



## COASTAL FUND MINUTES

Associated Students

Tuesday, 10/22/19, Nati Conference Room

**CALL TO ORDER: 6:04 PM**, 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
Kate Mcleod Co-Chair	present	Katherine Fukada Outreach Coordinator	present
Cyrus Kayhan Undergraduate Rep	present	Sarah Siedschlag Advisor	present
Karen Thornton Undergraduate Rep	present	Carissa Stewart Administrative Assist	present
Mike Martin Undergraduate Rep	present	Kevin Sway Senate Liaison	present
Phoebe Racine Graduate Student Rep	Absent (excused)	Emma Swanson Senate Liaison	absent
Laura Ingulsrud Graduate Student Rep	Absent (excused)		

### B. COMMITTEE BUSINESS

#### 1. Approval of Attendance and Proxies

**MOTION/SECOND:** Jeremy/Kate

*Motion language: Motion to approve attendance and proxies.*

**ACTION:** Consent

*Additional approval required: YES (Senate)*

#### 2. Approval of Minutes

**MOTION/SECOND:** Jeremy/Cyrus

*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)

- Jeremy did not get a bike
- Cyrus saw announcements for Cyrus vacancy next quarter

### **D. REPORTS**

1. **Advisor Report: Siedschlag**
  - i. Sarah will be at a conference until Thursday
  - ii. Reachable by text
  - iii. EAB will have as a guest-Joan Hartmen is a rep for our county district
  - iv. No makeup person required
2. **Chair Report: Francoeur**
  - i. No applications for vacant position
3. **Vice Chair Report: McLeod**
  - i. No report
4. **Senate Report: Sway and Swanson**
  - i. no report
5. **Administrative Report: Stewart**
  - i. all presentations confirmed except two
  - ii. four presentations per meeting
  - iii. one present on November 19th
6. **Coastal Service Program Report: Stewart**
  - i. all restoration projects are filled up
  - ii. more beach clean up applicants
7. **Outreach and Education Report: Patel and Fukada**
  - i. created a brochure
  - ii. one site visit confirmed November 8th
  - iii. One co-sponsorship application
  - iv. museum of natural history offering free admission for exhibit
  - v. asking for \$3000
8. **Sub-Committee Reports**
  - i. NRS scholarships
    1. Cyrus and Jeremy met
    2. grant application done
    3. budget application done

- a. Someone suggested to include Valentine reserve for water studying techniques
  - b. Cyrus and Jeremy think that is too far away
  - c. Kate says keep it simple now because we just started
  - d. Karen agrees but think it depends on where we end up going with the project
  - e. Sarah says we do not need to vote until the application from Valentine is official and presented
- 4. Rollover budget
- 5. How should we advertise
  - a. Cyrus was thinking about reaching out to admin of department and have them email it out to staff
  - b. Will draf up instruction list
- 6. End of week 6 applications would be due
- 7. Possibly making due date of grants earlier to leave room for scholarship deadline
- 8. Cap on \$5000
- 9. Should we prioritize trips to islands or larger amounts at coal oil point?
  - a. salt marshes in Carpinteria possibly
- 10. Not required to fund any classes
- 11. Jeremy and Cyrus will meet again in the future
- ii. Long-term funding application
  - 1. Emailed Jordan and got spreadsheet, last updated 2017-2018
  - 2. Hovering around 30% of annual budget
  - 3. Find a time to meet about long-term options
    - a. Channelkeeper, Blue-horizons, Nature-track also long term
    - b. Grant master spreadsheet has info
    - c. Will layout few alternate methods for long-term application and then vote on that
- iii. Pre-screening process for applications
  - 1. No report

## **E. AGENDA**

### **1. Approval of Agenda/Additions to Agenda**

*MOTION/SECOND: Jeremy/ Karen*

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

*ACTION:Consent*

*Additional approval required: YES (Senate)*

## **F. OLD BUSINESS**

### **1. NO report**

## G. NEW BUSINESS

1. Co-sponsorship: Underwater Parks Day

*MOTION/SECOND: Jeremy/ Cyrus*

*Motion language: Motion to approve \$3000 for co-sponsorship request for santa barbara sea center*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

## H. DISCUSSION

## I. PROJECT REVIEW

Project Title: FALL 19-02 : Restoring Fuel Breaks to Promote Native Ecosystem Services

Sponsoring Organization: EEMB

Presenter Name: Robert Fitch

Summary: We are requesting funding to provide stipends for four part time (60hrs/quarter) undergraduate interns for two academic quarters. These stipends would be expended during winter and spring 2020 in order to help off-set living costs so students may spend more time gaining valuable research experience on campus. The amount of funding is calibrated to \$1,000 per stipend for two quarters per student, ( $\$1,000 \times 2 \times 4 = \$8,000$ ) ~\$16.67/hr.

