JOURN AL



MONTH LY STAFF BULLETIN

LIBRARY ARCHIVE OT FOR LOAN

DEPARTMENT OF FISHERIES AND FAUNA LIBRARY. WESTERN AUSTRALIA

17(8) A 🛂 9 1968 DEPARTME FUT OF PARKS AND WILDLIFE F ENVIKONMENT AND CONSERVATION

BULLETIN



AUGUST, 1968 VOL. XVII, No. 8

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

DEPARTMENT OF FISHERIES AND FAUNA

MONTHLY STAFF BULLETIN

INAUGURAL MEETING OF THE WESTERN AUSTRALIAN WILD LIFE AUTHORITY HELD

On Friday, July 5, 1968, the inaugural meeting of the Western Australian Wild Life Authority was held at Koonwarra-House, Perth. The Minister for Fisheries and Fauna, Mr. G.C. MacKinnon, addressed the Authority on this historic occasion.

Under legislation passed in the 1967 session of Parliament, provisions were made, among other things, to establish this new body in lieu of the

Fauna Protection Advisory Committee . The now defunct Committee was set up in 1944. The new Authority consists of eleven members including the Director, who by virtue of his office is the Chairman. Other ex officio members are the Chief Warden of Fauna, Mr. H.B. Shugg, in Deputy Chairman of the Authority and Chief Executive Officer; the Chief Vermin Control Officer, Mr. A.R. Tomlinson, and the Conservator of Forests, Mr. A.C. Harris. The other seven members are Professor A.R. Main , Department of Zoology, University of W.A., Dr. D.L. Serventy, Division of Wildlife, C.S.I.R.O., Dr. W.D.L. Ride, Director W.A. Museum, Mr. R.D. Royce, State Herbacium, Mr. A.H. Robinson, Farmer of Coolup, Mr. N.A. Beeck, Farmer of Katanning, and Mr. H.G. Hall, Farmer of Dangin. The secretary of the Authority is Mr. K.J. Ammerer.

The Principal function of the Authority is to classify or reclassify fauna sanctuaries.



Mr. G.C. MacKinnon addressing the Authority

It has authority to classify sanctuaries as follows :-

- (a) prohibited areas;
- b) limited access areas;
- (c) shooting or hunting areas;
- (d) unlimited access areas;
- (e) such other classes of areas as the Authority thinks necessary for the surpose of giving effect to the objects of the Fauna Conservation let.

The Authority has the power to prepare a detailed written management plan for all fauna sanctuaries. The objects of such shall be to restore the natural environment, the protection, care, and propagation of fauna, and the promotion of the study of fauna to which the scheme relates.

MINISTER FOR FIGLERIES AND FAUNA VISITS SOUTH COAST

Mr. G.C. MacRinnon, the Minister for Fisheries and Fauna, together with the Director, visited fishing centres on the South Coast between July 9 and July 12, 1968. Discussions were held with the Gnowangerup Shire Council concerning the management of the Pallinup River and Wellstead-Bremer Bay Estuary. An on-the-spot ins ection of these areas was also made. At Albany the Minister met salmon fishermen and conferred with them on matters of the past season. Demmara was also visited by the Minister, and a discussion was held with the Shire President.

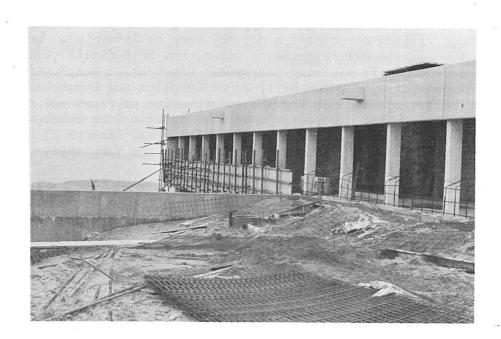
DIRECTOR IN GERALDTON.

Mr. B.K. Bowen departed from Perth in the morning of July 18, to attend the Geraldton Police Court that same morning. Listed for hearing before a Stipendary Magistrate was an offence by a freezer boat operator for being in possession of undersize crayfish. The breach evidently occurred in the Beagle area in December 1967. The skipper of the vessel was found guilty and fined \$2000 plus costs, with an additional penalty of \$2.00 for each undersize crayfish. The Director was also required to appear in Court as a witness in another case. This was in his capacity as an expert, to testify that a spawner had been brushed.

