

**Western Agencies  
29<sup>th</sup> Sage and Columbian Sharp-tailed Grouse Workshop**

*DRAFT* Session Program  
(Order of Talks Subject to Change)

*Day 1 of Symposium (Tuesday June 17<sup>th</sup>, 2014)*

<b>Session</b>	<b>Session Chair</b>	<b>Time Start</b>	<b>Title</b>	<b>Author(s)</b>
Habitat Selection	Jason Robinson (Utah Division of Wildlife Resources)	8:15 a.m.	Greater sage-grouse winter habitat use and site fidelity in south-central Wyoming	Nathan Wojcik, A. Widmer, J. Kehmeier, J. Millspaugh, C. Hansen, M. Rumble, S. Gamo, G. Miller
			Investigating the relationship between nest site selection and nest survival in Greater sage-grouse	Daniel Gibson, E. Blomberg, and J. S. Sedinger
			Using Stable Isotopes to Identify Greater Sage-Grouse Interseasonal Movement Behavior	Aaron C. Pratt and Jeffrey L. Beck
			Sage-grouse Connectivity In a Fragmented Landscape	Nicole Frey and Lisa Church
			Change in Grass Height During Incubation For Greater Sage-grouse Nests in Idaho	David Musil
Ecology and Natural History	Dave Budeau (Oregon Department of Fish and Wildlife)	10:15 a.m.	Spatial Arrangement of Vegetation Structure Surrounding Greater Sage-grouse Nests	Amarina Wuenschel, A. Hild, G. Paige and M. Murphy
			Detecting Palatable Plants for Greater Sage-grouse in the Sagebrush Sea	Jennifer Forbey, B. Robb, G. Frye, P. Olsoy, K. Gehlken, J. Connelly, J. Mitchell, and N. Glenn
			Does Plant Size, Species and Diversity Matter to Foraging Sage-grouse?	Marcella R. Fremgen, Brecken C. Robb, Dr. Jennifer S. Forbey, Dr. John W. Connelly
			A Hierarchical Investigation of Greater Sage-Grouse Winter Resource Selection	Brian Prochazka, J. Hull, and P. Coates
			Emerging Effects of Common Ravens on Nesting Ecology of Greater Sage-grouse	Kristy Howe, P. Coates, M. Casazza, Z. Lockyer, S. Espinosa, and David J. Delehanty
			Effects of Common Raven Removal and Temporal Variation in Weather on Greater Sage-grouse Nesting Success	Jonathan Dinkins, M. Conover, C. Kirol, J. Beck, and N. Frey

Session	Session Chair	Time	Title	Author(s)
Infrastructure	Catherine Wightman (Montana Department of Fish, Wildlife and Parks)	1:15 p.m.	Overview of Greater Sage-Grouse Monitoring Efforts, Chokecherry and Sierra Madre Wind Energy Project, Carbon County, Wyoming	Jon Kehmeier, N. Wojcik, J. Millspaugh, C. Hansen, M. Rumble, S. Gamo, G. Miller
			Winter Habitat Quality for Greater Sage-Grouse Influenced by Energy Development	Kurt T. Smith, C. Kirol, J. Beck and F. Blomquist
			The Influence of Transmission Lines on Greater Sage-grouse Demographics	Daniel Gibson, Erik Blomberg, and James S. Sedinger
			Development and Testing of a Greater Sage-grouse Connectivity Model and Its Use in Evaluation of Transmission Line Scenarios	Michael A. Schroeder and Leslie A. Robb
			Stakeholder Contemporary Knowledge Needs Regarding the Potential Effects of Tall Structures on Sage-grouse	Terry A. Messmer, R. Hasenyager, J. Burruss, and S. Liguori
			Patterns of inter-annual and intra-annual nest site selection and fidelity by greater sage-grouse in south-central Wyoming	Nathan Wojcik, D. Falkner, J. Kehmeier, J. Millspaugh, C. Hansen, M. Rumble, S. Gamo, G. Miller
Behavior/Resource Allocation Modelling	Tom Christiansen (Wyoming Department of Fish and Game)	3:30 p.m.	Mapping Fearscales and Foodscapes for Grouse: High-resolution Habitat Assessment Using Remote Sensing	Pete Olsoy, J. Forbey, J. Rachlow, J. Nobler, M. Burgess, T. Griggs, N. Glenn, and L. Shipley
			Basic science in the conservation of sage-grouse: how understanding lekking behavior informs management	Gail L. Patricelli
			Acoustic Soundscapes in the Gunnison Basin and Effects of Anthropogenic Noise on Gunnison Sage-grouse ( <i>Centrocercus minimus</i> ) in the Gunnison Basin, Colorado	Daniel Piquette, A. Keck, N. Seward, B. Magee, P. Magee, and G. Patricelli
			Sound Levels near Leks of Greater Sage-grouse in Sage Land Cover in Wyoming, 2013	Skip Ambrose and Chris Florian
			Special Relaxation and Appreciation Video: This is What It's All About	Tim Torrell, S. Espinosa

