**Helpful information:**

**Our GP email is** [**turfeffect@lists.bren.ucsb.edu**](mailto:turfeffect@lists.bren.ucsb.edu)

-welcome to schedule Chris’ google calendar (for Wednesdays at 10am-11am in Manzanita)

**Our meeting before talking with Costello:**

-Focus on data we have now, not engage with other communities = prediction. Ask Chris if it is possible.

-Use Basureto and IUCN to create a framework

-Software not necessary (Alvin suggested it though)

-Jorge wants peer-reviewed paper

-Build framework and evaluate effectiveness of reserves in existence

-Stable governance should be the focus

-Worried that communities view the TURF-Reserves as “COBI’s reserve” not “our reserve”

-Past issues: there were low O2 levels and high temperatures. Thus, they had a reserve but their product was dying. This incentivized them to harvest their resource now = destroy the reserve

-Recently got a US enforcement boat

-Reserves that are fighting are making the most money (despite sabotage from other communities. Ex. destroy their lobster traps) and other communities are jealous. Think that the cause of the increase in revenues is the reserves but it is just a coincidence and COBI has kept its mouth shut about that.

**Agenda:**

-Prepared for meeting with Costello

-Schedule weekly meetings with Costello

-Student expectations

-Faculty advisor expectations

-Suggested experts

-Project expectations/limitations

-Discuss client concerns about scope of project

-Discuss possible approaches/analyses

-Make agenda for our meeting with COBI

-Discuss our group meeting schedule

**Costello meeting:**

-faculty expectations: good organization, commitment, work out our own problems amongst ourselves first, autonomy to make own choices, we are highest priority – can interrupt him, make sure everyone is on same page/conflict resolution, clear sets of expectations

-in weekly meeting with advisor-come up with goal for next meeting with specific people’s name attached

-external resources-other PhDs, we mentioned PhD student we want from Arizona State University (governance and socioeconomic guide, working on the same communities), Costello recommendations:

-described to Costello in our own words about our background and understanding of the project

-Juan Carlos: worked with COBI; evaluate effectiveness of turf-reserves have established and create a framework for evaluating which communities are good for implementing future turf-reserves; other options in design for making turf-reserve (get certified fish in mean time to offset costs of implementation)

-Caio: experience in industrial fishing and bottom trawling; predicting which communities that are suitable for turf-reserve, but given emails with COBI will be analyze turfs already implemented, good if have a predictive framework for COBI

-Jael: small communities effect health of ecosystem (worked with sea lions), consumers guide for seafood, focus is on economics

-Sean: current research-collaborative fisheries with rock crab, data-limited small-scale fishery, determine management options based on characteristics of fishery, and figure out what suits a specific area; will be helpful with ecological analyses

-Costello: what data? Yearly ecological surveys of every Turf with control zones. Worried about social data that we can have. COBI does a social-economic analysis before implements TURFS with interviews but is unknown if we have data after implementation (=why we want Arizona PhD)

-Costello -> concern is with data, specific data

-Do know about previous analyses? Juan Carlos: some based on readings that have done so far with lit review

-How many TURFS are there, about 16 communities. Are in multiple ocean basins which was a surprise to Costello. Will be able to get data for all of them?

-Possible to extend objectives and deliverables to Costello

-If was due in a week? Me: lit review of existing info, ignore models

Juan Carlos: would focus on Pacific, not worried about ecological part and would focus on social part and have a call with COBI and use their expert judgement about what is happening in the communities; how is your MPA doing framework and select indicators that make sense; ignore governance

Caio: go for economic side of evaluation; reflect what is going on with the ecology of sites and a good resource to convince people (revenue for fishery); before and after or across control vs. reserve sites: would do a before and after

Jael: IUCN MPA and compare before and after

Costello: difference and difference framework statistical technique for data over time and across sections for estimating what the effect of an intervention has been = good framework for 1 year group project. Two ways to control: if know what revenues are now, can look at what was before and would also look at control site

