A Blue Economy Approach to Support Community-based Sea Turtle Conservation

Progress Report
April - July 2021
Our initial action was to recruit stakeholders for our first meeting. Our first five stakeholders decided they wanted to be more involved and so they formed our advisory board to help us make decisions and hold us accountable for how we recycle the funding generated from seafood sales and conservation travel back into the fishing communities. We will be holding another meeting with new stakeholders with a new profile as suggested by our advisory board.

Our interns, chef, and I traveled to Sinaloa to meet up with a team member, Dr. Alan Zavala who is also my Ph.D. Director. We visited the fishing communities of our five lead fishers who are contributing bycatch data to evaluate the seafood distribution system. Later we held our first workshop with our team fishers and local graduate students of Dr. Alan's to explain the project and discuss the logistics of data collection and data submission. We are exchanging gear for their data collection efforts such as much-needed safety equipment: lifejackets, VHF marine radios with GPS, and depth finders.

The lead fisher on the project led a methodology training for the other fishers on a new, quick capture technique for monitoring sea turtles. We reviewed safe handling procedures and made a list of all the safety and technology supplies each set of fishers would need to fully participate in the project.

Photo below: Stephanie J. Rousso and Dr. Alan Zavala speaking with lead project fishers and their boat crew from five different fishing communities.
Following the workshop, Dr. Alan introduced us to the President of the Fishers Union. We presented our bycatch research project and discussed the concept of a seafood certification program. Fishers can sell their products with this certification based on a set of criteria aimed at reducing sea turtle bycatch.

This program helps distinguish the responsible fishers from a niche market of mindful seafood seekers and helps them stand out. As the program builds momentum, they can increase their prices to reflect the specialty products identified and approved by the union.

We obtained our first shell catch camera which tracks the fishing operations and takes time-lapse photos of all the fishing operations, the catch, and the bycatch. Our principal fisher, Aldalberto Garcia will be responsible for the camera operation on his boats, rotating it between shark, shrimp, and finfish trips, uploading the photos to the cloud, and charging the camera in between fishing trips.

He and all other fishers will begin data collection and initiate the camera in September. We are still waiting on the field equipment and a special cable for the camera that was not included in the original shipment.

Above Map – locations of fishing communities where we are actively creating blue economy program of conservation travel and mindful seafood products.

Left Photo – Principal fisher, Aldalberto Garcia rescuing a young endangered olive ridley sea turtle entangled in a crab trap line.