

Wayzata Students: Costa Rica Biology Field Research with the opportunity to earn 3 college credits from Kean University and letter of recommendation for college from Dr. Pinto.



For a fifth summer, Wayzata students traveled to Costa Rica for biology research. **This is an opportunity will again be offered this summer for ten days approximately June 16-26 (dates need to be flexible so we can get reduced airfare).**

Right at the end of the school year in June of 2016, a group of WHS students traveled to Costa Rica to design and complete their own science research project involving leaf cutter ants. Students also experienced life in the rain forest and the culture of the people living in a small Costa Rican village. This rainforest research program is offered through “Seeds of Change”, a non-profit organization established to get high school students excited about doing science research in a location rich in possibilities.

Students stayed in cabinas located on a rural ecofriendly farm where they learned about the relationship these ants have with the local people, especially the farmers. Students also learned about the biological importance of the leaf cutter ants in the rainforest. The leaf cutter ant has a complex mutualistic relationship between the fungus that it grows and the bacteria that help the ant keep their fungus healthy.

The students also learned that in nature, things are not as simple as they appear and that animals can provide important insight into human problems. Leaf cutter ants have provided researchers from UW Madison a rich source of potential antibiotics for use in human medicine.

In Costa Rica, students identify a scientific problem and carry the scientific method through from start to finish. Students worked under the guidance of Dr. Adrian Pinto from the University of Costa Rica. Students experienced the successes and failures normally associated with scientific research beyond the high school classroom. They went through the processes of problem formation, background research including reviewing research done by previous students, procedural revisions, lab tests, field tests, statistical analysis and peer review.

Students also experienced life in a small rural village next to the Ricon de la Vieja National park at the foot of an active volcano in the rainforest. No English is spoken in the village. Nonetheless, students prepared and shared a meal in a village home, played soccer with the local kids, worked on a community service project and enjoyed the warm greetings of local villagers who live a very different life than that from our students. Students experienced zip lining through the forest canopy, horseback riding up a portion of the volcano, a naturalist guided day and night hike, a night time sea turtle sweep and a day at the beach.

Students wishing to participate in this experience in the Summer of 2017, must currently be in 10th or 11th grade and have completed 10th grade biology by the end of this school year. Students who have completed this experience also have the opportunity to get a letter of recommendation from “Seeds of Change” and the professors the students work with. For application materials, contact Ms. Toni Leland. You can stop by A406 or send an email at toni.leland@wayzata.k12.mn.us. Applications are being taken now until 16 spaces are filled. For more information students and parents can visit the seeds of change website at www.seedforeducation.org and check out this year’s Wayzata’s Costa Rica blog at <http://wayzatacostarica2016.blogspot.com/>