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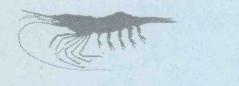
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## 1983 U.S. TUNA TRADE SUMMARY

by

Samuel F. Herrick, Jr. and Steven J. Koplin

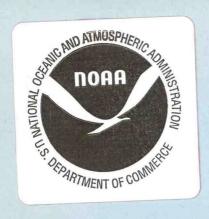




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1983 U.S. TUNA TRADE SUMMARY

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## 1983 U.S. Tuna Trade Summary

#### Introduction

1983 showed some signs of a turnaround for the U.S. tuna industry, which experienced a substantial decline in canned tuna sales, cannery receipts of domestically-caught and imported raw tuna, and domestic production activity during most of 1982. By the end of 1983, there was overall improvement in U.S. canned tuna sales, deliveries of raw tuna to U.S. canneries and domestic processing activity.

Buoyed by a recovering U.S. economy and declining shelf prices, overall volume of canned tuna sales at the retail level was reported to have increased 7% for all of 1983. Improved retail sales acted to reduce the buildup of canned inventories that plagued the industry in 1982, and stimulated the flow of raw tuna through U.S. canneries. Cannery receipts of imported and domestically-caught albacore and tropical tunas (skipjack, yellowfin, blackfin, bluefin and bigeye tuna) were up 6% from 1982, but still 11% below the 1978-82, five-year average volume of annual cannery receipts (Table 1). Despite fierce competition from foreign processors and record levels of canned tuna imports, overall canned tuna production

<sup>&</sup>lt;sup>1</sup>Cannery receipts include only tuna destined for U.S. canneries; exclude U.S.-caught tuna landed at foreign sites or U.S.-caught tuna landed at U.S. sites that is destined for foreign canneries, U.S.-caught tuna destined for the fresh-fish market; also excludes tuna imported as flakes, imported tuna not fit for human consumption and imported "sushi" grade tuna.

rose 5% during 1983, though it was still 9% below the 1978-82 annual average (Table 1). These improvements in overall performance accompanied significant changes in the structure and operations of the U.S. tuna industry. These changes gained attention in 1982 and were heightened during 1983.

Due in part to the adverse affects of El Nino on tuna resources in the eastern Pacific Ocean and continuing problems of access to traditional fishing grounds in this area, as well as the attraction of potentially more abundant tuna resources in the western Pacific Ocean<sup>2</sup>, the movement of U.S. tuna purse seiners to the western Pacific accelerated during 1983. At least 60 of the 127 seiners comprising the U.S. tuna purse seine fleet operated in the western Pacific during 1983. U.S. seiners fishing in this area were quite successful, and for the first time cannery receipts of domesticallycaught tuna from this area accounted for the greatest share of domestically-caught receipts by oceanic area: 171,153 short tons (tons), 60% of total domestically-caught cannery receipts for 1983 (Table 2). Nevertheless, a significant portion, approximately 25%, of the U.S. tuna fleet was inactive all or part of 1983. U.S. canneries continued to sell, or attempted to sell, interests they held in tuna purse seiners, reflecting the likelihood that tuna fishing under current conditions is more efficient or cost-effective when undertaken by independent vessels.

 $<sup>^{2}</sup>$ The eastern and western Pacific are distinguished at 150 degrees west longitude.

More than 75% of the domestically-caught tuna from the western Pacific was delivered or transshiped to off-shore canneries located in American Samoa, Hawaii and Puerto Rico in 1983. That off-shore processing sites are becoming more dominant in terms of U.S. tuna production is also reflected in the fact that in 1983, approximately 63% of the total U.S. pack of canned tuna was processed at off-shore facilities. This compares to 61% of total production at off-shore sites in 1982 and 58% in 1981. As a result of this continuing shift in canned production to off-shore sites, employment at California canneries, which fell sharply in 1982, is reported to have decreased further during 1983, by the equivalent of approximately 1,250 full-time jobs.

In the sections that follow, information pertaining to the production of raw and processed tuna by the U.S. tuna industry during 1983, and the consumption of tuna products by U.S. consumers is reviewed in more detail. In the last section, a number of issues and events are discussed that affected the industry's performance during 1983.

#### U. S. Production of Albacore, White Meat, Tuna

While overall improvement in the performance of the U.S. tuna industry was observed in 1983, this was not entirely the case when production and consumption are distinguished by fishery and product category. According to industry reports, consumption of canned white meat tuna, which is 100% albacore tuna, increased almost 17% during all of 1983. On the other hand, total cannery receipts, 83,325 tons, and canned production of albacore tuna, 5,105 thousand standard cases, were down 18% and 15% respectively for

1983 (Table 3). The fact that cannery deliveries and domestic production declined while sales showed an increase in 1983 probably reflects either a move to reduce canned white meat inventories on the part of processors or dominance of U.S. retail sales by imported canned white meat tuna, or both. In any case, retail sales were stimulated through significant albacore price adjustments at the ex-vessel, wholesale and retail levels.

## 1983 U.S. Cannery Receipts of Domestically-Caught Albacore Tuna

In recent years the U.S. albacore fishery has had upwards of 750 vessels participating on a regular basis. The majority of these vessels are in the 40-50 foot length range and fish albacore using troll gear exclusively. There is also a number of larger baitboats that operate in the fishery, and more recently several vessels have started to fish albacore using drift gillnets. Many of the vessels are of a multi-purpose design, capable of fishing albacore using a variety of gears, as well as operating in a number of alternative fisheries (e.g. ocean salmon, crab, tropical tuna).

The U.S. albacore fishery occurs almost entirely in the Pacific Ocean north of the equator and seaward from the west coast to approximately 180 degrees longitude. In 1983 all cannery receipts of domestically-caught tuna, 10,470 tons, came from this area with the exception of four tons which came from the Atlantic Ocean. Domestically-caught cannery receipts of albacore for 1983 were up 50% from 1982 (Table 4). This significant increase can largely be attributed to a combination of environmental and economic factors.

Albacore ex-vessel prices, which fell sharply in 1982, continued to decline in 1983. Early in the season a two tiered price system paid fishermen \$1,250 per ton (not adjusted for fish quality) for albacore 9 pounds and over and \$975 per ton for albacore less than 9 pounds, decreases of 12% and 32% respectively from 1982. These price reductions meant that fishermen would have to experience substantially greater success on the fishing grounds if they were to improve their collective economic performance from 1982. Such was the case, for the unusual warming of near-shore waters brought about by El Niño increased the availability of albacore to U.S. fishermen operating along the west coast.

