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Pre-war Japanese Fisheries in Micronesia —Focusing on Bonito and Tuna Fishing in the Northern Mariana Islands—

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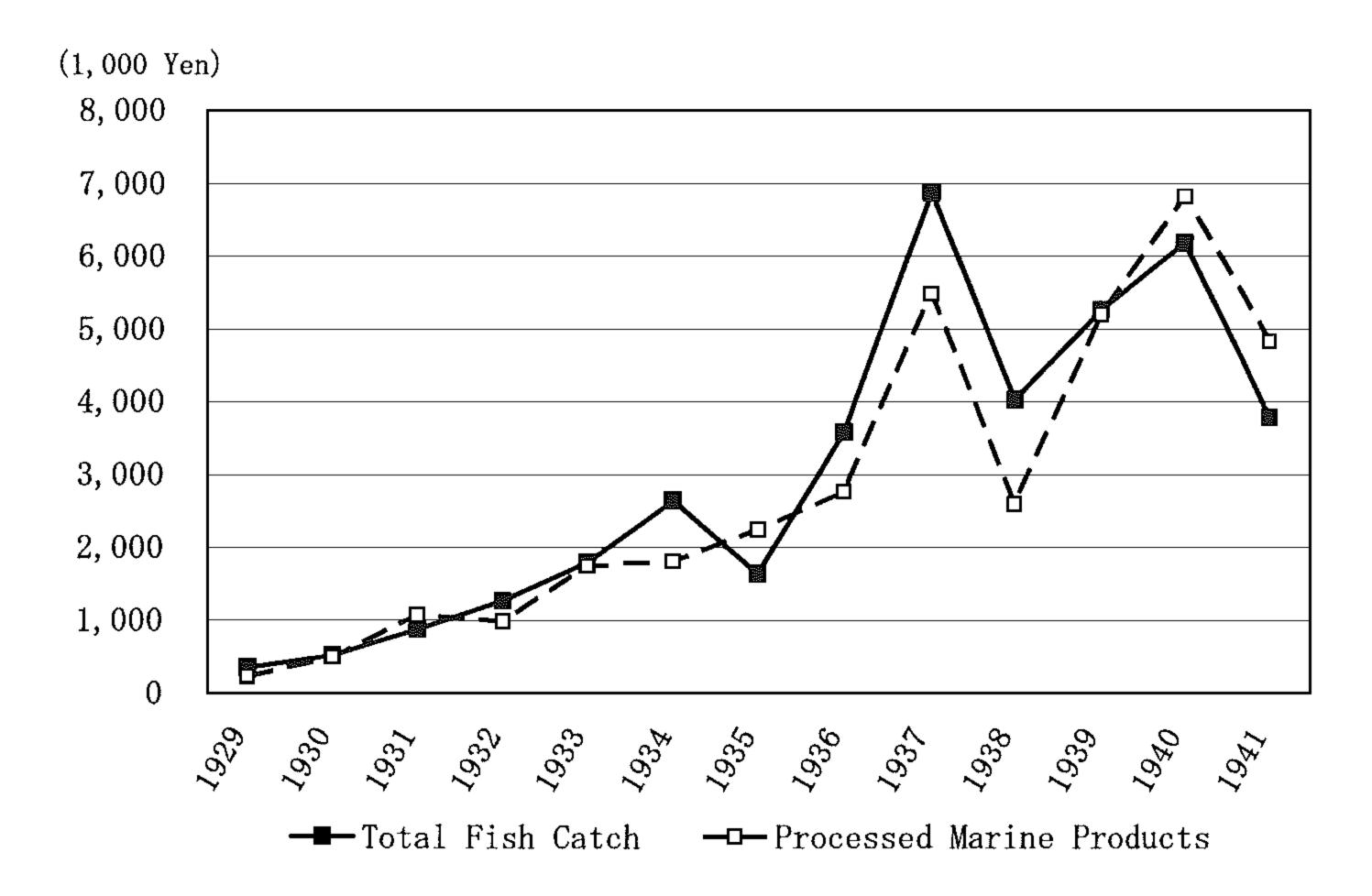
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Key Word: Micronesia, South Sea Islands, South Seas Bureau, Saipan District Branch, fishery, Northern Mariana Islands

I. Introduction

As a participant in World War I, Japan took control of the German colonies in Micronesia in 1914, and called them the South Sea Islands — comprising Saipan, Palau, Yap, Chuuk (formerly Truk), Pohnpei (formerly Ponape) and the Marshalls. The Japanese Navy administered the islands until 1922. Later, the civilian-run South Seas Bureau governed the islands as a League of Nations mandate. By the mid-1930s, the navy again became politically and militarily involved in the administration of the islands. As seen in Graph 1 below, the fishing industry in Micronesia increased rapidly throughout the 1930s, becoming one of the major economic achievements in the islands during Japanese rule, along with the sugarcane, copra, and phosphate industries. The main marine product was bonito caught by pole-and-line. This report will review records of the bonito and tuna fisheries in the South Sea Islands during the South Seas Bureau administration. The review is divided into three periods: 1922 -1931, 1931-1941, 1941-1942. The period 1922-1931 can be termed the Experimentation Period. The next period, 1931-1941, saw the rise of fishery industries in the South Sea Islands. The last period covers fisheries during the early Pacific War, 1941-1942. There are no South Seas Bureau fishery statistics available between 1943 and 1944. Fishing efforts in the Saipan district will be examined separately, since the other areas within the South Sea Islands are not

pertinent to the present project. Japanese references compiled prior to 1951 do not specify each kind of bonito and tuna caught. They simply identify fish as either bonito (katsuwo) or tuna (maguro). According to Okamoto Hiroaki, National Research Institute of Far Seas Fisheries, Japan, when "bonito" pole and line fishery is discussed in Japanese references, the species taken included mainly Katsuwonus pelamis (skipjack, or katsuwo), also Auxis thazard (hirasôda) and Auxis rochei (frigate mackerel, or marusôda); and probably Euthynuus affins (suma) and Sarda orientalis (bonito, or hagatsuwo). Japanese fishing grounds until then were limited to the western and central Pacific north of the equator. In the same way, the term, "tuna" includes the following species: Thunnus thynnus (Pacific bluefin tuna), T. alalunga (albacore), T. obesus (bigeye tuna), and T. albacares (yellowfin tuna)



Graph 1 Japanese Fishery in the South Sea Islands: Value per Year, 1929-1941 Source: Nan'yôchô, *Daisankai, Nan'yôchô tôkei nenkan* (Tokyo: Nan'yôchô, 1935), p. 124-126; and Nan'yôchô, *Nan'yô Guntô yôran*, 1929-1942.

II. Fisheries during the Experimentation Period (1922-1931)

With two fishery regulations — the Regulations for the Fishery Industry in the South Sea Islands (1916), and the Regulations for Encouragement of Fishery Industry in the South Sea Islands (1922), the South Seas Bureau's policy was always to promote and support fisheries in the islands. In 1925, the South Seas Bureau launched the

research ship Hakuômaru (10 tons), and began ocean research on bonito pole-and-line fisheries. Catches were poor in spite of the observation of large schools of fish. Though attempts at encouraging fisheries were made, they failed for a variety of reasons. The most serious problems throughout the pre-war years were difficulties in handling and marketing the fish — preservation, lack of local markets in the islands, a small Japanese population in the islands, and inadequate transportation to Japan.

Bonito Fishing in the South Sea Islands: It appears that the bonito fishery in the South Sea Islands first began in the 1920s. An individual by the name of Uehara Kamezô hired five Okinawan fishermen and an Okinawan-style large canoe on Saipan. In late 1925, he took akadoro (the general term for Apogonidae, Amia, Apogon, and Chilodipterus), small baitfish on the reef at Palau. They caught bonito — 50 to 100 bonito per day — two to three miles distant from the eastern channel and off the lighthouse at Palau.² Similarly, Taiyô Suisan Kabushiki Kaisha (Taiyô Marine Products Company) on Saipan hired Okinawan fishermen and caught bonito, also in the Palau area. However, because of lack of bait and the strong trade winds, the catch was poor. Taiyô Suisan also took bonito using the South Seas Bureau's *Hakuômaru* for two years, but the poor catches resulted in the dissolution of the company. In Chuuk, Okinawan fisherman, Tamashiro Eishô, began a bonito fishery around 1918. Fishermen from Shizuoka also engaged in fishing. While other fishermen from Shizuoka failed, Tamashiro succeeded. The reason for Tamashiro's success was that his Okinawan employees were skillful at catching the bait needed for a good haul in the South Seas. Two things were required for successful fishing: quantity and quality of bait, and skilled Okinawan fishermen.³ Bonito fishing was totally dependent on the right kind of bait. In Palau, there was abundant baitfish — kibinago (Stolephorus delicatulus [Bennett]), and especially nan'yo katakuchi iwashi (Engraulis heterolobus [Rueppel]). Although the latter was the best bait for bonito pole-and-line fishing, these small fish could not be caught in waters around Saipan. Instead, akamura (Caessio chrysozoma [Kuhl & Hass], maaji (Trachinrus japonicus [Temm. & Schl.]), meaji (Trachurops crumenophthalma [Bloch.]), shimaaji (Caranx malabalicus [Cuv. & Val.]), and another kind of horse mackerel (*C. leptolepis* [Cuv. & Val].) were used on For catching bait, Okinawan divers were necessary. In the 1920s, bonito fisheries were gradually centered around the waters of Palau, and Saipan. Okinawan fishermen, mainly from Itoman, Okinawa, were recruited to work in the South Sea

