

A REGIONAL APPROACH TO FISHERIES MANAGEMENT
IN THE SOUTH PACIFIC COMMISSION AREA

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1. Introduction

With increasing fishing pressure being brought to bear on the finite fisheries resources of the world's oceans and more countries becoming actively involved in exploiting these resources, the need for adequate conservation and management to ensure optimum resource utilization and benefits to all peoples is becoming increasingly apparent. Since 1946 25 major international and regional fisheries bodies have been established to protect and manage living aquatic resources from whales and seals through to the smallest freshwater fishes. These 25 bodies cover most of the world's oceans and water masses, and membership ranges from as many as 32 countries for the Indian Ocean Fishery Commission to as few as two in the numerous bilateral commissions which exist. It is surprising then that no international or regional fisheries organization exists which truly covers the interests of all the developing countries and territories of the central and western Pacific Ocean (area of the South Pacific Commission, Figure 1), particularly when one considers the vast area of ocean (approximately 30,000,000 sq.km.) and the large number of countries and territories involved (20). While the area of the Indo-Pacific Fisheries Council (I-PFC) does extend into the western Pacific Ocean, the lack of membership in I-PFC of even a single country from the area of the South Pacific Commission indicates that I-PFC as it is presently structured does not specifically represent the region. The need for a new fisheries management body, or the restructuring of an existing one, to cover the needs of the emerging countries in the central and western Pacific is therefore apparent.

Although the interest in the tuna, and particularly skipjack, resources of the western and central Pacific Ocean has been increasing in recent years, the significance of the production from tuna fisheries in the total yield of fisheries products from the region is not widely appreciated. The lack of a regional fisheries agency responsible for the compilation of statistics on these fisheries means that the actual magnitude of the catches from the ocean surrounding the developing countries of the region must be estimated from statistics not specifically compiled for this purpose. While this may detract from the accuracy of the figures available it does not conceal the complete domination of fisheries in the region by those concerned with skipjack and other tunas.

In addition to the paucity of the available catch statistics, the present state of knowledge on the stock structure, migration and biology of the most important resources is inadequate to enable the conservation and management of these resources to be approached with any confidence. In view of the impact universal acceptance of 200 mile zones of extended jurisdiction will have on the access and allocation of the total fisheries resources of the region, it is necessary to consider in depth the implications such extended jurisdiction may have on the total resource harvest from the region and the allocation of benefits or costs resulting from this harvest. The responsibilities of all countries of the region in ensuring the conservation and optimum utilization of the resources must also be considered.

It should be noted that the need for a tuna research and management body for the eastern Pacific Ocean was recognized by the formation of the Inter-American Tropical Tuna Commission (I-ATTC) in 1950, when the tuna catches from the region were about 161,000 tonnes. The need for a management body for the Atlantic Ocean was recognised by the formation of the International Commission for the Conservation of Atlantic Tunas (ICCAT) in 1966, when Atlantic tuna landings were almost 238,000 tonnes. In 1974 the total tuna landings in the western Pacific (FAO Statistical Areas 61, 71 and 81) exceeded 842,000 tonnes and still no regional conservation or management body has been established.

2. The Resources

Statistics given in Tables 1 and 4 and Tables 3 and 4 respectively show that over 93% of the declared fish catches and over 94% of the estimated catches in 1974 from the area of the South Pacific Commission (Figure 1) [which can for the consideration of total tuna landings be considered as approximately equivalent to FAO Statistical Area 71 (Figure 2)] was tuna, and that this tuna catch amounted to some 400,000 tonnes, with a fresh fish value of approximately \$A160,000,000. This fish could be anticipated to realize \$A500,000,000 in the canned form.

That tuna, which are highly migratory species, should so dominate fisheries production from the region is not surprising when the geography and oceanography of the area are considered. The land masses of the tropical Pacific are, in general, comparatively isolated islands or archipelagoes which are surrounded by clear, extremely deep ocean. In most cases the transition in depth from shallow, in-shore or lagoon waters is precipitous, dropping away to depths which often exceed 1,000 fathoms in distances from shore of a few miles or even less. Throughout the region there are very few areas of true continental shelf, and in those areas where a shelf does exist it does not generally extend beyond the 12 miles currently accepted as territorial sea (the south coast of Papua New Guinea is a major exception). As a result of this lack of extensive shallow-water, near-shore areas, there have been no large-scale fisheries developed for the harvesting of benthic fisheries resources by trawling or other techniques traditionally used in shallow waters, nor is there appreciable potential for such development. It is therefore not surprising that most of the present yield comes from fisheries which exploit the highly migratory, pelagic resources concentrated in the surface layers (top 300 metres) and that the major fisheries potential for the region is thought to lie in expanded utilization of these pelagic resources. This does not mean that there will not be considerable increases in the yields from coastal capture fisheries or aquaculture but it does indicate that such resources will be more a matter for national rather than regional management, as later discussed.

2.1 Highly migratory species

All of the major tuna species exploited by live bait and pole vessels, long-line vessels, or purse-seiners, undergo extensive migrations within and between regions and in several cases from ocean to ocean. The most economically significant of these are the skipjack, yellowfin tuna, big eye tuna, albacore and bluefin tuna, although the latter is of little importance to the fisheries of equatorial areas (Table 3). In addition, several species of billfish and tuna-like fish can be included in the category of economically significant, highly migratory resources. Approximations of the catches of the major highly migratory species in FAO Statistical Area 71 (approximately the area of the South Pacific Commission) are given in Table 3, from which it can be seen that the total harvest in 1974 exceeded 400,000 tonnes. However, it is important to note that only a small fraction (approximately 13%) of this tuna was taken by vessels registered in the developing Island countries. The potential value of these resources to the Island peoples in the South Pacific Commission area is therefore obvious, particularly in view of the increased jurisdiction envisaged in acceptance of 200 mile Exclusive Economic Zones. As can be seen from Figure 3 the greater part of the oceans of this total area will be covered by the Exclusive Economic Zone of one of the Island states. The potential benefit to the Island nations of increased participation in the harvesting of this immense resource is indeed great and substantially exceeds most other primary industries of the region. Nevertheless, it is necessary to consider some of the problems facing future resource utilization and management.

