



Colorado Plateau Native Plants Program 2017 Annual Meeting

Feb 28, 2017 - March 02, 2017



TUESDAY

8:30 **Welcome from Four Corners School & Canyon Country Discovery Center**
Chris Giangreco, Four Corners School

8:35 **CPNPP Annual Meeting Introduction**
Lance Porter, BLM Canyon Country District

8:45 **Colorado Plateau Native Plant Program Overview**
Adrienne Pilmanis, BLM Colorado Plateau Native Plant Program

Big Picture Restoration Need for Materials: Seed, Seedlings, Cuttings, Inocula

9:05 **BLM National Seed Warehouse System & History**
Patricia Roller, BLM Boise

9:25 **Long-term trends in restoration and associated land treatments in the Southwest United States**
Stella Copeland, Northern Arizona University

9:45 **Disturbance Automated Reference Toolset (DART): Prioritizing ecological rehabilitation from energy development on the Colorado Plateau**
Travis Nauman, USGS Moab



TUESDAY

- 10:05** **The applicability of next-generation sequencing (NGS) to native plant materials development including a case study: population structure and local adaptation in *Syntrichia* (*Tortula*) *ruralis*, an important component of biological soil crusts**
Rob Massatti, USGS Flagstaff

- 10:35** **Break**
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Big Picture Long-Term Players

- 10:50** **UCEPC Field Increase of *Koeleria macrantha*, *Poa secunda*, *Achnatherum hymenoides*, and *Elymus elymoides***
Steve Parr & Brandon Sanders, Upper Colorado Environmental Plant Center

- 11:10** ***LLPMC Report & plans***
Bernadette Cooney, Los Lunas Plant Materials Center

- 11:30** **USDA-ARS FRRL plant materials development for the Colorado Plateau**
Shaun Bushman, Forage & Range Research Lab, Agricultural Research Service

- 11:50** **From the Wild to Farm and Back Again: A Strategy for Native Plant Material Development and Utilization**
Kevin Gunnell, Utah Department of Wildlife Resources, Great Basin Research Center
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TUESDAY

12:15 Lunch - Peace Tree Café Caterer

1:15 When plant distributions and administrative boundaries don't align, can people? Partnering across plant materials development programs

Scott Jensen, BLM Canyon Country District

2:35 Industry perspectives on national native seed and local ecotypes

Robbie Henes, Southwest Seed, Inc.

2:55 Species Propagation Discussion: *Dalea searlesii* (prairie clover) germplasm: challenges & opportunities for production

Panel & attendees

3:15 Break

Partner Activity Reports - Projects

3:30 Uncompahgre Partnership Plant Materials Program Update

Kathy See & Jim Garner, Colorado Parks & Wildlife

3:45 Mayberry update

Kara Dohrenwend, Mayberry Plant Propagation Center



TUESDAY

- 4:00** **Common Garden Germination Trial of native and Introduced grasses with multiple treatments/ amendments**
Kelly Memmott, Dixie & Fishlake National Forest
- 4:15** **Genetic and cytotypic variability in a dominant southwestern grass (*Bouteloua gracilis*): Implications for restoration and seed sourcing**
Katrina Tso, Northern Arizona University
- 4:25** **Intra-specific trait variation of Western grasses**
Carla Roybal, Northern Arizona University
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Partner Activity Reports - Pollinators

- 4:55** **Using Rana to Screen Plant Species for Effective Pollinator Support During Ecosystem Restoration**
Bruce Pavlik, Red Butte Botanic Garden, University of Utah
- 5:15** **Understanding and Supporting Pollination Systems in Changing Environments**
Molly McCormick, Northern Arizona University
- 5:30** **Discussion**
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TUESDAY

- 5:45** **POSTERS & Reception - onsite - Peace Tree Café Caterer**
Bring your own beverage
- 5 min** **SEED: Species Variability In A Small Package**
Stan Young, Utah Crop Improvement Association and Utah State University
- 5 min** **Ecological responses of *Pleuraphis jamesii* to altered intra-annual precipitation patterns**
Mike Duniway, USGS Moab
- 5 min** **Building a Restoration Economy in the Verde Valley with Native Plants**
Molly McCormick & Kate Watters, Friends of Verde Valley
- 5 min** **Using species functional traits and local climate variables to predict restoration outcome across the Colorado Plateau**
Kathleen Balazs, Northern Arizona University
- 5 min** **Cedar City FO & Seed use**
Mitch Bayles, BLM Cedar City
- 5 min** **Regional climate change & CPNPP USGS-NAU Research Overview**
John Bradford, USGS Flagstaff
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WEDNESDAY

