FISHERIES DEPARTMENT, WESTERN AUSTRALIA

MONTHLY SERVICE BULLETIN

Vol. VI. No. 7. July, 1957

STAFF NOTES

The Minister for Fisheries (Mr. Kelly) spent the last week of June aboard m.v. "Lancelin" to see for himself the type of investigational work on which the Department is at present engaged in Shark Bay and vicinity. Prior to joining the vessel at Carnarvon Mr. Kelly inspected the Nor'-West Whaling Company's station at Babbage Island.

The Superintendent (Mr. A.J. Fraser), and the Chief Vermin Control Officer (Mr. A.R. Tomlinson), accompanied by Fauna Protection Officer H.B. Shugg, will visit Albany on July 10. They will meet a deputation that evening of members of the Albany Zone Council of the Farmers' Union, and members of the Albany Road Board, to discuss the kangaroo situation in the district. They will return to Perth the following day.

The Clerk-in-Charge (Mr. B.R. Saville) will commence one week's annual leave on July 3.

We welcome to the staff Mr. K.L. Brooks and Mr. K.R. Dickson, who commenced duty on June 15 as Assistant Inspector and Cadet Inspector, respectively.

Mr. W.K. Cherrington will commence duty on July 1 as a Clerk at Head Office. He will occupy an additional position recently created in the Fauna Section.

Technical Officer J.S. Simpson plans to commence three months' long service leave on September 1. As he also has three weeks' annual leave and boat leave due, he will not return to duty until the New Year.

MOVEMENTS OF DEPARTMENTAL VESSELS

The research vessel "Lancelin" is expected at Geraldton on July 7 where she will go on the slip for routine maintenance before returning to Shark Bay to continue the prawn-investigation programme.

CORRIGENDUM

In the May issue of this Bulletin, Vol. VI. No. 5, page 85, crayfish production in 1956 was shown as 10,638,938 lb. Late returns received since have shown that the catch was 10,685,853 lb. and total production 20,627,171 lb.

SALMON AT ALBANY

Inspector B.A. Carmichael of Albany reports that anglers fishing from the wharf at Albany "struck it rich" for three hours on Sunday afternoon, June 9, when a shoal of sardines brought a school of salmon close in to the wharf. As the good fortune of the few original anglers spread, more and more townsfolk assembled to take advantage of the situation until, by Mr. Carmichael's estimate, 150 people were present. All sorts of fishing lines were brought into use for which there was no shortage of bait as the salmon, when thrown up on the wharf, each disgorged up to half a dozen sardines. Several people using small, thin nylon lines had cuts bleeding on their hands, but kept on fishing. Inspector Carmichael says -"... like all fishermen, they were quite upset if they noticed the fellow next door was getting more than they were." He estimates that about 2 tons of fish were landed and, as salmon average about 300 to the ton, the anglers must have averaged four fish each.

FISHERMEN'S JETTY FOR BUNBURY

Confirmation has been received from the Public Works Department that the old pile landing jetty near the breakwater at Bunbury will be converted into a fishermen's jetty. An amount of £2,200 has been set aside to meet the cost. The Minister for Works (Mr. Tonkin) has decided to defer a suggestion that a slipway should be provided at the site, as it was considered that the facilities available at Busselton were adequate for the whole Bunbury-Busselton area.

TRAWLER FOR THE BIGHT

The Commonwealth Minister for Primary Industry (Mr. McMahon) announced last month that his Government had decided to purchase a modern diesel trawler to investigate the possibility of establishing a commercial fishery in the Great Australian Bight. It has been known for many years that a wide variety of fish are available in payable quantities in the waters of the Bight, but past attempts to develop the grounds have failed due to the use of unsuitable vessels and gear. It is understood that the new trawler will be fully equipped with modern gear and cold storage facilities.

