

Texas' Brown Shrimp and 1983-84 Indices

National Marine Fisheries Service scientists have concluded that the brown shrimp season off Texas will be poor and the catch for July 1983-June 1984 is expected to be about 17.8 million pounds, with a range between 16.0 and 19.4 million pounds. All of the 1983 indices point in the same disappointing direction—lower than 1982 and lower than their historical averages.

In the Gulf of Mexico, brown shrimp postlarvae enter the bays and passes when they are between ¼- and ½-inch in length. Collections of young postlarval brown shrimp from the Galveston, Tex., entrance are used as an early indicator of the upcoming crop for the offshore fishery. Shrimp abundance is measured as the postlarvae grow into juveniles and enter the bay and bait shrimp fisheries.

Indices of the abundance of brown shrimp postlarvae and juveniles in the bay are sampled by a unique drop sampling method while they are in vegetated marsh areas. Although no historical data are available from this sampling technique, it is believed that it may be a good basis for predicting the future of brown shrimp crops. Drop sampler data from Galveston Bay are available for 1982 and 1983, and for the first time scientists are using these density estimates as an additional indicator of the brown shrimp crop. NMFS scientists at its Southeast Fisheries Center Galveston Laboratory primarily use the relative abundance of brown shrimp caught by the Galveston Bay bait shrimp fishery as the most reliable means of predicting the brown shrimp season.

These indices of postlarval and juvenile abundance are based on information collected from Galveston Bay from February through 10 June which is believed to provide a reasonable forecast

for the entire Texas coast. Supplementing these indices are additional measures of relative abundance from the brown shrimp inshore fisheries in Matagorda, Aransas, San Antonio, and Galveston Bays.

Postlarval Brown Shrimp Index—Galveston Bay

Mass movements of postlarval brown shrimp into nursery areas usually occur after water temperatures reach or exceed 60°F. This year, bay waters were generally below 60°F until the first week in April. Low catches of postlarval brown shrimp were observed throughout the spring (Feb.-May) and were much lower than the 15-year average postlarval index for Galveston Bay.

Juvenile Brown Shrimp Indices—Galveston Bay

Sampling of juvenile shrimp with the drop sampler in a salt marsh at Galveston Island State Park indicated much lower densities in March and April 1983 compared with 1982. Late recruitment of juveniles was reflected by high densities in May 1983. Over 70 percent of juveniles in May were less than 30 mm in length and did not move into the primary bay areas and be available to the inshore fishing until late June. The lack of an early crop of juveniles in the salt marsh grass habitat in March-April severely limited the inshore and offshore abundance of brown shrimp in 1983.

Another measure of the abundance of brown shrimp is an estimate of the standing stock of shrimp in Sydnor Bayou, a secondary bay in Galveston Bay. In 1970, an above average brown shrimp year, the standing stock was estimated at 6,500 shrimp per acre; for 1983, the

standing stock was estimated at 2,600 per acre.

Texas Inshore Bay Fishery

The Texas inshore brown shrimp season opened on 15 May. Catch rates were relatively low, less than 45 pounds/hour in all bays, especially Galveston Bay where shrimpers concentrated on catching white shrimp in May. Although there are no comparable measures of catch rates from previous years, it is felt that the 1983 catch rates are low; good catch rates from previous years range from 75 to 100 pounds per year.

Bait Shrimp Indices for Galveston Bay

The best estimate of the relative magnitude of the brown shrimp crop comes from data collected from the Galveston Bay bait shrimp fishery during May and early June. This year's index is extremely low and we predict a total catch from July 1983-June 1984 of about 17.8 million pounds, a below average year (i.e., average offshore brown shrimp production for statistical areas 18-21 from 1960-82 was 27.5 million pounds). (Source: SEFC Galveston Laboratory.)

Marine Mammal Biology, Conservation Conference

The Fifth Biennial Conference on the Biology of Marine Mammals, sponsored by The Society for Marine Mammalogy, will be held from 27 November to 2 December 1983 in Boston, Mass., on the conservation of, and recent research on, whales, seals, and other marine mammals. Conference host is the New England Aquarium and the conference headquarters is at the Westin Hotel in Copley Place.

About 1,000 marine mammal specialists from North America are expected to attend, along with many other researchers from around the world. Further information on the conference and The Society for Marine Mammalogy is available from John H. Prescott, Conference Chairman, New England Aquarium, Central Wharf, Boston, MA 02110.

Oregon Shrimp Landings Down 54 Percent From '82

Only 1.0 million pounds of shrimp were landed in Oregon ports last June, a decrease of 69 percent from the 2.9 million pounds landed during June 1982. Season totals for 1983, through June, were 4.5 million pounds compared with 9.7 million pounds through June 1982.