Presentation Notes: Wanted to manage fuel-brakes by trying to utilize native species

- Use science to inform our management
- Promote ecosystems to put native species back in the fuel-breaks while still managing fuel goal
- After wildfire is over, firebreaks become invaded by invasive species
- Grasses are invasive and promotes fire
- Around urban interfaces
- Counter-intuitive to fuel goals
- Invasive species have short roots and other aspects that lead to fires
- Invasion to intact chaparral that hasn't been disturbed by the fire
- Overall will lead to more fires
- Establish native community of fuel brakes while keeping fuel goal
- Can be mowed but doesn't have to be taken out because they aren't very shrubby
- Planting these communities would have better results
- Build fire behavior model
- Demonstrate to forest service that we are capable of planting this and how ecology would respond
- Bring data to forest service

- Influence policy where after suppression, we put in natural species, and put this into protocol where we plant native plants right after fires
- Funding request for interns who have worked with him since summer
- Goal to have them be a part of the whole project
- They would follow through with entire project
- Require no previous research experience needed for interns
- Wants people to learn about the plants and the ecosystem

Board Questions: D0 fuel-breaks regularly get mowed

- Maintained via mowing every 5-7 years, but if fire then will be dozed down every time
- Has there been other research projects done in other areas like yours
  - Project in after corona fires, they use different methods to do similar concepts but similar, use different species
- Are you planning on coming back for the next four years
  - yes, want people to stay on each quarter, and pay them
- Are you looking to get younger people now to work for all years or are you looking for people who work as long as possible
  - No specific requirement, recruit 1-2 interns each year so far, needs the help and encourage anyone to join
- What does the day-to-day look like for interns?
  - Planting seeds, going to fields, work in greenhouse, working with him or intern, collecting data
- Are the interns helping you present to fire service or other
  - Hopefully interns would help with subcommittees or independent projects for presentations
- Have you made connections with fire service etc
  - Taken project to forest service research team-interested
  - Will be talking with Fuel-management team, but fire season started so hasn't been able to get through yet-have heard there is interest in doing things different
  - Positive responses so far, although tender topic about how we have done management so far
- Contact with forest watch?
  - No
- Few more years for him to be funded for graduate school
- What is potential project to implement program
  - Planting plants is more costly but more effective
  - Just laying out the seeds is cheaper but less effective
- What is the main reason this projects will take four years?
  - Took a lot of preliminary data to see what plants to use

- Need four years for field data-germination, mortality, creating a seed bank
- How will you simulate disturbances
  - Will mow or bulldoze, will coordinate with another group to see if they can burn

Board Discussion:N/a

*MOTION/SECOND: Jeremy/Cyrus*

*Motion language: Motion to table discussion on 19-02*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

Project Title: FALL 19-18: UCSB Adventure Programs-Community Service projects

Sponsoring organization: UCSB Adventure Programs

Presenter:Miles Wolfe

Presentation Notes:

- Adventure programs hosts a bunch of different excursions including canoeing backpacking, camping, do lessons, does ropes course, etc
- Love to give back to places where they play
- Will teach seven principles of ENT to participants
- 7 principles-Plan ahead, tread on variable surfaces, pack waste, leave what you find, minimize campfire effects, respect wildlife, be considerate to other people around you
- In 2014 nothing like community service project so in 2015 they wanted to go and do events to help community
- Tried to grow operation by getting more people involved
- Today they have more than 10 people on each event
- Picked up 100s of pounds of trash and added native species
- Events like cleaning up environments , do an events with best days-brings outdoors for people with disabilities, or minority, restoration with arroyo hondo
- Does camping trips with restoration projects in them
- Will send emails for events, provide transportation, sometimes they rent vans, evaluate afterwards,
- Would like to change some things to increase impact, create website/blog, current website is not great, would like to track data better, want to use data to figure out where to market, wants to make sure group is sustainable by who is staffed
- Lost funding last year, so right now everything is volunteer based
- Asking for funding to pay people in the top positions
- Money for transportation costs, marketing, and making events as fun as possible,
- Bringing vegan snacks and beverages

