

Department of Primary Industries

primefact

Fishing for Murray Crayfish in NSW

January 2024

Murray Crayfish, *Euastacus armatus*, are found inthe Murray and Murrumbidgee rivers and many oftheir tributaries. They are sometimes called freshwater crays or lobsters.

Murray Crayfish breed once a year at the end of autumn. After fertilisation, the eggs or ova (berries)incubate under the tail of the female for 4-6 months. The hatched juveniles remain another 3-4weeks, moulting twice and coming to resemble theadult body proportions, before leaving the mother.

Crayfish carrying eggs or young are protected and must be returned to the water. It is illegal to scrapeoff the eggs - this is one of the most common offences and is easily detected by a fisheries officer.

Crayfish do not grow continuously, but in stages ateach moult. They grow slowly, reaching maturity at6-7 years of age. The Murray Crayfish is the second largest freshwater crayfish in the world; exceeded only by the Tasmanian giant freshwater crayfish. The maximum documented size of Murray Crayfish is 174 mm occipital carapace length (OCL) and 2.5 kg.

Murray Crayfish are opportunistic feeders. They feed mainly on decaying aquatic plant matter, butalso eat dead fish and other animals.

Murray Crayfish have suffered considerable declines in range and distribution since European settlement. They were once widespread throughout the Murray and Murrumbidgee catchments, but are now considered rare in the lowland reaches of the Murray and Murrumbidgee Rivers and are rare or absent west of Mildura. It is thought that a range of environmental factors such as black water flooding events, land use practices and broad scale river regulation have contributed to the reduction of the species. While recreational fishing does not appear to have been a primary cause of the species decline, it is important that recreational fishing is managed to assist the species recovery.

This pressure on the stocks has meant that regulations are necessary to protect them and ensure that everyone can get a fair share of the catch. The regulations include size and bag limits, closed waters and a ban on taking berried females.



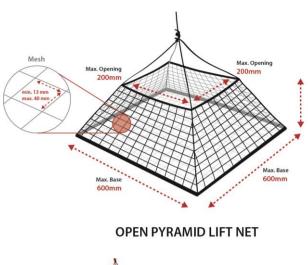
Figure 1: A Murray Crayfish (photo Prue McGuffie)

Table 1: Fishing rules for Murray Crayfish

Minimum size	10 cm OCL
Maximum size	12 cm OCL
Bag Limit	2 per day per person, 4 in possession. All crayfish under 10 cm and over 12 cm must be returned immediately to the water
Berried females	Must be returned immediately to the water
Closed waters	See over under the section titled "Closures"
Open season	June to August inclusive. The taking of Murray Crayfish is prohibited at all other times
Mutilation	Removing claws, head and/or tail in, on or adjacent to waters is prohibited.

Gear

The only legal methods of catching Murray Crayfish are with hoop / lift nets, open pyramid lift nets or attended lines. Up to 5 hoop / open pyramid lift nets (Figure 2) per person may be used and up to 2 attended lines per person may be used. Attended lines must be within 50m and in your line of sight.



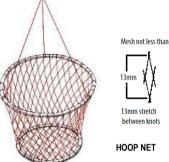


Figure 2. Open pyramid lift net and hoop net

The dimensions for hoop nets are as follows:

- greatest diameter or diagonal not exceeding 1.25 metres
- not more than 2 hoops, rings or frames attached to the net, but not attached to eachother by any rigid frame
- drop of net (inclusive of hoops, rings orframes) not more than 1 metre
- mesh not less than 13 mm
- must have attached a 100 mm buoy above thewater with the letters 'HN' and the fishers first initial, surname, year of birth and postcode 15mm in height and clearly visible
- Any rope attached to the buoy must not be floating on the surface of the water
- Cannot be left set for more than 24 hours

The dimensions for open pyramid lift nets are as follows:

• Netting with a horizontal opening at the top of not less than 200 mm in all dimensions; parallel to the base of the net with a mesh net height of not more than 150 mm, a maximum base size of 600 mm in length and width

- Mesh size between 13mm and 40mm
- The buoy must have the letters PN, initial and surname, year of birth and postcode, 15mm in height, clearly visible and in a contrasting colour to the buoy.
- Any rope attached to the buoy must not be floating on the surface of the water
- Cannot be left set for more than 24 hours

Open season

Crayfish can be taken during the months of June, July and August in the following waters only:

- Murrumbidgee River and its tributaries excluding Old Mans Creek from the Hume Highway road bridge at Gundagai downstreamto a line 100m upstream of the weir face of Berembed Weir near Ganmain
- Murray River and its tributaries from a line 130m below the weir face at Hume Weir nearAlbury downstream to the Newell Highway road bridge at Tocumwal.

