



Proposal # ____0990____

Instructionally Related Activities Report Form

SPONSOR: CLARE STEELE

DEPARTMENT: ESRM

ACTIVITY TITLE: CONSERVATION BIOLOGY FIELD TRIP TO SANTA CRUZ

DATE (S) OF ACTIVITY: MARCH 10TH, 2018

Please submit via email to the IRA Coordinator along with any supporting documentation at david.daniels@csuci.edu within 30 days after the activity. Thank you for your commitment to engaging our students!

A. ADDRESS THE FOLLOWING QUESTIONS:

- (1) PROVIDE A DESCRIPTION OF THE ACTIVITY;
 - (2) HOW DID THE ACTIVITY RELATE TO A COURSE(S) AND/OR LEARNING OBJECTIVES?
 - (3) WHAT DO YOU SEE AS THE STRENGTHS OF THE ACTIVITY?
 - (4) WHAT WOULD YOU SAY ARE/WERE THE ACTIVITY'S WEAKNESSES?
 - (5) HOW WOULD YOU IMPROVE THIS ACTIVITY FOR NEXT TIME?
 - (6) WHAT DID YOU LEARN FROM THE PROCESS?
 - (7) WHAT ARE STUDENT RESPONSES TO THE ACTIVITY? ATTACH STUDENT EVALUATIONS OR ASSESSMENTS (IN ACCORDANCE WITH FERPA RESTRICTIONS YOU MUST REMOVE ALL PERSONALLY IDENTIFIABLE STUDENT INFORMATION)
 - 8) GIVE A SUMMARY OF EXPENSES FOR THE ACTIVITY.
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B. ATTENDEE LIST- SUPPORTING DOCUMENT:

In addition to the report form, *in a separate document*, attach to your email a list of attendees complete with each student major and grade level. This for IRA Committee reference only and will not be published on the IRA website. Include your name and the title of your IRA activity on the document.

C. IMAGES FROM ACTIVITY:

Finally, attach to your email up to 6 images demonstrating student participation (under 2 MB total) with captions/titles. Please attach these photos in .JPEG format directly to email. Thank you!

(1) PROVIDE A DESCRIPTION OF THE ACTIVITY:

DUE TO LACK OF AVAILABILITY AT THE SRI UNDERGRADUATE RESEARCH STATION STUDENTS ENROLLED IN CONSERVATION BIOLOGY (BIO/ESRM 313) PARTICIPATED IN A 1 DAY EXCURSION TO SANTA CRUZ ISLAND. THE VISIT TO THE ISLAND PROVIDED MANY OPPORTUNITIES FOR LEARNING AND DISCUSSION OF CONSERVATION AND ECOLOGICAL PRINCIPLES. TWO NATURALISTS ACCOMPANIED THE GROUP AND GREATLY ENHANCED DISCUSSION OF CONSERVATION AND RESTORATION OCCURRING ON THE ISLAND.

(2) HOW DID THE ACTIVITY RELATE TO A COURSE(S) AND/OR LEARNING OBJECTIVES?

SANTA CRUS ISLAND AND THE CHANNEL ISLANDS NATIONAL PARK AND NATIONAL MARINE SANCTUARY PROVIDE AN AMAZING LIVING CLASSROOM TO EXPLORE MANY OF THE PRINCIPLES OF CONSERVATION BIOLOGY. THEY PROVIDE UNPARALLED ILLUSTRATIONS OF MANY OF THE TOPICS THAT WE LEARNED ABOUT THROUGHOUT THE SEMESTER, AND STUDENT UNDERSTANDING OF THE MATERIAL WAS GREATLY ENHANCED BY SEEING THESE PRINCIPLES 'IN ACTION'. DISCUSSIONS AND EXERCISES THAT CONDUCTED DURING OUR VISIT TO THE RESEARCH STATION ALIGNED WITH MANY OF OUR EXISTING CLASS MODULES, INCLUDING THE FOLLOWING: BIODIVERSITY; LANDSCAPE ECOLOGY; ISLAND BIOGEOGRAPHY; INVASIVE SPECIES; PROTECTED AREAS AND MPAS; MONITORING AND MITIGATION; SPECIES AND ECOSYSTEM MANAGEMENT.

(3) WHAT DO YOU SEE AS THE STRENGTHS OF THE ACTIVITY?

THE ISLAND VISIT PROVIDED INCREDIBLE OPPORTUNITIES FOR EXPERIENTIAL LEARNING. PARTICULARLY APPLICABLE TO THIS COURSE IS THE ANCIENT AND MODERN LAND-USE IMPACTS AND CONSERVATION HISTORY OF THE CHUMASH, RANCHING AND NPS PERIODS. ACCESS TO A VARIETY OF ECOSYSTEMS IN A RELATIVELY SMALL AREA ENABLES A VARIETY OF LEARNING & RESEARCH OPPORTUNITIES. WE INTRODUCED A NEW CONSERVATION STORYTELLING AND PHOTOGRAPHY EXERCISE THAT WAS LATER EXPANDED INTO A CLASS DISCUSSION BLOG.

