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April 1, 1952

LOSS OF "SUOMI"

It is with considerable regret that we record the loss at sea of l.f.b. "Suomi" (G1). Under the command of Mr. Thomas Rollands, one of Geraldton's most experienced skippers, with four passengers and a great deal of equipment aboard, "Suomi" sailed from Geraldton wharf shortly after 2 a.m. on March 21 for Rat Island, in the Easter Group of the Abrolhos.

She had been under way for about three hours when she sprang a sudden leak, and although she was taken in tow about 9 a.m. by l.f.b. "Queen", with l.f.b. "Dawn" standing by, she foundered about 10.30. No lives were lost.

"Suomi" was a 38' auxiliary Ketch owned by Mr. Cecil Garratt, and was used for transporting live crayfish from the Abrolhos to Geraldton. She was built at Geraldton by Mr. Bob Carlberg about 20 years ago.

M. V. "LANCELIN"

Under the command of Mr. Cecil Piesse, and with Assistant Inspector L. C. Oliver and Mr. K. Godfrey, Technical Officer of C.S.I.R.O., Fisheries Division, aboard, M. V. "Lancelin has been in the Geographe Bay area during the whole of March. The primary object of her visit was to engage in experimental drift-notting for sea herring (ruffs), but to date this species has not been sighted. In the meantime pots have been set at various spots in the vicinity of Bunbury, and fair catches of crayfish have been made.

STAFF NOTES

Mr. J. E. Munro, Metropolitan Inspector, on his return from Broome on relieving duty early in March, entered immediately on annual leave.

Inspector A. J. Bateman and Cadet Inspector M. J. Simpson, of M.V. "Kooruldhoo", have returned to Fremantle from Cervantes Island. The "Kooruldhoo" will leave for the Abrolhos Islands at an early date.

Inspector W. Davidson, of Fremantle, has returned to duty after a spell in Hollywood Military Hospital for an operation. He is now very well and looking forward to better health in the future.

Cadet Inspector Brian Carmichael has just completed 8 weeks' work in the laboratory of the hydrological section of C.S.I.R.O. Fisheries Division at the University of W.A. Cadet Inspector Simpson will take his place early in April.

Inspector G. C. Jeffery, of Albany, has just lost his mother, who died very suddenly in Perth. The sympathy of the entire staff is extended to the bereaved.

SALMON COMING GOOD

After a very poor start, the south coast fishermen have during the past two or three weeks had some excellent hauls of salmon, particularly at Cheyne Beach, where N. Price's team landed 30 tons in one shot.

SUPERINTENDENT VISITS GERALDTON

The Superintendent spent most of the second-last week of March in Geraldton. He was accompanied by Mr. B. R. Saville, who is still on long service leave. While in the town all crayfish de-tailing works were inspected, and a meeting was held with the committee of the Geraldton Licensed Fishermen's Association.

FREEDOM OF THE SEAS

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The following article by Professor H. Lauterpacht, Professor of International Law in the University of Cambridge, has been taken from the London "Times" of January 8, 1952. It is included in this Bulletin because it is the first really lucid explanation of the new concept of territorial waters that we have seen in this State.

Implications of the Norwegian Fisheries Case.

The judgment delivered on December 18, by the International Court of Justice in the case of the Norwegian fisheries is likely to rank among the most significant pronouncements of that high tribunal. It brought to a close a protracted dispute between two nations bound by a firm tradition of friendship. It gave a ruling on questions directly affecting the principle of the freedom of the seas. Inasmuch as it may create, with some, the impression of a daring piece of judicial legislation in the sphere of the law of the sea and in disregard of the historic attitude of the great maritime Powers, it raises issues which transcend the economic importance of the problem directly before the Court.

These issues affect the future of international judicial settlement, of which this country has been one of the staunchest supporters in the past; and, judging from the dignified and statesmanlike acceptance of the decision of the Court by the British representative, it wishes to remain a firm supporter.

Decrees dating back to 1812

The question which the Court was called upon to decide was whether the Norwegian decree of July 12, 1935, which delimited the Norwegian fisheries zone, was in accordance with international law. That decree, which purported to be in accordance with earlier Norwegian decrees dating back to 1812, laid down that the outer limit of Norwegian territorial waters "shall run parallel with straight base-lines drawn between fixed points on the mainland, on islands or rocks".

