## ASsquare_logo.tif Coastal Fund Agenda

## Associated Students

Tuesday, 11/06/2018, Nati Conference Room

**CALL TO ORDER** 6;03 by Jordan, minutes recorded by Rebecca and Emily

1. **ATTENDANCE**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Note:**  absent (excused/not excused)  arrived late (time)  departed early (time) | **Name** | **Note:**  absent (excused/not excused)  arrived late (time)  departed early (time) |
| **Jordan Gallagher**  **Chair** | **Present** | **Jem Unger Hicks**  **Outreach Coordinator** | **Absent** |
| **Maria McCausland**  **Co-Chair** | **Present** | **An Nguyen**  **Outreach Coordinator** | **Present** |
| **Lauren Enright**  **Undergraduate Rep** | **Present** | **Sarah Siedschlag**  **Advisor** | **Present** |
| **Angela Chu**  **Undergraduate Rep** | **Present** | **Rebecca Nishide**  **Administrative Assist** | **Present** |
| **Kate Mcleod**  **Undergraduate Rep** | **Present** | **Emily Orr**  **Administrative Assist** | **Present** |
| **Alana Ayasse**  **Graduate Student Rep** | **Present** | **Alex Funk**  **Senate Liaison** | **Absent** |
| **Juliette Verstaen**  **Graduate Student Rep** | **Present** | **Alli Adam**  **Senate Liaison** |  |

1. **COMMITTEE BUSINESS**
2. **Approval of Attendance and Proxies**

*MOTION/SECOND: Jordan/Maria*

*Motion language: Motion to approve attendance and proxies*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

1. **Approval of Minutes**

*MOTION/SECOND: Jordan/Lauren*

*Motion language: Motion to approve minutes from last week*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

1. **PUBLIC FORUM**

(Announcements, appreciations, concerns, requests to have items added to agenda)

1. **REPORTS**
   1. **Advisor Report: Siedschlag**

* UCSB Sustainability plan is up for public comments, up for public forum
  + Wednesday the 14th is another public forum 9 AM - 10:30 AM
* 15th: Bike Committee is doing annual Bike Light giveaway in IV
  + Coastal fund can write a letter in solidarity with bike committee about Birds/Limes
  1. **Chair Report: Gallagher**
* Matias Eusterbock is running for Goleta Water District
* No one has sent in Board Application
  1. **Senate Report: Funk & Adam**
* N/A
  1. **Administrative Report: Nishide**
* One Dive Fee Support Application submitted, Rebecca created the folder in current business
  1. **Coastal Service Program Report: Orr**
* Talked to housing people, CSP working with Res Halls is doable
* do we want to open up to whole staffs of buildings to do? Or just RA and floor?
  + staff development could use funding
  + we like it as long as it follows all AS rules
  + Emily will contact housing and put them in touch with Cindy
  1. **Outreach and Education Report: Unger Hicks & Nguyen**
* Started boosting posts on Facebook
* Share the posts if you see them
* Like the facebook page if you haven’t already
  1. **Sub-Committee Reports**
* Nobody met this week, not super urgent so it’s okay

1. **AGENDA**
2. **Approval of Agenda/Additions to Agenda**

*MOTION/SECOND: Jordan/Juliette*

*Motion language:Motion to approve agenda and additions to agenda*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

1. **OLD BUSINESS**
2. **(item)**

*MOTION/SECOND: (name)/(name)*

*Motion language:*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

1. **NEW BUSINESS**
2. **Fall 17-01 Extension Request**

* Interns are not getting paid more, were they working and will they be working more because of extension
  + he has other funding
  + he may not have been using them
  + the school has shifted pay structure for students

*MOTION/SECOND: Jordan/Lauren*

*Motion language: Motion to approve Extension request for FALL 17-01*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

1. **Spring 18-14 Reallocation Request**

* they might actually need the bike- seems really important to the integrity of the project
  + we should see the project through
* they care a lot about the project
* At this point it might be worth it to just fund the bike
* Lauren: it's actually kind of happening because her “friend” is in one of the houses that the project is happening at
* Jordan: give them the benefit of the doubt
  + hopefully the bike will stay in the organization

*MOTION/SECOND: Lauren/Maria*

*Motion language: Motion to approve the reallocation request for SPR 18-14*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

