# Assessing spatial variation in life history traits of black rockfish *(Sebastes melanops)* from central California to Gulf of Alaska


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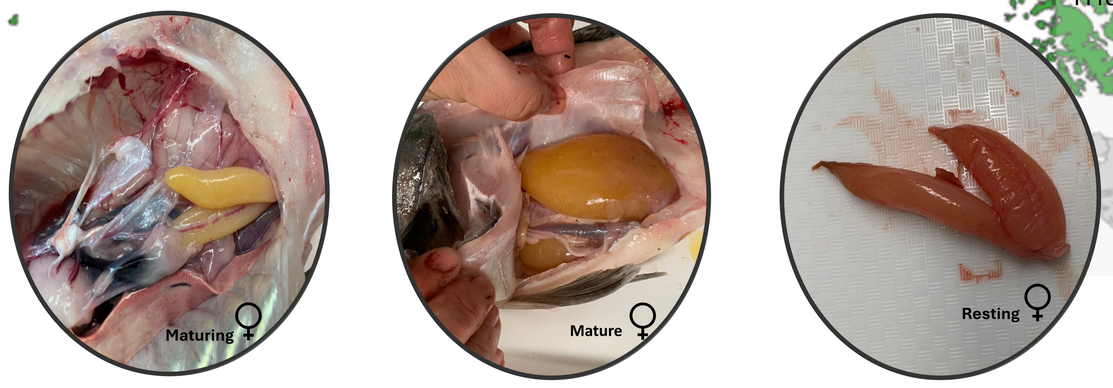
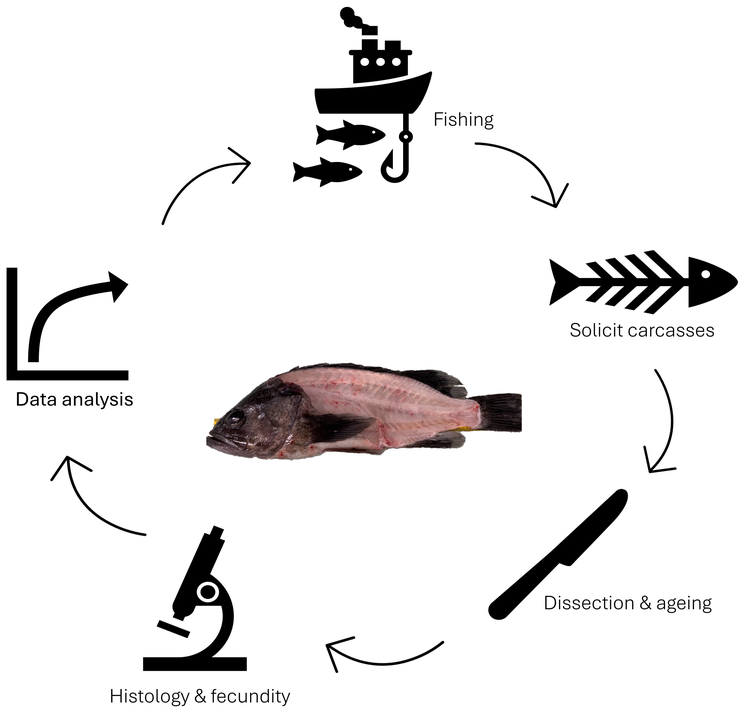
## Informing State-Based Stock Assessments

The California Current and Gulf of Alaska support highly valuable recreational, commercial, and subsistence groundfish fisheries. Black rockfish *(Sebastes melanops)* are particularly valuable in this ecosystem. We lack spatially explicit life history information for black rockfish across their natural range. To effectively quantify changes through time, we must examine spatially explicit life history traits, especially for species with broad geographic ranges. To provide region-specific estimates, we will evaluate spawning activities, age, and growth in the California Current and Gulf of Alaska. This study will serve as a baseline to inform management decisions on black rockfish within this ecosystem.




Figures 1 - 3: Various stages of maturity in female black rockfish.

## Estimating growth, maturity, age




## Next Steps

- Specimens will continue to be collected from recreational and commercial fishers, as well as retained from fishery-independent surveys in each region
- Age estimates will be read at the Oregon Department of Fish and Wildlife age lab
- Histology will be used to evaluate maturity stage
- Fecundity will be analyzed using gravimetric techniques

## Community Engagement

This is a highly collaborative project between local stakeholders, academic scientists, and state and federal agencies to facilitate project design, data collection, and the interpretation of results. If you are interested in learning more about this project, donating a carcass, or sharing insights, please reach out! Scan QR code for contact information:


## Acknowledgments


This project would not be feasible without the collaboration and assistance of the Oregon South Coast Anglers, Oregon Coast Anglers, Yaquina Bay Charters, undergraduate students; Meredith Adams, Ely Cunningham, the IMF Lab, my graduate committee; Scott Heppell, Leif Rasmuson, Jason Cope, and Steven Dundas, and biologists of;