STAFF

BULLETIN

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

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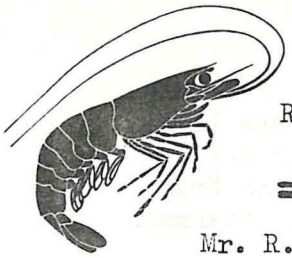

RESEARCH OFFICER COMMENTS ON FLUCTUATIONS IN THE PRAWN CATCH

Mr. R.J. Slack-Smith, B.Sc., in his talk on A.B.C. Radio on October 14, 1969, commented on the 1969 prawn catch in the Shark Bay area and on the research undertaken to establish why fluctuations in the catch occur from year to year.

"This year 2.8 million lbs. of prawns were trawled in Shark Bay. This catch is 41% greater than that taken during 1968. The time spent fishing by the trawlers had not increased although there had been an overall increase in average vessel efficiency, but this increase did not account for the 41% catch increase. These facts point up the local applicability of the overseas observation that prawn catches can fluctuate up to 50% from a mean value from year to year. In fact, the Shark Bay population of King and Tiger prawns is much less variable than the Banana Prawns from Northern Australia. We have well publicised examples of these fluctuations, firstly in the Gulf of Carpentaria, and secondly, a local example in Nicol Bay where the catch varied from 1 million lbs. in 1967 to about 50,000 lbs. in 1968.

Considerable research here in Australia and overseas has not yet come up with the answer as to why we get these violent fluctuations. Several lines of research have been followed. These include studies on the breeding habits, survival of the larvae and young, the effects of fishing on the next year's stock and the relationship of external factors, such as current, temperature, food supply, etc., on the next year's stock. Before many of these studies can be made effective we need to be able to individually mark or tag prawns so that we can study their movements, biology and the rates at which they are lost from the population. Overseas, workers have tried with varying success to develop tags or marks towards these ends. These include disc tags, pinned through the tails of prawns (these give individual tags but affect the behaviour of the prawn), and injection of non-toxic biological dyes so that there is a marked colour change in the prawn as a whole. This dyeing has little effect on the prawn's behaviour but each prawn is not marked individually. During October 1969 we shall be commencing a series of tagging and marking experiments at the W.A. Marine Research Laboratory at Waterman to further investigate these methods and to develop other methods of individually tagging. The prawns for these experiments were trawled in Shark Bay about 3 weeks earlier by the Fisheries Research Vessel "Flinders" and transported to Fremantle in seawater

pumped through tanks on her decks. Many prawns were killed or injured in the journey south during bad weather and alternative methods of transportation of live prawns from Shark Bay to Perth are also being investigated at Waterman.

I hope to be able to report on the results of these experiments in a future talk."

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SAVING THE SEA TURTLES

All seven species of marine turtles are balanced on a razor's edge between extinction and survival. The plight of these animals was made clear at a recent meeting of the International Union for the Conservation of Nature, where delegates heard reports of increasing exploitation, decreasing stocks, and the failure of most governmental protection. It seems that the ocean-going reptiles are too useful to man; they are cropped at every stage of their life cycle, both where they breed and where they principally feed although the areas may be thousands of miles apart. Apparently, two things are needed to alleviate the situation: firstly, because of the international range of the turtles, some sort of inter-governmental protection programme is required. Secondly, more research must be done to determine the size of stocks from all breeding and feeding areas, as well as to solve the mystery of turtle migration. Where breeding turtles come from is unknown. No-one knows where the hatchlings go, or where they spend their first year. It was said that such research, however, will never be accomplished if the populations upon which they might be based are destroyed for turtle soup and spectacle frames.

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STAFF NOTE

During the Senior Warden's absence on leave, Mr. A.R. Marshall acted as Senior Warden for the period prior to October 17. After the Annual Staff Conference Mr. A.T. Pearce acted as Senior Warden for the remainder of Mr. S.W. Bowler's absence. Mr. Bowler resumed duties on November 17.

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Youth is a wonderful thing; what a crime to waste it on children.

- Shaw

ANNUAL STAFF CONFERENCE

The Annual Staff Conference which was held during the week October 20 - 24, 1969, ended on a very high note. All members attending considered that the opportunity given to air issues was very stimulating.