1. **DISCUSSION**
   1. Grant that went to spam folder

* won’t be terribly hard to schedule, can either hear four grants in one meeting or at 6 PM on the decision meeting
  + in favor of 6 PM decision meeting, hopefully replacement board member could see a presentation
* Outreach will take over site visits

1. **PROJECT REVIEW**

Project Title: Fall 18-11 Internships and additional funding support for conservation, education, and restoration programs for winter and spring 2019

Sponsoring Organization: Coal Oil Point Reserve

Presenter Name: Jessica Nielsen

Summary: Coal Oil Point Reserve requests funds to provide UCSB students with paid internships

for winter and spring quarters of 2019. UCSB student interns and assistants will

participate in the Snowy Plover docent program, land stewardship (restoration,

maintenance, resource management), Nature Center exhibit interpretation, online field

guide development, water quality monitoring, soil mapping, and research on land use

history. The internships at the reserve will provide UCSB students with opportunities to

acquire experience to enhance their professional development.

* Juliette worked with Jessica in Moorea

Presentation Notes:

* Mostly for internships, she’s the conservation specialist
* 3 full time staff members
  + Research, preservation, restoration
* Closest Natural Reserve to any UC campus
* Snowy Plover Docent: protect the birds and have one docent on the beach at all daylight hours
* A lot of docents stick around
  + Gain experience in Environmental Education and Conservation
* Plovers are breeding in spring and summer, really important to make sure they are not trampled
  + More docents asked for in that time window
* Asking for two interns to work with land stewards
  + Miscellaneous projects
  + Only asking for one quarter because that’s when they get the most water for planting
* Two research interpretation interns per quarter
  + Split time working for nature center (docent for nature center) and developing content for online field guide
* 1 water quality intern each quarter
  + Lead that will coordinate volunteers to sample dev slough
  + Enter the data and make sure it’s quality data
* 2 new interns: soil mapping and land use history
  + Supervised by Kip because he has relevant background and interest due to restoration goals
  + Soil mapping would take cores throughout reserve
  + Working w COPR and librarians and people who do environmental history, and figure out good history of the land
* Asking for supply money to support program

Board Questions:

* Record year for plovers?
  + Fledge chick: hatches and survives for month (independent, flies)
  + Average is 30 fledges a year
  + This year there was 82 :)
* What do you think was the cause of that spike?
  + Breeding population was a record
  + Normally about 30-35 breeding plovers
  + This year there was over 50
  + Having docents on the beach helps
* For the winter and spring positions, do you think the people will stay?
  + Yes, we like to have continuity in our interns
  + Currently have interns that have been working for two quarters
* Is there a reason you guys have kept the $375? If it was possible, would you raise the value?
  + Didn't realize there was an option to raise it, thought it was standard
  + Would be nice to pay them more given inflation
  + She can decide what the stipend is
* How many hours do they all do?
  + 50 hours a quarter
* For the new intern positions, how will you recruit who you hire?
  + Soil mapping: would love to pull from Chadwick’s class
  + Ideally someone who is familar with processes/reserves would love to continue more in-depth
  + Will check in with Peter Alagona to see if he has students in mind
  + Land use history: biology and environmental list-serv
* Will results of soil mapping and land use history be integrated online
  + Yes, we love to put our data sets online
  + Just a matter of keeping it updated
  + Crucial to restoration to know which soils we have
* How does it work for mentorship with the interns?
  + Generally talk about who will superivse each intern
  + Jessica always does snowy plover, water qualtiy, research interns
  + Kip has interest in soil and land history so he supervises them
* How's the Nature Center going?
  + Going well, great to have an actual fascility
  + Was originally working out of barrack, fine for three of them but bad for training interns and meetings
  + Now there is room for interns to work
  + Opens every first saturday of the month
* Last fall you asked for four land stewards for each quarter, this year you asked for two, why?
  + Found that it is more efficient to have less interns that are more involved
  + Able to get volunteers for busy days
  + More working in the green house
* Does our CSP program work with you guys?
  + Yes, but not this quarter because Kip isn’t planting in fall
* Would COPR be involved in long term funding grant?
  + Yes, they ask for very similar internships every quarter
  + Many programs are set in stone, have consistent internships that they ask for every year
  + Special projects come up, would probably use minor grant for specific year long internships that have expiration
  + For the most part, most continue

Board Discussion: Board goes into closed discussion

*MOTION/SECOND: Jordan/Angela*

*Motion language: Motion to table discussion for FALL 18-11*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

