

Surveying the Mighty Saguaros

by Rebecca Patterson-Markowitz



Andrada Polytechnic saguaro survey team

On March 5 2016, 11 students from Andrada Polytechnic High School joined up with the Arizona Trail Association to participate in a Saguaro Survey at Saguaro National Park East. The group was a combination of youth from the Hiking Club and STEM Club, and was accompanied by Chemistry teacher Liz Werner and Biology teacher Mr. Kale.

Wendy Lotze, Volunteer Coordinator for the Arizona Trail Association, had coordinated with the Park to make the whole outing possible. We met up with Wendy, Ranger

Carolyn, and other ATA volunteers at the visitor's center. As a group, we totaled more than 30 student and adult volunteers. Ranger Carolyn welcomed us and spoke about the Park's practice of monitoring saguaro health every decade, and the importance of volunteers in helping collect this data for the hundreds of thousands of cacti in the park. She also stressed the importance of hydration and reptile awareness on this unusually warm March day.

Our groups rode in park vans down the old X-9 Ranch Road to intersect with a portion of the AZT. The park had flagged off a segment of trail about a mile in, on a steep slope covered with lots of buffelgrass. The students divided into two groups and each group worked with two park volunteers who handed out saguaro monitoring kits complete with a clinometer, flags for marking the cacti surveyed, a tape measure, measuring stick, and a clipboard for note taking. We hiked up a slope off the trail to the western most boundary of our plot. There we began working our way east with the task to record data about every saguaro within our designated plot.



Ray marks a saguaro for survey

Students worked with young and old saguaros. They learned to look for visible browning or purpling in the usually green flesh of the cacti, which is a sign from frost damage. They identified nurse plants, animal holes, insect damage and exposed roots. Over the course of the day, with every saguaro recorded in our log, they were more efficient and confident at recognizing the different data points for collection.

With all our focus on documenting the saguaros it came as a surprise when Mrs. Werner jumped into the air as a disturbed Gila monster ran from under her foot and into the brushy patch of buffelgrass nearby. A little while later, Josh, who was curiously taking in all his surroundings, found a jawbone of what looked to be a javelina, and he showed it off to all his peers. By the time the whole group took a lunch break, Ray, our cactus flagger, informed us that our log showed nearly 40 saguaros monitored.

Because of their schedule, our group of students had to leave after lunch. Ranger Carolyn thanked them and explained how their important data would serve the park. After their hike out to the van, for all their hard work, the students took a 15-minute break to explore the beautiful creek that was flowing nearby. Mr. Kale spotted a tiny garter snake that was partially submerged in the water. The students gathered around as Mr. Kale extended the extension arm on his GoPro camera to capture some close-up footage of the tiny reptile flicking its tongue before it lost interest and slithered away.



Josh reads the saguaro height to Mrs. Werner

The stream was teeming with life. Dragonfly nymphs swam in the bottom of the shallow pools and water boatmen and striders moved across the surface. The students splashed in the water to cool down and to enjoy the wonder of this tiny ecosystem. It was the perfect ending to an adventurous day for these Vail students in Saguaro National Park.



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