

## Southwest Biological Science Center Weekly Highlights December 5, 2005

**Results of the Southwest Gap Analysis Presented:** Southwest Regional Gap Analysis Project (SWReGAP) Featured: The products of the five state SWReGAP project will be overviewed in an opening day session at the National Gap Analysis Conference and Interagency Symposium, 12/5-8, in Reno, Nevada. USGS Southwest Biological Sciences Center ecologist Kathryn Thomas will demonstrate the types of results obtained from the gap conservation assessment in the wrap-up talk of the session 'Gap Analysis: Results and Inference in the Southwest'. She will also present an application of the Arizona land cover map, one of the SWReGAP products, at a later symposium talk 'Patterns in Invasive Non-Native Plant Distribution and Land Cover in Arizona'. Kathryn Thomas, Tuscon, AZ, 520.670.5534.

**2<sup>nd</sup> Graders Visit Flagstaff Science Center:** The Flagstaff Science Center hosted a class of 2nd graders from St. Mary's Elementary School on December 1, 2005. USGS researchers spoke to the class on different aspects of USGS research conducted at the Flagstaff Field Office which included presentations by: wildlife ecologist, J. Judson Wynne, on bats and other animals known to use caves in Arizona and Belize; geologist, Sue Priest on rocks, minerals and making toothpaste; geologist, George Billingsley, on the stratigraphy of the Grand Canyon; and Wendell Duffield on volcanoes. J. Judson Wynne, Flagstaff, AZ, 928.556.7172

**USGS and BLM Co-host Soil Workshop:** On 12 December, the Southwest Biological Science Center (SBSC) and BLM's Grand Staircase-Escalante National Monument (GSENM) will co-host an interagency workshop on the role of biological soil crusts in assessing and monitoring the condition of rangeland ecosystems on the Colorado Plateau. USGS researcher Mark Miller will begin the workshop by providing an overview of biological soil crusts as indicators of rangeland soil quality. The remainder of the meeting will focus on recent research conducted by Matthew Bowker of Northern Arizona University (NAU). In cooperation with SBSC researcher Jayne Belnap and NAU researcher Nancy Johnson, Bowker has developed spatially explicit predictive models of potential crust structure, function, and abundance in relation to environmental factors on GSENM. Expected participants include representatives of the Bureau of Land Management, the USDA Natural Resources Conservation Service, the National Park Service, and the USDA Forest Service. Mark Miller, Kanab, UT, 435-644-4325.

**Implications of Global Warming on the Hopi Reservation Discussed at Workshop:** On December 2 a workshop was held on the Hopi Reservation to discuss the implications of Global Warming on the Reservation. USGS scientist Kenneth Cole spoke and answered questions at the workshop on the scientific background of recent developments in climate change research. The session was attended by Hopi Elders, the Hopi Tribe Vice Chairman, representatives of renewable energy corporations, environmental organizations, and Hopi schoolchildren. Kenneth Cole, Flagstaff, AZ, 928.556.7466x230

**USGS Scientist invited to speak on Climate Oscillations in the Southwest:** On December 5, USGS scientist Kenneth Cole will be giving an invited presentation at the Annual Meeting of the American Geophysical Union in San Francisco. The presentation, entitled: "Late Glacial to Early Holocene Climate Oscillations in the American Southwest" will be given in a session on severe climates in Mountainous Regions. Kenneth Cole, Flagstaff, AZ, 928.556.7466x230

### **Press Contact:**

Kenneth Cole has been contacted about his presentation, titled "Late Glacial to Early Holocene Climate Oscillations in the American Southwest", by Jessica Marshall of "New Scientist" Magazine.

A recent article on past climates reconstructed from packrat middens by USGS scientist Kenneth Cole was featured in a news column in the monthly journal "Geotimes".