

*Biotic resistance on muddy shores?
Non-parasitic native barnacles
parasitise a non-native snail*



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Native barnacles impair invasive mudsnail movement

BACKGROUND

- The Japanese mudsnail (*Batillaria attramentaria*) was introduced to British Columbia via aquaculture
- These invasive mudsnails are now abundant on BC beaches, potentially competing with native species
- We asked if a native barnacle that grows on mudsnails could help slow their spread

METHODS

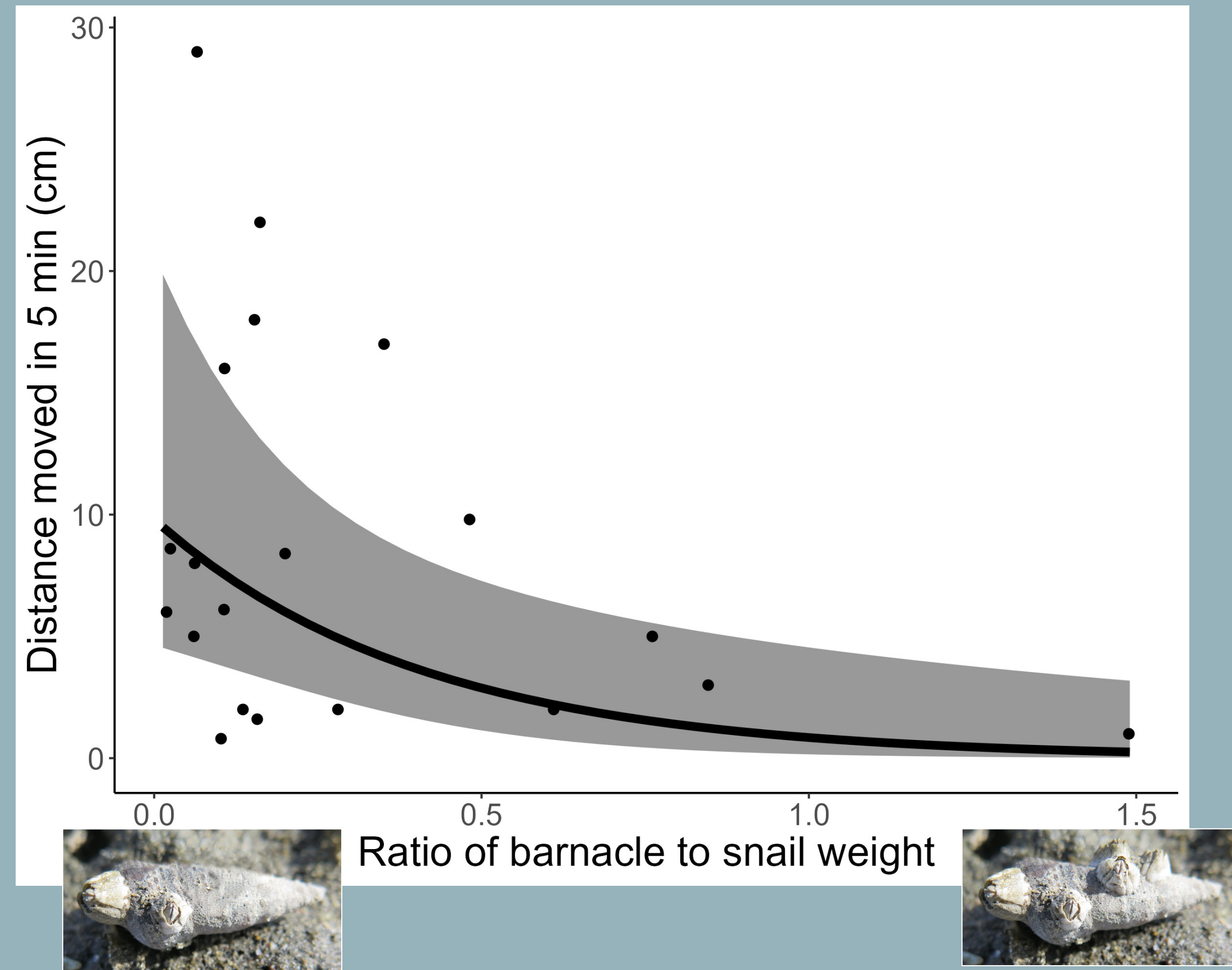
- Conducted population surveys and behavioural observations and experiments at Crescent Beach, BC, in June and July 2021
- Measured the effects of barnacles on movement, growth, and short-term survival of mudsnails

RESULTS

- Over 30% of mudsnails were carrying barnacles
- Some snails carried up to 3.4x their weight in barnacles
- Mudsnails were less likely to move when they carried barnacles
- Larger barnacles relative to snail weight decreased the distance snails moved
- No effect of barnacle presence on short-term mudsnail survival

DISCUSSION

- Native barnacles reduce snail movement, which may impair snail foraging
- Evidence of adverse impacts to invasive species from native species demonstrates further importance of protecting native ecosystems to resist future invasions



REFERENCES

Study by **Kiara R. Kattler**, Katrina-Nicole Perretta, Amanda R. Gray, Isabelle M. Côté
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