Mr. Bowen returned to Perth by plane, on Friday, July 19.

MARINE AQUARIUM

It is anticipated that the Aquarium being built at Waterman will be officially opened on or about October 25. If at all possible, this will permit most officers of the Department to attend as this will be the last day of the week during which the Annual Staff Conference is being held. The photo shown on this page was taken in the first week of June, and shows the southern aspect of the main wing.



ABORIGINAL ART AND ARTIFACTS

The Minister for Native Welfare has issued a circular to persons who, in the course of their activities might locate Aboriginal art and artifacts. He says that it has come to his attention that at times in the past, various items of Aboriginal manufacture, many of them sacred to their makers, have been destroyed or taken by persons who have come into possession of them by one means or another. Sometimes the destruction has been deliberate but more often it has been due to carelessness or to a lack of the realisation that these items were in fact the property of aboriginal Australians and even sacred to them.

It is the Minister's earnest desire to preserve any such item which has any sacred significance to living Aborigines and also any item which, though it might no longer be significant to Aborigines alive today, is still of value for preservation and research purposes in the State Museum. If any such articles are discovered, please leave them undisturbed and inform the nearest office of the Department of Native Welfare.

CHIEF WARDEN OF FAUNA VISITS CENTRAL WHEATBELT AREA

During the week commencing Monday, July 22, the Chief Warden of Fauna, Mr. H.B. Shugg visited a proposed sanctuary area at Jitarning. This is the area where the Dalgite was reported to occur, but no definite evidence could be collected by officers visiting the area. Other areas inspected by Mr. Shugg were the Kokerbin Hill, Nangeen Hill, Mount Caroline and Mount Stirling, areas. A number of reserves set aside for the conservation of flora and fauna were also inspected en route. These included the Narrogin lake complex and Reserves 27826, Kalgarin, proposed reserves in the Hyden area, Reserve 23262 near Yorkrakine, and a proposed waterfowl sanctuary in the York area.

Mr. T. Evans, the Department's Warden stationed at Fingelly, accompanied Mr. Shugg during the inspection tour.

ADMIRALTY GULF FRAMN SURVEY

Mr. J.P. Robins, Senior Research Officer, (Development) returned to Ferth, on Wednesday, July 17, 1968, after spending three weeks in Admiralty Gulf. During this period on board the research vessel "Flinders", prawn survey work was conducted and Mr. Robins was in a position to make an on-the-spot appraisal of the situation.

NEW COMMITTEE FORMED TO ADVISE ON PEST CONTROL

A new committee known as the Urban Pest Control Advisory Committee has been established. This committee includes representatives of Government Departments and other interested organisations for the purpose of considering



and advising on the co-ordination of urban animal and bird pests. One of the main areas of contact could be the increasing problem caused by feral pigeons. The Chief Warden of Fauna is the Department's representative on the committee.

COLLECTION OF FAUNA FOR NON-DEPARTMENTAL PURPOSES

The Department is approached quite frequently by study teams to assist in the collection of fauna used in their programmes. It is Departmental policy that officers of the Department should not be deployed to assist in this. It is not part of a warden's or inspector's, or any other departmental officer's duty and if assistance were given to one faculty to obtain material, assistance to others would have to be given too. Because of the numerous requests, far too much time would be spent on this activity. In any case, the Department must concern itself in authorizing and supervising such collections and to undertake collection work would be contrary to the spirit of the Department's duty.

Participation in official Departmental research programmes is quite different. Apart from these officially approved projects, Departmental officers should decline requests for assistance and explain that the Department does not approve because it is too time consuming and that it is contrary to the spirit of its duties.

TAX INSTALMENTS - DEPENDENTS DECLARATION FORM

The following circular has been received from the Accountant, Chief Secretary's Department:

"Employees who desire concessional allowances for dependents from the deductions made from salaries or wages are required to complete and forward to the Department a "Dependents Declaration Form", (Taxation form No. G12).

The Taxation Department has directed employers that "An employer shall not allow a concessional allowance in respect of a dependent not claimed by an employee on this form".