Day 2 of Symposium (Thursday June 19<sup>th</sup>, 2014)

Session	Session Chair	Time	Title	Author(s)
Techniques (Restoration, Monitoring and Translocation)	Scott Gardner (California Department of Wildlife)	8:00 a.m.	Sagebrush steppe habitat restoration – some lessons learned	Alan Sands and Ann Moser
			Evaluation of the Raven small Unmanned Aircraft System to Detect and Monitor Greater Sage-Grouse Leks within the Middle Park Population in Colorado	Michelle Cowardin L. Hanson and C. Holmquist-Johnson
			A Demonstration of Field Experience Detecting and Counting Wildlife With a High Resolution Cryogenetically Cooled Infrared Video Camera From Aerial and Ground Platforms	Bruce Greenhalgh and John Romero
			Satellites and Sage-grouse: A Desk-top Comparison Estimating the Cost/Benefit of New Technology	David Musil and Ann Moser
			Effects of Capture and Handling on Greater Sage-grouse ( <i>Centrocercus urophasianus</i> ) Adult Survival and Reproductive Success in Northwest Utah	Avery Cook, Terry Messmer, Seth Dettenmaier and Brian Wing
			Using Artificial Insemination to Promote Fertilization of Translocated Female Columbian Sharp-tailed Grouse	Steven Mathews, Peter Coates and David Delehanty
			Fire, Invasive Species and Climate Effects	Don Kemner (Idaho Department of Fish and Game)
Effects of climatic variation and previous reproductive success on greater sage-grouse reproductive vital rates	Michael Guttery, D. Caudill, B. Bibles, T. Messmer, G. Caudill, E. Leone, D. Dahlgren, and R. Chi			
Greater Sage-grouse Winter Selection During Different Climactic Conditions	Jennifer Hess, S. Harju, M. Dzialak, C. Olson, and J. Winstead			
Female Greater Sage-grouse Fitness and Habitat Selection Following a Large-scale Wildfire	Lee Foster, C. Hagen, D. Budeau, and K. Dugger			
Western Association of Fish and Wildlife Agencies Wildfire and Invasive Initiative: A Progress Report	Kenneth E. Mayer and Shawn P. Espinosa			
Effects of Juniper Encroachment on Sage-grouse Nest Selection in Southeastern Oregon	John Severson, K.P. Reese, and J.T. Forbes			

Session	Session Chair	Time	Title	Author(s)
Population Estimation	Kathy Griffin (Colorado Division of Parks and Wildlife)	1:15 p.m.	Improving Population Monitoring Strategies for Greater Sage-Grouse: Dual Frame Sampling as an Alternative to Traditional Lek Counts	Jessica Brauch
			An Integrated Population Model for Bi-State Greater Sage-grouse	Peter Coates, B. Halstead, E. Blomberg, M. Casazza, Lief Weichman, J. Tebbenkamp, K. Reese, S. Gardner and S. Espinosa
			One grouse, two grouse, three grouse more... estimating greater sage-grouse populations and trends at regional scales using population reconstructions	Christian A. Hagen
			Greater Sage-grouse Retrospective and Prospective Population Dynamics on Parker Mountain, Utah	David K. Dahlgren, M. Guttery, T. Messmer, and D. Koons
			Estimated abundance of the hunted population of Columbian sharp-tailed grouse in Idaho derived from population reconstruction.	Gifford L. Gillette, K.P. Reese, J.W. Connelly and J.M. Knetter
Conservation Planning	Pat Diebert (U.S. Fish and Wildlife Service)	3:10 p.m.	CRP-SAFE, Protecting and Enhancing Columbian Sharp-tailed Grouse Habitat in SE Idaho: What Has Been Accomplished and Where to Go From Here	Brett Gullett, J. O'Neill, H. Moyles, C. Frey and S. Roberts
			Alberta Greater Sage-Grouse Recovery Program: Last Chance for Sage-grouse in Canada	Joel Nicholson
			Greater Sage-grouse Seasonal Movements and Evaluation of Utah's Sage-grouse Management Area	David K. Dahlgren, T. Messmer and R. Larsen
			Evaluating Lek Buffers for Greater Sage-Grouse Conservation in Northwestern Colorado	Brett L. Walker
			A New Method for Space-Use Estimation to Inform Conservation Planning Decisions for Greater Sage-grouse	Mark A. Ricca, P. Coates, M. Casazza, S. Espinosa, S. Gardner and D. Delahanty
			Informing Management Decisions for Greater Sage-grouse in Nevada Using New Applications for Resource Selection Functions and Space-use Estimates	P. Coates, M. Casazza, S. Espinosa, B. Brussee, M. Ricca, B. Gustafson and D. Delahanty