



DEPARTMENT

WESTERN AUSTRALIA

MONTHLY SERVICE BULLETIN

W. J. Fraser

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October, 1962

STAFF NOTES

The Director, Mr A.J. Fraser, will attend the tenth meeting of the Indo-Pacific Fisheries Council to be held in Seoul, Korea, from October 10 to 25. At the meeting of Ministers for Fisheries in Sydney on September 24, Mr Fraser was selected to represent the various Australian States, while Dr G.L. Kesteven was selected to represent the Commonwealth. Mr Fraser will leave Perth by air on October 7 for Sydney from where he will fly to Seoul via Tokyo. He is expected to return to Perth about the end of the month.

The Supervising Inspector, Mr J.E. Bramley, with Senior Inspector J.E. Munro, will leave Perth on October 15 to visit fishing ports between Geraldton and Point Samson. They will call in at Shark Bay, Carnarvon, Maude's Landing, Point Cloates, North-West Cape, Onslow and Roeburn. They will pay particular attention to the developing spanish mackerel fishery and expect to be away about a fortnight. Inspector B.A. Carmichael, of Albany, who will be on annual leave then, will accompany them.

Our congratulations are extended to Assistant Inspector Dennis H. Smith who, on September 29, at Manjimup, was married to Lesley Lorraine Oliver, of Manjimup.

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The following transfers have been made or will become effective from the dates shown -

Inspector T.B. Baines, of Bunbury, to Shark Bay on September 7;
Inspector A.V. Green, of Mandurah, to Geraldton on September 28;
Inspector R.M. Crawford, of Geraldton, to Perth as Relieving Inspector from October 1;
Mr G.C. Jeffery, Relieving Inspector to Inspector, Mandurah, from September 26.
Cadet Inspector I.L. Cardon, from Geraldton to Perth, on September 28;
Cadet Inspector J.T. Kelly, from Fremantle to Geraldton, on October 1.

Inspector R.M. Crawford, as the new Relieving Inspector, will take charge of the Bunbury district from October 8, when Inspector E.H. Barker commences annual leave.

Inspector G.C. Jeffery will also commence annual leave this month. During his absence, from October 22, Inspector E.I. Forster will be in charge of the Mandurah district.

Other officers on annual leave this month will include Inspector B.A. Carmichael, of Albany, and Inspector J. Traynor, of Perth.

With regret, the resignation of Miss M.F. Crofts, of Head Office, has been accepted from close of business on November 2. Miss Crofts is leaving to go on a working holiday to the eastern States, including Tasmania, and also expects to visit New Zealand.

We omitted to report last month the retirement from August 31, of Senior Technical Officer Leonard George Smith. Mr Smith was the last of the officers who were on the staff at the time the present Director was appointed, having served for over 27 years. He will be given an official farewell at the next departmental conference which was to have been held this month but has been deferred due to the Director's attendance at the international meeting in Korea.

Senior Research Officer B.K. Bowen will leave Perth on October 28 to attend a course in population dynamics in applied fisheries research to be held in Sydney. He will return on November 11.

Mr. G.C. Ferguson, of Head Office, returned to duty after annual leave on September 24.

Fauna Warden N.E. McLaughlan returned to Perth by air from Broome, on September 20. A résumé of his report will be published in the next issue.

VALE ROY DOWNEY

A recent press report says that the search for Roy Downey has been abandoned and he must be presumed to have lost his life while crayfishing off the south coast of Tasmania. Mr Downey was skippering his own 52-ft. vessel "Woodanah" at the time and was believed to be fishing around the 27 fathom line when some particularly bad weather broke in the area. It is understood that Mr Downey had only one crew member with him and that an air search failed to find any trace of the vessel or the men. Mr Downey was well known in this State first as mate of the then C.S.I.R.'s research vessel "Warreen", and later as skipper of its "Derwent Hunter". Borne at Tyne Dock in England in 1914, Mr Downey came to Western Australia at the age of eight and was educated first at Narrikup and later at Albany High School where he was awarded an inspector's scholarship. A forceful and colourful personality, Mr Downey was a master mariner with a Board of Trade ticket. He leaves behind a wife and two sons living in Snug, Tasmania. To them and to other members of his bereaved family we extend our sincere sympathy.

AUSTRALIAN FAUNA AUTHORITIES CONFERENCE

The Director, Mr A.J. Fraser, and Fauna Protection Officer H.B. Shugg, who were this State's delegates at the Conference held in Hobart from September 4 to 6, report that it was a very successful one and that this State's background papers (which were published in the previous issue) were well received. Resolutions in respect of each were carried on the motions arising from them.

In due course, when copies of the full report of the Conference have been received from the secretariat, they will be available, through our Library service, for perusal by any staff members. For general information, however, the resolutions carried at the Conference are published hereunder, the headings being editorial addenda-

1. Key to Conservation:

Conference stresses that the essential factor in conservation of fauna is the preservation of habitats and recognition of the factors that may impair them.

A primary object of all Fauna Authorities therefore should be to ensure public appreciation of this important principle.

The preservation of habitats should include the reservation of representative samples of all the environments within each State or Territory and should be of adequate volume. This should be considered by the appropriate authorities in the planning of land development schemes.

There should also be continued recognition of the value of other types of reserves such as native forests, water catchments and even such restricted samples as roadside verges, natural and planted woodlots, farm dams, crop headlands and riparian fringes.

Attention is directed to the factors which seriously impair the efficiency of natural habitats, these including:-

- Grazing of domestic stock on wildlife habitats,
- Unbalanced land development projects,
- Unnecessary firing of lands,
- Clearing of vegetation along stream banks,
- Stream pollution from industrial developments,
- Over-zealous drainage of wet lands,
- The establishment of excessive stands of exotic trees, e.g., pines, which create local ecological deserts,
- Some aspects of river or stream flow control,
- Release of exotics,
- Misuse of pesticides and other agricultural chemicals,
- Undesirable husbandry practices such as wholesale removal of trees in pastures and other practices that lead to soil erosion and stream siltation and salt encroachment.