BOATS WRECKED

Two fishing boats were completely wrecked during the storms encountered in June. The Fremantle boat "Wild Rose", registered in the name of J. Reinhold, broke adrift from her anchorage at the South Mole, Fremantle, on June 17, and was wrecked on the rocks at the bottom of Grey Street. An attempt was made at salvage, with little success, due to the heavy seas. The "Wild Rose", powered by an auxiliary motor, was 26' long, with a beam of 16'. When registered she was valued at £1,500, but it was believed she was insured for a few hundred pounds below this amount.

On June 19 the "Sterling", owned by H.C. McCormick, of Gingin, broke adrift in the storm-swept seas off Cape Leschenault. She was buffeted onshore and became a total wreck. Registered as P.105, the "Sterling" had a length of 25' and a beam of 9½', and was valued by her owner at £2,000. About a year ago Mr. McCormick lost another boat, the "Seabird", during a storm. It is understood that the "Sterling" was fully insured.

CONVICTIONS RECORDED

April 1 to June 30, 1957

Date	Defendant	Court	Charge	Result
29.4.57	Amm, L.K.	Fremantle	Undersize C/fish	Fined £5
do.	Ruly, N.	do.	do. do.	" 10
do.	Collins, F.	do.	do. do.	" 5
do.	Lombardo, V.	do.	do. do.	" 10
do.	Vinci, T.	do.	do. do.	" 5
do.	Klingberg, A.	do.	do. do.	" 5
do.	Hartog, D.	do.	do. do.	" 5
do.	Gazeley, T.	do.	do. do.	" 10
do.	Siggins, L.	do.	do. do.	" 20
17.6.57	Pittorino, A.	do.	do. do.	" 3
do.	Ruly, N.	do.	do. do.	" 3
do.	Byllemos, L.P.	do.	do. do.	" 5
14.5.57	Willers, J.	Geraldton	do. do.	" 2
do.	Hogan, A.S.	do.	do. do.	" 2
do.	Smith, H.	do.	do. do.	" 3

Date	Defendant	Court	Charge	Result
14.5.57	Kijenia, M.	Geraldton	Undersize C/fish	Fined £15
do.	Tipping, P.	do.	do. do.	" 10
30.4.57	DeLacey, N.A.	Perth	do. do.	" 4
2.5.57	Baker, R.G.	do.	do. do.	" 5
do.	McCormick, H.	do.	do. do.	" 2
do.	Russell, C.F.E.	do.	do. do.	" 5

TASMANIAN MUTTON BIRD INDUSTRY

The mutton bird industry in Tasmania is concentrated mainly in the islands of the Furneaux Group off the north-east tip of the island. These islands are not populated except during the mutton bird season, which usually opens towards the end of May and continues for about six weeks. When the season opens, small fishing ketches take "birders", most of them descendants of the Tasmanian aborigines, from Flinders and Lady Barron Islands to the rookeries where they catch the birds, pluck them and salt them down in wooden casks. More recently, with the introduction of deep freezing, mutton birds have been frozen instead of being salted down. Most of the annual catch is sold in Australia, although large quantities of salted birds are exported to New Zealand.

The mutton bird, more correctly known as the short-tailed petrel, is a sea bird that migrates to the Bass Strait islands in millions each year. They lay a single white egg in a burrow three to four feet long, and usually the young bird hatches out during early January. By the time it is two months old, it is twice the size and weight of its parents. It is then deserted, and the young bird quickly slims down sufficiently to fly. At this time the season opens, and although many thousands of the young birds are taken each year, there would appear little danger of the population being seriously decreased.

