WESTERN AUSTRALIA. DEPARTMENT
MONTHLY SERVICE BULLETIN

Vol. VIII, No. 7 July, 1959.

STAFF NOTES

The Researoh Officer, Mr. B.K. Bowen, will lead a scientifio team to Bernier and Dorre Islands during the month. The party will leave Perth for Carnarvon on July 11 and two days later will board the Lancelin for the trip across to the islands whioh are approximately 40 miles west of that port.

* * * *

Senior Inspector J.E. Munro will begin annual leave on July 13.

* * * *

Congratulations are the order of the day to the following officers -

* Mr. C.J. Seabrook, who was appointed Assistant Inspector, Classification G-VII-1/2, as from April 1, 1959. During the month Mr. Seabrook received notification that he had passed the examinations for, and been awarded, the Motor Engine Driver's Competency Certificate and Skipper's Certificate Grade 2.

A daughter, Joanne, was born to Mr. and Mrs. Seabrook on June 8.

* Mr. E.H. Barker, who was promoted to the position of Assistant Inspector, Classification G-VII-1/2, as from June 5.

* Cadet Inspector R.G. Emery, who was appointed to the permanent staff on June 5.

* Mr. E.I. Forster, who was promoted to Inspector Grade 2, Classification G-II-1, from June 18.

* Mr. H.D. Kavanagh, who was also promoted Inspector Grade 2, Classification G-II-1, from June 24.

* * * *

Inspector N.E. McLaughlan will fly to Perth on July 3 to assist in taking the r.v. "Lancelin" to Shark Bay. She will sail from Fremantle on July 4. "Lancelin's" crew comprises, in addition to Mr. McLaughlan, Assistant Inspector D. Wright and Mate C.R.C. Haynes.

* * * *

Inspector J. Traynor will carry out patrols in the Denmark area to assist the administration of the Albany district whilst Inspector B.A. Carmichael is occupied as whaling Inspector at the Cheyne Beach Whaling Company's site.

PERSONAL PARAGRAPHS

An expert on freshwater and tropical fish, Mr. Geoffrey R. Fish, called on the Director during the month. Mr. Fish, who had just completed three years' research at the British Fish Culture Station at Malacca, Malaya, also met a number of departmental officers. After spending about a week in Perth he left to attend the international limnological conference in Vienna.

* * * *

Mr. F. Williams, a professional crayfisherman of Port MacDonell, South Australia, is at present visiting the State. He spent a few days in Geraldton, and called on the Director while in Perth. Arrangements have been made for Inspectors Baines and Carmichael to show Mr. Williams some of the south-west and southern coast. He will also spend a short time on the "Bluefin".

Mr. Williams is looking around to see whether he will later bring his own boat over to establish himself as a crayfisherman in the West.

CRAYBOATS ADRIFT

Mr. M. Woodberry, a North Island crayfisherman, had a narrow escape from drowning when his 16-foot boat "Frolic" was swamped on June 13. Fortunately, Mr. Woodberry was able to reach a coral reef after swimming for more than an hour. He was washed off the reef several times before being rescued by another fisherman, Mr. E. McEvoy, shortly before dusk. It is understood that the "Frolic", which was insured for £500, broke up and sank after the swamping.

* * * *

The l.f.b. "Cutty Sark" broke away from her moorings about 200 yards from shore at Port Denison on June 17. Her skipper, Mr. J. Shields, of Applecross, swam out to the craft after attempts to launch a dinghy had failed, but was unable to start the engine. She was swept ashore on a dry weed bank on the main beach on the following day. It is understood that she was not seriously damaged despite the severe buffeting she received.

* * * *

On the night of June 2, the crayfishing boat "Falcon", owned by Mr. R. Crooks, of Wonthella, dragged her anchor at Geraldton during a brief thunderstorm. Gale-force winds up to 45 knots blew her to the breakwater and damaged her planking.

MONEY FOR KANGAROOS

With the price of first grade skins rising to 9/- a lb., competent kangaroo hunters are currently earning large weekly sums from the sale of kangaroo skins and meat. It is understood that the increased price of skins has been brought about by a curtailment of leather production in South American countries. The growth of the trade in kangaroo meat, both in the export of tails and choice cuts for human consumption overseas, and in the processing into pet food for the local market, has received prominence in the press in recent weeks. It was reported that Mr. E.H. Karlovsky, Manager of the South Coast Ice and Trading Company, Safety Bay, who has been engaged in the trade for a number of years, recently installed a £1,000 freezing plant at Leonora. He was reported as saying that the newly installed plant could hold and chill up to 650 kangaroos prior to conveyance to the Safety Bay Works in an insulated vehicle.

Mr. Karlovsky and his field associate, Mr. Ben Matthews, first commenced operation in the trade about 5 years ago. Since then a holding depot has been erected at Agnew and the number of carcasses processed had risen to 18,000 a year. With at least three other companies purchasing carcassesfrom hunters, the professional kangaroo shooter, who had become almost a legendary figure, seems now to be coming back into his own. Annual production of kangaroo meat processed as pet food is estimated to total about 1,500,000 lb., while the overall sales must be well in excess of that figure.