2. Do Pesticides, etc., kill fauna:

Conference, while appreciating their value to

agriculture, expresses its grave concern at the potential danger to wildlife communities of the increasing use of Compound 1080 and other pesticides, chemicals, etc.

An investigation of these matters would be a difficult task and beyond the immediate resources of existing organisations and Conference therefore recommends that the Commonwealth Government makes adequate finance available for an investigation of the effects of these substances on Australian fauna.

3. Water and Fauna Conservation:

Conference stresses the need for State and Commonwealth bodies to consult with the appropriate Fauna Authorities in the planning stages of water conservation schemes such as the proposed Chowilla Dam on the Murray River, the hydro-electric scheme on the Mersey River in Tasmania, and other like projects.

4. Powers wanted to control release of Exotics:

Conference is opposed to the introduction and release of exotic fauna. It recommends that fauna authorities be given adequate power through Legislation to control the release of fauna.

5. Exploitation of 'Roos causes concern:

Because of the severe diminution of red kangaroo populations in some areas, Conference believes a more cautious approach in marsupial utilisation should be adopted. It recommends that in some places, notably in New South Wales, strong measures be taken to restrict the taking of kangaroos and that other States and Territories review the position in their areas and gather accurate data.

6. Bagging for Waterfowl Research:

Conference adopts the report of the Australian Waterfowl Advisory Committee and stresses the importance of adequate staffing by all States and Territories to carry out the essential work envisaged in the reports.

7. Wanted - Vital Information:

Conference agrees that there is a pressing need for field surveys to provide the basis for the conservation of Australian animals. It resolves that a Committee be set up -

- (a) to determine what has been done in this field in Australia;

- (b) to seek to co-ordinate activities of all bodies in this work;
- (c) to contact the Australian Academy of Science and advise that body of the determinations of this Conference and confer with it on any future programme; and
- (d) to report to the next Conference.

8. Reptiles deserve protection:

Conference having considered a submission by Western Australia on the protection of reptiles, recommends that all States and Territories review the need for conservation of these animals and that the Department of Customs and Excise co-operate with those States where protective restrictions already apply.

9. Zoo security standards:

Conference is concerned at the release of animals from quarantine and the transfer of others from A Class zoos to those of lower security standards. It requests the Commonwealth Department of Health not to permit any live animal to be released from quarantine or transferred without the acquiescence of the relevant fauna authorities.

10. Poisons and Pesticides - authority for sale:

Conference recommends that the attention of State and Commonwealth authorities responsible for the registration of pesticides and other agricultural chemicals be drawn to the necessity of considering also the potential effect of these substances on wildlife before authorising their sale and use.

FISHERMEN'S ADVISORY COMMITTEE

Meetings of the Fishermen's Advisory Committee were held last month at Fremantle and Geraldton. In the Director's absence the Chief Clerk, Mr B.R. Saville, took the chair. Fremantle fishermen showed a much keener interest in the proceedings of the Committee and like their confreres at Geraldton, made a number of soundly-based requests for the better conservation and management of our fisheries. Items discussed included -

- * limitation of pots and boats
- * increased license fees
- * inshore reef closure
- * aerial patrols of close waters
- * use of snapper traps.

Some of the resolutions reached by the Committee at their plenary sessions have been communicated to the Minister. Others, including some which require further consideration, will be forwarded for the Minister's decisions which will be promulgated in due course.

As we go to print the Minister has announced that he has accepted, in principle, a far-reaching recommendation that restrictions be imposed on the number of boats which will be permitted to fish for crayfish next year. The administrative details necessary to give effect to this decision have yet to be decided, but the Minister has announced his intention to restrict boat numbers to give all concerned due warning.

WHALES AND TUNA

We are indebted to C.S.I.R.O. whaling officer K. Godfrey for reports on whaling activities in this State. In common, he says, with most other countries which are members of the International Whaling Commission, a whale marking programme is being pursued in our waters. During the recent humpback season, two chasers of the Nor'-West Whaling Company worked on behalf of his Division and tagged 16 humpbacks. The principal targets were cows with calves, for they will give the most information in later years. Undersized males and females were also marked. Tagging of sperm whales is being continued on behalf of the Division by the Cheyne Beach Whaling Company, of Albany, and will continue until the season ends next December.

Tags Recovered

Mr Godfrey says that eight marks have been recovered from numbers 4 and 5 whaling stocks this year. Three were Australian marks which had been fired in local waters, while four were Russian and one a Japanese which, presumably, had been fired in the Antarctic. Tagging details have not yet been received.

Rare Whale Sighted

A specimen of a right whale of an estimated length of 70 feet, with a 20-foot calf, was sighted in the last week of August by chasers operating west of Bernier and Dorre Islands. This species is extremely rare and is usually classed as virtually extinct.

Tuna Sighted

Both 'planes and chaser vessels of the Nor'-West Whaling Company reported sighting reasonable schools of yellowfin and northern bluefin tuna during the humpback season. All the sightings were made within a radius of 150 miles from Carnarvon.

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Concluding an interesting report, Mr Godfrey tells us that on his next visit to the Albany whaling station he will be accompanied by Professor N.F. Stanley, the authority on ARBOR virus diseases, who is interested in the possible use of sperm whale blood plasma in virus studies.

FAUNA NOTES

An increased demand for kangaroo skins principally on the American market, besides increasing the prices being paid for all qualities, has produced an interesting development in the utilization of skins from kangaroos taken for the pet trade. Frozen carcasses brought to some processing works are now being skinned by machine and sold to skin dealers, thus eliminating the waste which skin dealers have long considered to be an economic drag on the trade. One processing firm alone is reported to have sold over 2,000 skins since the new technique was introduced about four weeks ago.

