

Highlights for this week include last week's hard work and accomplishments. Enjoy!

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Southwestern Biological Science Center Weekly Highlights May 8-19, 2006

New Genus of Cricket Found in Cave by SBSC/CPRS NAU doctoral candidate Jut Wynne: Wynne along with NPS researcher Kyle Voyles have discovered a cricket that has several unique physical features within the Rhaphidophoridae family.

Identified by cricket expert Theodore Cohn of San Diego State University, the unnamed genus has a pair of clasping pinchers, or cerci, at its hind end. Common crickets have cerci at their hind ends, but they do not clasp.

This cricket discovery suggests that there is much to be learned in Southwestern caves, as discoveries within the well-known Orthoptera order in North America are rare, according to Neil Cobb, curator of the Colorado Plateau Museum of Arthropod Biodiversity. Wynne said the discovery of this new genus provides unparalleled research opportunities and underscores the fact that cave research is still in its infancy. Wynne's cave detection work will be featured on KNAZ Channel 2 news May 21 at 6 PM and 10 PM. (Jut Wynne at Jut.Wynne@nau.edu, 928-525-3359)

USA Today Interviews SBSC Researcher: USGS researcher David Mattson was interviewed on May 9th by Pat O'Driscoll of USA Today for a series of stories being written on effects of global climate change. Mattson was asked about impacts on both grizzly bears and mountain lions.

Mattson discussed connections between whitebark pine and grizzly bear survival and reproduction in the Yellowstone ecosystem, potential alternative foods for Yellowstone grizzlies in a warmer world, and drought and human-wildlife conflict in the Southwest. Throughout, Mattson emphasized the complexity of natural systems and the potential for surprise, hearkening back to past dynamics of the Yellowstone system and surprises and complexities associated with wildlife and water in the Flagstaff area. (David Mattson, USGS Southwest Biological Science Center; David_Mattson@usgs.gov; 928-556-7466 ext 245.)

SBSC Researcher Advising Film Crew: During the past 8 months USGS researcher David Mattson has been advising Tigriss Productions (United Kingdom) on production of a film for National Geographic regarding relations between black bears and grizzly bears. This advisement has included conveyance of publications and information on evolution and ecology of the two species, observed interactions, informational contacts, and prospective timing and locales of filming. Primary contacts at Tigriss Productions have been researchers Sam Hodgson and Christina Holvey. (David Mattson, USGS Southwest Biological Science Center; David_Mattson@usgs.gov; 928-556-7466 ext 245.)

GCMRC and Grand Canyon Youth cooperation: On May 5 - 8, Lisa Gelczis and Charles Drost of the USGS Southwest Biological Science Center teamed up with middle

school students through the non-profit organization "Grand Canyon Youth" to gather data on declining amphibian species, helping the students learn about the ecology and natural history of the Southwestern deserts. Grand Canyon Youth is a non-profit organization that provides educational and service opportunities to student groups from all over the United States, working in outdoor environments across northern Arizona and southern Utah. Students on this trip from the Northland Preparatory Academy in Flagstaff, Arizona, assisted with ongoing surveys and population monitoring of Leopard Frogs in the western Grand Canyon region. Leopard Frogs have suffered substantial declines throughout the Southwest, and this USGS project is one of several studies seeking answers for the cause of the declines. (Charles Drost, USGS Southwestern Biological Science Center, Flagstaff, AZ 928-556-7187, cdrost@usgs.gov)

Petrified Forest National Park Centennial Anniversary: Southwest Biological Science Center (SBSC) vegetation ecologist Monica Hansen is presenting a talk "The Flora and Vegetation of a Unique Badland and Arid Grassland Environment: Petrified Forest National Park, Arizona" on May 18, 2006 at Petrified Forest National Park. The presentation is part of a science symposium celebrating the 100th anniversary of the Park. The talk will summarize the results of floristic and vegetation characterization work that Hansen and co-author Kathryn Thomas conducted at the Park over the last decade at Petrified Forest NP. Over 445 vascular plant species have been documented with 250 specimens vouchered as part of their investigations. Thirty-two unique vegetation associations have been described and are currently being mapped as part of the USGS/NPS vegetation mapping program. Contact: Monica Hansen, Flagstaff, AZ, 928-556-7466 x251, mlhansen@usgs.gov.