GIANT PETRELS

(Macronectes giganteus)

Date Found	Place	F.I.D.S. Band No.	Date Released from Fremantle	A.N.A.R.E. Band No.	Remarks
9/6/57	Mandurah	52432	-	-	Found dead. Report received from Mr. L. Glauert of West Australian Museum.
15/6/57	Swanbourne	-	23/6/57	-	Anterior tendon of left tarsus severed but otherwise healthy.
22/6/57	Kwinana	-	28/6/57	10291	Banded 26/6/57 by D.L. Serventy.
23/6/57	Mandurah	52491	-	-	Partly decomposed. Reported by Mr. L. Glauert.
24/6/57	Quinn's Rocks	52109	-	-	Found dead.
24/6/57	Trigg Is.	52512	28/6/57	-	-
24/6/57	City Beach	-	28/6/57	10292	Banded 26/6/57 by D.L. Serventy.
24/6/57	Cottesloe	-	28/6/57	10293	Banded 26/6/57 by D.L. Serventy. This bird in white phase.
29/6/57	Cottesloe	52602	-	-	Leg with feathers only found. Report received from Mr. L. Glauert.

STORM DRIVEN BIRDS *

The sustained storms experienced during June resulted in quite a number of giant petrels being reported on the South-West coast. Four banded birds that had died from exhaustion were picked up, and in addition two banded birds were found in a weakened condition. Four petrels without bands were also reported to the Department, and were picked up by departmental officers.

The first of the unbanded birds, which had been injured, was taken to a veterinary officer and then cared for by Inspector A.J. Bateman at Fremantle, while the other three were looked after by Fauna Warden S.W. Bowler, who also cared for the two live banded birds. Inspector Bateman released his bird from Fremantle on June 23. The others were also released at Fremantle on June 28, two days after Dr. D.L. Serventy had placed A.N.A.R.E. bands on the three not previously banded. All the birds appeared to be in their first or second year, and those which were banded on arrival were carrying Falkland Island Dependency Service bands. These had probably been placed on them in the region of Grahamsland, south of South America, in Antarctica. Details of the recovery of all the birds have been forwarded to the British Museum of Natural History, London, from whom banding details have been requested.

The table on page 110 sets out the recovery and release data. Advice of recovery of bands 52432, 52491 and 52602 were first reported by the finders to Mr. L. Glauert of the W.A. Museum, who kindly made details available.

One of the birds, which was later ringed with A.N.A.R.E. band number 10293, excited particular interest as it was a comparatively rare "white phase" specimen. According to Dr. Serventy, this colouration occurs in only about 5% of the giant petrel population. Almost all its feathers were white, but the sprinkling of black and the brown iris was proof that the lack of black colouration was not due to true albinism.

All the birds were fed on a diet of fish and fish offal and readily drank either fresh or sea-water with no noticeable preference.

DUCK BAND RECOVERIES

During the month a further 6 bands were returned and in addition, details were obtained of a band sent in some time ago.

The table hereunder sets out the particulars associated with these recoveries. Band No. 3162 was only the second recovered from a pink-eared duck. In this case the bird was not killed - it was captured alive in moult, the band removed and the bird released.

Band No.	BANDING		RECOVERY		Distance Flown
	Date	Place	Date	Place	
			Black Duck		
2922	25/10/54	Cockleshell Gully	26/12/56	On a pool 10M. S. of Eradu	90 miles
6583	12/2/57	Butler's Swamp, Claremont	21/5/57	Butler's Swamp (found dead)	--
6831	31/3/57	Karrinyup Lake	24/4/57	Road Lake, Mandurah	50 "
6568	11/2/57	do.	May'57	Butler's Swamp, Claremont, (found dead)	6 "
6720	20/3/57	Bennecke's Swamp, Kojonup District	April'57	Boscabel	7 "
			Grey Teal		
3833	24/3/56	Wardering Lake	22/5/57	Trapped 65 mls N.E. of Lake Grace	140 "

Band No.	BANDING		RECOVERY		Distance Flown
	Date	Place	Date	Place	
			Pink-eared Duck		
3162	19/1/55	Yealering Lake	Captured alive 15/6/57	14 mls S.W. of Coorow	210 miles

ABROLHOS CRAYFISHERY

The catch at Houtman's Abrolhos continues to exceed production figures of past years. The table at page 114 compares the intensity and results of the fishing force in May last year with those this year. If conditions during the remainder of this season are usual, a record 3 million lb. catch may be expected.