CONFERENCE ON UNIFORM FAUNA CONTROL

A conference of State and Commonwealth officials to consider common policies on the protection and export of fauna will be called shortly, the Commonwealth Minister for Customs, Mr. Henty, announced recently. An effort would be made, he said, to iron out anomalies which occur partly as a result of the division of control on exports between the Commonwealth and States, and partly because of the different protection laws which apply in each of the States. Approval has been given by the Minister for Fisheries (Mr. Hutchinson) for a delegate to attend from this State.

RECOVERIES OF GIANT PETRELS

Although the winter storms set in late this year, the number of giant petrels appearing along our shores appears to be much the same as in past years. The recovery of birds banded by the United States Fish and Wildlife Service has, however, caused considerable interest. One found at Port Beach just north of the Fremantle Mole on June 22 was believed to be the first American banded bird ever discovered in Australia. It later transpired, however, that band 528-10845 had been recovered the day before. Altogether, four American and seven British banded birds were reported during the month.

It is presumed the American bands were placed on nestlings in the Antarctic by the United States scientists who spent many months in the Antarctic in connection with the International Geophysical Year.

The Fauna Warden, Mr. S.W. Bowler, has again maintained, at his home, a small "hospital" to care for petrels picked up in an exhausted condition. One of his patients this year was an albatross, but it received short shrift from one of the petrels and is now a museum specimen.

In keeping with the practice of past years, Dr. D.L. Serventy, Principal Research Officer, Wildlife Survey Section, C.S.I.R.O., has placed ANARE bands on giant petrels released from Mr. Bowler's hospital. Unfortunately two of the three he banded later succumbed.

The tables on pages 102-104 set out the details of band recoveries and also of sightings of banded and white-phase birds.

INTERNATIONAL MIGRATION OF WILD DUCKS

A press report of the recovery of a Victorian banded grey teal at Lake Whangape, South Auckland, New Zealand, has been amplified in an item in newsletter "Fur, Feathers and Fins," published by the Fisheries and Game Department, Victoria. The teal had been banded at Lara, near Melbourne, on May 19, 1957. Its recovery point was approximately due east across 1,200 miles of sea. Two years ago a New Zealand band was found on a black duck shot at Menindie, River Darling, New South Wales, so that the recent teal recovery is of importance in confirming a two-way movement of ducks across the Tasman sea. Another Victorian banded duck was recovered at Okaba in New Guinea.

Previous reports from passengers on liners that they had seen ducks on the sea a thousand miles or so from shore had not been believed. It now appears that a considerable movement of ducks actually takes place across great stretches of ocean when conditions in one country are not suitable. New Zealand authorities confirmed a great build up in the number of grey teal in the Dominion in recent months. Recoveries such as this, and of Darwin banded birds in Western Australia and the Eastern States, and Victorian and New South Wales banded ducks in the Northern Territory and this State, reveal an irregular but massive nation-wide movement unsuspected a few years ago. Banding has demonstrated beyond any doubt that conservation must be at least on a nation-wide basis if not on an international one.

FURTHER HOPE FOR NATURE RESERVES

Following the encouraging news published in the previous issue of this Bulletin concerning the action taken by the Australian Academy of Science to enquire into all aspects of national reserves in all states, it is pleasing to read of an important new step being taken in Victoria. The Victorian Cabinet has recognised the fundamental need

for preservation of the habitat by setting up a State Wildlife Reserve Committee. The personnel of the committee is as follows -

Mr. G.T. Thompson, L.A., A.M.I.E. (Aust.),
(Chairman, Soil Conservation Authority) - Chairman.

Mr. A.L. Tisdall, M.Agr. Sc., M.A.I.A.S.
(Commissioner, State Rivers and Waters Supply Commission).

Mr. A.W. Shillinglaw, B.Sc., Dip.For.,
(representing the Forests Commission).

Mr. F. Klenner,
(representing the Lands Department).

Mr. A. Dunbavin Butcher, M.Sc.,
(Director of the Fisheries & Game Department)

The Secretary is Mr. A.C. Anderson of the Premier's Department.

It was reported in the July issue of the newsletter published by the Victorian Department of Fisheries and Game, that the committee has been directed -

1. To consider what areas of land, having regard to present land usages and other needs of the community, should be reserved for wildlife, and on what terms and conditions.

2. To advise as to whether existing legislation is adequate for such reservations and, if not, to recommend any necessary amending legislation.

THE USE OF MODERN AIDS

A Trans-Australia Airlines spokesman reported during the month that the Nor'-West Whaling Company Ltd. and the Cheynes Beach Whaling Company Pty. Ltd., were interested in the use of helicopters for spotting whales in Western Australian waters. In previous years light aircraft have been used by both companies with varying success. It is understood that helicopters would have a cruising speed of 60 miles per hour and a range of 110 to 235 miles. They would operate from land bases. The spokesman said that the lightweight three-seat Hillier would be particularly suitable for the job.

