

USGS Develops Research Tool for Capturing Birds in Flooded Woodlands: The Journal of Field Ornithology has published details of a novel method for suspending mist nets over deep water in flooded habitat. This technique was developed by USGS while conducting long-term demographic research on the endangered Southwestern Willow Flycatcher at Roosevelt Lake in central Arizona. Heavy winter precipitation in 2004/2005 resulted in Roosevelt Lake rising over 70 feet, flooding much of the historical breeding habitat of the flycatcher. Unable to use traditional methods to capture and band the flycatchers within the flooded woodland, USGS personnel developed a method of using buoys to float mist nets in flooded woodland, a technique that has wide application to many research situations. Full citation: Pollock, Mark G. and Eben H. Paxton. 2006. *Floating Mist Nets: A Technique for Capturing Birds in Flooded Habitat*. Journal of Field Ornithology 77:335-338. Contact: Eben Paxton (eben_paxton@usgs.gov).

USGS SBSC scientist Charles van Riper III wins George B. Fell Award: The Natural Areas Association has awarded Charles van Riper III the George B. Fell Award, the Association's highest honor. George B. Fell was one of America's leading conservationists in the last century. The Fell Award is given to an individual who has demonstrated the highest level of leadership in natural areas stewardship and science. The Association cited the effectiveness of Dr. van Riper's work with natural area managers, particularly National Park Service managers, and its relevance to the stewardship of natural areas. They also commended him on his research accomplishments, beginning in Hawaii Volcanoes National Park to his current work on the Colorado Plateau. The Association stated that Dr. van Riper's work on avian diseases and their impact on wildlife populations in National Parks was pioneering and laid the foundation for much of the current work concerning West Nile virus and avian influenza. Dr. van Riper was presented with the award at the 33rd annual Natural Areas Conference, held Sept. 20-23, 2006, in Flagstaff, Arizona. (Charles van Riper III, 520-626-7027).

Foliage Density and Estimated Evapotranspiration of Large Area Saltcedar Stands on the Lower Colorado River: USGS scientist Pamela Nagler will present research at the Tamarisk Conference in Fort Collins, Oct. 3-4, 2006, on estimated evapotranspiration (ET) rates from large-area saltcedar stands at the Cibola National Wildlife Refuge. Saltcedar (*Tamarix ramosissima*) has become the dominant plant species on the Lower Colorado River. Over 90% of the riparian corridor is classified as saltcedar habitat, growing in monocultures or in association with other salt tolerant shrubs such as arrowweed (*Pluchea sericea*) or saltbushes (*Atriplex* spp.). There is concern that saltcedar uses large amounts of water that could otherwise be used for agriculture or municipal water needs. Foliage density, leaf area index and ET rates of saltcedar have been measured at the plant or small-plot scale, but little information is available for these parameters at the landscape level of measurement from which water budgets can be constructed. Remote

sensing methods and ground surveys were used to characterize the stand structure and ET of three large (1 km²), densely vegetated stands of saltcedar at the Cibola NWR.

<http://www.tamarisk.colostate.edu/program.html>

(Pamela Nagler, Tucson, AZ, 520-626-1472).

Careers in Environmental Science, University of Arizona Class Presentation: USGS scientist Pamela Nagler will make a brief presentation about the personal, professional, and academic choices which led to her career in environmental science. The class entitled "Careers in Environmental Science" is required for undergraduate majors in Environmental Science at UA, and is open for those who have not selected a major. The purpose of the class is to show students the variety of careers that can come out of environmental science. A new focal area of the undergraduate program is "Environmental Remote Sensing and Geospatial Analysis". Pamela Nagler is a remote sensing specialist and received her Ph.D. from the Soil, Water, and Environmental Science Dept. at UA. (Pamela Nagler, Tucson, AZ, 520-626-1472).

Meeting of the USA National Phenology Network (USA-NPN): USGS scientist Pamela Nagler will participate as a member of a Remote Sensing implementation team which is helping to organize the USA National Phenology Network (USA-NPN) chaired by Julio Betancourt (USGS, Desert Laboratory) and Prof. Mark D. Schwartz (University of Wisconsin-Milwaukee, Dept. Geography). The U.S. Geological Survey (USGS) has offered to provide base stable support in the form of a National Coordinating Office and Executive Director for USA-NPN, to be located at the University of Arizona (Tucson). The goal of the Remote Sensing team is to develop a series of experiments that take advantage of planned surface phenological measurements during the 2007 growing season. (Pamela Nagler, Tucson, AZ, 520-626-1472).

SBSC Researcher Admitted to Explorers Club: J. Judson "Jut" Wynne (cave research scientist) was admitted into the prestigious Explorers Club as a Research Fellow. The Explorers Club (www.explorers.org) promotes exploration and science around the globe and has inductees ranging from Sir Edmund Hilary and Tenzing Norgay (firsts to summit Mt. Everest) to Neil Armstrong and Buzz Aldrin (firsts to walk on the moon). Jut's research and exploration of caves in Arizona, Belize and Chile, as well as additional expeditions abroad earned him this distinction. Contact: Jut Wynne at 928-556-7466, ext. 238

SBSC's Jut Wynne to Give Cave Presentations: J. Judson "Jut" Wynne (cave research scientist) will give a presentation entitled: "Astrobiology and the Search for Martian Cave Life" at 7:00pm, 25 September 2006 at the Museum of Northern Arizona, Flagstaff as part of the 2006 Flagstaff Festival of Science Lecture Series. Wynne will also give a presentation entitled: "Astrobiological Implications of Detecting and Exploring Caves on Mars" at the Mission Gallery Coffee House in Grants, New Mexico at 7:00pm, 28 September 2006. Contact: Jut Wynne at 928-556-7466, ext. 238

GCMRC GIS Data Used in National Geographic Article: The April, 2006 National Geographic featured GIS data prepared by GIS coordinator Tom Gushue to create a map of the shrinking Lake Powell. The article, titled *A Dry Red Season*, describes drought effects on the lake and reveals once-submerged archaeological and natural features. Contact: Tom Gushue, (928)556-7370 tgushue@usgs.gov

SBSC Scientists Give Presentations at Northern Arizona University: GCMRC GIS coordinator Tom Gushue gave a presentation at the Western Association of Map Libraries Fall 2006 Meeting held at Northern Arizona University between September 13-16 entitled *Modern-Day Surveying and Mapping Along the Colorado River in Grand Canyon*. Susan Hueftle of SBSC gave a presentation titled *Climatic Control of Lake Powell Limnology* preceded by a presentation by SBSC's Trent Hare, *The Creation of the Global GIS and Possible Future Directions*. Contacts: Tom Gushue, (928)556-7370 tgushue@usgs.gov, Susan Hueftle, (928)556-7460 shueftle@usgs.gov, Trent Hare, (928) 556-7126 thare@usgs.gov