- Goal of program is to give people an opportunity to see outdoors and protect it, give community an opportunity to help the environment, hope to inspire people to be more environmentally friendly and use the 7 principles
- Want to encourage diversity in program, MAPAs works with marginalized communities to bring them camping and hiking with restoration
- Outdoors is a place of privilege, gear is expensive, permits are expensive, and encourage diverse communities to experience it
- Want to promote for more interns and create line of sustainability
- Goal to get interns for winter and spring
- Want to engage community, ecologically and human community
- Want the impact to spread
- Best events-restoration projects with Arroyo Honda
- Want to promote coastal fund
- Would like to hear feedback

#### Board questions:

- Do you have specific trips planned for next quarter
  - Will be going back to arroyo hondo, more beach cleanups, will do a lot of rock-climbing, trying to reestablish a santa cruz island restoration project, working on schedule for winter and will come out soon
- Do they get credit at the moment
  - Not paid for anything right now
  - Didn't get budget money because they don't bring in any revenue
- If they fund, will coastal fund always be a funding source for managers
  - Yes, hoping for support from recreation department in the future, but for this year and next year, they need funding
  - If they get funding from coastal fund, it will legitimize for other funding options
- No equipment on budget, do you share or is it from adventure
  - For MAPA's trip, They used adventure program gear
  - Future trip will follow the same procedure, but most people have adventure pass and can rent it
- Are you planning to target larger audiences out of ucsb
  - Yes, use Facebook to promote and want to involve larger community, passionate about bringing
  - Want to get more people from adventure program included and freshmen, reach out to greek life too
- Do you guys have specific guidelines about educating on the outdoors
  - Want to educate more, main job is to get community there
  - Always learning knowledge and transferring that knowledge
  - Have institutional projects changing

- Budding natural history program, guides to talk about history of ecology, have training program called leave no trace so that they can become certified LNT staff
- UCSB adventure service project questions
  - Is it possible to put in an application for a full year
    - Yes, also extension requests, if you ask for more money Presentation Notes
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- Love to give back to places where they play
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- Would like to hear feedback

Board discussion: N/a

*MOTION/SECOND: Jeremy/Kate*

*Motion language: Motion to table discussion for FALL 19-18*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

Project Title: FALL 19-05 : Native Tree Restoration, Maintenance and Education

Sponsoring Organization: Your Children's Trees at UCSB

Presenter Name: Quinlan Dougherty

Summary: Your Children's Trees at UCSB (YCT UCSB) is an organization dedicated to the preservation of the natural environment through ecosystem restoration and educational outreach. The requested funding would finance positions for 40 student internships during 2020, as well as the supplies needed to carry out our restoration efforts.

Interns are responsible for leading tree care events every Saturday during the school year, where YCT UCSB grows, plants, and cares for native trees with volunteers from local organizations. Interns also maintain 200+ trees at our growing grounds tree nursery in preparation for future planting events.

In addition to restoration efforts, interns promote environmental education by attending approximately 15 STEM Nights at local elementary schools every year. At these events, YCT UCSB provides hands-on activities to educate over 2,000 children and parents about trees.

Support from the Coastal Fund would help YCT UCSB continue to benefit our campus and community.

Presentation Notes: Interns important because tons of volunteers

- Guide interns on training process
- Two side of organization-restoration side and education side
- Teach children on importance
- Every saturday they have trees
- Collect acorns and plant trees
- Train interns on restoration skills and educating them
- Interns maintain trees and irrigation lines
- 283 trees have survived

- Ucsb students are biggest volunteers
- Take a lot of dedication so prioritize giving interns stipend
- Get around 12 intern applications but are not able to fund all of them, would like to give them a stipend
- Work with local elementary school to go to stem nights
- Attend 15 science nights a year- different organizations get a classroom and they teach people about trees
- Get students excited about environment and trees
- Internships create and update tree-walks-includes all the different tree species on campus and has qr code that tells students more about the species
- Get good feedback from teachers and parents
- Want to get tree campus k-12 accreditation
- Most schools have this but need help getting logistics
- Will open up more funding opportunities for them in the schools and educate
- Coastal fund is highlighted on brochure