Helicopters are used for many purposes in the United States by a number of Federal and State agencies, including the Fish and Wildlife Service. It is realised that they would be a most suitable craft for patrolling the crayfisheries of this State but to date the intitial cost of the craft of between £30,000 and £50,000 has proved a stumbling block. The cost of hiring will, however, be watched with interest.

GOVERNMENT AIDS CAMPAIGN

The Western Australian Government has decided to contribute towards the cost of the "Pearls for Prestige" campaign at present being conducted overseas. As reported in the previous issue of this Bulletin, the results of the campaign have been most encouraging. The Commonwealth Government decided early last month to make a second grant to the campaign fund, which was established in the first place by contributions from the Commonwealth Government, the Australian Pearlshell Industry and United States pearl buyers. Pearlshell promotion in the fashion design fields of London, Paris and the United States has moved along very successfully and it is now expected to offset to a large extent the inroads made by the plastics industry with its imitation pearl buttons.

WILDLIFE EXPORTS

Four immature pelicans reached Perth early in June after having been aiffreighted from Pelican Island, Shark Bay, by Inspector N.E. McLaughlan. The birds were taken originally for export to the Paris Zoological Gardens but it is now understood that the State Zoological Gardens Board is so pleased with them that they intend to keep them themselves, at least for the time being. Meanwhile, five black swans, which were sent to Japan as a goodwill gift from the city of Perth, arrived safely in Kobe. They carried with them a personal message to the Mayor of Tokyo from Perth's Lord Mayor Howard. Their trip on the "Ellen Baake" (the same ship which freighted the first consignment of craytails direct from the port of Geraldton) was reported as uneventful. They were fed on a diet prescribed by the Superintendent of the South Perth Zoological Gardens, Mr. W.H. Lyall.

PROFESSIONAL FISHERMEN WAIT ON MINISTER

On June 10, a deputation representing the W.A. Professional Fishermen's League told the Minister for Fisheries, Mr. Hutchinson, that pleasure boats should undergo an annual inspection and that middlemen's profits in the fish industry should be cut. They maintained that pleasure craft and their crews should be subject to the same conditions. They complained that fishermen were getting too small a share of the retail price paid by the consumer and charged the middlemen with making unfair profits. Other points made by the deputation were -

* the Fisheries Department should control the opening of bars in rivers and inlets;
* the Fisheries Act Regulations should be reviewed;
* entry of new persons into the fishing industry should be restricted; and
* health authorities should allow more than three fish-shops in the Perth city block.

HEAVIER PENALTIES

Many suggestions have been made in the past by inspectors and professional fishermen that penalties for breaches of the Fisheries Act and Regulations should be sharply increased. The suggestions usually have applied particularly to the crayfishing industry. It should be of interest to the staff, therefore, to note the penalties which apply to the taking of undersize rock lobsters in South Africa. There, any professional or amateur fisherman, whose hauls contain rock lobsters below the legal body length of $3\frac{1}{2}$", runs the gauntlet of a heavy penalty. First offenders, upon conviction, could expect the confiscation of their nets and other equipment used to catch rock lobsters. Second offenders might forfeit their boats, gear and everything else to the Crown! In addition, there is a provision for a maximum fine of £100 or of imprisonment for twelve months, and the chance of forfeiting the right to fish commercially.

DUCK BAND RECOVERIES

As stated in the previous issue, hereunder are listed the recoveries of bands from grey teal and other species of wild ducks received this year -

Band No.	BANDING		RECOVERY		Distance Flown
	Date	Place	Date	Place	
			Grey Teal		
4107	17/4/56	Yere Yere Stn. Dandaragan.	11/1/59	Moora Lakes	18 miles
3869	25/3/56	Wardering Lake, Woodanilling.	10/1/59	20 miles west of Woodanilling	10 "
4753	11/4/58	Near Murapin Lake, Woodanilling.	3/1/59	Casuarina swamp	30 "
1667	22/3/53	Big Bootine Swamp, Beermullah.	10/1/59	Rowles Lagoon, North-east of Kalgoorlie	310 "
4509	16/1/58	Karrinyup Lake, Wanneroo.	10/1/59	Goomalling	75 "
4520	18/1/58	Karrinyup Lake, Wanneroo.	16/1/59	Spade Lake north of Beermullah	53 "
3957	27/3/56	Wardering Lake, Woodanilling.	21/12/58	3 miles south of Pinjarra	100 "
4172	7/12/56	Gundaring Lake, Wagin.	17/1/59	Behind Busselton Golf Club.	125 "
3923	26/3/56	Wardering Lake, Woodanilling.	20/1/59	Near Ora Banda	320 "
4369	7/11/57	Koomberkine Lake, Dowerin.	23/12/58	Mouth of Harvey River.	140 "

