

USGS Sagebrush Ecosystem and Rangeland Fire Science

Webinar series - Thursdays 11-12:30 MST

Wyoming big sagebrush. Winnemucca, NV. Photo: USGS

The US Geological Survey Land Management Research Program and the Great Basin Fire Science Exchange are teaming up to bring you updates in sagebrush, fire, and wildlife related research. Presentations and published resources will be made available after the series at: <https://greatbasinfirescience.org/events/>

Dates and Topics

[REGISTER for ALL](#)

1/30 – Greater sage-grouse

2/6 – Invasive species, restoration effectiveness, and monitoring

2/20 – Monitoring, pinyon-juniper, and fuels management

2/27 – Fire, fuels management, invasive species

3/6 – Climate, carbon, and more

Presentations

1/30 – Greater sage-grouse

GREATER SAGE-GROUSE HIERARCHICAL POPULATION MONITORING FRAMEWORK: RANGE-WIDE APPLICATION OF AN EARLY WARNING SYSTEM FOR POPULATIONS AT-RISK

Pete Coates, (USGS-WERC), Cam Aldridge (USGS-FORT), Brain Prochazka (USGS-WERC), Cali Weise (USGS-WERC), Mike O'Donnell (USGS-FORT), Adrian Monroe (USGS-FORT), Meg McLachlan (BLM), Lief Wiechman (USGS-LMRP)

EVALUATING THE EFFECTIVENESS OF CONSERVATION ACTIONS DIRECTED FOR GREATER SAGE-GROUSE USING HIERARCHICAL MODELS AND THE CONSERVATION EFFORTS DATABASE

Pete Coates, (USGS-WERC), Brain Prochazka (USGS-WERC), Cam Aldridge (USGS-FORT), Lief Wiechman (USGS-LMRP), Kevin Doherty (USFS), John Tull (USFWS)

GREATER SAGE-GROUSE RANGE-WIDE SEASONAL HABITAT MAPS: IDENTIFYING REGIONAL THRESHOLDS and RELATIONSHIP BETWEEN TRENDS AND SEASONAL HABITAT USE

Greg Wann (USGS-FORT), Cam Aldridge (USGS-FORT), Pete Coates, (USGS-WERC), Brain Prochazka (USGS-WERC), Mike O'Donnell (USGS-FORT), Meg McLachlan (BLM)

CHARACTERIZING THE ENVIRONMENTAL DRIVERS OF RANGE-WIDE GENE FLOW FOR GREATER SAGE-GROUSE

Shawna Zimmerman (USGS-FORT), Sara Oyler-McCance (USGS-FORT), Greg Wann (USGS-FORT), Cam Aldridge (USGS-FORT)

CHARACTERIZING GREATER SAGE-GROUSE CLIMATE DRIVEN MALADAPTATION

Shawna Zimmerman (USGS-FORT), Sara Oyler-McCance (USGS-FORT), Cam Aldridge (USGS-FORT)

QUANTIFYING CARBON STORAGE AND GREENHOUSE GAS EMISSIONS IN SAGEBRUSH RANGELANDS TO INFORM MANAGEMENT FOR CARBON RESILIENCE

Maddy Case (USGS-FRESC), Seren Bagcilar (ORISE/USGS FRESC), Scott Shaff (USGS-FRESC), Benjamin Rau (USFS), Lisa Ellsworth (Oregon State University), Beth Newingham (USDA ARS), Matthew Reeves (USFS), Rory O'Connor (USDA ARS)

2/6 – Invasive species, restoration effectiveness, and monitoring

DEVELOP ANNUAL HERBACEOUS PERCENT COVER MAPS IN NEAR-REAL TIME

Stephen Boyte (USGS EROS), Neal Pastick (USGS EROS), Devendra Dahal (KBR EROS)

PROLIFERATION OF FINE FUELS: ASSESSING UNDER FUTURE CLIMATIC CONDITIONS

Julie Heinrichs (Colorado State Univ), Helen Sofaer (USGS-PIERC), Michele Crist (NIFC-BLM), Morgan Roche (Colorado State Univ), Erin Buchholtz (USGS SC-CRU, formerly FORT), Catherine Jarnevich, Dan Manier, Cameron Aldridge (USGS-FORT)

OPTIMIZING SAGEBRUSH RESTORATION AND MANAGEMENT ACTIONS TO INCREASE CONNECTIVITY WITHIN THE SAGEBRUSH CONSERVATION DESIGN

Bryan Tarbox (USGS-FORT), Adrian Monroe (USGS-FORT), Cam Aldridge (USGS-FORT)

ASSESSING CHEATGRASS TREATMENT EFFICACY ACROSS THE SAGEBRUSH BIOME

Bryan Tarbox (USGS-FORT), Adrian Monroe (USGS-FORT), Cam Aldridge (USGS-FORT)

