

CONSERVATION
LIBRARY KENSINGTON



080267-18 08

JOURNAL

MONTHLY STAFF BULLETIN

18(8) Aug 1969

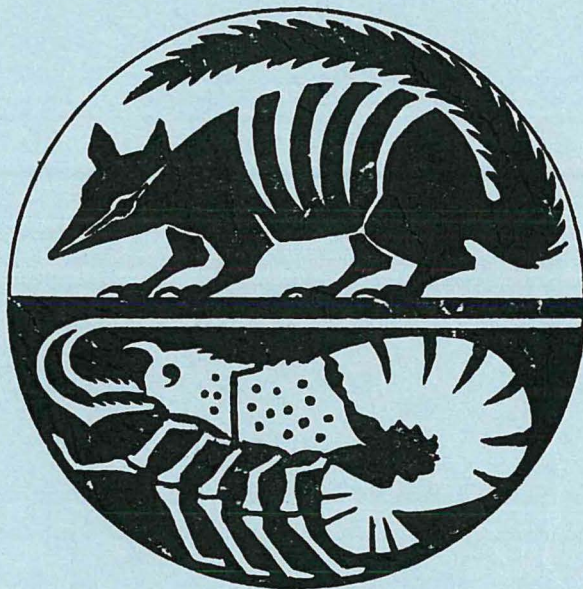
DEPARTMENT OF PARKS AND WILDLIFE

STAFF

BULLETIN

DEPARTMENT OF
FISHERIES AND FAUNA
LIBRARY.
WESTERN AUSTRALIA.

CALM LIBRARY ARCHIVE
NOT FOR LOAN



AUGUST, 1969

VOL. XVIII, No. 8

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

ANNUAL REPORT ON THE 1968 WHALING SEASON

In the Annual Report on the 1968 Whaling Season, the Department's Whaling Inspector stationed at Albany, said that a total of 658 sperm whales were taken by the Cheynes Beach Whaling Company during the period March 5 to December 15, 1968. The Company used its three chasers "Cheynes II", "Cheynes III", and "Gascoyne" to capture the whales. These were aided by a spotter aircraft, a Cessna 337 Twin Engine push-pull centre line thrust aircraft. The aircraft was flown by two pilots and clocked 1212 hours during the season. Included in this are flights made to Jandakot for servicing. Apparently, sonar radar is to be fitted to the "Cheynes III" during 1969, and it is claimed that this device should assist in the tracking of whales, particularly "deep divers".

During the season the company employed 88 people in the following capacities - 10 as flenzers on a contract basis, 47 on the whale chasers, 22 at the whaling station, 6 office personnel, 2 mess contractors and 1 pilot, with one of the office staff acting as second pilot.

Production for this season realized:

Whale oil - 4026.3 tons (24,158 barrels), at an average price of \$1111 per ton	= \$446,919
Whale solubles - 1933.26 tons, at an average price of \$106 per ton	= \$204,925
Whale meal - 968 tons, at an average price of \$111 per ton	= \$107,448
Filtered oil - 94 tons	= \$16,152
Whale teeth - 2,673 lbs (\$1.00 lb.)	= \$ 2,673
Ambergris - 146½ lbs, sold at an average price of 43c per oz.	= \$ 5,452
Whale meat - 31,498 lbs	= \$ 1,100

Statistics of Catch

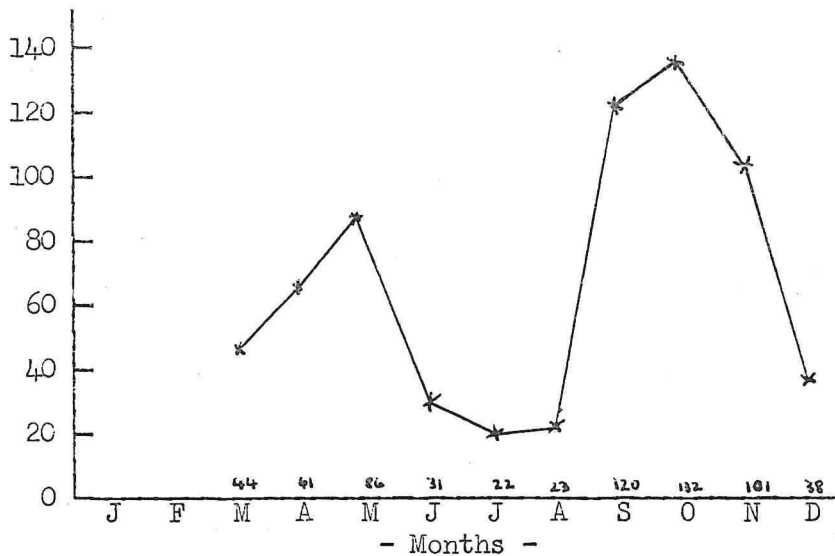
Females	73
Males	585
	<u>658</u>

A total of 606 of the whales taken were of legal size, the remaining 52 (7.9%) were undersize. In the 1967 season the percentage of undersize whales was .51%. Of the 14 embryos located 10 were males and 4 females. The smallest embryo was a 2' male and the largest a 13' male. The smallest female taken was 31'9".

Another interesting statistic provided is the average number of barrels of oil per whale realized in the past three seasons:

1966 - 43.5 barrels
 1967 - 39.33 barrels
 1968 - 36.71 barrels

The following chart shows the catch per month



According to the report the weather conditions during the 1968 season were the worst experienced by the company. A total of 125 days, which includes half days, was lost due to the adverse conditions prevailing. This left a total of 159 days (half days included) where whaling was possible, giving an average catch of 4 whales per day.