In international law, as understood by the majority of States, prior to the judgment of the Court, the "base-line" - i.e., the line at which the territorial waters of a State begin - runs along the low-water mark, following generally the sinuosities of the coast. In the case of bays (other than so-called historic bays which may cover vast stretches of the sea) the general, though not universal, consensus of opinion and practice has been that the base-line is formed by a straight line drawn across the bay at a point at which it is not more than 10 miles wide.

Fixing Base-Lines

The decree of 1935 departed from that principle. It selected 48 fixed points either on the mainland or on islands or rocks, some of which are at a considerable distance from the mainland. These points were connected by straight lines of lengths ranging from 18 to 44 miles. The sea enclosed by these lines, as well as the adjoining four-mile belt of territorial waters, was to constitute the Norwegian fisheries zone.

The Court found, by a majority of ten votes to two, that the method which the decree employed for the delimitation of the fisheries zones was not contrary to international law. It also held, by eight votes to four, that the lines fixed by the decree in application of that method were not contrary to international law.

The salient points of the judgment may be summarised as follows: - The 10-mile rule for the determination of the base-line in the case of bays has not acquired the authority of a general rule of international law. In any event, it was not applicable to Norway, who had always resisted attempts to apply it to the Norwegian coast. Subject to restrictions of international law and the overriding test of reasonableness, the littoral State is entitled to determine the method of selection of base-lines.

The base-line must follow the general direction of the coast rather than the low-water mark along the coast. That principle is particularly applicable to the peculiar geographical configuration of the Norwegian coast. In the case of Norway it is sanctioned by long and, on the whole, consistent usage which, until recently, was unopposed by other States, including the United Kingdom. The base-lines as fixed by the decree of 1935 "have been kept within the bounds of what is moderate and reasonable".

Sir Arnold McNair and Judge Read delivered dissenting opinions, in which, on all these points, they expressed views opposed to those enunciated by the Court. It may be deceptive to gauge the authority of that dissent by reference to its numerical strength. The meticulous scholarship and the elaboration of detail make the dissenting opinions a weighty and lucid contribution to international law on the subject. Their exhaustiveness is in contrast with the judgment of the Court as a whole which, in its formulation of the applicable principles of law, is remarkable for its brevity.

Clarification of International Law

In many cases decided by it in the past the Court has been fully alive to the fact that its proper function is not only to decide disputes but to clarify and to develop international law in a manner likely to enlighten and convince public opinion. Needless to say, the ability and impartiality of the Court are not in question. But no tribunal in the world has greater need to justify, by full and careful reasoning, by detailed reference to available authorities and precedent, and by an exhaustive examination of the arguments of the parties, the confidence placed in it by Governments.

It may be added that Judge Hackworth agreed with the judgment only on the ground that, in his view, Norway had established an historic title to the disputed maritime areas, and that Judge Hsu Mo dissented from the judgment of the Court in respect of the base-lines of two areas of very considerable extent.

Some Natural Disappointment

It is natural that the judgment of the Court should have caused some disappointment in this country, and that the innovation - for an innovation it is implied in the express judicial recognition of straight bast-lines should be viewed with some anxiety. However, it is probable that, essentially, the judgment amounts to no more than an affirmation that in view of the absence of general agreement on the subject of base-lines their selection is in the first instance within the province of the littoral State; that such selection is a matter of law and not of arbitrary discretion; that in case of dispute it is for an international tribunal to determine the reasonableness and justification of the principle and of the method of selection adopted by the State concerned; and that such determination must be made in the light of various relevant factors, including prescriptive title, acquiescence by other - and particularly the complaining - States, "geographical realities", and the economic and social equities of the situation.

The Rock Rampart

Thus circumscribed, the judgment of the Court ought perhaps to give less cause for apprehension than may appear at first sight - although the fact remains that the various tests as laid down by the Court, being of a subjective nature, are necessarily vague and elastic and may make it difficult for legal advisers to advise Governments as to the correct legal position in any particular case.