SIMULATING TRENDS IN LAND HEALTH COMPONENTS UNDER TREATMENT SCENARIOS AND SAGEBRUSH CONSERVATION DESIGN

Adrian Monroe (USGS-FORT), Bryan Tarbox (USGS-FORT), Cam Aldridge (USGS-FORT)

BIOME-WIDE VEGETATION CHANGE MONITORING AND WARNING SYSTEM

Cam Aldridge (USGS-FORT)

VECTORS OF ANNUAL GRASS INVASION

Julie Heinrichs (Colorado State Univ), Morgan Roche (USGS-FORT), Cam Aldridge (USGS-FORT)

PREDICTING REBURN RISK TO RESTORATION INVESTMENTS

Cara Applestein (USGS-FRESC), Matt Germino (USGS-FRESC)

2/20 – Monitoring, pinyon-juniper, and fuels management

PLANNING FOR CONSERVATION DELIVERY SUCCESS: LINKING BIOME-WIDE SAGEBRUSH CONSERVATION DESIGN TO LOCAL TREATMENT PLANNING BY LEVERAGING LANDSCAPE RESTORATION OUTCOMES

David Pilliod (USGS-FRESC), Jacqueline Cupples (USFWS-Ecological Services), Robert Arkle (USGS-FRESC), Michelle Jeffries (USGS-FRESC), Justin Welty (USGS-FRESC), Megan Creutzburg (OSU-Institute for Natural Resources)

TECHNICAL TRANSFER TOOLS FOR THE NEVADA AND OREGON RANGELAND MONITORING PROJECT (NORMP)

David Pilliod (USGS-FRESC), Robert Arkle (USGS-FRESC), Michelle Jeffries (USGS-FRESC), Justin Welty (USGS-FRESC)

RAPID AND OTHER ASSESSMENT AND MONITORING METHODS (ROAM) PROJECT

David Pilliod (USGS-FRESC), Robert Arkle (USGS-FRESC), Michelle Jeffries (USGS-FRESC), Justin Welty (USGS-FRESC)

PIÑON-JUNIPER TREATMENTS FOR MINIMIZING CLIMATE & FIRE VULNERABILITY

John Bradford (USGS-SBSC)

SYNTHESIS AND FORECASTS OF PIÑON-JUNIPER WOODLAND DIE-OFF

Andreas Wion (USGS-FORT)

SYNTHESIZING SCIENTIFIC INFORMATION ON TREATMENT AND NATURAL DISTURBANCE EFFECTS ON PINYON-JUNIPER WOODLANDS AND ASSOCIATED WILDLIFE HABITAT

Doug Shinneman (USGS-FRESC), Pete Coates (USGS-WERC)

TREATMENT AND POST-FIRE ASSESSMENT TOOLS FOR MANAGEMENT OF THE SAGEBRUSH ECOSYSTEM

Mike Duniway (USGS-SBSC)

2/27 – Fire, fuels management, invasive species

EFFECTIVENESS OF LAYERING TREATMENTS IN THE “MULTIPLE-INTERVENTION” RESPONSE TO WILDFIRE IN SAGEBRUSH STEPPE

Matt Germino (USGS-FRESC)

A COLLABORATIVE AND ITERATIVE FRAMEWORK FOR DELIVERING APPLIED FUEL BREAK SCIENCE: WITH A FOCUS ON SAGEBRUSH ECOSYSTEMS AND THE GREAT BASIN

Doug Shinneman (USGS-FRESC), Pete Coates (USGS-WERC), Cam Aldridge (USGS-FORT), Julie Heinrichs (Colorado State University), David Pilliod (USGS-FRESC), Mark Ricca (USGS-FRESC), Michele Crist (USGS-LMRP); Cali Roth (USGS-WERC)

UAS SURVEY OF SAGEBRUSH FUEL BREAKS

Doug Shinneman (USGS-FRESC), Jason Kreitler (USGS-WGSC)

INVASIVE ANNUAL GRASS - ECONOMIC ASSESSMENT

James Meldrum (USGS-FORT), Catherine Jarnevich (USGS-FORT), Cam Aldridge (USGS-FORT)

LONGEVITY OF HERBICIDES TARGETING EXOTIC ANNUAL GRASSES IN SAGEBRUSH-STEPPE SOILS

Matt Germino (USGS-FRESC), Brynne Lazarus (USGS-FRESC)

SYNTHESIS OF INDAZIFLAM OUTCOMES FOR PROTECTING SAGEBRUSH ECOSYSTEMS

Morgan Roche (USGS-FORT), Julie Heinrichs (Colorado State Univ), Cam Aldridge (USGS-FORT)

CAN RUDERAL COMPONENTS OF BIOCRUST BE MAINTAINED UNDER INCREASING THREATS OF DROUGHT, GRAZING, AND WILD HORSES?

Lea Condon (USGS-WERC), Pete Coates (USGS-WERC)

3/6 – Climate, carbon, and more

Finalizing speakers – check back for updates