Project Title:Fall 18-12 - Surveys of the Leopard Shark aggregation of Coal Oil Point

Sponsoring Organization: MSI

Presenter Name: Samantha Mladjov

Summary:This request is for funding to support my ongoing observational study of leopard sharks

(Triakis semifasciata) adjacent to the UC Coal Oil Point Reserve. I have been

independently documenting, without funding assistance, the presence and numbers of

leopard sharks in shallow waters off the beach between the Reserve and Isla Vista since

March 2017. I began this study on my own while I was a student at UCSB. I have since

graduated in June 2018. I have been developing aerial and underwater data collection

protocols with advice from Drs. Milton Love and Mary Nishimoto (UCSB). Two current

UCSB students are partnered with me on this project. One has provided his drone and

pilots the aerial surveys we have been conducting. The other, a highly skilled and

experienced underwater photographer and videographer, has been contributing his

knowledge of the local environs and is providing video data of sharks in their underwater

habitat. I am seeking funding for equipment and supplies to support data

* Maria and Lauren are recusing themselves because they are close friends with people involved in this project
* Jordan knows them but feels comfortable being impartial

Presentation Notes:

* Brought handouts and pictures in: lots of sharks!
* Love and Nishimoto have about 60 years at data
* Was curious about leopard sharks when she saw them, asked advisors about them
  + No information oncesoever
* Did walk along surveys, counts, evaluating what kind of data was needed
* Correlation in Thomas bay where they move with tides for energy saving
* La Jolla: lot of pregnant females, use warmth to advantage
* What is the correlation here at UCSB?
  + There are here year round, and this is the only aggregation on a reserve
* Overarching idea is to start gathering data
* Reproduce anually and they are here year round
* Data points from each month, lot of data already established
* Bo is drone pilot
* Realized counts were very off once she saw the video
* Doing counts but using videos now with analysis, what not
* Because of their grouping, they have a high vulnerability
  + Approved through COPR to do this work
  + Will be spreading info, doing outreach
* Trying to perfect protocol, has been working on this for a while and has a lot of data but now has time to put more work in
* Planning to go to grad school, hoping this project will help her gain skills
* super passionate about this project

Board Questions:

* Could you talk a little bit about the environmental data?
  + Initial readings were from online, but sensors were far away (LTER)
  + Will help them and other leopard shark project going on
  + Have temperature stick that they have been using,
  + Still uses walk along survey method if water is murky
  + COPR is enthusiastic about tidbits becuase COPR projects can use this info
  + Bo works with washburn lab, they are all helping each other with permits and sharing data
* Other leopard shark studies? There are other labs working on this, how much are you collaborating
  + Just connected this summer, Stier Lab. Not sure of their official name
  + Doing blood analysis, caging, gut analysis
  + Data will be complementary to big picture
  + Are sharing data, will be one big project together, answer each others questions
  + Working with them for tidbits, get permits with their help
* Where are you putting tidbits
  + One close to shore, one further
  + Trying to avoid putting them in surf zones
* How will you ensure you are consistent with counting data, what will be protocol for using both data
  + Still working on protocol, because its hard to be consistent, especially because sometimes he’s not out there
  + Hoping to do 1-3 drone flights a week
    - Always go on same flight path
    - Keeping same height
  + Using the drone on clear days, using program called Leechy (?) to help with the consistency
* Is it video or stills?
  + video
* Dr. Nishimoto’s involvement on the project?
  + Sam was talking about the sharks and Mary and Love were fascinated, did not know about sharks
  + Went to beach with her to see, were interested
  + Other researchers found aggregations that were temporary
  + Interested with why they are here year round
  + She is helping Sammy come up with scientific protocol
  + There as an advisor
  + Dr. Love also advising
* Highest youve ever counted?
  + 480
* How do you do walk alongs?
* Have you ever done walk along while drone was going to compare counts?
  + Have, not more than once. Will look into it
  + Likes that idea, realized how much she was off
  + Can be complicated sometimes to use drones permit wise, need approval from UC, COPR, airport
  + Have streamlined process, things are easier now, visibility is a huge factor and they can get out there when visibility is good
  + Aim is to get density over time not just counts
  + Getting relative size population data/structural insights from relative sizes on drone
* You can get good size estimates from footage or just walking?
  + Couple methods being used, mostly landmarks
  + Can get a couple of size classes
* Habitat distribution; are you analyzing habitat usage from drone
  + Yeah, at least for the ones that are clear enough to see, able to see if they’re staying in sand channels, etc.
* There are two species, are you able to distinguish?
  + They do not really do the band behavior
  + She has never seen them among leopard sharks unless there is guitarfish
  + Not a normal thing to mix with aggregate in such shallow water
* Do you want to make signs for COPR or around outside the beach?
  + Questionable, need to discuss around COPR
  + Have to be careful because of stigma
  + Need signs to be educational, put some thought into it
  + Sharks are easily grabbed and messed with, and are harmless
  + Super unique to UCSB, really cool opportunity we have
* Are there any items that are more important than others?
  + 4k drone, footage is a lot of data and her computer is reaching max
  + SD card really important to preserve data
* Is the drone your private drone?
  + Yeah he brought it its tiny and 4k
  + About 2K
  + Multidirectional obstacle avoidance (birds)
  + He is helping look at footage too
  + Program to set coordinates and it is autonomous
    - Issue with this is variety in tide
    - Normalize to tide
    - Running and saving GPS coordinates