WHITE-NECKED HERONS *

All officers are invited to send in notes on observations of white-necked herons. Dr. D.L. Serventy, who is a member of the Fauna Protection Advisory Committee, has recorded information on the arrival and departure times and general behaviour pattern of these birds this year, as an irruption of this species is occurring in the South-West at the present time. He says that these irruptions occur periodically - the last was in 1952 - and that they are believed to be caused by unfavourable conditions further north where the bird is more common.

In appearance the white-necked heron, which is also known as the Pacific heron, is similar to the white-faced heron or blue crane, a widely known and popular bird to which it is closely related. The Pacific heron is a slate grey on the upper parts and has a long neck, white underneath, white on the breast and at the bend of the wings. It feeds on aquatic insects and other food obtained in some flooded paddocks.

ABROLHOS CRAYFISHERY

AREA	MAY, 1956			MAY, 1957		
	No. of Men	Total Catch	Catch per Man	No. of Men	Total Catch	Catch per Man
		lb.	lb.		lb.	lb.
North Is.	28	74,429	2,658	30	111,560	3,718
Wallabi Is.	47	160,150	3,407	47	176,756	3,760
Easter Group	41	183,626	4,478	62	171,954	2,773
Pelsart Group	42	150,023	3,572	53	151,404	2,856
TOTAL ...	158	568,228	3,596	192	611,674	3,185

TOTAL FOR THREE MONTHS 1956 .. 1,917,161 lb.

TOTAL FOR THREE MONTHS 1957 .. 2,390,157 lb.

THE CLEARING HOUSE

Travellers by Nature ..

Mr. and Mrs. Leton live in Burwood, near Sydney, New South Wales. One afternoon, last summer, they were sitting in their sunroom overlooking the main road. Suddenly Sam Leton made a startled dive for the window. "If that's not Beau, I'll go hopping!" he called to his wife. Mrs. Leton rushed to join him. Heading their way, was a travel-stained limping fox-terrior. They hurried downstairs, flung open the front door and ran to the gate. The little dog trotted the final few yards. His tail swung in a tired wag. He crouched on his belly while the two humans fussed over him.

A month previously, the Letons had made a car trip to the famous Blue Mountains. Seventy miles from home, their dog, Beau, had jumped from the car and set off after a scampering cat. Somehow or other he had made his way home.

It was just another amazing case of inexplicable animal navigation. Cats have been known to travel hundreds of miles back to the homes of people who attempted to disown them. Homing pigeons wing their way back over longer distances.

The migration of birds is the most astounding phenomenon of all. Late in the summer thousands of swallows leave Great Britain and European countries to fly off to South Africa to avoid the northern winter. They return in time for the following spring. It has been proved over and over again, that many of them return to the self-same homes which house their nests.

Of the marine species of life, most puzzling to students, is the eel. In the Northern hemisphere the average eel travels thousands of miles to its place of spawning. There it dies but its young swim thousands of miles back to the place from which its parents came. When eels are about ten years old, they make their way down rivers to the sea. When

they arrive at the deep water they swim out into the Atlantic Ocean. Eels from Egypt apparently negotiate the Mediterranean Sea. Having arrived in the Atlantic, they continue on until they reach the waters of the West Indies. There the females lay eggs. The males spawn and fertilise the eggs. That is the end of their usefulness. They die. The eggs hatch and young eels are born. They set off on a long journey back to Europe, staying almost on the surface of the water. The journey to Europe takes a full three years. When the youngsters arrive at the estuaries of European rivers they are no more than two inches long. At this stage they are known as elvers. They progress up the rivers in masses of thousands and thousands. Many leave the rivers after heavy rain-storms, and make their way into ponds and land-locked lakes. When they reach the age of ten years they follow the same cycle as their parents.