However, while the effects of <u>El Niño</u> benefited the coastal albacore fishery, they tended to have an unfavorable impact on the off-shore and mid-Pacific albacore fisheries. This is partly revealed in the 33% decline in cannery receipts of domestically-caught and imported albacore from the western Pacific during 1983 (Table 6). Because of these factors, there was a ready market for relatively less expensive U.S.- caught albacore in 1983 which generated \$13 million in ex-vessel revenue, up 35% from 1982. Dividing 1983 albacore ex-vessel revenue by total cannery receipts yields a weighted ex-vessel price of \$1,248 per ton, down 10% from 1982.

## 1983 U.S. Production of Canned White Meat Tuna

Albacore tuna is consumed almost exclusively as canned white meat tuna by U.S. consumers. Traditionally, the most popular albacore product has been the 7-ounce (standard size) can of solid white meat tuna packed in water.

San Diego and San Pedro, California, Mayaguez and Ponce, Puerto Rico, Honolulu, Hawaii and Pago Pago, American Samoa are the major U.S. tuna receiving and processing sites. For reporting purposes, tuna receipts are combined for California and for American Samoa and Hawaii (American Samoa/Hawaii). Of the total, 1983 raw (whole and other than whole) albacore cannery supply (83,325 tons), 60% was delivered to Puerto Rico, 22% to American Samoa/Hawaii and the remaining 18% to California. All three areas showed declines in total albacore receipts, 17%, 26% and 7% respectively, from 1982 (Table 4).

Of the total 1983 domestically-caught, raw albacore cannery receipts, 90% was received in California. Virtually all of the remainder, was received at American Samoa/Hawaii sites except for four tons delivered to Puerto Rico. Domestically-caught albacore delivered to California rose 85% from 1982 to 1983, while receipts at American Samoa/Hawaii sites decreased 45%. The four tons delivered to Puerto Rico represented a 100% increase from 1982 (Table 4).

U.S. cannery receipts of imported raw albacore tuna totaled 72,855 tons in 1983, down 23% from 1982. Imports comprised 87% of the total 1983 cannery supply of albacore tuna compared to 93% in 1982. Puerto Rico was the major receiving site for U.S. imports of raw albacore tuna during 1983, with 50,105 tons or 69% of the total. American Samoa/Hawaii followed with 24% of the 1983 total, and California accounted for the remaining 7%. Albacore imports received in Puerto Rico during 1983 decreased 17% from 1982, while imports received at American Samoa/Hawaii and California declined 25% and 49% respectively from 1982 (Table 4).

Japan was the leading exporter of raw albacore tuna to U.S. canneries during 1983 with approximately 22,826 tons or 31% of the total raw albacore imports. Taiwan was next with 17,829 tons, 24% of the total (Table 5).

Raw albacore imports received at U.S. canneries in 1983 were valued at approximately \$97 million, down almost 45% from 1982. Dividing this value by the corresponding volume results in a weighted average import price of \$1,335 per ton for raw albacore in 1983, almost 28% below that for 1982.

In 1983, the Pacific Ocean provided 43% of the total U.S. cannery supply of albacore tuna. The Atlantic and Indian Oceans followed with 40% and 17% respectively of the total supply, almost all imports. This pattern is unchanged from 1982. Because of the significant increase in domestically-caught albacore cannery receipts, the eastern Pacific was the only oceanic area from which an increase in supply (88%) was reported in 1983 (Table 6).

Of the three major U.S. canned tuna production centers, Puerto Rico was the primary U.S. albacore processing site during 1983 with 3,412 thousand standard cases, 67% of the total white meat pack for 1983. This is a 3% decrease from 1982. American Samoa/Hawaii followed with 912 thousand standard cases, 18% of the total 1983 white meat pack, down 41% from 1982. Continental sites produced 781 thousand standard cases of white meat tuna in 1983, 15% of the total, and a 18% decrease from 1982 (Table 7).

Wholesale list prices for U.S. produced, advertised white meat tuna ranged from \$59.45 to \$62.50 per standard case at the beginning of 1983 and

fell to \$53.17 to 60.63 per standard case by year's end, a decline of between 11% and 3%. Also, discounts further reduced the price to as low as \$40.20 for a standard case. In terms of total value, U.S. production of canned white meat tuna - advertised and private brands - generated \$196 million in 1983, down 29% from 1982. Based on total white meat volume the weighted average price was \$38.40 per standard case compared to \$45.74 for 1982, a 16% decrease.

#### U.S. Production of Tropical, Light Meat, Tuna

U.S. tuna industry performance in terms of tropical, or light meat, tuna harvesting and production improved substantially in 1983. Consumption of canned light meat tuna reportedly rose 12% during 1983. There was a similar increase in total (U.S. caught and imported) cannery receipts of tropical tunas, to 448,724 tons in 1983. However, the volume of 1983 tropical tuna cannery receipts was still 10% below the 1978-82, 5-year average (Table 8). Production of canned light meat tuna rose in 1983, to a total pack of 23,277 thousand standard cases, which was up 10% from 1982 (Table 8). Declining prices at the ex-vessel, wholesale and retail levels during 1982 and most of 1983 led to increased purchases of tropical tuna by both producers and consumers.

## 1983 U.S. Cannery Receipts of Domestically-Caught Tropical Tunas

In 1983, the U.S. tropical tuna fleet consisted of 146 vessels: 127 purse seiners and 19 bait boats (pole and line gear). This compares to a total fleet of 139 vessels in 1982: 127 purse seiners and 12 baitboats.

Fleet carrying capacity was 129,126 tons in 1983, up 2% from 1982. By far, purse seiners account for the bulk of domestically-caught tropical tuna cannery receipts, over 97% in 1983.

