



# Red Drum

## North Carolina Wildlife Profiles



### Red Drum

#### *Sciaenops ocellatus*

Picture a surf fishing scene on North Carolina's Outer Banks and you'll probably imagine a huge red drum being hoisted by a grinning, wader-clad angler. In fact, this fish is so sought after and revered along the coast, that the N.C. General Assembly designated the red drum our official State Saltwater Fish in 1971.

#### Description

Red drum encountered in North Carolina commonly range in length from 12 to 48 inches. The largest specimens can reach a maximum length of about five feet and weigh in excess of 90 pounds. Red drum are rather robust in form and have a blunt snout with a mouth well adapted to feeding on the bottom. The tail has a squared-off rather than forked shape. The scales are large and on old specimens they are about the size of guitar picks. One or more black ocellated spots occur on the upper sides near the base of the tail. Red drum are a coppery color, darker along the back and upper sides, shading gradually to a grayish-white underside.

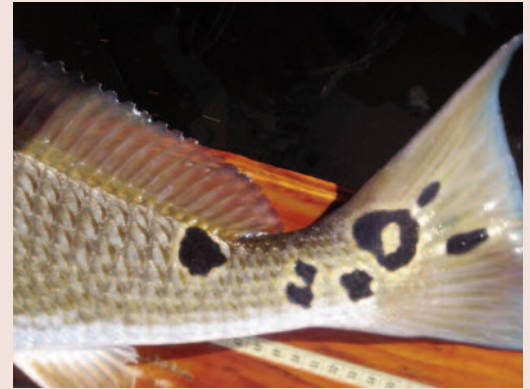
#### History and Status

Red drum have long been harvested both commercially and recreationally in North Carolina. However historically, red drum have made up only a small portion of the statewide commercial harvest. Most are taken with either gill nets or long haul seines. Recreational interest in the species has steadily increased since the 1960s, and today the majority of the harvest occurs from fish taken by hook-and-line anglers.

Currently, red drum are heavily regulated to restore the population from a period of overfishing in recreational and commercial sectors that occurred from at least the 1980s to the mid-1990s. Overfishing is defined by fisheries scientists as removing fish from a population at a rate greater than the population can replenish itself. Management measures on the species increased in 1998 to prevent overfishing. Measures taken include size limits to protect spawning fish and bag limits to reduce harvest. The good news for red drum is that to date, these measures have been successful; overfishing is no longer occurring, and the stock is now near recovery.

Recovery for a species like red drum can take many years because the species is long lived. The oldest red drum ever aged by scientists was in North Carolina and found to be 62 years of age. These fish commonly live to ages in excess of 40 years. Today the management strategy for red drum allows for limited harvest on young red drum (ages one to three) while protecting older spawning fish in the population. This is accomplished by imposing a maximum size

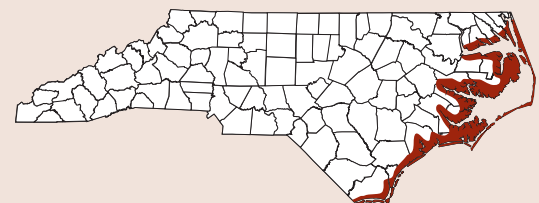
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#### Range and Distribution

On the Atlantic Coast, red drum occur from Massachusetts south to southern Florida, but are most common from Virginia southward. Range along the Gulf of Mexico extends from southwest Florida to Tuxpan, Mexico. Red drum occur year-round all along the North Carolina coast.

#### Range Map



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limit of 27 inches on fish that can be retained. Red drum mature when they are approximately age four and around 32 inches in length.

### Habitat and Habits

Both estuaries and inshore oceanic waters are critical habitats for red drum. In North Carolina, the males reach sexual maturity at two to three years of age; females mature at three to four years of age. Spawning occurs near inlets, beach sloughs and in larger estuarine bodies such as Pamlico Sound from August to September at water temperatures ranging from 72 to 86 degrees. A 35-inch long female may release 3.5 million eggs. The eggs hatch in approximately 20 hours, and larvae are transported by winds and currents into the less saline estuarine nursery areas. There, the young fish feed on copepods, amphipods and small shrimps for six to eight months. Juvenile fish gradually move oceanward into more saline waters as they grow larger. Adults off North Carolina and Virginia migrate seasonally, generally north and inshore in spring, and south and offshore in fall. Many adults will enter Pamlico Sound during the summer where they will spend several months feeding before they spawn. During spring and fall, red drum are most commonly found around coastal inlets and near-shore ocean waters, where they are often accessible to hook and line surf fishers.