There are ample indications in the judgment that what it conceived to be the equities of the case made a deep impression on the Court, and that, to a large extent. those equities formed the by no means inarticulate major premise of its decision. Thus we find the Court stating, at the very commencement of the exposition of the reasons of its judgment, that "what matters, what really constitutes the Norwegian coastline, is the outer line of the 'skjaergaard'" (the "rock rampart" which includes the islands. islets. rocks, and reefs); that these areas were exploited by Norwegian fishermen from "time immemorial"; that "in these barren regions the inhabitants of the coastal zone derive their livelihood essentially from fishing": and that "such are the realities which must be borne in mind" in appraising the validity under international law of the decree of 1935.

It is perhaps not unnatural that the dissenting judges should have considered such "realities" to be irrelevant for the purposes of a legal decision. On the other hand, there is now the impressive authority of the overwhelming majority of the Court in support of the view that international law on the subject of base-lines and, generally, of the maritime frontiers of States has shown no such approximation to a generally agreed rule as to preclude the Court from taking these factors into consideration.

Recent Developments

It is possible that the Court was influenced by the fact that recent developments in international practice have paved the way for a measure of adaptation of a rigidly conceived notion of the freedom of the sea to the requirements of the legitimate interests of the littoral State. These developments include the proclamation, on the part of a number of States (including the United Kingdom and some of its dependencies in the Persian Gulf), of exclusive control and jurisdiction over submarine areas adjacent to their coasts. However, in these proclamations the States concerned have attached importance to leaving intact the overriding principle of freedom of navigation on the high seas.

Special Circumstances

The full implications of the judgment of the Court on the general issue before it are not beyond doubt. But there are some factors which clearly limit the apparently alarming comprehensiveness of the judgment. The base-lines must, generally, represent the line of the coast.

Accordingly, straight lines, when used, must not depart appreciably from the general direction of the coast. Moreover, the Court, while upholding the Norwegian system of straight lines, repeatedly emphasised the special circumstances of the case, such as the exceptional configuration of the coast of Norway, her economic interests and her historic claims. These considerations suggest that there is perhaps no sufficient reason for the assumption that the judgment has caused irreparable injury to the principle of the freedom of the sea or that it has left the door wide open to exorbitant claims in the future. That principle still constitutes part of international law, and its beneficence is not yet spent.

The practice of enlightened States, aided by a judicial determination of the test of reasonableness, may evolve a rational compromise between rigid insistence on the status of the high seas as being, without limitations, res omnium communis in all its manifestations, and unilateral assertions of extravagant national claims inimical to the wider aspects of the principle of the freedom of the sea.

It is only such judicial ascertainment of the reasonableness of the delimitation effected by the littoral State that can prevent the principle as now formulated by the Court from becoming a source of abuse.

FISHING INDUSTRY LOSES ANOTHER OLD IDENTITY

Mr. Walter W. J. Trigg, another well-known figure in the fishing industry, particularly in the Geraldton district, died in Perth on March 4, just one day after the late Arthur Clegg, whose passing was reported in the last issue. Mr. Trigg was born at Geraldton on September 18, 1869, and lived in the district for practically the whole of his long life. An accountant by profession, Mr. Trigg many years ago joined the firm of Winter, Brandt and Co., wholesale

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fish merchants, of Perth, Geraldton and Kalgoorlie, who at one time held a controlling interest in most of the Scandanavian fishing fleet at Geraldton.

When Winter, Brandt's Geraldton premises were destroyed by fire early in the last war, Mr. Trigg decided to retire from active business, but on the formation of the Geraldton Licensed Fishermen's Association he was prevailed on to take over the secretaryship, a position he held until about 12 months ago. For many years he was a member of the Abrolhos Islands Board of Control, and was a mine of information on the early history of the Victoria district.

Mr. Trigg's wife predeceased him some years ago. He left one son and three daughters.

HISTORY DOES REPEAT ITSELF

Among some old manuscripts recently discovered in Kent (England) was, according to "The Fishing News", a copy of an Order-in-Council issued by Charles II in 1660. This old document is a clear indication that three hundred years ago even the problem of fish prices was as much a headache. to the authorities as it is today. The Order reads:-

And lastly, for that the Fishmongers (upon the observation of the aforesaid Orders) may perhaps take occasion thereby to inhaunce the prices as well of Fresh as Sea-fish; We do therefore hereby further charge and command. all Fishmongers whatsoever, that they sell and utter their fish at usual Rates and Prices, and that all Justices of Peace, Mayors, Bayliffs, and other Officers, as well within Liberties as without, to whom it shall appertain, shall from time to time take such Order with the said Fishmongers, that Our Subjects be not grieved by any such Inhauncement or increase of prices upon Fish, upon pain of Our high displeasure, and such further punishment as may be inflicted upon them by Our Laws.