In 1983, domestically-caught cannery receipts of tropical tunas were 275,084 tons, 24% above 1982 (Table 11). Practically all of this was taken from the Pacific Ocean. However, in 1983 more vessels, representing a disproportionately greater amount of carrying capacity, operated in the western Pacific than in the historically more popular eastern Pacific Ocean. U.S. vessels active in the western Pacific numbered 60 during 1983, an increase of 85% from 1982, while 57 vessels were active in the eastern Pacific, a 40% decrease from 1982. Carrying capacity of the vessels operating in the western Pacific was 73,395 tons in 1983, an average of 1,223 tons per vessel, compared with 30,986 tons, or an average of 544 tons per vessel, for the eastern Pacific. Fifty-nine of the vessels that operated in the western Pacific had carrying capacities of at least 1,000 tons as opposed to only 15 of the vessels operating in the eastern Pacific. Very little U.S. tropical tuna fishing occurred in the Atlantic Ocean during 1983.

Ex-vessel prices for domestically-caught tropical tuna continued to fall during 1983. At the close of 1983, the posted ex-vessel price (without quality adjustments) in effect for skipjack tuna in the 3.0 to 4.0 pound range was \$640 per ton, down 9% from the close of 1982. The posted ex-vessel price for yellowfin tuna in the 7.5 to 20.0 pound range (without

quality adjustments) at the end of 1983 was \$990 per ton, 6% below that at the close of 1982. The full range of skipjack and yellowfin ex-vessel prices for 1983 is shown in Table 10.

Domestically-caught skipjack tuna cannery receipts totaled 155,040 tons for 1983, up significantly, 51%, from 1982 (Table 9). Domestically-caught skipjack tuna receipts were valued at 124 million dollars ex-vessel in 1983, a 26% increase over 1982. This yields a weighted ex-vessel skipjack tuna price of \$800 per ton for 1983, down 16% from 1982. Cannery receipts of domestically-caught yellowfin tuna (includes bigeye, bluefin and blackfin tuna) totaled 120,044 tons in 1983, up slightly, 1%, from 1982 (Table 9). Domestic deliveries of yellowfin tuna generated approximately \$124 million in ex-vessel revenues during 1983, 7% below 1982. The weighted ex-vessel price for yellowfin tuna in 1983 was \$1,031 per ton, a decrease of 8% from 1982. Total ex-vessel revenues from domestically-caught tropical tuna receipts were approximately \$248 million in 1983. This is a 7% increase over 1982, indicating that U.S. tropical tuna fishermen more than offset the loss in per unit revenue through increased cannery deliveries.

## U.S. Production of Canned Light Meat Tuna

Skipjack and yellowfin tuna are blended together and canned as light meat tuna, the most popular tuna product consumed in the U.S. The 6.5-ounce (standard size) can of chunk style, light meat tuna in water led light meat tuna sales in 1983.

The total supply of raw tropical tuna, 448,724 tons, was delivered to canneries in Puerto Rico, American Samoa and Hawaii and California during 1983. Puerto Rico was the leading receiving site in 1983 with 180,551 tons, 40% of the total cannery supply. California canneries followed with 38% of the total supply and American Samoa /Hawaii sites received 22% of the total 1983 supply. Total tropical tuna receipts for Puerto Rico increased 13% from 1982; increased 65% for American Samoa/Hawaii; but fell 5% for California (Table 9).

Of the total domestically-caught receipts of tropical tuna for 1983, 125,224 tons (46%) was received in California; 78,208 tons (28%) at American Samoa/Hawaii sites; and the remaining 71,652 tons (26%) in Puerto Rico. Domestically-caught deliveries of tropical tuna to California fell 8% from 1982 but increased 93% in American Samoa/Hawaii and increased 60% in Puerto Rico. Skipjack tuna dominated domestically-caught tropical tuna receipts, comprising 56% of the total, domestically-caught tropical tuna receipts for 1983 (Table 9).

Imported tropical tuna receipts totaled 173,640 tons in 1983, 2% below 1982. Imports made up 39% of the total tropical tuna cannery supply in 1983 versus 45% in 1982. Puerto Rico was the major receiving site for tropical tuna imports during 1983 with 108,926 tons, 63% of the total. California followed with 26% and American Samoa/Hawaii received the remaining 11%. Receipts of imported tropical tuna in Puerto Rico decreased 5% from 1982 and increased slightly for California and American Samoa/Hawaii sites (1% and 3% respectively). Skipjack tuna was the major tropical tuna species

imported during 1983, with 135,308 tons, comprising 78% of total tropical tuna imports. Yellowfin tuna contributed the balance. Overall skipjack tuna imports were up 6% from 1982, while yellowfin imports fell 25% (Table 9).

The leading exporter of raw tropical tuna to the U.S. in 1983 was Japan, with approximately 30,320 tons or 12% of the 1983 total. Imports from Japan consisted of 97% skipjack tuna and the remainder yellowfin and unidentified tuna. Ghana followed with 23,413 tons, 9% of the total; of this 95% was skipjack tuna, and the rest was yellowfin and unidentified tuna (Table 5).

The total value of 1983 tropical tuna imports received at U.S. canneries was \$138 million, down 21% from 1982. The value of skipjack tuna imports was approximately \$100 million and the value of yellowfin tuna imports was approximately \$38 million, decreases of 13% and 36% respectively from 1982. These values convert to weighted average prices of \$742 per ton for skipjack tuna imports and \$983 per ton for yellowfin tuna. This represents price decreases of 19% for skipjack tuna and 16% for yellowfin tuna from 1982.

The Pacific Ocean was the major source of U.S. tropical tuna cannery receipts. For all tropical tuna species combined, the Pacific provided 380,864 tons during 1983, 85% of the total supply. The Atlantic and Indian Oceans provided 14% and 1% each, virtually all imports. On a regional basis, the western Pacific was the leading source of tropical tuna receipts contributing 263,001 tons, 59% of the total tropical tuna cannery supply in 1983. Total tropical tuna receipts from the western Pacific rose 99% from

1982. Of the total tropical tuna receipts originating in the western Pacific during 1983, 64% (169,121 tons), was domestically caught; the remainder (93,880 tons) consisted of imports. Domestically-caught tropical tuna receipts from the western Pacific increased 154% from 1982 while imports increased 44%. Skipjack tuna dominated tropical tuna receipts from the western Pacific in 1983, contributing 72% of the total receipts from this oceanic area, and 42% of the total tropical tuna receipts from all areas. Other oceanic regions contributing to the 1983 U.S. cannery supply, in order of importance, were the eastern Pacific (primarily domestically-caught yellowfin tuna); the eastern Atlantic (almost all skipjack tuna imports) and, the western Atlantic (mainly skipjack tuna imports). A breakdown of the 1983 tropical tuna cannery supply by ocean of origin is presented in Table 11.

