



COASTAL FUND MINUTES

Associated Students

Tuesday, 05/05/2020, Zoom

CALL TO ORDER: 6: 02 minutes recorded by Carissa

A. 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) |
|---|--|--|--|
| Jeremy Francoeur Chair | present | Anushna Patel Outreach Coordinator | present |
| Mike Martin Co-Chair | present | Katherine Fukada Outreach Coordinator | present |
| Ethan Estrada Undergraduate Rep | present | Sarah Siedschlag Advisor | present |
| Rylee (Kiya) Pupa Undergraduate Rep | present | Carissa Stewart Administrative Assist | present |
| Mykala Listorti Undergraduate Rep | present | Kevin Sway Senate Liaison | absent |
| Phoebe Racine Graduate Student Rep | present | Emma Swanson Senate Liaison | absent |
| Laura Ingulsrud Graduate Student Rep | present | | |

B. COMMITTEE BUSINESS

1. Approval of Attendance and Proxies

MOTION/SECOND: Jeremy/ Mike

Motion language: Motion to approve attendance and proxies.

ACTION: Consent

Additional approval required: YES (Senate)

2. Approval of Minutes

MOTION/SECOND: Jeremy/ Ethan

Motion language: Motion to approve minutes from last week

ACTION: Consent

Additional approval required: YES (Senate)

C. PUBLIC FORUM

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

- Happy Cinco de Mayo!
- grants and funding coming in

D. REPORTS

1. Advisor Report: Siedschlag

- i. article in the independent about the project we funded
- ii. dive fee support link has been updated and activated- no applications yet
- iii. talked to instructor and is still figuring out if there is going to be class in fall
- iv. Put June 15th as deadline

2. Chair Report: Francoeur

- i. went to senate to request funds but they denied our request
- ii. gave us some resources for sources of other funding
- iii. will be meeting with NRS board
- iv. source issue listed

3. Vice Chair Report: Martin

- i. no report

4. Senate Report: Sway and Swanson

- i. no report

5. Administrative Report: Stewart

- i. Let me know if you guys have any questions for the software programs

6. Coastal Service Program Report: Stewart

- i. no report

7. Outreach and Education Report: Patel and Fukada

- i. posted winner of photo contest
- ii. putting together end of the year annual report
- iii. thinking of doing FALL 19-16 which is Lagoon restoration

8. Sub-Committee Reports

- i. NRS scholarships
 1. no report
- ii. Long-term Funding/ Pre-Screening Application
 1. application is good, 4 groups we want to test run with
 2. shooting it out during summer time

3. we were thinking of splitting it up between 2 in winter and one in fall and one in spring

E. AGENDA

1. Approval of Agenda/Additions to Agenda

MOTION/SECOND: motion to approve agenda and additions to agenda

Motion language: Jeremy/ Phoebe

ACTION: Consent

Additional approval required: YES (Senate)

F. OLD BUSINESS

G. NEW BUSINESS

FALL 19-09 Extension Request: Turning Up the Heat: Climate Science in Action

MOTION/SECOND: Jeremy/ Laura

Motion language: Motion to approve extension request for FALL 19-09

ACTION: Consent

Additional approval required: YES (Senate)

FALL 19-10 Reallocation Request: Kids in Nature Peer to Peer Environmental Education Program

MOTION/SECOND: Jeremy/Kiya

Motion language: Motion to approve reallocation request FALL 19-10

ACTION: Consent

Additional approval required: YES (Senate)

WIN 19-23 Extension Request: Rapid, High Temporal and Spatial Resolution Data on Increased Run-off of Goleta Mud Offloading on Coastal Phytoplankton Bloom Response and Coastal Ecosystem Health of the Santa

Barbara Channel

MOTION/SECOND: Jeremy/ Mike

Motion language: Motion to approve WIN 19-23 extension request

ACTION: Consent

Additional approval required: YES (Senate)

FALL 19-01 Extension Request: Long Video

MOTION/SECOND: Jeremy/ Phoebe

Motion language: Motion to approve FALL 19-01 extension request

ACTION: Consent

Additional approval required: YES (Senate)