Mr. G.C. MacKinnon in his opening address set the pace this year when he said that he would welcome suggestions from the staff on major issues facing the industry and administration, such as:

the operation of freezer boats

the mile limit

land usage - grazing and mining on sanctuaries

Mr. MacKinnon said that conflicts such as these must be resolved. The resolutions must be in the best interests of the majority of the people of Western Australia and Australia as a whole, and not just for a minority group. He considered that education, together with experience should assist to achieve this aim.

On the evening of Friday, October 24, Departmental officers attended the Social Club's Annual Staff Social. The function which was held at Venezia House, Victoria Park, proved to be a very enjoyable occasion. The highlight of the evening was when a presentation was made to Mr. B.R. Saville, the Department's Administrative Officer. Mr. Saville will retire at the end of this year, after 26 years of continuous service with the Department of Fisheries and Fauna.

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STAFF NOTE

All officers were very pleased to see Mr. B. Carmichael at the Annual Staff Social on Friday, October 24. Mr. Carmichael, who underwent a series of major operations since August 3, hopes to resume duties later this month (November).

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INSPECTION BRANCH

STAFF ALLOCATION

The Chief Inspector, Mr. J.E. Bramley decided to allocate the personnel of the Inspection Branch during the 1969-1970 rock lobster season as shown below.

It is expected that some difficulty may be encountered due to the absence of two Senior Officers on sick leave.

Albany

Messrs. C. Ostle and J. Williams

Bunbury

Messrs. R. Emery and R. Silbert

Mandurah

Messrs. D. Smith and J. Cresswell

Fremantle

Messrs. A. Melsom, P. Pennings and M. Mahoney

Perth

Messrs. M. Crawford, R. Green and K. Marshall

Leschenault

Mr. J. Neal

Ledge Point

Mr. B. Bruce

Lancelin

Messrs. J. Kelly and J. Blackman

Cervantes

Mr. P. Kendrick

Jurien Bay

Messrs. J. Fletcher and I. Burns

Dongara

Mr. P. Strickland

Geraldton

Messrs. D. Gordon, P. Willey and P. Lambert

Shark Bay

Messrs. R. Smith and J. van Roon

Mobile Patrol I

Messrs. B. Baines and J. Wilson

Mobile Patrol II

Messrs. E. Hammond and B. Hawkins

Marron Patrol

Mr. D. Blackman

P.V. "Dampier"

Messrs. E. Little and J. Harman

P.V. "Pelsart"

Messrs. E. Forster and B. Smith

P.V. "Lancelin"

Messrs. H. Pedersen, G. Faulkner, S. Lilburn and G. Lukeis

Relieving

Mr. D. Noble to relieve at Geraldton and Dongara
Mr. I. Burns to relieve at Cervantes
Mr. M. Brown to relieve at Lancelin, Ledge Point and Leschenault

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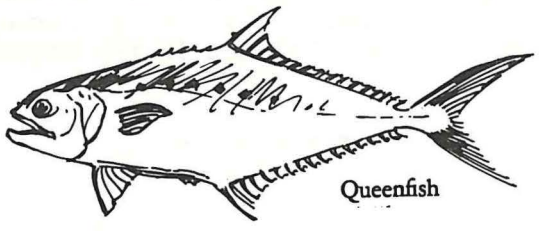

Staff Notes

The Department's Director, Mr. B.K. Bowen, returned to Perth on Thursday, October 16, after visiting Rome and London. Mr. Bowen was absent for three weeks and during this period attended the Indian Ocean Fishery Commission's Working Party session in Rome. While in England, Mr. Bowen undertook to examine the use of house-boats on inland waters.