(4) WHAT WOULD YOU SAY ARE/WERE THE ACTIVITY'S WEAKNESSES?

ON-ISLAND TRAVEL IS LIMITED BY WALKING DISTANCE TO SITES, THUS OPPORTUNITY TO EXPLORE MORE DISTANT SITES IS LIMITED. LIMITED TIME AND ADVERSE WEATHER ON THE ISLAND CONFINED OUR ACTIVITY TO THE MORE HEAVILY IMPACTED RANCH AREA.

(5) HOW WOULD YOU IMPROVE THIS ACTIVITY FOR NEXT TIME?

HOPEFULLY BETTER WEATHER WILL ALLOW US TO TRAVEL FURTHER AFIELD. THIS WAS OUR FIRST VISIT TO THIS SITE AND IN FUTURE WE MAY PLAN ON SOME VEGETATION SURVEYS THAT WILL GENERATE DATA WE CAN ANALYZE DURING SUBSEQUENT CLASSES.

(6) WHAT DID YOU LEARN FROM THE PROCESS?



**INSTRUCTIONALLY
RELATED
ACTIVITIES**

C H A N N E L
I S L A N D S

IMMERSION IN THIS LEARNING ENVIRONMENT ENCOURAGES STUDENTS TO MAKE CONNECTIONS BETWEEN CONSERVATION TOPICS DISCUSSED IN THE CLASSROOM AND TO UNDERSTAND REAL-WORLD IMPLICATIONS FOR CONSERVATION AND MANAGEMENT IN CALIFORNIA ISLAND ECOSYSTEMS. ACTIVITIES ON THIS TRIP THAT WERE PARTICULARLY BENEFICIAL INVOLVED DISCUSSIONS OF BALANCING MANAGEMENT FOR RECREATION AND HABITAT RESTORATION, OBSERVING THE IMPACT OF INVASIVE SPECIES IN THE HEAVILY IMPACTED RANCH AREA AND EXAMINING WILDLIFE CONFLICTS.

(7) WHAT ARE STUDENT RESPONSES TO THE ACTIVITY? ATTACH STUDENT EVALUATIONS OR ASSESSMENTS (IN ACCORDANCE WITH FERPA RESTRICTIONS YOU MUST REMOVE ALL PERSONALLY IDENTIFIABLE STUDENT INFORMATION)

PLEASE SEE ATTACHED REFLECTIONS 990 2018 S.DOCX

8) GIVE A SUMMARY OF EXPENSES FOR THE ACTIVITY.

GRANT PROVIDED TRANSPORTATION EXPENSES TO SANTA CRUZ ISLAND FOR 48 STUDENTS & 2 FACULTY.

B. ON SEPARATE DOCUMENT, PLEASE ATTACH ATTENDEE LIST (PERSONALLY IDENTIFIABLE INFO REMOVED)

SEE ATTACHED

C. PLEASE INCLUDE UP TO 6 IMAGES AS ATTACHMENTS TO YOUR EMAIL SUBMISSION

SEE ATTACHED

Participant list for IRA 990
Spring 2018

Arbogast, Matthew
Bains, Alyssa
Barron, Karina
Barton, Rainey
Bonilla, Karla
Castro, Rolando
De Lao, Bailey
Edwards, Mary
Ferguson, Joe
Fisher, Ali
Flores, Flores
Fogarty, Joanna
French, James
Guevara, Kristianne
Guzman, Gem
Hernandez, Berena
Johnson, David
Lafayette, Alexandra
Latthitham, Josiah
Lee, Summer
Magana, Leslie
Maldonado, Jessica
Marquez, Eduardo
Martin, Lily

Martinez, Geydy
Masukawa, Jamie
Mendez, Shannon
Moore, Aryana
O'Connell, Sarah
Oros, Brian
Palasik, Shelby
Palomares, Eva
Perez, Juliana
Perez, Raul
Powell, Sycora
Raygoza, Rafael
Rosete, Arturo
Sanchez, Monica
Sanchez Ramirez, Ruben
Schumacher, Amanda
Spies, Brenton
Steele, Clare
Tapie, Chad
Vansloten, Ryan
Vuicich, Lauren
Whearley, Dakota-Rose
Wiebe, Jia
Williams, Shirley



