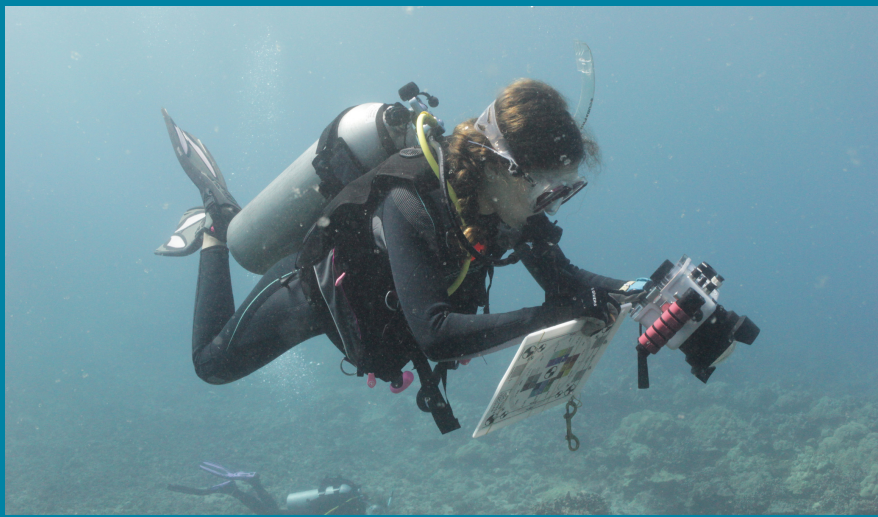


# Influence of live coral cover on reef fish

Manuela Cortes

## SfM Photogrammetry

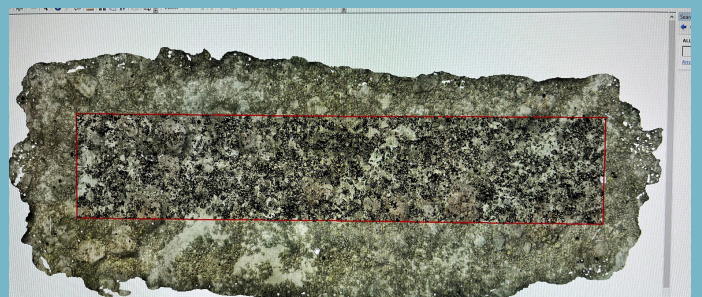
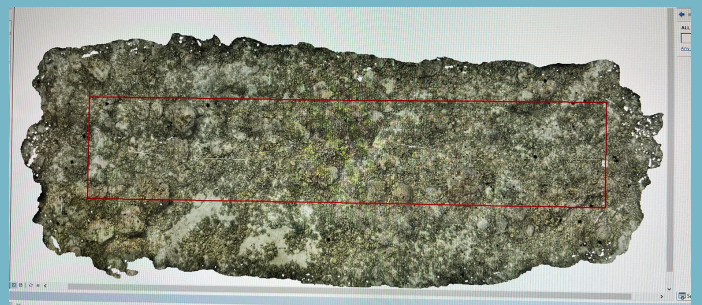
Although most orthomosaics were already built for this research project, we were able to get trained in Structure from Motion Photogrammetry to build our own models of reefs



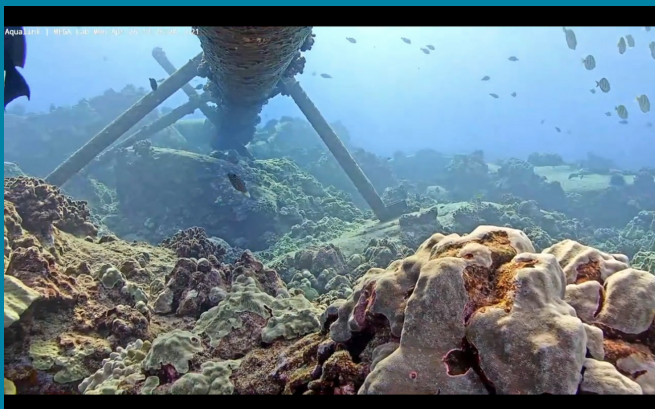
## Digitizing Orthomosaics

### ArcGIS and ArcMap

- A very important part of this research project is digitizing orthomosaics of coral reefs in ArcGIS to quantify the coral cover in each of the models that we are surveying



## Fish Surveys



- We conducted fish surveys remotely through the MegaLab Live Cam to compare the results of innovative survey methods with traditional OC SCUBA-based reef monitoring
- Lots of experience counting and sizing fish
- Promising results to use the camera as an educational tool in the future

- We also conducted fish surveys in Waiolena Ocean Park as part of a new monitoring program of coral reefs in Hilo, Hawaii
- Amazing field and research experience!