Declarations lapse on June 30 in each year and it is noted that a



number of employees have failed to lodge declarations for the current year. Then a current form has not been lodged, the Department is required to deduct instalments at the rate applicable to single persons and where such deduction has been made no later adjustment is possible as amendments can only apply from the date of receipt of a "Declaration". This could cause financial litticulty to employees and they are urged, in their own interests, to introdiately lodge a Declaration with the Salaries Branch or the appropriate officer in their Department."

STAFF NOTES

The Farewell Buncheon in honour of Mr. A.J. Bateman, who retired on July 24, held at the Albion Hotel, Cottesloe, was attended by over thirty officers from this Department and the Harbour and Light Department. Mr. Jateman held the position of Fleet Maintenance Officer for a number of years and commenced with the Department soon after the war ended in 1945. We wish kr. and Mrs. Bateman a long, happy and healthy retirement.

The R.V. "Flinders" returned to Fremantle during the last week of July, after spending eight weeks in northern waters. During this cruise, the R.V. "Flinders" under the command of Mr. C.J. Seabrook, conducted prawn survey work for the Development Section.

\$ \$

Assistant Inspector Mr. M.J. Little, acted as shipper of the P.V. "Dampier" Juring the absence of the vessels regular skipper Mr. M.V.R. Stiecke on Annual Recreation Leave. Mr. Little has had, since he obtained his Skipper Grade II ticket, his Marine Motor Engine Drivers Certificate and his 3rd Class Radio operators ticket, the opportunity to relieve as skipper of the P.V. "Lancelin" and the P.V. "Delsert", during absence, on sick or annual leave, of the regular skippers.

de de de

Liss Marlene Clayton, Technical Assistant at Head Office, has entered the Miss Australia Quest 1968. The purpose of this Quest is to raise money for spastic children and to select a girl who could represent Australia as the reigning Beauty Queen. Marlene has conducted a very successful raffle, a Cabaret Dance, and fashion parades, as well as other small fund raising functions, and extends her thank you to all officers who have assisted her in any way at all. The Quest comes to a close early October, when Miss Australia will be announced.

...****

DEPARTMENTAL TRAINING SCHOOL

Mr. G.C. MacKinnon, the Minister for Fisheries and Fauna, has approved a long-awaited training programme designed to give new staff recruits some formal training in the duties they are expected to perform.

As early as 1951 Mr. A.J. Fraser, former Director of this Department, thought it most desirable that courses of training be instituted for assistant and cadet inspectors in order that they might be properly instructed in Departmental routine and procedure, patrol duties, fisheries legislation and the like.

The course will be of two weeks duration commencing on Monday, September 9 this year and will be attended by all general division of licers, up to but not including grade G-II-I in this initial year and by new recruits only, in subsequent years.

The school will be opened by the Director and a representative from the Public Service Commissioner's office, but most of the lectures will be conducted by staff members. Much practical work will be undertaken during the term of the course and will include visits to the fish markets, a working trip on a Departmental vessel, a visit to the Museum, a first aid demonstration, and appropriate films.

Students will be required to sit for practical and written examinations on the last two days. The practical test will consist of going on patrol, making an apprehension, submitting a report and giving evidence at a mock court. The results of both examinations will be an important factor when considering an officer's promotion in this Department.

A timetable of subjects is set out for your information in the centre pages of this Bulletin.

MR. R.J. SLACK-SMITH PROMOTED

Congratulations are extended to Mr. R.J. Slack-Smith on his promotion to the position of Senior Research Officer as from August 2.

FIRST WEEK

Starting Time	DAY MONDAY	TUESDAY	
9,00	Opening by Director of Fisheries and Fauna and representative of P.3.C.	Fisheries and Other Acts (Whaling, Pearling, Oysters etc.) in Principle	
10.20	The State Government. The Department, its Purpose & Functions.	Interpretation of important sections of Acts.	
11.40	Duties and Responsibi- lities, Standards required and Conditions of Employment.	Interpretation of important sections of Regulations.	
1.00	LUNCH	LUNCH	
2,00	Outline of the Fisheries of Western Australia	Proclemations, Notices and Ministerial Directions.	
3.20	Outline of the Fauna of Western Australia.	Liaison with Industry.	
4.30	Departmental film (Crayfish for Julie)	Telephone Courtesy and other P.R. Films.	