California was the leading U.S. production center for canned light meat tuna during 1983, with 9,190 thousand cases, 39% of the total light meat pack for 1983. Next was Puerto Rico with 8,604 thousand standard cases, 37% of the total followed by American Samoa/Hawaii with 5,482 thousand standard case, 24% of the 1983 total. Production of canned light meat tuna in California was down 3% from 1982; µnchanged from 1982 in Puerto Rico; and, up 82% from 1982 in American Samoa/Hawaii (Table 7).

The wholesale list price of U.S. produced advertised light meat tuna ranged from \$43.00 to \$46.65 a standard case, discounted to as low as \$34.00 a standard case, at the beginning of 1983. By the end of 1983 it had fallen to between \$40.15 and \$41.05 per standard case, a decrease of 7% to 12%. Total U.S. production of canned light meat tuna - both advertised and private label - in 1983 was valued at \$625 million, down 3% from 1982.

Dividing total value by total volume yields a weighted average price of \$26.86 for a standard case of light meat tuna in 1983, down 12% from 1982.

### Canned Tuna Imports

The U.S. imposes tariffs on canned tuna imports in two categories: tuna in oil, and tuna not in oil. The tariff schedules on imported canned tuna were originally established when light meat tuna packed in oil was much more popular among U.S. consumers than light meat not in oil. Since then, U.S. consumption has shifted significantly in favor of light meat tuna packed in water.

Canned tuna in oil is subject to a 35% ad valorem tariff and imports are negligible. Canned tuna imports not in oil are controlled under a tariff rate quota which allows imports up to 20% of the previous year's domestic production at one rate, with imports above this level subject to a higher rate. Prior to reaching the quota on canned tuna not in oil, imports of canned white meat tuna not in oil are distinguished from imports of canned light meat tuna not in oil. Once the quota is reached however, there is no distinction between light and white meat tuna.

In 1983 the tariff rate on tuna not in oil was 6% ad valorem below quota and 12.5% above quota. The 1983 quota on imports of canned tuna not in oil was 95,620 thousand pounds or approximately 4,900 thousand standard, light meat equivalent, cases. Total imports amounted to a record 122,329 thousand pounds or almost 6,300 thousand standard, light meat equivalent, cases an increase of 40% from 1982. When the 1983 quota was reached white

meat comprised 16% of the canned imports not in oil, the remaining 84% was light meat tuna. U.S. imports of canned tuna in oil - virtually all light meat tuna - totaled 197 thousand pounds in 1983 or about 10,102 standard cases, down 8% from 1982.

Thailand was the leading exporter of canned tuna to the U.S. in 1983 with 39,930 thousand pounds of canned product or approximately 2,000 thousand standard, light meat equivalent, cases. This was 33% of the total U.S. imports of canned tuna. The Philippines followed with 32,018 thousand pounds, or about 1,600 thousand standard, light meat equivalent, cases, representing 26% of the total 1983 canned imports.

The value of all imported canned tuna was approximately \$137 million in 1983, an increase of 21% from 1982. This converts to a weighted average standard, light meat equivalent, case price of \$21.89, which is 13% below that for 1982. Imports of canned tuna by exporting country and their corresponding value are shown in table 12.

#### U.S. Consumption of Canned Tuna

U.S. civilian per capita consumption of canned tuna - both light and white meat - in 1983 was 3.0 pounds, 11% above 1982. Assuming that during 1983 canned light meat and canned white meat tuna were consumed in the same proportions as they were produced (18% white meat, 82% light meat), domestic consumption is estimated to be .54 pounds of white meat tuna and 2.46 pounds of light meat tuna on a per capita basis. This is equivalent to 1.2 standard cans of white meat and 6.1 standard cans of light meat tuna

per capita. Using the same procedure for 1982 this represents a 12% decrease in per capita consumption of white meat tuna and a 18% increase in per capita consumption of light meat tuna. Based on the National Marine Fisheries Service's, "Operation Price Watch," 10-city average price for domestically-produced canned tuna, U.S. consumers paid an average of \$1.49 per can for white meat tuna and \$.87 per can for light meat tuna during 1983, decreases of 3% and 9% respectively from 1982. This results in a slight increase in estimated per capita tuna expenditures: \$7.10 for 1983 versus \$7.08 for 1982. These estimates are based on U.S. canned production, and retail price information and do not take into account domestic consumption of imported canned tuna.

#### Discussion

U.S. tuna industry performance during 1983 was highlighted by increased domestically-caught cannery receipts of albacore and tropical tuna, an increase in the light meat tuna pack and increased purchases of tuna products by U.S. consumers. However, marked improvement in these areas was not realized without some significant changes in the industry's structure and operations. Some of these changes can be traced back to the late 1970's and early 1980's when rising production costs, particularly for fuel, led to record high prices at the ex-vessel, wholesale and retail levels. Higher prices increased consumer resistance to purchases of canned tuna resulting in an accumulation of canned tuna inventories. To stimulate consumption, the U.S. tuna industry initiated price reductions in mid-1980 and prices at all levels have declined since. This action, together with overall

improvements in the U.S. economy during the past year, has enhanced canned tuna sales and done much toward restoring U.S. canned tuna production to its historic average.

To accommodate wholesale price reductions and improve their inventory positions, U.S. processors sought to streamline cannery operations. Production at California canneries was cut back severely beginning in 1982 with the closure of one major cannery and significant contractions in the remaining operations. Processing in California declined further in 1983 as major U.S. canners shifted their operations to offshore sites (Puerto Rico, American Samoa/Hawaii) in order to take advantage of more favorable operating conditions.