Market

Whale oil was sold in the United Kingdom and in the U.S.A., but the filtered oil was sold on the Australian market. Solubles were sold to Japan as well as on the

Australian market. Whale teeth were sold in Seattle, U.S.A. for scrimshaw work.

Plant Improvement

A pilot oil filtering plant was successfully operated during the year using a cloud point temperature of 72°F. Apparently, the lower the temperature is when filtering the wax from the whale oil, the lower the cloud point becomes and greater the amount of wax residue that can be removed by the filter. The full-scale filter plant, which is to be built and operated in 1969, will incorporate a freezer and operate on a cloud point of 40°F. This should produce an even purer product than the pilot filter plant. The new plant will have a capacity of 1800 tons per year, but the probable output will be approximately 1000 tons per year.

The wax residue which has been subject to laboratory experiments by the company's industrial chemist during the past year has, according to the report, numerous uses ranging from facial creams to de-greasing oil, and even fish lure. Small quantities of hand lotion and fish lure were sold on the local market on a trial basis.

Other improvement work planned during 1969 includes office extensions and replacing timber on the top flenzing deck. Although the company made a profit of \$34.00 during the 1968 season, the 52 undersize whales taken and included in this figure must be considered when the economics of the overall situation are studied.

* * * * *

WHERE DO WAVES COME FROM?

The commonly seen waves on the surface are caused principally by wind. However, submarine earthquakes, volcanic eruptions, and tides also cause waves.

A breeze of less than 2 knots (2 nautical miles per hour) can form ripples. As the wind speed increases, larger more visible waves form. The wave height in feet usually will not be more than half the wind speed in miles per hour, although individual waves may be higher.

As long as the wind blows consistently from the same direction, the waves are referred to as sea. When the wind stops or changes direction, the waves that continue in a direction different from that of the local winds are called swell. ("Questions About The Oceans," U.S. Naval Oceanographic Office.)

A REPORT ON THE RED AND GREY KANGAROO
IN THE GOLDFIELD'S AREA

During July 1969, Mr. K.D. Morrison, Fauna Warden, carried out an investigation in the Goldfield's area of the Red and the Grey Kangaroo populations, their comparative percentage status and their present rate of exploitation by commercial enterprise. Information was obtained by visits to the Kalgoorlie Town and Shire Councils offices, pet meat dealers, Honorary Wardens of Fauna, personal observations and by making roadside counts of kangaroos killed by traffic.

According to both Councils, kangaroos in the district are quite prolific but are not reported as being in pest proportions. The Kalgoorlie Shire Clerk advised that a questionnaire was at present being answered by pastoralists concerning the kangaroo situation on their properties. It is anticipated that results of this survey will be forwarded to the Department.

The investigation revealed that kangaroos were plentiful in occurrence south of Kalgoorlie. Motorists using the Kambalda - Kalgoorlie road were experiencing considerable damage to vehicles by these animals. On a 30-mile stretch of this road 23 carcasses were counted by Mr. Morrison; of these about 65% were Grey Kangaroos, the remainder were Red Kangaroos and Euros. In comparison on a 25 mile stretch along Broadarrow Road, north of Kalgoorlie, Mr. Morrison counted only 4 dead kangaroos; 3 Grey and 1 Red. However, this may not be a true representation when comparing the density of the traffic on the two roads. During a patrol 45 miles to the east of Kalgoorlie, as far as Kurnalpie, a total of 12 live kangaroos were sighted, 6 Grey and 6 Red. Along this secondary gravel road only 3 carcasses were noted, 1 Red, 1 Grey and 1 Euro.

In his report Mr. Morrison stated that almost all of the kangaroos observed were in the vicinity of dams and windmills. He was of the opinion that his observations may therefore not be a true indication of the abundancy of the kangaroo in these areas, as the animals would tend to congregate at these watering places due to the dry conditions being experienced in the Goldfields.

A count of carcasses along Great Eastern Highway between Kalgoorlie and Coolgardie, a distance of 23 miles, revealed 7 Grey, 4 Red and 2 Euros. Between Coolgardie and Bullabulling, a distance of 20 miles, 10 Grey and 8 Red kangaroo carcasses were counted.

In Kalgoorlie and Boulder there are five pet meat shop operators. Most of these do their own shooting but some also buy from professional shooters. Investigation revealed that if shooting is conducted to the south of Kalgoorlie about 75% of the kangaroos taken are Grey Kangaroos, whereas when operating either to the north or to the east of that centre the take is 90% Red Kangaroos. It would appear that the over-all average take consists of 75% Red and 25% Grey Kangaroos. The total number of kangaroo carcasses sold as pet meat in these five shops would be about 310 per week.

Proposed business ventures by two South Australian pet meat companies to operate in the areas north and east of Kalgoorlie have come to the notice of the Department. These inter-state developments, as well as the existing local trade, will be considered in the present review of the Fauna Conservation Act Regulations.

* * * * *

TRAINING SCHOOL

The Department will again conduct a training course for Cadet and Assistant Inspectors, Cadet Fauna Wardens and Technical Assistants who joined the Department since the inaugural course was held last year. The school will be of two weeks' duration and will be held during the two weeks before the Annual Staff Conference. The Annual Staff Conference is scheduled to commence on Monday, October 20.

The curriculum for the training school is as yet undecided but will probably cover a wide range of topics relevant to officers of this Department with emphasis again on knowledge of Acts administered by the Department. At the end of the course, officers will again be required to take both practical and written examinations.

Officers who are to participate in this training school will be advised of the syllabus at a later date.

* * * * *

It is better to wear out than to rust out.

- Bishop G. Horne.