Last month Fauna Warden S.W. Bowler and Cadet Inspector K. Morrison took a departmental exhibit to the Australian Inland Mission's Wildflower Show held in the Kalgoorlie townhall from September 18 to 21. Attendance at the show was reported to be even better than usual and the Department's co-operation was gratefully acknowledged. The opportunity was taken to carry out a district patrol including the usual calls on honorary wardens, police officers, local authorities and so on. In addition, visits were paid to reserves in the area and to well known shooting and breeding grounds. Messrs Bowler and Morrison also spent some time on the transline in the area where the rare Naretha Parrot, or Little Blue Bonnet, occurs. These birds fetch a high price on Australian markets and illegal trafficking in them is suspected but no evidence of this was detected. A visit was also paid to the Cundelee Mission where 350 members of the Wongi tribe were camped. Unfortunately, our honorary warden at the Mission, the Superintendent, Mr R.S. Stewart, was away on furlough.

TROUT CONTROL CHANGES

This month the Trout Acclimatisation Council of Western Australia will go out of existence. Set up in 1948, it comprised representatives of the different trout acclimatisation societies and was chaired by the Director. In recent years Research Officer B.K. Bowen was also a

member.

Government approval has been obtained for the setting up of a new controlling body to be known as the Pemberton Hatchery Board. As a board of management, it will be directly responsible for the running and maintenance of the hatchery and ponds at Pemberton, for the employment of labour, publicity, sales and for co-operation with the local tourist authority. Its members will comprise Mr A.J. Fraser, Director of Fisheries, as Chairman; Mr B.R. Saville, Fisheries Department, as Deputy Chairman; and three members, all residents of Pemberton. Mr A.R. Kelly, Mr R.J. Kelly and Mr H.F. Jay have all accepted appointment in this regard. The inaugural meeting of the Board was held at Pemberton on September 13. In the Director's absence, it was chaired by Mr Saville. Mr G.B. Todd, also of Pemberton, agreed to act as honorary secretary-treasurer, and has been duly appointed.

The final meeting of the Trout Acclimatisation Council was held on September 29 at the Forest Youth Camp hall, Pemberton. The Minister for Fisheries, Mr Hutchinson, was present at the meeting, which was chaired by the Director. The Department's other representative on the council, Research Officer B.K. Bowen, was also present, as were Technical Officer J.S. Simpson and Mr L.G. Smith, by invitation.

At a wind-up dinner held later at the R.S.L. Hall, Pemberton, and presided over by Mr A.R. Kelly, a Certificate of Life Membership of the Council was presented to Mr C.A. Glew. Mr Glew, who was a foundation member of the Council and secretary and treasurer for a lengthy period, and who has been associated with trout acclimatisation from its earliest beginnings in 1930, had been honoured at a previous meeting of the Council by being made its first and only Life Member. A copy of the certificate, which has already assumed historic significance because of the Council's liquidation, appears elsewhere in this issue.

BOTULISM - INFORMATION WANTED

Those officers blessed with longer memories might recall that in the May 1962 issue we asked for specimens of dead fish or waterfowl to be brought to this Office for forwarding for study purposes to Professor Stanley.

Professor Stanley now advises that while specimens are no longer required, full information on any noted or reported mortalities would be appreciated. Sufficient specimens have been received for the necessary pathological

laboratory work, but reports on the incidence of this or any other diseases causing mass mortalities are required.

Mortalities from botulism are not expected to occur until the summer has advanced, but mass fish losses might occur earlier from other causes. If any large-scale mortalities are noted we will want to know the species involved, an estimate of the numbers killed, and when and where the mortalities occurred.

CRAYFISHING

Record Abrolhos Production - at a price!

At folios 195 and 196 are set out tables of production and fishing intensity at Houtman Abrolhos during the past ten years. It will be seen that there is a marked increase in the number of men operating there last season and that for the first time production passed the 4,000,000 lb. mark. The result, one might say, inevitably, was a marked decrease in the catch-per-man.

The high price paid for crayfish and the additional boats and men which it has induced into the industry has resulted in much sharper competition on existing grounds in the Abrolhos as it has on all other grounds. This heightened competition has, in turn, induced fishermen to use an increased number of pots and to search for new grounds. The number of men operating these days in the Abrolhos, gives a wry twist to our recollection that, less than a decade ago, one authority stated that the number of men fishing the Abrolhos should be limited to sixty!

A review of the 1962 figures indicates that although production did increase, it took something like a 30% increase in the number of men to force an increase of less than 11% in production. The combination of the two factors resulted in the average catch-per-man falling by about 15%. It will be seen that with the exception of the Pelsart Group, the catch-per-man showed a serious decline this year in what was regarded by fishermen as a good fishing year. This could be a warning harbinger as also might be the fact that the total catch in the North Island area showed a sharp decline. The record catch in the Pelsart, or Southern, Group was only made possible by the increased number of boats (including 8 former Fremantle vessels) which fished these waters and brought under production grounds which were not previously worked. Our contention that only the working of new grounds made the increase possible is supported by the fact that while the

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ABROLHOS CRAYFISH PRODUCTION

Year	Number of Men				Total
	North Island	Wallabi Group	Easter Group	Pelsart Group	
1953	7	26	40	17	90
1954	15	36	41	21	113
1955	18	39	47	45	149
1956	31	42	38	40	151
1957	26	45	60	46	177
1958	30	58	64	40	192
1959	43	70	67	51	231
1960	62	71	81	45	259
1961	74	68	80	55	277
1962	84	79	90	109	362