Adverse conditions in the processing sector of the U.S. tuna industry at the end of 1981 filtered downward to U.S. tuna fishermen in the form of substantially lower ex-vessel tuna prices and difficulties and delays in selling their catches. Further, canneries were anxious to divest themselves of interests they held in tropical tuna vessels and to cut back their financial support to independently owned vessels. Under these circumstances many vessels were unable to participate in the fisheries. In addition to weakened ex-vessel markets, U.S. tropical tuna fishermen faced continued uncertainty in terms of access to traditional eastern Pacific fishing grounds, decreased availability of tropical tuna resources in the eastern Pacific attributed to El Niño, and increased competition from foreign fishermen. These factors, together with potentially more abundant tropical tuna resources to be found in the western Pacific Ocean, contributed to a reduction in the number of active U.S. tropical tuna

vessels and a redeployment of most large U.S. purse seiners to the western Pacific in 1983. Whether this situation will persist is unclear in view of events over which the industry has little or no direct control.

Of particular concern is the growing interest of resource adjacent nations to develop their own tuna fisheries, or otherwise benefit from readily accessible tuna resources. Whether the western Pacific will continue to account for the largest share of the U.S. tuna catch will depend on access and fishery development agreements that can be negotiated with the numerous island governments that exist in this region. In this regard, future stability in the exploitation of western Pacific tuna resources would seem contingent on the creation of a cohesive institutional arrangement that recognizes resource limitations as well as the particular interests of all parties involved. In addition, adequate industry infrastructure must be in place to support future growth. Similar concerns can be expressed over potential expansion of the U.S. tropical tuna fleet into the Atlantic and Indian Oceans. On the other hand, the eastern Pacific could regain its former harvesting stature once the effects of El Niño have abated and a pending international access licensing arrangement in this area is fully endorsed.

The U.S. industry has also expressed considerable alarm over the recent influx of canned tuna imports. Production of canned tuna outside the U.S. has grown steadily over the last decade. Most of this increase has been targeted for export to the U.S., the major market for canned tuna, where the market share of imports has more than doubled in recent years from 6% in 1977 to 14% in 1982. In terms of total volume, U.S. imports of canned

tuna increased 136% between 1978 and 1983 (72% from 1981 to 1983) an annual average rate of 19%. On the other hand, during this same period, imports of raw tuna decreased almost 43%, a significant shift in U.S. tuna imports from raw to finished product. Foreign producers thus gain the value added through processing. This implies a real cost-revenue squeeze for U.S. processors as they compete with foreign processors for inputs of raw tuna, driving up production costs and as they compete with foreign processors to maintain their share of domestic retail sales, putting downward pressure on prices they receive. Domestic wholesale prices fell to low levels in 1983, and discounts of up to \$9.00 per case were also being offered; nonetheless, import prices were still \$3.00 to \$5.00 per case below domestic prices. Lower prices and a strong U.S. dollar abroad have made foreign produced canned tuna very attractive to U.S. importers since early 1982. Furthermore, since the ad valorem duties on canned tuna imports are determined by their price, the lower the price of imported canned tuna, the lower the customs duty. The current high value of the U.S. dollar acts to further reduce the effective tariff on imported canned tuna. Even if the dollar weakens against foreign currencies in the near term, U.S. producers will continue to face stiff competition from foreign processors.

A significant event affecting the tuna industry in 1983 was the exclusion of canned tuna not in oil packed in American Samoa from being counted against the quota on imports of canned tuna not in oil. It is estimated that one third of the annual quota in recent years had been filled by canned tuna processed in American Samoa. In effect, the American Samoa exclusion allows foreign countries to export that much more canned tuna not in oil under the lower tariff duty rate. To a great extent this accounts for the large increase in foreign produced canned imports in 1983.

The U.S. tuna industry has brought attention to the import situation by seeking revisions to the tariff structure for tuna imports not in oil. It also successfully petitioned for a countervailing duty investigation on imported canned tuna from the Philippines. The investigation resulted in a countervailing duty of .72% being levied against Philippine exporters to offset production subsidies they received. This is but one case where the U.S. industry has obtained import relief, and if foreign competition grows more intense, it is likely that the U.S. industry will pursue other means available to protect itself as it adjusts to a new international order in tuna harvesting and processing.

On another front, the U.S. tuna industry recently responded to the changing tastes and preferences of U.S. consumers by introducing a line of low-sodium (low-salt) canned tuna products. While it may be premature to judge the popularity of the low-sodium tuna products among growing numbers of health and nutrition-conscious consumers, the line has experienced wide-ranging acceptance in terms of retail distribution. More important, perhaps, this product innovation suggests a willingness on the part of the U.S. tuna industry to look ahead and assume a greater degree of risk to assure future growth in a increasingly competitive market for the U.S. consumer's food dollar. The U.S. tuna industry recoginizes that opportunity lies in perceiving and meeting the challenges of the future, rather than attempting to revitalize the past.

Table 1. U.S. tuna cannery receipts and U.S. cannery production, 1982-83.

|  | Dom     | Domestically-Caught | Saught |         | Imports         |      |         | Total           |      | Average    | Total |
|--|---------|---------------------|--------|---------|-----------------|------|---------|-----------------|------|------------|-------|
|  | 1982    | 1983                | %CHG   | 1982    | 1983            | %CHG | 1982    | 1983            | %CHG | 1978-82 %C | %CHG  |
| Cannery<br>Receipts<br>(short tons)                | 228,156 | 228,156 285,554     | 25     | 272,490 | 272,490 246,495 | 6-   | 500,646 | 500,646 532,049 | 9    | 600,307    | -11   |
| Total Pack<br>(1,000's std<br>cases <sup>2</sup> ) |         |                     |        |         |                 |      | 27,088  | 28,382          | Ŋ    | 31,278     | 6-    |

Includes imports and domestically-caught tuna.

A standard case consists of 48, 6.5 ounce cans of light meat tuna and 48, 7 ounce cans of albacore or white meat tuna.

Source: NOAA, NMFS, Statistics and Market News, Southwest Region.