JUVENILE WHALE SUICIDES IN HAMELIN POOL

On July 6 Inspector J. Van Roon, stationed at Shark Bay, investigated the suicide of a porpoise in Hamelin Pool, near the Hamelin Post Office. Apparently, attempts to tow the mammal out to deep water during the previous week had failed, as it kept returning to the beach.

On examination of the carcass, Mr. Van Roon realised that it was not a porpoise, but a small whale. It measured 9 feet long with a girth of 6 feet. The baleen was quite noticeable and there was a small dorsal fin situated on its back about 6 feet from the tip of its head, plus a nectorial fin on each side of its girth.

Mr. J. Bannister, Curator of Mammals, W.A. Museum, is endeavouring to obtain further information on this mammal to establish positive identification.

* * * * *

TRAVELLING, TRANSFER AND RELIEVING ALLOWANCES

Following a review of the above allowances, it has been agreed with the Civil Service Association of Western Australia (Incorp.) that the current rates of re-imbusement should be varied on and from the 1st July, 1969, as follows:

Clause	Item No.	Daily Rate	
		1.1.69	1.7.69
6. Travelling Allowance	1	\$8.70	\$8.85
7. Transfer Allowance	1	8.70	8.85
	2	4.35	4.43
9. Relieving Allowance	1	8.70	8.85
	2	4.35	4.43
	3	2.90	2.95

The rate for item 6 of Clause 6 - Travelling Allowance, has been increased to \$10.50 a day.

MEETING OF MINISTERS ON WILDLIFE CONSERVATION

A Commonwealth - State Conference on conservation of Australian fauna and flora was held in Canberra on Tuesday, July 29, 1969, under the chairmanship of the Hon. Malcolm Fraser, the Commonwealth Minister for Science and Education.

The Minister for Fisheries and Fauna, the Hon. G.C. MacKinnon represented Western Australia at this Conference and the Director, Mr. B.K. Bowen, together with the Chief Warden of Fauna, Mr. H.B. Shugg and Mr. J. Meacham of the Forest Department, attended as advisors.

This meeting considered the recommendations of the Australian Fauna Authorities' Conference held in November 1968. These were published in the June 1969 issue of the "Fauna Bulletin". There was also a number of additional items to be considered involving the role of the Commonwealth Government in wildlife conservation. Although the meeting was mainly exploratory to discuss conservation issues as they broadly affect Commonwealth - State and interstate relationships, the aim of the meeting was to try to form a comprehensive picture of the areas in which the Commonwealth could assist the various State fauna authorities.

Because W.A. is separated from the other States by a vast area of land, much of which is arid, it did not have the interwoven conservation problems of other States and their neighbours.

* * * * *

STAFF NOTE

Mr. G.R. Morgan, Fisheries Research Officer, was in Adelaide for the period August 18 to August 25, 1969, to attend the ANZAAS Congress at the University of Adelaide. "ANZAAS" stands for Australian New Zealand Association for Advancement of Science. During this Congress various papers on particular phases of fisheries research were presented - one, for example, was on the application of mathematics to fisheries biology.

* * * * *

Laugh and be well -

M. Green

ARE ALL FISHES EDIBLE?

Not all fishes are edible. Some have organs that are always poisonous to man; others sometimes become toxic because of certain elements in their diet. In Japan, a national dish called fugu is highly prized. It is prepared from the puffer fish, and the gonads of the puffer are highly poisonous. For this reason, fugu is only served in restaurants licensed by the government.

Consumption of sharks and rays has been known to cause illness or death; this was probably because the victim ate a portion of the liver, which contains a very high concentration of Vitamin A that the human body cannot tolerate.

There are 300 tropical species of fishes that cause fish poisoning; one type of poisoning is commonly known as ciguatera. A particular species may cause ciguatera when caught on one side of an island, but not if caught on the other side. These tropical fish are associated with reefs and do not usually venture far from the home reef; for this reason, the people living on one island may eat a certain species of fish, while those on a nearby island would not. No one knows what causes the fish to become poisonous, but most investigators agree that it is something in the diet. There is no method to determine before a fish is consumed whether or not it will cause ciguatera. Some common species of fish known to cause ciguatera are: surgeon fish, jacks, porgies, snappers, goatfish, moray eels, wrasses, and barracudas.

Scombrid fish, commonly known as tuna or mackerel, have been known to cause scombrid poisoning, usually because of inadequate preservation. The flesh of scombrid fish contains bacteria which, if the fish is not preserved soon after capture, begin to produce a histamine-like compound. This compound, if ingested by humans, causes a severe allergylike reaction and may even lead to death. ("Questions About the Ocean," U.S. Naval Oceanographic Office.).

* * * * *

You can never plan the future by the past.

- E. Burke

Life is not to be alive, but to be well.

- Martial

**METROPOLITAN COAST
FISHERIES RESTRICTIONS**

**FISHERIES ACT
REGULATIONS**

Fishing Boat Licenses.

2. (1) The owner or person in charge of any boat used or intended to be used for or in connection with the taking by any method whatever of fish for sale, or for other disposal for gain or reward, shall hold a current fishing boat license which shall be issued in Form "A" in the Appendix to these regulations, or a renewal of such license pursuant to subregulation (2) of this regulation.

Penalty.—Two hundred dollars and, in addition, four dollars for each day the boat continues unlicensed.

(2) A fishing boat license issued under this regulation may be renewed annually and the renewal shall be issued in Form "A1" in the Appendix to these regulations and remain in force until the 31st day of December of the year in respect of which the renewal is issued.