-Scope of project: think that scope is project (especially with predictive) is too much, doesn’t know enough about it. 1. Predict things with a model. Put parameters in model that reflect data have and project out in future 2. Statistical model and then use regressions and then use that to predict

-Juan Carlos will be doing internship with COBI, want to know where

-To fill in gaps, interview the fishermen. Costello likes the idea

-Costello thinks the summer will be important for us

-Jorge Torre (main director of COBI), Alvin Suarez = main contacts at COBI

-Sean: not in weekly meetings. Schedule once a month to definitely meet. Costello: once a month is not good. Meet/keep in touch with Sean so don’t get off track. Tell him

-Good goal to be accomplished before the end of this quarter: get all data then do an in-depth lit review to select indicators that should use

-Costello: Important goals are getting the data, lit review (understand what is out there that is not in our data set), good sense of what analyses that want to do (don’t need to do them). Divide and conquer. Data team of two people and lit review of two people.

-Caio: we are doing a lit review with short findings on paper

-Do COBI reserves increase revenues: here is the regression we would run and parameter would test and here is the variables and here is how would run the model

-How many questions: Costello says 4-5 questions, in agreement with Guidelines. 2-3 Questions on what has happened. 1-2 or so on what could happen and how to select communities

-Will be using R. Shiney app for predictions. Juan Carlos wants to pursue the app regardless of what COBI wants.

-Will be going to Software Carpentry workshop this weekend

-Sean can help us do power analyses to see if we have enough data/samples to run the analyses we want

**Running Questions:**

-Ask if will be able to keep website we created/have to use a different platform

-Ask COBI about what their values are (Juan Carlos: care about both social and biological; bottom-up approach, strong communities can overcome problems)

-What data have now or will have? Number of communities and describe them. Will be getting data for all of them?

-where will Juan Carlos’ internship be? b/c is a huge cultural difference across sites. Can he join the ecological surveys and interview fishermen or have others do survey for us

-Trip to COBI? All of us or Juan Carlos. Will pay for our trip. Costello thinks we should try to do that. Ask if can take $ out of our budget to do it. Costello wants to tag along. Early Fall. November 15th is when start lobster fishery. Should go before lobster fishery opens up

-Define roles and responsibilities with PhD mentor

**Our meeting after talking with Costello:**

-Group meetings: half an hour after our Wednesday meetings. 10-11:30am; 10-11am with Costello; 11-11:30am for just us

-Our summer focus will be lit reviews

**COBI Meeting Guidelines:**

-Okay to have 3-month reports for COBI?

-Data: social, economic, ecological. For what communities.

-Internship: where is it going to be? Will be able to work on other projects? Notify them that group partners will not be solely working on the project as they will have other internships

-Possibility of trip to Mexico to meet with COBI. Costello thinks will be valuable

-COBI’s mission and vision (how do they weight the importance of social, economic, and ecological success of TURF-Reserves)

**For next time (Wednesday, April 12th):**

-Prepare a list of agreed upon topics to go over with the client during the meeting after talk to Costello (based on guidelines) -> send agenda to client before the meeting on Wednesday

-Finish lit reviews on assigned readings and upload lit reviews to the 4lit\_review channel on Slack (make sure to check off that you read the papers in the Control.xlsx document in our Literature folder on DropBox)

-Submit personal bio on Slack if have not done so already

-Confirm with COBI and advisor with Arizona student, send her a message/contact her (can be formal or informal)

-Want summary of data that have or will be able get before next meeting (not this Wednesday because can’t make it but the following Wednesday). Short presentation on data have, think we can get, and gaps

-Project objectives and deliverables due this Friday to Costello, but he said it will be due next Wednesday for us

-Read over due dates in guidelines

-Send invitation to Dropbox to Sean and Costello. Invite them to Github as well.

-Send lit reviews to Sean (wants to be able to see what we are doing as we go along

-Sean will send his expectations memo and we will check it over to make sure we like it

-Add us to Costello’s calendar

-Extend our group meetings to 11:30am on our google calendar

-Help Jael with her internship search