U.S. tuna cannery receipts (short tons) by receiving site and ocean of origin, 1982-83. 2. Table

|              | Domes   | Domestically-Caught | 111  |         | Imports |      |         | Total   |      |
|--------------|---------|---------------------|------|---------|---------|------|---------|---------|------|
|              | 1982    | 1983                | %CHG | 1982    | 1983    | %CHG | 1982    | 1983    | %CHG |
| Site         |         |                     |      |         |         |      |         |         |      |
| California   | 140,850 | 134,658             | 1-4  | 56,397  |         | 6-1  | 197,247 | 186,139 | 9-   |
| Am. Samoa/HI | 42,388  | 79,240              | 87   | 41,180  | 35,983  | -13  | 83,568  | 115,223 | 38   |
| Puerto Rico  | 44,918  | 71,656              | 09   | 174,913 |         | 6-   | 219,831 | 230,687 | 2    |
| Total        | 228,156 | 285,554             | 25   | 272,490 | 246,495 | -10  | 500,646 | 532,049 | 9    |
| Ocean        |         |                     |      |         |         |      |         |         |      |
| E. Atlantic  | 1       | 21                  | 100  | 78,552  |         | -29  | 78,552  | 55,932  | -29  |
| W. Atlantic  | 115     | 77                  | -33  | 41,306  | 40,643  | -2   | 41,421  | 40,720  | -2   |
| E. Pacific   | 159,618 | 115,303             | -28  | 31,164  |         | -61  | 190,782 | 127,540 | -33  |
| W. Pacific   | 68,423  | 170,153             | 149  | 102,086 |         | 16   | 170,509 | 288,816 | 69   |
| Indian       | ı       | ı                   | 1    | 19,382  |         | -2   | 19,382  | 19,041  | -2   |
| Total        | 228,156 | 285,554             | 25   | 272,490 | 246,495 | -10  | 500,646 | 532,049 | 9    |

Source: NOAA, NMFS, Statistics and Market News, Southwest Region.

Table 3. U.S. albacore tuna cannery receipts and U.S. white meat cannery production, 1982-83.

|  | 1982    | 1983   | %Change | 1978-82 | % Change |
|--|---------|--------|---------|---------|----------|
| Total Can-<br>nery Receipts<br>(short tons)        | 101,564 | 83,325 | -18     | 103,815 | -20      |
| Total Pack<br>(1,000's std<br>cases <sup>2</sup> ) | 6,021   | 5,105  | -15     | 6,056   | -16      |

lincludes imports and domestically-caught tuna.

A standard case consists of 48,7 ounce cans of white meat tuna.

Source: NOAA, NMFS, Statistics and Market News, Southwest Region.

U.S. albacore tuna cannery receipts (short tons) by receiving site, 1982-83. Table 4.

|              | Do        | mestically-Ca   | ught       |         | Imports  |         | _       | Total  |      |
|--------------|-----------|---|------------|---------|----------|---------|---------|--------|------|
| Site         | 1982      | 2 1983 %CF  | %CHG       | 1982    | 1983     | %CHG    | 1982    | 1983   | %CHG |
| Continental  | 5,099     |   | 85         | 11,115  |          | 1       | 16,214  | 15,050 | -7   |
| Am. Samoa/HI | 1,866     | 1,032   | -45        | 22,814  |          | -25     | 24,680  | 18,166 | -26  |
| Puerto Rico  | -0-       |   | 100        | 00,009  | 50,105   |         | 000,00  | 50,109 | -17  |
| Total        | 6,965     | 10,470  | 20         | 94,599  | 72,855   | -23     | 101,564 | 83,325 | -18  |
| Source: NOA  | AA, NMFS, | NOAA, NMFS, Statistics and Market News, Southwest Region. | ind Market | News, S | outhwest | Region. |         |        |      |

Table 5. Preliminary U.S. imports as received (short tons) of fresh, frozen and partially processed whole tuna by exporting country for the 10 leading exporters during 1982-83.

|                    | AIL    | Albacore | S       | klpjack | Yellowfin | owfln1 | Unider | ntlfled   |         | Total   |      |
|--------------------|--------|----------|---------|---------|-----------|--------|--------|-----------|---------|---------|------|
| Source             | 1982   | 1983     | 1982    | 1983    | 1982      | 1983   | 1982   | 1982 1983 | 1982    | 1983    | %CHG |
| Panama             | 1      | 1        | 10,321  | 4,728   | 12,683    | 7,218  | 910    | 501       | 23.914  | 12.447  | -48  |
| Venezuela          | 1      | 1        | 5,482   | 5,647   | 4,742     | 4,134  | 375    | 535       | 10,599  | 10.316  | . 1  |
| Brazil             | 609    | 619      | 14,539  | 13,996  | 416       | 293    | 2      | 4         | 15,567  | 14.912  | -4   |
| France             | 2,738  | 794      | 18,784  | 13,365  | 4,570     | 4,133  | 166    | 59        | 26,258  | 18,621  | -29  |
| Singapore          | 1,990  | 2,114    | 2,555   | 3,281   | 353       | 205    | 63     | 1         | 4,961   | 5,600   | 13   |
| Philippines        | 360    | 50       | 5,436   | 5,140   | 2,077     | 1,579  | 2      | -         | 7,875   | 6,770   | -14  |
| Rep. Korea         | 1,905  | 2,705    | 3,709   | 8,802   | 884       | 2,067  | 643    | 207       | 7,141   | 13,781  | 93   |
| Taiwan             | 27,434 | 17,829   | 2,062   | 3,842   | 767       | 1,976  | 36     | 41        | 30,299  | 23,688  | -22  |
| Japan              | 21,308 | 22,826   | 19,412  | 29,450  | 2,902     | 844    | 55     | 26        | 43,677  | 53,146  | 22   |
| Ghana              | 1      | 1        | 13,602  | 22,198  | 1,066     | 1,162  | 41     | 53        | 14,709  | 23,413  | 59   |
| "Other"            | 37,349 | 25,224   | 35,900  | 29,750  | 20,151    | 13,948 | 872    | 973       | 94,272  | 69,895  | -26  |
| Total <sup>2</sup> | 93,693 | 72,161   | 131,802 | 140,469 | 50,611    | 37,559 | 3,166  | 2,400     | 279,272 | 252,589 | -10  |
| -                  |        |          |         |         |           |        |        |           |         |         |      |

Includes bigeye and bluefin tuna. Individual species totals may not agree with those reported elsewhere due to unidentified catagory. Overall totals may not agree with those reported elsewhere because they can include tuna not destined for U.S. canneries and exclude foreign

Table 6. U.S. albacore tuna cannery receipts (short tons) by ocean of origin, 1982-83.

