

THE EFP PROGRAM

One mission of the California Department of Fish and Wildlife (CDFW) is to develop sustainable fisheries for the benefit of Californians. The Box Crab Experimental Fishing Permit (EFP) Program seeks to do that through a collaboration between CDFW, CA Sea Grant, Pacific States Marine Fisheries Commission, Ocean Protection Council, Resources Legacy Fund, and commercial fishermen. The program is generating information on the biology of brown box crab to evaluate its potential as a sustainable fishery. It began in 2019 and may continue for up to four years.

Photo: Lindsay Orsini CDFW



Measuring crab size (carapace width).

Fishermen with box crab permits collect data on the crab and bycatch and share information about their fishing grounds and gear. Electronic monitoring systems and at-sea professional observers validate and supplement these data. A mark-recapture study is also underway to assess crab movement, growth, and population sizes. Life history information (e.g., body size, seasonality of growth and reproduction, diet) is generated from these field observations and laboratory studies.



CONTACT US

Website

<https://wildlife.ca.gov/Regions/Marine>

Email

AskMarine@wildlife.ca.gov

Cover photo: Julia Coates CDFW

Photo: Lindsay Orsini CDFW



BROWN BOX CRAB

Information on California's collaborative box crab experimental fishing permit program

January 2022

What is a box crab?

Brown box crab (*Lopholithodes foraminatus*) is a member of the king crab family. They are named for the box-like shape formed by tucking their legs and claws under their body, a defense mechanism against predators. The shape of the brown box crab's claws and first pair of walking legs form large, circular openings thought to help with respiration.



Males can reach up to about 8 inches wide, while females are significantly smaller and carry around 10,000 to 60,000 eggs depending on their size. Box crab likely feed on small invertebrates.



Photo: Travis Lobo
Female (left) with eggs vs. male (right).

Where do box crab live?

Box crab mostly live in large groups on sandy, muddy, and rocky bottoms from Alaska to San Diego, California. They are deep-dwelling crustaceans mostly caught at depths of 400 - 800 feet in California, but they can be found from the intertidal to as deep as 1,800 feet. Population sizes are currently unknown and likely to vary along the coast.



Photo: Kelli Major

Brown box crab for sale at a fish market.

Is box crab good to eat?

The brown box crab is known for its delicate and buttery taste and good texture. Relative to its total body size, it yields a high amount of meat which is concentrated in the legs and claws but also found in the body.



Box crab trapper recording data at sea.

Who can catch box crab?

In California an EFP is required to target brown box crab using traps. Five permits are currently active, and no more will be issued under this program. Permittees may land up to 36,000 pounds of large crab (> 5 ¾" wide) per year. Up to 25 pounds of brown box crab (and other species of king crab) is allowed as incidental catch in other invertebrate trap fisheries.