



# MERRIAM-POWELL

Center for Environmental Research



October 30<sup>th</sup> 2007 du Bois Center

## Climate Change and Ecosystem Impacts

- 8:20-8:40AM **SHIFTING LANDSCAPES IN MOUNTAIN ENVIRONMENTS: HOW CLIMATE CHANGE HAS INFLUENCED GLACIER NATIONAL PARK** Presenter: Fagre, Daniel B., USGS Northern Rocky Mountain Science Center
- 8:40-9:00AM **CLIMATE MODELING AND PROJECTION IN SUPPORT OF SOCIETAL IMPACTS ASSESSMENTS**  
Presenter: Duffy, Philip B., Lawrence Livermore National Laboratory
- 9:00-9:20AM **FINE-SCALE PROCESSES REGULATE THE RESPONSE OF EXTREME EVENTS TO GLOBAL CLIMATE CHANGE** Presenter: Diffenbaugh, Noah S., Purdue University
- 9:20-9:40AM **DEVELOPMENT OF ECOSYSTEM SIMULATION MODELS APPLICABLE AT SCALES RANGING FROM LANDSCAPE TO GLOBAL** Presenter: Ron Neilson, Oregon State University, USFS
- 9:40-10:00AM **SIMULATED VEGETATION RESPONSE TO FUTURE CLIMATE CHANGE IN THE WESTERN UNITED STATES** Presenter: Shafer, Sarah L., USGS
- 10:20-10:40AM **DOWNSCALED CLIMATE CHANGE PROJECTIONS FOR THE SOUTHERN COLORADO PLATEAU**  
Presenter: Garfin, Gregg M., University of Arizona, NOAA Earth Systems Research Laboratory
- 10:40-11:00AM **VEGETATION CHANGE ON THE COLORADO PLATEAU FOLLOWING PAST CLIMATE WARMING EVENTS: AN ANALOG FOR THE PRESENT AND FUTURE**  
Presenter: Cole, Kenneth L., USGS, Southwest Biological Science Center
- 11:00-11:20AM **EXPLORING MODELING APPROACHES FOR PREDICTING CLIMATE CHANGE IMPACTS ON DOMINANT PLANTS; EXTREMES VS. MEANS AND COMMUNITIES VS. SPECIES**  
Presenter: Ironside, Kirsten E., Northern Arizona University
- 11:20-11:40AM **MODELING THE IMPACTS OF CLIMATE CHANGE – CHANGES MADE IN A SPECIES SPECIFIC MODELING SYSTEM** Presenter: Chew, Jimmie, USDA Forest Service, Rocky Mountain Research Station
- 11:40-12:00AM **CONCEPTUAL MODELING OF CLIMATIC INFLUENCES ON UPPER-ELEVATION PLANT COMMUNITIES ON THE COLORADO PLATEAU** Presenter: Vankat, John L., Grand Canyon NP and Miami University
- 1:00-1:20PM **CLIMATE CHANGE AND DUST: WHAT DOES THE FUTURE HOLD?**  
Presenter: Belnap, Jayne, USGS, Southwest Biological Science Center
- 1:20-1:40PM **RESPONSES OF COLORADO PLATEAU DRYLANDS TO CLIMATE CHANGE: VARIABILITY DUE TO LAND USE AND SOIL-GEOMORPHIC HETEROGENEITY**  
Presenter: Miller, Mark E., USGS Southwest Biological Science Center
- 1:40-2:00PM **THE ROLE OF CLIMATE AND LAND USE IN PINYON PINE RECRUITMENT AND GROWTH**  
Presenter: Barger, Nichole, University of Colorado
- 2:00-2:20PM **DISSECTING THE CAUSES AND EFFECTS OF A CLIMATE-INDUCED REGIONAL-SCALE TREE MORTALITY EVENT** Presenter: White, Amanda B., Los Alamos National Laboratory
- 2:20-2:40PM **CARBON DIOXIDE AND ENERGY EXCHANGE IN DISTURBED SOUTHWESTERN PONDEROSA PINE FORESTS** Presenter: Kolb, Thomas E., Northern Arizona University
- 3:00-3:20PM **SIGNATURES OF VEGETATION CHANGE IN A STRATEGIC INVENTORY AND MONITORING SYSTEM**  
Presenter: Shaw, John D., USDA Forest Service, Rocky Mountain Research Station
- 3:20-3:40PM **INSTITUTING THE HYDROCLIMATIC INDEX IN MONITORING DROUGHT ACROSS THE COLORADO RIVER BASIN** Presenter: Ellis, Andrew W., Arizona State University
- 3:40-4:00PM **WHAT'S DYING IN SOUTHERN CALIFORNIA'S MOUNTAINS: REPEAT SURVEYS AND MICROMETEOROLOGICAL MEASUREMENTS ALONG AN ELEVATION GRADIENT**  
Presenter: Goulden, Michael L., University of California Irvine
- 4:00-4:20PM **CLIMATE-RELATED TRENDS IN NORTHERN NEW MEXICO ECOSYSTEMS: LONG-TERM MONITORING, THRESHOLD EFFECTS, AND DISTURBANCE INTERACTIONS**  
Presenter: Allen, Craig D., USGS Bandelier National Park
- 4:20-4:40PM **A CLIMATE CHANGE VULNERABILITY ASSESSMENT FOR BIODIVERSITY IN NEW MEXICO: RECENT CLIMATE DEPARTURES & CONSERVATION IMPLICATIONS**  
Presenter: Enquist, Carolyn A.F., The Nature Conservancy
- 4:40-5:00PM **A CURRENT PERSPECTIVE ON OUR DEVELOPING UNDERSTANDING OF DROUGHT-INDUCED DIE-OFF AND ITS CONSEQUENCES** Presenter: Breshears, David D., University of Arizona