Federally-Recognized Tribes Extension Program
2008 HIGHLIGHTS

FRTEP UNIT: Arizona – Colorado River Indian Tribes

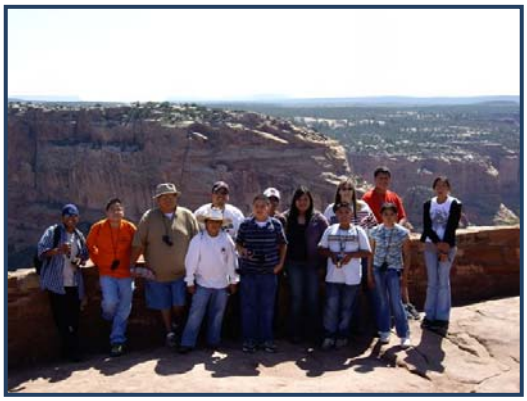
PROGRAM AREA: 4-H Youth Development - Science & Technology

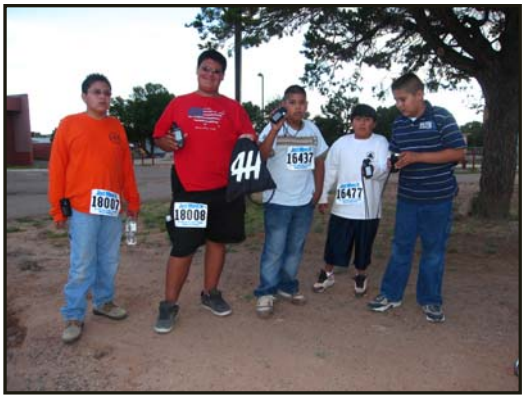
PROGRAM TITLE: Geographic Information Systems and Global Positioning Systems (GIS/GPS)

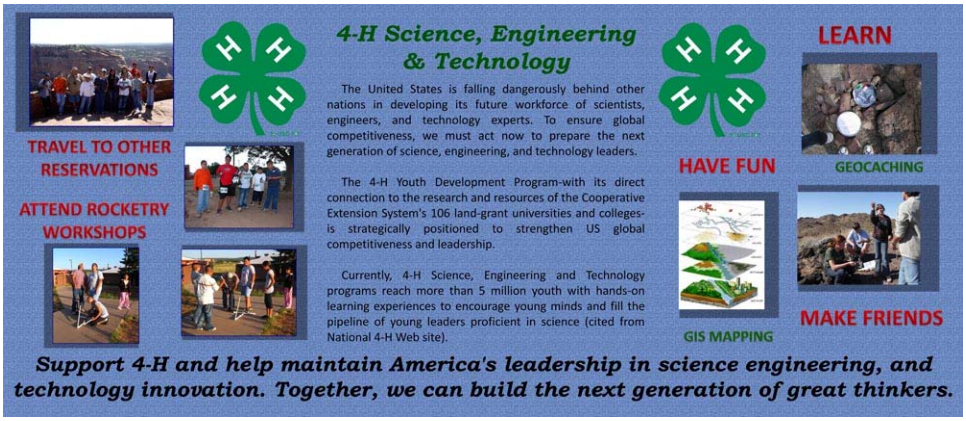
ISSUES ADDRESSED: This program addresses the Cooperative State Research, Education and Extension Service's (CSREES) Strategic Goal 2 to "Enhance the Competitiveness and Sustainability of Rural and Farm Economies" and Strategic Goal 3 to support "Increased Economic Opportunities and Improved Quality of Life in Rural America." According to the National 4-H Youth Development program, the "United States is falling dangerously behind other nations in developing its future workforce of scientists, engineers, and technology experts…To ensure global competitiveness, we must act now to prepare the next generation of science, engineering, and technology leaders." The agriculture industry has an ever-increasing demand for graduates with an agronomy background who can turn data into information and information into profit for the modern producer in the areas of field mapping, predicting field potential, soil sampling/soil analysis, fertility recommendations, yield monitoring, and many other such areas. Youth trained in science and specifically GPS/GIS Technology can help to satisfy this demand while qualifying for interesting, high-paying jobs which are otherwise hard to find in rural areas.

PROGRAM DESCRIPTION:

The Colorado River Indian Tribes (CRIT) Federally Recognized Tribal Extension Program agent (FRTEP) partnered with agents on the San Carlos Apache reservation and the Navajo Nation to provide educational materials and to host summer Natural Resources and Technology camps for youth. In 2008, 15 youth attended a new camp at the Diné College in Tsaile, Arizona. We plan to hold this as an annual event and include tribal youth from several reservations in Arizona and New Mexico. Locally, the 4-H Technology program is promoted at Tribal workshops including the Native Vision Technology workshop. Educational posters and free materials were made available to encourage more participation in the program. We are currently working with both the Parker High School library and the CRIT library to set up an after-school GIS/GPS program. Classroom presentations and visits to local 4-H clubs were made in 2008 to help build this program. Physical activity events, along with lessons in geology, flora, fauna, and hydrology are combined with GPS Geocaching hikes.







PROGRAM IMPACTS: Program information was provided to 150 participants at the CRIT Native Visions Technology workshop with the goal to increase participation and recruit leaders. Our currently small club participated in geocaching activities. Youth learned to use GPS units and then combine that activity with computer applications while learning about natural resources and participating in physical activity. Youth also prepared educational materials, and worked on the development of a map showing the location of 4-H animals in La Paz County. These youth will be the leaders for the next year's Natural Resources and Technology camp at Diné College for youth age 14 and older. This year's attendees were able to meet with youth from other reservations and work together to learn about GPS and GIS. Locally, the first after-school technology class attracted 8 youth.

CONTACT: For more information on this project, contact Linda Masters, Federally Recognized Tribal Extension Agent, Colorado River Indian Tribes at the University of Arizona, La Paz County Cooperative Extension Office: P.O. Box 3485, Parker, AZ 85344. Phone: (928) 669-9843 or Email: lmasters@ag.arizona.edu.