WEST AUSTRALIAN FISHERIES IMPRESS

Mr. Robert L. Stix, New York City fish and seafood sales representative, returned to the United States in mid-December (says the January, 1952, issue of <u>Pacific Fisherman</u>) after spending several weeks in Australia, New Zealand and Japan. His trip principally was to meet and confer with producing principals whom he represents on the Atlantic Coast of America.

He found the "spiny lobster" fisheries of Western Australia and New Zealand "highly productive, and with a tremendous potential for further development" as their product comes into the more general appreciation it merits. He believes these countries also will become more and more important as sources of canned fish, notably tuna.

Here's hoping!

WESTERN AUSTRALIA'S POST-WAR FISHERIES DEVELOPMENT

The post-war years have been notable for the unprecedented increase in commercial fishing activity in Western Australia. Two major industries have been developed in the freezing of crayfish tails for export and the canning of Australian Salmon. The catch of these two species alone accounts for 70% of the total take for the State. Major developments in other branches have been the re-introduction of whaling in 1949 and the inauguration of deep-sea trawling in 1948. In only one section of the industry has contraction taken place, viz. pearlshelling.

The fisheries may broadly be divided into three categories -

- 1. Whaling;
- 2. Pearlshelling;
- 3. General fishing.

1. Whaling

The whaling industry was re-established in 1949 after a lapse of many years. Land stations are established at Point Cloates (Nor'West Whaling Co. Ltd.) and Carnarvon (Australian Whaling Commission). Whales are taken in ocean waters in very close proximity to the land stations.

Production

Station	Year	No. of Whales
Point Cloates	1949	190
	1950	348
	1951	574
Carnarvon	1950	40
	1951	650

A third concern (Cheyne Beach Whaling Co. Ltd.) will operate in 1952 from a land station established near Albany.

2. Pearlshelling

Owing to the war pearlshell fishing was suspended from 1942 to 1945. Since the resumption in 1946 relatively few vessels (20 or 21 as against 55 or so in pre-war days) have been engaged. The principal base is at Broome, only one lugger having fished out of Onslow in 1951.

Production				
Year	Tons			
1946	104			
1947	320			
1948	336			
1949 .	312			
1950	352			
1951	321			

3. General Fishing

Ι. Crayfish:

The major fishing regions are -

- (a) Fremantle (Safety Bay to Moore River); (b) Lancelin Island (Moore River to Jurien Bay);
- (c) Abrolhos Islands; (d) Geraldton onshore (Dongara to Port Gregory).

The major portion of the catch is de-tailed, frozen and exported to the United States.

Production (Whole Fish)

Year	lb.
1947	2,333,826
1948	2,804,832
1949	5,132,353
1950	6,549,811
1951	7,838,280

II. Trawled Fish:

The trawler base is at Albany, whence two steam trawlers operate. The area of operation lies principally in the western Bight. Trawling commenced in September, 1948.

Production

- 1 : --

Year	<u>lb</u> .
1948	13,970
1949	317,058
1950	963,945
1951	586,055

III. Salmon:

This species is taken principally between Esperance on the south coast and Cape Naturaliste on the west coast. Canneries have been established at Esperance, Hopetoun, Albany, Busselton and Perth. Almost the entire catch is canned.

Production

Year	<u>16</u> .	Cans	produced	(doz.)
1947 1948 1949 1950 1951	2,859,853 5,559,282 4,945,766 3,569,452 3,409,459		150,581 243,708 237,255 166,912 155,609	

IV. Other Fish:

Production			
Year	16.		
1947 1948 1949 1950	4,137,713 3,757,601 3,718,985 3,167,143		
1951	4,684,454		

W.A. FISH PRODUCTION

The following table shows production figures for each of the more important species during the year 1951. The 1950 figures are also given for purposes of comparison.

