Introducing the mud crabs of Gladstone Harbour

The green mud crab (Scylla serrata) is a big, powerful crustacean with a smooth shell (or carapace), and large claws that are able to crush shells.

Sometimes called ‘muddies’, mud crabs can grow to more than 25 centimetres across their shells and weigh more than 2 kilograms, and their delicious taste makes them a regular in the kitchens of Queensland.

A mud crab’s eyes are set on stalks and this gives them 360 degree vision both in and out of the water. They also have a pair of antennae between their eyes that can detect small changes in water movement while the tips of their legs are covered with tiny hairs that are very sensitive to touch – and even taste.

Mud crabs vary in colour from dark olive-brown to greenish-blue and blue-black and have lighter coloured dots that cover their ‘walking’ legs.

Population status
Mud crabs are found in shallow waters all along the Queensland coast. As their name suggests, mud crabs love to live in the soft muddy bottom of estuaries, tidal flats and rivers that are sheltered from winds and waves. Throw in a mangrove forest and it’s a mud crab paradise!

Many mud crabs live in burrows in the intertidal zone (where the land is exposed at low tide), but some adults live in areas that are below the low tide mark and bury themselves in the mud during the day.

Migration
Gladstone is full of sheltered waterways, creeks and large mangrove forests that make perfect ‘muddy’ habitat.

The Narrows varies from gravel and mud banks to deep rocky holes and channels that are perfect for mud crabs – and for crabbing!

Places like Graham Creek, Pacific Creek and Ramsay’s Crossing can also produce a haul of the famous Gladstone muddy – but make sure you stick to the bag and size limits!

A meal fit for a muddy
Mud crabs emerge from their burrows to look for food. They are omnivores which means they eat both plants and animals, even other crabs, and will happily scavenge on the remains of dead fish.

Life cycle

Mud crabs are fast growing and short lived. They grow through a frequent process of moulting (shedding their shell). Hormones trigger a new ‘cuticle’ (or shell) to grow under the current shell, and then while the new shell is still soft, the mud crab splits its old shell (along seams built in to the shell) and leaves it behind. Biological processes quickly harden the crab’s new shell after that. Both sexes mature when their carapace is about 9 to 11 centimetres in width, within the first year of life.

While most of the life cycle of mud crabs is spent in estuaries, the berried females (ones with fertilised eggs held on their bellies) migrate offshore to spawn when water temperatures reach around 27°C-30°C. Female crabs hold the fertilised eggs under their abdomen (between 2 and 5 million eggs at a time) for about two weeks before they hatch. The baby crabs (called zoea) float in the water with plankton and go through many larval stages. After about two weeks the zoea grow into megalopa and settle on the seabed. About a month after hatching, the baby mud crabs begin to move into nearby estuaries to grow and repeat the life cycle.

Catching a mud crab

- The only way to catch mud crabs legally in Queensland is to use crab traps (crab pots). Other methods, like hooks, are banned.
- Fishermen all have their own secret ‘top’ spots for crabbing but just remember their favourite habitats and you’ll be in business!
- Crabs prefer fresh bait so increase your chances by changing your bait more frequently. The secret is to use fresh bait – but what you use is up to you: from fresh fish heads to chicken necks – remember, they will eat anything!
- When handling a muddy, be sure to pick it up by holding the back two swimmer legs together - that way its claws can’t reach you.
- Some say that the most humane way to cook a mud crab is to put it to ‘sleep’ in the freezer prior to cooking.

Risks to the muddie

- Green mud crab numbers are classed as ‘Sustainable’ by the Fisheries Research and Development Corporation – but that doesn’t mean we don’t have to look after them.
- Mud crabs are the species most recreational and commercial crabbers in the Gladstone Region want to catch, so there is danger they may be overfished (caught faster than they can reproduce) but for now they are being fished at a ‘sustainable’ level.
- The taking of female crabs is illegal and can eventually have a major impact on a healthy and sustainable population.
- Loss of habitat - mangrove forests, tidal flats, creeks and rivers are home for the mudcrabs.

Keep muddies on the menu

- Queensland has laws about the size and number of mud crabs you can take home to eat:
  - You can only place four crab pots per person, and have no more than ten mud crabs in your possession at any time.
  - It is illegal to take a female mud crab (a ‘Jenny’) – put them back!
  - A ‘legal’ mud crab is a male (‘a buck’) with a shell that is a minimum of 150 millimetres across.
  - You must have your name and address on both the crab pot and the float.
- Tread carefully on the mud flats and stay on a single path.
- Keep away from mangrove roots – mangroves are important to mud crab populations and the trees can die if their roots are damaged.
- Don’t step on crab burrows when trying to catch a muddy!

Find out more

Gladstone Region Fishing Guide
www.gladstoneregion.info
Queensland Department of Agriculture and Fisheries
www.daff.qld.gov.au