

## CHATHAM ISLAND BLUE COD

**Size:** Whole 0.8-3 kg, fillet 100-300 g (minimum legal fish length: 30cm).

**Fillets:** White flesh that is suitable for most cooking methods.

**Identifying features:** The Chatham Island Blue Cod are large fish with greenish-blue to blue-black coloring above and more brownish-grey sides. They have a smoothly sloped head and snout, short low first dorsal fin, and a long second dorsal fin, which are clear structural features.

**Catching methods:** Potting.

**Habitat:** The Chatham Island Blue Cod are endemic to the Chatham Islands and found in and around Chatham Islands, up to 150 meters in depth. They are a bottom-dwelling species and do not move around a lot, staying in the same area for long periods of time.

Tracking studies of blue cod over time revealed that the fish usually stay in the area they are born and do not travel far over the course of their lifetime.

This species of cod can be hermaphroditic, switching from female to male after reaching maturity. Male fish grow faster than females, and the males are the only ones to appear a true deep blue in color. Female fish are more brown in appearance, and juvenile fish have a green tint to their blue coloration. The fish reach a size they can be legally caught at around 7 years of age, with a lifetime that can last up to 17 years.

**Sustainability:** Pots are used to trap the Chatham Island Blue Cod. The pots are baited and then laid on the ocean floor, the preferred habitat for the blue cod. The blue cod enter the pot and cannot escape once inside. This is an environmentally friendly and a sustainable method of fishing as it eliminates large amounts of by-catch. After 20 to 30 minutes the traps are hauled to the surface where the catch is still alive. Incidentally, if there is any by-catch, it is released unharmed.

Each pot is made of steel mesh, which is set at a size that allows younger undersized fish to escape without any harm.

Blue cod were introduced to the Quota Management System (QMS) in 1986. The QMS monitors stocks and catches, allowing the government to set Total Allowable Catch (TAC) limits for individual species to ensure the sustainability of New Zealand's fisheries.

Total Allowable catch for the Chatham Island Blue Cod is 700 tone per year.

**Food:** Mainly small fish, small abalone and crustaceans.

**Nutrition:** The National Resource Defense Council suggest fish containing mercury levels of less than 0.09 parts per million have the least amount of mercury. Chatham Island Blue cod has a level of 0.04 parts per million, making it very safe to eat.

Omega 3 level 0.01g/100g

**Availability for Fishing:** Year round, peak during winter month.

**Spawning:** Blue cod have an annual reproductive cycle and spawn in late winter and spring. Blue cod are hermaphrodites (they have both male and female sexual organs) and start off as females before some change to males. The length of time it takes for juveniles to reach sexual maturity varies according to their location, and can be anywhere between 2 and 6 years (Ministry of Fisheries, 2004).