Board Discussion:

*MOTION/SECOND: Jordan/Juliette*

*Motion language:Motion to table discussion for FALL 18-12*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

Project Title: Fall 18-13 - Investigating the synergistic impact of elevated temperature and carbon dioxide on a phytoplankton species from the Santa Barbara Channel

Sponsoring Organization: MSI

Presenter Name: Megan Lowry

Summary:I am requesting funding primarily towards hourly wages for time spent working on the proposed

experiments, which will span approximately 12 weeks. A smaller percentage of the requested

funding is directed toward lab supplies required to complete the proposed experiments. All major

equipment is available through the Passow Lab.

Presentation Notes:

* Passow Lab working with phytoplankton, affect of climate change
* Looking at increase CO2 level, temperature from El Nino, climate change
* El Nino, sea surface temp , upwelling, climate change
* El Nino events increasing due to climate change (warmth)
* What will happen to our phytoplankton population in 20 years?
* Not a ton of research on phytoplankton during El Nino in our channel
  + Research she did find was different than predictions
* More research into future conditions
* Phytoplankton are important; Primary producers, respire oxygen, base of food change
* Three hypothesis:
  + Under el nino condition, there will be an increase in temp resulting in increased productivity and population
  + Under climate change conditions, there will be an increase in temperature and CO2 levels
  + Third being cumulative effect in El Nino and Climate Change, which will have detrimental effects
* Study using multicultivators
  + 8 tubes that regulate CO2, temp, and light
  + Will test each of her three hypotheses
* Will look at CO2 and Temp as Variables
  + Future projects could look at more conclusive effect of El Nino measuring light intensity and nutrients

Board Questions:

* You mentioned light and nutrients, but those are constant right?
  + These are constant variables
* Do you account for nighttime?
  + yes
* How did you pick this one species?
  + Local to our water and have worked with it before
  + Also looked at cyanobacteria
  + 1985 El Nino event inspired
* Are these levels of CO2 and Light from predictions on the future levels of climate change?
  + Yes, took from papers
* Do you know what the change in the current temperature and an el nino year is?
  + Three degrees
* Are you going to have someone in the lab helping you, or are you on your own?
  + Mentor is guiding her
* Are you going to do this while also taking classes?
  + Will quit other job to focus on this
* Would those 12 hours go to the 20 hours a week?
  + Yes, would focus solely on this project
* What is your sample size?
  + three per each condition
* Is that a standard number?
  + yes
* Is prepared seawater easier to use/control?
  + What she’s doing right now, more stable
* Have you thought about how you might be able to continue this research/how it might be used and continued onward?
  + Conference that moves every year (ASLOW?), hoping to present this information
  + Personally: would definitely be interested in working with phytoplankton into grad school, this would help
* Your analysis work is being done at UCSB?
  + yes
* Will you be doing it or sending it off to the lab?
  + Sending it off to the lab

Board Discussion:

*MOTION/SECOND: Jordan/Lauren*

*Motion language: Motion to table discussion for FALL 18-13*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

**ADJOURNMENT AT 8:29 PM**

*MOTION/SECOND: Jordan/Maria*

*Motion language: Motion to adjourn meeting at 8:29*

*ACTION: Consent*

*Additional approval required: NO*