(3) The fee for a fishing boat license or a renewal of such license shall be in accordance with the following scale:—

	\$
(a) For boats of any length propelled solely by oars	2.00
(b) For boats propelled by motor or sail—	
(i) Not exceeding 25 feet in length	4.00
(ii) Exceeding 25 feet in length, but not exceeding 35 feet in length	10.00
(iii) Exceeding 35 feet in length, but not exceeding 55 feet in length	15.00
(iv) Exceeding 55 feet in length	30.00

(3a) A fishing boat license or a renewal of such license shall not be issued under this regulation in respect of any boat unless that boat is licensed under the provisions of Division 1 of Part VIII of the Western Australian Marine Act 1948 (as amended).

(3b) Every license or renewal of a license issued under this regulation is issued subject to such conditions as the Minister has imposed or may from time to time impose in respect of such license or renewal thereof pursuant to the provisions of section 17 of the Act.

(4) Every license or renewal of a license issued under this regulation is issued subject to the condition that there shall be legibly painted and kept so painted on both sides of the hull at the turn of the bow of the boat in respect of which that license or renewal is issued, the letters "L.F.B." followed by the initial letter of the port at which that license or renewal is issued and the distinguishing number allotted in respect of that boat by the licensing officer.

(5) The letters and figures required to be painted on both sides of the hull of a boat pursuant to subregulation (4) of this regulation shall be painted in black on a yellow background and be not less than twelve inches in height and not less than two inches in width, except where the boat is one propelled solely by oars in which case those letters and figures may be less than six inches but not less than five inches in height.

LONG LINES RESTRICTIONS

Extract from Government Gazette, (No. 106) of
15th December 1967

FISHERIES ACT, 1905-1966.

Department of Fisheries and Fauna,
Perth, 11th December, 1967.

F.D. 54/45.

THE Minister for Fisheries and Fauna pursuant to the powers conferred by section 9 of the Fisheries Act, 1905-1966, doth hereby prohibit all persons from taking any fish whatsoever by means of fishing lines known as or called "long lines" or "set lines" in all those portions of Western Australian waters described in the Schedule hereto, as from the date of publication of this notice in the *Government Gazette*.

Schedule.

- (1) The whole of the waters of Warnbro Sound (Safety Bay), including the waters surrounding the offshore rocks and islets, bounded on the north by a line drawn from Mersey Point and extending seawards to a position one mile west of that Point; thence by a line drawn in a generally southerly direction to a position one and one-half miles west of Becher Point; thence by a line drawn in an easterly direction to the said Becher Point.
- (2) The whole of the waters of the Indian Ocean commencing at the North Mole at Fremantle and extending in a northerly direction to Wreck Point with a width seawards of one mile from the foreshore.

This notice cancels the following Proclamations:—

Proclamation dated 30th November, 1939, and published in *Government Gazette* of 1st December, 1939.

Proclamation dated 29th April, 1965, and published in *Government Gazette* (No. 51) of 14th May, 1965.

Proclamation dated 22nd June, 1964, and published in *Government Gazette* (No. 58) of 3rd July, 1964.

G. C. MacKINNON,
Minister for Fisheries and Fauna.



CLOSED WATERS

(Extract from Government Gazette (No.102)
of 8th November, 1968)

FISHERIES ACT, 1905-1967.

Department of Fisheries and Fauna,
Perth, 31st October, 1968.

F.D. 367/66.

THE Minister for Fisheries and Fauna, pursuant to the powers conferred by sections 10 and 11 of the Fisheries Act, 1905-1967, does hereby prohibit all persons from taking any fish whatsoever by means of fishing nets in any of the portions of Western Australian waters described in the schedule hereto, from the date of publication of this Notice in the *Government Gazette* until further notice.

Schedule.

Metropolitan Beaches.

All that portion of the Indian Ocean from the western extremity of the North Mole and extending in a north-easterly direction to the western extremity of Rous Head, with a width of a quarter of a mile from the foreshore.

All that portion of the Indian Ocean from a point on high water mark forty chains north-easterly from the western extremity of Rous Head and extending in a north-easterly direction to a point one-half mile south of the drain at Swanbourne with a width of a quarter of a mile from the foreshore.

All that portion of the Indian Ocean at City Beach commencing at a point on the foreshore one-half mile south of the southern groyne and extending in a northerly direction to a point one-half mile north of the northern groyne with a width seawards of one-half mile from the foreshore.

All that portion of the Indian Ocean at Scarborough Beach commencing at a point on the foreshore fronting the western extremity of Reserve Street, and extending in a southerly direction to a point two chains south of Brighton Road, and to a width of one-half mile from the foreshore.

All that portion of the Indian Ocean at Yanchep Beach commencing at a point on the foreshore one-half mile north-west of the north-western corner of Reserve No. 12439 and extending in a generally south-easterly direction to a point on the foreshore one-quarter mile south-east of the south-western corner of the said reserve, with a width seawards of one-half mile from the foreshore.

The notice dated 11th December, 1967, and published in the *Government Gazette* (106) on the 15th December, 1967, is hereby cancelled.

G. C. MacKINNON,
Minister for Fisheries and Fauna.

Ir

Inc

Rou

Nor

CRESCENT NAIL-TAIL WALLABY

During June 1969 a report was received by the Department of sightings of what possibly could have been Crescent-tailed Wallabies. The observations were made by Mr. N. Tonkin and by Mr. A.C. Linto of the Agriculture Department, Kalgoorlie.

Mr. Tonkin first observed 3 of these marsupials about 2 years ago whilst rabbit trapping near Mungarrie Station about 8 miles north-east of Kalgoorlie. His attention was caught by the unusual white facial markings on the animals and by their small size. Mr. Tonkin reported that the animals stood between 2 and 3 feet high, were greyish in colour with a cream-brown front and paws, and had ears more rounded than elongated. Several months later he saw the animals again in the same area. However, the most recent sighting was made about 3 months ago when one was seen crossing the Kalgoorlie Road about 5 miles west from Kalgoorlie.