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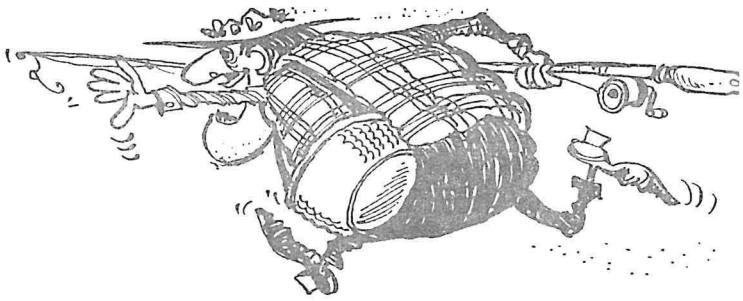
Mr. A.C. Waldon, the Department's Publicity and Extension Officer, was a notable absentee from the Annual Staff Conference. For those who did not know, Colin was at Kalbarri on the Murchison River enjoying a spot of fishing during his Annual Recreation Leave.



PROCESSING RESTRICTION LIFTED

The Minister for Fisheries and Fauna, Mr. G.C. MacKinnon, has directed that the restriction in relation to the processor's license for the freezer boat "Madeira" LFB G296, be cancelled as from October 29, 1969. This means that the fishing vessel may process rock lobster in the 1969-1970 rock lobster season.

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A FURTHER NOTE ON THE CRESTED PENGUIN

The Crested Penguin which was nursed back to health after being washed up at Long Point during June, 1969, has been released. The bird was flown to Albany on August 14, and liberated near the Continental Shelf from the whale chaser "Cheynes II" two days later. It followed the chaser for some time before commencing its long journey home to the New Amsterdam and St. Paul Islands in the southern Indian Ocean.

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CAPE ARID RESERVE BECOMES A NATIONAL PARK

Cape Arid Reserve 24047, located east of Esperance, comprising an area of 642,000 acres, has had its purpose changed to class "A" reserve "national park", with vesting in the National Parks Board of W.A. Notice to this effect was published in the Government Gazette on August 29, 1969.

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ARCHIPELAGO OF THE RECHERCHE

All the islands of the Archipelago of the Recherche have been set aside as a class "A" reserve, No. 22796, and vested in the Western Australian Wild Life Authority. Notice to this effect was published in the Government Gazette dated September 26, 1969.

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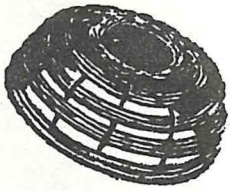
FAST BOATS TO AID PATROL OF FISHING GROUNDS



Inspectors will be aided in the coming rock lobster season by the availability of fast patrol boats. These specially equipped boats will work in conjunction with the regular patrol vessels "Dampier", "Pelsart", and "Lancelin". Walkie-talkie sets will be part of the standard equipment to enable these fast boats to stay in constant communication with the regular patrol vessels and with the mobile land patrols. The use of these special patrolling units should aid the Inspection Branch in its policing work, especially with the problem of over-potting.

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STAFF NOTES

The P.V. "Vlaming" under the command of its regular skipper, Mr. R. Smith, sailed for Shark Bay from Fremantle on Tuesday, October 28. On board were regular crewmen, Mr. J. van Roon and Mr. B. Smith. Mr. B. Smith was only on board to assist during the trip north. During her stay in Fremantle, the vessel's personnel attended the Annual Staff Conference. At the same time, the P.V. "Vlaming" was slipped and generally made ready to resume duties in the northern waters.

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At present the P.V. "Lancelin" is under the command of relieving skipper, Mr. G. Faulkner. This vessel's regular skipper is acting as skipper of the research vessel "Flinders".

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Mr. E.R. Forster resumed duties on the P.V. "Pelsart" on October 27, after a period of duty ashore, during which he also took his Annual Recreation Leave.

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RESERVES NEWS

Coolgardie Shire

In the Government Gazette dated August 8, 1969, there was notice amending the purpose of Reserve 17804 to "Water and Conservation of Flora and Fauna". This reserve, known as Cave Hill, comprises 500 acres and is located 20 miles south-west of Widgemooltha. It remains vested in the Minister for Water Supply.

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Lake Grace Shire

Reserve 29860, known as Lake Pallarup, has been set aside for the purpose of "Conservation of Flora and Fauna". It comprises an area of 3717 acres, is not vested, and is located about 8 miles south-west of Lake King. Notice to this effect was published in the Government Gazette on July 4, 1969.