ABROLHOS CRAYFISH PRODUCTION

Year	Total Catch (lb)				Total
	North Island	Wallabi Group	Easter Group	Pelsart Group	
1953	123,243	573,081	647,967	294,020	1,638,311
1954	208,972	679,781	814,848	415,797	2,119,400
1955	278,681	717,699	802,879	672,885	2,472,144
1956	395,831	713,153	774,172	561,512	2,444,668
1957	433,185	774,926	1,042,910	653,685	2,904,705
1958	512,126	1,026,150	1,153,189	580,667	3,276,132
1959	659,180	980,053	1,151,347	760,542	3,551,122
1960	776,798	937,587	1,165,603	662,773	3,542,761
1961	1,021,771	1,010,220	1,167,193	751,364	3,950,548
1962	783,518	1,039,306	1,041,510	1,514,515	4,378,849

ABROLHOS CRAYFISH PRODUCTION

Year	C A T C H P E R M A N				
	North Island	Wallabi Group	Easter Group	Pelsart Group	Whole Abrolhos Area
	lb.	lb.	lb.	lb.	lb.
1953	17,606	22,041	16,199	17,294	18,203
1954	13,931	18,883	19,784	19,800	18,756
1955	15,482	18,402	17,082	14,952	16,592
1956	12,769	16,979	20,373	14,038	16,189
1957	16,661	17,221	17,382	14,211	16,411
1958	17,204	17,692	18,018	14,516	17,063
1959	15,329	14,001	17,184	14,912	15,373
1960	12,529	13,205	14,391	14,728	13,679
1961	13,807	14,857	14,590	13,661	14,229
1962	9,328	13,156	11,572	13,895	12,074

number of men and the total catch for the Pelsart Group doubled, the catch-per-man actually rose slightly. The figures for the other groups are typical of what one might expect from fisheries where the intensity of fishing is close to its limits. This was particularly so in the case of North Island where the figures encourage one to guess that overfishing might be occurring.

W.A. Pack Quality - Department Praised

Last month we published comments on a reported statement by a South Australian exporter that inferior packaging of our product was causing a bad reaction on the United States market.

Resulting from the South Australian's allegations, the "West Australian" called for a report from one of its staff, Frank Devine, who was at the time in New York. In an article published in its issue of September 6, the "West Australian" quoted comments from American importers interviewed by Mr Devine. Typical of them was that by Harrison Pierce, of Wilbur Ellis Inc., who was recorded as saying, "Whoever said the West Australian tails are no good must be crazy". A representative of Gillman International was quoted as follows -

"I would not be surprised if the criticism of the West Australian tails is a kind of counter-attack by somebody importing South Australian tails to the United States. The West Australian crayfish fetches a better price here and so the West Australian fishermen get paid more than the South Australian. If an importer is being pressured by the South Australians about this it is understandable that he should take a swipe at West Australians".

Publishing those and a number of other comments, the Sydney "Fish Trade Review", in its September issue, printed quotes from an interview on the subject with Len Johnson, of W. Len Johnson Pty.Ltd., who is director in Australia for the Ross group of Grimsby. Mr Johnson, said the "Review", was in America only last June and was told by importers that they were "holding up the W.A. pack as a model to processors in other countries". Mr Johnson was reported to have added that the only hitch in Australian selling was through marketing methods in which underselling and lack of co-ordination had done definite harm. He urged that the Australian industry inquire into these matters and the desirability of a uniform selling name and price. He was quoted further as saying, "My observations are that the W.A. Government is handling the problems of

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the industry very intelligently. Provided fishermen and processors co-operate with the Government, a prosperous future is assured for the industry".

WESTERN FISHERIES RESEARCH COMMITTEE TO MEET

The next meeting of this Committee, of which the Director is chairman, and Mr B.R. Saville, secretary, will be held at Head Office on November 20 and 21. Business on the agenda includes a review by the project leader, Dr J.M. Thomson, of the research reports on crayfish, prawns, salmon and whales. Other items to be discussed will be the testing of monofilament nylon nets and the organization of the Committee.

VACANCY FOR SENIOR TECHNICAL OFFICER

Consequent upon the retirement of Mr L.G. Smith, applications have been called to fill the item he vacated, which is known officially as Technical Officer Grade 1, and carries the classification G-II-3. The duties of this position include responsibility in the absence of a research officer, for the supervision of the work of the other Technical officers; general technical duties in connection with the applied research programmes on the crayfish and prawn fisheries; trawling and trolling surveys; trout acclimatisation; and studies on the distribution of Australian fish species.

FAUNA RESEARCH PROGRAMME UNDER WAY

A detailed programme of research into the ecology of the important fauna sanctuary at East Pingelly was commenced last month. This was revealed in a report prepared for the Fauna Protection Advisory Committee by the programme leader, Dr A.R. Main, reader in zoology at the University of Western Australia.

Dr Main said he and Mr R.D. Royce, Officer-in-Charge, Botanical Section, Department of Agriculture, had worked on the reserve from September 17 to 21. They spent their time traversing it and mapping its vegetation, collecting specimens of the flora and making a preliminary assessment of the vegetation from the point of view of the needs of its animals, such as tamar and woiilie. Both were impressed, as others had been, with the remarkable richness and diversity of the plants in such a small area. An example of this was afforded by the orchids, of which there were collected no less than 23 species. Additionally,

many of the plant species found to occur in small colonies within the reserve seemed to be singularly isolated, for their nearest known neighbours were far distant. Such isolated occurrences are of great interest to botanists and others concerned with plant distributions.

Other items of considerable interest and importance noted by the party were a decline in the numbers of the small marsupials on the reserve and the finding of a small and unusual burrowing skink previously known only from Cheyne Beach, on the south coast and from Jurien Bay. The decline in marsupials fitted in with the pattern in other areas, including Rottnest, and is considered to have resulted directly from the long dry summer experienced last year in most of the South-West Land Division.