Islands. Out of a total of 1,336 workers engaged in the fisheries industry in 1932, 405 worked out of the Saipan district (30%), 425 in the Palau district (32%), 234 in the Chuuk district (18%), 178 in the Pohnpei district (13%), 83 in the Yap district (6.2%), and 11 in the Juluit district (0.8%).6 Table 1 below shows the number of fishing permits issued by the South Seas Bureau. The permits for bonito fishing slowly increased in the Saipan district from the 1920s on, but the number of permits was still fewer than 8 by 1931. Table 2 below shows that there were 23 permitted vessels in the Saipan district, with 167 fishermen as of 1930. According to Table 3, the total value of the Saipan fish catch increased from 19,627 yen in 1929 to 70,296 yen in 1930, owing to the employment of four vessels of 20 tons and more. Also, as seen in Table 3, the bonito catch in Saipan district increased from 24,690 kg in 1929 to 258,004 kg in 1930, an increase of more than 10 times. Because of the increase of motorized vessels on Saipan, bonito catches rapidly increased to 564,258 kg by 1931, 23 times more than in 1929. These increases were catches by vessels from Yaizu, Japan, which organized as Nan'yô Suisan Kigyô Kumiai (South Seas Fishery Companies' Association, later Nankô Suisan) in 1931. In 1925, bonito catches made up 14% of the total fish catch in the South Sea Islands (33% in the Saipan district). This increased to 55% in 1929, 78% in 1930 and 73% in 1931 (53%, 87%, and 90% in the Saipan district respectively). As a result, bonito fishing became a major industry on Saipan, as well as in other parts of the South Sea Islands. And owing to the increase of bonito fish catches, dried bonito production also increased accordingly, as seen in Table 4.

Tuna Fishing: The South Seas Bureau Marine Laboratory reported in 1938 that the density of tuna schools in the South Sea Islands was the same as for bonito. However, processing of tuna after catch was more difficult than bonito because tuna needed icing to keep it fresh. Further development of the tuna fisheries had to wait for construction of necessary refrigeration, ice storage, and processing facilities. As mentioned above, island conditions — such as distance from Japan's markets, and limited local consumption in the South Sea Islands — were also a detriment to growth of the tuna fishery. There were only three longliners for tuna fisheries, and these were only at Palau as late as 1935. Table 3 shows increasing tuna catches starting in 1930. Nan'yô Suisan's pole-and-line vessels probably took these tuna. During the Experimentation Period, Japanese bonito fisheries focused on the seas of Palau, Chuuk, and Saipan districts. Fishing grounds located near the outer islands and far

Table 1 Fishing Permits Issued by the South Seas Bureau (S: Saipan District = Saipan, Tinian, and Rota)

	Total	Fixed Net	Raising	Hawks- bill	Tectus maximus , Pearl Oyster	Bonito	Other Fish	Trepang	Coral	Whaling
1922	38 S: 9		2	1	3	1 S: 1	21 S: 7	9 S:	1 S: 1	
1923	43 S: 10	1	2	1	3	2 S: 1	23 S: 7	10 S: 1	1 S: 1	
1924	55 S: 15	1	2	1	3	3 S: 2	31 S: 10	13 S: 2	1 S: 1	
1925	90 S: 31	2	2	5	6	4 S: 3	50 S: 24	19 S: 2	1 S: 1	l S: 1
1926	86 S: 18		2	10	8	11 S: 6	35 S: 9	18 S: 1	1 S: 1	1 S: 1
1927	94 S: 21	1	2	9	7	12 S: 6	44 S: 11	17 S: 2	1 S: 1	1 S: 1
1928	94 S: 21	2	2	8	7	12 S: 5	48 S: 14	13 S:	1 S: 1	1 S: 1
1929	94 S: 23	2	2	6	6	17 S: 6	46 S: 15	13 S:	1 S: 1	i S: 1
1930	87 S: 16	2	2	5	4	24 S: 8	37 S: 7	13 S: 1	 S:	 S:
1931	74 S: 9	i	2	4	I	36 S: 7	21 S: 1	9 S: 1	 S:	 S:
1932	103 S: 22	1	2	3	4	37 S: 10	47 S: 11	9 S: 1	 S:	 S:
1933	124 S: 47	1 S:	1 S:	5 S:	2 S:	51 S: 16	56 S: 30	8 S: 1	 S:	 S:

Source: Statistics 1922-1932: Nan'yôchô, *Dainikai, Nan'yôchô tôkei nenkan* (Palau: Nan'yôchô, 1934), pp. 348; and Statistics 1933: Nan'yôchô, *Daisankai, Nan'yôchô tôkei nenkan* (Palau: Nan'yôchô, 1935), pp. 126

Table 2 Fishing Vessels and Fish Catch in the South Sea Islands (S: Saipan District = Saipan, Tinian, and Rota)

]	Fishing Vess	els					
			Non-Moto	rized Vessels			M		1	Total Fish Catch		
Total Fis	hing Vessels						Steam	Engine	Mo	otor	Crew	(yen)*
		Total	<5 tons	5-20 tons	>20 tons	Total	<20 tons	>20 tons	<20 tons	>20 tons		
1928	1044	1031	1031			13			13		1781	247933
	S: 35	S: 32	S: 32	S:	S;	S: 3	S:	S:	S: 3	S:	S: 102	S: 24,490
1929	846	825	825			21			21		1665	305849
	S: 34	S: 32	S: 32	S:	S:	S: 2	S:	S:	S: 2	S:	S: 105	S: 19,627
1930	1007	979	975		4	28			23	5	1861	488487
	S: 23	S: 19	S: 15	S:	S: 4	S: 4	S:	S;	S:	S: 4	S: 167	S: 70,296
1931	1041	980	980			61			57	4	2599	850490
	S: 40	S: 22	S: 22	S:	S:	S: 18	S:	S:	S: 18	S:	S: 324	S: 141,013
1932	1116	1053	1053			63			62	1	2933	1252121
	S: 92	S: 75	S: 75	S:	S:	S: 17	S:	S:	S: 17	S:	S: 498	S: 374,564
1933	376	314	314			62			62		1882	1790322
	S: 90	S: 73	S: 73	S:	S:	S: 17	S:	S:	S: 17	S:	S: 492	S: 406,964

Source: 1928-1932 Statistics: Nan'yôchô, *Dainikai, Nan'yôchô tôkei nenkan* (Palau: Nan'yôchô, 1934), p. 349; and 1933 Statistics: Nan'yôchô, *Daisankai, Nan'yôchô tôkei nenkan* (Palau: Nan'yôchô, 1935), p. 126

^{*} Some of these statistics are not consistent with the grand total in Table 3.

Table 3 Fish Catch in the South Sea Islands: Quantity and Value (S: Saipan District = Saipan, Tinian, and Rota)