FIRST WEEK

<u> </u>			
WEDNESDAY	THURSDAY	FRIDAY	
Fauna Conservation Act, In Principle.	Weather and the Fisheries, Weather and the Bush.	Elementary Biology (Fish and Fauna).	
Interpretation of important sections of Fauna Conservation Act.	Navigation and Identification a Seamanship. Measurement of 1 2nd Schedule Fis		
Interpretation of important sections of Fauna Regulations.	Navigation andid Seamanship: ' on	Fauna Recognition.	
LUNCH	LUNCH	LUNCH	
Allowances Agreement.	Use of Commercial Entitlements and Fishing Gear (On Leave applications Flinders or Pelsart).		
Driving Safety.	Use of Commercial Fishing Gear.	al Hygiene in Fish snops and factories.	
Driving Safety Films.	Use of Commercial Fishing Gear	Hygiene Film	

10. SECOND WEEK

Starting Time	DAY MONDAY.	TUESDAY.			
9.00	Inspection of * Fish Markets	Communications			
10.20	Report and Letter Writing	Accounts, Inventories and Ordering Stories.			
11.40	Diaries and Vehicle Reports	Statistical Returns their Form and Purpose, Graph Drawing.			
1.00	LUNCH	LUNCH			
2.00	First Aid Demonstration.	Role of Research in Fauna Conservation.			
3.20	First Aid Demon- stration (Cont'd)	Role of Research in Fisheries Management.			
4.30		Driving & maintenance of 4 wheel drive vehicle and Elementary engine repairs.			

* NOTE. Starting time will be 6.30 A.M. this day.

(Cont'd on page 12).

PROBLEMS IN RESERVE MANAGEMENT

In a recent radio broadcast the Chief Warden of Fauna, Mr. H. B. Shugg spoke on the problem the litterbug is to the reserve manager.

Herewith is the text of Mr. Shugg's address:-

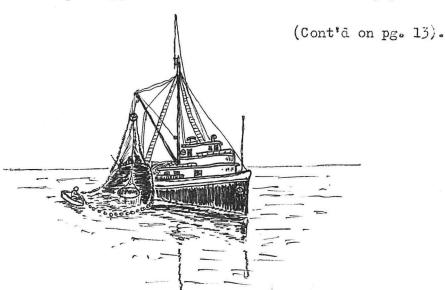
"A wildlife reserve is a farm - of sorts. It produces plants and animals and it needs careful and trained management. While the reserve manager shares many problems with his farmer neighbours, he also has unusual ones.

A farmer knows his farm, his stock and crops, intimately and precisely.

not so the reserve manager. More often than not he does not know what plants and animals are on his land nor what they need to survive. He has no proved techniques of stock husbandry and has great difficulty in ascertaining whether his stocks are increasing or decreasing or are about to become extinct.

Research work being undertaken on the Tuttanning Fauna Reserve east of Pingelly is aimed at overcoming these problems but it is also revealing unexpected ones. This reserve is an outstanding one because its flora and fauna are so diverse. We know that if it were left to look after itself it would deteriorate and many valuable forms of wildlife there would disappear.

Because native animals must have ground cover and dense shelter belts, some farmers, understandably, look askance at the reserves and expect them to be burnt every year or two. But this is quite out of the question. Different plant associations needed by the animals take many years to recover and too frequent, too big, or too hot fires would be quite disastrous. The structure and type and ago of the plants required to support the diverse fauna are governed by the nature of the fires. Consequently, these have to be most carefully planned and controlled.



12.

SECOND WEEK (Cont/d)

Starting time	WEDNESDAY	THURSDAY	FRIDAY
9.00	Licensing, and Handling of Public Money.	Petrol duties and gathering evidence.	Revision.
10.20	Commonwealth Fisheries Legislation. Commonwealth State relationships.	Court Procedure.	Revision.
1 1. 40	Commonwealth Fisheries Legislation. Commonewalth State relationships.	Dummy Patrol and apprehension.	Revision.
1.00	LUNCH	LUNCH	LUNCH
2,00	Correspondence and Office Procedure.	Cont. of Patrols.	Exam.
5 . 20	Care and Handling of small boats.	Dunmy Report.	Exam.
4., 30	Practical Session. Crayfish in berry. Crayfish stripped. Crayfish pinched. Net mesh Measuring. Crayfish Measuring. Fish Board. Labels etc.	Dummy Court.	

