

Alive and kicking

Best practice handling of live mud crabs for retailers

The Queensland Government with funding assistance from the Fisheries Research and Development Corporation has developed best practice guidelines for the handling and storage of mud crabs, from harvest to table. These guidelines aim to help reduce the stress levels of crabs, decrease mortality after harvest and increase eating quality.

This fact sheet provides information on sorting and storage of live mud crab for **retailers**.

Sorting crabs on receipt

- Dead crabs are a health risk to the crabs around them. Remove dead crabs immediately and dispose of them.
- Make sure crabs are firmly tied, lively and not blowing bubbles from their mouth.
- Remove weak, slow or bleeding crabs. These may be revived using a recovery procedure (see Recovery Fact Sheet), or cooked.
- Confirm grades by checking shell hardness and other signs (see **Figures 2-6**).
- Gently clean crabs of any faeces or dirt.

During storage

- Crabs can live for several days if kept moist. They can 'breathe' only if their gills are moist. Once the gills dry out, they will die.
- Avoid exposure to sunlight and breeze. Wind and breeze cause death.
- Air conditioning will dry crabs out, but may be used to avoid very high temperatures. A damp, clean hessian bag will help crabs stay moist (see **Figure 1**). This will limit disturbance, moisture loss and direct breeze and sunlight.
- Keep temperature as constant as possible at between 18°C to 25°C. Avoid large, sudden changes in temperature (10°C either way).



Figure 1. Live mud crabs stored under a wet hessian bag.

- Ensure crates are insect proof. Flies will lay eggs, causing maggots.
- Limit loud noises as these increase stress.
- Handle gently. Disturb as little as possible.
- Crabs held out of water for more than 5 days will benefit from a recovery step (see Recovery Procedure Fact Sheet).
- See Tanking Fact Sheet for immersed longer term storage.

Cooking crab

- Humanely kill the crab either by:
 - putting it in the freezer for 20 minutes; or
 - putting it in an ice slurry for 30 minutes.
- Clean the crab's shell.
- Boil salty water and cook for 20 mins/kg, timed from water returning to rapid boil.
- Cool in salty, iced slurry for 90 minutes to reach a food safe temperature of 4°C.

More information

John Mayze

Innovative Food Technologies

john.mayze@daff.qld.gov.au

+61 7 3276 6023



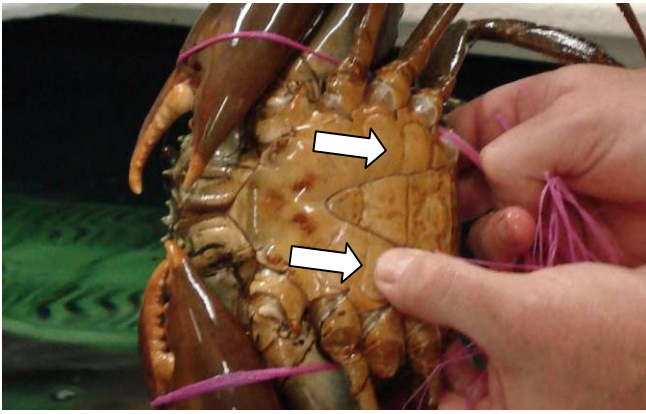


Figure 2. Checking a male mud crab.

Firmly press the abdominal plates adjacent to the 2nd walking legs (arrowed). If there is no flex the crab is likely to be full of meat. The abdominal carapace should be fully opaque and solid in colour.

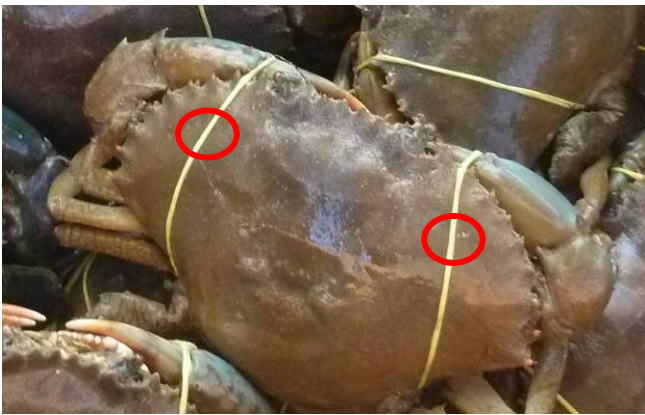


Figure 3. Checking a female mud crab (Take of female mud crab is prohibited in Qld).

Firmly press the top carapace at the areas circled. If there is no flex on both sides, the crab is likely to be full of meat.



Figure 4. A damaged segment from previous testing.

Do not press on a segment that has already been damaged (circled) as it will give a false indication of shell hardness.

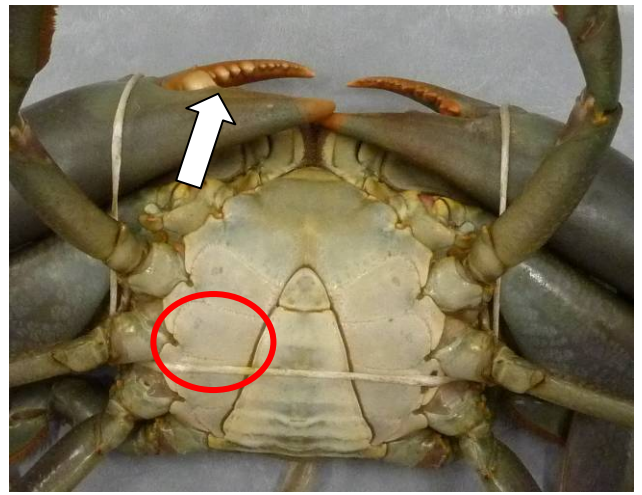


Figure 5. Newly moulted mud crab.

A crab with a clean, semi-transparent shell, transparent leg attachments and no wear on its claw teeth (arrowed) is less likely to be full of meat. The carapace will flex with light or moderate pressure on the segment circled. These newly moulted crabs will not survive extended periods out of water.

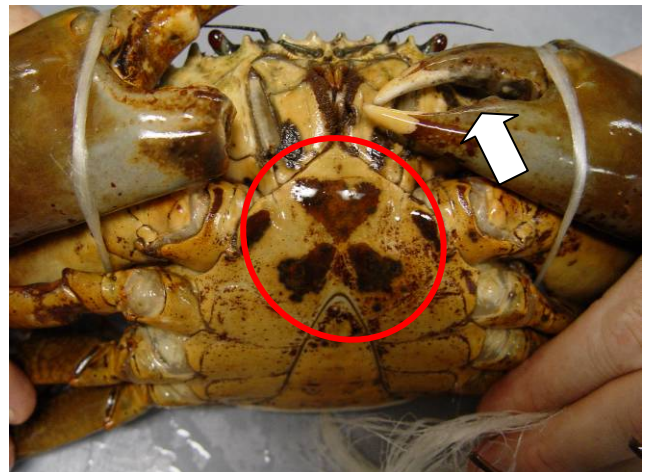


Figure 6. Signs of very old mud crab.

Dark mating scar (circled), worn claw 'teeth' (arrowed), carapace scars and damage, excessive large barnacles, or excessive amount of algae around the mouth parts indicate the crab has not moulted recently and is unlikely to be full of meat. They are often light in weight for their size. These crabs are often slow, weak and prone to die early.