	Grand Total	Total Fish Catch	Bonito	Tuna	Mackerel	Horse Mackerel	Spanish Mackerel	Grey Mullet	Shark	Other Fish	Shellfish Others
		360,653 kg	9,713 kg	6,075 kg	13,399 kg	31,875 kg		10,500 kg		289,091 kg	
1922	113,596 yen	90,062 yen	6,770 yen	3,730 yen	3,573 yen	11,018 yen	 	4,200 yen		60,771 yen	23,534 yen
		S: 8,741 kg	S: 2,363 kg	S: 1,312 kg	8: ···	S: 1,275 kg	S:	s: ···	g:	S: 3,791 kg	
	S: 4,961 yen	S: 4,961 yen	S: 1,890 yen	8: 875 yen	g:	S: 680 yen	s:	g:	8:	S: 1,506 yen	8:
		304,740 kg	7,305 kg	6,652 kg	7,110 kg	19,695 kg	49 kg	6,473 kg	2,471 kg	254,985 kg	
1000	175,609 yen	78,525 yen	5,068 yen	3,673 yen	4,121 yen	8,364 yen	34 yen	2,627 yen	566 yen	54,072 yen	97,084 yen
1923		S: 19,680 kg	S: 2,813 kg	S: 1,252 kg	8: 19 kg	8: 1,856 kg	S: 49 kg	8: 285 kg	S: 97 kg	8: 13,309 kg	
	S: 10,202 yen	8: 9,677 yen	S: 2,250 yen	S: 888 yen	8: 14 yen	8: 990 yen	8: 34 yen	8: 152 yen	8: 26 yen	8: 5,323 yen	S: 525 yen
		252,593 kg	17,741 kg	11,951 kg	11.944 kg	22,087 kg	668 kg	4,613 kg	6,356 kg	177,233 kg	
1924	115,178 yen	82,173 yen	11,580 yen	5,971 yen	9,545 yen	13,523 yen	363 yen	1,632 yen	1,969 yen	37,590 yen	33,005 yen
1924		S: 19,261 kg	S: 9,097 kg	S: 1,534 kg	S: 45 kg	S: 570 kg	S: 349 kg	S: 19 kg	S: 1,519 kg	S: 6,128 kg	
	S: 15,192 yen	S: 10,447 yen	8: 6,065 yen	S: 1,024 yen	S: 30 yen	S: 304 yen	S: 233 yen	S: 15 yen	8: 324 yen	S: 2,452 yen	8: 4,745 ye:
		251,445 kg	36,319 kg	12,229 kg	$7,725~\mathrm{kg}$	27,697 kg	1,642 kg	2,606 kg	5,269 kg	157,958 kg	
1005	204,452 yen	93,453 yen	17,520 yen	4,657 yen	5,760 yen	17,462 yen	563 yen	1,187 yen	1,949 yen	44,455 yen	110,999 yen
1925		S: 43,061 kg	S: 14,805 kg	8: 1,403 kg	8: 787 kg	S: 2,610 kg	S: 386 kg	8: 127 kg	8: 1,024 kg	8: 21,919 kg	<u> </u>
	S: 18,740 yen	8: 16,181 yen	S: 6,348 yen	S: 749 yen	8: 210 yen	8: 1,392 yen	8: 228 yen	8: 46 yen	S: 273 yen	8: 6,985 yen	S: 2,559 ye
		399,349 kg	92,284 kg	55,534 kg	31,043 kg	24,637 kg	1,425 kg	9,225 kg	3,941 kg	181,260 kg	
	254,372 yen	142,884 yen	42,282 yen	22,423 yen	15,813 yen	9,056 yen	406 yen	3,479 yen	653 yen	48,772 yen	 111,488 yen
1 9 26		8: 75,813 kg	S: 44,842 kg	S: 2,314 kg	S: 690 kg	8: 1,481 kg	S: 94 kg	S: 150 kg	S: 2,847 kg	S: 23,895 kg	
	S: 27,817 yen	8: 27,022 yen	S: 17,937 yen	ĺ	8: 369 yen	S: 665 yen	S: 51 yen	S: 80 yen	S: 313 yen	S: 6,372 yen	8: 795 yen
		380,467 kg		54,266 kg	4,586 kg	61,601 kg	581 kg	16,796 kg	2,419 kg	187,264 kg	
	232,725 yen	136,378 yen	- 1	24,327 yen	1,834 yen	25,224 yen		6,410 yen		54,200 yen	96,347 yen
1927	1 1	S: 51,416 kg	•		g:	S: 1,560 kg	g:	8:	S: 1,800 kg	8: 17,040 kg	
	S: 19,417 yen	·	_		g:	8: 599 yen	s:	S:	S: 315 yen	l •	S: 1,154 ye
•	 	583,995 kg		164,182 kg	4,380 kg	40,192 kg	2,449 kg	13,264 kg	12,900 kg	182,914 kg	
	<u> </u>	166,045 yen		38,629 yen	1,805 yen	16,223 yen	845 yen	4,990 yen	1,006 yen	•	111,888 yen
1928	j l	S: 57,855 kg			g:		S: 615 kg		S: 1,031 kg	8: 25,418 kg	,
	S: 24,490 yen		_		g:	· · · · · · · · · · · · · · · · · · ·	S: 245 yen	8:	Ī .	· · ·	S: 3,462 ye
	 	850,129 kg		172,001 kg	9,784 kg	29,599 kg	926 kg	34,005 kg	2,186 kg	132,117 kg	,,
	1	215,432 yen		31,825 yen	3,910 yen	11,396 yen	·	5,409 yen	337 yen	35,377 yen	127,227 yen
1929		S: 46,416 kg			8;	S: 2,100 kg			S: 1,612 kg	S: 17,010 kg	,,
	S: 19,627 yen	_		_		[-	_	-		8: 5,443 yen	8: 2.795 va
	D- 10,021 Jen	**************************************		····	2,993 kg	32,554 kg	1,796 kg		5,445 kg	181,189 kg	D. 2,700 yo.
	510,767 yen	-	327,861 yen	_	714 yen		243 yen				97,638 yen
1980		•	S: 258,004 kg	•	8:				S: 4,871 kg	8: 80,210 kg	0,,000,011
	S: 70,296 yen			· •	8: ····						S: 1,866 ye:
	 				888 kg		5,230 kg		24,010 kg	469,542 kg	D. 1,000 Jo.
	! 1		1. Va. 44		189 yen						83,602 yen
1981			8: 564,258 kg	•	,			,	_	S: 42,315 kg	00,002 ; 611
	S: 141,013 yen		_		g:	_	~ ·			S: 10,879 yen	S: 1 FAF va
<u>. :.,,,</u>	 	***************************************	4,861,263 kg		341 kg	180,849 kg			<u>, , , , , , , , , , , , , , , , , , , </u>	330,809 kg	5. 1,000 Je
	1 ·				_	-		_	, -		95 179 von
1932	l	1,181,693 yen		50,801 yen	137 yen				626 yen		85,173 yen
: .	1		8: 1,809,725 kg	i	İ '					S: 125,182 kg	
	8: 374,564 yen				· · · · · · · · · · · · · · · · · · ·	8: 14,795 yen	· · · · · · · · · · · · · · · · · · ·		 	8: 22,649 yen	D. 2,048 ye
	1	_	6,889,401 kg	· -	4,154 kg		2,118 kg		,	360,543 kg	01.400
1988	· ·		1,512,631 yen	. •	788 yen			•	253 yen		81,436 yen
	i I		8: 1,762,800 kg					_	S: 1,704 kg	S: 122,186 kg	_
	8: 406,964 yen	S: 405,715 yen	8: 370,184 yen	8: 2,908 yen	g:	S: 2,704 yen	8:	8: 50 yez	8: 253 yen	S: 29,616 yen	B: 1,249 ye r

Source: 1922-1932 Statistics: Nan'yôchô, *Dainikai, Nan'yôchô tôkei nenkan* (Palau: Nan'yôchô, 1934), pp. 350-353; and 1933 Statistics: Nan'yôchô, *Daisankai, Nan'yôchô tôkei nenkan* (Palau: Nan'yôchô, 1935), pp. 124-125.

seas had been untouched. The South Seas Bureau wrote in 1935 that there was plenty of scope for the fishing industry in the South Sea Islands, if fishing methods were improved and fishing grounds expanded. However, it also added, "excluding of areas of poor condition such as Saipan."8 For increasing the catch of fish in the islands and because Saipan appeared more developed with many Okinawan immigrants, bonito fishery in the

Saipan district water was necessary and important. However, in the long term Saipan was not expected to yield as much fish as other islands along the equator would likely do.

Table 4 Marine Products in the South Sea Islands: Quantity and Value (S: Saipan District = Saipan, Tinian, and Rota)