In Australia, two years ago, thousands of eels appeared at the closed mouth of Lake Coila, near the south coast of New South Wales. Local residents were mystified when they saw a huge area of threshing marine life. The seas were calm and a large stretch of sand separated the Lake from the ocean. There was no evident reason why the eels should be there. A few days later the reason arrived in the form of progressive record tides. With flood tides there came a number of storms which sent waves crashing and rolling across the stretch of sand, separating the Lake from the sea. The eels thrashed their way over to the deep water. In squirming, wriggling masses, they fought through the huge waves crashing on to the beach. Thousands of them got over into the ocean water.

A visitor to the district said: "The lake seemed to be full of eels. Some of them were five feet long and must have weighed about 30 lb. All of them were trying to get out. It was a fantastic sight."

A local official said: "The lake is about 6 or 7 miles around. Some instinct must have brought the eels down. We don't know what it is."

The experts appear to be no more knowledgeable than the local residents. Those South Coast eels, obviously, were pre-warned about record tides which were unsuspected by human kind.

The "boys in the back room" who study marine phenomena came to the conclusion that the Australian eels were anxious to get to their breeding grounds at sea. Where these breeding grounds actually area, they could not say, with any degree of certainty. Gilbert Whitley, ichthyologist of the Australian Museum, suggested that their breeding ground is probably somewhere in the vicinity of New Caledonia. He stated that the females fatten up in the upstream fresh waters and contact romantic males around the estuaries.

Mr. T.C. Roughley, former State Fisheries Superintendent in New South Wales, in his book "Fish and Fisheries of Australia", says that eels have been seen climbing a weir at Parramatta, in masses of thousands during February and March. In the daytime they hide under stones. They come out at night time to work their way upstream.

When asked for a scientific explanation of the Lake Coila incident, Mr. Roughley answered: "For some uncanny reason the eels must know that there are going to be high tides." He added that he and his colleagues would be overjoyed to receive a solution to the problem of eels and their incredible forecasting instincts.

Prawns, like eels, are able to forecast high tides and are aware of the fact that the moon is up, even when enclosed in a room. They, too, gather at the seaward bank, before high tides, when living in an enclosed lagoon. Doctor Racek, a prawn research expert, says that the moon, which affects the tides, exerts an influence on the behaviour of all marine creatures. By experiment, he has discovered that prawns, kept in an enclosed and darkened laboratory, can tell when the moon is up. As soon as the moon rises, they burrow in the sand of their tank, just as they do, to escape from their natural enemies, when living normally.

Probably best known migrators of the fish family are salmon. Their jumping flights, upstream, against fast running currents and rapids, have been the subjects of still and movie photographs for almost half a century. Their movement is in the opposite direction to that taken by most fish. They swim from the sea, up into the rivers to breed. Their object is to lay their eggs in the source waters of the streams. The baby salmon remain in the rivers for a couple of years and then they swim down to the sea. There they have a grand time eating greedily and showing rapid growth. When they feel the beginnings of the urge to breed they swim once again to the river and force their way back to the head-waters.

For the purposes of this story it is remarkable that salmon often return from the sea, to the same rivers in which they commenced their lives, although they probably have travelled many miles up or down the coast, away from the estuary which first led them into the blue water. This has been proved by marking the young fish so that they could be positively identified again. The usual marking is done by cutting a small piece off a fin. The logical explanation to the puzzle of the homing salmon is that the ability is due to an inherited instinct. In California salmon eggs were taken from a river in which they had been laid and they were placed in another river where they were eventually hatched. A large number of the young fish were marked before they swam down to the sea. The marked salmon came back from the sea to spawn in the rivers where they had spent their youth. On no occasion did they enter the river in which their parents had laid the eggs which had produced them.

Some years ago a number of shearwaters (sea birds which nest in burrows in the ground) were taken from a small island off the Welsh Coast where they were nesting. They were marked with numbered metal rings which encircled their legs. They were transported to locations various distances from their nesting ground. One of them was taken by plane to Venice, where it was released. The bird returned, from Italy, to its nest as did the others. Measured in a straight line, Venice is 930 miles from the island

near Wales. The journey occupied only a fortnight. If the bird followed the expected route, travelled by sea·birds, it would have traversed the Mediterranean Sea, and arrived home via Gibraltar. That journey would have taken it over a distance of 3,700 miles.