Mr. Linto reported a similar animal dead alongside the same road some 7 miles west of Kalgoorlie. This observation was made in the middle of June of this year. Unfortunately, investigation of the roadside area by Mr. K.D. Morrison, a Departmental Fauna Warden, revealed no carcass. Mr. Morrison was in Kalgoorlie enjoying his annual recreation leave at the time the report was received.

These observations of this marsupial are very encouraging. Mr. Tonkin and Mr. Linto both have assured the Department that if any further sightings are made or any dead animals located by them, they would report them and also forward either the skin or skull to the W.A. Museum for positive identification.

Ellis Troughton in his book "Furred Animals of Australia" records that the Crescent Nail-tail Wallaby once ranged in its distribution from south Western Australia to eastern and central South Australia. Now the animal is believed to be verging on extinction in the settled districts of the south-west of this State, once its stronghold. It is said to occur in isolated localities west of the lower part of the Great Southern Railway, and further east towards the Great Victoria Desert.

According to Wood Jones in 1924, who knew of no observations since 1894, (Reference - Ellis Troughton) this animal had probably vanished from South Australia. J.T. Tunney, the well-known collector, thought in 1921 that the animals had

disappeared from their most favoured haunts in Western Australia, and would inevitably become extinct under the advance of settlement and spread of the fox. One can only hope that the efforts of the various local authorities to conserve the remarkably interesting fauna will include special provision for saving representatives of this lovely species.

* * * * *

DISTRICT ALLOWANCES

In the September 1968 issue of the "Monthly Staff Bulletin" (Vol XVII, No. 9) reference was made to the Public Service Commissioner's review of the District Allowances. Apparently some officers are not fully aware of the additional provisions that came into effect as from July 19, 1968.

The main new feature of this Award is that it provides for the payment of different rates to officers whose headquarters are not located in an area where a district allowance is payable. Another point to remember is if an officer is required to spend any continuous period in excess of one month in any of the districts in respect of which an allowance is payable, he qualifies for such allowance as is prescribed in the Second Schedule of the Agreement.

* * * * *

STAFF NOTE

Mr. B.A. Carmichael, Senior Inspector, Perth District, was admitted to Mount Hospital, Perth, on Sunday, August 3 for an emergency operation. At the time of writing, Mr. Carmichael's condition was satisfactory but he could not receive visitors. Reports at this stage indicate that he could be absent from his duties until late this year.

All members of the staff wish Brian a good and speedy recovery from the ailment.

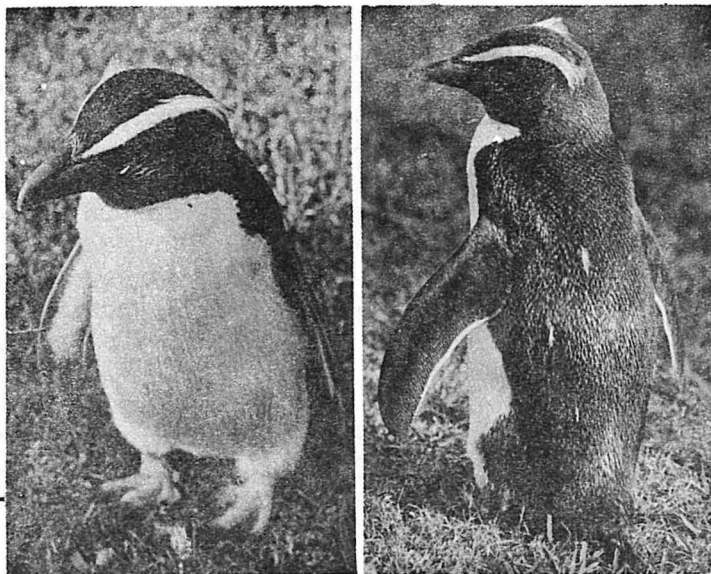
* * * * *

Life is a jest, and all things show it;
I thought so once, but now I know it.

- B. Gay

CRESTED PENGUIN

On Sunday, June 22, 1969, a Crested Penguin (Eudyptes chrysocome moseleyi) was found and placed in the care of Cadet Fauna Warden Mr. R. Gardiner. This penguin, an apparent straggler to our coast, was found by a relative of Mr. Gardiner at Long Point, Warnbro Sound, in a very exhausted and poor physical condition. It could not stand nor walk.



The particular species of the Crested Penguin, also known as the Rock-hopper Penguin, breeds at St. Paul and New Amsterdam Islands in the southern Indian Ocean, according to the handbook "Birds of Western Australia" by Serventy and Whittell. Specimens have been observed north to Rottnest Island and Scarborough and east to Esperance. There are a number of closely allied Crested Penguins which breed on the Sub-Arctic Islands and range northward after the breeding season is over. The penguin found at Long Point belongs to the only species so far recorded in Western Australia. In south-western Australia two others are occasionally stragglers. The more common is the Thick-billed Penguin, breeding in the New Zealand area, and the other is the Royal Penguin which breeds on Macquarie Island. A possible additional visitor to Western Australia is the Macaroni Penguin, a south Indian Ocean species, breeding at Prince Edward, Marion, Kerguelen and Heard Islands. Our Crested Penguin can be distinguished from the Macaroni and Royal by the fact that in these two latter species the yellow crests over the eyes are united in front across the forehead, whereas they are separated in both the Crested and Thick-billed. The Royal differs from all of the others in having the entire under parts, including the throat, white; all the other penguins with crests have the throat black or greyish. There is more difficulty in distinguishing the Crested from the Thick-billed, though in Western Australia the question is more academic than practical as it is unlikely that the Thick-billed Penguin will wander so far west against the prevailing winds and ocean

currents.

