SBSC Weekly Highlights October 13-20, 2006

Press Contact: The quarterly journal, Conservation in Practice, has interviewed SBSC scientist Kenneth Cole this Friday. The topic of discussion was the possible effects of rapid climate change on plant species. Contact: Kenneth Cole, Colorado Plateau Research Station, 928-556-7466 ext. 230

Lake Powell Rises: Heavy rains in the Upper Colorado River Basin bumped the elevation of Lake Powell up by 4.2 feet since the evening of October 5, 2006, an increase in storage of 423,000 acre feet in six days. Surface elevation of Lake Powell rose 1.2 feet in a single day on October 7, 2006. Except for brief runoff periods in late May 1973 and late May 2005, when the reservoir was coming up by about 1.3-1.5 feet per day, and a similar storm in October 1972, that's the largest single-day increase since 1968, in the early stages of reservoir filling. Contact: Bill Vernieu, GCMRC, bvernieu@usgs.gov

USGS Researchers Present at International Conference: USGS SBSC researchers Kristina Paxton and Scott Durst presented at the 4th North American Ornithological Conference, Veracruz, Mexico, October 3-7, 2006. Kristina was invited to speak in the Challenges of Intercontinental Migration: Eastern and Western Perspectives Symposium and presented USGS research conducted during the 2006 Spring Migration entitled "Deuterium Values and Orientation of Wilson's Warblers at a Stopover Site Indicate Different Migratory Pathways for Changing Breeding Populations" with co-authors Charles van Riper III and Chris O'Brien. Her work detailed how combining telemetry and stable isotopes provides a powerful new way to look at migration ecology. Scott presented a talk based on a long-term demographic research project conducted on endangered Southwestern Willow Flycatchers on breeding grounds in Arizona entitled "Patterns of Southwestern Willow Flycatcher Survivorship" with co-authors Eben Paxton and Mark Sogge. His presentation detailed patterns of adult and juvenile survivorship over a ten year period, providing essential information on this endangered species, and highlighted the importance of considering survivorship estimates at multiple spatial scales. The 4th North American Ornithological Conference was among the largest ornithological meetings ever held and was attended by U.S., Canadian, Mexican as well as other Latin American ornithologists from state and Federal governments, academia, and private organizations. Contact: Scott Durst; 928-523-8142; sdurst@usgs.gov.

USGS SBSC Scientist Maps Vegetation Communities: The Travertine Springs complex in Death Valley has been a source of water for inhabitants from pre-settlement times until the present. The spring complex is contained within a 2-square-mile area east of Furnace Creek Ranch in Death Valley National Park, California, and supports a relatively diverse plant community. USGS SBSC ecologist Kathryn Thomas led a team that recently completed mapping and classification of the vegetation communities of the spring complex. Eleven vegetation communities are represented within the spring complex, with Mesquite Shrubland and Arrowweed Seasonally Flooded Shrubland being most common.

In addition, 43 plant species are recorded. Mapping results will be used by park resource managers to guide vegetation management during the planned reconstruction of the water collection system originating at the springs. More information can be found in the report: “Death Valley National Park Travertine Springs Complex Vegetation.” (Contact: Kathryn Thomas; Kathryn_a_Thomas@usgs.gov, 520 670-5534.)