kangaroo in a protected area. The man was fined \$9.00 with \$11.00 costs.

Mr. J. Dell, Honorary Warden of Fauna, detected the breach of Fauna Protection Act Regulation 16 (14) at 6.00 a.m. on December 29, 1967, some 2½ miles west of Mundaring Weir on the Mundaring Road. The offender co-operated readily by giving the necessary details and showed no surprise when informed of the offence committed.



### Addresses

In our effort to ensure that all Honorary Wardens of Fauna receive this publication, we ask you to please show on the next Quarterly Report you submit, your address. This would aid us twofold. Firstly we can ensure that we have your correct address, and secondly establish whether or not, we reach all of our Honorary Wardens.

Thank you for submitting your past reports, and we look forward to your future "Quarterly Reports".

### New Forms

The Department is also in the process of preparing a Quarterly Report form suitable for wardens reporting on fauna found north of the 26<sup>o</sup> latitude. This form, when available, will be issued to all wardens located in the north and north west.

### Stickers

The window stickers for Honorary Wardens' vehicles should be available from the printer any day now. If it becomes available when this publication is posted, the sticker will be included, otherwise it will be posted later.

### xxx Late News:

Car stickers are enclosed in this publication. These may be fixed to car windows in much the same way as car registration stickers are done, as long as the driver's vision is not obstructed. Dip into cold water for a few seconds and then place against glass and remove backing.

### New Act

Copies of the consolidated Fauna Conservation Act 1950 - 1967, will soon become available for distribution to all honorary wardens who wish to receive one. A copy will not be sent to any honorary warden unless he signifies on his next quarterly report that he would like to have one.

We suggest that all who would like one should ensure that his address is on his report and that he adds the words "Act Wanted". We will then post him one when supplies are received from the Printer. Additional copies will later be available for purchase at the Government Printing Office but no charge will be made for the first copy sent by us to any warden who wants one.

THE EAST WALLABI ISLAND TAMMAR

Professor A.R. Main and some of his colleagues from the Zoology Department, University of Western Australia, made two visits during the past 12 months to East Wallabi Island to study the Tamar. One visit was made in April 1967 and the more recent in February 1968. These two trips were designed to conclude the physiological investigations undertaken during previous trips and to continue the tagging programme so that population estimates would ultimately be possible.

During the April 1967 visit, a total of 52 Tammar were caught, 24 mature males and 23 mature females. In addition 2 juvenile males and 3 juvenile females were tagged. Two of the female were barren. 15 animals previously tagged were recaptured. The average weights of the captured animals were 3.69 k.g. for the males and 2.86 k.g. for the females.

In the visit made in February 1968, a total of 61 Tammar were caught; 26 mature males and 24 mature females. In addition there were also 4 juvenile males and 5 juvenile females tagged. Two adult females were found to be barren. Of the joeys, 9 were males and 11 females, other joeys were too small to be sexed. A total of 16 animals previously tagged were recaptured. The average weights of the captured animals were 4.00 k.g. for the males and 2.97 k.g. for the females.

In commenting on these two visits, Professor Main said that the Tamar population continues to stay at its usual high level. The weights of adult animals shows an improvement in condition when compared with the 1967 visit. The summer rains which preceded the 1968 visit left large sheets of water throughout the centre of West Wallabi Island and all the soil of East Wallabi was completely wet to a depth of over 2 feet. No plants on East Wallabi showed any of the usual signs of dehydration and summer drought.

DR. G.F. MEES VISITS WESTERN AUSTRALIA

We were delighted at the news that Dr. G.F. Mees, of the Rijksmuseum van Natuurlijke Historie, Leiden, Holland was making a study visit to Australia. Dr. Mees called on the Chief Warden of Fauna on March 26, and informed him that the main purpose of his visit was to extend his knowledge of the Western Australian birds. He also intends to collect some reptiles for his Museum. During his stay in Western Australia Dr. Mees will be collaborating with Dr. D.L. Serventy, and can be contacted at the C.S.I.R.O. Wildlife Research, Helena Valley.

Dr. Mees, who was Curator of Birds at the Western Australian Museum before he went overseas, will visit the Eastern States for a few weeks before returning to Holland at the end of the year.