This visit was the first of a series planned in the programme for the detailed study of the reserve and its flora and fauna. The programme was developed by the Advisory Committee, which is responsible for the carrying out of fauna research in the State, for the express purpose of ensuring that the remarkable fauna of the reserve is conserved.

CONVICTIONS

JULY-SEPTEMBER 1962

Date	Defendant	Court	Charge	Result
<u>FISHERIES ACT</u>				
2.7.62	PARKIN, Edward	Fremantle	U/s crayfish	Fined £61.10s.
2.7.62	PELL, John	"	" "	£55.7.6.
2.7.62	AMATO, Corrado	"	" "	£24.2.6.
2.7.62	ALLEGRETTO, Modesto	"	" "	£30.
2.7.62	RIGGS, Edward G.	"	" "	£28.7.6.
2.7.62	RIGGS, Edward G.	"	" "	£27.1s.
2.7.62	RIGGS, Edward G.	"	" "	£20.
26.7.62	ALLEGRETTO, Modesto	"	" "	£30.14s.
26.7.62	ALLEGRETTO, Modesto	"	" "	£29.
26.7.62	ALLEGRETTO, Modesto	"	" "	£32.12s.
26.7.62	ALLEGRETTO, Modesto	"	" "	£31.14s.
30.7.62	GIGLIA, Albert	"	" "	£13.5s.
30.7.62	COLICA BROS.	"	" craytails	£17.2.6.
30.7.62	FEDELLE, Gennaro	"	" "	£26.12.6.
13.8.62	RULJANCICH, Mikula)	"	" "	£13.5s.
	RULJANCICH, Luke)			
13.8.62	DE CEGLIE, Guiseppe)	"	" "	£20.15s.
	DE CEGLIE, Giovanni)			

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CONVICTIONS
(continued)

Date	Defendant	Court	Charge	Result
3.9.62	MARINO, Dominic	Fremantle	U/s crayfish	£21.7.6.
3.9.62	MARINO, Dominic	"	" "	£58.5s.
3.9.62	MARINO, Dominic	"	" "	£25.7.6.
27.6.62	DILETTI, George	Geraldton	Fished Commonwealth proclaimed waters	£400.
22.8.62	JOHNSON, Ernest Alfred	"	U/s crayfish	£15.10s.
22.8.62	MARTIKAINEN, Vieko	"	" "	£30.11s.
22.8.62	PURCHASE, Jack	"	" "	£37.9s.
22.8.62	BURTON, Noel J.	"	" "	£11.15s.
22.8.62	BURTON, Richard	"	" "	£12.
22.8.62	FINLAY, Harry Richard	"	" "	£12.2s.
22.8.62	MIRAGLIOTTA, Felice A.	"	" "	£13.10s.
22.8.62	KELLY, Francis W.	"	" "	£16.2s.
22.8.62	JONES, Colin	"	" "	£20.12s.
26.7.62	LA ROCHE, Stanley	Pinjarra	Fishing Closed Waters	£5.
26.7.62	LA ROCHE, Stanley	"	Unlic.fishing	£3.
30.8.62	RAY, Edward Montague	"	Unlawful netting	£5.
20.7.62	SWEETMAN, George	Perth	Unlawful Net	£5.
20.7.62	STARR, George	"	Obstruction	£25.
25.7.62	BOWERS, Wallace Henry	"	U/s crayfish	£47.3s.
6.9.62	PARRY, Victor	"	Refusing name and address	£15.
6.9.62	PARRY, Victor	"	" " "	£5.
6.9.62	PARRY, Victor	"	" " "	£5.
6.9.62	PARRY, Victor	"	" " "	£10.
<u>FAUNA PROTECTION ACT</u>				
25.9.62	BARRY, Kenith Kevin	Midland	Taking pro- tected fauna	£10.
25.9.62	HARRISON, Trevor John	"	Taking pro- tected fauna	£10.

FISH PRODUCTION AND CRAYFISH EXPORTS

The tables below and overleaf set out fisheries statistics for the past three financial years. They show the weight of processed crayfish "tails" exported and their export value at our ports, and the weight and total value to the fishermen of general fish and crustaceans produced under the Fisheries Act.

Whaling and pearling figures are not shown as their seasons are closely tied to calendar years and both these fisheries (if they may be so called) are controlled under separate Acts.

It will be seen that the increase in the weight of "tails" exported in the last period, is not proportionate to the increase in overall crayfish production. The cause is not known but it might have been brought about by shipping arrangements.

CRAYFISH PRODUCTION IN WESTERN AUSTRALIA

1959-60 to 1961-1962

(processed tail weight and value f.o.b. at port of export)

YEAR	TAIL WEIGHT	VALUE
	lb.	\$ U.S.
1959-60	6,472,000	7,760,000
1960-61	6,359,500	8,000,000
1961-62	8,017,500	10,022,000

FISHERIES PRODUCTION IN WESTERN AUSTRALIA

1959-60 to 1961-62

(live weight and total gross value to fishermen)

Year	Production				Total	Value
	Crayfish	Fish *General	Prawns	Crabs		
	lb.	lb.	lb.	lb.	lb.	£A.
1959-60	19,545,400	10,468,500	131,800	74,700	30,220,400	3,663,500
1960-61	18,019,200	9,664,300	106,100	48,400	27,838,000	3,660,400
1961-62	19,237,600	11,775,000	239,000	59,000	31,310,600	4,528,000

* live weight estimated from cleaned or processed weight.

The Trout Acclimatisation Council of Western Australia

This is to certify
that
Life Membership
has been conferred on

Cyril A. Glew

in recognition of his outstanding service in the cause of Trout Acclimatisation
in Western Australia, as originator of the movement in 1930, and as
Honorary Secretary-Treasurer of the Council from its foundation
on August 11, 1948, to his retirement on October 2, 1960.

