

Wisdom of Crowds reveals decline of Asian horseshoe crabs in Beibu Gulf, China

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SUPPLEMENTARY MATERIAL Interview survey administered to 400 people in 30 villages and towns along the coast of Beibu Gulf, Guangxi, China (Fig. 1), to gather local knowledge about population trends of the Asian horseshoe crabs *Tachypleus tridentatus* and *Carcinoscorpius rotundicauda*.

Gender: Male Female Age:

Section A: Present occurrence

1. Where have you found adult horseshoe crabs in the last 5 years?
2. Do you know of any other place(s) where adult horseshoe crabs occur in high density?

Based on question 2, answer the questions 3–7.

3. Which species of adult horseshoe crabs occur there? (*You may choose more than one.*)
 - Chinese horseshoe crab *Tachypleus tridentatus*
 - Mangrove horseshoe crab *Carcinoscorpius rotundicauda*, known locally as the ghost horseshoe crab
4. Have you ever encountered any mating pairs of horseshoe crabs?
 - Yes (Name location: _____)
 - No

Section B: Population trends and associated threats

8. Do you think there has been a change in overall abundance of adult horseshoe crabs?
 - Yes, the number is decreasing (*Proceed to question 9*)
 - Yes, the number is increasing (*Proceed to question 13*)
 - No (*Proceed to question 13*)
9. Please name the place(s) where adult horseshoe crabs occurred in the past but are no longer present.

10. Please name the place(s) where adult horseshoe crabs occur at present, but did not occur in the past.
11. What do you think is causing the decline of adult horseshoe crabs? (*You may choose more than one.*)
- Coastal reclamation Industrial pollution Aquaculture pollution
- Over-harvesting Other: _____
12. Have you ever observed people eating Chinese horseshoe crabs?
13. Do you think the Chinese horseshoe crab is edible?
14. Do you have the habit of eating Chinese horseshoe crab?

Section C: Targeted fishing of Chinese horseshoe crabs

15. Have you observed mass harvesting of adult Chinese horseshoe crabs?
- Yes (*Proceed to question 16*)
- No (*End of survey*)
16. What fishing method is used to catch the crabs? (*You may select more than one.*)
- Bottom trawling Hand fishing Submerged trap cage
- Gill-netting Purse-seine fishing Other: _____
17. What size (prosomal width) are the majority of the horseshoe crabs harvested?
- >10 cm 2–5 cm
- 5–10 cm < 2 cm
18. What is the mean catch rate per day for the last 5 years?
19. What was the mean catch rate per day in the past? (*Please state the year(s).*)