

Fall American Geophysical Union Meeting
Dec 3 – Dec 7, 2012

Session B027: **Global Change and the Biogeochemistry of Dryland Ecosystems**
<http://fallmeeting.agu.org>

Abstract: Dryland ecosystems comprise > 40% of the terrestrial surface and are home to more than one third of the global population. These ecosystems are under great pressure to support exponentially increasing human populations in the face of changing climate. Ecosystem perturbations resulting from land uses (e.g., grazing, altered fire regimes) and global changes (e.g.,

elevated CO₂, temperature, rainfall amount and seasonal distribution) can impact both above- and belowground processes resulting in changes to soil organic matter stocks, biogeochemical processes, soil fertility, erosion and desertification, changing microbial and plant community structure and biodiversity, and shifting ecosystem boundaries



due to phenomena such as woody plant encroachment. This session will bring together scientists to discuss the biogeochemical response of dryland systems to punctuated and progressive ecosystem stress.

Invited Speakers:

- **Jin-Sheng He:** Department of Ecology, Peking University
- **Heather Throop:** Biology Department, New Mexico State University
- **Markus Steffens:** Department of Ecology and Ecosystem management, Technical University of Munich
- **Jed Sparks:** Ecology and Evolutionary Biology, Cornell University

For Further information please contact:

- **Timothy Filley** (Email: filley@purdue.edu)
Department of Earth, Atmospheric, and Planetary Sciences; Purdue University
- **Tom Boutton** (Email: boutton@TAMU.edu)
Department of Ecosystem Science and Management, Texas A&M University
- **Edith Bai** (Email: bai@iae.ac.cn)
Institute of Applied Ecology; The Chinese Academy of Sciences