These problems can be largely divided into those associated with fisheries of different types, i.e. (1) those for skipjack and surface schooling tunas which are taken mostly by live-bait or purse-seine vessels, (2) those for deep swimming larger tunas and billfish captured by long-line vessels.

2.1.1 Skipjack and surface schooling tunas

The catches of skipjack throughout the world are increasing each year and although landings of skipjack already exceed those of any other tuna species, the domination of tuna landings by skipjack is anticipated to increase even further. Although small quantities (estimated 10,000 tonnes) of other tunas are taken by surface fishing gear in the western equatorial Pacific, skipjack so dominates such fisheries that it is the only species considered here. The skipjack landings in the area of the South Pacific Commission in 1974 were more than 200,000 tonnes (Table 2). The major part of this catch is taken in fisheries which have only developed since 1970, and there is general optimism that the resources can safely yield catches well in excess of those of 1974.

The results of skipjack research, which has intensified since 1971, indicate that the fishing pressure so far brought to bear on the resource has had no detectable deleterious impact on the stocks, and the optimism held for the future of the fishery has been confirmed. However, although a great deal more research is required if the resources are to be developed to their optimum value, many facts on the distribution, biology and behaviour of skipjack relevant to the possible future management of the resources have been discovered.

It has been established that the skipjack represents a truly regional resource with individuals, and even whole sub-populations, migrating thousands of miles through the waters of many countries. These migrations do not follow completely predictable patterns from year to year, resulting in great within and between year variability in the temporal and spatial distribution of concentrations of skipjack suitable for commercial fisheries.

An examination of the catches by the Japanese long-range skipjack fleet in the western equatorial Pacific clearly shows that while good concentrations of skipjack may occur within 200 miles of one country one year, there is no guarantee of a similar occurrence in the same area at the same time (or in many cases at any time) in the following year(s) [see for example Figures 4, 5, and 6]. These figures show that the seasonal concentrations of skipjack which appeared around Papua New Guinea in March 1974 occurred as several separate concentrations, one to the north-east near the Marshall Islands and two to the south-east near the Solomon Islands and Fiji, in March 1975. In March 1976 the peak concentration occurred in a broad band across the area of Nauru, the Gilbert Islands and the Marshall Islands. The 1975-76 skipjack season was unusual in that at no stage did a major part of the Japanese fleet cross the equator to take skipjack, although the fleet did at times congregate very close to the equator. The movements of the Japanese fleet also indicate that in very few areas are the concentrations of skipjack sufficiently consistent to support a long-range fleet on a year-round basis. These fluctuations in the abundance of skipjack are such that fishing fleets tend to move from the waters adjacent to one country to those of another many times throughout the year.

The present knowledge of the seasonal distribution of the total skipjack resources of the western Pacific clearly indicates that for long-range fleets of any country to be able to operate economically on a year-round basis, they must be allowed free access to fishing areas within 200 miles of at least several other countries, and the countries into whose waters access is required will vary from year to year. Obviously a great deal more research on the movements and biology of skipjack will be required before the future of the resources can be assured and management decisions to facilitate optimum utilization and economic return from these resources made with confidence. In this regard the South Pacific Commission Skipjack Survey and Assessment Programme will provide essential information on the regional distribution of skipjack and batfish resources.

2.1.2 The larger tuna species and the long-line fishery

The distant water long-line fishery for yellowfin, albacore and bigeye tuna has been operating extensively throughout the Pacific since the 1950's and the data base available for the study of this fishery is much greater than that for skipjack. All the species taken in this fishery are, like skipjack, highly migratory and the vessels involved often travel thousands of miles, following fishable concentrations, and in extreme cases may fish in all three oceans in a fishing season. In addition, many of the vessels fishing the Pacific will shift their emphasis from one species to another, and hence shift their fishing grounds many times throughout the year. The fishes exploited by long-lining must therefore, like skipjack, be assessed on a regional basis.

The catch and research data accumulated to date clearly indicate that all of the larger tuna species in the tropical Pacific are heavily exploited and it is generally accepted that the exertion of greater fishing effort by long-lining would result in marginal, if any, increases in the total yield. Additionally, in recent years the economics of this industry have taken a serious downturn with the poor catch rates being accompanied by escalating fuel and labour costs and inconsistent tuna prices. Therefore, even though in excess of 90,000 tonnes of tuna with a fresh fish value of approximately \$A36,000,000 were taken from the South Pacific Commission area in 1974 the future prospects for the industry are not bright and a decline in total catches is anticipated. Nonetheless the industry is still of considerable value to the region, particularly to those countries which have canneries or freezer facilities dependent upon long-line catches, and a resource of this magnitude is obviously of great significance. That a decline in total yield is predicted and the future of the industry considered in doubt is in itself sufficient reason to justify management of the resource and, as the resource is not in any way restricted by national boundaries, any management must be approached on a regional basis.

2.2 Coastal fisheries resources

Although catches of the highly migratory species undoubtedly dominate fisheries production from the area of the South Pacific Commission, the figures indicated for the catches of other fishes (Table 4) probably represent an underestimation of such production. The significance of coastal fisheries resources on the diet and life styles of Island peoples is indisputable and no additional justification of the need for their conservation and optimum utilization is required. While many of these inshore, coastal fisheries may require management either now or in the foreseeable future it is doubtful that a regional management strategy would prove of practical benefit in such cases.

As previously indicated, the oceanic areas of the South Pacific Commission constitute a comparatively uniformly deep, purely oceanic environment surrounding numerous islands which are for the most part ecologically isolated. The fisheries resources of each of these islands, or at least of each archipelago, can in the main be considered as discrete units which are not appreciably influenced by fishery-induced, or natural, fish mortalities in other areas. The actual management of such resources will therefore in most cases be handled at a national rather than regional level. This is not to say that a great deal of mutual benefit cannot be obtained from a regional fisheries body which gives advice, assistance and disseminates information on the most modern methods of approaching such problems, particularly where such problems have been encountered in similar situations in other parts of the Pacific region. Such an advisory capacity could also extend to the demonstration of hitherto untried fishing methods or to assistance with the introduction of exotic species which may be suitable for fish farming or aquaculture, and other such matters of common interest.

