

Vol. XIV, No. 5.

June, 1965

DEPARIMENT OF

FISHERIES AND FAUNA

LIDRARY.

STAFF NOTES

We welcome to Head Office Mr. R.J. Husband who commenced duty on May 3. Mr. Husband has taken over the position on the clerical staff formerly held by Mr. P.W. Smith, who has been promoted to a C-II-l position in the Public Health Department. We extend our best felicitations to Mr. Smith.

Mr. W.F. Carruthers, who has been employed as skipper of p.v. "Misty Isle", resigned from the public service on May 7.

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Officers to commence annual leave last month included Inspector A.T. Pearce (Perth), on May 3, and Mr. P.G. Yewers (Head Office), on May 31. Fauna Warden L.R. Frizzell will commence annual leave on June 4.

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Research Officer R.J. Slack-Smith and R.C.J. Lenanton left for Shark Bay on May 5. Mr. Slack-Smith will review the status of the prawn fishery and Mr. Lenanton commence pre-liminary investigations on the silver or sand whiting, with an accent on the history of the fishery in Shark Bay. Mr. Slack-Smith advises that the first two stained tiger prawns were recovered east of the Peron flats (Shark Bay) during the month of May. They had been at liberty approximately 9 weeks and had moved only a few miles from the point of liberation. Mr. Slack-Smith, accompaned by Mr. David Coe, technical assistant from C.S.I.R.O. at Cronulla, left for Exmouth Gulf on May 26 to institute a programme for collecting log book data and to carry out regular length-frequency sampling of prawn catches. Mr. Slack-Smith returned on May 31. Mr. Coe on the other hand will stay in Exmouth Gulf for approximately three months.

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Under the command of Capt. C.J. Seabrook, with technical assistant Mr. D. Donnelly, r.v. "Lancelin", left for the Abrolhos on May 23 to continue the crayfish research programme, Senior Research Officer B.K. Bowen and Dr. R.G. Chittleborough, project leader of the Western Fisheries Research Committee, flew to Geraldton on May 24 to join "Lancelin" for a few days. They returned on May 27.

Mr, N.E. McLaughlan is making a tour of the crayfishing centres along the coast and at the Abrolhos in connection with the log book monitoring programme.

Supervising Inspector J.E. Bramley left for Shark Bay on May 10 for a district inspection. He first visited Carnarvon to investigate allegations that unauthorised prawn trawlers were operating in the Shark Bay restricted area. Investigations proved that the allegations were based on fact. While at the Bay, Mr. Bramley investigated other reports of trawlers operating in the closed area. The only trawler seen in the Bay at the time was l.f.v. "Eureka". Mr. Bramley returned to Perth on May 8.

IN-SERVICE TRAINING The Public Service Commissioner has nominated Mr. G. Dixon, of Head Office, to attend one of the in-service training courses in supervision which have been included in this year's Central Training Programme.

The course to which Mr. Dixon has been allotted commenced on May 27 and will involve attendance for four hours a week over a period of twelve weeks.

FISHERIES NEWSLETTERS AND MONTHLY SERVICE BULLETINS

A number of spare copies of earlier issues right up to date are available at Head Office. Any officer who wants a particular issue or issues may obtain a copy on application. It will be a case of first come first served, as the number It will be a case OI IIrst come IIrst Bervou, as one name of copies is in some cases strictly limited.

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BASIC WAGE RISE

The Public Service Commissioner has advised that as a result of the quarterly declaration of the Western Australian Industrial Commission, the basic rate has been increased by £9.0.0. per annum for adult males and £7.0.0. per annum for adult females.

The new rates took effect on April 26, 1965.

RESTRICTION ON PETROL SUPPLIES

Officers obtaining petrol from the Government Motor Garage are advised that in future supplies will be restricted to the quantity which can be delivered into the tank of the officer's motor vehicle. Where it is considered necessary for additional petrol to be drawn and carried in auxiliary containers, an authority to this effect signed by a senior officer of the Department must be produced to the bowser attendant.

REGULATIONS TO CONTROL ENTRY INTO A PROCLAIMED FISHING ZONE

On page 43 of the March 1965, edition of this Bulletin appears an article concerning the proposed protection of the salmon industry in this State by a system of proclaimed fishing zones.

Hereunder are the schedules of such zones proclaimed for the period ending April 30, 1965, and during the periods commencing on February 15 and ending April 30 in each year thereafter.

