



Girl Scouts & STEM

MAKING CHANGES LOCALLY & GLOBALLY

Under the Space Shuttle.

By JULIE BUCHWALD HALEY

Juliette Gordon Low and her first Girl Scouts of the USA blazed trails in 1912. In a time when women and girls were expected to cook and clean and tend to children, Low and her Scouts were hiking, camping, swimming, learning about the stars, and playing basketball. They were sharing adventures, learning that girls can do anything, and helping those in need around the world. Juliette and her girls may not have known it then, but they were also blazing trails in STEM (Science, Technology, Engineering, and Math).

Today's Girl Scouts are carrying on the mission to "build girls of courage, confidence, and character, who make the world a better place." The local council is Girl Scouts River Valleys, which serves more than 28,000 girls in

partnership with 9,000 committed volunteers and adult members throughout 49 counties in southern Minnesota, western Wisconsin, and one county in northern Iowa.

Scout troops in Northfield have concentrated on STEM learning and projects for about the past 20 years. Part of being a Scout is learning about and trying new and varied activities to earn badges and awards. Some activities include taking trips to STEM-centric locations such as River Bend Nature Center, Prairie Island nuclear power plant, Xcel Energy, the wind turbines at St. Olaf College, and a military base. During a trip to Goodsell Observatory at Carleton College with former troop leader Debby Walser-Kuntz, a biology professor at Carleton, the girls learned about both historic and modern telescopes, identified stars and constellations, and worked on asking thoughtful questions.

"When we left the Observatory and looked

up to the night skies, we identified Northern Lights," Debby said.

Many of the Scouts have made trips outside of Minnesota to places like Huntsville, Ala., and the U.S. Space Camp on the grounds of the U.S. Space and Rocket Center museum. They learned about space exploration, aviation and robotics, sat in control rooms, took space walks, visited an International Space Station, built parachutes, and walked under a space shuttle. They also enjoyed meeting Robert "Hoot" Gibson, the pilot and astronaut who commanded the crew of the first Space Shuttle to dock with the Russian Space Station Mir, and who was the first person to shake hands with Russian astronaut Vladimir Dezhurov when the doors between the stations were opened.

Another memorable trip took them to Costa Rica, where they camped, backpacked, and studied mangrove forests along the Pacific



Butterfly Garden at LBS.



Jeanette & Ana.
Planting in the Mangrove Nursery.

coast. Mangroves are filtration systems that protect coasts and habitats from erosion and are critically important to Costa Rica's environment. The Scouts helped collect and plant seeds while working in a mangrove nursery – a large pit with seedlings of various ages exposed to the extreme ocean tides. Part of the work included planting seeds in recycled containers, packing them in with ground soil, then planting the entire unit in the nursery.

Studies show that girls become interested in STEM subjects around the age of 11, but often lose that interest when they're 15. Research also shows that girls prefer subjects where they can see the impact they are making in the world. So, during these formative years, the Girl Scouts program encourages girls to be empowered to think about how STEM subjects and activities can change the world. They are learning to be both good students and good stewards of our world.

When Scouts Ainsley Nutt and Jeanette Pelletier, both 16, talk to peers about making a difference in the world, they speak from experience.

Jeanette's Gold Award project will take her to Tbilisi, Republic of Georgia, this year. She's working on raising awareness about vision loss and creating sister schools between the Minnesota State Academy for the Blind and a school in Tbilisi. Ainsley's Silver Award project included rescuing more than 1,200 beginner reader books from a recycling bin, then organizing and delivering them to a youth center in the Dominican Republic.

The Scouts are gaining skills and experience in communication, organization, time management, fundraising, diversity, and travel, all of which translate to a wide

variety of careers. They've also worked on local projects including building and maintaining a butterfly garden at the Laura Baker School and planting trees at the Carleton Arboretum.

"It's pretty amazing when I realize I'm making a difference, not just talking about it," Jeanette said.

Part of the work the Scouts do all year long is fundraising. Each spring, it's Girl Scout Cookies time, a program that started in 1917 by Girl Scouts and their moms as a way to fund their activities. It has steadily improved and increased since then to become a major fundraiser for many troops across the country. Seventy-six percent of proceeds goes to the troop itself, with 24% going to the Cookie program and bakers' costs. Selling cookies helps the girls develop important skills in communication, math, and organization. And it helps to ensure that trips can be made by any Girl Scout interested in participating.

Cookie sales also help girls develop life-long friendships.

"We love that all the girls want to spend time together," Kelly Stanton-Nutt, mom to Ainsley, and Jenny Pelletier, Jeanette's mom and Troop 25258's leader, said.

One of the many benefits of Scouting is that girls feel that they have important, intelligent voices to be heard and considered.

The Girl Scouts continue to encourage girls to become leaders across all subjects, helping them build courage, confidence, and character. And the Scouts are most certainly making the world a better place.

Julie Buchwald Haley is a freelance writer, new grandma, and PTSD survivor who works full-time, volunteers part-time, and is a pet parent to three. She returned to Minnesota after a 30+ year absence to make new memories with her parents.

A FEW FAMOUS GIRL SCOUTS:

SALLY RIDE, astronaut and physicist

TAMMY DUCKWORTH, Senator (D-IL) and retired U.S. Army Lt. Col.

MAE JEMISON, engineer, physician, and former astronaut

EILEEN COLLINS, retired astronaut and U.S. Air Force Colonel

SANDRA DAY O'CONNOR, retired Associate Justice of the U.S. Supreme Court

JANET NAPOLITANO, attorney, university administrator, former U.S. Secretary of Homeland Security

MADELEINE ALBRIGHT, former U.S. Secretary of State

CONDOLEEZZA RICE, former U.S. Secretary of State

GERALDINE FERRARO, attorney and first female Vice Presidential candidate representing a major political party

GLORIA STEINEM, journalist and social political activist

DR. JOYCE BROTHERS, psychologist and columnist

LINDA CHAVEZ-THOMPSON, former President of the Trade Union Confederation of the Americas