Band No.	BANDING		RECOVERY		Distance Flown
	Date.	Place	Date	Place	
			Grey Teal		
4149	5/12/56	Gundaring Lake, Wagin.	18/1/59	Disused Dam 58 miles from Kalgoorlie on Kalgoorlie-Menzies Road.	315 miles
4557	24/1/58	Karrinyup Lake, Wanneroo.	28/1/59	Lake Mealup, Peel Inlet.	55 "
3110	2/12/54	Near Meckering	11/1/59	White Lake, Yealering.	75 "
3185	23/1/55	Yealering Lake, Wickepin.	11/1/59	Pool on Milgun Stn. Gascoyne River.	520 "
3022	23/11/54	Lake Mears, Brookton.	26/1/59	Avon River, 8 miles S.E. of Mt. Kokeby.	15 "
14911	7/1/59	Coolup.	9/1/59	Boggy Bay, Peel Inlet.	10 "
4403	14/11/57	Metcalf Lake, Dowerin.	11/10/58	Kalgoorlie.	270 "
4588	1/3/58	Karrinyup Lake, Wanneroo.	Band recd. 18/2/59. Date of recovery not known	Lakes 15 mls. south of Tambellup.	175 "
3894	28/3/56	Wardering Lake, Woodanilling.	14/2/59	Taarblin Lake, east Narrogin.	43 "
14928	3/2/59	Coolup.	22/2/59	18 mls. north of Capel.	55 "

Band No.	BANDING		RECOVERY		Distance Flown
	Date	Place	Date	Place	
			Grey Teal		
4102	15/4/56	Yathroo Stn. Dandaragan.	22/2/59	Gundaring Lake, Wagin.	203 mls.
3937	[illegible]/3/56	Wardering Lake, Woodanilling.	25/2/59	Wannamal Lakes.	180 "
14912	10/1/59	Coolup.	12/3/59	Wilson Inlet	180 "
4331	5/11/57	Koomberkine Lake, Dowerin.	14/3/59	Cook's Lake 2 mls. west of Moora.	67 "
14929	3/2/59	Coolup.	4/3/59	Coolup, Location 75.	
14919	15/1/59	Coolup.	30/3/59	Dookanooka Swamp 16 mls. S.W. of Three Springs.	205 "
4577	27/2/58	Karrinyup Lake.	14/3/59	Marada Lake, 3 mls. N.W. of Moora.	82 "
3970	28/3/56	Wardering Lake, Woodanilling.	30/3/59	Toolibin Lake, East Narrogin.	45 "
4670	5/4/58	Near Murapin Lake, Woodanilling.	26/3/59	Red Lake, south of Kalgoorlie.	315 "
4243	5/2/57	Craig's Lake, Kewdale.	11/4/59	Toolibin Lake, East Narrogin.	120 "
4603	6/3/58	Yathroo Stn., Dandaragan.	4/4/59	Moora.	20 "

Band No.	BANDING		RECOVERY		Distance Flown
	Date	Place	Date	Place	
4402	15/11/57	Near Metcalf Lake, Dowerin.	19/4/59	Taarblin Lake, east Narrogin.	130 mls.
14753	24/2/59	Cape Riche	10/3/59	Cape Riche.	
2997	21/11/54	Lake Mears, Brookton.	19/4/59	Lake Brown, off Yealering.	30 "
4018	12/4/56	Yathroo Stn., Dandaragan.	20/4/59	Qualen Lake 10 miles N.W. of Dowerin.	83 "
4235	19/1/57	do	4/1/59	McHugh's Lake 7 miles north of Dowerin.	83 "
4654	4/4/58	Murapin Lake, Woodanilling.	4/1/59	Oak Park Lake 17 miles north west of Dowerin.	165 "
4439	5/11/57	Koomberkine Lake, Dowerin.	3/4/59	Lake System 16 miles N.W. of Esperance.	334 "
3864	25/3/56	Wardering Lake, Woodanilling.	March 1959	Murapin Lake, Woodanilling.	
2058	19/12/53	Watson's Lake, Dumbleyung.	Mid Apl. 1959	Bremer Bay.	123 "
3116	4/12/54	Meckering District	Band sent in on 2/7/59	Trig Pool near Lake Austin, Cue district.	283 "
		Mountain Duck			
6709	10/3/57	Wardering Lake.	21/12/58	Sam Light's Swamp near Wardering.	
		Maned Goose			
7242	8/3/58	Yathroo Station, Dandaragan.	10/1/59	Kanowna Lakes near Kalgoorlie.	345 mls.
3499	17/2/56	Craig's Lake, Kewdale.	3/1/59	Near Mingenew.	190 "

ECOLOGICAL SURVEY OF BERNIER AND DORRE ISLANDS

A noteworthy event will soon take place when a survey team, led by the Department's Research Officer, Mr. B.K. Bowen, will land on Bernier and Dorre Islands about the middle of the month. Members of the team in addition to Mr. Bowen are -

Dr. W.D.L. Ride (who will direct the field survey),
Dr. G.F. Mees, Curator of Birds, and Mr. A.M. Douglas, Entomologist, from the Western Australian Museum;
Mr. R.D. Royce, Senior Botanist, Department of Agriculture, and
Mr. H. Briscoe, Department of Zoology, University of W.A.