PROBLEMS IN RESERVE MANAGEMENT (Cont'd)

Besides the fire problems, the reserve manager has many other problems. Because he controls public land a whole miscellany of people expect to be allowed to satisfy their legitimate needs there. These include photographers, campers, egg collectors, bird trappers, pet food shooters, hungry Australians old and new, scientific collectors, sportsmen, boating enthusiasts, and so on. Even if they can be allowed to operate on wildlife reserves, their activities must be controlled and everyone knows how difficult people are to control.

Finally, the reserve manager has to cope with the litterbug. There are two species of this pest. The worst, the dumping litterbug, hoards his rubbish at home and then carts it to a reserve and dumps it there. The second, the wandering litterbug, discards his rubbish as he picnics or passes through. His specialties are empty bottles, cartons, cans, packets and tins.

Litter is ugly - but it is worse than that. En masse it eats up wild land which means that more of our wildlife is lost for ever. Rubbish dumping introduces pests and weeds into reserves and creates additional fire hazards. Rubbish has to be disposed of and those responsible for getting rid of it naturally look to wild lands because they are available. Much of our richest area, our lakes, swamps and marshes, have already disappeared under avalanches of rubbish and covering sand fill.

This is the age of the disposable container. More and more manufacturers are being forced by fashion and economics to turn from returnable to disposable ones. "Disposable" means you throw it away. So someone else has to pick it up or it lies there to litter the countryside. Either way the general public, not the litterbug, pays. Existing alternatives are to pay more rubbish tax for cleaning up, or lose the beauty and utility of the countryside to lazinessinduced litter.

There is a simple solution. Impose a special tax on all non returnable containers and packages.

Such tax would have a double effect. Firstly, it would make the use of disposable containers less attractive and returnable ones more economic. Secondly, it would provide funds for distribution to local authorities to meet the costs of keeping their districts clean.

It would be a moral tax because those who cause the problem would pay the cost of the cure.

It could be applied on a sliding scale to all potential rubbish, from match boxes to car bodies. It could be raised like sales tax and would yield millions of dollars.

Such a tax would finance the purchase of the revolutionary new treatment plants which convert rubbish into saleable fertilizer, the proceeds from which can be most lucrative.

If I have strayed from the subject of reserve management, I am sure that everyone who has seen and thought about this litter problem will forgive me. Our wetlands and other wild areas are now too rare and precious to sacrifice to rubbish disposal whether or not it is done under the pseudonym of reclamation. In any case all districts must, eventually, run out of such areas and find new disposal methods. Our remaining wild lands and reserves must be saved for they bring beauty and variety to our countryside and variety is the spice of life."