R. J. Murray

Chairman

R. Hodgson

Hon. Secretary-Treasurer

CLEARING HOUSE

Wildlife: A Community Resource

by Jack H. Berryman

Many rural communities are withering on the vine. Homes are boarded up; there are fewer people and fewer opportunities. With loss of opportunity, the young people leave. This loss of future leaders is the real tragedy of many small communities. Some communities have disappeared entirely. Ghost towns - a curious phenomenon of the "sizzling sixties".

Yes, the face of rural America is changing. Changes in agriculture, industry, and transportation seem to be spelling the end to Thomas Jefferson's dream of a pleasant American countryside with scattered rural populations. For some, the change is inevitable. For others, there are unrealized opportunities that offer the hope of survival and healthy growth.

Tourism is one such opportunity. Most rural communities have a one or two dimensional economy, based on agriculture or industry. Tourism can add a third dimension, to bolster a faltering economy and help check a population decline.

Consider for a moment the value of tourism. According to the U.S. Department of Commerce, 24 tourists stopping daily in a community is the equivalent of an industry having an annual payroll of 100 thousand dollars. To states like Utah, with countless tourists stopping or passing through communities, this is extremely important. Tourists annually spend 22 billion dollars in the United States. For Utah, the figure is 100 million.

Wildlife - a built-in attraction

This is where wildlife fits in - fishing and hunting are forms of tourism. Wildlife is a built-in attraction, a community resource. Fishermen and hunters spend almost 60 million dollars every year in Utah. Of this amount, 15 million is used for transportation, over 9 million for meals and lodging, and more than 32 million for equipment and supplies.

On the surface, sportsmen's visits to communities or downtown businesses have little importance to the land-owner. Looking a little deeper, the visits are of significance to everyone, including the farmer. For example, purchases by sportsmen increase sales of local

potato, beef, and other farm produce. According to studies by the Knoxville Tourist Bureau, Knoxville tourists annually eat a half million eggs, almost three million pounds of fresh meat, over two million pounds of fresh vegetables, a million and a half pounds of fresh fruits, and a quarter of a million pounds of butter. Tourist expenditures also ease the tax burden. In reality tourist visits, including sportsmen visits, are vital to everyone.

Obviously fishing and hunting have made a considerable impact on Utah's economy. This has been virtually without planning. Few, if any, communities have deliberately planned to realize the full potential of sportsmen visits. With planning, how substantial might these visits become?

Awakening Utah communities

Several Utah communities are awakening to the impact of wildlife resources. Beaver has a community development project actively concerned with fishing and hunting. The deer hunt is important to Beaver's economy. Studies are under way to find ways and means of increasing hunter expenditures by increasing attractions and services.

Panguitch is an outstanding example of a shifting economy. In a brief period this small livestock and agricultural community has become a tourist center and a headquarters for fishermen and hunters. There are new motels, restaurants, and other facilities and you can sense the hustle-bustle of vigorous new growth.

A fine example of a community taking advantage of a latent resource is the now popular Green River boat trips. The simple act of providing services and hospitality so that water enthusiasts can "float the Green" annually causes an influx of visitors from several western states, giving the local economy a much-needed shot in the arm.

The elk herd at the Blacksmith Fork Ranch in Cache County annually attracts over 18,000 visitors. Here is a tremendous opportunity to provide services to these winter visitors anxious to buy or take pictures, enjoy a hot meal, or leave with a memento - and to stimulate the economy during a slack period.

A community must be alert to the opportunity and willing to plan and serve. It must know how many hunters and fishermen visits are made to or through the community. It must provide adequate facilities and services; attractive restaurants (open before and after fishing and hunting

hours); adequate motel facilities; places where sportsmen can obtain equipment and supplies - tackle, ammunition, white gas, ice, groceries, and licenses after hours. And, most imperative, these facilities should be readily available.

There are real opportunities to provide special services and create new businesses based on sportsmen visits. Hideprocessing, meat processing (including freezing and shipping); and the preparation of specialty items such as deer salomi, the sale of artwork, photographs, and mementoes, are but a few examples. A little imagination on this subject goes a long way.

Special attraction

Most communities have special attractions. Tours, lectures, historic and scenic sites are all of interest to some sportsmen who might stay a day longer or take advantage of such opportunities during off hours. These attractions are also of interest to the sportsman's family. A well satisfied hunter or fisherman may return another year with his family for a vacation, or he may become a permanent resident.

He may even return to establish a business.

Well-placed brochures describing a community's attractions are impressive in telling sportsmen and others what a community has to offer. This is an opportunity for service organizations, civic groups, and chambers of commerce.

There is danger in attracting more sportsmen than the wildlife resource will support. The objective, however, is not to attract more, but first to provide adequate services for present visits.

In some areas there may be a neglected resource, and reason to attract more people. This should be considered carefully in the planning stage. A good example is the cisco in Bear Lake. For many years little interest was shown in these small fish. The late winter cisco run is now a real attraction, drawing thousands of people to the shores of Bear Lake with no adverse effect upon the resource. The same is true of white fish, which can provide off-season winter fishing but has not attracted much sportsman attention. Promotion would be helpful in two ways: by making better use of the resource and by attracting people to communities during the slower winter months.

Wildlife can be a significant community resource,

but crass commercialism must be prevented. Too often the aesthetic values of outdoor recreation are cheapened through over-commercialization. This need not be the case. A community can provide adequate services and sportsmen visits can be of economic importance. Pleasures will not be diminished if the venture is characterized by wholesome planning.

