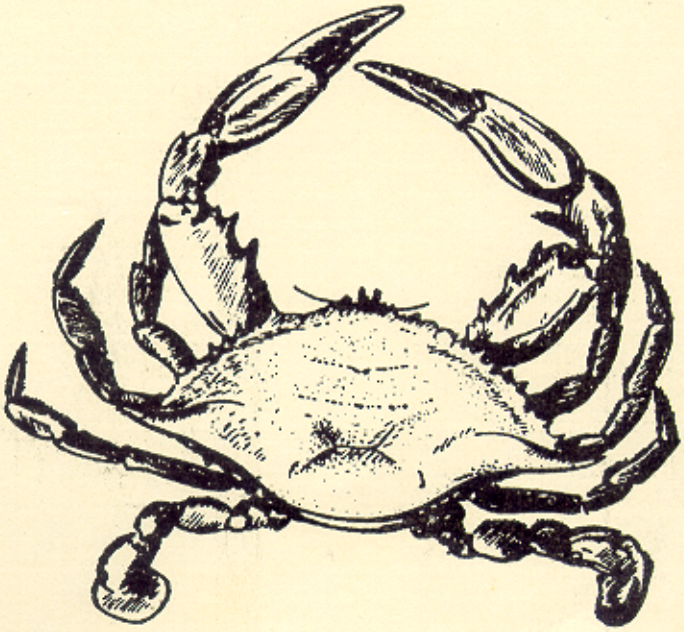
EDIBLE CRABS



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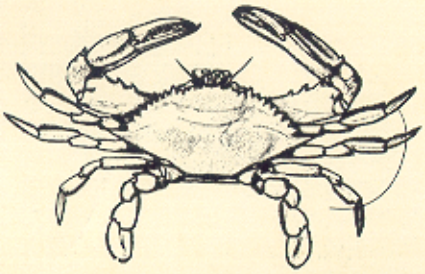
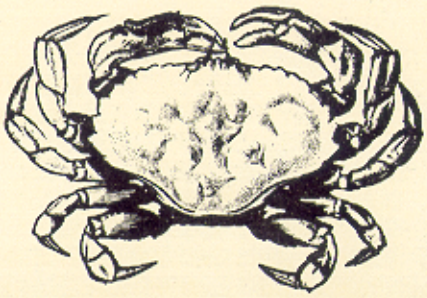
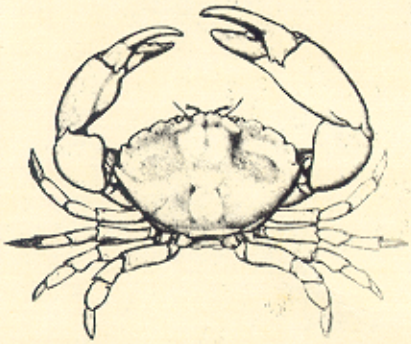
UNITED STATES DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
BUREAU OF COMMERCIAL FISHERIES
WASHINGTON 25, D. C.



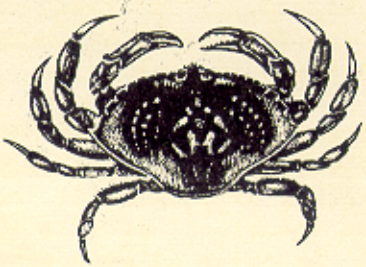
BLUE CRAB
RANGE - TEXAS TO RHODE ISLAND
GEAR - TROT LINES, POTS, FYKE NETS, DIP NETS, SCRAPES, DREDGES



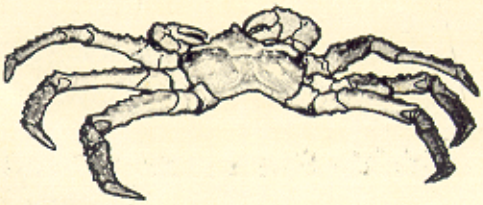
ROCK CRAB
RANGE - NEW ENGLAND
GEAR - POTS



STONE CRAB
RANGE - FLORIDA
GEAR - DIP NETS, CRAB POTS



DUNGENESS CRAB
RANGE - PACIFIC COAST STATES AND ALASKA
GEAR - TRAPS



KING CRAB
RANGE - ALASKA
GEAR - TANGLE NETS, OTTER TRAWLS

by

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Four species of crabs possessing the qualifications of an important food resource - abundance, wholesomeness, good flavor, and a ready market are found in the marine waters of the United States and Alaska. These are the blue crab of the Atlantic coast and Gulf of Mexico, the rock crab of New England, the Dungeness crab of the Pacific coast, and the king crab of Alaska. A few other species of good quality and of sufficient abundance also support small fisheries. Among these are the Jonah crab of New England and the stone crab of the south Atlantic and Gulf coasts.

Atlantic and Gulf Coasts

THE BLUE CRAB, *Callinectes sapidus*, next to the shrimp and lobster, is the most valuable crustacean of our waters. Its range is from Cape Cod to Mexico. It is found in greatest abundance from Delaware Bay to Texas, and the region of Chesapeake Bay is especially famous for its great numbers of blue crabs.

The favorite habitat of the blue crab includes estuarine waters such as bays, sounds, and channels at the mouths of coastal rivers. This crab prefers shallow water, not exceeding 30 feet in depth. While normally an inhabitant of salt water, it is also found in water that is only slightly brackish or even fresh. It may live for many hours out of water if kept moist and cool. It is active and pugnacious and will devour almost any animal food it can obtain. This crab lives 2 to 3 years and generally spawns during its third summer.