Cheyne Beach

All that portion of the Southern Ocean bounded by lines starting from the north-eastern corner of Reserve 878 and extending generally westerly and generally northerly along the high water mark of the Southern Ocean aforesaid to a point situate in prolongation easterly of the northern boundary of Plantagenet location 3955; thence east 40 chains and thence south-south-easterly to the starting point.

Foul Bay

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All that portion of Foul Bay bounded by lines starting from a point on the high water mark of that Bay situate in prolongation southerly of the western boundary of Hay location 1423 and extending generally north-easterly along that mark to a point situate east of the south-eastern corner of location 392; thence south-east to a line 40 chains south-easterly from and parallel to the high water mark of Foul May aforesaid; thence generally south-westerly along that line to a point situate 100 degrees from the starting point and thence westerly to that point.

Bremer Bay

All that portion of Bremer Bay bounded by lines starting from a point on the high water mark of that bay situate at the north-eastern corner of Bremer Bay Town Lot 131 and extending generally westerly, generally northerly, generally north-easterly and generally southerly along that high water mark to a line between the south-western corner of the north-western severance of Kent location 1325 and the north-eastern corner of Bremer Bay Town Lot 131 aforesaid and thence south-westerly along that line to the starting point (Note: It is probable there will be some modification of this area next year).

Eagle Bay

All that portion of the Indian Ocean bounded by lines starting from a point on the high water mark of the ocean situate in prolongation easterly of the southern boundary of Sussex location 293 and extending generally north-western along that high water mark to the western most point of Cape Naturalist; thence north 40 chains; thence generally southeasterly along a line parallel to and 40 chains northeasterly from the high water mark of the Indian Ocean aforesaid to the intersection with the prolongation easterly of the southern boundary of location 293 aforesaid and thence westerly along that prolongation to the starting point.

Torbay

(a) <u>Point Hughes Zone</u>: All that portion of the Southern Ocean bounded by lines starting from a point on the high water mark of the ocean situate 190 degrees from the southern corner of Plantagent location 456 and extending 190 degrees 40 chains; thence 30 degrees to the high water mark of the Southern Ocean aforeshid and thence generally north westernly along that mark to the starting point.

(b) <u>Point Hearding Zone</u>: All that portion of the Southern Ocean bounded by lines starting from a point on the high water mark of that ocean lying south east from a point on the south-eastern boundary of Torbay A.A. lot 28 situate 43 chains north-easterly from the high water mark of the Southern Ocean aforesaid; thence generally south westerly along that line to a point situate in prolongation easterly of the northern boundary of lot 41; thence westerly along that prolongation to the high water mark aforesaid and thence generally north-easterly along that mark to the starting point.

(c) Forsyth Bluff - Torbay Head Zone: All that portion of the Southern Ocean bounded by lines starting from a point on the high water mark of that ocean situate at the eastern most extremity of Forsyth Bluff and extending south-east to a line parallel to and 40 chains easterly from the high water mark of the Southern Ocean aforesaid; thence generally southerly along that line to a point situate east of the southernmost extremity of Torbay Head; thence west to the high water mark aforesaid and thence generally northerly along that mark to the starting point.

UNDERSIZE SPERM WHALES FOR SCIENTIFIC PURPOSES

The Minister for Primary Industry, Canberra, has granted a permit under Sec. 26(1) of the Commonwealth Whaling Act, 1960, for the capture of 120 undersize sperm whales by Cheynes Beach Whaling Co. Ltd., on behalf of C.S.I.R.O. for scientific purposes. The whales are to be taken in groups of up to 40 during fortnights beginning on any suitable day between -

> April 15 and 21, 1965, inclusive July 15 and 21, 1965, " November 8 and 14, 1965, "

The permit is issued subject to the following conditions:-

(a) A duly authorised officer must inspect and report on each whale and be permitted to remove any biological specimens on behalf of C.S.I.R.O.

- (b) For any day lost through bad weather during any period, an additional day shall be allowed at the end of each fortnight. No further extension will be allowed.
- (c) There shall be no carryover to any subsequent period of whales not taken during the specified time.
- (d) The whales are to be taken as an unbiased sample of the animals present in any one school on as few occasions as possible.
- (e) The products of the whales to be the property of the Company.