	Total	Dried Bonitos	Dried Tuna	Trepang	Shark Fin	Canned Tun
		120 kg		21,011 kg	* * -	***
1922	19,957 yen	160yen		19,797 yen		
		S:	S:	S:	S:	S:
				23,149 kg		
1923	20,353 yen			20,353 yen		
		S:	S:	S: 1,200 kg	S:	s:
	S: 760 yen			S: 760 yen	s:	S:
		1,095 kg	1,030 kg	57,859 kg	364 kg	
1924	38,480 yen	3,404 yen	3,744 yen	30,969 yen	363 yen	
1924		S: 855 kg	S:	S: 35,460 kg	S: 364 kg	S:
	S: 19,290 yen	S: 2,508 yen	S:	S: 16,419 yen	S: 363 yen	S:
	T	1,560 kg	1,061 kg	25,196 kg	75 kg	30 kg
1925	18,997 yen	4,116 yen	2,264 yen	12,072 yen	150 yen	15 yen
		S: 484 kg	s:	S: 2,966 kg	S: 75 kg	S:
	S: 4,240 yen	S: 1,292 yen	S:	S: 2,798 yen	S: 150 yen	S:
		9,543 kg	16,054 kg	14,861 kg	188 kg	
	77,414 yen	28,540 yen	38,541 yen	9,958 yen	375 yen	
1926		S: 3,293 kg	S: 19 kg	g:	S: 188 kg	s:
	S: 9,205 yen	S: 8,780 yen	S: 50 yen	s:	S: 375 yen	g:
		4,751 kg	6,169 kg	9,326 kg	128 kg	
	40,940 yen	12,445 yen	13,160 yen	11,437 yen	190 yen	
1927		S: 1,976 kg	S:	S: 1,965 kg	S: 128 kg	s:
	S: 7,058 yen	S: 5,270 yen	S:	S: 1,598 yen	S: 190 yen	g:
		18,893 kg	28,219 kg	35,520 kg	289 kg	
1000	111,424 yen	37,805 yen	45,160 yen	27,453 yen	415 yen	***
1928		S: 2,235 kg	S:	S: 18,210 kg	S: 75 kg	S:
	S: 19,808 yen	S: 5,960 yen	g:	S: 13,688 yen	S: 160 yen	s:
		104,310 kg	33,735 kg	48,480 kg	203 kg	
1000	220,209 yen	138,122 yen	48,629 yen	27,399 yen	190 yen	
1929		S: 2,580 kg	S:	S: 9,885 kg	S: 203 kg	S:
	S: 12,348 yen	S: 6,885 yen	s:	S: 5,273 yen	S: 190 yen	S:
······································		232,825 kg	22,954 kg	31,271 kg	668 kg	
4000	484,547 yen	434,743 yen	28,815 yen	16,928 yen	530 yen	
1930		S: 13,654 kg	S: 113 kg	S: 1,140 kg	S: 668 kg	S:
	S: 23,730 yen	S: 21,425 yen	S: 255 yen	S: 1,520 yen	S: 530 yen	s:
		842,210 kg	42,665 kg	14,213 kg	794 kg	**
1001	1,064,341 yen	997,840 yen	44,388 yen	6,829 yen	541 yen	
1931		S: 68,044 kg	S: 755 kg	S: 2,760 kg	S: 386 kg	ß:
	S: 97,466 yen	S 94,236 yen	S: 855 yen	S: 2,106 yen	S: 269 yen	S:
		972,875 kg	73,746 kg	3,412 kg	206 kg	
4000	981,634 yen	917,989 yen	55,985 yen	2,266 yen	138 yen	
1932		S: 192,172 kg	S: 3,152 kg	S: 1,087 kg	S: 206 kg	g:
	S: 214,213 yen	S: 210,072yen	S: 3,278yen	S: 725 yen	S: 138 yen	s:
		1,305,290 kg	68,626 kg	5,216 kg	60 kg	?
	1,747,595 yen	1,662,066 yen	76,410 yen	2,623 yen	30 yen	6,466 yen
1933	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	S: 297,654 kg	S: 4,100 kg	s:	S: 60 kg	S:
	S: 383,173 yen		S: 3,493 yen	s:	S: 30 yen	S:

Source: 1922-1932 Statistics: Nan'yôchô, *Dainikai, Nan'yôchô tôkei nenkan* (Palau: Nan'yôchô, 1934), pp.354-355; and 1933 Statistics: Nan'yôchô, *Daisankai, Nan'yôchô tôkei nenkan* (Palau: Nan'yôchô, 1935), p. 126.

III. The Rise of Fishing Industries (1931-1941)

As seen in Table 4, the value of marine products in the South Sea Islands rapidly increased after 1930 - 2.2 times, 4.8 times, and 7.9 times in 1930, 1931, and 1933respectively, compared with 1929. The industry that once concentrated on tortoise and other shells changed its focus and half the total catch was a single product — bonito. Hara Kô's bonito fishing efforts had success after his experience in 1927 and 1929 in the South Sea Islands. Hara, from Makurazaki, Kagoshima, showed that bonito fishing in the South Sea Islands could be highly profitable, and his efforts attracted other bonito fishermen from Japan. In 1931 Anbara Ichizô organized Nan'yô Suisan Kigyô Kuniai, a business association for bonito and tuna industries in Yaizu, Shizuoka. Nan'yô Suisan established a fishing base at Malakal, Palau, opened a Saipan office, and began bonito fishing. The company also purchased bonito caught by Okinawan fishermen. Seeking more investment, Anbara asked Nan'yô Kôhatsu President Matsue Haruji for financial support. Originally a sugar growing and processing company, Nan'yô Kôhatsu established a fishery department within the company to support Nan'yô Suisan's fishing activities. In January 1935, Anbara and Matsue established the Nankô Suisan Kabushiki Kaisha or Nankô Marine Production Company, capitalized with 1.2 million yen. The president was Matsue, and the vice President was Anhara, with headquarters at Palau. An office on Saipan was opened as well. Photo 1 shows Nankô Suisan's fishermen doing pole-and-line bonito fishing.



Photo 1 Nankô Suisan, Nankô Suisan Kabushiki Kaisha gaiyô (October 1942), p. 5.

By 1938, there were two more bonito fishery and canning companies —Kimi Suisan at Palau and Hamaichi Shôji at Palau and Chuuk —in addition to Nankô Suisan. Nankô Suisan mainly employed fishermen from Okinawa and Yaizu, and it was the only bonito fishery and processing company on Saipan. By 1942, Nankô Suisan was responsible for 90% of bonito caught in the South Sea Islands.⁹ As to the background of the monopoly, Nankô Suisan's business was strongly supported by the South Seas Bureau, the Overseas Affairs Ministry (an upper body of the South Seas Bureau), and the Japanese Navy, which was responsible for the South Sea Islands ocean area.

The South Sea Islands Ten-Year Development Plans (1935): With Japan's withdrawal from the League of Nations in 1935, the Overseas Affairs Ministry of the Japanese government prepared a comprehensive ten-year development plan for the islands. The plan designated the islands as part of Japan's outer defence system, and as an advanced base for future planned expansion to the south. The development plan called for construction of infrastructure, particularly at Saipan and Palau, which included harbour facilities, roads, communication facilities, water supply systems to vessels, and housing — all of which were also necessary for the improvement of fisheries. The plan also budgeted 4.4 million yen for marine research and for the fishing industries (water service for fishing vessels, ice manufacture, cold storage, oil storage, shipbuilding, ironworks, and repair facilities at fishing ports). The plan also promoted excursions into new fishing grounds at New Guinea, and in the Arafra, Banda, Celebes, Sulu, and Flores Seas. The advance base for all of this expansion was designated the South Sea Islands.

Fisheries as National Policy: Because of Japan's worsening international reputation, and isolation in the early 1930s, Japanese fishing vessels were shut out from the major southern fishing grounds near the Dutch East Indies. In order to achieve some sort of breakthrough, the government designed the "Fundamentals of National Policy" in August 1936. The policy called for expansion into new fishing grounds south of the South Sea Islands. Accordingly, the South Seas Bureau established the Marine Laboratory at Palau in 1937, for research on fishing, fish processing, and fishing-techniques. Marine resources research focused on the bonito fishery grounds in the Western and Central Caroline Islands. Also in 1937, Nan'yô Takushoku Kabushiki Kaisha (South Seas Colonization Company) was established to carry out

government policy under the guidance of the Overseas Affairs Ministry, and Nankô Suisan was purchased and operated by this semi-governmental company. With the financial assistance of Nan'yô Takushoku, Nankô Suisan increased its capital from 2.5 million yen in 1937 to 5.0 million yen in 1939, for the purchase of equipment for the tuna industry, expansion of existing facilities, and construction of a tuna-canning factory at Palau. The company's capital was again increased to 10 million yen in 1941, to build a ship for longline fishing only, and a refrigerator ship as well as to install ice manufacture, freezing, and cold storage facilities. In addition to bonito fisheries, Nankô Suisan began tuna fisheries. This entailed purchase of tuna and operation of transportation facilities and related businesses (shipbuilding, ironworks, and finance) — all with government assistance.

Bonito Fisheries: The bonito catch in the Saipan district was always ranked third behind Palau and Chuuk. Saipan had two characteristic disadvantages. One was the lack of bait. As mentioned above, Saipan lacked baitfish, nan'yô katakushi iwashi (Engraulis heterolobus [Rueppel]). Instead, young fish, akamuro (Caecionidae), were used at Saipan. Every September, schools of akamuro approached the west coast of Saipan. For one month while *akamuro* stayed at depths of 15 to 25 meters in rocky coral areas, vessels stopped fishing for bonito. Okinawan divers searched the bait area and used stretch nets called *chûsô shikiami* (25 meters height, and 12 meters width) amongst the rocks in 15 meters depths. The akamuro were chased by the divers into the nets. The live akamuro, 10-centimeters long, were kept alive in submerged fishnets (katsusuami) for 30 to 40 days. Only skilled Okinawan divers could catch akamuro using this method. Another disadvantage was that the bonito-fishing season in waters around the Saipan district was shorter than at Palau and Chuuk, because of Saipan's higher latitude. In comparison to the open ocean fishing (yûri gyojô) in the waters around Palau, Saipan's fishing grounds were close to the reef that rose steeply from the ocean bottom and neighboring areas (sone gyojô) where bonito were always found though the number was not large. Therefore, the catches at Saipan were not big takes. During the off-season around Saipan, pole-and-line fishing was conducted north of Anatahan, especially in the area of Maug Island. However, the conditions in the waters around Maug Island — sone gyojô — were the same as at Saipan so that the catch was limited. Fishing vessels also found schools of migratory fish and fish congregating near drift timbers and caught them. 11 As of 1935, Nankô Suisan's