Species		<u>1951</u>]b.	<u>1950</u>
Crayfish		7,838,280	
Salmon, incl. salmon trou	ıt	3,409,459	3,569,452
Snapper		764,078	420,050
Ruffs (sea herring)		737,299	304,377
Trawled Fish		586,055	963,945
Mullet		560,861	472,562
Whiting, Sand		367,929	312,215
Mullet, Yellow-eye		327,166	221,323
Cobbler		252,543	223,040
Jewfish		201,433	203,335
Shark		158,606	179,742
Tailer		158,468	157,552
Skipjack (trevally)		81,126	107,413
Bream, Yellow-Fin		56,925	45,850
Garfish		51,988	54,010
Crabs		39,841	50,896
Whiting, King George		35,035	43,676
Samson Fish		26,045	19,906
Perth Herring		25,023	33,239
Prawns		23,597	21,099
Cod		19,138	24,729
Bream, Black		17,325	15,122
Groper		8,906	16,578
Mulloway		5,878	13,295
Other Species		237,660	227,134
Total	.S :	15,990,664	14,250,351

TROUT ACCLIMATISATION COUNCIL OF W.A.

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At the meeting of the Council held at Pemberton on Sunday, March 2, Professor E. Percival, Professor of Biology, Canterbury University College, Christchurch, New Zealand, and Professor H. Waring, Professor of Zoology, University of Western Australia, were present and gave most interesting addresses.

Professor Percival said that trout were first liberated in New Zealand in 1868 from eggs brought from Tasmania. The project was immediately successful, and the trout population in most parts of the Dominion was now very dense. Generally speaking the country was steep, with swift, stable rivers, shallow and with wide flood beds. In the Otago district of South Island alone about 250,000 trout were taken annually. The minimum lawful length was 9 inches, and the average weight of the fish caught in the various stream systems was from 4 lb. down to $\frac{1}{4}$ lb., depending on the accessibility of the streams.

In 1929 a Freshwater Research Committee was formed, and the N.Z. Fisheries Act was amended to provide that the acclimatisation societies would collect license fees, which were to be used largely for financing research activities. In 1936 a research organisation was set up at Christchurch to deal with problems relating to trout and quinnat salmon established in local streams.

Stocks of trout in the streams were formerly maintained by stripping and hatching eggs and liberating the resultant fry. Fish were not reared beyond 6 months, because handling and transport costs were too great. Occasionally eyed eggs were sold by hatcheries, but the great majority were carried through to hatching. In those days up to 7 million eggs were handled annually by the various societies, and a lthough some hatcheries are still in existence the hatchery system has largely been abandoned as a result of the surveys carried out by the research organisation. These surveys showed that trout were reproducing naturally in most of the river systems. For example, Professor Percival quoted one area in which the hatcheries - at very considerable cost - were producing 34 million eggs annually, and planting out the resultant fry, but the stream surveys showed that in the same area about 52 million eggs were produced naturally with a 94% hatch - at no cost whatever. These surveys occupied in all seven years.

It was also discovered that there were influxes of spawning trout from the sea, and in the case of a fish that had been marked, a distance of 250 miles had been travelled at sea while migrating from one river to another. A number of eggs were deposited in areas which were unsuitable - many of these were now collected and transferred to suitable waters.

Other results of the research work in New Zealand referred to by Professor Percival were -

1. A progressive reduction in the average weight of trout was shown. This took place at different rates in different streams, although in a few the rate of reduction was fairly constant. Causes were shown to be low food values and inbreeding, but the human factor, i.e., the increase in intensity of angling, played a bigger part than either of the other causes mentioned. In some areas definite need for protection was shown and this was duly afforded.

2. Growth rates and natural productivity were studied and the attitude of the trout societies changed from indiscriminate planting to careful stream management.

3. Careful records were kept concerning angling and stream factors, for use by future generations. Past work had been greatly handicapped by the lack of records.

4. A search for a stream in its virgin state to be used as a control - resulted in only one such in the whole of New Zealand, all others being populated with trout.

In conclusion Professor Percival said he felt he had not seen sufficient of Western Australian streams to make specific recommendations, and did not suggest that what suited New Zealand would also suit Western Australia, particularly as American experience had shown that heavy plantings were necessary according to angling pressure or stream conditions. "I do not want to put my head out", he said, " and try to tell you what you ought to do. Might I just say that stream surveys are most necessary and unless you are going to make it excessively hard for those who follow after, you should make a point of keeping accurate records which will be invaluable to future workers. I shall finish by congratulating your Council and the various Societies on their foresight and on the tremendous amount of voluntary and unselfish work you have put into your hatchery set-up."