MINISTERIAL TOUR

The Honorary Assistant Minister for Fisheries and Fauna, Hon. G.C. MacKinnon, M.L.C., accompanied by the Director, Mr. A.J. Fraser and the Minister's private secretary (Mr. D.R. Fitzpatrick) visited Dongara, Geraldton and Carnarvon from May 17 to 21.

At Dongara, a meeting was held with the executive officers of the fishermen's association and a visit made to the local crayfish processing plant.

At Geraldton, all crayfish processing plants in the town were inspected, a call was made on the Mayor of Geraldton, an appeal by a fisherman whose licenses had been cancolled was heard by the Minister, and a meeting was held with the Committee of the Geraldton Professional Fishermen's Association. The party also attended a reception at Shepheard's Hotel given by Mr. J.C. Bowes, President of the Crayfish-Rock Lobster Industry Development Association.

The prawn processing works of Nor'-West Whaling Co., were inspected at Carnarvon, and in company with the President of the Gascoyne Shire Council, an inspection was made of the area which the Shire believes should be developed as a fishing port.

PRAWN FISHING AT EXMOUTH GULF

The need to avoid depletion of the stocks of prawns in Exmouth Gulf led to the recent decision to restrict the number of vessels to 15. This restriction has been imposed by the Minister for Fisheries and Fauna under the powers vested in him by Section 17 of the Fisheries Act, 1905-1964.

The restricted area comprises the whole of the waters of Exmouth Gulf lying south of a line drawn from the northern point of Bundegi Reef to the eastern foreshore of the said Gulf in the vicinity of Tubridgi Point (as shown on page 108).

The license of each of the 15 boats authorised to trawl for prawns in Exmouth Gulf has been endorsed with the condition that that boat shall not enter or use for the taking of prawns by means of trawling any of the waters of the Indian Ocean and Shark Bay lying between the parallels of 24°30' and 27°0' of South Latitude and east of 112°50' of East Longitude. This is the complement of a condition endorsed on the licenses of boats authorised to trawl for prawns in Shark Bay. In other words, the boats licensed to trawl for prawns in Shark Bay shall not trawl in Exmouth Gulf, and vice versa.

Of the 15 licenses for Exmouth Gulf, nine were allocated to M.G. Kailis (1962) Pty. Ltd., for vessels either owned or nominated by the Company. The license of each of these is subject to the further condition that no prawns taken under its authority from the waters of Exmouth Gulf shall be sold other than to the processing works in Exmouth Gulf except under the prior authority in writing of the company or of this Department. The other six have been issued to independant operators by ballot drawn by the Hon. G.C. MacKinnon. The vessels decided by the ballot were -

Otak Nicola, owned or licensed by N. & I. & P. Botica. Santa Lucia, owned or licensed by L. Ruljanich. Maria Laura, owned or licensed by N. Lagalla. Helen II, owned or licensed by B.T. & H.C. Rose. Danube, owned or licensed by M. Petcovich. Costa Rica, owned or licensed by M. Correia.

The boats nominated by M.G. Kailis (1962) Pty. Ltd., were:-

Miss Denison, owned or licensed by J. & A.M. Bailey. Conchise, owned or licensed by K. Turner.



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Waterwitch, owned or licensed by M.G. Kailis (1962) Pty. Ltd. Dawn, owned or licensed by E. Nielsen. Ross New York, owned or licensed by Ross International Fisheries Pty. Ltd. Ross Sea Tip, owned or licensed by Ross International Fisheries Pty. Ltd. Dolphin, owned or licensed by R.D. Horn. Sea Wyfe, owned or licensed by C. Hill. Tiderunner, owned or licensed by K.G. Leech.

In continuation of the co-operation established tween the respective agencies interested in fisheries search, the Division of Fisheries and Oceanography, S.I.R.O., has posted an additional technical assistant this State. He is Mr. David Coe, who has gone to Exmouth lf to assist in the monitoring programme to be conducted ere under the auspices of the Western Fisheries Research mmittee.

ESCAPE GAPS IN CRAYFISH-POTS

The Honorary Assistant Minister for Fisheries and una (Mr. G.C. MacKinnon) has announced that legislation 11 be introduced to compel the use of escape-gaps in ayfish pots. It is expected that the new measures will me into operation on January 1, 1966, and that they will ply to professional and amateur fishermen alike. Mr. cKinnon said that the Minister for Fisheries and Fauna r. Ross Hutchinson) had decided on this course of action, ich had been recommended by the Western Fisheries Research nmittee.