Saipan office (5,600 square meters) in Garapan owned four bonito vessels (17 tons each) and contracted with another four vessels for purchase of fish, for a total of eight vessels. All bonito caught were transported in lighters from the fishing vessels at the port and unloaded at the wooden pier that jutted out 40 meters from the beach. All fish were then taken to the factory by handcart. Processing capacity at the factory was 20 tons/day. Ice manufacturing was 5 tons/day. In 1936, a new factory was built alongside a quay at Chikkô (Tanapag), north of Garapan. It included an ice manufacturing facility (15 tons/day), refrigeration facility (5 tons/day), cold storage facility (5 tons/day), and ice warehouse (400 tons). The Saipan factories processed fresh bonito into toasted, dried, and shaved dried bonito. Ironwork for repairing fishing vessels was done at the Nan'yô Kôhatsu's factory. For processing bonitos caught by three fishing vessels operating in the outer ocean north of Saipan, a branch factory was built at Pagan Island. The factory was able to cut and process bonito into rough dried bonito (arabushi) before sending it to the Saipan factory for completion of the process. Table 5 shows the bonito fishery catches at Saipan. After Nan'yô Suisan began business on Saipan, the catches reached 3,697,298 kg in 1937, up from the 564,258 kg caught in 1931 — a 6.6 times increase in six years. The 1937 catch was the peak of that four-year fishing cycle. The catch at Saipan also more than doubled in between 1936 and 1937. After that, the catch decreased for two years, but reached 3,379,048 kg in 1940. A Nankô Suisan publication, *Nan'kô Suisan no ashiato* (Nan'kô Suisan's Footmark), reported that 1941 was the peak of the next four-year bonito cycle. Again, according to the publication, the total value of the bonito catch in 1941 was worth 6,159,000 yen, and dried bonito was worth 6,816,000 yen.¹² corroborating data were not found in the South Seas Bureau's handbook. Therefore, in Table 5 note ***, the claim that 1941 was a bumper year cannot be verified. Again, referring to Table 5, the total number of bonito vessels in 1937 and 1938 was 145. Of these, Saipan had 36 in 1937 (25% of the total), and 34 in 1938 (23% of the total). Weight of Saipan's bonito catch was 11% of the total in 1937, and 17% in 1938. Catch per vessel at Saipan was less than the average catch in the South Sea Islands because of poor fishing grounds around Saipan, as mentioned before. More than 90% of the bonito caught was processed into dried bonito, called "nankô bushi" (Nankô's dried bonitos). Of that total, Nankô Suisan's factories produced nearly 80% of the total dried bonito. After processing, all dried bonito was shipped to Japan, amounting to about 60% of the total consumption of dried bonito in Japan in 1937. 13 In Photo 2,

Table 5 Bonito Catches and Dried Bonito Production in the South Sea Islands

(S: Saipan District = Saipan, Tinian, and Rota)

	(2)	Saipai	ı Distric	t = Saip	an, Tini	an, a	nd Kota,)		<u> </u>	
	Permits of	Bonito	Bonito	Dried Bonito	Dried Bonito		Permits of	Bonito	Bonito	Dried Bonito	Dried Bonito
	Bonito				(yen)		Bonito				(yen)
	Fishery	Catches (kg)	Catches	(kg)			Fishery	Catches (kg)		(kg)	
	1 (7) * 0	0.710.1	(yen)	1001	1.60		51 (D .) 0	6 000 401 1	(yen)	1 205 200 1	1.662.066
	1_ ` .	9,713 kg	6,770 yen	120 kg	160 yen		` .	6,889,401 kg		1,305,290 kg	i i
1922	Tuna)	C. 2 262 I	C. 1 000	a.	G.	1933	Tuna)	G. 1 762 200	yen C. 270 194	6. 207 654	yen S. 270 (50
	S: 1	S: 2,363 kg	S: 1,890 yen	S:	S:		S: 16	S: 1,762,300	•	S: 297,654	S: 379,650
	2 (Bonito &	7,305 kg	5,068 yen	l			76	kg 8,956,411 kg	yen 2 205 050	1,594,170 kg	1.714.590
	Tuna)	7,505 116	5,000 yen			4044	· · · · · · · · · · · · · · · · · · ·	0,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	yen	1,000,000	yen
1923	S: 1	S: 2,813 kg	S: 2,250 yen	S:	S:	1934	S: 23	S: 2,516,000	[' ·	S: 419,512	S: 470,469
		, , , , , ,	, , , , , , , , , , , , , , , , , , , ,					kg	ven	kg	yen
	3 (Bonito &	17,741kg	11,580 yen	1,095 kg	3,404 yen		67	11,722,284	1,317,919	2,097,388 kg	2,127,424
1924	Tuna)					1935		kg	yen		yen
* / 47	S: 2	S: 9,097 kg	S: 6,065 yen	S: 855 kg	S: 2,508 yen	1733	S: 17	S: 1,785,977	S: 420,983	S: 264,133	S: 360,593
								1 	yen	kg	ven
	<u>_</u> `.	36,319 kg	17,520 yen	1,560 kg	4,116 yen		87	14,265,772	1,468,996	2,422,856 kg	
1925	Tuna)	C. 14 005 1	C. (240	G. 404 I	G. 1 202	1936 s	G. 10	kg 5. 1.606.006	yen	C. 425 072	yen
	S: 3	S: 14,805 kg	5: 6,348 yen	S: 484 Kg	S: 1,292 yen		S: 19	. '	S: 220,481	S: 425,072	S: 581,628
	II (Bonito &	92 284 kg	42,282 yen	9,548 kg	28,540 yen		145		ven 2,833,905	5,812,745 kg	ven 5.081.774
4047	Tuna)	72,201 Kg	12,202 yen	7,5 10 kg	20,540 yen	1025		ko	yen	5,012,7 15 Kg	yen
1926		S: 44,842 kg	S: 17.937	S: 3,293 kg	S: 8,780 yen	1937	S: 36	S: 3,697,298	•	S: 626,176	S: 601,738
			yen	,				kg	yen	kg	yen
	12 (Bonito &	52,954 kg	23,781 yen	4,751 kg	12,445 yen		145	14,958,592	1,356,969	2,501,222 kg	2,429,521
1927	Tuna)	·		<u> </u>		1938		kg	yen		yen
132,	S: 6	S: 28,110 kg	S: 10,778	S: 1,976 kg	S: 5,270 yen	1,700	S: 34	S: 2,592,029	S: 315,411	S: 451,883	S: 426,657
·	10 (5) ': 5	160 5141	ven	10 002 1	0.7.005		100		yen	kg	yen
	12 (Bonito &	163,714 kg	48,644 yen	18,893 kg	37,805 yen		135	1,	2,462,707	3,229,686 kg	
1928	Tuna) S: 5	26,494 kg	S: 10,219	S: 2,235 kg	S: 5,960 yen	1939		кд S: 1,297,354	yen C. 150 006	S:	yen S:
	3, 3	20,434 Ng	yen	3. 2,433 kg	3. 3,700 yen				yen	3	D
	17 (Bonito &	469.511 kg	126,937 yen	104,310 kg	138,122 yen		133		4,430,385	2,973,270 kg	5,193,000
1020	Tuna)		,,,,,,	, , , , , , ,	, ,	1040		kg	yen***		yen
1929	1 .	S: 24,690 kg	S: 9,876 yen	S: 2,580 kg	S: 6,885 yen	1940	S: 25	S: 3,379,048	S: 721,560	S: 561,122	S: 1,190,146
								kg	ven	kg	
	24 (Bonito &	1,335,720 kg	327,861 yen	282,825 kg	434,743 yen		129	I ' '	2,918,934	1,333,840 kg	
1930	Tuna)		n =			1941*		l ''	yen***		yen***
–	S: 8	S: 258,004		S: 13,654 kg	1	_ 	S: 26	l.	S: 358,996	-	S: 491,227
	36 (Bonito &	7 816 900 ba	Yen 622 083 van	9/2 210 b~	ven 007 940 ven	·· - ···········	112	kg 14,872,781	ven	kg 1,905,130	yen 5,307,063
	Tuna)	2,010,000 Kg	022,703 yell	042,210 Kg	997, 840 yen		113	kg**	~~~		yen**
1931	i i	S: 564,258	S: 122,022	S: 68,044 kg	S: 94.236	1942	S: 27		S:	S:	S:
			ven_		yen		·				
	37 (Bonito &				917,989 yen					-	
1932	Tuna)			- ~	- "						
1734	S: 10	S: 1,309,725	S: 317,916	S: 192,172	S: 210,072						
	I	kg	yen	kg	yen						

Sources: 1922-1932 statistics: Nan'yôchô, *Dainikai, Nan'yôchô tôkei nenkan* (Palau: Nan'yôchô, 1934), pp. 348-355;1933 statistics: Nan'yôchô, *Daisankai, Nan'yôchô tôkei nenkan* (Palau: Nan'yôchô, 1935), p. 125-126.