Board Questions: Which local school are you reaching out to

- They are going to reach out to schools to see who is interested
- Does the award give money to the schools
  - Yes they provide money to your children's trees to plant more trees
  - Create education and would require environmental club on elementary schools
- Have you gotten good feedback?
  - Has tree tags with number and qr on them to make it easier to do tree walks
- What is your process for selecting interns
  - Go through each applicant to see who has the most interest and skills
- Do board members receive money
  - No its volunteer
- On average how many trees do you plant
  - Varies on how hard the soil is and what areas have been cleared
  - Have planted 284 trees so far
  - Have about 200 trees under production, depends on CCBRR
  - They do all of the work but it is CCBRRs land
- Saw something about ucsb award
  - Have been working on getting ucsb recognized with the award
  - Trying to get campus staff members to get on board
  - Tree award would cover the entire campus, so complications, but working on it
  - Just got in contact with Cameron from greenhouse
- Wondering about day-to-day experience as intern

- On thursdays would go to science night, on saturday there is an orientation meeting, special position on Saturday for specific interns to go out and set up for restoration project
- Great opportunity for ucsb students to get experience
- Coastal fund support is essential and what they do is essential for coastal fund because planting trees will help us have cleaner water
- 

Board Discussion:N/a

*MOTION/SECOND: Jeremy/Mike*

*Motion language: Motion to table discussion for FALL 19-05*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

Project Title: FALL 19-06 : Evaluation of Insecticide Risk to Aquatic Organisms of the Santa Barbara Coast  
Sponsoring Organization: UCSB (Bren School)  
Presenter Name: Nicol Parker

Summary: Pyrethroids are insecticides which pose significant threats to aquatic ecosystems throughout California. In preliminary efforts, we have predicted pyrethroid concentrations within the Santa Barbara Watershed to exceed concentrations at which organisms experience inhibition to reproduction and mortality. Thus, we seek to monitor and model pyrethroid loads to quantify risk to organisms in coastal streams and estuaries within the Watershed. Results of the proposed research will also quantify pyrethroid loads from agricultural, professional, and home pesticide use. If deemed applicable by the results, we shall provide recommendations for monitoring and mitigating pyrethroid transport to surface waters. Results of the study are to be shared with local agencies in an effort to raise pyrethroid awareness and protect local fauna. Agencies we will connect with include: County of Santa Barbara Water Resources Division, City of Santa Barbara Creeks Division, and Santa Barbara Channelkeeper.

Presentation Notes:

- Proposal to evaluate risk on santa barbara watershed with pesticides
- Worked in chemistry, civil engineering, etc
- Pyrethroids is an insecticide and bad because chemicals used to kill them can kill marine life
- Has been very significant studies that show large concentrations of pyrethroids

- Pyrethroids replaced other insecticides, but toxic at concentration a million times lower than other insecticide
- Will bind in sediment but extremely toxic if in water
- In santa barbara its easy for concentrations to exceed what is safe
- Did statewide investigation looking at amount of insecticides and found that pyrethroids were in the top 5 amount found,
- 80% of problem seem to come from pyrethroids, small portion of factor is causing large majority of problem
- Went in and modeled the santa barbara watershed, only had access to professional sites, not homes
- Proposal is incorrect, handout is correct
- Found that over a decade with application data, there was frequent exceedances of concentrations
- Based on mortality rate and reproduction rate
- Extreme variability because fluctuations with hydrology
- Important to model pyrethroids because they are there for short amount of time but make large impact
- Monitoring trigger levels- which were exceed frequently
- What are principle components of models
- Trying to create model to accurately simulate concentrations
- Big effort of proposed project would be modeling, high resolution
- Work With master students and undergrads that would conduct surveys to find out residential uses of insecticides
- Conducting monitoring, which would confirm or deny hypotheses about pyrethroids in santa barbara watershed
- Has two locations where she would do testing in goleta
- In goleta and campus area, has different tributaries where has the potential to be impacted by different types of communities-professional but also residential
- Wetlands and sloughs capture a lot of pesticides so would test it there

#### Board Questions

- How long do pyrethroids stay in sediment
  - Longer and less toxic in sediment
  - Break down by hydrolysis in about 30-60 days
  - Even with them being in the water for short time, it causes lasting effects
- Do commercial farms use different insecticides or why do residential areas use more
  - Want to quantify residential use because there is no data
- How would jobs differ between grad and undergrad students
  - Looking to look for help from channelkeeper, masters would be testing and reporting
  - Undergrads would be working on survey data, reporting, and get them out on the field
- What is design for identifying which households to send it to, what type of survey

- Worked in quantitative science
- Would want to get significant proportions of different types of houses like apartments complex, houses, etc
- How are you changing it
  - Did a lot more pre-screen work, did more testing, had a modeling effort
- How are you going to evaluate surveys and put it into results
  - Within the watershed, will get a feel for what happens
  - More concerned about smaller family homes and larger low-income residential areas than rich people
- Is team of interns the same people you have been working in
  - Have been doing it mostly by herself, have been keeping them updated but hasn't spent too much effort until it becomes established