An open season acknowledges the community's desire for the fishery to continue while also providing protection at other times when crayfishare normally inactive under natural conditions. Lowered water temperatures downstream of major impoundments have lengthened the period of activity for Murray Crayfish, making them susceptible to capture.



Figure 3: Berried female crayfish must be returned immediately to the water without harm.

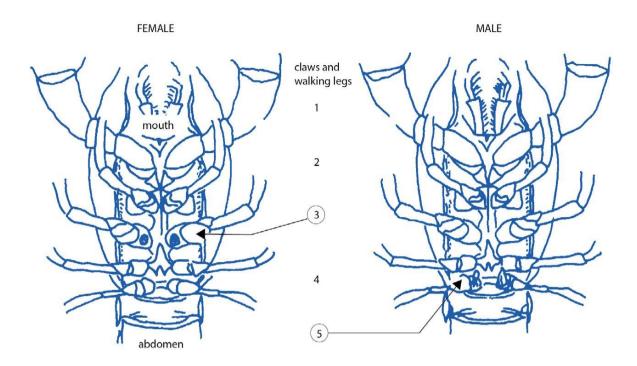


Figure 4: Underside of male and female showing reproductive openings.

The male (right) has projecting papillae at the bases of the 5th walking legs (counting from the large claws). The female has oval openings at the bases of the 3rd walking legs.

Closures

Murray Crayfish cannot be taken from any waters in NSW by any method between September and May inclusive. Additionally, the taking of berried females and the removal of heads, tails or claws of Murray Crayfish in, on or adjacent to waters, is prohibited. Murray Crayfish or berried females (carrying eggs) must be returned immediately to the water without harm (Figure 3).



Figure 5: Map of NSW showing Murray Crayfish fishing areas.

The closed season provides protection for crayfish during their normal period of inactivity. The closure which restricts fishing to specified waters of the Murrumbidgee and Murray Rivers (as shown in Figure 5) is designed to prevent any further pressure on remaining Murray Crayfish populations. The closure will enable fishing and non fishing areas to be compared and will help to determine whether any improvements or declines in the population are due to fishing or other environmental factors. For more information consult the Murray Crayfish Threatened Species primefact.

Measuring a Murray Crayfish



Figure 3. Measuring a Murray crayfish

Murray Crayfish have a minimum size limit of 10cm and a maximum size limit of 12cm. The minimum size limit reflects the size at which Murray Crayfish can spawn before being caught. The maximum size limit protects larger Murray Crayfish, ensuring there are sufficient large adults for recruitment within the fishery.

Your catch of Murray Crayfish must be measured immediately after capture. Murray Crayfish are measured in a straight line from the rear of the eye socket to the centre of the rear of the carapace which includes the rib at the rear of the carapace but does not include the fine hairs that protrude from it.

NSW Department of Primary Industries (NSW DPI) has available free of cost Murray Crayfish measuring devices, which can be used to assist in measuring Murray Crayfish caught, to ensure they are of legal size. Measuring devices can be obtained from the NSW DPI Fisheries offices listed opposite. Carrying a measuring device in your boat when fishing for Murray Crayfish is recommended.

Conservation

Murray Crayfish may leave the water for a period of time during flooding and blackwater events. At such times, all NSW laws relating to taking of Murray Crayfish continue to apply. Please do not interfere with crayfish during these periods. MurrayCrayfish will return to the water when water qualityimproves. Penalties for illegal fishing apply. Fishers are encouraged to take only what they need for immediate consumption and to considerreturning excess crayfish to help with the conservation of the species.

Illegal fishing

Report illegal fishing to your local fisheries office or Fishers Watch Phoneline on 1800 043 536.

NSW recreational fishing fee

When fishing, or in possession of fishing gear in, on or adjacent to any NSW waters, including the Murray River, you are required by law to pay the NSW recreational fishing fee and have the receipt for current payment in your immediate possession.

Call 1300 369 365 for payment of the recreational fishing fee. Rules apply for other species and otherrestrictions may apply.

For further information, contact your local NSW DPI fisheries office, phone 1300 550 474 or referto the website www.fisheries.nsw.gov. au.

NSW DPI Fisheries Offices, South Western NSW

To obtain a Murray Crayfish measuring device please contact the following DPI Fisheries Offices in South Western NSW. It is suggested that you phone prior to visiting an office as Fisheries Officers may be in the field. For updates go to www.dpi.nsw.gov.au/ primefacts

- Hume Fisheries Office. Suite 5/620 Macauley Street, Albury Phone: (02) 6051 7763
- Far West Fisheries Office. Agricultural Research and Advisory Station, Dareton Phone: (02) 5019 8408
- Riverina Fisheries Office. 449 Charlotte Street, Deniliquin Phone: (03) 5881 9928
- South West Slopes Fisheries Office. 64
 Fitzroy Street, Tumut Phone: (02) 6947
 9028

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