This will be the first ecological survey ever carried out at the direction of the Fauna Protection Advisory Committee. It will seek to establish the areas essential to the conservation of the Island fauna and whether they would suffer by the setting up of tourist camps and other facilities, which certain interests have in mind.

MARLIN OR SWORDFISH

Inspector A.K. Melsom has advised that on April 7, 1959, the crew of the fishing boat "Jupiter" caught what was described as a 17-foot marlin. The "Jupiter" was operating at the time off the Beagles and the fish was caught in a most unusual manner. A craypot line had fouled around its gill covers and in its mouth to form a bridle. It is understood that the fish was so large it would not fit into the freezer of the "Bluefin" until it had been beheaded. Its weight was reported to have been 290 lb. headed and gutted, which would mean about 400 lb. in the round. Further details of the fish are being sought from Poole Bros., who are at present operating the "Bluefin" on the crayfish survey in southern waters. It sounds as though the fish was either a black marlin or a swordfish. The length/weight ratio seems to have been wrong for a marlin.

INTERNATIONAL WHALING

Further to the note on page 79 of the previous issue of this Bulletin, advice has been received from the Acting Director, Fisheries Division, Department of Primary Industry, Canberra, that Norway and the Netherlands have withdrawn from the International Whaling Convention of 1946. Their decision was made known at the meeting of the

International Whaling Commission in London towards the end of last month. While both countries have refused to observe the quota of blue whale units as allocated to them, both have agreed to observe the remainder of the Convention.

The next Antarctic whaling season will probably commence on December 28, 1959, and the overall blue whale unit quota will remain at 15,000. This figure will determine the end of the season, but Norway and the Netherlands will probably continue operations until they reach 4,850 and 1,200 blue whale units respectively.

The Antarctic humpback season will again be restricted to 4 days but will commence on January 20 instead of February 1.

As the Australian whaling industry will receive virtually the same protection as in the past, there would seem to be no reason for altering the arrangements at present operating in Australia.

GIANT PETRELS (CONTINUED FROM PAGE 92)

F.I.D.S. & U.S.F. & W.S. BAND RECOVERIES

Band No.	Details
FIDS. 500222	Found alive near Breaksea Island, Albany. Yellow band and metal band both removed and bird released immediately.
FIDS. 57021	Found dead on 21/6/59 at Coogee Beach south of Fremantle. Yellow band and metal bands both removed.
FIDS. 56220	Found alive on 3/6/59 at Point Moore Lighthouse, Geraldton. Bird released with yellow and metal bands intact on 4/6/59.
FIDS. 57225	Found alive on 27/6/59 in the Dongara district. Yellow metal bands removed and bird released.
FIDS. 54854	Found dead in September 1958 20 miles south of Geraldton. Bands removed (Red plastic band and metal band).
USA. 528-10194	Found alive on 26/6/59 out from Safety Bay, south of Fremantle. Band removed and bird released.

Band No.	Details
USA. 528-10845	Found alive on 21/6/59 at Woodman Pt. Jetty, Naval Base. Band removed and bird released.
USA. 528-10468	Found alive on 24/6/59 at Fremantle Harbour. Bird released with band intact at Fremantle on June 26, 1959.
USA. 528-10835	Found dead on 22/6/59 at Port Beach, North Fremantle. Band removed.
FIDS. 57112	Found alive near Breaksea Island, Albany. Bird released with band intact.
FIDS. 56889	Found alive at Fremantle on 6/6/59. Band removed by Neil Gugeri and bird released. (Newspaper report).
USA. 528-10985) FIDS. 57278)	Found alive on 9/7/59 35°0' South 118° 13' East Lured to ship's side by F. & N. Swarbrick of Emu Point, Albany, and released after details noted.

UNBANDED PETRELS FOUND AND BANDED BY DR. SERVENTY

Band No.	Details
ANARE. 10300	Found on 17/6/59 at Leighton Beach north of Fremantle. Released at the North Mole, Fremantle, on June 22, 1959. Found dead at Leighton 2 miles north of Fremantle on 23/6/59.
ANARE. 10301	Found on 17/6/59 at City Beach north of Fremantle. Released at the North Mole, Fremantle, on June 22, 1959.
ANARE. 10302	Found on 25/6/59 at Freshwater Bay about 5 miles up Swan River. Found again at Naval Base 29/6/59 and picked up in the water dead near Garden Island a day or so later.

WHITE-PHASE AND BANDED BIRDS SIGHTED

Date	Details
22/6/59	Observed at Fremantle Mole by Messrs. H.B. Shugg and S.W. Bowler (Fisheries Department). Bird in white-phase seen to be carrying a yellow plastic band. Ten other black petrels (no bands seen) were in the area when releasing 10300 and 10301.
23/6/59	Observed at Robbs Jetty, Fremantle, by Mr. Dickson of Willagee. Mr. Dickson phoned that of 5 petrels seen one bore a yellow band and one an aluminium band. (Not known if same bird).
5/6/59	Observed at Bunbury Estuary by Inspector T.B. Baines, Fisheries Department, Bunbury. One unbanded bird in white-phase found and released some days later.