Mr. Gardiner cared for the penguin for the first two weeks, during which time it recovered sufficiently to resume walking. During this time it had to be hand-fed with white bait, cod liver oil, chopped fresh fish fillets and Pentavite. All food had to be submerged in sea water before being fed to the bird. After this period, Miss L. Nicholls took the bird into her care, as it was thought that the penguin was suffering from a fungal infection of the respiratory tract. The treatment given to the penguin cured it from this normally fatal condition. During the treatment period the penguin was kept in a clean large cardboard box. After the first week it received a daily hosing down to induce it to resume preening. By July 21, the penguin had completely recovered.

It is planned to fly the Crested Penguin in a special box to Albany. There it will be taken on board a Cheynes Beach Whale Chaser and released in the waters off Albany. By releasing the Crested Penguin in that area, it is thought that it would be past its main obstacle of Cape Leeuwin, and that it should have a better chance of catching up with other migrating Crested Penguins. A close watch will be kept on the weather before its release, to ensure that the penguin has at least a few days of fine and mild conditions, enabling it to readjust better to its natural environment.

* * * * *

1969 ANNUAL STAFF CONFERENCE

Officers are reminded that the conference for this year is to be held during the period October 20 to October 24 inclusive. The format for this year has not yet been decided upon and there is still time to submit ideas and agenda items to Head Office. Last year the conference took on a "new look" and there is no reason why we should not be able to improve on it again. So here is your opportunity to express your views on how the conference should be conducted, what issues should be included for discussion and what issues in your opinion should be omitted.

* * * * *

Nothing so needs reforming as other people's habits.

- M. Twain

THE TELEPHONE AND YOU!

If you have a telephone on your desk then keep reading. In a recent open letter the Australian post office reminded us all of a few points to keep in mind.

"You are an important person. You become a spokesman for the Department.

If you answer with a glad-to-serve spirit, you will be accepted by your callers as a good person with whom to do business.

Should your tone of voice be contrary, your articulation poor, and your manner careless, the chances are that your callers will resent such heedless handling and shy away from future contacts with the Department.

When the telephone rings, you have no way of knowing whether the call is from within the Department, or from a caller who has a problem to discuss. The speed with which you answer your telephone, and the adept manner in which you handle the caller's request or problem will go a long way towards convincing a caller that his call is receiving considerate handling.

You are going to have to use a lot of ingenuity and tact, if you are to develop a sound service perspective for the calls that reach your telephone. Many will be from callers who have contacted you for years, others will be from new callers, strangers; others may reach you in error. How you handle each call will spell the difference between mediocrity and excellence, between approval or censure.

Perhaps some irate caller will suddenly appear on your telephone, condemning what he considers was some failure of the Department or yourself. You will need to be tolerant, to listen to the bitter words, and to insert a soothing word here and there until your caller calms down and is capable of listening to reason. In short, the user of a telephone in today's business world must become a diplomat.

It isn't always easy. But careless handling of a call can lead to misunderstandings, as well as disagreements and loss of business. It can also make life a little more difficult for you.

Let's all get together and improve our telephone techniques.
Efficiency will improve and life will be so much easier.

* * * * *

1890'S RULES FOR USE OF TELEPHONES

An American telephone company has resurrected the following 1890's rules that governed the use of telephones by subscribers of that era:-

Ladies who eat onions must stand four feet from the transmitter.

No mistake in grammar will be rectified in transmission.

Profane swearing is wearing on the line and will not be tolerated.

People are strictly forbidden to use the wires for clotheslines.

Messages sent out in the rain will be thoroughly dried before delivery.

Patrons are strictly forbidden to use words of 12 syllables for fear of breaking down the line.

* * * * *

DO EAGLES SWIM?

On March 10, the biologists at BCF's Auke Bay (Alaska) Biological Laboratory had a ringside seat to the performance of an eagle diving upon a duck so swiftly that the eagle went into the water still holding the duck. The eagle swam to shore and hopped up on a rock, fluttered its wings and then sat there stoically while many of a flock of crows darted about it. After a short rest, the eagle flew across the bay with the duck still in its talons.

* * * * *

For they can conquer who believe they can.

- Virgil.

ANIMAL SOUNDS RESEARCH -
NOISY SCRUB BIRD

Mr. F.N. Robinson, Experimental Officer, Division of Wildlife Research, C.S.I.R.O. is in the process of carrying out research work on animal sounds at the Two People Bay reserve set aside for the conservation of the Noisy-scrub bird. Mr. Robinson has the use of a field laboratory established at Two People Bay. Recently he expressed his appreciation to the Minister for Fisheries and Fauna, Mr. G.C. MacKinnon, for the assistance and encouragement given to him by officers of the Department. In commenting on this reserve at Two People Bay, Mr. Robinson said, that, with its rich and rare fauna and flora, and magnificent scenery, it must be one of the finest anywhere in the world and considered it both a pleasure and a privilege to work there.

Mr. Robinson's speciality of research is the recording and analysis of animal sounds, in particular the Noisy-scrub bird. He is mainly concerned with the origins, evolution and meaning of passerine bird song and its relation to the breeding cycle and the relevant environmental factors.