It therefore appears that the immediate management responsibilities of a regional fisheries body would be largely restricted to the highly migratory species and the benefits to coastal fisheries would come from a more advisory function. It must be noted that these coastal fisheries advisory and demonstrative functions for all Islands countries and territories of the regions are presently covered by the South Pacific Commission's Regional Fisheries Adviser, Regional Ecological Adviser, Outer Reef Artisanal Fisheries Project, Lobster Project and Turtle Breeding Project. In addition, the discussion of mutual problems and the dissemination of information on all fisheries matters is covered by the annual Regional Technical Meeting (the only forum to meet annually in the South Pacific Commission area to discuss fisheries matters), and the Meetings of the Expert Committee on Tropical Skipjack, sponsored by the South Pacific Commission.

3. The Impact of a Regional Management Approach on the Surveillance of Foreign Vessels

The acceptance by all the countries in the area of a common resource conservation and management strategy will greatly reduce the problems and costs associated with the surveillance of foreign vessels. As already indicated, adoption by all the Island states of a 200 mile Exclusive Economic Zone will mean that the greater part of the ocean of the South Pacific Commission area will be covered by the Exclusive Economic Zone of one of the Island states and could therefore restrict the entry of foreign fleets to almost all of the western equatorial Pacific (Figure 3). Therefore, if all of the Island states in the area accept a common policy with regard to foreign vessels, any vessel fishing illegally in this region may well have huge distances to travel before reaching the high seas, and its chances of avoiding capture by any surveillance vessel giving chase are much less than with the previous 12 mile regulations.

Furthermore, the tuna resources of the region are not susceptible to overexploitation by a few individual illegal vessels. It would require large fleets to fish for extended periods throughout the region to cause detectable influences on the stocks and in many cases, the most susceptible stocks occur within 100 miles of land which is at least 100 miles inside the area of increased jurisdiction. Fleets fishing in such areas for extended periods would be comparatively easily detected. The commercial value of such a fleet, which may run as high as \$A100,000,000, and the potential magnitude of the loss if the whole, or part of, such a fleet was seized, would act as a great deterrent to this type of activity.

The implications of acceptance of a common policy for extended jurisdiction on the conservation of coastal resources are even more favourable. Whereas it is now comparatively easy for a foreign vessel to make the short 12 mile excursion into territorial waters to harvest a reef or littoral resource, the necessity of traversing 200 miles (or thousands if complete regional co-operation is achieved) of prohibited waterways greatly increases the chances of detection and makes apprehension virtually certain if a surveillance vessel gives chase.

If a common policy is not adopted, then many additional licensing and surveillance problems are created.

Should it be more economical for foreign skipjack vessels to obtain licences to fish in the waters of one country then it is possible that vessels would declare catches, which had actually been made in another area, as having been made in that area. This would seriously jeopardize the success of optimum resource management and would also create extensive surveillance problems which could be avoided under a common system. It would also mean that the possibility of vessels poaching from one island area to another would be greatly increased and separate surveillance systems would be required by each country.

The importance of all countries and territories of the region adopting a common policy cannot be overemphasized. Of particular importance for a regional approach to the management of the resource and surveillance of foreign fleets is participation from the Trust Territory of the Pacific Islands. More than half of the skipjack catch currently taken by foreign fleets in the area of the South Pacific Commission (145,000 tonnes) is taken in waters which would fall within a 200 mile zone of extended jurisdiction of the Trust Territory alone. It is possible that this percentage could be increased by intensified fishing effort in this region, giving rise to heavier exploitation of the migratory regional resource. The strategic significance of the ocean area of the Trust Territory as a point of entry of both migrating skipjack and foreign fleets to the area as a whole must be noted. Similar comments are applicable to French Polynesia, particularly in relation to the long-line fisheries.

4. Possible Adverse Effects of Failure to Adequately Manage the Tuna Resources

It has already been indicated that the future of the long-line fishery in the central and western Pacific is in grave doubt due to a decline in catch rates and escalating fuel, labour and vessel costs, and it is readily apparent that some management decisions are required if this industry is to remain viable. If as a result of adoption of 200 mile zones of extended jurisdiction by the coastal states, the foreign fleets currently involved in this fishery are restricted from fishing in many areas or are required to pay uneconomical licence fees to fish such waters, then the fishery could well cease, or be greatly reduced.

If the collapse of such a fishery did occur there could be a drop in production of at least 90,000 tonnes or approximately 25% of the total fisheries production from the region (this figure would be much higher if billfishes and other miscellaneous highly migratory fish taken by long-liners are included). Similarly a decrease in the production from skipjack fisheries could occur if the Japanese fleet (1974 catch 145,000 tonnes) was excluded from the region. If all distant-water foreign tuna fleets were to be excluded from the region, or if their operations were so restricted that they could no longer operate economically, the declared fisheries production would, based on 1974 figures, fall by 322,000 tonnes or 93.23%. While some of this catch currently taken by distant-water foreign fleets could be compensated for by an increase in locally registered joint ventures the highly migratory nature of the species concerned necessitates freedom of movement throughout the region if optimum utilization of the major seasonal fish concentrations is to occur. Failure to approach the management on a regional basis indicates that a substantial drop in production would be inevitable, particularly when the isolated nature of the bait-fish resources is considered. At a time when world fisheries production is inadequate to meet the increasing needs of a growing population such a decrease in total production must be avoided.

