

Do you support the use of alternative fishing gear?

Can you share your perspective on this topic with me?

Hi all, my name is Eliza Hoyland, and I am currently completing my honours at the University of Newcastle. In my undergrad I studied a Bachelor of Coastal and Marine Science and this year I am focussing on alternative crab trap designs, looking specifically at recreational fishers' perceptions of them. My research does not aim to investigate the effectiveness of modified technology, rather, I hope to gauge the perceptions of fishers in NSW and understand why they may, or may not, be in support of modifications. While my focus is on recreational crab fishers, I would also love to hear from recreational fishers generally.

How you can help? If you hold a recreational fishing licence you are eligible to complete the survey.

How you can complete the survey? Over the phone (preferred method), via the link below or as typed responses to an email.

1. To organise a time to speak on the phone, please text me – 0466961409
2. Typed responses, please email me for the questions – eliza.hoyland@uon.edu.au
3. If you would prefer to complete the survey online, please use the links below, the first is for recreational fishers generally, the second is specific for crab fishers (those who own / use crab traps)
Link for recreational fisher survey <https://forms.gle/2EznocnZqRUXxetu6>
Link for recreational crab fisher survey <https://forms.gle/ED5gYR2BU9z9gs9z5>

To fully gauge your perception of modifications I would ideally conduct this survey over the phone, however, if using the link or emailing your responses is more convenient, please do so, **any contribution is greatly appreciated and is really valuable to my research and also the future management of fisheries in NSW.**

CRAB FISHERS

Would you like to trial a trap or retrofit your own traps?

In addition to completing the survey, I have the ability to provide modified crab traps to recreational crab fishers for a trial period. The modifications I am focusing on are escape gaps, openings at the base of the trap that let undersized crabs escape. Alternatively, if you would rather retrofit your existing traps, I have escape gaps that can be installed. If you opt to trial a trap for me I will ask you to maintain a data sheet of your catch and then complete a follow up survey at the end of the trial period to tell me how you found them.

If you have any other questions about the project, would like to be involved or wish to discuss anything further, please comment below or feel free to get in touch via my phone number or email.

Phone: 0466961409

Email: eliza.hoyland@uon.edu.au

I look forward to hearing from you!

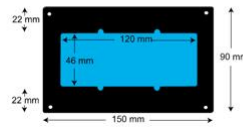
*** Please note, I do not work in the industry and am not associated with any authority that mandates the use of new technologies. I am gauging the community's perception of these for my final year project as part of my university studies ***

IMAGES ARE FOR RECREATIONAL CRAB FISHER REFERENCE, USED TO UNDERSTAND ESCAPE GAPS AND HOW THEY CAN BE EFFECTIVE.

Giant mud crab, *Scylla serrata*



85 mm CL (legal size)
= ~46 mm carapace depth
= ~125 mm carapace width

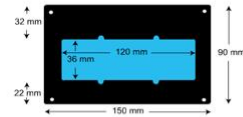


A 46-mm high escape gap will let out mud crabs < 85 mm CL.

Blue Swimmer crabs, *Portunus pelagicus*



65 mm CL (legal size)
= ~36 mm carapace depth
= ~140 mm carapace width



A 36-mm high escape gap will let out blue swimmer crabs < 65 mm CL.

CL – Carapace Length

Image: Legal size limits for the giant mud crab and the blue swimmer crabs, showing the associated carapace depth and the corresponding escape gap size that can be installed, to let undersized crabs escape catch.



Image: An escape gap fitted to a collapsible round netted trap. This one is 46 mm x 120 mm and would let out undersized mud crabs. Escape gaps 36 mm x 120 mm could be fitted to traps targeting blue swimmer crabs.

Escape gap size	Number of escape gaps	Effect on reducing undersized mud crab (<i>S. serrata</i>)	Effect on reducing catch of yellowfish bream (<i>A. australis</i>)
46 mm x 120 mm	1	93%	-
	2	-	95%

Escape gap size	Number of escape gaps	Effect on reducing undersized blue swimmers (<i>P. armatus</i>)	Effect on reducing catch of yellowfish bream (<i>A. australis</i>)
36 mm x 120 mm	1	35%	-
	2	54%	-
	3	77%	93%

Image: The effectiveness of escape gaps in reducing the number of undersized crabs and fish (which are illegal to keep if caught in crab traps) data collected by Barnes and Broadhurst over a number of studies. This image is for recreational crab fishers who may be interested in knowing effectiveness, but as a reminder, this is not the focus of my project, rather, I hope to gauge the perspective of fishers surrounding modified technology.