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Dundas Shire

Reserve 3211, known as Dordie Rock, has been set aside for "Water and Conservation of Flora and Fauna". It comprises 300 acres and remains vested in the Minister for Water Supply. Notice to this effect was published in the Government Gazette on July 4, 1969.

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Kulin Shire

Reserve 16763 (Williams Location 9192) had its purpose changed from "camping and public utility" to "Conservation of Flora and Fauna". It comprises 42 acres and has been vested in the W.A. Wildlife Authority. Notice to this effect was published in the Government Gazette on June 13, 1969.

This reserve is located 3 miles east of Jitarning.

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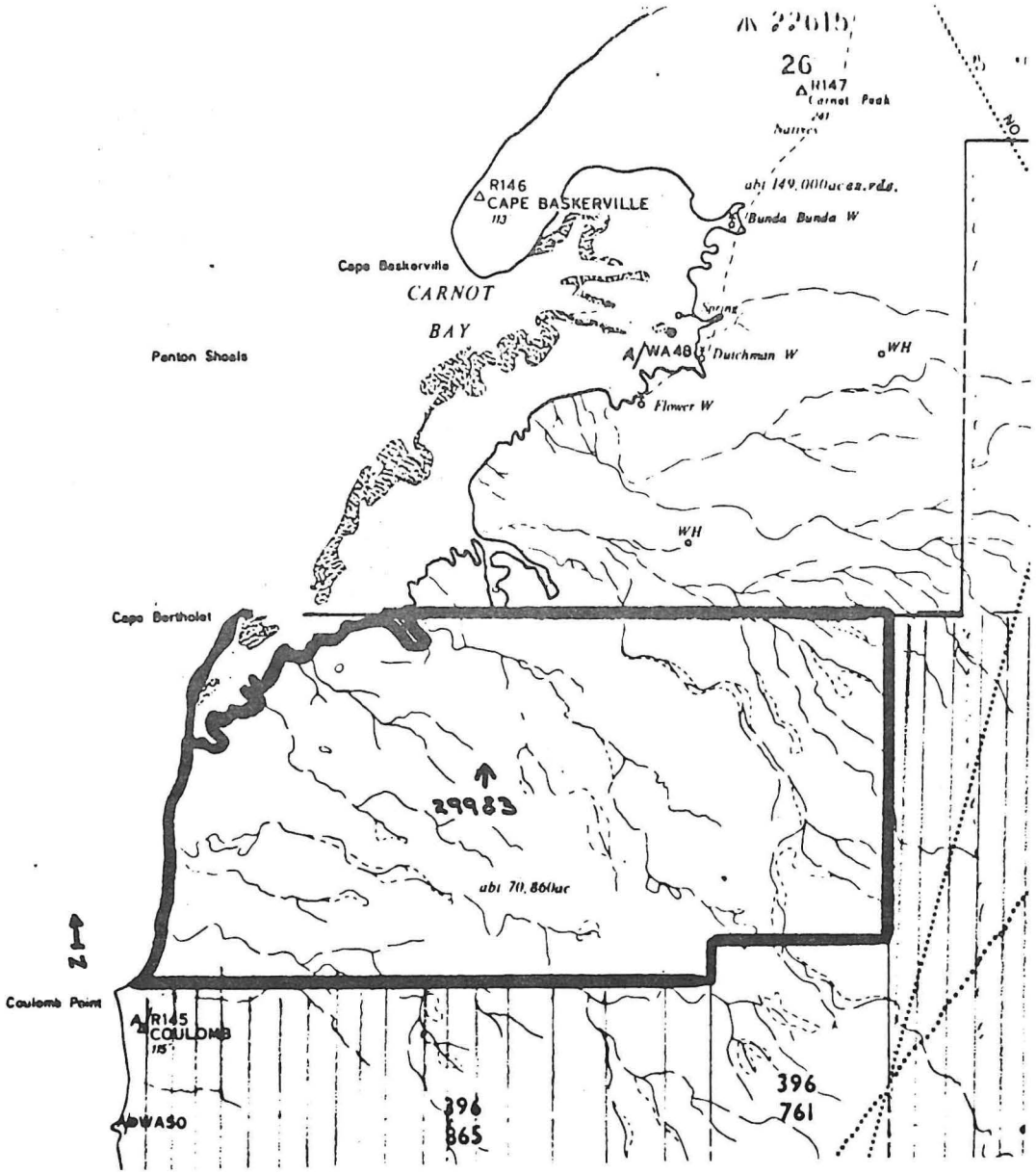
POINT COLOUMB RESERVE