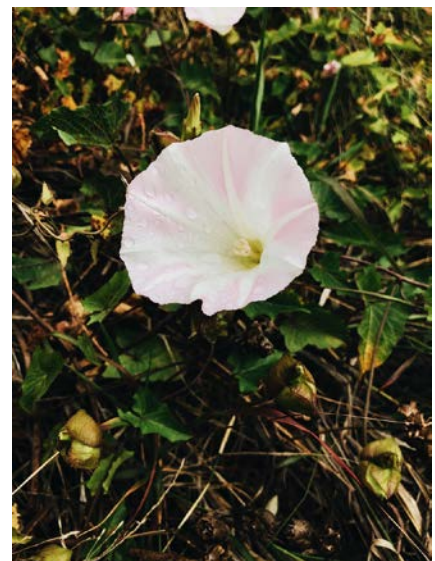
RB Mar 31, 2018

In Southern California, untouched land is becoming increasingly rare as urban sprawl ensues. While visiting Santa Cruz Island, one of eight of the Channel Islands located off shore of Southern California, the ESRM 313 Conservation Biology class was fortunate enough to have the opportunity to wander up a relatively remote wash. The difference between the well tread trail and this remote wash was striking. Along the trail the diversity of plant species and animals was relatively low and invasive plant species were more abundant. While exploring the wash the increase in animal and plant diversity was blatantly apparent. In this wash we spotted the famed endemic island jay calling out as it hopped from tree to tree, dudleya, iron wood, prickley pear cacti, an island species of lupine, lizard, spiders, and water striders.

Experiencing this more 'wild' and remote location on the island removed from the high-traffic ocean front helped to reinforce my support for preserving this beautiful place. I believe that this place should be preserved so that we are all able to visit and experience its beauty. However, I also believe that it should be preserved in a state of 'wild' just for the sake of having beautiful places. While we all go about our daily lives it is comforting to know that these places exist in a wild and relatively untouched state. It is less painful to watch our open spaces be gobbled up by development while knowing that these wild places exist and that there are people working tirelessly to ensure that they thrive into the future. I am very grateful that Dr. Steele provided our class with the opportunity to experience this unique island ecosystem.

LF Mar 27, 2018

The type of species that depicts the wilderness and no signs of humans in it is the picture containing the plant called Island Morning Glory and its scientific name is *Calystegia Macrostegia*. This particular species is endemic to Santa Cruz Island which means it is found abundantly in the area. This picture illustrates how the island flourishes with many different type of plant species. What it also illustrates is that the area is rich enough to let these plant species live long due to the current low disturbance of humans and decline of livestock. There are numerous plants found all over the island and there are continuing to grow due to the conservation efforts taking place on the island. This is one out of many plants that are permanently beginning to reside and it is such a great success



story because it is proving that the island has come a long way from where it was a couple of years ago. Overall this plant illustrates on how the island is beginning to prosper and if people continuing to protect it the island could eventually go back to how it was before there was any human interruptions.



RS Apr 3, 2018

Conservation: "Our greatest responsibility is to be good ancestors" -Jonas Salk

Educating the public, allowing them to connect to their public lands, and learning from past mistakes will foster public response and action to protect ecologically important places like Santa Cruz Island.

JF Apr 3, 2018

Most of us from ESRM are familiar with the conservation success story of the Island Fox. I had seen one trotting around on Santa Rosa Island a few years ago and one even managed to sneak into the bunkhouse, leaving muddy paw prints along the counter. Even then, I didn't realize how comfortable the foxes are with people. We were on Santa Cruz Island for less than 30 minutes before one casually strolled right next to me, less than five feet away. It wasn't long before another crossed me. By removing non-natives like feral pigs and golden eagles, reintroducing bald eagles, as well as breeding foxes, the Island fox population has clearly rebounded. It's great to see the results so up-close and personal but it also concerns me that the fox has no fear of humans. I understand they lack predators on the island, hence this behavior, yet I know some visitors take advantage and feed them. The only solution is to continue to spread awareness and educate visitors on the matter.





CT Apr 3, 2018

The idea of finding a picture untouched by human is hard to do anywhere in the world even a place like the Channel Islands. This picture I took is at the top of a hill and looking out into the ocean with rock structures adjacent to the islands. This picture is interesting to me because although it looks untouched I know just from researching that I can say with certainty that there has to be microplastics in that water. That is the

frustrating part about pollution because even if the pollution is done from afar it will make its way to even protected places. It's a conundrum. It is quite peaceful though because it looks mellow, and peaceful, unlike if I were to take a picture from the mainland.



MA Apr 3, 2018

To hug a tree is to hug time itself. How would it feel to hold 200 years?

But this foreign invader is a terror on the island. It drinks deeply with greed, and all around it spreads its mark so that nothing else can grow. It clears the land and claims its space. Maybe we hug, because we can relate?

JL Apr 3, 2018

Santa Cruz Island is a prime example of the difficulties posed in conserving fragile habitats. During a recent trip to Santa Cruz Island, students hiked up a river bottom to a ravine and saw lichens and an endemic species of dudleya. In this ravine, we discussed the recovery of the river bottom in the years since cattle grazing had been banned from the island. Although the island has been experiencing severe drought conditions, native and non-native vegetation has dramatically increased and has now covered what was once an almost barren river bottom. Even though some non-

native plant species are easy to identify, it remains difficult to eradicate them due to a lack of secure disposal methods. On our walk, it was made aware that by trampling some of these plant species, you could actually spread their seeds further and make eradication more difficult.