SACRED KINGFISHER

Mr. D.M. Purchase, of the C.S.I.R.O. Division of Wildlife Research Laboratory, Canberra, has recorded a very interesting banding record of the Sacred Kingfisher. The bird was banded as a fledgling on December 31, 1964, near Chain of Ponds in South Australia, by a Mr. M.H. Waterman. It was found alive at Tuart Hill on March 16, 1968, but died two days later. Dr. D.L. Serventy thinks that the bird had gone northwards on its migration and, on its return, either in the first year or last year, had mingled with Western Australian birds and made the southern passage with them.

"The Sacred Kingfisher (Halcyon sancta) occurs all over the State, except in the far inland portion. In the south it is found inland to Tammin, Lake Grace, and Norseman, while in the North West it penetrates along the rivers to their upper reaches frequenting the eucalypt belts.

"In the southern portion of the State the Sacred Kingfisher is a migrant, arriving during the first half of September when it insistently reveals its presence by its "ki-ki-ki" note - one of the characteristic sounds of the spring and summer bushland". This extract is from "Birds of Western Australia", by Serventy and Whittell who also say that the majority of birds leave again in their northward migration in early March and most have gone by the first week in April, but a few individuals continue to remain behind for the winter; these however, are usually silent. Some of our birds migrate to Timor and adjoining islands of Indonesia.

ROYAL SPOONBILLS SEEN ON WANDERING LAKE

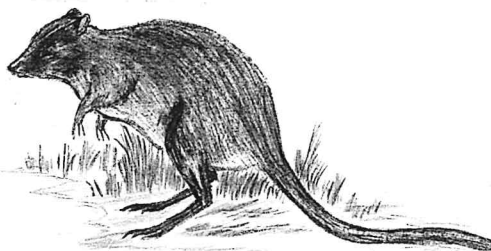
An Honorary Warden of Fauna, Mr. L. Bell, of Wagin, reported to an officer of this Department that he had observed four Royal Spoonbills on Wandering Lake. The observation was made during the period April 7 to April 13, 1968.

The Royal Spoonbill (Platalea regia) according to Serventy and Whittell, ranges in its distribution pretty well throughout Western Australia, except in the south-eastern parts of the State. There is however, no definite record of its breeding south of the Kimberley Division in Western Australia. This bird is also known as the Black-billed Spoonbill because of its black legs and beak. Otherwise the birds is entirely white. The beak is large and expanded at the end into a wide spoon-shape. These birds feed with a sideways swishing of the bill in shallow water. They frequent wetland areas in search of food which Cayley, in "What Bird is That" lists as small fish, aquatic insects and molluscs.



A STUDY OF THE BETTONG

Mr. J. Sampson, of the Zoology Department, University of Western Australia, has submitted a very interesting progress report on his work on the Woilie (Bettongia penicillata).

Bettong

His study of this bettong is being conducted on the Tuttanning Fauna Reserve east of Pingelly. Although the study includes both field and laboratory work, this particular report refers only to his field work.

During the 14 visits made to Tuttanning during 1967, Mr. Sampson marked a total of 39 animals - 25 males and 14 females. It was established that at least 80% of the females have joeys in pouch at any one time. Joeys have been born every month of the year, suggesting that there is no clear breeding season. The length of their pouch life is about 3 months. This has been confirmed by one animal having 4 joeys taken to term in the one year. A growth curve has been produced, and joeys can now be aged during pouch life.

The condition of the animals, Mr. Sampson says, is very constant. Throughout the year they all maintained weight with no seasonal fluctuations evident. It has become apparent, however, that there is some seasonal movement within the habitat occupied by the animal. Some evidence supports a contention that animals move from the lower ground to the laterite ridges in winter, but more data is needed before firm conclusions can be drawn. The males appear to range over an area of 100 acres, whereas the females range over an area only half that size.

A population of approximately 50 animals use the study area comprising about 150 acres of Whitegum and Box country (Eucalyptus redunca var. elata - Oxylobium parviflorum association).

Mr. Sampson would appreciate any information on the present distribution and abundance of bettongs elsewhere in the State. Very few reports on their occurrence and numbers are received so that we do not have a clear picture of their present range and status. They are known also as kangaroo-rats or rat-kangaroos and were once quite common in the South West. Pockets of them are known to survive in uncleared land and forest country but further specific information is needed.