Mr. MacKinnon said that one of the most serious oblems confronting the industry was the destruction of dersize crayfish. This was not always wanton, but it had doubtedly played a major part in the deterioration of the ayfisheries over the past couple of years.

Investigations conducted by a team of State and nmonwealth officers had shown that the use of escape-gaps the appropriate size would save many small crayfish by lowing them to escape before the pots were pulled. The search group had experimented with escape gaps of different

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CRAYPOT FITTED WITH ESCAPE GAP

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Drawn By R. INGPEN

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dimensions and with pots without gaps. They had been tested on both red and white crayfish at the Abrolhos and at Lancelin.

It had found that pots without gaps captured many more undersize red crayfish than those with gaps. Gaps of $2\frac{1}{2}$ inches and $2\frac{1}{4}$ inches allowed virtually all undersize fish to escape, but some fish of or above the minimum legal size also passed through the gaps. On the other hand, pots with 2 inch gaps had caught almost 50% less undersize crayfish than pots with no gap and legal-size fish did not escape.

The Government had therefore decided, Mr. MacKinnon continued, to act on these findings and would bring the necessary measures into operation as one other step towards stabilising the crayfishing industry.

It was fully appreciated, he said, that escape gaps would have little effect in conserving crays in the "white" phase, nor would they be really effective in deep water, where small fish were rarely caught. Nevertheless, the new legislation would apply to all waters, deep and shallow, and at all times of the year. This was necessary, he explained, to ensure that unscrupulous fishermen would not be able to exploit weaknesses that would be revealed if exceptions to the general rule were made.

As far as stick and wire pots are concerned, it will be necessary either to insert a rigid metal frame measuring internally not less than 12 inches by 2 inches, as illustrated in the sketch on page 110, or to have the pot so constructed that a full 2" gap would be left at the bottom. In batten pots, only slight adjustments would be necessary to the positioning of the second lowest slat.

The use of escape gaps was not confined to Western Australia, concluded the Minister. Research carried out some years ago in Canada had also demonstrated the effectiveness of escape gaps in the lobster fishery. Experiments there showed that the catch of immatures could be reduced by 60% without the loss of mature fish. As a result escape gaps are now compulsory in the Canadian lobster fishery. In New Zealand, the Government is encouraging crayfishermen to use escape-gaps.

TWO YEAR BAN ON SNAPPER TRAPS

The Minister for Fisheries and Fauna (Mr. Ross Hutchinson) after discussions with Mr. MacKinnon, announced last month that the taking of snapper by means of fish traps had been prohibited in Western Australian waters for a period of two years. This ban implemented a recommendation of the Fishermen's Advisory Committee after hearing evidence last October at Fremantle and Geraldton. It will be remembered that snapper traps were first used at Shark Bay in 1959, and although big catches were taken initially, the number caught by traps had fallen in recent years.

Some fishermen believed that the use of traps damaged the snapper grounds and had caused the decline in production. Although this has not been proved, it was thought that, by resting the area, comparative information could be obtained. It was known that a percentage of the trap caught fish were bruised and the sale of these fish forced prices to a lower level. Most of the fishermen operating in the snappery fishery and in particular the line fishermen, favoured the new measure.

RUSSIAN TRALWERS OFF GERALD TON

On May 13, Inspector B.A. Carmichael reported the presence of a number of Russian ships off Geraldton. One which bore the name "OPANK" with a hammer and sickle painted on her funnel, was approached to within 50 yards of the l.f.b. "Zora IV", The skipper of the latter (Mr. Henry Ott) informed Mr. Carmichael that the trawler at that time was sailing in an easterly direction and was between $2\frac{1}{2}$ and 3 miles offshore in approximately 14 fathoms. The Russian ship had two otter boards on the port side and a trawl net was seen aft on the raised deck. The "Zora IV" was able to get to within 20 yards of the trawler before the latter turned and steamed away in a westerly direction. Two women were seen to be on board and the ship's radar mast was working. She was estimated to be about 150 feet in length and was not a whale chaser. She had a navy grey hull and white superstructure. The "Zora IV" followed the tralwer for about 7 miles out to sea. She then headed for what was believed to be her mother ship drifting about 12 miles offshore. This was thought to be of about 1500 tons with the same navy grey hull and white superstructure.

Another sighting was made by fisherman Tom Rollands, who reported that when returning from the Abrolhos at dusk he saw what he thoughtwere two strange ships.

These incidents were immediately referred to Canberra.

