

# GIS captures high schooler's imagination

—by Rylee Ellyson

**Hello,** I'm Rylee Ellyson and I'm a sophomore at Purcell High School in Purcell, Oklahoma. I'm also part of the McClain Co. GIS 4-H Geoclovers team. Our team has an ESRI grant that allows us to use ArcMap 9, but to take advantage of the grant, we have to have a community mapping project.

The Geoclovers and I have done different things using ArcMap and other geospatial technology. We started modestly, by attaching GPS units to the handle bars of our bikes and riding around Purcell Lake to collect geographic data. The idea was to find out where the city needed to come in and expand walking trails or build new ones.

Toward the end of 2007, when we became fairly familiar with ArcMap, the City of Purcell asked the Geoclovers to create hand-out maps of the Heart of Oklahoma Christmas Lights for people who came through to view the lights.



I've learned through my involvement with the Geoclovers that GIS is a crucial part of everyday life. With GIS in their phones or iPods, people can look for places and deliver goods and services fast and without hassle. Imagine, for example, a map that will show up on your gizmo with all the Starbuck coffee shops along the route from your home to work, and maybe even rate them by price and quality.

In this and other seemingly mundane matters, GIS has influenced today's world and it will change tomorrow's. GIS connects all aspects of life, so all things can run smoothly. GIS changes the world in more ways than we notice. But, as the saying goes, "you need to be the change in the world you want to see." 4-H teaches leadership, and as a member I have to try to be the change that makes life better for other people. GIS helps me do that by teaching me such life skills as problem solving, leadership, communication, and many more.

Like anyone else I like money and so, I became even more enthusiastic about GIS when I found out that the GIS field has many jobs with good salaries. But just like in every other job field, you need college education to make a mark and be noticed. I plan to become a 4-H youth extension educator and run a GIS program. And what better way of talking to GIS educators than to attend the ESRI Education User pre-conference. (Below with Dr. Aileen Buckley, CaGIS president, and ESRI research cartographer (left) and Ilse Genovese, *ACSM Bulletin* editor (right)).



When we had a few maps done, Geoclovers and I got to present the maps and our ideas about them at the National Geography Educational Conference in Oklahoma City, Oklahoma. Our maps were critiqued by professors of geography, ESRI researchers, and by users of ESRI software. They gave us tips on how to improve our maps so that they are easy to read and shared ideas for future projects. Armed with all this information, we went home and edited our maps so that they are more educational and more useful to the public.

The new maps earned Geoclovers a spot in a National Alert, Evacuate, and Emergency Training exercise held in Dallas, Texas. In Dallas, we learned how to map emergency evacuation routes and evacuation sites.

The Geoclovers are currently working on a mapping project which involves locating and mapping rural fire hydrants. Concurrently, we are also mapping sources of water that may be polluted by human or natural causes. When the project is completed, we will have produced a map which will help firefighters to substantially cut down the time they need to re-fill a fire truck with water during an emergency. From the map, they will know where the closest water hydrant is, if it's not near the property on fire, and how to get to it as quickly as possible. Usually, Fire Chiefs also want to know whether a hydrant is "wet" (connected to a water main) or "dry" (a term I made up for a hydrant connected to a stream, pond, or lake).



I wish that all young people around the world could have the GIS experiences I have had. Because being involved in GIS not only broadens one's understanding of so many different things, but it's also great fun.