AUSTRALIAN FAUNA TO BE FILMED

The Commonwealth Film Unit is at present in the initial stages of planning a series of films on Australian Wildlife. The films will be in colour and will be designed for wide distribution to mainly lay audiences. Mr. John Shaw, Film Director of the Commonwealth Film Unit has been nominated as Director of the films. Mr. Ronald Strahan, Director of the Taronga Park Zoo, Sydney, has offered his services on general scientific liaison for the films. Before each film is commenced a vast amount of research will be made and the film unit will rely upon specialist knowledge within the field of its coverage. Dr. Tom Spence, Director of the Zoological Gardens, South Perth, has indicated that he would assist in the location of animals and sites suitable for filming.

It is hoped that these films will help the public to a better understanding of our unique fauna and what is actually required to maintain on as wide a distribution pattern as possible those species still surviving. The films will include areas of ecological research, survey research management, habitat manipulation and reserve management.

Initially the accent will be on mammals, and will include the following species found in Western Australia; the Numbat or Banded Ant-eater, the Dalgite or Rabbit-eared Bandicoot, the Northern Native Cat, Western Native Cat, the Scaly-tailed Possum, the Central Jerboa Marsupial, and the Honey and Pigmy Possums.

BRITISH EXPEDITION TO COLLECT BIRDS IN  
WESTERN AUSTRALIA.

The Department has issued a scientific license to members of the 5th Harold Hall Expedition of the British Museum (Natural History), the last of a series of expeditions to Australia.

Under the terms of the license, members of the expeditions are authorized to take protected fauna for bonafide research and other scientific purposes. The Expedition, led by Major B.D. McDonald Booth, will work in the northern areas of Western Australia and the Northern Territory, these being areas not covered by previous expeditions. Other members of the party are Messrs. D. Freeman, H. Butler, C. Frith, R. Whistler, and A. Hillier. Permission has also been granted, by the Minister for Native Welfare, for the party to enter and remain on the Kimberley, the Kalumburu and the Forest River Native Reserves. This permit was granted on the condition that the expedition has neither contact nor dealings with

Aborigines unless specifically authorised, nor interfere in anyway with aboriginal art, or artifacts, sacred areas or water resources, nor take any photographs of Aborigines or anything to do with Aborigines.

The assurance has been given by the leader on behalf of the expedition that it will confine activities to the collection of ornithological specimens in accordance with the conditions of the license issued by this Department. In the conditions applied to the scientific license the Department has ensured that only limited collecting of specimens will take place and that species listed as rare and endangered are excluded from those that may be collected. Under the license no fauna is permitted to be taken from any sanctuary nor is fauna to be exported, without the specific written approval of the Chief Warden of Fauna. Members of the expedition must also comply in all respects with the provisions of the Fauna Protection Act and Regulations.

#### DEPARTMENTAL WARDEN PATROLS ON HORSEBACK

On April 25, 1968, the Department's Warden stationed at Wittenoom, Mr. R.F. Dear, proceeded on horseback from Wittenoom on a fauna patrol to areas north-east of the town. This area is mainly flat with patches of small stones. In his report Mr. Dear said that a large area of this country was burnt last December and was very sparsely covered with young green spinifex and with odd patches of other grasses.

Mr. Dear expected to find some Wild Turkeys and perhaps some chicks, but none of these were sighted and only three Red Kangaroos and one Emu were seen. There were large numbers of Crested or Topknot pigeons but no nests were sighted. Red-plumed pigeons, Mr. Dear said, had started to nest. Bee-eaters, also known as Rainbow birds, were present in numbers as a result of their annual migration. Diamond and Peaceful doves were plentiful in the gullies where the Grey Box and Micum trees are. Although the birds were displaying, no dove nests were noted. In the unburnt area, where dense spinifex still exists, Painted finches were busily building large domed nests in the grass. Zebra finches were building nests in every likely looking nesting place. These birds have even invaded some of the homes at Wittenoom.

Mr. Dear says that riding a horse is an excellent way of observing wildlife as it is not disturbed by the presence of a horse. While patrolling the foot-hill area, one Euro for example hardly moved out of the horse's way.

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A NOTE ON THE SMOKER PARROT

During a recent inspection of a reserve near Mundijong with the Chief Warden, the Metropolitan Warden, Mr. A.R. Marshall, sighted seven Smoker Parrots feeding on the ground in a paddock about  $\frac{1}{4}$  mile west of the Bunbury Highway, near the Mundijong-Jarrahdale road. This was the first time, Mr. Marshall said, that he had seen these birds so far south.

The Smoker Parrot, also known as the Regent Parrot, is one of the species which has notably increased in abundance and range of distribution since the settlement of the Wheatbelt. This sighting indicates that the trend is continuing.

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