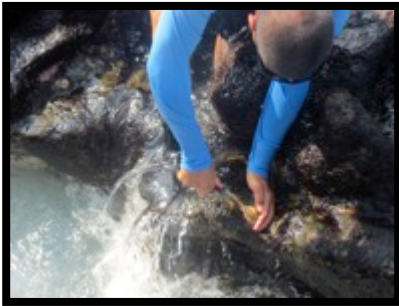


# Are 'Opihi Spawning?

1) Collect 10 'opihi of each species



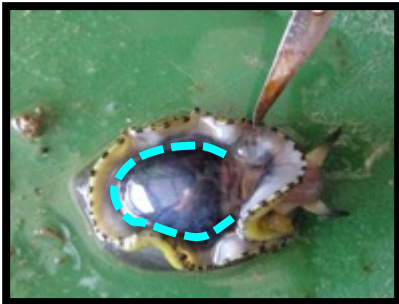
2) Measure & record total length (mm)



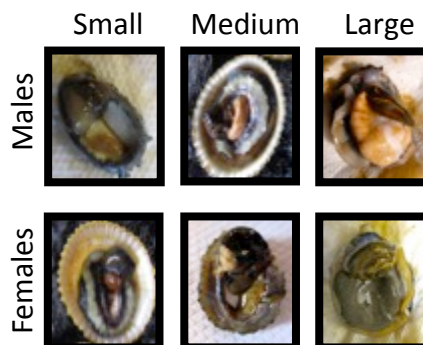
3) "poke" 'opihi (separate body from shell)



4) Make a horseshoe cut and pull back the na'au

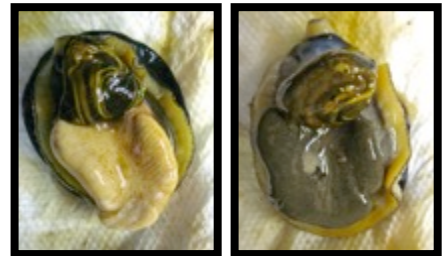


5) Determine gonad size:



6) Determine gender

Male: white/yellow  
Female: green/brown



\*7) Remove, weigh & record gonad weight (g)



\*8) Weigh the rest of the tissue (minus na'au & gonad)



9) Repeat for other 'opihi collected



## Other Notes / Recommendations:

- Note & record moon phase. 'Opihi spawn during the new moon phases, so ideal to collect during full moons.
- Ideal to collect 10 'opihi of each species every month for at least a year to understand peak spawning cycles for your place.
- Using a scale will help determine how "ripe/momona" 'opihi are by calculating the gonad index (GI) for each month.  

$$GI = (\text{Gonad Weight} / \text{Tissue Weight}) \times 100\%$$
- Gonad Size:      Small = Just finished major spawning  
                           Medium = Growing gonad or spawning  
                           Large = Going to spawn soon

## Materials Needed:

- 'Opihi knife
- Calipers or ruler
- Spoon
- Scalpel or knife
- Scale (optional for #7,8)