|             | Dome  | stically-Ca | ught |        | Imports |      | _       | Total  |      |
|-------------|-------|-------------|------|--------|---------|------|---------|--------|------|
| Ocean       | 1982  | 32 1983 %0  | %CHG | 1982   | 1983    | %CHG | 1982    | 1983   | %CHG |
| E. Atlantic | -0-   | -0-         | -0-  | 19,815 | 16,935  | -15  | 19,815  | 16,935 | -15  |
| W. Atlantic | -0-   | 4           | 100  | 21,129 | 16,127  | -24  | 21,129  | 16,131 | -24  |
| E. Pacific  | 5,099 | 9,434       | 85   | 48     | 243     | 400  | 5,147   | 719,6  | 88   |
| W. Pacific  | 1,866 | 1,032       | -45  | 36,760 | 24,783  | -33  | 38,626  | 25,815 | -33  |
| Indian      | 10-   | -0-         | -0-  | 16,847 | 14,767  | -12  | 16,842  | 14,767 | -12  |
| Total       | 6,965 | 10,470      | 50   | 94,599 | 72,855  | -23  | 101,564 | 83,324 | 1 8  |

Source: NOAA, NMFS, Statistics and Market News, Southwest Region.

Table 7. U.S. production of canned tuna (thousand standard cases) by processing site, 1982-83.

|              |           | White Mea | 3+   |                       | Light Mea       | +    |          | Total    |      |
|--------------|-----------|-----------|------|-----------------------|-----------------|------|----------|----------|------|
| Site         | 1982      | 1983 %CHG | %CHG | 1982                  | 1983 %CHG       | %CHG | 1982     | 1983 %   | %CHG |
| Callfornla   | i         | 1         |      |                       | 9,190.5         | -3   | 10,197.4 | 1        | -2   |
| Am. Samoa/FI |           |           | -41  |                       | 5,482.3         | 82   | 4,541.5  |          | 41   |
| Puerto Rico  | 3,529.1   | 3,412.2   |      |                       | 8,635.1 8,604.1 | 1    | 12,164.2 | 12,016.3 | ī    |
| Total        | 6,020.7 5 | 5,105.2   |      | -15 21,066.7 23,276.9 | 23,276.9        | Ξ    | 27,087.4 | 28,382.1 | 5    |

Table 8. U.S.tropical tuna cannery receipts and U.S. light meat cannery production, 1982-83.

|  | 1982            | 1983    | %Change | 1978-82 % Change | % Change |
|--|-----------------|---------|---------|------------------|----------|
| Total Can-<br>nery Receipts<br>(short tons)        | 399,082 448,724 | 448,724 | 12      | 496,492          | -10      |
| Total Pack<br>(1,000's std<br>cases <sup>2</sup> ) | 21,067          | 23,277  | 10      | 25,222           | L-       |

lIncludes imports and domestically—caught tuna. 2A standard case consists of 48, 6.5 ounce cans of white meat tuna. Source: NOAA, NMFS, Statistics and Market News, Southwest Region.

Table 9. U.S. tropical tuna cannery receipts (short tons) by receiving site, 1982-83.

| Site                | 1982     | Domestically-Caught<br>1983 %CH | Saught<br>%CHG | 1982    | Imports | 000  | 000     | Total Supply     | рІу  |
|---------------------|----------|---------------------------------|----------------|---------|---------|------|---------|------------------|------|
|                     |          |                                 |                | 100     | 006     | 5000 | 7861    | 1985             | %CHG |
|                     |          | Skipjac                         | Skipjack Tuna  |         |         |      |         |                  |      |
| Callfornla          | 56,167   | 58,521                          | 4              | 37,108  | 41.450  | 12   | 976.70  |                  | 1    |
| Am. Samoa/HI        | 26,598   | 54,911                          | 106            | 8.729   | 9.182   | - I  | 75 477  |                  | - :  |
| Puerto Rico         | 19,689   | 41,608                          | 11             | 81,270  | 84,676  | 4    | 100,959 | 126,284          | 25   |
| Sub-Total           | 1.02,454 | 155,040                         | 51             | 127,107 | 135,308 | 9    | 229,561 | 290,348          | 26   |
|                     |          | Yellowfin Tuna                  | n Tuna¹        |         |         |      |         |                  |      |
| California          | 79,584   | 66,703                          | -16            | 8,174   | 4,415   | -46  | 87,758  | 71,118           | -19  |
| Puerto Rico         | 25,229   | 30,044                          | 14             | 32,973  | 24,250  | -25  | 23,561  | 32,964<br>54,299 | 40   |
| Sub-Total           | 118,737  | 120,044                         | -              | 50,784  | 38,332  | -25  | 169,521 | 158,376          | -7   |
|                     |          | Total Tropical Tuna             | Ical Tun       | B       |         |      |         |                  |      |
| California          | 135,751  | 125,224                         | 8              | 45,282  | 45,865  | -    | 181,033 | 171,089          | -5   |
| Am. Samoa/HI        | 40,522   | 78,208                          | 93             | 18,366  | 18,849  | 2    | 58,888  | 97,057           | 65   |
| Puerto Rico         | 44,918   | 71,652                          | 09             | 114,243 | 108,926 | -5   | 159,161 | 180,551          | 13   |
| Grand Total 221,191 | 221,191  | 275,084                         | 24             | 177,891 | 173,640 | -2   | 399,082 | 448,724          | 12   |

Includes bigeye, bluefin and blackfin tuna. Source: NOAA, NMFS, Statistics and Market News, Southwest Region.

Table 10. Posted ex-vessel prices (\$ per ton), without quality adjustments, for skipjack and yellowfin (includes bigeye, bluefin and blackfin) tuna, 1982-83.

| 0212         | SKI   | Skipjack Tuna |      | Ye      | Yellowfin Tuna | na    |
|--------------|-------|---------------|------|---------|----------------|-------|
| (spunod)     | 1982  | 1983          | %CHG | 1982    | 1983           | % CHG |
| under 3.0    | \$500 | \$400-440     | -16  | \$890   | \$400          | -55   |
| 3.0 to 4.0   | \$700 | \$640         | 6-   | \$890   | \$640          | -28   |
| >4.0,<=7.5   | \$890 | \$800         | -10  | \$890   | \$800          | -10   |
| over 7.5     | \$890 | \$ 900        | -    |         |                |       |
| >7.5,<= 20.0 |       |               |      | \$1,050 | \$990          | 9-    |
| over 20.0    |       |               |      | \$1,170 | \$1,125        | 1-4   |

Source: NOAA, NMFS, Statistics and Market News, Southwest Region.