CLEARING HOUSE

ANCHOVY BRINGS NEW PROSPERITY TO IQUIQUE

Before the first world war, the port of Iquique in Northern Chile, was the centre for the nitrate industry, which brought to it life and prosperity. That period, now a thing of the past, is brought to memory by empty greatly dilapidated palatial residences and by a desolated coastal boulevard leading to what was once one of South America's most modern seaside resorts.

But in the past few years an important change for the better has taken place, and Iquique has come alive again. It started around the mid-50s, when an enterprise was established to engage in fishing and set up a processing factory.

Anchovy Encountered

Enormous shoals of anchovy were encountered similar to those which gave rise to the rapid development of the fishmeal industry in the Peruvian town of Callao. In view of the initial findings, the CORFO - the Chilean state organisation for economic development - regarded it as a possibility to stimulate the economic life of this northern region.

Plans were made to establish a fishmeal industry, in which the CORFO participated financially. This induced an interest in the latent possibilities among foreign countries also. American, Canadian, Norwegian and South African capital started to find its way to Chile and a new period of prosperity for Iquique began.

1965 Target Reached

Whereas the CORFO expected initially a total capital investment of \$40 million and a fishmeal production of 165,000 tons by the end of 1965, this target was reached a year earlier, according to the Dutch journal Economische Voorlichting. In the past year alone, foreign investments totalled \$20 million and double this amount is expected for the current year.

The port has once again a busy traffic and, at an American-Chilean shipyard, fishing vessels of 120 tons are being built for the anchovy catch.

The fish meal is finding a ready demand, but nevertheless the producers in Iquique are constantly seeking new markets to ensure that this newly-acquired prosperity continues. For this purpose, two European research oranisations have been called in.

(Fishing News

London

February 26, 1965)

THE NEW COLLISION RULES AND FUTURE FISHING LIGHTS

New lights and shapes for fishing vessels are amongst the changes to be made when the amended Collision Regulations come into force next September. The revised International Regulations for Preventing Collisions at Sea are an outcome of the fourth International Conference on Safety of Life at Sea which was convened in London in 1960.

Recommendations on the mariner's responsibility in the use of radar in reduced visibility are contained in an important annex to the Rules, and it is hoped that this clarification will halt the continuing rise in radar-assisted collisions.

Big Changes

Fishermen will find the new Rule 9 makes big changes in fishing lights and shapes. The trawler's tri-coloured lantern is to be replaced by two all-round vertical lights, green over white, spaced not less than four nor more than l2ft. apart.

Port and starboard lights, and stern light will also be shown by vessels engaged in trawling, and they may in addition use their foremast white steaming light, but this optional light shall be carried lower than and abaft the all-round green and white lights. When not making way through the water, the sidelights and stern light will not be shown. Vessel engaged in fishing, except trawling, will in future shown two all-round vertical lights, red over white.

Where their gear extends more than 500ft. horizontally into the seaway an additional all-round white light, between six and 20ft. away from the vertical lights and not lower than the sidelights, will indicate the direction of the gears. Here again sidelights and stern light will be shown when making way through the water. The optional use of the foremast white steaming light does not apply to these vessels, only to trawled Rule 1 has a new paragraph which explains that "the term 'engaged in fishing' means fishing with nets, lines or trawls, but does not include fishing with trolling lines".

The traditional basket in the fore-rigging indicating a vessel fishing, will be superseded in vessels over 65ft. by a black shape consisting of two cones each not less than 2ft. in diameter with their points together one above the other. Vessels under 65ft. may continue to use the basket. Where gear extends more than 500ft. horizontally into the seaway, its direction must be indicated by an additional black conical shape, point upwards.

For Two Miles

All these lights and shapes for vessels engaged in fishing, listed in Rule 9, are required to be visible at a distance of at least two miles. This rule also permits the shining of a searchlight beam in the direction of a danger threatening an approaching vessel. It also cautions fishermen to be on guard against bright or insufficiently screened working lights imparing the visibility and character of their navigation lights.

The present trawling fog signal will be replaced by three blasts in succession, namely one long blast followed by two short blasts, at intervals of not more than one minute. This signal is made when engaged in fishing when under way or at anchor. These changes of lights and fog signals for trawlers bring them more into line with other vessels having restricted manoeuvrability, such as towing vessels, and generally the new edition tidies-up many points in the old rules.