DEPARTMENTAL PROSECUTIONS

April 1 - June 30, 1959.

Date	Defendant	Court	Charge	Result
23/3/59	Bivi, L.	Fremantle	Undersize c/fish	Fined £3
6/4/59	Paparello, C.	do	do	" £2
do	Luito, G.	do	do	" £15
do	Tickle, D.W.	do	do	" £2
do	Mazzeo, F.	do	do	" £2
do	Pittorino, G.	do	do	" £10
do	Larner, J.	do	do	" £2
20/4/59	Cicerello, S.	do	do	" £2

Date	Defendant	Court	Charge	Result
18/5/59	Farrell, J.P.	Fremantle	Undersize c/fish	Fined £3
do	Grego, G.	do	do	" £5
do	do	do	do	" £5
do	Rutigliano	do	do	" £3
do	Katnic, F.	do	do	" £3
15/6/59	Pitsakas, A.	do	do	" £2
do	Sloan, G.P.	do	do	" £3
do	Vernon, R.	do	do	" £2
16/6/59	Delaney, Thos.	Geraldton	do	" £8
do	Hancock, D.	do	do	" £2
do	Ritchie, Wm. A.	do	do	" £2
do	Ral, Kim	do	do	" £3
7/5/59	Beale, D.R.	Mandurah	Net in closed waters	" £5
7/4/59	Hondras, Wm.	Midland Junction	Undersize C/fish	" £4
14/4/59	Sticcor, P.	do	do	" £4
16/4/59	Bowers, W.H.	Perth	do	" £3
do	Francesconi, A.	do	do	" £3
14/5/59	De Lacey, N.	do	do	" £5
do	Douglas, F.W.	do	do	" £10
do	Poynton, J.W.	do	do	" £2

Date	Defendant	Court	Charge	Result
14/5/59	Magi, G.B.	Perth	Undersize C/fish	Fined £5
10/6/59	Hugill, D.R.	do	do	" £10
do	Kailis & Sons, G.P.	do	do	" £2
do	do	do	do	" £5
18/6/59	Campbell, E.	do	do	" £5
do	Cannella, S.	do	do	" £5
23/6/59	Mastrone, G.	do	do	" £5
do	Brown, R.	do	do	" £5
do	Ayre, D.S.	do	do	" £10
18/6/59	Hopkins, J.	do	do	" £5
9/7/59	House, K.H.	do	do	" £5
do	Hugill, D.R.	do	Non-submission of returns	" £3
25/6/59	McDonald, H.G.	Pinjarra	Net in closed waters	" £5

ABROLHOS CRAYFISHING

Opposite appears a table showing crayfish production in the Greater Abrolhos area during April and May. For purposes of comparison last year's figures are incorporated.

There has been an increase of some 20% in the number of men fishing at the Abrolhos this year, but the catch has risen by only about 10%. The catch-per-man has correspondingly fallen away by approximately 10%.

AREA	APRIL 1958 *			APRIL 1959 *		
	No. of men	Total Catch	Catch per man	No. of men	Total Catch	Catch per man
		lb.	lb.		lb.	lb.
North Island	34	194,348	5,716	50	262,788	5,256
Wallabi Group	65	379,870	5,998	72	331,237	4,336
Easter Group	71	444,551	6,261	77	389,978	5,064
Southern Group	41	228,073	5,554	60	315,247	5,254
TOTAL:	211	1,246,842	5,861	259	1,299,250	5,016

	MAY 1958			MAY 1959		
		lb.	lb.		lb.	lb.
North Island	32	113,362	3,542	46	154,076	3,349
Wallabi Group	63	217,387	3,451	77	249,923	3,246
Easter Group	68	226,958	3,337	72	263,034	3,653
Southern Group	41	136,439	3,328	51	166,725	3,269
TOTAL:	204	694,146	3,403	246	835,204	3,395

* For March figures see May issue of Bulletin.

Total for three months (March, April, May)	1956	1,917,161	lb.
do do	1957	2,390,157	"
do do	1958	2,677,048	"
do do	1959	2,931,643	"

RECOVERY OF RUSSIAN WHALE MARKS

It will be remembered that in September, last year, four Russian whale marking darts were recovered at the North West Whaling Company's Station at Carnarvon. They were numbered 1007, 1027, 1030 and 1165.

In the May issue of this Bulletin it was recorded that the darts had been fired into the whales about 2,000 miles south-west of their point of capture.

It is of interest, therefore, to note a recent report from Inspector B.A. Carmichael, of Albany. He writes that two additional Russian whale marking darts, Nos. 719 and 720, were recovered from a humpback whale taken by The Cheyne Beach Whaling Company's chaser Kos.VII on June 29. The whale was a male, 36'1" in length, taken at 35° 02'S and 117° 58'E. The date and place where the darts were fired will be published when details are received.

COMMONWEALTH LICENSES.

The Acting Director of the Fisheries Division, Department of Primary Industry, has requested that full details of the motive power of fishing boats be shown on all Commonwealth fishing boat licenses. As this State is the only one not already supplying the information we have agreed to comply with the request. Previously, in answering the question "How Propelled", inspectors have usually written such answers as "motor", "petrol", "diesel", "engine", "auxiliary" etc.