Table 11. U.S. tropical tuna cannery receipts (short tons) by ocean of origin, 1982-83.

| Ocean               |         |         | The company of the co |                     | STIODWI              |      | ř       | Total Supply |      |
|---------------------|---------|---------|--|---------------------|----------------------|------|---------|--------------|------|
|                     | 1982    | 1983    | %CHG   | 1982                | 1983                 | %CHG | 1982    |              | %CHG |
|                     |         |         |  | Skipjack            | k Tuna               |      |         |              |      |
| E. Atlantic         | ı       | 21      | 100  | 49,417              | 34,358               | -30  | 49,417  | 34,379       | -30  |
| W. Atlantic         | 1       | 3       | 100  | 17,119              | 18,070               | 9    | 17,119  | 18,073       | 9    |
|                     | 59,925  | 40,103  | -33  | 11,916              | 4,502                | -62  | 71,841  | 44,605       | -38  |
| 4. Pacific          | 42,529  | 114,913 | 182  | 46,892              | 75,066               | 09   | 89,421  | 189,979      | 112  |
| Indian              | ı       | 1       | ı  | 1,763               | 3,312                | 88   | 1,763   | 3,312        | 88   |
| Sub-Total           | 102,454 | 155,040 | 51   | 127,107             | 135,308              | 9    | 229,561 | 290,348      | 26   |
|                     |         |         |  | Yellowfin Tuna      | In Tuna <sup>1</sup> |      |         |              |      |
| Atlantic            | 1       | ı       | 1  | 9,320               | 4,618                | -50  | 9,320   | 4,618        | -50  |
|                     | 115     | 7.0     | -39  | 3.058               | 6.446                | 1111 | 3,173   | 6.516        | 105  |
|                     | 94.594  | 65.766  | -30  | 19,200              | 7,492                | -61  | 113,794 | 73,258       | -36  |
| W. Pacific          | 24,028  | 54,208  | 126  | 18,434              | 18,814               | 2    | 42,462  | 56,092       | 32   |
| P                   | ı       | 1       | •  | 772                 | 962                  | 25   | 772     | 362          | 25   |
| Sub-Total           | 118,73  |         |  |                     |                      |      | 69,521  | 158,376      | -7   |
|                     |         |         | Ĭ  | Total Tropical Tuna | cal Tuna             |      |         |              |      |
| Atlantic            | 1       | 21      | 100  | 58,737              | 38,976               | -34  | 58,737  | 38,997       | -34  |
|                     | 115     | 73      | -37  | 20,177              | 24,516               | 22   | 20,292  | 24,584       | 21   |
| E. Pacific          | 154,519 | 105,869 | -31  | 31,116              | 11,994               | -61  | 185,635 | 117,865      | 100  |
|                     | 66,557  | 169,121 | 154  | 2,535               | 4,274                | 6 9  | 2,535   | 4,274        | 69   |
| Grand Total 221,191 | 221,191 | 275,084 | 24   | 177,891             | 173,640              | -2   | 399,082 | 448,724      | 12   |

<sup>1</sup>Includes bigeye, bluefin and blackfin tuna. Source: NOAA, NMFS, Statistics and Market News, Southwest Region.

Table 12. Imports of canned tuna (in oil and not in oil) by exporting country and their corresponding value, 1978-83.

| The same of the sa | 016       | 6/61                                    | 1980                 | 1981    | 1982    | 1983    |
|--|-----------|---|----------------------|---------|---------|---------|
|  |           | J                                       | Quantity (1,000      | (spunod |         |         |
| Japan  | 35,887    |   | 24,794               | 21,271  | 26,481  | 20,387  |
| Fhillppines  | 3,374     | 6,998                                   | 13,777               | 21,451  | 27,631  | 32,018  |
| Thalland   | 1,551     | 4,844                                   | 6,405                | 10,315  | 18,667  | 39,930  |
| Talwan   | 9,051     | 12,282                                  | 15,947               | 15,771  | 10,704  | 18,710  |
| Australla  | 0         | 0                                       | 0                    | 58      | 1,930   | 2,799   |
| Malaysla   | 651       | 292                                     | 99                   | 969     | 755     | 3,083   |
| Indonesia  | 0         | 0                                       | 0                    | 146     | 595     | 2,634   |
| Haldive  | 0         | 62                                      | 009                  | 592     | 327     | 0       |
| Spaln  | 132       | 336                                     | 146                  | 170     | 120     | 133     |
| Singapore  | 0         | 0                                       | 28                   | 65      | 120     | 329     |
| VII Other  | 1,136     | 523                                     | 1,792                | 316     | 248     | 2,306   |
| Total  | 51,781    | 53,704                                  | 63,553               | 70,852  | 87,579  | 122,329 |
|  |           |   | Value (1,000 dollars | ollars) |         |         |
|  | 717 717   | 37.055                                  | 42,015               | 36,453  | 38,561  | 24,643  |
| Japan  | 40.04     | 7 | 20.00                | 30.504  | 31,085  | 32,291  |
| Philippines  | 5,556     | 7,7,7                                   | 20,04                | 15,400  | 22,711  | 43,259  |
| halland  | 1,886     | 201.0                                   | 712 20               | 24.631  | 14,366  | 22,772  |
| Talwan   | 199'6     | 14,105                                  | 010107               | 105     | 3,451   | 3,684   |
| Australla  | ı         |   | 32                   | 1.230   | 1.242   | 4,068   |
| Malaysla   | 746       | 214                                     | 0                    | 209     | 669     | 2,679   |
| Indonesia  | 1         | . !                                     | u c                  | 874     | 379     | 1       |
| Maldive  | ı         | 19                                      | 679                  | 402     | 300     | 268     |
| Spaln  | 294       | 201                                     | 100                  | 10      | 141     | 386     |
| Singapore  | 1 1 1     | 579                                     | 1,698                | 459     | 412     | 3,274   |
| AII OTher  | 0 + 0 4 - |   |                      |         |         |         |
|  |           | 120 33                                  | 07.254               | 110,358 | 115,54/ | 1710754 |

Source: U.S. International Trade Commission, Publication 841, Summary of Trade and Tariff Information, July 1983. Bureau of Census.

U.S. DEPARTMENT OF COMMERCE
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