FALL 19-15 Extension Request: Pre-K Env. Education

MOTION/SECOND: Jeremy/Phoebe

Motion language: Motion to approve extension request for FALL 19-15

ACTION: Consent

Additional approval required: YES (Senate)

SPR 19-14 Extension request: Restoration Internship

MOTION/SECOND: Jeremy/ Laura

Motion language: Motion to approve extension request for SPR 19-14

ACTION: Consent

Additional approval required: YES (Senate)

H. DISCUSSION

I. PROJECT REVIEW

Project Title: SPR 20-08 : Internships and additional funding support for conservation, education, and restoration programs for summer and fall 2020

Sponsoring Organization: Coal Oil Point Reserve

Presenter Name: Jessica Nielsen

Summary:

Coal Oil Point Reserve (COPR) requests funds to provide UCSB students with paid internships for summer and fall quarters of 2020. UCSB student interns and assistants will participate in the Snowy Plover Docent Program, land stewardship (restoration, maintenance, and resource management), water quality monitoring, and subtidal monitoring. The internships at the reserve will provide UCSB students with opportunities to acquire field experience to enhance their professional development while helping the reserve with crucial conservation and education programs.

Presentation Notes:

- Ethan Recuses himself
- Mission is to support reserve and asked mostly for internships
- In the beginning of breeding season right now and a lot of the snowy plovers will be hatching at the end of summer into Fall
- The other internships are for the restoration of the reserve
- Some of the money would be for the water quality monitoring program
- Looking at how the devereux slough is changing
- Also asking for land steward assistant for KIP

- This would be a right hand man for restoration
- For end of summer beginning of fall they have been doing surveys so they want an intern that will help them dive
- Then general supply money for interns like snacks and snacks

Board Questions:

- Could you talk about the water-quality monitoring internships
 - There is another study going on at coal oil point and they used copr's water quality information
 - The intern would be responsible for collecting data and training volunteers and scheduling volunteers
- How does coal oil point monitor MPA and work together
 - Santa barbara LTER protocols is the protocols that copr uses
 - Worth exploring
- What has changed in the past couple of years?
 - It's hard to say with so little information and they would have to do analyses
 - They found giant sea bass which was in a survey
- Do you do a reef check of indicator species or do you count everything
 - They count everything within a certain species list depending on the protocol
- Is someone who works as a docent, can they become a staff member?
 - It's mostly been entry level experience but they have an internship that would be an assistantship which is a future for docents that would allow them to get a more extensive internship
 - Want covid-19 has been lifted they can continue with the process of that
- How is covid-19 affecting your organization
 - Able to continue plover program
 - Have been able to restart docent program
 - Its open if they want to come back
 - Have certain procedures in place so that it is safe
 - Have been ramping back up
 - Able to hire one student so far that is still in IV
 - The land steward program has not been able to start going yet
 - Waiting for things to progress
- Would it be to rigorous for volunteers to do the snowy plover docent
 - Would love new volunteers but have to get approval before getting new volunteers
 - Hope things will be back to normal by fall
- What's the general consensus of the snowy plover docent
 - There are some people who have been to the beach before it was a reserve and they have ownership over it
 - 90-95% are neutral or positive reactions

- What are the most essential interns
 - Land steward and Subtitle assistant
 - The snowy plover docent program- could make do with less
 - Same with land steward interns- could make do with less

MOTION/SECOND: Jeremy/ Phoebe

Motion language: Motion to table discussion on SPR 20-08

ACTION: Consent

Additional approval required: YES (Senate)

Project Title: SPR 20-09 : Moving beyond luck: Developing broodstock conditioning protocols to facilitate culture of rock scallops

Sponsoring Organization: UCSB Marine Science Institute

Presenter Name: Carrie Culver

Summary:

There is growing interest nationally and locally to expand marine aquaculture to meet the increasing demand for seafood. To meet this need, culture technology for new species is necessary. Currently, the most promising candidate species for commercial aquaculture is the native purple-hinge rock scallop. This project will address one of the few remaining bottlenecks in the commercial production of this species, while providing UCSB undergraduates valuable research experience. The bottleneck we are addressing – broodstock conditioning – has impeded the availability of a reliable source of seed scallops for commercial production. We propose to study the connections between feeding and gonad condition in the purple-hinge rock scallop to develop methods needed for successful reproduction thereby optimizing its culture. Our results will help to bring rock scallop culture closer to commercial production, eventually providing a new local product for UCSB and Santa Barbara seafood consumers.