Board Discussion:N/a

*MOTION/SECOND: Jeremy/Kate*

*Motion language: Motion to table discussion of FALL 19-06*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

Project Title: FALL 19-17 : Impact of Natural Disasters on the Native Olympia Oyster in the Santa Barbara Watershed

Sponsoring Organization: UCSB (Bren School)

Presenter Name: Brandon Quintana

Summary: The Olympia Oyster, *Ostrea lurida*, is the only oyster species native to the West coast of North America. Populations once ranged from British Columbia to Baja California, but have declined dramatically due to coastal development and pollution. Previous studies conducted at the Bren School and Coastal Fund projects surveyed and mapped oysters along the southern California Coast in 2017, finding many in local lagoons and sloughs.

The Carpinteria Salt Marsh, a UC Natural Reserve managed by UCSB, was once home to one of the largest natural populations of Olympia oysters in Southern California. Many oysters were found in 2017 but the fires and subsequent mudslides in early 2018 covered the marsh with mud and debris, killing most of the Olympia oysters and modifying their habitat. The research question this study seeks to answer is: what is the impact of 2018 debris flow on Olympia oyster populations in Carpinteria Slough, and what are the restoration bottlenecks limiting their recovery?

Presentation Notes: Olympia oyster is foundational species in santa barbara harbor

- Only native species on west coast
- Population has dwindles because of pollution
- Fires made soil sensitive to rainfall
- Debris overflow caused salt marsh to be polluted with sediment and wood
- Carpentry salt marsh has larger population with olympic oyster
- Salt marsh data a year after the slides had 72% decrease in oyster population
- Only looked at olympia oysters and only looked at presence
- Recruitment is when the larvae grow into adults, didn't happen this year but might happen next year
- Identify impact of debris flow
- Check for oyster presence, use bren data but didn't give a realistic view of actual data so need to test areas that havent been tested
- Want to resurveying where they know there is oysters
- Also taking into account invasive oysters, and competitors
- Within survey they will look at other species
- One they get substantial data, they will move oysters to more desirable conditions
- Bring in more rocks to up the chances of oyster recruitment
- Will use data to try and get estuaries population back up
- Will increase chances of the oyster to repopulate on a larger scale
- Want to bring population back up before there is more natural disasters
- Would take on position as full time research technician if given grant
- Student led but will get guidance from past phd student and other professors
- Ass research technician will be doing field data and teaching interns
- Look at where invasive species are located and look at where the best conditions are in order to relocate
- Help interns get into grad school and find interns their fit
- He would also be doing outreach including presenting in front of people to create restoration projects
- Help undergrads get funding and get santa barbara communities involved
- Inform communities about effects on animals
- Will create twitter and social media accounts to provide education

Board Questions:

- 2017 study was it lucky that they monitored oyster before fire?
  - It was just lucky with a two year studies
- Did the monitor just one spot in 2017
  - Yes which is why he wants to monitor population in other areas
- What is the main driver of olympia oyster decline along whole coast
  - Lack of recruitment, invasive species, and lower population numbers

- Why was there a lot of recruitment but not a lot of species
  - Just because they have recruitment does not mean they will survive, so restoration efforts, the oyster will be moved
- What would intern do
  - Do data collection, outreach program, help with social media, depends on what they want to do
- How will you pick interns
  - Through listserve, low gpa, and seeing who wants to apply
- How many hours for interns
  - Around 3-5 hours but depends on what they need to do in a week
- What about after your leave
  - If someone took over it would turn into their project
  - Would publish experiments
- Is there any other olympia efforts anywhere else
  - Yes, pretty much everywhere including orange county and Oregon
  - Well-researched niche, but no one is testing in carpinteria salt marsh
- Will you want to pursue this in grad school
  - Yes applying for olympia oyster restoration research projects for grad school

Board Discussion:N/a

*MOTION/SECOND: Jeremy/Kate*

*Motion language: Motion to table the discussion on FALL 19-17*

*ACTION: Consent*

*Additional approval required: YES (Senate)*

#### **ADJOURNMENT AT 9:32**

*MOTION/SECOND:Jeremy/ Kate*

*Motion language: Motion to adjourn at 9:32 PM*

*ACTION: Consent*

*Additional approval required: NO*