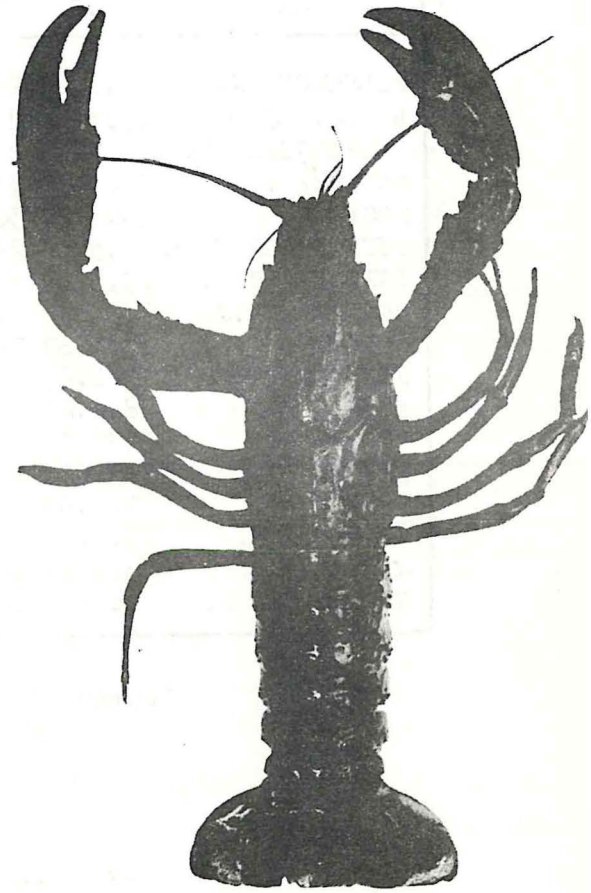
Executive Council has approved that Dampier Location 77 be set aside as Reserve No. 29983 for the purpose of "Conservation of Flora and Fauna", classified as Class "A" and vested in the Western Australian Wild Life Authority. Notice to this effect was published in the Government Gazette dated September 26, 1969.

This reserve, which will be known as Point Coloumb Reserve, comprises an area of about 70,860 acres and is located in the Broome Shire.



MARRON FISHING

Dr. N.M. Morrissy, the Department's Freshwater Research Officer, in his report in relation to proposed Inland Fishing Regulations, expressed the opinion that on a social basis the marron fishing season should be opened prior to Christmas. As a result the Minister for Fisheries and Fauna, Mr. G.C. MacKinnon, issued a Notice in pursuance of the powers conferred by Section 9 of the Fisheries Act 1905-1969, prohibiting the taking of marron by any means of capture whatsoever, from May 1 to December 15 in every year.



MARRON *(Cherax tenuimanus)*

The new opening date to the fishing season should to a large extent discourage present pre-season fishing. Most people do not go marron fishing continuously but tend to concentrate their usual effort over a short period in the first few months of the season, mainly because of holidays and of the desire "to get in first".

At the same time the Minister agreed to continue the restriction on the use of fishing nets and introduced the prohibition on the use of fish traps for the taking of marron during the open season. This means that the method of capture is restricted to the use of a pole snare, a scoop net or up to six drop nets per person.

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That man's silence is wonderful to listen to.

