IRA Funds Request for Conservation Biology Field Trip to Santa Rosa Island Undergraduate Research Station (ESRM/BIO 313)

Project Sponsor: Clare Steele

Activity Title: Conservation Biology Field Trip to Santa Rosa Island Undergraduate Research Station (ESRM/BIO 313)

Date Funding Needed By: 10/14/16

Previously Funded?: Yes

Semester/Year: Spring 2016

Proposal #: 0747

Report submitted for previously Funded Activity?: Yes

Report submitted for previously Funded Activity:

Steele_ESRMtravelbudget03012016.xlsx

Estimated Number of Students Participating: 25

Academic Program(s) / Center Name(s): Environmental Science and Resource Management

Costs:

- Estimated total Course Fee revenue: 1000
- Amount Requested from IRA: 2119
- Estimated total Course Fee Revenue: 1000
- Additional Proposers: —
- Additional Report #1: Steele_TA_10_9_15Participantlist.docx
- Additional Report #2: Steele_TA_10_9_15Participantlist.docx
- Additional Report #3: —
- Additional Proposers: —

Brief Activity Description:

Santa Rosa Island provides a wealth of illustrations of the principles of Conservation Biology and the Spring 2016 ESRM/BIO 313 Conservation Biology class would benefit greatly from the opportunity to see the practical implications of their studies during a visit to the research station on this island. For the last six semesters, students in this class have surveyed the sandy beach infauna at two mainland beaches, calculating density and diversity matrices to describe the beach communities and observing the impact of kelp wrack removal by grooming. A class visit gives students a fascinating opportunity to compare mainland and island biodiversity of sandy beach communities. The addition of surveys of shore birds, which are the primary predators of the beach infauna, would facilitate discussion of parasitism and trophic systems and add to our growing data set on sandy beach ecology recently updated during the 2015 CSUCI Summer Research Institute. The sandy beach field research will take place on the full Saturday, and the partial travel days, Friday and Sunday will be occupied with the following proposed activities. A hike up through Cherry Canyon on Friday afternoon will provide opportunities for discussion on recent island history and conservation efforts, including the ranching era, recent removal of grazing animals, and the role of these canyons as refuges for native vegetation. A discussion of the importance of long term monitoring and recent restoration efforts will be included. On Sunday, before departure, an early hike to the Torrey Pines area will provide opportunities for observation and discussion of the unique properties of islands and their native species, including island endemism and instances of island dwarfism and gigantism. The Torrey Pines and the island fox are particularly interesting local examples of intriguing conservation stories.

Description of Assessment Process:

Data gathered during sandy beach research will be analyzed and compared to similar data gathered during mainland class activities. Topics covered during class discussions whilst on Santa Rosa Island are an important aspect of the experience and will serve to deepen students understanding of these subjects as they will be examined in several class units. Students will be asked to complete a written reflection at the conclusion of the field trip, highlighting their experience and knowledge gained during the project.

Learning Outcomes and Relation to IRA to Course Offerings:

1. ESRM 313, BIO 313
2. The island provides unparalleled illustrations of many of the topics that students learn about throughout the semester, and their understanding of the material would be greatly enhanced by seeing these principles 'in action'. Discussions and field exercises facilitated by a visit to the research station would align 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. In addition to curricular enhancement, data collected from the sandy beach infauna and bird surveys will contribute to increasing our understanding of this frequently underexplored ecosystem, and to ongoing sandy beach research at CI that has been conducted during prior Conservation Biology classes, Summer Research Institutes in 2013-2015 and the Spring Break 2014 research by ESRM students and faculty.

Activity Budget:

SteeleESPMtravelbudget03012016.xlsx

CIA Budget:

—

CIA Proposal:

—
Course Syllabus —
CIA Certification —
Other Sources of Funding Course Fees from ESRM/BIO 313 assessed at $40 per student
Target Audience/Student Marketing The intended audience for this project are undergraduate students enrolled in ESRM/BIO 313 Conservation Biology. A weekend visit to Santa Rosa Island provides students with the opportunity to be immersed within the ecosystems they are learning about in class and to view, first hand, conservation and restoration issues that are ongoing on the island.
Bring Benefit to Campus As students of California State University, Channel Islands, our Channel Islands are part of our University & our student's cultural heritage. Providing students an opportunity to visit the islands as part of their educational experience at CSUCI enhances the student’s cultural identity and expands their learning opportunities. In addition, students will contribute to a growing body of ecological research that extends across classes and across programs.
Sustainability This project primarily focuses on "Environmental Education", one of the five primary areas of sustainability identified by the CI Sustainability Task Force. In the class visit to Santa Rosa Island, we will be observing an island ecosystem with a long history of exploitation by humans, from the Chumash people to the more recent ranching practices. Exploring an area now protected as a National Park and in recovery from extensive human influence will educate students in sustainable practices and use of marine, coastal and terrestrial resources, understanding the impact of humans on the environment and restoration of degraded ecosystems.

Program Chair/Director

Donald Rodriguez

Acknowledgement

I acknowledge that I have reviewed and accepted the Conditions and Considerations herein. Please check off boxes as appropriate.

Recommendation

I recommend approval of the IRA Funds Request described on this page

Name

Donald Rodriguez

Date/Time

3/1/2016 7:22:58 AM

Validation

myCI-signin-HW-8151

Comments —

Dean Review

Recommendation

I recommend approval of the IRA Funds Request described on this page

Name

Karen Carey

Date/Time

3/1/2016 7:43:53 AM

Validation

myCI-signin-TC-5125

Comments —

IRA Committee Decision

Decision —

Comments —

Current Tasks

Task | Time Assigned | Assigned To
--- | --- | ---
IRA Committee Decision | 3/1/2016 7:43:53 AM | David Daniels

Completed Tasks

Task | Time Assigned | Time Completed | Completed By
--- | --- | --- | ---
Review from donald.rodriguez, Program Chair/Director | 2/29/2016 10:18:57 PM | 2/29/2016 10:18:57 PM | Clare Steele

Actions

- IRA Committee Decision
- View IRA Funds Request