### People Interactions

Red drum are affected by human activities. Activities that have altered water salinity in sounds, or dredged and impounded shallow nursery areas have degraded red drum habitat. Fortunately, laws such as those associated with the Coastal Area Management Act (CAMA) of 1974 have slowed the rate of habitat degradation. Overfishing in the past has also posed a threat to the state's red drum populations. However, more restrictive length and harvest limits have effectively prevented overfishing and allowed red drum to make a dramatic recovery during the last decade. Continued diligence by scientists who monitor the stocks and by sportsmen and women who abide by regulations will ensure this wonderful resource is enjoyed for generations to come.

### Name

Throughout their range, red drum go by many names. Local names typically describe the physical attributes of the fish such as “red” due to the reddish dorsal coloration and “drum” due to the ability of males to make “drum like” sounds by forcing air through their swimbladder. In Virginia, red drum are commonly called “channel bass,” while in our state small red drum are called “puppy drum” and large red drum are simply called “drum” or “old drum” out of respect for their long-lived nature. South Carolina refers to the species as “spot-tail bass,” and in the deep South from Florida and to the Gulf coast states, red drum are referred to as “reds” or “redfish.”

Scientists believe the spot near the tail of a red drum helps the species escape from predators.

### Wild Facts

#### Classification

Class: Osteichthyes (bony fishes)

Order: Perciformes

Family: Sciaenidae

#### Size

Up to 60 in.; common from 14–48 in.

Weigh up to 92 lbs.

#### Food

Opportunistic predators that change prey items as they grow in size. Young fish feed primarily on zooplankton, as they grow their diet expands and is comprised mostly of crabs, shrimp, fish and sand dollars.

#### Breeding

Red drum spawn in late summer and fall.

Spawning takes place in major inlets, along beach fronts, and in large estuaries. All red drum are mature by age 4 when they are about 32 in. in length.

#### Life Expectancy

Up to 62 years; common to age 40.

# Red Drum

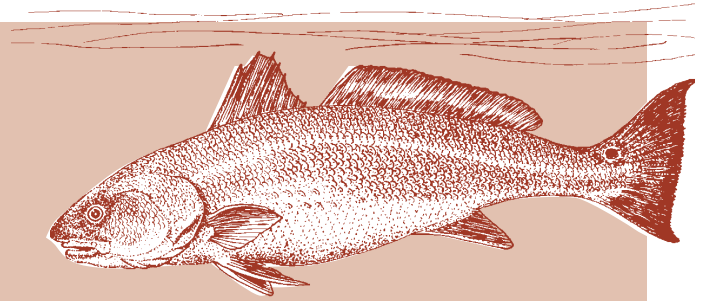
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### NCWRC Interaction

In 1971 the North Carolina General Assembly designated red drum the state saltwater fish. The Tar Heel State is famous for its trophy-sized red drum that weighs in excess of 40 pounds, traditionally caught in the surf and sound between Oregon Inlet and Cape Lookout.

In 1984, a giant red drum was caught off Hatteras Island that weighed 94 pounds, 2 ounces; aside from being the state record red drum, this is also a world record for all tackle. North Carolina has produced 10 out of 16 current world records for red drum. The declining status of red drum led the N.C. Division of Marine Fisheries, in 1998, to begin preparing a management strategy to guide the recovery of this important species. Harvest restrictions were implemented to begin stabilizing the stock until a fisheries management plan (FMP) could be developed.

In April 2001, the Marine Fisheries Commission approved the Red Drum FMP, charting a course for recovery of North Carolina's official saltwater fish. As a result of these proactive management measures, the outlook is now good for red drum. The stock is now near recovery and overfishing is no longer occurring.



### Q&A—Resources for Teachers

#### 1. How big is a red drum?

Red drum can be from 12 to 48 inches in length and weigh in excess of 90 pounds.

#### 2. What caused the population of red drum to be threatened in the past?

Overfishing has been a cause for concern. And activities that altered water salinity in the sounds and shallow nursery areas in the past degraded red drum habitat. Laws associated with the CAMA Act have slowed the rate of habitat degradation, and restrictions on length and harvest limits have allowed the red drum to make a dramatic recovery in the last decade.

#### 3. What is significant about the prominent dark spot on the tail of the red drum?

The spot on the tail serves as a false “eye” and distracts predators. It also serves as an identifier of the species when caught by anglers.

### References

Manooch, C.S. *Fishes of the Southeastern United States* (Raleigh, N.C.: N.C. State Museum of Natural History, 1991).  
North Carolina Division of Marine Fisheries (NCDMF). 2008. *Red Drum Fishery Management Plan Amendment 1*. North Carolina Division of Marine Fisheries, Morehead City, NC. 197 p. + appendices.

### Credits

Written by Bennett Wynne, updated by Lee Paramor, NCDMF.  
Photos by Ron Sinfelt, *Game & Fish Magazine*. Illustrations by J.T. Newman.  
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