Wildlife is many things to many people. Fishing and hunting are wholesome forms of outdoor recreation to the sportsman, sometimes a nuisance to the farmers, a source of irritation to long-suffering wives, and a delight to a boy and his dad. Wildlife means more - it can be a valuable community resource, important to ailing communities and an integral part of the community economy. Wildlife resources should be considered carefully in planning for the new Rural Area Development programme. Wildlife is becoming the ally of Utah's agriculture and industry.

(Farm and Home Science

Utah

March, 1962)

Knotless Nets - A Scottish Netmaker's Views

(by A. Glover, W. & J. Knox, Ltd., Kilbirnie)

For several years now, attempts have been made in various parts of the world to apply netting without knots to fishnetting. The stimulus to this development has unquestionably been provided by the increasing use of synthetic twines in fishnet manufacture instead of the cotton, flax and hemp which have been traditionally used for this purpose. The knots by which meshes are formed in the netting, assumed a new significance when using synthetic as opposed to natural fibre twines. The main reasons for this were that (1) there was a much greater tendency for the knots to slip, owing to the much smoother surface of synthetic twines; (2) the high loss of initial twine strength in synthetics when it is knotted; (3) being relatively more expensive, the amount of synthetic twine taken up by the knots, especially in small mesh nets, began to assume a significant part of the total cost; (4) due to the high strength of synthetic netting, quite often before a mesh broke, an area of distortion in neighbouring meshes was created which gave subsequent problems in mending.

While netting manufacturers have been overcoming most of the problems in conventional netting, there has been an increased willingness to investigate the potentialities of knotless netting for fish nets. In the United

States, Europe and Britain, the main lines of approach to knotless netting have been on the basis of the Raschel knitting principle. In a Raschel net, the legs of the meshes are formed with a series of knitting stitches as its base and the lines of knitted stitches forming the mesh legs are knitted together at prescribed intervals to form the mesh interconnections.

Attracted

Generally speaking, the manufacturers of netting have been more readily attracted to the possibilities of netting without knots than the users of the actual fishing nets. An attraction of the Raschel loom, for instance, over a conventional knotting loom, is the possibility of working from beams holding large quantities of yarn, whereas the limited capacity of shuttles has an important effect on the efficiency of a knotting loom. The working speed of the Raschel loom is much higher than that of the knotting loom and in combination they can give lower operating costs. In addition, the greater uniformity of mesh size on the Raschel machine gives lower examining and mending costs to be considered in the final cost of the net.

After considerable practical development work on the production of Raschel knotless nets, however, and their application to practical fishing, the following points become clear:

- (1) The relative economics of the Raschel net are very much a function of the mesh size in which the net is being made. This is explained by the fact that, whereas the knotting loom makes one row of knots with every cycle of the machine - with a certain length of yarn being delivered in between rows to form one leg of the mesh, the Raschel machine is different, in that a number of machine cycles have to go into the building of each mesh leg. The break-even point between the two constructions varies a good deal but in general, only what is considered in the trade as "small mesh netting" lends itself to the economics of the Raschel construction.
- (2) The minimum quantities necessary for economic manufacture are high in the case of the Raschel machine, due to the method of machine operation and yarn preparation.
- (3) To obtain competitive weight/strength ratios for Raschel netting as compared with knotted netting, the correct constructions and yarns must be used. Here again, the break-even point has much to do with mesh size and the smaller this is the greater the advantage

to the Raschel net.

- (4) The Raschel construction has limitations as compared with the knotted loom in the degree of selvedging which can be applied, and a completely different approach to joining has to be made.
- (5) Unquestionably, however, within the limitations referred to in the above points, the Raschel form of construction produces a net of remarkably good and even quality, of high knot strength in relation to weight, with regular and slip-proof meshes, excellent abrasion resistance and, if designed correctly, excellent mending characteristics. There is also no doubt that, if the application is carefully chosen, it will produce the above qualities most economically and can justify a small corner in the fishing net business, alongside well-tried and conventional knotted netting.

(World Fishing

London

June, 1962.)

Tuna Fishermen React Strongly When Struck
By Series of Squalls.

American tuna fishermen, who often seem to hit rough weather in more than one sense, are currently riding out a number of squalls that seem to have struck their industry from half a dozen directions at once.

For almost a year now the fishermen have been facing the unpleasant fact that the stocks of Eastern Pacific Yellowfin seem to be in danger of overfishing due to the increased fishing efficiency of the new tuna seiners with their superior equipment operated by hard-working resourceful crews.

Pushed by the apparent need for conservation measures on Yellowfin, the fishermen through their organizations have reluctantly agreed to limit their catches to protect the resource, and their spokesmen have backed the U.S. Senate Bill S-2568 which aims to put an 83,000-ton ceiling on the total 1962 catch of Yellowfin from the Eastern Pacific.

But, as American tuna industry leaders sat with their colleagues of Ecuador, Costa Rica and Panama in the meeting of the Inter-American Tropical Tuna Commission at Quito in May, the Ecuadorean government published a new decree flatly prohibiting purse seiners from fishing in waters within 40 miles of the Ecuadorean coast.

That was Squall Number One for the American tunamen to ride out.

American tuna fishermen have raised their voices unanimously against this unilateral action by Ecuador. They find it hard to understand why Ecuador by itself, while joining conservation talks with other nations, decides to take its own lone action in the name of conservation without consulting anybody, after signing a solemn treaty to join in managing the Yellowfin resource by joint international action.

They also question whether Ecuador has the right, under international usage and law to legislate 40 miles out into the high seas, which are customarily considered open to all nations. For Ecuador to regulate fisheries in waters 40 miles from its shores seems to the tuna fishermen to be unreasonable and unconventional.

American tuna fishermen regard Yellowfin conservation as a probably necessary evil, although they don't take kindly to any measure that restricts their freedom of action. At the same time, American tunamen are concerned with conserving their common Yellowfin resource, and will submit to regulations in the general interest.