1934-1942 statistics for bonito fishery permits: Nan'yôchô, Nan'yô Guntô yôran, 1934-1942. 1934-1937 statistics for fisheries except for bonito fishery permits: Nan'yôchô, Nan'yôchô Suisan

Shinkenjô yôran (Palau: Nan'yôchô Suisan Shikenjô, 1938), pp. 42-58.

1938, 1940, and 1941 statistics: Nanyôchô, Nan'yô Guntô yôran, 1939, 1941, and 1942.

1939 and 1942 statistics: Ôkurashô Kanrikyoku, Nihonjin no kaigai katsudô ni kansuru rekishiteki chôsa: Tsûkan dai nijûissatsu Nanyô Guntô hen daini bunsatsu: Dainibu Nan'yô Guntô keizai sangyô, 1949, p. 86-87, and pp. 147-148.

Nankô Suisan employees pack dried bonito in wooden boxes.

In contrast, the Japanese residents in the islands consumed fresh fish such as horse mackerel, Spanish mackerel, striped mullet and other reef fish (meyasu, sunakuchi,

^{*} All statistics for bonito fishery for 1941 and 1942, printed in 1942 and 1943 editions of *Nan'yô Guntô yôran*, respectively, are identical. The statistics for 1941 are used in this table.

^{**} This statistics were cited from the text of Ôkurashô Kanrikyoku publication.

^{***} According to Kawakami Zenkurô's Nankô Suisan no ashiato, the bonito catch in 1940 was 5,255,000 yen in value; 6,159,000 yen in 1941; and the value of dried bonito in 1941 was 6,816,000 yen.

kamasu, and itoyori). The fishing industry's exemption from fuel taxation was abolished in 1937 because of the costly Japan-China War. The price of fuel suddenly rose in Japan and influenced fishery operations in the South Sea Islands. In October 1937, the South Seas Bureau promulgated "Regulations on Financial Assistance to Fishery Management" that subsidized 30% to 50% of the cost of the fisheries. One of the reasons for this large government assistance was the importance of dried bonito to support the food requirements of the Japanese military in China and at home.



Photo 2 Nankô Suisan, Nankô Suisan Kabushiki Kaisha gaiyô (October 1942), p. 6.

Tuna Fisheries: Until the mid-1930s, Japan's tuna fisheries were secondary and seasonal operations. Tuna was occasionally caught during pole-and-line bonito fishing. After some home-based longliners began catching tuna near the Western Caroline Islands in 1938, tuna fishing became a year-round industry in the South Sea Islands. Some records show that in 1938, Daini Shinkômaru (118 tons), belonging to Tôhoku Shinkôsha, was loaded to capacity with Pacific bluefin tuna (Thunnus orientalis) and yellowfin, 200 nautical miles east of the Mariana Islands and returned to Japan. In autumn of the same year, Fukujumaru (80 tons), from Wakayama, operated tuna fisheries off Saipan. Hideyoshimaru (99 tons) from Hiyori Fushimaru port, Wakayama, returned to its homeport in Japan with a full load of tuna after 60-70 days of operation in the "South Seas." Such good catches attracted tuna fishermen

from all over Japan. In 1938, the South Seas Bureau Marine Laboratory found a new yellowfin fishing ground near the north equatorial current. It was estimated that the value of catches in these waters would be close to 20 million yen. By 1939, the number of Japanese longliners fishing the grounds south of 20-degree north latitude was 76.14 Although Japan had been exporting albacore to the U.S., it suddenly became more difficult after 1938, because the U.S. imposed custom duties of 30% to 45% and Partly as a result of these increases, the Japanese long-liners, which then 75%. ¹⁵ were used for taking albacore in Japan's eastern fishing ground, changed their grounds to the south, aiming at yellowfin. Through this effort, the Japanese fisheries expanded from Saipan, south to New Guinea, New Britain, and the Solomon Islands. As mentioned above, one of the greatest problems these vessels faced was how to keep tuna fresh during the long return voyage to Japan. Wooden ships of less than 100 tons did not have an ice machine. As a result, Saipan became an important supply base because Nankô Suisan had ice making machines and cold storage there. In base because Nankô Suisan had ice making machines and cold storage there. In addition, fresh water and food were located at Saipan. Table 6 shows tuna catches in the South Sea Islands. In 1939, 40 longliners (120 tons) from Japan, mainly from Misaki, Kanagawa, and 10 from the South Sea Islands, caught 41,400,000 kg. However, because of their small size and low numbers, ships from the South Sea Islands caught only 1.3% (551,250 kg) of total tuna catch for 1939.16 Nankô Suisan became involved in tuna fisheries after contracting with longliners in Fukushima in November 1939, and in Miyagi in 1940. It purchased bait — nakaba iwashi (one of the sardines) — in Misaki, and caught yellowfin tuna and bigeye tuna in the seas near Palau. The company began a full-scale tuna fishery in 1941, once it was determined that the catch would remain fresh after long-distance transportation. Yellowfin tuna and bigeye tuna were the two major tuna fisheries in the South Sea Islands, but total catch of the former was considerably larger than the latter. The longliners also caught striped marlin, bonito and shark. Flying fish (tobiowo), and brown-striped mackerel scad (muroaji) were the main baitfish on Saipan, while brown-striped mackerel scad (muroaji) and sardine (iwashi) were used in the waters around Palau. According to Table 6, tuna caught by longliners in the South Sea Islands increased from 858,793 kg in 1940, to 1,023,093 kg in 1941, after Nankô Suinsa began its tuna fishery.

However, the catch in waters around the Saipan district decreased rapidly from 84,506 kg to 33,699 kg for unknown reasons. In September 1941, a tuna-canning

Table 6 Tuna Catches and Dried Tuna Production in the South Sea Islands

(S: Saipan District = Saipan, Tinian, and Rota)

		(S. 5a	ipan Dia	strict = i	Saipan,	11nia	n, and K	ota <i>)</i>			
	Permits of	Tuna	Tuna	Dried Tuna	Dried Tuna		Permits of	Tuna	Tuna	Dried Tuna	Dried Tuna
	1	Catches (kg)	Catches	(kg)				Catches (kg)	Catches	(kg)	
	Tuna		(yen)		(yen)		Tuna		(yen)		(yen)
	1 (Bonito &	6,075 kg	3,730 yen				51 (Bonito &	374,796 kg	59,811 yen	68,626 kg	76,410 yen
1922	Tuna)					1933	Tuna)				
	S: 1	S: 1,312 kg	S: 875 yen	S:	S:	<u>-</u> .	S: 16	S: 9,584 kg	S: 2,908 yen	S: 4,100 yen	S: 3,493 yen
	2 (Bonito &	6,652 kg	3,673 yen					427,041 kg	116,449 yen	93,329 kg	85,237 yen
1923	Tuna)					1934					
	S: 1	· · · · · · · · · · · · · · · · · · ·	S: 888 yen	S:	S: —			S: 27,289 kg	S: 9,366 yen	S: 3,160 kg	S: 2,293 yen
	3 (Bonito &	11,951 kg	5,971 yen	1,030 kg	3,744 yen		13	480,014 kg	105,501 yen	102,404 kg	99,485 yen
1924	Tuna)					1935					
	S: 2		S: 1,024 yen	S:	S:		S: 10	S: 42,915 kg		S: 6,264 kg	S: 5,172 yen
	4 (Bonito &	12,229 kg	4,557 yen	1,061 kg	2,264 yen			587,116 kg	110,160 yen	71,972 kg	75,172 yen
1925	Tuna)			<u> </u> 		1936				l_	.
			S: 749 yen	S:	S:				S: 52,857	S:	S:
	11 (Bonito &	55,534 kg	22,423 yen	16,054 kg	38,541 yen	1937	7	681,176 kg	90,828 yen	384,011 kg	381,377 yen
1926	Tuna)	G 00441	C 400#					G 00 0= 63		g	
			S: 1,235 yen		S: 50 yen		·	S: 88,876 kg		S:	S:
	12 (Bonito &	54,266 kg	24,327 yen	6,169 kg	13,160 yen	1938	8	270,899 kg	42,934 yen	49,127 kg	41,634 yen
1927	Tuna)	G. 2 BOC 1.	S. 4 AFF]_]_			G 22 020 1	0 11 706	G. 455 h	G. (00
	·		S: 1,475 yen		S:	<u>-</u>	S: 2	S: 33,920 kg			S: 608 yen
	12 (Bonito &	164,182 Kg	38,629 yen	28,219 kg	45,160 yen		Japan: 40	Japan & SSI	1 ·	SSI: 54,831	SSI: 66.777
1928	Tuna)	:					Ships (120		16,560,000	kg**	yen**
1920	S: 5	S: 1,260 kg	S: 618 yen	S:	S:		tons), South	41,400,000	ven* SSI: 98,500		
	3. 3	5. 1,200 kg	S. Glo yen	J	3	1939	Sea Islands:	kg*	yen*		-
	17 (Bonito &	172.001 kg	31,825 yen	33,735 kg	48,629 yen	1707	1 to 5 in ps (20	SSI: 551,250	l '		
4000	Tuna)	1,2,001 1.5	51,025 yes.	55,755 Kg	10,025 30		tons)*	1	yen**	}	
1929		S: 562 kg	S: 300 уел	S:	S:			SSI: 361.530	, 611		
		8	•					kg**			
	24 (Bonito &	111,997 kg	13,947 yen	22,954 kg	28,815 yen		23	Japan & SSI:	Japan & SSI:	85,496 kg	119,140 yen
1930	Tuna)		-								-
1730	S: 8	S: 4,534 kg	S: 2,493 yen	S: 113 kg	S: 255 yen		S: 2	64,875,000	25,950,000	S: 101 kg	S: 284 yen
						1940		kg*	yen*		
	36 (Bonito &	211,910 kg	29,898 yen	42,665 kg	44,388 yen			SSI: 858,793	SSI: 306,126		
1931	Tuna)		g =					kg	yen		
	<u> </u>	S: 16,734 kg	 		S: 855 yen		.	· · · · · · · · · · · · · · · · · · ·	S: 34,787		
,	37 (Bonito &	361,445 kg	50,801 yen	73,746 kg	55,985 yen	1941**	21	1,023,093 kg	315,705 yen	66,719 kg	129,882 yen
1932	Tuna)	G. 40 544 1	G. 15 450	0. 4 455 7	G. 2.25	*	G. 2	0. 22 ((0.3	a. 10.012	la.	g.
<u> </u>	S: 10	S: 48,244 kg	S: 15,438	S: 3,152 kg	S: 3,278 yen		S: 2	S: 33,669 kg	S: 19,9 13	S:	S:

SSI: South Sea Islands

Sources: 1922-1932 statistics: Nan'yôchô, *Dainikai, Nan'yôchô tôkei nenkan* (Palau: Nan'yôchô, 1934), pp. 348-355;

1933 statistics: Nan'yôchô, *Daisankai, Nan'yôchô tôkei nenkan* (Palau: Nan'yôchô, 1935), p. 125-126.

1934-1942 statistics for tuna fishery permits: Nan'yôchô, Nan'yô Guntô yôran, 1934-1942.

1934-1937 statistics for fisheries except for tuna fishery permits: Nan'yôchô, Nan'yôchô Suisan

Shinkenjô yôran (Palau: Nan'yôchô Suisan Shikenjô, 1938), pp. 42-58.

1938, 1940, and 1941 statistics: Nanyôchô, Nan'yô Guntô yôran, 1938, 1940, and 1941.

factory was opened on Malakal Island, Palau, after the catch of yellowfin started looking up. In December 1940, cans of tuna in oil were exported to New York from Palau, via Java in order to get around the high tariff imposed on Japanese marine products. Mitsubishi Shoji, a major trading firm in Japan, also exported 10,000 cases

^{*1939} statistics: "Takumu daijin seigi Nanyôchô Suisan Shikenjô kansei chû kaisei ni kansuru ken" October 1, 1940.

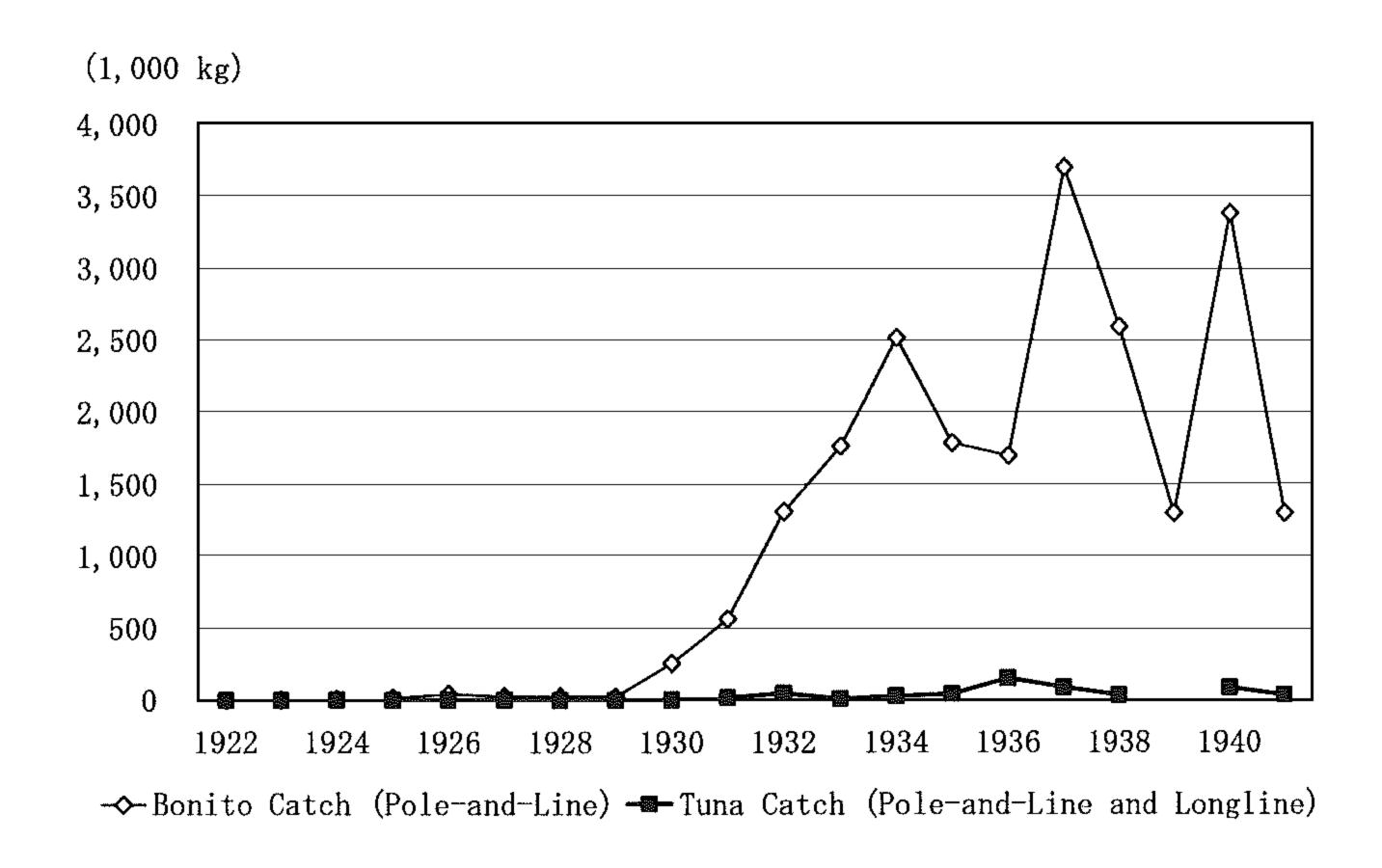
^{**1939} statistics: Ôkurashô Kanrikyoku, *Nihonjin no kaigai katsudô ni kansuru rekishiteki chôsa:* Tsûkan dai nijûissatsu Nanyô Guntô hen daini bunsatsu: Dainibu Nan'yô Guntô keizai sangyô, 1949, p. 86-87, and pp. 147-148.

^{* 1940} statistics: "Takumu daijin seigi Nanyôchô Suisan Shikenjô kansei chû kaisei ni kansuru ken" October 1, 1940.

^{***} All statistics for tuna fishery for 1941 and 1942, printed in 1942 and 1943 editions of *Nan'yô Guntô yôran*, respectively, are identical. The statistics for 1941 are used in this table.

of canned tuna to Germany during this same period. Frozen fillet of yellowfin and bigeye tuna were also exported to the Chinese cities of Tientsin and Beijing. There are no details on tuna caught in waters around Saipan during this time period.

Graph 2 presents data on bonito and tuna catches in the Saipan district during 1922-1941. Note that the marked increase in bonito in the early 1930s is not matched by a similar increase in tuna. In all years, the bonito catch greatly exceeded the tuna catch. Furthermore, bonito was cyclical in that every three or four years the catches were huge, viz, in 1943, 1935, and 1939.

