

# Students get an up-close look at a quake fault

**Jerry Soifer, Riverside Press-Enterprise, 7-16-10**

Heat cut down a planned three-mile hike to just over two miles. The hikers went to inspect the Cucamonga fault line in the North Etiwanda Preserve of the San Gabriel Mountains on Thursday.

Neither summer weather nor a strenuous walk that climbed from 400 feet to 2,400 feet in elevation in Rancho Cucamonga could drain the love of geology from Jacqueline Cooper, a teacher at Heritage High School in the Perris Union School District in Riverside County.

Cooper calls herself the "geosciences goddess." She abbreviates her moniker on her personalized license plates and her e-mail addresses.

Cooper and her student, Brie Paladino, 16, were part of a group of 20 who inspected the fault line under the guidance of Sally McGill, a Cal State San Bernardino geology professor.

Participants, from San Bernardino, Riverside, Los Angeles and Orange counties studied evidence of ancient temblors.

Cooper said the hike was like "a wannabe Indiana Jones ... If you're into it, it's part of the education."

Brie said of her teacher, "She's the reason I'm in geology. She is the one who made me realize I could make a career out of it."

The Cucamonga fault becomes part of the Malibu-Santa Monica-Sierra Madre-Cucamonga fault system. McGill said the Cucamonga fault, which is easily visible, is capable of a magnitude 6.7 to 7.2 earthquake. Its estimated slip rate is five millimeters a year. She estimated the last earthquake on the fault was 600 to 700 years ago.

The hikers paused at spots where McGill pointed out the rises in the earth that indicated the fault scarps that rose about 20 feet.

Tina Ramsey, a Montclair High School teacher, found shade at a monument to a home made by early settlers in the area.

Clariza Munguia, 17, a student at Hesperia High School, said, "It kind of lessens my fear. I understand it better."

Hesperia High physics teacher Michelle Meijer said she is now more afraid of earthquakes because she realizes how much damage they can do. Meijer said students in California have a unique opportunity to know the types of earthquakes that can occur and be better prepared.

McKinley Johnson, a teacher at Crean Lutheran High School in Irvine, called himself one of the lucky few to be taking part in the program. He said he will take what he learns back to his school to help all teachers with their lesson plans

"We can help people be better prepared and make better decisions for when the 'Big One' happens," said Johnson, 60. "I bet it will happen in my lifetime and for sure in my students' lifetime."