- Hardy

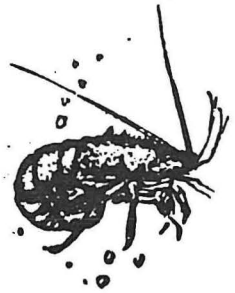
OFFENCES UNDER THE FISHERIES ACT

NAME	D.O.O.	D.O.H.	COURT	NATURE	FINE
ALLERTON W.	24.6.69	20.10.69	Ftle	Netting C/W	$50
BARLOW J.	23.3.69	8.8.69	Perth	Closed Waters	$200
BEBBINGTON R.	29.3.69	29.7.69	Collie	U/S Marron	$30 + $15
BUMBACK V.	3.1.68	11.8.69	Ftle.	Closed Waters	$20
COCKMAN T.	19.4.69	30.7.69	Perth	Closed Waters	$200
FITZGERALD T.P.	29.3.69	29.7.69	Collie	U/S Marron	$20 + $1.20
FITZGERALD T.J.	29.3.69	29.7.69	Collie	U/S Marron	$20 + $1.20
HOLLAND L.W.	3.3.69	9.7.69	Perth	U/W Craytails	$52.75
HOWARTH G.R.	12.1.69	19.9.69	G/ton	U/S Crays	$130
JENKINS G.A.	11.4.69	11.8.69	Ftle	Closed Waters	$200
KOVACS J.	28.5.69	12.9.69	Perth	Closed Waters	$250
MOORE N.	3.3.69	9.7.69	Perth	U/W Craytails	$52.75
NELSON R.	3.3.69	9.7.69	Perth	U/W Craytiils	$52.75
PROWSE A.	24.6.69	20.10.69	Ftle	Netting C/W	$50
VEGAR A.V.	15.4.69	11.8.69	Ftle	U/S Crays	$100 + $60
WALKER E.	13.4.69	13.8.69	Harvey	U/S Marron	$40 + $20.10
WOOLHOUSE N.	6.4.69	12.9.69	Perth	U/S Crays	$68

Netting C/W = Netting in Closed Waters
U/S = Undersize
U/W = Underweight

OFFENCES UNDER THE FAUNA CONSERVATION ACT

NAME	D.O.O.	D.O.H.	COURT	NATURE	FINE
DEL-BARELLO A.	6.6.69	12.9.69	Perth	Taking Fauna in Closed Area	$40
EWEN T.	6.6.69	12.9.69	Perth	" " "	$40
GUGIATTI E.	19.7.69	10.10.69	Perth	" " "	$50
GUGIATTI R.	19.7.69	10.10.69	Perth	" " "	$50
HANERVELD R.	6.6.69	12.9.69	Perth	" " "	$40



GRANITE ROCK RESERVES

Some time ago, the Western Australian Wild Life Authority recommended that a considerable number of granite rocks, together with adjoining Crown Lands, be maintained for the conservation of fauna and flora, particularly for scientific studies.

Scientifically, these rocks are of particular value because:-

1. They act as modifiers of habitat through their effect on the climate of their verges. The effects of the shade they throw on the southern aspects and run off of rainwater on all sides produces conditions which favour a unique flora and fauna. Typical examples are the occurrence of ferns and other plants in comparatively arid districts many miles from their point of widespread occurrence. This isolation gives opportunities to study adaptive radiation in plants and animals and other evolutionary factors.

2. Many of them shelter relict species not found elsewhere and in the pools which form after rain, successions of aquatic life occur which give an opportunity for studying the effects of arid environments on this type of fauna.

3. Some are the main strongholds of interesting forms of lizards, frogs, wallabies and many invertebrates.

4. Taken as an array of areas, they provide a series of assemblages of plants and animals as cross sections of the southern part of the State. They thus show gradations in the occurrence of flora and fauna on north-south and east-west clines.

The main forms of damage from which these rocks need to be protected are:-

1. Clearing or grazing of vegetation.

2. Repeated indiscriminate burning and shooting.

3. Trampling of vegetation and disturbance of rock cover by picnic parties and introduction of exotic plants.

4. Disfigurement with litter or paint, unauthorized vehicular tracks and mining for road or building

materials.

Two other forms of man-induced changes on granite rocks occur by:

(a) Modification as a water catchment area

(b) Inclusion in farmland where they become accessible to grazing and trampling by sheep and cattle.

The first of these usages, insofar as it uses granite slabs for walling the water catchment channels, destroys the habitat of all these animals - lizards, spiders etc. which shelter beneath rocks. However, there are some slabs and rock pools which remain, and immediately adjacent land is undisturbed.