Two types of sound recordings are involved. First, high quality recording of individuals, for spectrographic analysis and secondly automatic measurement of daily song output by means of automatically operated tape recorders which record for short periods at regular intervals. A typical interval is a 10 second recording every six minutes. When the tapes are replayed, Mr. Robinson can make a quantitative measurement of the daily output of song and an accurate estimate of the date of egg-laying. Some of Mr. Robinson's research colleagues are also using this automatic recording technique to trace the movements of nomadic or migratory species by establishing recording stations at suitable places. The recorders run for four weeks without attention.

In 1961 the Division of Wildlife Research, C.S.I.R.O., established an acoustic laboratory. Its aims are threefold: first to provide a technical and scientific advisory service in this field to other units of the Division; second to investigate the possibility of using sound signals to communicate with animals; and third to study the structure and meaning of vocal communication in animals.

"A study of the use of vocal mimicry in the superb lyrebird has shown that the mimicked sounds are carefully selected for their acoustic properties, and that the production of these sounds by the lyrebird functions as a highly directional sound beacon, enabling females and rival males to locate a singing male at a considerable distance in dense vegetation. Loud and sustained song is an important factor in breeding success, and mimicry adds both individuality and variety to a basically simple song which would become monotonous with repetition. This extensive use of mimicry of the songs and calls of other birds is made possible by the fact that the superb lyrebird breeds in mid-winter, so that at the peak of the song cycle the species mimicked are virtually silent. Calls of birds which are vocal during the winter months rarely occur in the lyrebird's repertoire.

These observations suggest that mimicry is an important factor in the evolution of bird language and has prompted a comparative study of mimicry in the songs of the superb lyrebird, the Albert lyrebird, the rufous scrub bird and the noisy scrub bird. All of these have a rather simple syrinx, but are capable of reproducing a variety of complex sounds, most of which are copied from the calls of other species.

Already this study has demonstrated that the different songs of these four related species represent different stages in the evolution of the complex coded message which is contained in modern passerine territorial song, ranging from the short, simple stereotyped song of the rufous scrub bird to the more sophisticated and individually variable song of the noisy scrub bird. The causes of this type of evolution appear to relate to the gradual crowding of the acoustical environment due to the increasing numbers of species using vocal communication.

The development of using for the first time an automatically-operated tape recorder to obtain a quantitative measure of the male breeding cycle by recording the daily output of bird song, together with parallel measurement of environmental factors, such as temperature, rainfall, and soil moisture, provides an entirely automated method of assessing the breeding cycle and its causation.

* * * * *

You'll find us rough, Sir, but you'll find us ready.

- C. Dickens.

CLOSURE

[Extract from Government Gazette (No. 26) of 11th March, 1966.]

FISHERIES ACT, 1905-1965.

Department of Fisheries and Fauna,
Perth, 4th March, 1966.

F.D. 54/45.

THE Minister for Fisheries and Fauna, pursuant to the powers conferred by sections 10 and 11 of the Fisheries Act, 1905-1965, doth hereby prohibit all persons from taking any fish whatsoever by means of fishing nets other than hand scoop nets in all that portion of Western Australian waters described in the schedule hereto during the period commencing at six o'clock in the forenoon and ending at 6 o'clock in the afternoon of each and every day, from the date of publication of this notice in the *Government Gazette* until 29th July, 1970.

Schedule.

All that portion of the Indian Ocean from the western extremity of Rous Head and extending in a north-easterly direction along high water mark for a distance of forty chains, with a width of a quarter of a mile from the foreshore.

G. C. MacKINNON,
Minister for Fisheries and Fauna.

Amateur Fisherman's License.

3A. (1) A person who catches or attempts to catch any fish, other than crabs for his personal use by means of any fishing net, crayfish pot or marron trap shall hold an amateur fisherman's license which shall be issued in Form "B1" in the Appendix to these regulations.

(2) The fee payable for and on the issue of an amateur fisherman's license shall be one dollar.

(3) Every amateur fisherman's license issued under this regulation is issued subject to the following conditions:—

- (a) That no net having a length greater than 100 yards and with any mesh smaller than two and one-quarter inches shall be used in any estuary, river or inlet, or in the entrance waters thereof.
- (b) That no net having a length greater than 132 yards and with any mesh smaller than two inches shall be used in any other waters.
- (c) That not more than two crayfish pots, or six drop nets or traps for taking marron, or one scoop net or dredge net for taking prawns, shall be used or carried in any boat at any one time.
- (d) That not more than two gallons of prawns shall be taken in any one day.
- (e) That no fish caught while any fishing net or other article mentioned in subregulation (1) of this regulation is being used shall be sold, consigned, or offered or exposed for sale.

(4) In this regulation the term "fishing net" includes any scoop net, drop net, dredge net, dip net or landing net, that exceeds two feet in its greatest diameter.

CLOSED WATERS

(Extract from Government Gazette (No. 19) of 14th February, 1969)

FISHERIES ACT, 1905-1967.

Department of Fisheries and Fauna,
Perth, 11th February, 1969.

F.D. 745/68.

THE Minister for Fisheries and Fauna, pursuant to the powers conferred by section 9 of the Fisheries Act, 1905-1967, does hereby prohibit all persons from taking any fish whatsoever by any means of capture whatsoever, and taking any marine algal life whatsoever, in all that portion of Western Australian waters specified in the schedule hereto.

ROSS HUTCHINSON,
Acting Minister for Fisheries and Fauna.

Schedule.

All that portion of the Indian Ocean within a radius of 20 chains from a point on the foreshore, situate in prolongation westerly of the centre line of Elvire Street, Waterman.

METROPOLITAN COAST

FISHERIES RESTRICTIONS

FISHERIES ACT REGULATIONS

Fishing Boat Licenses.