Consideration must also be given to the possible impact of a world-wide drop in fisheries production if all distant-water fleets were restricted from those current fishing areas which will be included in the Exclusive Economic Zone of a coastal state. Consider Japan as an example: Japanese fisheries production currently (1973) runs to some 10.7 million tonnes, of which 674,000 tonnes are exported but 592,000 tonnes are imported to give a nett consumption of about 10.6 million tonnes. Almost 50% of Japan's total catch is taken in waters that will be included in the Exclusive Economic Zone of another country if 200 mile extended jurisdiction is universally accepted. If Japan is unable to negotiate fishing rights which allow production to be maintained at present levels, it will be forced to import fish or other high protein foods to feed its population. In such a case it is highly probable that the present level of Japanese fisheries exports will be severely reduced (or will cease altogether) in order to meet local demand. Many countries in the central and western Pacific rely heavily on imports of fish (Table 5), Japanese mackerel in particular, and if such products became unavailable, or increased substantially in price, it would have considerable impact on the peoples of the region. Fish consumption throughout the world and particularly in developing countries must be considered when the possible restriction of foreign fleets into areas which they currently fish is considered.

A more rational approach to the maintaining of optimum yields from the migratory resources of the region would be to undertake a common licensing policy to cover the operation of foreign fleets. Such a policy could in the short term give monetary returns to the coastal states and in the long term provide for increased local participation and involvement of the peoples of the region in the industry without causing disruption to the production of fish from the area. Again the need to adopt a common regional policy must be stressed, for should a series of independent bilateral agreements predominate then the problems of accurate catch declarations and surveillance could outweigh the probable benefits.

5. The Possible Structure and Future Role of a Regional Fisheries Management Body

Given the present dominance of the fisheries of the region by skipjack and other tunas, it is obvious that there is an urgent need to set up a special body for the management of tuna. But this does not necessarily preclude the creation of a regional fisheries body which is wider in scope but which will concentrate mainly on tuna management problems, at least in the short term. Also given the highly migratory nature of the resources, any such management body must accept responsibility over all waters in which the common resources are distributed and must have the co-operation of all countries harvesting these resources, both regional coastal states and countries with distant-water fleets.

It is now accepted that the skipjack and tuna stocks of the South Pacific Commission area cannot be separated from the stocks which are exploited in more northerly (e.g. off Japan), southerly (off New Zealand and Australia) and perhaps even easterly (off central western America) regions of the Pacific Ocean. While the relationships between spawning and recruitment and natural or fishery-induced fish mortalities in the various areas have not yet been established, it is obvious that for management of these resources to be effective the effects of fisheries on tuna at different stages of their life cycles must be considered. It is clear that the skipjack which are seasonally abundant in (a) the north-western Pacific off Japan (where over 200,000 tonnes are taken in a good year; Table 2, FAO Statistical Area 61) and (b) more southerly regions off New Zealand (FAO Statistical Area 81), gradually migrate into more equatorial regions where they spawn and the cycle is repeated. It is equally clear that the higher latitude areas serve as a nursery ground for larger fish which are eventually captured in FAO Statistical Area 71. Therefore, to attempt to undertake management of the skipjack resources of the area of the South Pacific Commission without

- (a) the co-operation of all the countries and territories of the region,
- (b) the co-operation of all countries with distant-water fleets,
- (c) the co-operation of the countries fishing skipjack to the north, i.e. Japan, Philippines, Korea, Taiwan,
- (d) the co-operation of the countries to the south, where great expansion in the skipjack harvest is anticipated in New Zealand and Australia, and
- (e) at least research co-operation with the tuna research and management body (Inter-American Tropical Tuna Commission) of the eastern Pacific

would make rational management and optimum resource utilization impossible to achieve.

It can be stressed that the coastal states of the region would greatly increase their chances of achievement through such a management body by adopting a common policy on resource utilization and management.

The structuring of such a tuna research or management body beyond the necessity to have all interested parties involved would depend on the role of such a body. The need for greatly increased tuna research in the region, coupled

with the necessity for this research to be carried out on a regional basis, underlines the need for such a body to have its own research capabilities. It would also be the obvious body to co-ordinate the compilation of tuna catch statistics by both coastal and foreign fleets, this research and catch information being made freely available to all participating parties. It can also be assumed that such a body would be responsible for the formulation of conservation and management proposals based on the most up-to-date scientific data.

The functions of a regional fisheries body can therefore be summarized as follows

- (1) The collection and compilation of catch statistics from all areas of occurrence of the common resources.
- (2) The collation of all available biological data on all such resources.
- (3) Scientific research in selected fields, particularly to facilitate stock assessment and the study of resource dynamics.
- (4) Development of management proposals where management is indicated.
- (5) Formulation of conservation measures where necessary.
- (6) Consideration of socio-economic implications of all management measures.
- (7) Evaluation of fishery development prospects throughout the region of responsibility.
- (8) Evaluation of possible regional licensing policies.
- (9) Consideration of optimizing regional surveillance coverage when necessary.

The degree to which each of the above points would be covered and the priority which each would be assigned would be determined by the requirements of the member countries.

While it is comparatively easy to describe ways in which a regional fisheries body could be of invaluable assistance to the region as a whole, it must be noted that the chances of success of any such body will be severely restricted if adequate financing cannot be obtained. As it is extremely unlikely that the necessary finances will be available from within the major area of concern, alternative sources of such finances must be considered. Similar fisheries bodies normally derive their funds from the countries involved in harvesting the resources concerned and similar funding might well be obtained in this region. Assistance could be sought from numerous international aid agencies in addition to the metropolitan countries with interests in the region. One possibility which must be considered is the prospect of obtaining at least part of the finances required from the regional licensing of foreign fleets.

Table 1. Catches of all tuna and tuna like fishes as declared to FAO in selected statistical areas (from FAO Yearbook of Fishery Statistics 1975)

Statistical Area	1970	1971	1972	1973	1974
61	334600	296400	353100	426900	326705
71	154300	197100	199100	273900	345357
81	59200	70400	82100	81700	141453
TOTAL (61+71+81)	548100	563900	634300	782500	813515
WORLD TOTAL	1499600	1620300	1753600	1851100	1875334

Table 2. Catches of skipjack as declared to FAO in selected statistical areas from 1970 - 1974 (from FAO Yearbook of Fishery Statistics, 1975)

Statistical Area	1970	1971	1972	1973	1974
61	166200 F	119800 F	157100 F	202600 F	128829 F
71	57900 F	102400 F	100300 F	174600 F	215903
81	00	200	500	1700	51957
TOTAL (61+71+81)	224100	222400	257900	378900	396689
WORLD TOTAL	371200 F	408200 F	403900 F	519000 F	587651 F

Note: Figures on Tables 1-4 are in metric tonnes.

