

# SPECIES SNAPSHOT

A 2022 status update for South Carolina's saltwater species

## BLUE CRAB

The blue crab (*Callinectes sapidus*, 'beautiful swimmer') is a cherished resident of South Carolina waterways that humans have enjoyed eating for millenia. Blue crabs support one of the state's largest and oldest fisheries and play an integral role in the coastal food chain as both predator and prey.



### AGE

Blue crabs can live up to six years, but most are harvested before reaching the age of two. Crabs reach maturity between 12 and 18 months. Crab numbers can fluctuate widely from year to year depending on environmental conditions.

### SIZE

Mature blue crabs (males are sometimes called *jimmies* and females *sooks*) can reach eight inches from 'point to point' of the shell, but most range from five to six inches wide at maturity. Crabs must be at least five inches wide to harvest.

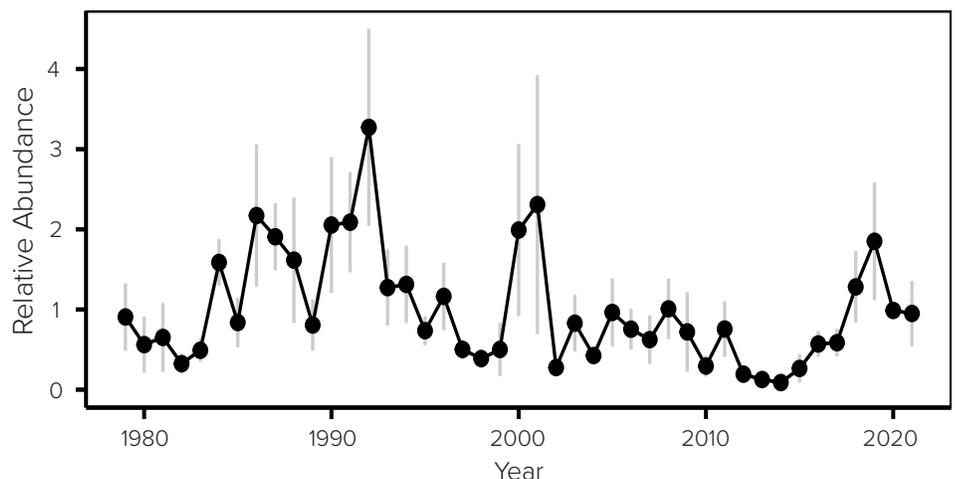
### LIFE CYCLE & HABITAT

Mating occurs in upstream, brackish waters, after which females migrate downstream to release their eggs in saltier habitats. Larvae pass through several stages in the ocean before returning to the estuary as juvenile crabs.

Blue crab numbers have increased recently after a period of decline

- Legal-sized crab numbers in our estuarine trawl survey were close to the long-term average in 2021 (shown at right).

- How to read this graph: Each data point has been standardized in reference to the long-term average. Error bars in gray show variability in the data.



- In recent years, legal-sized crabs caught in SCDNR's crab potting survey (conducted in the fall, when adult crabs move out of creeks and into more open waters) have been falling below average (graph not shown).
- Encouragingly, the size of the average blue crab has not declined over time.

### FOR MORE INFORMATION

South Carolina Department of Natural Resources  
Marine Resources Division | [marine@dnr.sc.gov](mailto:marine@dnr.sc.gov) | 843-953-9300



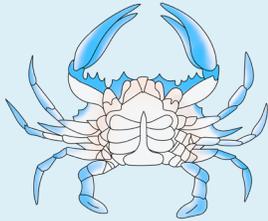
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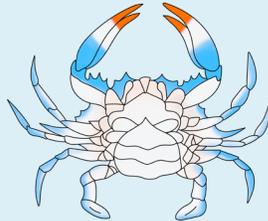
How do we get these numbers?

How to identify male vs. female blue crabs



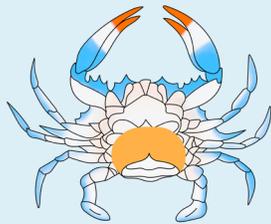
Adult male

T-shaped abdomen



Adult female

Rounded abdomen



Female carrying egg mass

- Since the 1980s, SCDNR staff have caught and studied blue crabs in habitats ranging from shallow tidal creeks to open water along the South Carolina coast, collecting data such as size, life stage and sex to keep tabs on the population.
- Today, these efforts include monthly sampling in the Charleston region, focused sampling of adult crabs in the fall across a broader geographic range and trawl surveys from Charleston to Calibogue Sound during key months. Officials need to use all of these data sets -- and more -- to gain the most accurate picture of a population.
- More detailed information on recreational and commercial fishing efforts would allow SCDNR staff to understand the effects of these fisheries on the population.

Many factors impact blue crab numbers



### FISHING PRESSURE

The ~350-person commercial fishery has remained stable, but recreational crabbing has grown (~45,000 crabbers) as the coastal population has increased. Crabbing is open year-round in SC.



### ENVIRONMENTAL CONDITIONS

Environmental conditions and events such as tropical storms and drought can have a dramatic impact on South Carolina's blue crab population numbers from year to year.



### HABITAT AVAILABILITY

Blue crabs rely on many different environments throughout their lives, making their habitat needs complex. They need high-quality salt marsh, river and open ocean habitats to survive.

You can help blue crabs in South Carolina

### FOLLOW REGULATIONS

Release all undersized crabs (<five inches wide) and any females with egg masses. Anglers may fish up to two crab pots with a recreational fishing license.

### CRAB RESPONSIBLY

Use crab pots with escape holes and never leave your pot in the water for more than five days. Abandoned pots continue to catch and kill marine animals.

### BUY A FISHING LICENSE

Even if you don't crab, buying a fishing license is another great way to support South Carolina's blue crabs through funding of research and education.