In future explicit particulars of the make, type and horsepower of the engine must be recorded, e.g. "Rolls Royce - Diesel - 180 HP".

CLEARING HOUSE

Japanese Plan Atom-Powered Experimental Fishing Vessel

Japanese plans for building the first atomic-powered fishing vessel were announced at the second World Fishing Boat Congress in Rome last month.

Professor Atsushi Takagi of the departmental of naval architecture of the University of Tokyo said that the vessel will have a displacement of 3,000 to 4,000 tons, and will be powered with an American-type reactor. It will have a complement of 100 men, of which 50 will be sailors and 50 research scientists. Of the research crew, 20 will be observers and 30 will be responsible for handling the reactor. The vessel will be used for experimental fishing in the Pacific.

The reactor will be installed in a container and will use as fuel 29% condensed dioxidized uranium. For emergency use, a 120 HP diesel will be installed so that the boat can be navigated if the reactor is not working.

Professor Takagi said that this was a "trial design which we hope will be as economical as possible. But it is up to the Japanese government whether or not we shall get the necessary appropriation to construct the vessel. It is a very expensive project, even for our proposal which is on a modest scale," he said.

He went on to say that he belived that high-speed fishing boats driven by reactors will be coming into general use before 1970 and that the atomic energy in them would be used directly as power rather than through boilers.

"We can compare this transition with the change that took place when a steam engine was replaced by diesel," he continued. "If the new atomic plant is compact and lightweight it will certainly be used in fishing boats. We can also imagine that such an atomic plant would enable us to build subsurface fishing boats as the power required to drive them would not consume oxygen. Furthermore, the development of electronics will be the means of introducing superior automatic control systems and with these, the boats will be able to

trawl any depth in the sea, and submerge to the calm bottom in rough weather."

The American-type reactor (PWR) was chosen by the Japanese because it "has already proven its value in vessels."

The reactor will be used to drive a 2-step reduction steam turbine developing 8,000 HP at 200 rpm. The total weight of the reactor and its screen will be about 1,100 tons, of which 795 tons will be the weight of the shield.

("Western Fisheries" Vancouver, B.C. May, 1959)

The Fishing Boat of 1975

Delegates to the Second World Fishing Boat Congress had a look into the future when, at one session, they discussed the fishing boat of 1975. At the 1953 Congress, states a preamble to this discussion, there was a paper about gas turbine propulsion of fishing boats, and a number of papers on factory ship design. Many participants felt that it was too early to take up such subjects.

Now, however, gas turbine trawlers have been put into operation, and dozens of huge factory ships are operating successfully in waters not before known to the fishing industry. Development in fishing craft design will not slow down but, on the contrary, will accelerate as technical progress continues. The time might not be very far ahead when the first atomic powered fishing craft will operate. Similarly, with the advance of stern trawling, stabilisers might soon be introduced to make working conditions for the crew much more comfortable.

With progress in automation, fishing boats might be designed to operate with much smaller crews. It might even be possible to send large factory ships to the fishing ground, manned by a skeleton crew, and, when needed, send out the main working crew by supersonic 'planes. The fishing craft of the future might even be airborne with adjustable jets to keep them stationary or at low speed when fishing, and then flying with their catch direct to consumption centres far inland. It would be time well spent to devote some hours to a discussion of the fishing boat type of the immediate future.

("The South African Shipping News" Capetown. May, 1959)

Soviet Fishery Expansion Focused on High Sea Areas

The rapid expansion of the Russian fishing industry is being directed mainly toward high seas fisheries, according to a publication recently released by the Soviet department of fisheries.

In "High Seas Fisheries of the U.S.S.R.", the authors explain that "traditional Soviet fisheries have been conducted on a large scale in almost all major inland and coastal-marine waters. These waters, however, are believed to be fully exploited. It has been reported that in some lake and river fisheries, catches have been declining because of pollution, hydroelectric projects and other factors. With long coast-lines providing access to the rich fishing grounds of the Arctic, Atlantic and Pacific Oceans, the Soviets are in a most advantageous position for expanding their high seas fisheries."

Most recent major Russian fishery expansion has been in the Bering Sea, where a fleet of more than 60 vessels are taking groundfish.

("Western Fisheries" Vancouver, B.C. May, 1959)

Celastic in Wide Use On Fishboats

Celastic, a colloid-treated fabric with amazing qualities of adhesiveness and strength, is coming into wide use on British Columbia fishing vessels. It has been used here for about five years on yachts and workboats, but has not been used extensively on fishing vessels until recently.

It was used on the wheelhouse of the recently launched combination boat "Bering Sea", and is being applied to the boat deck, foredeck and wheelhouse of the 94-ft. yacht being built for John David Eton at Matsumoto Shipyards. It is used on the deck of the fiberglass gillnetter launched this month from the yard of British Columbia Glass Hulls, and has been used in various applications on most new fishing boats launched during the past year.