The second of the changes, (b) above, leads to complete destruction of the habitat; adjacent flora is grazed out, the rock loses lichens etc. because of trampling, slabs are broken and removed and pools polluted by sheep and cattle droppings. Clearly, once a rock is included in a farm its ability to retain its biological characteristics are limited. Nevertheless, it seems unnecessary to have only rocks of a "wilderness" status as reserves and it is advisable to have a number of categories, e.g. (i) Wilderness; (ii) Picnic and local beauty spot, (iii) Water catchment. An array of rocks with district usages is most likely to ensure the maintenance of these unique areas.

In general, the size of the rock is not important, i.e. a very large size is not, in itself, necessary before an area is reserved. The ideal would be a more representative array of all sizes of granite rocks included in the reserve system. Large rocks have an advantage in that there is greater topographic relief and hence a more diversified fauna and flora. In addition, large rocks in the eastern limit of the wheatbelt area have a good catchment and run-off which often allows small populations of the wetter types of plants and animals (now found much further west) to persist as relicts.

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SOCIAL CLUB

At the Annual General Meeting of the Department's Social Club held on Monday, October 20, the following officers were elected to attend to the administration of the Club for the ensuing twelve months:

President - Mr. E.R. Hammond
Vice President - Mr. A.R. Marshall
Secretary/Treasurer - Mr. K.J. Ammerer
Members - Messrs. S.W. Bowler, B.T. Baines, E. Barker, R.M. Crawford

One notable occurrence in the history of the Club was that members agreed (without any prompting from the Treasurer) to increase the fortnightly subscriptions to 50 cents. The increase will be effective as from November 20, 1969.

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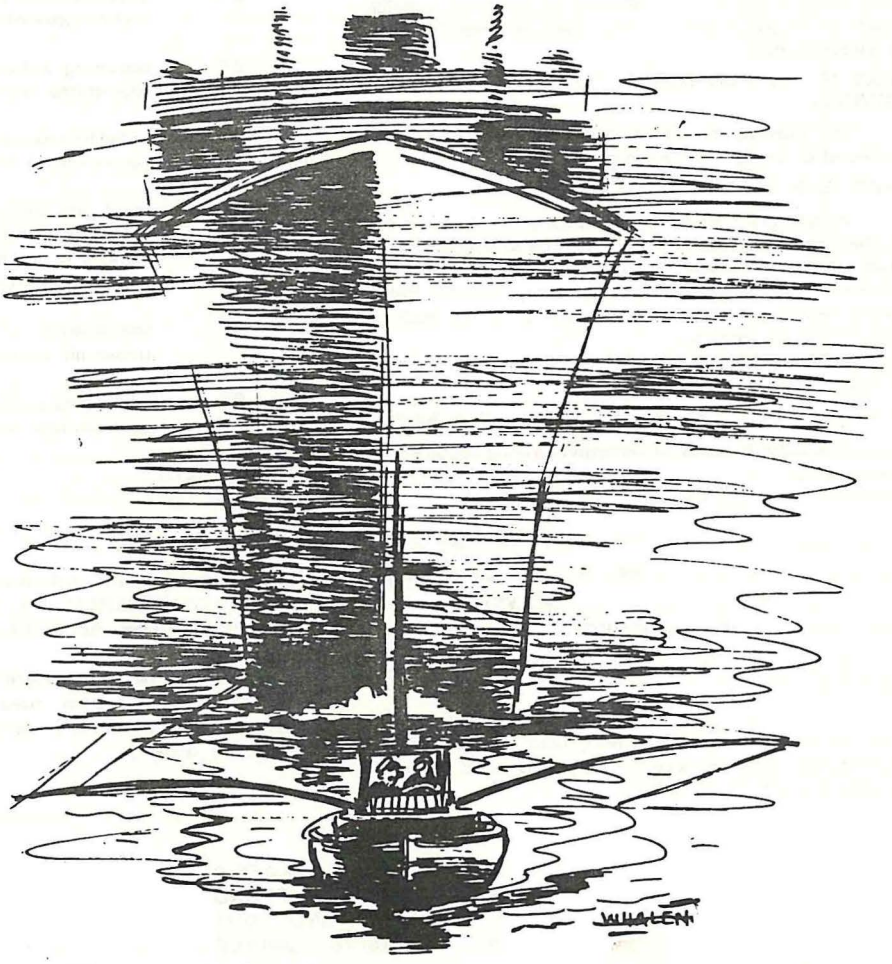
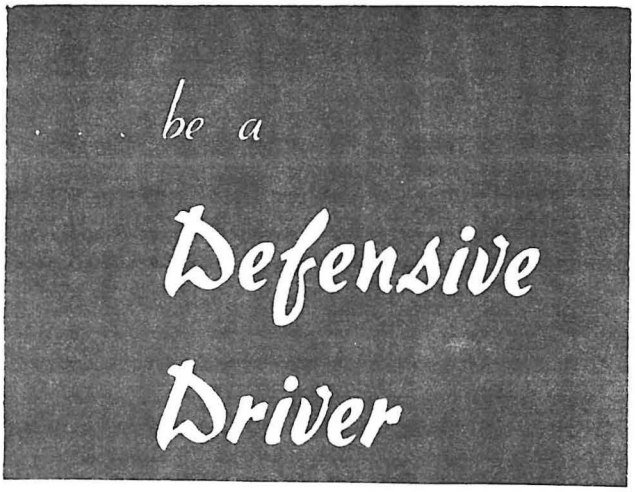