Presentation Notes:

- Lots of products can come from aquaculture
- A lot more people are recognizing aquaculture as an economic option
- One candidate for aquaculture is the rock scallop
- It is a very prized food item, its native, its found all over the west coast
- Continues to be some hurdles even though it is the most promising
- Have experienced a problem of adults maintaining reproductive capabilities in captivity
- Goal is to create efficient methods to create effective reproduction
- They will use a microscope to see what kind of algae they choose to eat
- If dissolved organic matter has influence in their development and will expose them to varying levels of organic matter
- Will be adjusting the high flow vs low flow water variables

- The team will be led by dr. culver and dr. paige
- Marissa will be hiring undergraduate interns in addition to Kyler
- Have had great responses to intern applications
- Will be tasked with onboarding and training undergrad and working on algae culture
- Kyler will be leading experiment
- Hope to hire interns at the end of june or july and starting growing algae
- In the summer that is when they will be doing particle size experiment and organic matter experiment
- During fall that is when they will be doing flow experiment
- The undergrads will be writing a blog post at bare minimum, if all goes well, they will have a brood stock protocol that will go out and be based on the research

Board Questions:

- What are the reproductive cycles of scallops in the wild?
 - Spawn in the spring, turn into larvae, metamorphosis and settle on rocks, it grows then cement to the rock and grow into adults
 - Also there is a spawning period in the fall
 - Some adults spawn throughout the year
- How long are the spawning periods and is it consistent flow or does it come in waves?
 - There is usually a consistent flow but in the peak times there is about a month of spawning
 - At the offshore platforms they tend to do really well
 - What are they missing in captivity that keeps them from reproducing
- In captivity were there fewer eggs released or were larvae dying young
 - They can assess the gonad development through a process of tickling
 - Some animals will have a very clear and flat gonad if they are not reproductive
 - When they bring them in their gonad is good, but as they stay in the tanks, the gonad deteriorates
 - When you are conditioning well the gonad will fill up
 - Sometimes the animals just won't spawn or they cannot be fertilized
- Are there other groups that have noticed a similar issue if there is a closed off region of the ocean
 - Have not heard of a closed off situation in the ocean
 - As long as they are in the ocean they can reproduce but if they are in captivity then they will not spawn
- Is there a scallop fishery and what do we know about scallop aquaculture around the world
 - There is no commercial scallop fisheries but there are recreation fisheries
 - There are other kinds of scallops that are cultured
 - There are some larger scallop fisheries that are bigger than the rock scallops that they have looked at

- Is there a potential for a paper or a manuscript
 - Definitely a possibility
- Are there other people looking into this particular issue
 - Still no commercial production
 - It has not been the focus
 - Washington state has been denying the take of these species
- Could you touch on the sustainability of this project
 - You don't really have to feed them once they get to a certain point
 - You don't have to give them antibiotics or fertilizer
 - It's a native species
 - The growers are very careful with their gear and in the lab they use native species and native ocean water
- What are the other knowledge gaps
 - The other issue is getting the larvae through metamorphosis
 - There has not been directed research on that
 - Need to get the larvae first before studying the metamorphosis
- How long do they take to get the preferable size for eating
 - It's about two years, for sushi a little less
 - Were going about \$5-7/ scallop
 - \$2-5/ scallop is more normal
- If you do figure out what the problem is, is there any issues that you could see that will come about from moving to larger scale
 - If water flow rates are critical, they will need to create a larger scale system, but doesn't seem like a big problem

MOTION/SECOND: Jeremy/Mike

Motion language: Motion to table discussion on SPR 20-09

ACTION: Consent

Additional approval required: YES (Senate)

ADJOURNMENT AT (time)

MOTION/SECOND: Jeremy/ Phoebe

Motion language: Motion to adjourn at 8:32 PM

ACTION: Consent

Additional approval required: NO