Celastic resembles thick blotting paper. When immersed in activator BBX, commonly called "dunk", is soggy, slippery and easily mouldable. A few minutes after application it becomes tacky, then leathery. After about 24 hours, it is completely dry, and can be sanded, painted, or otherwise finished. It is rot-proof, and is not affected by salt water or petroleum products.

Celastic is now distributed in British Columbia by Marine Industrial Supply Ltd., 1587 W. 8th Ave., Vancouver.

("Western Fisheries" Vancouver, B.C. May, 1959)

Big Catch, High Prices Make Record Marketing

The 1958 market value of all British Columbia fish and fish products was $98.2 million, a figure comparable only to the 1951 figure of $84 million. It is a record which is likely to s tand for many years.

The 1958 market value was $35.1 million, or 55% higher than the 1957 total.

The value of the fisheries to fishermen was also a record. The landed value of $51,989,000 was more than $20 million above the 1957 figure and $11 million more than the previous record in 1951.

Quantities and Values of Most Important Species - 1958
(In Order of Value)

Kind of Fish	Quantities Landed (000's lbs)	Landed Value $(000's)	Marketed Value $(000's)
Salmon	181,321	37,129	75,800
Herring	405,123	6,712	8,990
Halibut	23,707	4,902	6,690
Crabs and Shrimps	6,117	689	1,264
Soles	7,655	424	780
Ling Cod	4,296	382	564
Grey Cod	7,666	377	752
Oysters	4,706	270	321
Clams	2,428	65	259
Black Cod	576	74	181
Liver and Viscera	651	99	151
(1) Other Items	5,144	866	2,472
TOTAL:	649,390	51,989	98,224

(1) Includes landed and marketed values for whales.

("Western Fisheries" Vancouver, B.C. May, 1959)

Antibiotic Protection Is Sanctioned for Fish

Revelation that chlortetracycline, brand-named Aureomycin and Acronize by its producer, had been cleared for use on fish was one of the notable events of the National Fisheries Institute's April convention in New York.

The fresh and frozen fish and fishing industry hailed this development as of the utmost importance to the future of the fishing industry and its economy. This because it has been abundantly demonstrated in scientific tests that the shelf life of fish and shellfish can be extended as much as 150% through the use of this antibiotic at strengths within the official tolerance.

The signed order was to become effective about the end of April. It will permit a tolerance of 5 parts per million of chlortetracycline on whole, headed and gutted fish; on unpeeled shrimp and on shucked scallops.

At present the order does not apply to fillets, as these are taken to be processed products and must be covered under a new application.

Speaking at the NFI convention, Edward F. Kline of the scientific staff of the American Cyanamid Co., manufacturer of Aureomycin and Acronize, said that experiments with shellfish showed great benefit from the antibiotic in the case of scallops; but that shrimp and lobsters in the shell did not benefit in like degree.

("Pacific Fisherman" Portland, Ore. May, 1959)

Sea Lions Eat Mostly Scrapfish.

Sea Lions along the British Columbia coast eat mostly scrap fish, octopus, squid, and some salmon, but on occasion feed on lamprey and dogfish, according to a report by Gordon C. Pike, of the Biological Station at Nanaimo.

Mr. Pike reported that during a large part of the year, most of the population is fasting, and at other times, many sea lions are located where few commercially valuable species of fish are present.

The northern, or Stellar sea lion has been bitterly denounced by fishermen because of its habit of robbing nets, traps and lines, and because of its reputed depredations to stocks of commercially valuable fish. No doubt exists that in certain areas sea lions are guilty of patrolling and robbing salmon gillnets or trolling gear, and halibut or black cod set lines. However, well-documented evidence as to the extent, time and location of damage to fish and gear is scarce, said Mr. Pike.

Available data are insufficient to justify any firm conclusions on the feeding habits of the northern sea lion. They indicate that more evidence in the form of stomach samples and documented records of damage to fish and gear are required. A control programme carried on persistently over a period of years and concentrating effort where damage to fishing occurs can be effective. Available evidence on the extent to which sea lions destroy stocks of valuable fish tends to mollify the harshness with which the species has been denounced. During a large part of the year most of the population is fasting. At other times, many sea lions are located where few commercially valuable species of fish are present. Stomachs examined show a predilection for scrap fish, octopus, and squid, and salmon occur infrequently. On occasion, sea lions feed on species such as lamprey and dogfish, which are themselves important predators of valuable food fishes.

("Western Fisheries" Vancouver, B.C. April, 1959)

Plant Life Found At Great Depths

Plant and animal life have been found in extremely deep areas of the ocean.

Sea anemones have been taken as deep as 10,190 metres, although this may have been exceeded by some recent Russian records.

Plants which photosynthesize cannot grow below a depth where the light is much less than one per cent of that at the surface. It will be reduced this much at a few hundred meters in even the clearest oceanic waters. However, many plants such as bacteria, molds, yeasts, etc., can feed on organic matter and live in the dark. Bacteria, at least, have been found in sediments from the greatest depth examined.

("Western Fisheries" Vancouver, B.C. April, 1959)