Table 3. Estimated total catches of all tuna species (excluding billfish and tuna-like species) in selected statistical areas (Figures modified from W.L. Klawe, Inter-American Tropical Tuna Commission, 1976, Personal Communication).

STATISTICAL AREA	61	71	77	81
SPECIES				
Frigate Tuna <i>Auxis</i> spp.	27,726	20,067	-	-
Mackerel Tuna <i>Euthynnus</i> spp.	13,383	24,150	3,736	-
Skipjack <i>Katsuwonus pelamis</i>	129,227	231,825	89,953	52,616
Albacore <i>Thunnus alalunga</i>	64,247	12,449	9,312	37,949
Yellowfin Tuna <i>Thunnus albacares</i>	28,923	56,603	218,939	16,632
Southern Bluefin Tuna <i>Thunnus macoyii</i>	-	-	-	13,866
Bigeye Tuna <i>Thunnus obesus</i>	7,522	21,513	36,690	15,518
Bluefin Tuna <i>Thunnus thynnus</i>	10,255	96	5,670	-
Longtail Tuna <i>Thunnus tonggol</i>	-	13,800	-	-
Other Miscellaneous Species	1,200	31,980	-	-
TOTAL	293,283	412,483	364,300	136,581

Table 4. Nominal total fish and tuna catches in 1974 by the countries in the South Pacific Commission (from FAO Yearbook of Fishery Statistics, 1975).

Country or Territory	Total Fish Catch (MT)	Skipjack Catch (MT)
American Samoa	82	10*
Cook Islands	1000 F	50*
Fiji	4261	100*
French Polynesia	2386	1000*
Gilbert and Ellice Islands***	300 F	50*
Guam	92	10*
Nauru	-	-
New Caledonia	868	30*
New Hebrides	(8000 F)**	(8000 F)**
Niue	-	-
Norfolk Island	-	-
Papua New Guinea	52708	40350
Pitcairn	-	-
Solomon Islands	11585	10000
Tokelau	-	-
Tonga	726	30*
TTPI	3360	3206
Wallis and Futuna	-	-
Western Samoa	900	40*
TOTAL BY SPC COUNTRIES	78268	54876
TOTAL BY FOREIGN FLEETS	UNKNOWN	145000*

* No figures available so rough estimate given.

** Almost all tuna caught by foreign long-line vessels. Omitted from totals.

*** These figures were compiled by FAO before the emergence of Tuvalu.

Table 5. The value of imports of fish and fish preparations into some countries of the South Pacific Commission area.
 (The year for which individual figures are presented is given in parenthesis). Modified from the South Pacific Commission
 Statistical Bulletin No.8.

American Samoa	Cook Islands	Fiji	Gilbert and Ellice Islands	Guam	New Hebrides	Niue	Norfolk Island	New Caledonia	Papua New Guinea	French Polynesia	Solomon Islands	Tonga	Western Samoa
\$US	\$NZ	\$F	\$A	\$US	FNH	\$NZ	-	CFP	K	CFP	SA	ST	SWS
731,000 (1972)	51,000 (1973)	7,761,000 (1974)	71,000 (1973)	1,468,000 (1972)	110,800,000 (1973)	56,000 (1974)	-	186,300,000 (1973)	10,055,000 (1974)	240,100,000 (1974)	165,000 (1973)	95,000 (1972)	559,000 (1973)