There are some fishermen who are inclined to doubt that placing the recommended 83,000-ton ceiling on the 1962 Yellowfin harvest will help to conserve the resource. There are those, also, who don't think there is any danger of Yellowfin overfishing; but even these men are willing to go along, in view of the strong case built up for conservation by Dr Milner B. Schaefer and his staff of scientists of the Inter-American Tropical Tuna Commission. Even the skeptics agree to conservation for several years, to give the Commission's recommendations a fair test.

As the tuna conservation measure stood at presstime, it provides for embargo on import into the United States of Yellowfin caught by anyone in the time and area of conservation closure; and also for suspension of the entire conservation programme in the event of consequential failure of other nations to co-operate in its application.

In brief, the tuna fishermen's position is about like this:

"We don't like restrictions; but conservation is probably needed, and we'll go along - provided everyone else goes along too".

New Techniques Protect Whale Meat for Food

New techniques of whalehandling are being introduced this spring at the re-activated Coal Harbour, B.C., station now operated by Western Canada Whaling Co. Ltd. Innovations are to meet the requirements of the station's new product programme, the preparation, freezing and shipment to the Japanese market of whale meat for human consumption.

Associated in the new company are British Columbia Packers Ltd., and Taiyo Gyogyo Kabushiki Kaisha, and the latter gigantic company is introducing at Coal Harbour the specialized techniques which increase the economic recovery from whales by using the meat for human food.

Taiyo provides skilled personnel to the new company to instruct Canadian workmen in the Japanese methods. Two inspectors and eight technicians, Japanese nationals, have been granted temporary visas for this purpose. It is expected that when the regular crew of the new company is fully trained, the Japanese technicians will no longer be required.

The new technique begins in handling the killed whales at sea. Instead of having the whole whale towed to the processing station, the carcass will be split open to cool, and the viscera removed. Plastic buoys attached to the tail prevent sinking while the catcher boat tows the cooled carcass to the shore station. The method is patterned after Antarctic procedure.

Principal equipment at the Coal Harbour station consists of four Kvaerner type digesters, five Sharples Super D-Canters, horizontal screen cookers, deep bay cookers, flame dryer and meal cyclone, meat press, four Sharples separators, a liver oil plant, blowdown tanks and separating tanks. In another building, are the evaporator plant for production of condensed solubles from the stick water and refrigerating facilities for storage of fresh meat.

B.C. Packers made an attempt to take fresh meat for direct use as animal food during the 1953 season, when meat from baleen whales was removed on the lower flensing deck and given preliminary washing and cooling in running sea water. It was subsequently ground and packaged in 50 lb. paper bags before being placed in cold storage. Some of the meat was cut into small pieces and frozen directly.

and
Processing/flensing follow the conventional

pattern. As soon as the whale is hauled up on the landing, blubber and baleen are removed. Five steam winches are used on the flensing platform and cutting of the carcass and its disposal from an elevated deck are facilitated by nine steam winches and two bone saws.

(Pacific Fisherman Portland 5, Ore. July, 1962)

Echo-ranging for Tuna

The fact that schools of tuna can only be located on, or near the surface has for some time indicated that horizontal echo ranging (Asdic or Sonar) might well be useful in searching - which takes up a major part of the tuna purse seiner's time.

The results of a tuna cruise made by the Norwegian vessel Thor Iverson in 1960 were not too promising, however, and in an article in "Fiskets Gang," the value of this equipment was said to be limited. Although echoes were received from fish near the surface at ranges of up to 2,600 ft., it was not possible to identify them as tuna without visual proof.

Since these trials, Simrad sonar sets have been installed in two American tuna purse seiners, the Sea Pride and West Point by the U.S. Bureau of Commercial Fisheries and further trials have been carried out. This time, results appear to have been more encouraging, though further work is said to be necessary. The small boat sonar which can be carried by a skiff was found especially useful in surveying the size and depth of a shoal when it was located.

Two discoveries

Two important discoveries were made in the course of this work. One is that tuna will often dive into water layers until now thought to be too cold for them, in order to escape the net. This suggests the possibility of deeper nets.

The other discovery was that the porpoises which often accompany tuna shoals were frightened away by the high frequency acoustic pulse of the sonar beam - and the tuna followed them. However, it was found that by beginning transmissions at a low intensity and gradually increasing to full power, this reaction could be avoided.

The report, published in Simrad Echo, recommends the training of sonar operators as soon as possible.

(World Fishing, London July, 1962)

Bright Future for W.A. Prawns

A bright future is predicted for Western Australia's prawning industry, started on a commercial basis for the first time about two months ago by the Nor'-West Whaling Company at Carnarvon.

Some prawning had been attempted before in W.A. but there were no processing plants, freezers or transports to handle the catch properly.

Some experts believe the W.A. prawning potential is equal to Queensland where the industry employs 300 boats and is worth £2 million a year in exports.

Until the extent of the prawning grounds is fully known it would be impossible to say how much prawning could be worth to W.A.

Encouraging

All that can be said at present is that results have been so encouraging that the whole of W.A.'s fishing industry is watching Nor'-West Whaling's pioneer efforts with keen interest. This is especially evident in the Fremantle crayfishing fleet which is laid up every winter. The prawn season in the north-west coincides with the slack period down south. If this season's trawling is successful, many of the Fremantle boats will be working next year instead of lying idle over the winter.

Great benefit

Fisheries Minister Mr R. Hutchinson said that the Government was watching the progress of Nor'-West Whaling's prawn programme with keen interest. A sound prawning industry would be of great benefit to northern fishing interests and to the State.

Risking their money in the new venture are the Moore brothers (Bob, Lin and Bill) directors of N.W.W. They are following the footsteps of their father, the late Robert Moore, who established a whaling station at Point Cloates after World War II and later bought out the Australian Whaling Commission's station at Carnarvon for £880,000.