This article outlines some of the changes to be found in the amended rules which directly affect fishing vessels, but the full text gives revised rules relating to the display of lights and shapes by pilot vessels, minesweepers, sailing vessels and tugs, which all mariners will will want to know about by the operative date of September 1.

(Fishing News

London

February 26, 1965)

FISHERMEN URGED TO ORGANISE

Australia's professional fishermen have been urged to organise themselves into a national body. The Minister for Primary Industry, Mr. Adermann, said fishermen would be foolish not to do this. He was backed by the Minister for the Interior, Mr. Anthony, who said, "The professional fishing industry is the worst organised primary industry in Australia". The Ministers gave this advice to a meeting of fishermen at Tweed Heads last month.

Mr. Anthony said fishermen were not a "tangible force", Other primary industries had been united for years, but there was not one voice to put the fishing industry's case before the Tariff Board for protection or stabilisation. Messrs. Adermann and Anthony dropped in on the Tweed fishermen while on their way to a Country Party rally at Murwillumbah. They promised that a fisheries expert would later visit the area and discuss fishermen's problems. They kept their word and Mr. Cedric Setter went to Ballina this month to address a special meeting of fishermen.

Commonwealth Angle

Mr. Setter talked on taxation and research and what the Commonwealth Fisheries was doing or could do for fishermen. N.S.W. Fish Authority chairman Mr. Joseph was also invited to the Ballina meeting to discuss marketing. Mr. Joseph said he was very impressed with Mr. Anthony. "It can definitely be said that Mr. Anthony is interested in the welfare of fishermen", he said.

He went on that the Authority was interested in developing the port of Brunswick Heads on which the State Government has spent £250,000 on harbour works. Mr. Setter brought new hope to fishermen by predicting a bright future for tuna off the coast. Mr. Setter said he believed there were far more yellow fin tuna off the north coast than in southern N.S.W. waters where the industry was established.

The department had assisted southern fishermen in their search for tuna by paying 75 per cent of the cost to boat owners and 50 per cent of the survey plane costs, he said. A request for similar aid to find tuna and new prawn grounds off the far north coast certainly was worth putting to his department, said Mr. Setter. The department might consider chartering local trawlers for this work.

He said the C.S.I.R.O. was about to establish an east coast prawn research unit and trawlermen would be able to confer with its officers. Australian pole and bait tuna fishermen were as efficient as any in the world, but the Australian tuna fleet was using mainly converted tugs, ferries and other craft. Few of these were designed for tuna fishing, said Mr. Setter. Although the Australian industry was not highly organised and mechanised like its American counterpart, it was developing quickly.

The president of the Tweed Heads-Coolangatta Fishermen's Association, Mr. G. Harrison, asked Mr. Setter what electronic aids could be used by fishermen to help them to find prawns. Mr. Setter said that interesting work was being done overseas and by the Navy on the hydrophone which could be lowered from boats. He said it might be possible to tune the hydrophone so that it would filter out the sounds of prawns from other sounds on the sea bed.

However, research was needed to discover if it were practicable to hear only prawn sounds. Other possible aids Mr. Setter mentioned were TV cameras attached to trawling gear and underwater films to show the behaviour of trawl nets and marine life. He said work was being done on underwater TV adaption, but this was expensive.

(Fish Trades Review

Sydney

March, 1965)

BID TO SELL W.A. PRAWNS IN JAPAN

A bid to interest the Japanese market in Western Australian prawns is being made this month by the Ross Group.

Len Johnson, principal of W. Len Johnson Pty. Ltd., and Ross director for Australia, has been given the job of promoting the prawns. Len left earlier this month for Tokyo where an International Trade Fair is being held. Ross has a stand at the fair and Len, together with suitable female assistants, will grace it with his presence. Before leaving Len told us his firm had taken space at the fair specifically to promote its Western Australian pack of prawns, which are sold under the Ross Foods label.

New Trawler

Ross International Fisheries has three processing factories in W.A. mainly for crays. It recently bought another freezer boat the Empress of Geraldton from the Kingfisher group. It has re-named the boat Ross Empress. The vessel, with a holding space for 500 cases of prawns, fishes, cooks and freezes its own catch. It is operating in Shark Bay at present.

(Fish Trades Review Sydney April, 1965)

KURI PEARLS HAVE IMPORTANT FUTURE

The sending of 30,000 live Broome oysters from Kuri Bay to Thursday Island could mean further expansion of the £2 million industry. These oysters, which come from the beds of this north-west coast, have been found to be the best hosts for cultured pearls. The pearls coming from Kuri Bay are grown by the oysters in about two years and are bigger than the Japanese pearls.

