



# Ending the day with a song Patterns of calling behavior in a species of rockfish





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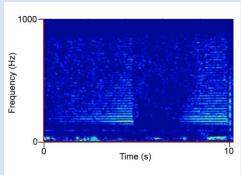
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## Background

- Fish chorusing is an important part of the marine soundscape.
- However, not much is known about fish calling behavior
- Bocaccio (Sebastes paucispinis) are endangered, vocally active rockfish that occur on the Pacific Coast of the US.

AIM: Find seasonal, lunar and nocturnal patterns of bocaccio calling behavior.



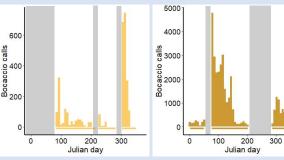


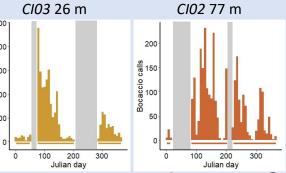
#### Methods

- Calls recorded in 2018-2020
- Analysis: matched filter detector with manual evaluation

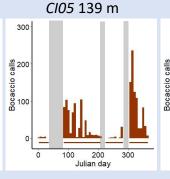


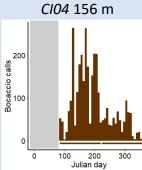
# Season



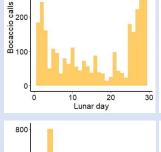


300-

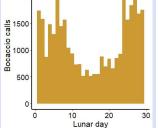


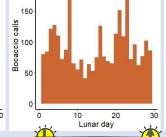




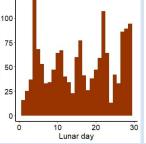


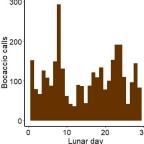
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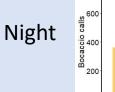


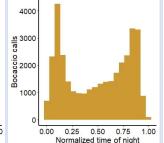


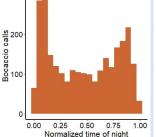
Results

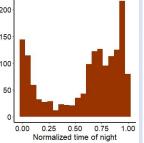


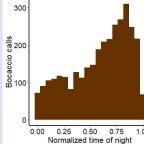












#### Conclusion

0.25 0.50

Normalized time of night

0.75

Clear seasonal, lunar and diel calling patterns.

Calling patterns related to water depth > diel vertical migration

### Acknowledgments

This work was completed as part of the SanctSound project, which is a collaboration between NOAA and the U.S. Navy to better understand underwater sound within the National Marine Sanctuary System. For more information, visit https://sanctuaries.noaa.gov/science/monitoring/sound/