

# Deep-Sea Red Crab Fishery Management Plan

## Species Managed Under Fishery Management Plan (FMP)

The deep-sea red crab (*Chaceon quinque-dens*) occurs in a patchy distribution from Nova Scotia to Florida. Though the species is found primarily within a 200-1800 meter depth band along the continental shelf and slope, red crab has also been located in some deep-water canyons along the coast. Preferred depth depends, in part, on the characteristics of individual crabs. Species of the genus *Chaceon* that are red in color generally inhabit deeper water than those that are tan. Young crabs dwell in considerably deeper water than adults and males are typically found deeper than females. The red crab is a slow-growing species which may not spawn annually. It is long-lived, with some individuals surviving for up to 15 years. These characteristics make it particularly susceptible to depletion by overfishing.

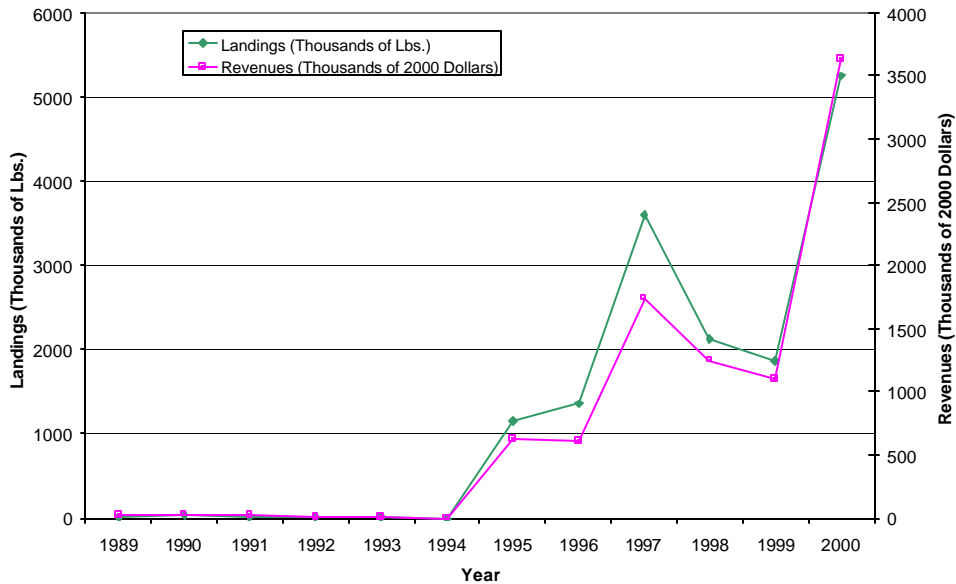
## Management Plan Overview

The New England Fishery Management Council began development of the Red Crab FMP in November 1999 to address overfishing of the red crab resource and the threat of overcapitalization of the red crab fishery. In 2000 a control date was established to discourage "speculative entry", or rapid entry of new vessels into the fishery while the management plan was undergoing development. The control date was also intended to serve as a way to establish future eligibility for participation in the fishery if the Council chose to limit access to the resource. In 2001 the National Marine Fisheries Service implemented emergency regulations, which expired in May 2002, to prevent overfishing of the resource. The FMP was recently approved by the Council and NMFS' Northeast Regional Office but awaits approval from NMFS headquarters. The measures in the plan grant controlled access permits to vessels that demonstrate average annual landings of red crab of greater than 250,000 lbs. during a specific time period, set trip limits that restrict the amount that can be landed during each fishing trip, designate an annual total allowable catch (TAC), allocate days-at-sea (number of days that can be fished each year) to vessels with a controlled access permit, place restrictions on gear (limit on the number of pots per vessel) and limit processing at sea (crabs may be partially processed at sea and landed in whole or half sections with the claws and legs attached).

## History of the Fishery

Since the early 1970s there has been a small directed fishery off the coast of New England and in the Mid-Atlantic for deep-sea red crab. Though the size and intensity of this fishery has fluctuated since its origin, it has remained consistently small relative to more prominent New England fisheries such as groundfish, sea scallops and lobster. Landings have increased substantially since 1994, when implementation of Amendment 5 to the Northeast Multispecies (Groundfish) FMP may have redirected some fishing effort onto "under-exploited" fishery resources such as red crab. Concern expressed by a group of New England fishermen about the threat of resource depletion and overcapitalization of the fishery served as the impetus for management action. In 1999 the Council began development of a management plan for red crab.

**Landings and Revenues in the Deep-Sea Red Crab Fishery**



## Fishery Status

The lack of fishery-independent data on the red crab resource presents a real challenge to the Council and there are no reliable estimates of red crab biomass that may be used to determine the present stock condition. The NMFS bottom trawl survey only captures red crabs occasionally at the shallowest fringe of their habitat. Red crabs are known to occupy depths from 200-1800 meters, but the highest densities and biomass occur between 320-910 meters. The shaded band in the image on the right represents the area of the fishery in which the highest concentration of adult red crabs is likely to be found.

There are plans to conduct a red crab survey within the next three years through a collaborative effort among scientists in the Northeast region and members of the red crab fishing industry. Information obtained through this survey about the condition of the red crab resource is important in assessing the effectiveness of the management measures in meeting the overall goals of the FMP.