The swallows which leave England in August and September, fly to Africa where they spend the winter. In the spring they return to England, to nest. There are other birds that leave England in the late summer, heading south. They include cuckoos and nightingales. The distance from England to South Africa is 6,000 miles.

By what incredible means do the birds find their way on these enormously long journeys? Parents do not teach their young the way back. It is not possible. In most cases the parents fly off first. How the birds find their way is a mystery. Many of them travel by night, when landmarks would not be discernible. In any case they fly hundreds, even thousands of miles over the sea where there are no landmarks at all.

The American Golden Plover makes its nest in Canada. At the end of the summer these Plover migrate south to South America. They track laterally to the coast and then fly 2,000 miles non-stop over the ocean.

The neat little Penguin is a bird which cannot fly. Some of this species every year make a migration swim from the Antarctic continent, all the way to South America and back. The precision of their navigation is infallible. There are no landmarks en route and where they obtain their bearings is a complete mystery.

Some authorities suggest that birds are able to sense the magnetic lines of force reaching from the north to the south magnetic poles. This is something of an optimistic theory. A multitude of experiments have failed to show that animals or birds are affected by forces of magnetism.

Recently the research men produced an ingenious apparatus, designed to indicate how many hours a bird flies when making its way from place to place. The instrument is a small metal capsule attached to one of the bird's quill feathers by means of a rubber solution. Rubber is used so that the bird cannot peck it away. The quill feathers were selected as they are probably the only ones which the bird will not pull out. The capsule is divided into two parts, by a metal partition with a tiny hole in it. At one end of the capsule is a photographic film. At the other a radio active substance which emits electrons. When the bird is squatting the hole is closed by a tiny metal ball that automatically rolls onto it. In flight the electrons hit the film. Later the electron tracks are counted and their aggregate enables a calculation of the total time the hole was open and the bird was in flight. Latest innovation is a minute recording compass that can be attached to the bird to record the direction flown.

Insects too are remarkable migrators. The best known are locusts. They appear in huge masses. Sometimes there are thousands of millions in a flight. They fly over hundreds of miles. Their migrations occur usually when a district which they have plagued suffers a bad season. Much to the disgust of distant farmers and rural investors, they make their way to fresh fields and pastures new. However, there is less mystery surrounding the travelling of the voracious locusts. This marauder invariably follows prevailing winds and interrupts its journey when new pasture grounds are sighted.

by S.G. Ebert.

("The Australian Outdoors and Fishing"
Sydney April, 1957)

Look at Fishery Conservation in this Way

Look at fishery conservation from this angle. Compare our halibut, salmon and herring fishing banks with great areas of grazing land stocked with herds of cattle. Methods used for catching fish might be compared with the methods used in rounding up the market herds of cattle.

A short-sighted rancher, thinking only of this year's market, might send out his cowboys to round up as many head of stock as possible, including grown cattle, yearlings, and calves. Everything would be killed in the roundup. Grown animals shipped to market, and the calves left to rot or to be eaten by the vultures and coyotes. If the number thus killed each year were great, we would expect the rancher's herds soon to dwindle in size until the animal roundup would go to waste for lack of sufficient animals to graze and to perpetuate the herds.

The modern rancher operates in no such wasteful fashion. Each year he kills off only the grown stock and leaves the rapidly growing calves until they are of the greatest value. He knows that in the long run he will get the greatest amount of market beef by keeping his herds of sufficient size to utilise all of the grazing land available. It is true that the wolves will get some of the young stock left out on the range, and some will die from other causes, but the remainder will increase many times in size and value and will repay the rancher for the additional time they were left on the range. The young calves that formerly were killed and left to rot will be a total gain, for if left alone another year they will double and triple in size and so form a valuable addition to the annual market herds.