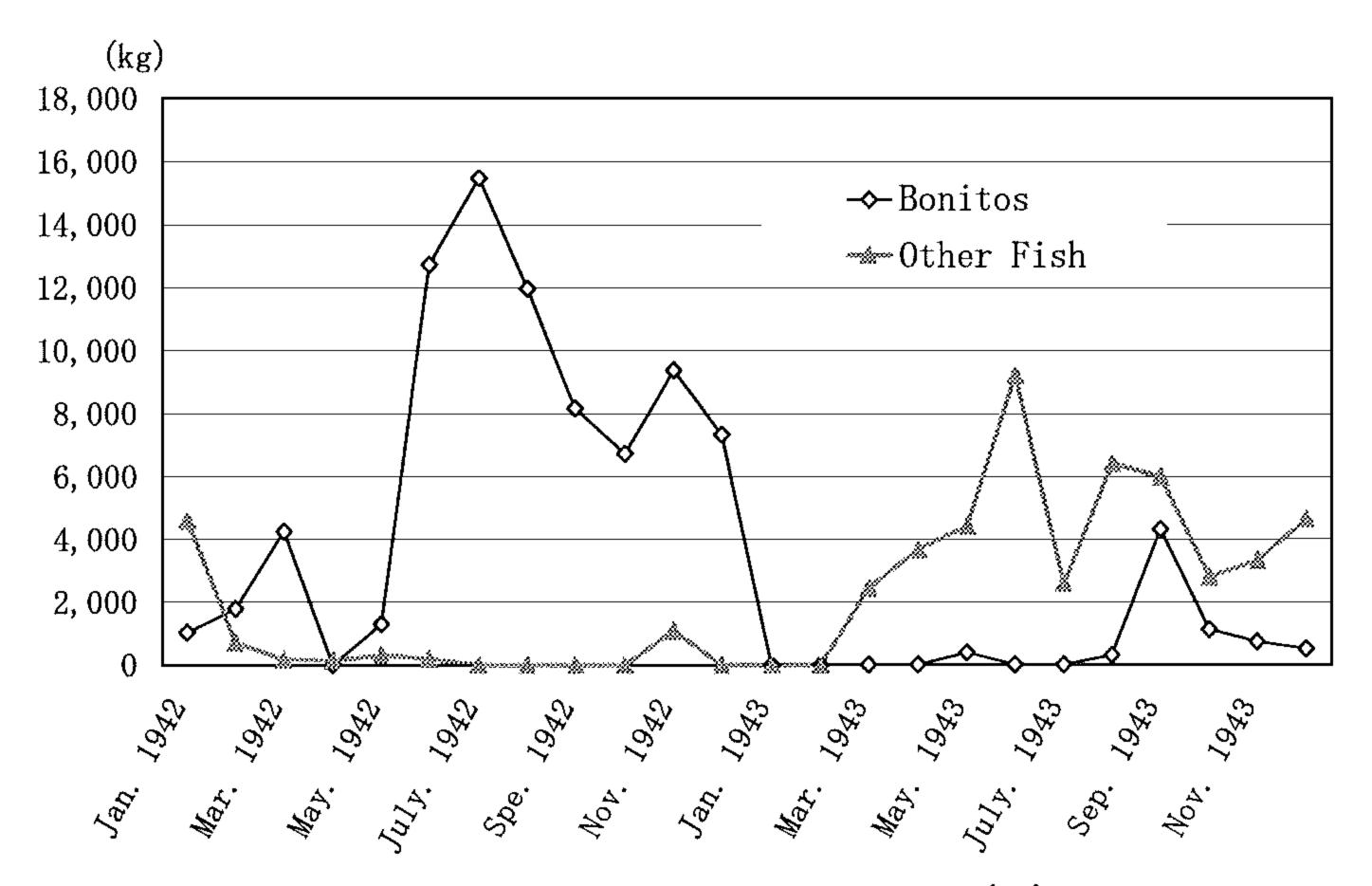


Graph 2 Weight of Bonito and Tuna Catches in Saipan District, 1922-1941

W. War and Fishery (1941-1944)

Because of the long-term Japan-China War that began in 1937, the Japanese government tightened material controls starting in late 1939. This caused a shortage of fuel and supplies for some fisheries. In particular, the shortage of fiber nets and line was serious. After the Pacific War broke out in December 1941, fishing vessels, along with their crews, were gradually requisitioned for military service. As of 1942, Nankô Suisan had offices in Tokyo, Saipan, Chuuk, Pohnpei, Kosrae, Jaluit, Dalian (China), Yaizu, and Okinawa. There were also offices at Guam, Ambon, Rabaul, Kavieng (New Ireland), and Manila — areas that Japanese forces had taken. However,

because of the war, Japan's commercial fishing activities in the South Sea Islands declined. After the outbreak of war with the U.S., the Nankô Suisan Saipan ice plant and cold storage facility were taken over by the Japanese Navy. All fresh and semi-processed bonito were distributed for military use. Dried bonito was also supplied to the military. In June 1942, 8,000 dried bonitos — emergency food for 4,000 military personnel — were distributed to the Japanese troops on Saipan. Some 10,000 additional Japanese army troops were landed on Saipan and Tinian after March 1944, and the factories and attached buildings of Nankô Suisan in Garapan were taken over completely by the military. The company employees, except for those engaged in fishing, were mobilized for construction work on airfields and fortifications, and fishing activities in the Mariana Islands ended completely when U.S. forces approached the islands in mid-1944. Guam, a U.S. territory in the Mariana Islands since 1898, was occupied by Japan on December 10, 1941. According to Japanese Navy orders, Nankô Suisan's Saipan office established its Omiya (Guam) Branch Office in Agana. Two bonito pole-and-line vessels from Saipan started fishing off Guam and supported the military's self-sufficiency efforts on the island. These vessels were later used to patrol around the island in anticipation of a U.S. attack, and fishing activities were dramatically reduced. The following is a summary of the Japanese Navy's Civil Administration Department report on Nan'kô Suisan's fishing on Guam between 1942 and 1943: "The company began bonito fishing with two 21-ton ships southwest of Matsuyama (Merizo), in the southern part of the island, and between Guam and Rota. A dried bonito factory was built to process 60 kan (225 kg) of bonito per month, but the result was disappointing, with 'no hope of increasing production' because of an unfavorable period of migratory fish, and few schools of baitfish in the Guam and Saipan areas. Large catches were not expected because of the influence of seasonal winds and rough waters. The catch for 1942 was 82,170 kg of bonito and 7,230 kg of other types of fish, totalling 89,400 kg. There was no catch of other fish in July, October, and December. Since no bonito was caught between January and April, and between June and July 1943, the total fell to 7,340 kg for that Other fish catches also decreased to 45,465 kg. After the *Daini Tôkaimaru*, a cargo-passenger ship and a commercial cruiser, was sunk in Apra Harbor in January 1943, the fisheries rapidly declined."17



Graph 3 Fish Catch in Guam Waters (kg)

V. Conclusion

During the Experimentation Period, 1922-1931, fishing permits, total fish catches, including bonito catches, in the South Seas Islands increased markedly during the 1920s and early 1930s (Table 1-3). As well, the Saipan district went through an historic change in 1930 and 1931. The Saipan district caught a large percentage of bonito (20% in 1931, 27% in 1932 and 26% in 1933) in the South Sea Islands, even though the seas around Saipan were regarded as poor fishing grounds. This increase in bonito catches resulted from the introduction of motorized vessels and increased Japanese government support (Table 2-3). From 1931-1941, the government's national fisheries policy was directed at increasing the amount of fish caught and processed for consumption in Japan and China. Catches of bonito rose markedly in the 1930s, but the Saipan district's contribution actually declined percentagewise (Table 5 and Graph This shows that the fishing grounds expanded in both the South Sea Islands and further south to newly occupied areas. In the period from 1941 to 1942, fisheries in the South Sea Islands collapsed due to the Pacific War. Fisheries in the Saipan district were no exception. In conclusion, it should be pointed out that from the 1930s through to the 1940s, the fisheries in the South Sea Islands were influenced not only by the coming of war, but by Japanese government policy, both in terms of financial assistance and administrative policy.

NOTE

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- 4 Marukawa Hisatoshi, "Nan'yô Guntô no suisan (4)" *Nan'yô Suisan 5, no. 5* (May 1939): 4-9.
- 5 The total Japanese population in the South Sea Islands in 1929 was 16,202 (male: 10,291, and female: 5,911). Of them, 8,289 were from Okinawa 51%. 7,754 Okinawans (94%) lived on the Saipan District, while 347 Okinawan (4%) lived on the Palau District. Nan'yôchô, *Nan'yôchô tôkei nenkan* (Palau: Nan'yôchô, December 1934), pp. 34-39.
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戦前ミクロネシアにおける日本漁業:北マリアナの鰹·鮪漁業 樋口和佳子

キーワード:ミクロネシア、南洋群島、南洋庁サイパン支庁区、漁業、北マリアナ諸島

1930 年代初頭以降,南洋群島における総漁獲高は著しく増加し、その主体となったのは鰹漁業であった。その成長の一端を担ったのがサイパン支庁区である。サイパン近海はけっして優良な漁場ではなかったが、その北部において積極的操業活動が行われた。その理由として,日本人人口、とりわけ南方漁業の経験豊かな沖縄出身者が多かったこと、南洋庁が群島中、パラオとともにサイパンの開発に最も重点を置いたこと、鰹の加工業のためのインフラ整備が比較的容易に実施できたことがあげられる。しかし南洋群島の漁業は住民の自給政策の一環として奨励されたのではなく、国策として推進されたものであった。漁業基地はサイパンからパラオに移り、さらに南方へと拡大するが、太平洋戦争の戦局悪化により漁業は不可能となる。

それはサイパン支庁区も例外ではない。南洋群島の漁獲統計から考察できるのは資源量の推移というよりも、戦前の国策を背景とした水産業の変化であった。

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