

Introduction

- Fear of snakes is mostly learned¹ and positively linked with killing snakes.²
- Messaging about rattlesnake sociality improves people's perceptions.³
- Drawings can demonstrate children's views of and relationship to nature.⁴
- Does watching rattlesnake livestreams impact children's perceptions?

Watch wild snakes and view the curriculum at RattleCam.org!



Methods

- We created RattlEd: a curriculum that incorporates Project RattleCam livestreams while aligning with Next Generation Science Standards.⁵
- 4 classes of 4th-5th graders (n=59)
- Surveys before and after unit include drawing, writing, and emotional survey questions about rattlesnakes.
- Themes manually coded from responses to the prompt "Draw a moment in a rattlesnake's day."

Results

"Do rattlesnakes make you feel...?"

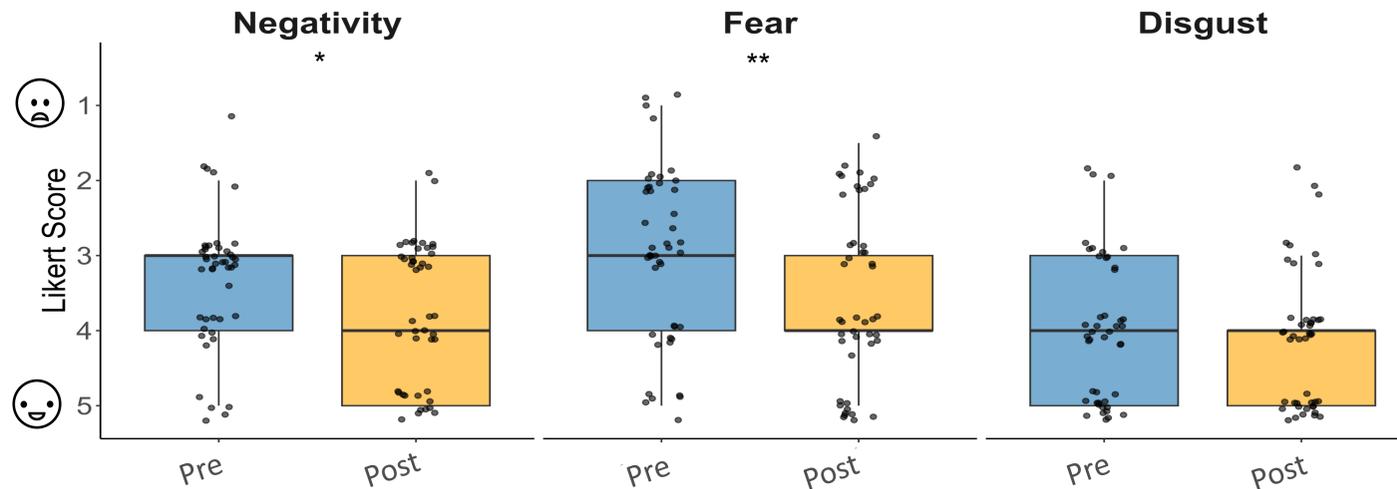


Figure 1: Negativity and fear decreased by 0.42* and 0.61** respectively. Disgust decreased by 0.11, but not significantly (p = 0.40). Fear was positively correlated with negativity (r = 0.69) and disgust (r = 0.57). (* p < 0.05, ** p < 0.001).

"Draw a moment in a rattlesnake's day"

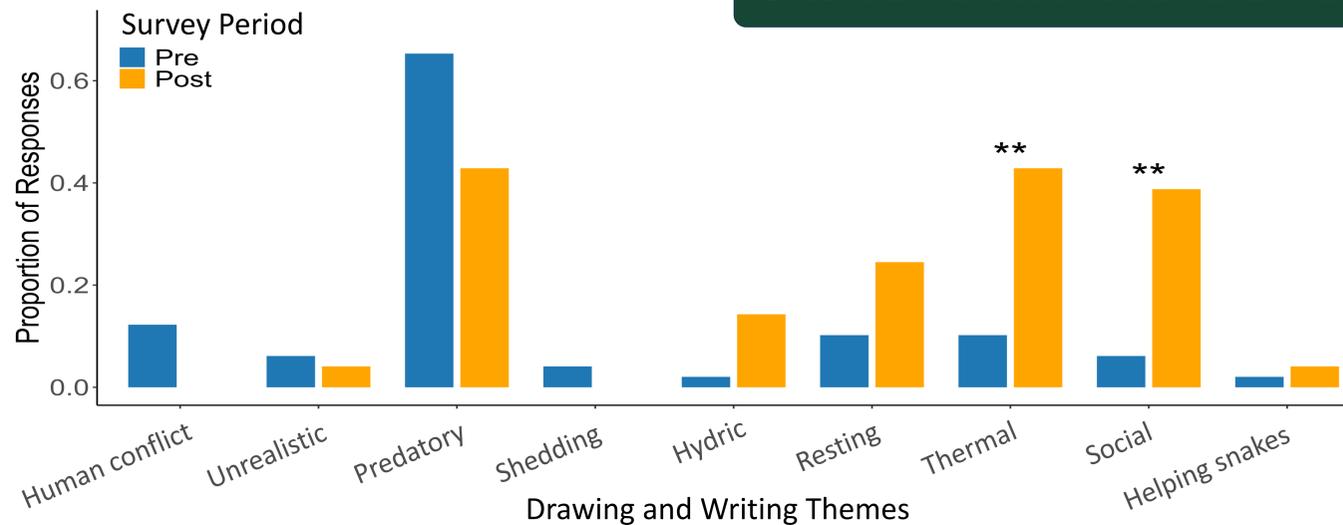


Figure 2: Predatory themes decreased, and thermal and social themes increased in student drawings and writing following the unit. Human conflict was only depicted in pre-unit surveys. (* p < 0.05, ** p < 0.001).

Discussion

- Active learning with wildlife livestreams may help improve perceptions of maligned animals.
- Curriculum reduced negativity and fears about snakes.
- Student perceptions of rattlesnakes shifted from primarily predatory themes to include diverse behaviors.
- Drawings and writing can provide novel insights into youth perceptions.



Future Directions

- Incoming data from 12 participating classrooms in CA, UT, NM, and OR.
- Potential for expansion to other grade levels and taxa in Arizona and beyond.

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References

1. LoBue and Adolph 2019. Dev Psychol.
2. Larson et al., 2024. Biol Conserv.
3. Allison et al., 2024. PloS One.
4. Tallapragada et al., 2021. Environ Commun.
5. NGSS Lead States, 2013.

Unit Layout