("Western Fisheries" Vancouver, B.C. April, 1957)

Vanity Does the Trick with Crayfish

Broadhaven, County Mayo, lobster fishermen are "betwixt and between" in their views on the vanity of crayfish now fetching an all-time-high price of £5 a dozen from French buyers.

A local fishermen, who has consistently caught double the number of crayfish than his rivals claims that he has discovered a strong streak of vanity in these crustaceans.

His good catches he attributes to the fact that he lines the bottom of the pot with a mirror. A crayfish crawling over the top of the pot, he claims, sees its own reflection and strains every effort to get into the pot. Others follow until each pot is fairly jammed with the fish. Other fishermen discount the story ... in public. Nevertheless, it is reported that a mirror cannot be bought in the surrounding villages for love or money.

("The Fishing News" London May 31, 1957)

Sole Swam 25 Miles in Six Years

A Dover sole tagged by the California (U.S.) Department of Fish and Game in 24 to 26 fathoms of water off the mouth of Mad River on July 13, 1950, was recovered from the same general area on August 24, 1956, says Mr. E.A. Best, of the Marine Fisheries Branch.

The fish was at liberty six years one month 11 days - a total of 2,234 days. Net movement after six years was less than 25 miles.

According to departmental records the next longest time at liberty for a tagged Dover sole was about three years 11 months.

A record of five years, six months has been established for a sable fish.

("The Fishing News" London May 10, 1957.)

This Shrimp Tastes Like Lobster

A new species of shrimp, with a flavour similar to that of lobster, has been found by U.S. research workers in waters 165 fathoms deep. The new species called the "Royal Red", has gone on sale in Florida markets, says Maine Coast Fisherman.

("The Fishing News" London May 17, 1957.)

Luderitz Firm Exports Milled Kelp to United States

Sea Plant Products (Pty.) Ltd., of Luderitz, South West Africa, have since 1954 been concerned with the harvesting of matured seaweed (kelp) washed up along the desert coastline in the vicinity of Luderitz.

As the seaweed collected is sun and wind dried, and not bleached by rainfall, it contains a higher potash percentage in comparison with places where rainfall is more frequent.

The loose, raw product is gathered by machinery and hand along the accessible beaches of the coast at the high water mark. It is then spread for drying and after a period is conveyed by lorries to the depot where it is sorted and milled to various grades before being bagged for shipment to overseas and home markets. The main export market being the United States of America.

The seaweed is an organic fertiliser which contains important trace minerals, potash and alginic acid.

Good results have been achieved from the use of kelp fertiliser in South and South West Africa. Owing to its high trace mineral element content, it is also a valuable feed additive for all kind of livestock, especially sheep and cattle.

This type of fertiliser has been used with great success for centuries in Scandinavian and Far Eastern countries.

Sea Plant Products (Pty.) Ltd., are at present operating on a small scale but hope, in the near future, to increase production as more shipping space becomes available and the demand for the fertiliser and cattle feed increases.

("The South African Shipping News and Fishing Industry Review" Cape Town May, 1957.)

Advertising Campaign on South African Rock Lobster Tails.

The advertising of quick-frozen South African Rock Lobster Tails this year is a stepped-up campaign, both in size of space and in message. Dominating full-page, full-colour ads in the New Yorker, and Gourmet Magazines and four colour ads in leading Sunday newspaper magazine sections are augmented by week-after-week advertisements in Thursday issues of newspapers in over 50 markets.

Facing the facts about the big quality difference in various sources of catch, and the outstanding consumer leadership of the South African tails, the ads explain the reasons for the superiority of spring-chicken tender South African tails. All ads feature the fast-moving 11-ounce 2-tail package, which greatly simplifies the retailer's stocking and display set-up.

Backing up the South African consumer advertising is such instore and local advertising material as full-colour display posters, supplies of the popular rock lobster recipe book, and practical retail advertising mats.

Such an increasing number of customers are asking for South African by name, that featuring this brand is good business, both in terms of dollar volume and customer good will.

("Fishing Gazette" New York April, 1957)