

## Mud Crab - Running on Empty? How to ensure your mud crab is full!

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### SO HOW DO YOU TELL IF A CRAB IS FULL OF MEAT?

**BE CAREFUL** with the following tests because mud crabs can attack you with their claws. Make sure your crabs are firmly tied or restrained before handling them. When testing a crab with a new or clean carapace, be careful not to press too hard as it is easy to penetrate the shell and damage the crab.

#### Step 1: Check the shell condition



**Figure 1.** A claw of an empty mud crab

An empty crab will have a clean and shiny shell (i.e. the carapace) and sharp, well defined teeth on the inside of the claws (see Figure 1).



**Figure 2.** A claw of a full mud crab

The shell of a full crab will be dull and may have algae or barnacles attached; the inner teeth of the claws will also be worn down (see Figure 2).

#### Step 2: Check the shell hardness



**Figure 3.** Testing a female mud crab

**Females:** Press your thumb on either side of the carapace (see Figure 3). If it flexes or clicks the crab is empty.



**Figure 4.** Testing a male mud crab

**Males:** Press your thumb against the abdominal plate adjacent to the second walking leg (see Figure 4). If there is movement the crab is not full.

**If you have just caught an empty mud crab, return it to the water as soon as possible.**

## WHY ARE SOME MUD CRABS NOT FULL?

Mud crabs grow through a series of moults; each moult occurring when the internal organs fill the existing shell. Moulting is controlled by hormones that initiate the secretion of a cuticle (the precursor to the new shell) under the old shell.

To moult, a crab rapidly absorbs water, splits its old shell and backs out of it. Inorganic salts in the haemolymph are then rapidly redeposited to harden the cuticle which expands to form the new shell. The crab then feeds voraciously, increasing its meat content as it does so.

Mud crab populations sometimes moult at the same time, leading to high catch rates of empty crabs. Tagging data and accounts from commercial fishers suggests that when 'empty' crabs are returned to the water, they fill with meat within a few weeks.



**Figure 5.** A moulting mud crab

## FURTHER INFORMATION

Before going crabbing, please ensure you are familiar with the NT mud crab recreational minimum size and possession limits (i.e. 130 mm for male crabs and 140 mm for female crabs; 10 mud crabs per person or a maximum of 30 mud crabs per vessel). If you are new to tying crabs please read Fishnote 14 - 'Mud Crabs – Tie Me Muddie Up Tight Sport'.

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