Fig. 1 The area of the South Pacific Commission

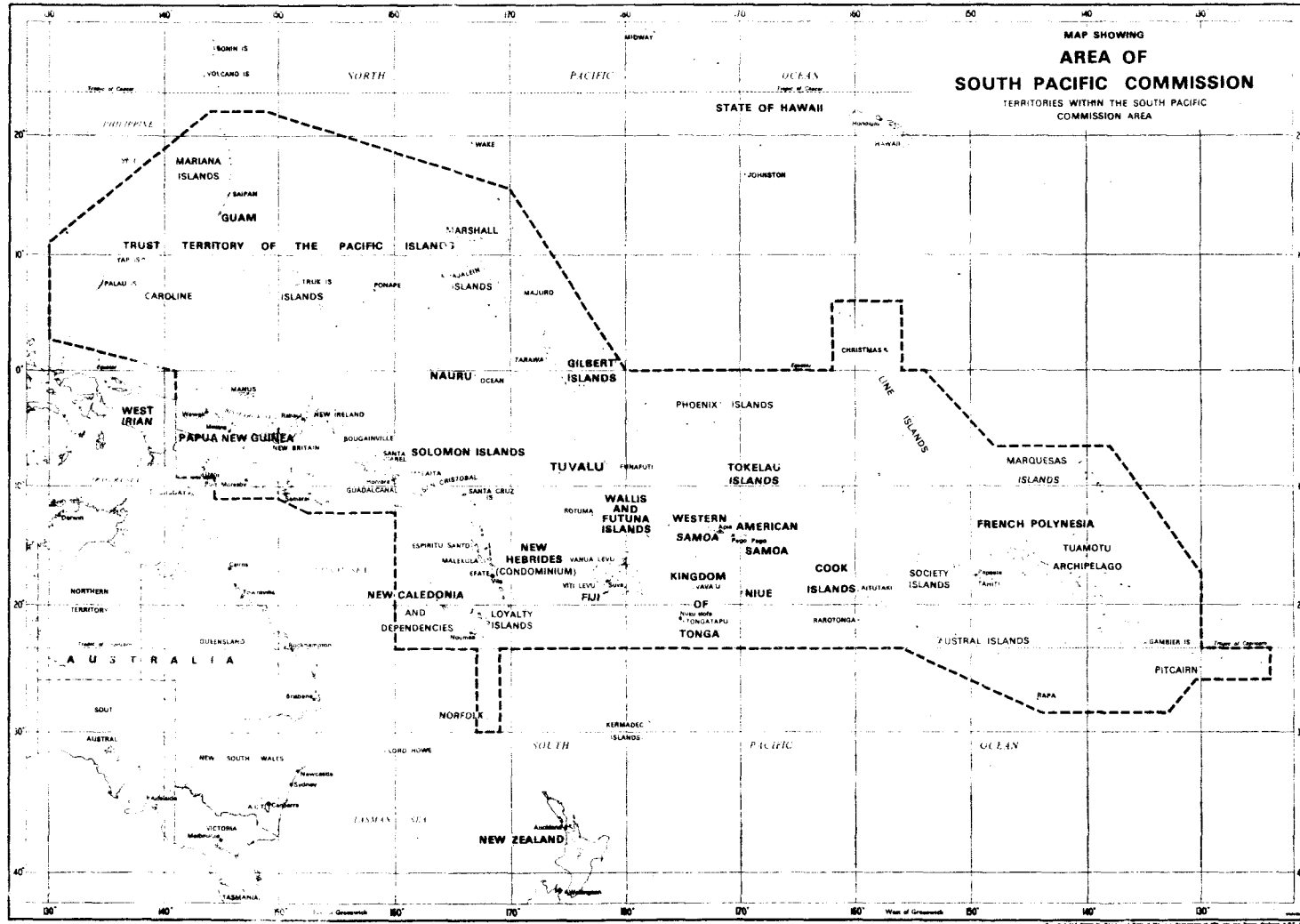


Fig. 2 The demarcation of FAO statistical areas in the Pacific Ocean

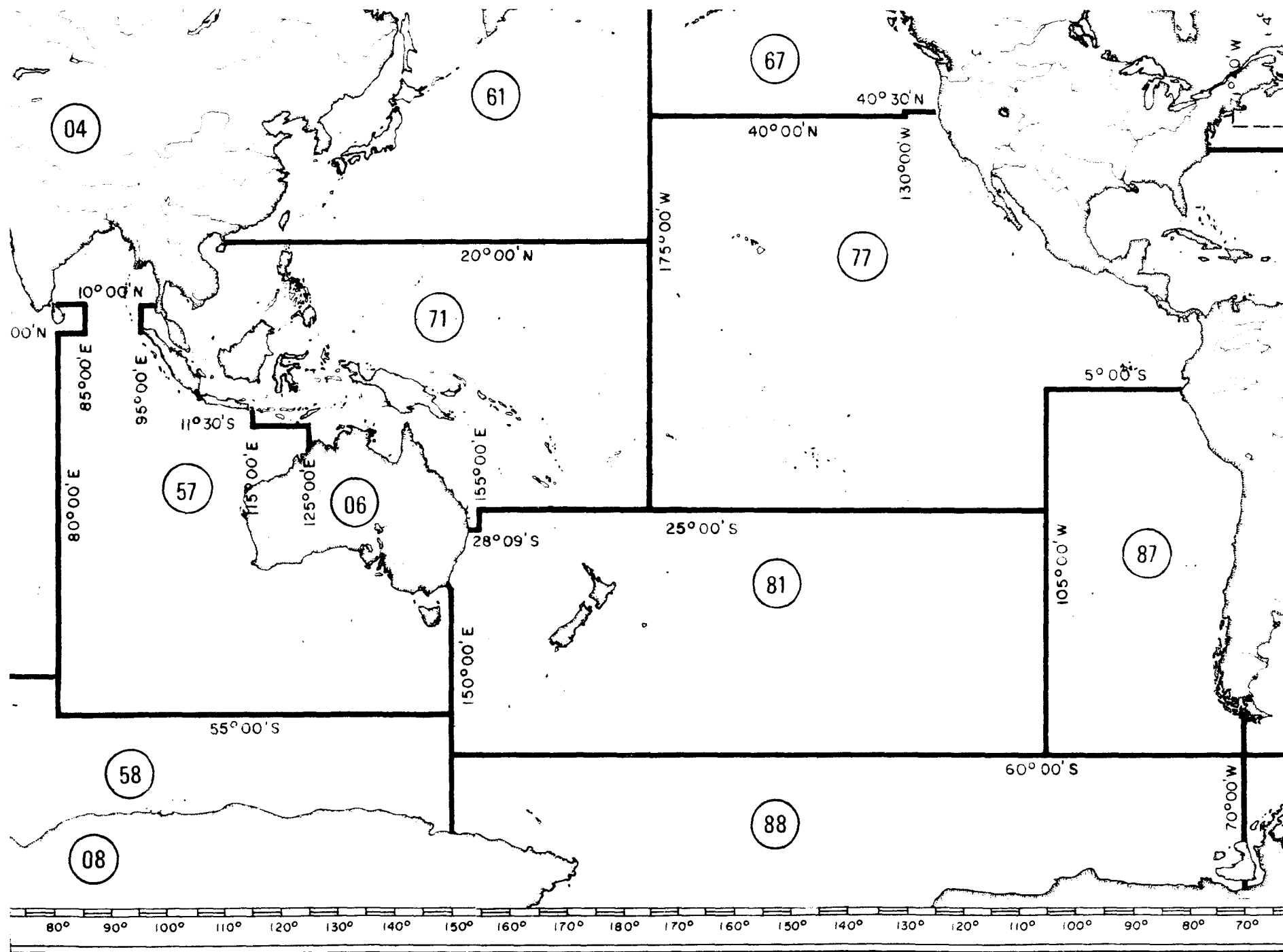