2. (1) The owner or person in charge of any boat used or intended to be used for or in connection with the taking by any method whatever of fish for sale, or for other disposal for gain or reward, shall hold a current fishing boat license which shall be issued in Form "A" in the Appendix to these regulations, or a renewal of such license pursuant to subregulation (2) of this regulation.

Penalty.—Two hundred dollars and, in addition, four dollars for each day the boat continues unlicensed.

(2) A fishing boat license issued under this regulation may be renewed annually and the renewal shall be issued in Form "A1" in the Appendix to these regulations and remain in force until the 31st day of December of the year in respect of which the renewal is issued.

(3) The fee for a fishing boat license or a renewal of such license shall be in accordance with the following scale:—

	\$
(a) For boats of any length propelled solely by oars	2.00
(b) For boats propelled by motor or sail—	
(i) Not exceeding 25 feet in length	4.00
(ii) Exceeding 25 feet in length, but not exceeding 35 feet in length	10.00
(iii) Exceeding 35 feet in length, but not exceeding 55 feet in length	15.00
(iv) Exceeding 55 feet in length	30.00

(3a) A fishing boat license or a renewal of such license shall not be issued under this regulation in respect of any boat unless that boat is licensed under the provisions of Division 1 of Part VIII of the Western Australian Marine Act 1948 (as amended).

(3b) Every license or renewal of a license issued under this regulation is issued subject to such conditions as the Minister has imposed or may from time to time impose in respect of such license or renewal thereof pursuant to the provisions of section 17 of the Act.

(4) Every license or renewal of a license issued under this regulation is issued subject to the condition that there shall be legibly painted and kept so painted on both sides of the hull at the turn of the bow of the boat in respect of which that license or renewal is issued, the letters "L.F.B." followed by the initial letter of the port at which that license or renewal is issued and the distinguishing number allotted in respect of that boat by the licensing officer.

(5) The letters and figures required to be painted on both sides of the hull of a boat pursuant to subregulation (4) of this regulation shall be painted in black on a yellow background and be not less than twelve inches in height and not less than two inches in width, except where the boat is one propelled solely by oars in which case those letters and figures may be less than six inches but not less than five inches in height.

LONG LINES RESTRICTIONS

Extract from Government Gazette, (No. 106) of
15th December 1967

FISHERIES ACT, 1905-1966.

Department of Fisheries and Fauna,
Perth, 11th December, 1967.

F.D. 54/45.

THE Minister for Fisheries and Fauna pursuant to the powers conferred by section 9 of the Fisheries Act, 1905-1966, doth hereby prohibit all persons from taking any fish whatsoever by means of fishing lines known as or called "long lines" or "set lines" in all those portions of Western Australian waters described in the Schedule hereto, as from the date of publication of this notice in the *Government Gazette*.

Schedule.

- (1) The whole of the waters of Warnbro Sound (Safety Bay), including the waters surrounding the offshore rocks and islets, bounded on the north by a line drawn from Mersey Point and extending seawards to a position one mile west of that Point; thence by a line drawn in a generally southerly direction to a position one and one-half miles west of Becher Point; thence by a line drawn in an easterly direction to the said Becher Point.
- (2) The whole of the waters of the Indian Ocean commencing at the North Mole at Fremantle and extending in a northerly direction to Wreck Point with a width seawards of one mile from the foreshore.

This notice cancels the following Proclamations:—

Proclamation dated 30th November, 1939, and published in *Government Gazette* of 1st December, 1939.

Proclamation dated 29th April, 1965, and published in *Government Gazette* (No. 51) of 14th May, 1965.

Proclamation dated 22nd June, 1964, and published in *Government Gazette* (No. 58) of 3rd July, 1964.

G. C. MacKINNON,
Minister for Fisheries and Fauna.



CLOSED WATERS

(Extract from Government Gazette (No.102)
of 8th November, 1968)

FISHERIES ACT, 1905-1967.

Department of Fisheries and Fauna,
Perth, 31st October, 1968.

F.D. 367/66.

THE Minister for Fisheries and Fauna, pursuant to the powers conferred by sections 10 and 11 of the Fisheries Act, 1905-1967, does hereby prohibit all persons from taking any fish whatsoever by means of fishing nets in any of the portions of Western Australian waters described in the schedule hereto, from the date of publication of this Notice in the *Government Gazette* until further notice.

Schedule.

Metropolitan Beaches.

All that portion of the Indian Ocean from the western extremity of the North Mole and extending in a north-easterly direction to the western extremity of Rous Head, with a width of a quarter of a mile from the foreshore.

All that portion of the Indian Ocean from a point on high water mark forty chains north-easterly from the western extremity of Rous Head and extending in a north-easterly direction to a point one-half mile south of the drain at Swanbourne with a width of a quarter of a mile from the foreshore.

All that portion of the Indian Ocean at City Beach commencing at a point on the foreshore one-half mile south of the southern groyne and extending in a northerly direction to a point one-half mile north of the northern groyne with a width seawards of one-half mile from the foreshore.

All that portion of the Indian Ocean at Scarborough Beach commencing at a point on the foreshore fronting the western extremity of Reserve Street, and extending in a southerly direction to a point two chains south of Brighton Road, and to a width of one-half mile from the foreshore.

All that portion of the Indian Ocean at Yanchep Beach commencing at a point on the foreshore one-half mile north-west of the north-western corner of Reserve No. 12439 and extending in a generally south-easterly direction to a point on the foreshore one-quarter mile south-east of the south-western corner of the said reserve, with a width seawards of one-half mile from the foreshore.

The notice dated 11th December, 1967, and published in the *Government Gazette* (106) on the 15th December, 1967, is hereby cancelled.

G. C. MacKINNON,
Minister for Fisheries and Fauna.