Professor Waring said he was concerned at our lack of knowledge of stream productivity and seasonal conditions. He admitted the problem was most complex, and would involve a study of all the food chains in the streams, and not of insects alone. It was imperative that skilled men work on the problems before us. Every endeavour should be made to have a permanent officer appointed to commence this work. This was reasonably the responsibility of the State Fisheries Department, but the Department of Zoology in the University of Western Australia would give such a man its complete co-operation.

CERVANTES-GREEN ISLETS-LANCELIN CRAYFISHERIES

Most interesting and informative reports have been received from Inspector A. J. Bateman concerning these three important crayfisheries. They are summarised below for the information of the field staff.

Cervantes Island

Inspector Bateman was at this station from February 25 to March 12. About the time of his arrival better catches were being made by all boats. "Sonoma" and "Proton" were processing and freezing their own catches. These two boats, which are controlled by Consolidated Fisheries, work to a very high standard of packing. "Villaret" was also at Cervantes, processing and freezing the catch of 10 boats. Some freezer troubles have been experienced by both "Sonoma" and "Villaret", the former having to make two trips to Fremantle for repairs. Mr. Bateman states that about 70% of the Cervantes catch is graded "small" and "midget", practically all the remainder being "medium" with just odd "large". "Jumbo" packs are no longer put up.

Mr. Bateman feels that the Cervantes fishery will need careful watching in the future, as the indications suggest that the pace is becoming too fast, even if it has not reached the stage of being overfished. All boats are working in from 27 to 45 fathoms. One boat which set pots "over the edge", in about 50 fathoms, recovered 5 of them later with about 1 bag of crayfish caught in them. All these were white and graded "medium". The number of undersize fish brought in is not really great, but still greater than at Lancelin. The large number of small (but not necessarily undersize) fish caught at this station makes the task of the Inspectors very onerous and difficult.

Green Islets

A few days were spent at this station where the freezer-boats "Bluefin", "Eureka", "Nord Star" and "Kingfisher" are catching and processing and "Cutty Sark" is just catching. The catches of the freezer-boats - from 15 to 20 bags daily - appear to give the lie to suggestions made in some quarters that these large vessels are unsuitable for crayfishing.

A trip to the grounds was made by Inspector Bateman and Cadet Inspector Simpson in "Kingfisher". The anchorage was cleared at first light and a W.S.W. course steered for approximately $1\frac{3}{4}$ hours to the first line of pots. There were 50 pots in this line fishing from 27 to 30 fathoms, each with 50 fathoms of rope. This line produced $6\frac{1}{2}$ bags, but a better yield (10 bags) was made from the second line of 48 pots. "Kingfisher" returned to anchorage at 2.30 p.m., and processing was completed and ship cleaned up by 7 p.m., 20 boxes of tails being the result. The other freezer boats, all of which were visited, also seem to be doing equally well, with "Eureka" perhaps having the edge on the others.

Lancelin Island

The catchesfrom this area, in spite of a rather dubious start, are about equal to last season's. Although catches by the smaller boats have declined somewhat, there has been an improvement in the catch of the larger boats. Two de-tailing plants are situated on the mainland, one operated by Tropical Traders & Patersons Pty. Ltd. and the other by Lancelin Products Ltd.

The grounds now being worked are generally farther away than formerly, some vessels working up to 30 miles from the anchorage, in from 27 to 40 fathoms.

Mr. Bateman expresses some concern at the relatively high mortality among the crays, particularly during hot weather, while waiting to be processed. One factory in particular had a bad record in this regard, due largely to the system of operation, whereas at the other factory, where more speed in handling was evident, the loss rate was negligible.

Twenty-nine boats were working at Lancelin, of which 18 were supplying one plant and 11 the other. One thing which Mr. Bateman noted particularly was the decline in the average size of the fish. This is the danger signal in all fisheries and it will be necessary to keep a very watchful eye on this place next season. Fishermen generally are now "playing the game" as far as undersize crayfish and crayfish in berry are concerned.