"Ya ever notice how fog tends to make the engine sound louder?"



. . . . be a Defensive Driver:

- Avoid driving errors
- Make allowances for lack of knowledge, skill, and care by other road users
- Make allowances for weather, road and traffic conditions

and by formulating sound driving plans and decisions based on:-

- What CAN be seen
- What CANNOT be seen
- POSSIBLE circumstances which may reasonably be expected to develop

you will uphold the principle of SAFETY for others as well as for yourself.

WHAT IS DEFENSIVE DRIVING?

Defensive driving is driving in such a way as to avoid being involved in a collision or situation causing danger or inconvenience to any road user regardless of the circumstances.

WHAT IS THE PURPOSE OF DEFENSIVE DRIVING?

The purpose of defensive driving is to reduce the likelihood of being involved in an accident.

WHAT IS A DEFENSIVE DRIVER?

A Defensive Driver formulates a driving plan based on the correct assessment of the ever-changing scene ahead and to the rear of his vehicle. He should have a deliberate and calculating temperament, able to make driving decisions without hesitation in a methodical manner at any moment.
ALL decisions must be based on the principle of SAFETY for others as well as himself.

WHAT IS THE BASIS OF DEFENSIVE DRIVING?

The basic features of defensive driving require the vehicle to be

_____in the right position on the road
_____travelling at the right speed
_____with the right gear engaged
_____ALWAYS!

HOW CAN THIS BE ACHIEVED?

BY CONCENTRATION and DELIBERATE DRIVING TO A SYSTEM

. . . which will enable the driver to formulate a safe driving plan to meet every circumstance likely to occur on the road - and to carry the plan into effect, skilfully.

HOW CAN I DRIVE DEFENSIVELY?

BY understanding thoroughly the definition and purpose of defensive driving

BY acquiring a thorough knowledge of the regulations relating to road traffic

BY a determination to give complete concentration to the task of driving

BY intelligent anticipation of the possible action of other road users and circumstances to be expected in any or particular driving conditions

BY the exercise of restraint and courtesy under all circumstances

BY an understanding of the limitations of both human being and vehicle

AND FINALLY . . . . . .

by the adoption of a SYSTEM in the task of driving.

A SYSTEM OR DRILL, EACH FEATURE OF WHICH IS TO BE CONSIDERED, IN SEQUENCE BY THE DRIVER AT THE APPROACH TO ANY HAZARD.

(A hazard may be any physical feature, such as a cross road, roundabout system, road junction, bend or hill crest, or any potentially dangerous traffic situation developing ahead.)

IN TODAY'S TRAFFIC WE CANNOT AFFORD TO BE ANYTHING BUT A DEFENSIVE DRIVER

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