

I had always been highly interested in science, as well as passionate about helping the environment, but it was not until ninth grade Biology and the Brown Environmental Leadership Lab the following summer that I discovered my love for working to preserve the environment by using science. I had originally proposed an extremely ambitious action-plan involving building my own photosynthetic solar panels using a cutting-edge technique that had recently been developed at MIT by Dr. Andreas Mershin. I did many hours of research in the months after my completion of BELL, planning to work on my action-plan as part of an independent study at my school. I created a PowerPoint containing my research and my plan, which I then presented to my school's entire science department (Lakeside) asking for permission for an independent study. The science department faculty decided to delay my immediate approval and requested that I reapply my Senior year; the teachers explained that they didn't believe I had covered enough high school science material to complete my project, at that time. I had been communicating with Dr. Mershin's secretary at MIT to seek his guidance during the summer and was extremely disappointed that my school would not allow me to launch this independent study in the time frame I originally planned while at BELL. This experience did set me back emotionally, as I had worked so many hours to understand this new technology and I remain incredibly passionate about building low cost solar panels that would be accessible for the developing world. Attending the Brown Leadership Symposium in the Fall was pivotal for me in terms of dealing with my disappointment, initial feelings of failure and my need to drastically alter my action plan. I learned that not every plan goes *smoothly*; I truly learned how to problem-solve as opposed to giving up due to a supposed "failure". I decided to revisit this photosynthesis idea in twelfth grade once I had actually taken high school Physics and Chemistry. However, I was still determined to use my love of science to help the environment in some way.

Sometimes life has a way of presenting new options organically, if one can stay open to other possibilities. By keeping an open mind and maintaining a deep desire to take action, plus feeling bolstered by the community at BELL, I found my way to my new action plan. I had always known that my ancestors were from Colombia, South America and that my grandfather had grown up there until he moved to America in the 1930's. But that was the extent of my

knowledge about my family heritage in South America, until recently... Earlier this year, I was looking through my mother's bookshelf in our living room when I came across an intriguing book- *Vista Nieve: The Remarkable, True Adventures of an Early Twentieth-Century Naturalist and His Family in Colombia, South America* by Melbourne Carriker, my great uncle! Curious, I opened the book and began to read the story of my great grandfather, who had been a prominent ornithologist in Colombia and naturalist during his lifetime. He had lived on a coffee plantation by the name of Vista Nieve and had traveled across the jungle examining birds, eventually discovering the migration patterns of these animals through the insect specimens that could be found on their bodies.

I was interested by this newly discovered family history, so I decided to do more research online and found out more about my great grandfather's life in South America.

(<http://siarchives.si.edu/blog/tale-coffee-and-collecting>). To my amazement, 250 acres of land in the region around my grandfather's childhood home had been preserved, and Vista Nieve had been named the Carriker Bird Sanctuary, after my great grandfather.

<http://www.abcbirds.org/newsandreports/releases/100922.html>

A Colombian not-for-profit organization called ProAves (www.proaves.org) now manages this bit of land; however, this small portion of the enormous mountaintop in the Sierra Nevada mountain range is part of the only area that has been protected. 1/8 of the fragile area is currently under protection by ProAves. This is very frustrating because the loss of this wildlife and the environment would be tragic. Colombia has the most bird species on earth. 1,870 different species and 1/5 of all birds known on earth are in an area eight times smaller than the USA. The biodiversity of the region is absolutely extraordinary. The site is internationally recognized by over 60 conservation organizations worldwide through the Alliance for Zero Extinction, and is designated as a Biosphere Reserve in Colombia by Unesco. Unfortunately, this recognition isn't enough. Every day more and more species of both flora and fauna are disappearing, simply because their entire natural habitat is not being protected. After discovering all of this new information, I felt inspired to do something to change the situation in Colombia: not only did it relate to my passion for helping the environment, but it was directly linked to my own family's history. I learned that it costs \$100/acre to preserve the land and make it belong to the ProAves wildlife reserve. For my BELL action plan, I decided to begin by raising money to buy back land

using the international online fundraising platform Indiegogo. I also encouraged other family members to get involved with me and we were going to go to Colombia in February but the FARC guerrillas had kidnapped bird watching tourists in the area so my family requested that we wait to visit until we could work together to create a plan for safety. It is exciting for me to have re-ignited my family's interest in environmental leadership and I can honestly say that going to BELL gave me the tools to communicate my goals with them and hear their concerns. This open dialogue has created a strong team and we plan to go in November with the money I raise, to give to ProAves directly and review other ways to help. My plan has three steps: 1.Raise \$500-\$1000 USD through an indiegogo campaign to buy back the land (this will preserve 5-10 acres more) and protect it, working directly with ProAves.org 2.Create Awareness through both my indiegogo campaign and a documentary project I am creating with my family which will eventually bring more funds to buy back more land for ProAves, bring more awareness and inspire others to help us protect the land 3.Visit the site and explore an internship with ProAves in scientific research so that I can apply my love for science to this conservation need in the rain forests of Colombia. I know one thing, this project will last a lifetime and I will never give up. I feel inspired to do what I can to help and grateful to BELL for giving me a community and guidance.

-Bella Carriker