The number of vessels fishing for shrimp also continued to decline, with only 94 vessels making deliveries in Oregon during the period, compared with 109 vessels the previous year. A more significant reduction in effort is seen in the number of deliveries, which declined from 339 during June 1982 to 221 in June 1983. The price fishermen received for their catch ranged from \$0.72-0.77/pound, depending on the grade of shrimp and the port or plant to which it was delivered.

Shrimp availability was spotty to nonexistent in almost all areas. Most of the effort had been made in the Mud-hole area, but the volume was low. The smallest shrimp continue to come from the Destruction Island area, with an average of 164.9 shrimp per pound.

During April, Oregon shrimp fishermen had landed 2,011,000 pounds of shrimp, a decrease of only 4,000 pounds from the 2,015,000 pounds landed in April 1982. However, 1,263,000 pounds were delivered into Oregon from 16 to 30 April, 33 percent less than the 1,894,000 pounds delivered during this period in 1982. The number of vessels fishing increased by 10, totaling 92 during this period, but which was a decrease of 33 percent from 1982 when 137 vessels were fishing. Fishermen received \$0.62-0.72/pound for their catch during this period.

During May fishermen landed only 1.5 million pounds of shrimp in Oregon, a decrease of 69 percent from the 4.8 million pounds landed in May 1982. This decline left the season total, through May 1983, at 3.5 million pounds compared with 6.8 million pounds through May 1982.

Only 101 vessels fished for shrimp during May, 55 vessels less than in May of 1982. These vessels made 247 deliveries and were paid \$0.70-0.75/

pound for their catch. Larger amounts of 1-year-old shrimp began to appear in the catch during May, particularly in area 32 (Destruction Island) where the count averaged 167 shrimp per pound.

Bristol Bay's Sockeye Take Breaks All Records

Alaska's 1983 Bristol Bay commercial harvest of sockeye salmon, *Oncorhynchus nerka*, broke the previous all-time high record catch and also exceeded the record harvest of all salmon species in the bay. More than 36 million sockeye had been harvested by commercial fishermen as of mid-July; the previous harvest record was 25.7 million caught in 1981.

The Bristol Bay fishery, largest sockeye producer in the world, generates about 24 percent of the Pacific Rim production, approximately 48 percent of the United States production, and some 63 percent of Alaska's red salmon production. By mid-July more than 44 million fish had been accounted for in the 1983 Bristol Bay sockeye run. The record run of sockeye to the bay was 63 million in 1980. The unexpectedly high run and harvest of sockeye this year are attributed to such factors as phenomenal fresh water and marine survival coupled with a significant reduction in high seas interception, plus sophisticated management of escapement in past years to ensure returning stocks, according to the Alaska Department of Fish and Game.

TEXAS OYSTERMEN REAP TOP HARVEST

Oystermen along the Texas Gulf Coast harvested an all time record 6.3 million pounds of oysters during the 1982-83 season, according to Texas Parks and Wildlife Department officials. C. E. Bryan, director of shellfish programs, said the estimated \$8.4 million dockside value of the catch also was an all-time high. Previous high for the 6-month oystering season was 1965-66, when 4.9 million pounds were brought

in, Bryan said. The season usually runs from 1 Nov. to 30 April each year.

As in the past, about 80 percent of the Texas oyster harvest occurred in the Galveston Bay system, where placement of clean oyster shell on 700 acres of the bay in July 1980 was believed to be a factor in the good 1982-83 harvest. Generally favorable environmental conditions on the Upper Texas Coast since 1978 also enhanced oyster reproduction and survival, Bryan noted. The clean shell provided additional habitat for larval oysters (spat) to attach and grow. The shell placement was estimated to have increased the spat set by 1.5 million per acre, he said.

Texas and other Gulf Coast states operate a system of private leases which also increases the total harvest. Under the lease system, oysters from polluted areas can be transported to designated areas and subsequently harvested after being examined by Texas Department of Health officials and declared safe for human consumption. All private leases in Texas are located in Galveston Bay, Bryan said. Other management techniques have been used in recent years to protect the resource, including adjustments of the opening and closing dates of the season. (Source: Texas Parks and Wildlife Department.)

Pacific Mackerel Signs Reported "Encouraging"

The Pacific mackerel season was closed at midnight 23 June, having reached a season quota of 29,000 tons according to landing receipts tallied by California's Department of Fish and Game. The season reopened 1 July with a quota of 22,000 tons.

That quota was recommended by DFG marine biologist Rick Klingbeil of Long Beach who estimated a total biomass of approximately 131,000 tons in his annual legislatively mandated report on the Pacific mackerel status. Klingbeil noted that the age composition of Pacific mackerel samples from April and May 1983 reversed the trend of a fishery dominated by older fish. From

July 1982 through March 1983, the 1978 and older years classes accounted for an estimated 65 percent of the tonnage landed. During April-May 1983 they accounted for 41 percent of the tonnage landed, with 2- and 3-year-olds (1980 and 1981 year classes) accounting for 49 percent.