HANDBOOK OF AUSTRALIAN FISHES

The Department receives numerous enquiries for published information that may be available to help identify fish found in Australian waters. To date the only material available is the "Handbook of Australian Fishes" by Ian S.R. Munro, published in series form in the "Fisheries Newsletter" in the issues listed below. As this is the only source where this handbook was published, and as these "Fisheries Newsletters" are now out of print and out of stock, officers are requested to retain any of these issues in their District Office, or forward them to the Library a Head Office.

```
1956
                  Vol. 15 No. 7
                                  pp. 13-20 July
No. 1
No. 2
           1956
                  Vol. 15 No. 8
                                  pp. 15-18 August
                 Vol. 15 No. 9
No. 3
           1956
                                  pp. 15-18 September
No. 40
           1956
                  Vol. 15 No. 10
                                  pp. 15-18 October
No. 5.
           1956
                  Vol. 15 No. 11
                                  pp. 15-18 November
No. 6.
           1956
                 Vol. 15 No. 12
                                  pp. 15-18 December
No. 7.
           1957
                 Vol. 16 No. 1
                                  pp. 15-18 January
No. 8.
                                  pp. 15-18 February
           1957
                  Vol. 16 No. 2
No. 9.
           1957
                  Vol. 16 No. 3
                                  pp. 15-18 March
                                  pp. 15-18 April
No. 10.
           1957
                 Vol. 16 No. 4
No. 11.
           1957
                  Vol. 16 No. 5
                                  pp. 15-18 May
                                  pp. 15-18 June
No. 12.
           1957
                  Vol. 16 No. 6
No. 13.
           1957
                 Vol. 16 No. 7
                                  pp. 15-18 July
No. 14.
           1957
                  Vol. 16 No. 8
                                  pp. 15-18 August
                                  pp. 15-18 September
No. 15.
           1957
                  Vol. 16 No. 9
No. 16.
           1957
                  Vol. 16 No. 10
                                  pp. 15-18 October
No. 17.
                  Vol. 16 No. 11
           1957
                                  pp. 15-18 November
No. 18.
           1957
                  Vol. 16 No. 12
                                  pp. 17-20 December
```

```
No. 19.
         1958
               Vol. 17 No. 1
                               pp. 17-20
                                           January
No. 20.
               Vol. 17 No. 2
                               pp. 17-20
         1958
                                           February
               Vol. 17 No. 3
No. 21.
         1958
                               pp. 17-20
                                           March
              Vol. 17 No. 4
No. 22.
         1958
                               pp. 17-20
                                           April
              Vol. 17 No. 5
No. 23.
         1958
                               pp. 17-20
                                           May
No. 24.
         1958
              Vol. 17 No. 6
                               pp. 17-20
                                           June
No. 25.
         1958
               Vol. 17.No..7
                               pp. 17-20
                                           July
No. 26.
              Vol. 17 No. 8
                               pp. 17-20
         1958
                                           August
              Vol. 17 No. 9
                               pp. 17-20
                                           September
No. 27.
         1958
               Vol. 17 No. 10
                               pp. 17-20
                                           October
No. 28.
         1958
No. 29.
         1958
              Vol. 17 No. 11
                               pp. 17-20
                                          November
No. 30.
         1958
              Vol. 17 No. 12
                               pp. 17-20
                                          December
No. 31.
         1960
              Vol. 19 No. 4
                               pp. 17-20
                                           April
No. 32.
         1960
              Vol. 19 No. 5
                                pp. 17-20
                                          May
No. 33.
         1960
              Vol. 19 No. 6
                               pp. 17-20
                                           June
No. 34.
         1960
              Vol. 19 No. 8
                               pp. 17-20
                                          August
No. 35.
         1960
              Vol. 19 No. 10
                               pp. 17-20
                                          October
         1960 Vol. 19 No. 12
                               pp. 17-20
No. 36.
                                          December
No. 37.
         1961 Vol. 20 No. 2
                               pp. 17-20
                                          February
No. 38.
         1961
              Vol. 20 No. 4
                               pp. 17-20
                                          April
No. 39.
         1961 Vol. 20 No. 6
                               pp. 17-20
                                           June
                               pp. 19-22
         1961 Vol. 20 No. 8
No. 40.
                                           August
              Vol. 20 No. 10
10. 41.
         1961
                               pp. 19-22
                                           October
              Vol. 20 No. 11
                                pp. 19-22
110. 42.
         1961
                                           December
```

UNDERWATER LABS FOR FISH STUDIES? FAO FISH BEHAVIOUR CONFERENCE

1/2

The first FAO Conference on "Fish Behaviour in Relation to Fishing Techniques and Tactics" was held in Bergen during October, 1967.

After general discussions at the main sessions, working parties were set up to deal with the following subjects: The study of fish behaviour by acoustic methods; The use of submersibles in marine research and fisheries; The possible herding, aggregating and general control of fish to improve harvests with existing gear and possible future harvesting methods; Experimental design for the study of fish behaviour and the design of facilities; Short-term distribution pattern and fishing strategy and, finally; Sensory physiology and its possible contribution to behaviour studies and fishing gear design.

Among the recommendations for further study was one for research on underwater laboratories from which scientists could study the behaviour of fish in their natural environment. It was also suggested that use could be made of submersibles to study the reaction of fish to various types of fishing gear. The study of fish shoaling behaviour at sea was also recommended.

The Conference also suggested that the present state of knowledge and experimental techniques on fish behaviour should be compiled as a handbook by MO, as a guide to effective gear design and operation.

Further research was also needed on the reaction of fish to sound stimuli with a view to using this knowledge to attract or herd fish into catching systems. Also, research was needed on the use of sector scanning and other coustic techniques for the identification of fish and the study of their reactions to fishing gear.

The 66 papers presented at Bergen will be published later, with the cliscussion, by FAO. The Conference chairman was D.L. Alverson, of the U.S. Lureau of Commercial Fisheries and Hon. President was K. Sunnanaa, Norwegian Director General of Fisheries.

"World Fishing", February, 1968.



"What's for chow?"