Fig. 3 Approximation of world areas of 200 mile extended jurisdiction

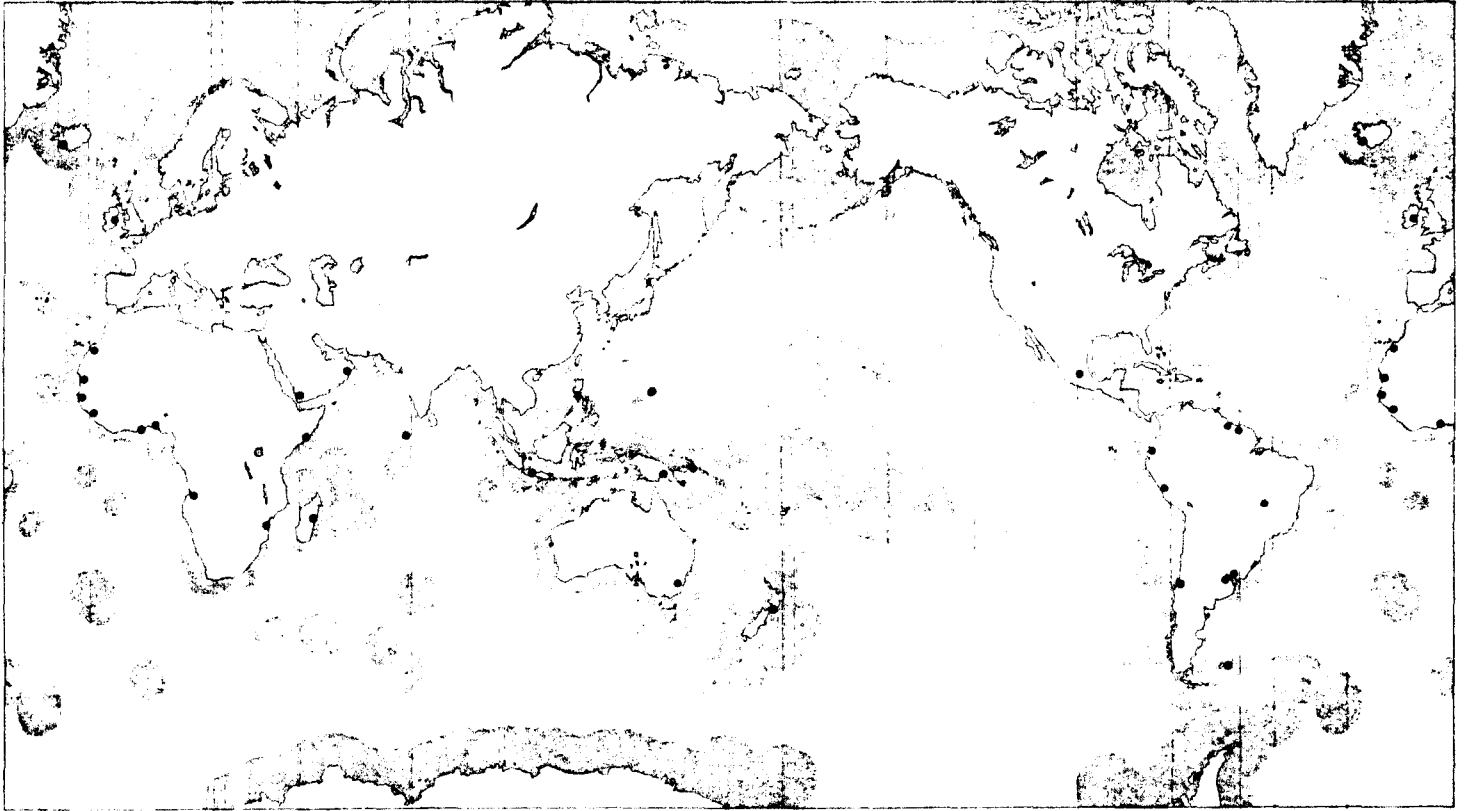


Fig. 4 The distribution of skipjack catches by the Japanese distant-water fleet in March 1974 (from Tohoku Regional Fisheries Research Laboratory).