Kuri Bay requires 100,000 oysters a year for the oyster racks at the water farms. The oysters are collected from the pearling luggers which operate out of Broome. Twice every day the boat, Kuri Pearl, comes up alongside the luggers and takes off the live oysters.

They are stacked carefully in racks which are immersed in fresh sea water in the holds. There are holes in the bottom of the boat which allow fresh sea water to come in as the moves. As soon as Kuri Pearl has her full load of 30,000 oysters, she steams full speed to the farms 250 miles away.

Live Broome oysters have, as hosts for cultured pearls, come to mean £1,000 a ton at Kuri Bay. Before Kuri Bay, the average return from shell was £400 a ton.

(Jetstream

Perth

March, 1965)

THAT OIL DRILLING IS 'NO THREAT' TO FISH SHOALS

Risks of damage or danger to fish shoals in the North Sea, resulting from oil and gas drilling operations there, are negligible, and Mr. John Morris, Parliamentary Secretary to the Ministry of Power, told the Commons last week that available evidence suggested this.

Asked by Mr. Hector Hughes (Aberdeen North) what steps would be taken to prevent fish from the danger of effluvia escaping, Mr. Morris replied: "Licensees are 11 .

Mr. Morris answered that these operations affected only a fraction of the North Sea, and if Mr. Hughes disagreed that the risks to shoals were negligible, "I shall be interested in any evidence which he can produce". He agreed with Mr. Nicholas Ridley (Cirencester and Tewkesbury) that drilling and exploration in other parts of the world showed no evidence of damage to fishing or fishing interests.

(Fishing News

London

February 19, 1965)

FISH IN MAGNETIC FIELDS

Latest Soviet experiments show that fish are able to react to electromagnetic waves

Soviet physiologists have proved experimentally that some animals feel electromagnetic waves and a magnetic field. Fish, rabbits, birds and dogs were used for the tests.

Reflex to bell

Scientists of the Institute of Higher Nervous Activity and Neurophysiology of the Soviet Academy of Sciences have developed a conditioned reflex of fish to a bell. At first the signal was given and then food followed. After several repetitions the fish swam to the feeding place when the bell started ringing, and behaved in the same way after the bell had been replaced by inaudible electromagnetic oscillations.

With what organs of sense do the animals feel the electromagnetic irritants? The scientists blocked in turn, sight, hearing, sense of smell and sense of touch, but in all the experiments the reflex was not disrupted. On this basis they advanced the hypothesis that the magnetic field and its changes directly influence the central nervous system.

Biologist Yuri Kholodov, discussing the significance of these experiments, said that until now scientists knew only about the effect of external irritants on the five sense organs. It was believed that it was through them alone that the animal received information for its central nervous system.

Cerebral reaction

Electromagnetic oscillations have a penetrating power, and therefore it is quite possible that, as distinct from sound, light, and mechanical irritation, they can directly reach the cerebral cells.

(World Fishing

London

April, 1965)

TRAWLING CONES CAN REPLACE OTTERBOARDS, SAYS INVENTOR

An open-ended cone-shaped device which will hold the mouth of a trawl open and which supplants the usual otterboards has been invented in Denmark.

The forward end of the cone is cut at a backward angle while the rear end is square. The cone has a keel underneath with a rounded front edge to prevent the cone from digging into the bottom when the trawl is fished near the bottom. A vertical bridle attaches the rear end of the cone to a cable leading to the trawl. Front bridles are attached to the forward end of the cones and then to cables which lead to a single cable to the towing vessel. The depth of the trawl is adjusted by letting out of hauling in the single cable,

In operation, the water passing through the cones keeps them separated and the trawl open. The stream of water directed back through the cones toward the trawl is expected to increase the catch when passing through a school of fish.

Patent and model protection has been applied for in Denmark for the device.

Inventor is Hartman Fynbo, Holstvej 8, Skagen, Denmark. He is a tinsmith, and his first models of the device have been constructed of metal. However, the patent application states the cones may be made of collapsible material such as canvas or plastic cloth. There have been no reports of the device being used commercially. The inventor has said that a special trawl should be used with the cones, and that such a trawl is being constructed.

(Western Fisheries

Vancouver January, 1965)