What this appears to mean, said Klingbeil, is that the trend toward an older population of mackerel seems to be reversing itself, an "encouraging" sign. In his report, Klingbeil noted that sardines had occurred in 67 percent of the sampled mackerel landings in May, and that the cumulative 1983 incidental catch of sardines through the end of May was close to 200 tons. Klingbeil said it was too early, however, to say that the sardine was about to make a comeback. (Source: California Department of Fish and Game News.)

Global Seafood Expo Is Set for Los Angeles

An international seafood exposition, Sea Fare '84, will be held in Los Angeles, Calif., 24-25 January 1984 at the Airport Hilton and Towers. Jointly sponsored by Sea Fare Expositions, Inc., and *Seafood Leader* magazine, it will feature displays of seafood products, associated services, and seminars.

Exhibitors will include seafood producers and distributors who will display a wide variety of fresh, frozen, and processed seafood products from around the world. Seafood buyers from all levels of the food distribution chain (foodservice and institutional buyers; supermarket buyers; restaurant owners, buyers, and chefs; seafood retail market owners; and buyers and foodservice operation managers) are expected to attend.

Sea Fare '84 will feature an extensive program of hands-on seminars to educate seafood buyers about the complexities of seafood and thus improve their profitability. Sample seminar topics include: "How to Sell Consumers on Frozen Seafood," "Seafood Seasons: Knowing When to Buy," "Quality Seafood: Making It Pay," "Product Substitution: How to Spot and Avoid It," and "What a Consumer Looks for in Seafood." For further information, contact

project manager Sandi McKenzie, Sea Fare '84, 4016 Ashworth Ave. N., Seattle, WA 98103, telephone (206) 547-6030.

International Artificial Reef Conference Held

The "Third International Artificial Reef Conference" was held at the Registry Hotel in Newport Beach, Calif., on 3-5 November 1983. The conference examined the effectiveness of new technologies in enhancing marine productivity and harvest. Conference sessions included: Siting and reef design criteria, reef development and productivity, surface and midwater fish aggregating devices, productivity of artificial versus natural reefs, mitigation applications, and fishery management considerations. The conference was attended by over 250 persons and the proceedings of it are scheduled for publication at a later date, according to conference organizers.

The conference brought together many of the major researchers concerned with recreational and commercial fishery applications of artificial reef enhancement and fish aggregation from the United States, Japan, China, Australia, Philippines, and many other nations. It also emphasized the need to establish coordination between current and future artificial reef enhancement and fish aggregation research efforts throughout the United States and the world.

FAO Holds International Conference on Fisheries

The U.N. Food and Agriculture Organization (FAO) will hold a World Conference on Fisheries Management and Development, FAO Director-General Edouard Saouma has announced. The two-part conference will be held in Rome.

"This initiative by FAO is the first international step to examine the practical realities of fisheries management in the context of the new legal regime of the seas," Saouma stated. Although it will concentrate on marine fisheries, the World Fisheries Conference will also

look at inland fisheries and aquaculture. The first part of the Conference (technical side), in the regular meeting of FAO's Committee on Fisheries, was held 10 to 19 October 1983. The Committee will present its recommendations to the policy phase of the Conference from 27 June to 6 July 1984.

The Conference will discuss the contribution of fisheries to national economic, social, and nutritional goals; the special role and needs of small-scale fisheries and rural fishing communities; international trade in fish and fishery products; and international collaboration in fisheries research and management.

FAO expects the Conference to forge a strategy of fisheries management and development and come up with action programs which will focus on technical assistance, with special emphasis on small-scale fisheries, investment for fisheries development, integrated training, and promotion of intraregional and international trade. The World Fisheries Conference is open to all member nations of FAO, of the UN, and its specialized agencies.

Two Giant Bluefin Tuna Set Texas State Records

Two huge bluefin tuna caught within 2 hours of each other have been certified as state records by the Texas Parks and Wildlife Department. The new record was held briefly by Robert C. Wilson III of Houston when he caught a 640-pounder at 3:30 p.m. on 30 May. At 5:10 p.m., Wilson's guide, Ricky H. Preddy of Port Mansfield, boated an 802-pound bluefin which ousted the first fish from the record book.

Both fish were caught in 300 fathoms depth off the East Breaks, and both anglers were using 130-pound-test line. Preddy's record fish was 114 inches long and 84 inches in girth. A 540-pounder had held the state record since 1977.

Other state records recently certified by the department's fish records committee include a 2.81-pound smooth puffer caught by Judie Holland of Galveston 5 June and a 63-pound, 4-ounce bigmouth buffalo caught by Kelly Arnold of Marshall at Caddo Lake on 21 May.