Blue crabs are caught and marketed both in a soft and hard shell condition. Soft-shell crabs are immature growth stages. Four to six molts or soft shelled stages may occur during the life of a crab after market size has been attained. Soft crabs are taken principally in Chesapeake Bay during the summer months with small dredges and dip nets and in pound nets. In some places crabs about to shed are placed in holding pens or live cars and after molting are sold as soft-shell crabs. Soft crabs are shipped alive to market in wooden boxes containing trays filled with moist sea grass and bring a high price. The entire body of a soft-shell crab may be eaten after cooking.

This Leaflet is a revision of Fishery Leaflet 71, Edible Crabs (July 1945)

The hard blue crab yields the familiar crab meat of the eastern and southern United States. Dredges, baited lines, and traps of various types are used to capture the hard crab. Some hard crabs are shipped alive to markets, but most are steamed near point of capture and the meat extracted from the shell. The meat is either shipped to market fresh or pasteurized by a new process in iced containers or canned for shipment to more distant areas. The catch of blue crabs in 1957 amounted to about 113,728,000 pounds valued at $7,483,000.

THE ROCK CRAB, Cancer irroratus, and the JONAH CRAB, Cancer borealis, both common to the New England coast, are similar in appearance and often difficult to distinguish. Both crabs range up to 6 inches in width and are smoother in outline than the blue crab. The Jonah crab has a rougher shell than the rock crab and is larger and heavier when fully grown. The legs of the former are also proportionately shorter and heavier. Both crabs inhabit rocky shores near the low tide level, and the clear waters of the ocean shores. The Jonah crab is well protected with a heavy shell and is not given to self-concealment, often being found between the tides on the beach. The rock crab, however, tends to hide among rocks, partially burying itself in sand or gravel.

These crabs have scarcely been exploited commercially, but there is no reason why they should not be. Both are rather abundant, contain more meat than the blue crab, and are equal to the latter in flavor. The meat is delicious whether served in the shell, as a salad, or deviled. These crabs are generally taken in lobster pots from April to November. The combined catch of both species in the New England states amounted to 1,368,000 pounds in 1957, valued at $89,000.

THE STONE CRAB, Menippe mercenaria, ranges from North Carolina to Mexico. It lives in water from the low tide line to a depth of 30 fathoms in holes in the mud along borders of creeks or estuaries and is also found near the rocks of harbor jetties. It grows to a much larger size than the blue crab and its shell is hard and thick. The flesh is more like that of the lobster than that of the blue crab and is most abundant in the large claws. Many consider it superior in flavor to the blue crab, but because of its scarcity in most localities and the difficulty of capturing it, the fishery is limited, principally to the west coast of Florida. It is captured mainly with pots and the crabs are usually declawed and released. Sometimes the entire crab is kept although yield in meat from the body is slight. Nothing definite is known concerning the survival of crabs whose claws have been removed, but it is known that crabs do regenerate new claws.

Stone crab claws are either boiled and chilled prior to sale or are sold fresh frozen. The catch amounted to 241,000 pounds in 1957, valued at $89,000.

Pacific Coast

THE DUNGENESS CRAB, *Cancer magister*, ranges from the Aleutian Islands in Alaska to Magdalena Bay, Mexico. This crab is found in greatest abundance in shallow water on sandy bottom, but ranges in depth from the low water line to 50 fathoms. It reaches approximately 8 inches in width and weighs up to 4 pounds, although the average weight is slightly under 2 pounds. It lives about 8 years and like all crabs, molts in order to grow. Unlike that of many crabs, the soft shell of this species is leathery and unpalatable. During molting the flesh undergoes changes that make it undesirable for food unless taken in full soft shell. It is seldom taken at this stage since molting individuals do not seek food and are not attracted by bait; neither do they enter nets until the shell has begun to harden. For these reasons the crab is captured largely in the hard shell condition by traps and hoop nets. The crabs are marketed as frozen whole dressed crabs or the cooked meat is sold fresh or canned. Dressed crabs are prepared by removing digestive and reproductive systems and gills after cooking and then freezing in plastic bags. Prior to 1957, nearly the entire production of fresh crab meat was marketed on the Pacific coast. Since that time, however, the market for fresh crab meat and whole dressed crabs has been extended to the midwest and the Atlantic and Gulf coasts. The catch in the United States and Alaska in 1957 totaled 42,774,000 pounds, valued at $3,529,000.

THE KING CRAB, *Paralithodes camtschatica*, is found in the cold offshore waters of central and western Alaska, extending from Prince William Sound to the Alaska peninsula and to the northern part of the Bering Sea. Present information indicates that the waters along the Alaska peninsula contain the best fishing areas. This crab is usually found in 10 to 40 fathoms of water in the spring and in 30 to 70 fathoms in the fall. Prior to World War II, the Japanese were the principal exploiters of this resource, utilizing large cannery ships accompanied by smaller craft from which tangle nets were fished to catch the crabs. Since then an American fishery has developed for king crab, and in 1957 produced 13,077,000 pounds, valued at $1,046,000. This catch was made by otter trawls and pots, and the crab meat was marketed either as a canned or frozen product. The king crab is one of our most important sources of crab meat, and large quantities are imported from Japan each year, much of which is caught in the Bering Sea. The most spectacular and commercially important feature about king crabs is their size. Male crabs with an over-all spread of 4 to 5 feet and weighting 15 or more pounds are common in waters south of the Alaska peninsula.

Further information concerning crabs, if desired, may be obtained from the following papers, some of which are now out of print but may be consulted in Government depository libraries.

Reference Material

Crab industry of Chesapeake Bay. by E. P. Churchill. Appendix IV to Report U. S. Commissioner of Fisheries for 1918, 25 pages, 1920.

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