



## Spring Has Sprung in Saguaro National Park West

by Rebecca Patterson-Markowitz



**Jessica and Tina make observations**

On April 1, 2016, five students from the Santa Rita High School Conservation Club headed out to Saguaro National Park West to participate in saguaro science. Driving through the Tucson Mountains and into SNP it was evident to the group that the warmer spring climate had affected the normal wildflower season. Cholla and hedgehog cacti, which normally flower at the end of April, were already in full bloom. Even some of the saguaros we passed had crowns of buds waiting to burst open.

Once we arrived at the SNP education center, we met with park educators Chip Littlefield and Tina Vavages to talk about the materials we'd be using out in the field that day. To study saguaros and desert flora, students would use a GPS, a clinometer, a tape measure, a yardstick, and of course a data sheet to make entries about the variety of cacti they discover.

As our group headed down the wash, Sara was the first to take a turn with the GPS. Following the small digital GPS arrow, she guided us up and over a rocky plateau that jutted above the wash to the plot of saguaros we would be studying. As we hiked along, students were enthralled by the diversity and all the colors of flowers! From cholla and ocotillo, to hedgehog cactus covered in fuchsia blooms, it was a delightful discovery of spring. However, after examining many saguaros and noticing the browning coloration of the normally green skin, we could conclude that many had suffered some considerable winter frost damage.

This group of students was quick to notice that to determine each saguaro's height the calculations they were using with the clinometer was a form of trigonometry. Not always an easy task, Jessica was one student who first began frustrated with the clinometer, until Ms. Vavages encouraged her to take it slow and keep trying. Finally getting the hang of it, Jessica later mentioned that the clinometer was a highlight to her day.



**Sara measures at the base of the saguaro just over the blooming hedgehog cactus**

After measuring five saguaros, we made our way back down the *arroyo* to close out our beautiful day and to eat some lunch. The bees were buzzing in the sweet acacia and mesquite blossoms, so we used this natural symphony as inspiration to make sound map drawings. After finding a quiet spot, students sat to observe and illustrate all the many different sounds they could hear around them – distinct birdcalls, buzzing bees and the gentle desert breeze.

After Ms. Vavages was kind enough to invite students back for another educational outing this summer when the saguaro fruit would ripen and they could experience a traditional harvest, we wrapped up the day with a short reflection writing exercise. Damien wrote, “I’ve liked both the outside activities we’ve done and can’t wait for the next one. I especially liked going hiking, which is something I don’t do much anymore.” Luckily for this high school junior, there is more Seeds of Stewardship in the Santa Rita Conservation Club’s future!



**Damien in his sound mapping spot**

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