Restoration Methodology & Projects in Relation to Plant Materials

- 8:30** **Lessons Learned from Riparian Revegetation**
Ann Marie Aubry & Shannon Hatch, BLM Moab & Tamarisk Coalition
- 8:50** **Using connectivity Modifiers to restore degraded grasslands in Canyonlands and Arches National Parks**
Rebecca Mann, USGS Moab
- 9:10** **Attempts to restore biological soil crust and stabilizing eroding soils in Bandelier National Monument, NM**
Kristina Young, Northern Arizona University
- 9:30** **Collaborations between researchers and practitioners yields practical and informed guidance for seed selection and restoration planning**
Owen Baughman, University of Nevada
- 9:50** **Salt Desert Restoration Studies**
Nikki Grant-Hoffman, BLM & Colorado State University
- 10:10** ***New types of seed preparation and restoration seeding methods***
Madsen Lab members, Brigham Young University
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WEDNESDAY

10:30 **Break**

Wildland Seed Collection Guidance/ Utilizing CPNPP

10:45 **Regional Seed Collection Guidance**
Rachel Hosna, BLM / Great Basin Institute

11:15 **Data driven seed collection using Python and weather forecasts**
Avery Uslaner, BLM / Great Basin Institute

New Partner Proposals Database

11:30 **Vernal Field Office SOS/ Plant Materials Development past, present & future**
Jessi Brunson, BLM Vernal

11:45 **The science of seed banks: providing information about existing soil seed banks to inform management**
Akasha Faist & Sasha Reed, University of Colorado & USGS

12:00 **Native plants on green roofs for water conservation, support of native pollinators, and as a seed source for community native landscaping**
Jackie Grant, Southern Utah University



WEDNESDAY

- 12:15** **Lunch - offsite, Wagon Wheel Pizza**
Rachel Hosna, BLM / Great Basin Institute
- 1:30** **Canyon Country Discovery Center Conservation & Service: a New Program Emphasizing Seed Collection, Native Plant Propagation, and Related Activities**
Mark Grover, Four Corners School
- 1:45** **Introduction to the Navajo Natural Heritage Program and the “budding” Navajo Native Plants Program**
Nora Talkington & Leanna Begay, Navajo Natural Heritage Program
- 2:00** ***Climate Smart Restoration Tool; Webpage proposal***
Lori Scott, NatureServe
- 2:15** ***Seed Increase fields proposed***
Kate Watters, Friends of Verde Valley
- 2:30** ***Native Seed mix development for Greater Sage Grouse and Pollinators***
Bruce Pavlik & Sarah Barlow, RBG
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WEDNESDAY

2:45 Discussion - New Partner Proposals

Discuss overlap, complementarity, coordination, prioritization, procedure
All

2017 Seed Collection Coordination & Planning Meeting

3:30 Discuss coordination, prioritization, potential overlap, complementarity, procedure, schedule follow-up calls/ meetings

Everyone planning or proposing wildland seed collection in 2017

3:30 Optional Dinner offsite, Roughlock Lodge

THURSDAY

Field Trip (Details Next Page)

8:30 Mike Duniway, Rebecca Mann, Liz Ballenger, Kristina Young

2:00 Optional late afternoon TBD Small Group Meetings

6:00 Optional Dinner & music at State Line



Thursday, March 2. 8:30 am – early afternoon

CPNPP Field Trip to Partner Project Sites:

Mike Duniway (USGS), Rebecca Mann (USGS), Liz Ballenger (NPS), and Kristina Young (NAU) will be your expert guides for this excursion from Monticello to the Needles District of Canyonlands National Park (<https://www.nps.gov/cany/index.htm>) and the Canyonlands Research Center (<http://canyonlandsresearchcenter.org/>) and back.

RSVP required by February 21 for both trip and van transport.

Email Adrienne Pilmanis at apilmani@blm.gov.

Space is limited

Description: For this half day tour, we will visit a variety of project sites, including both research and management actions, in the Indian Creek and Needles areas.

Stops will include: a visit to the Canyonlands Research Center headquarters to visit

1) a grass precipitation manipulation trial (Hoover et al poster)

1) a biological soil crust restoration experiment (Young et al presentation)

- and three stops in the Needles District of Canyonlands National Park.

1) a grassland restoration adaptive management action (Con Mods, Mann et al presentation & recently featured on [CBS news](#))

2) an increase field where the NPS is increasing sand dropseed (*Sporobolus cryptandrus*) and alkali sacaton (*S. airoides*) to provide locally-sourced seed for NPS restoration activities

3) if time allows, a very successful four-wing saltbush-sagebrush restoration project at an old NPS maintenance yard.



Thursday, March 2. 8:30 am – early afternoon

Important Details:

1. Attendees should bring a sack lunch and sufficient water for up to 6 hours.

<https://www.nps.gov/cany/planyourvisit/winter.htm>

2. The Field Trip will proceed even if temperatures are below freezing. Only dangerous driving conditions (e.g. snowpack or ice) will cause Field Trip cancellation.

3. Four Corners School will be providing van transport and attendees will be asked to sign liability forms. Attendees may also choose to drive themselves.