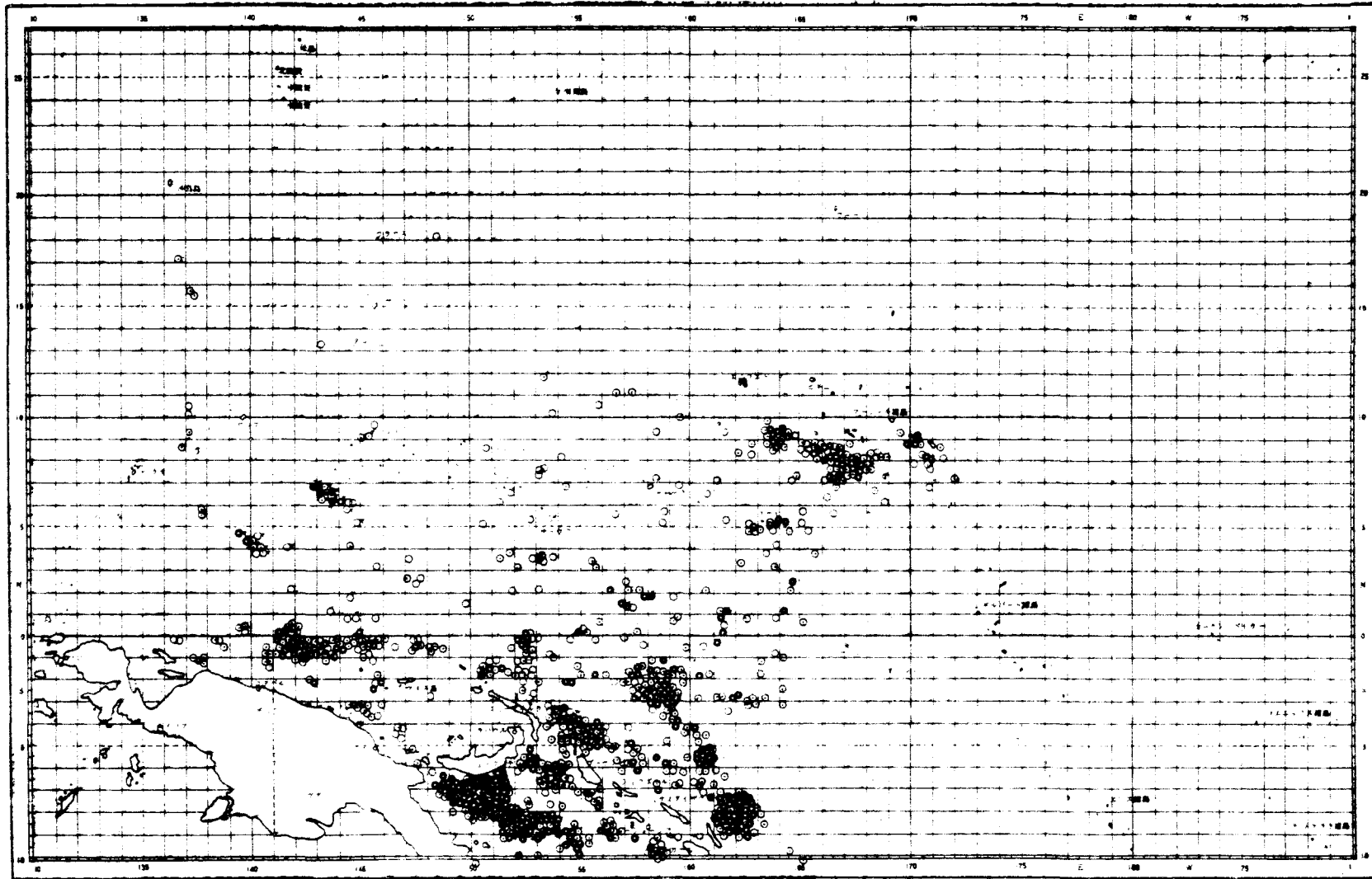


Fig. 5 The distribution of skipjack catches by the Japanese distant-water fleet in March 1975 (from Tohoku Regional Fisheries Research Laboratory).

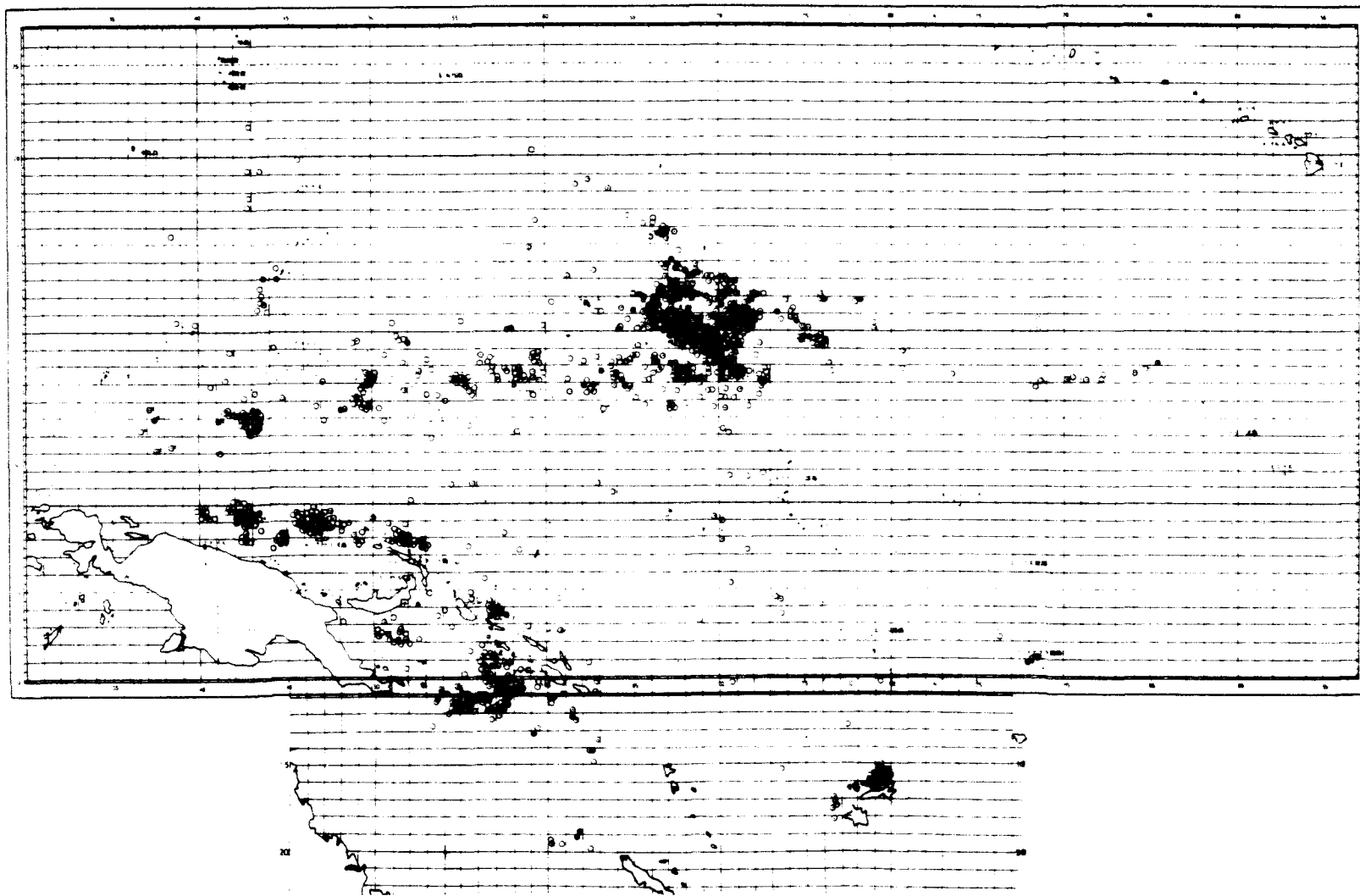


Fig. 6 The distribution of skipjack catches by the Japanese distant-water fleet in March 1976 (from Tohoku Regional Fisheries Research Laboratory).

