



2013 Colorado Chapter of The Wildlife Society Annual Winter Meeting

Ecological Disturbances: Are they too hot to handle?
Doubletree Hotel, Colorado Springs
February 6-8, 2013

Tentative Agenda

Wednesday, February 6

8:00 Registration opens

9:00- 4:00 **Workshops**

Large Carnivore Conflict Management Workshop

Wyoming Game and Fish Department, Large Carnivore Conflict Program
Brian DeBolt, Large Carnivore Conflict Coordinator
10am – 4pm, lunch provided

Synoptic Modeling of Animal Location Data Combining Animal Movements, Home Range and Resource Selection Workshop

Dr. Edward O. Garton, University of Idaho
9am- 4pm, lunch provided

5:30

Welcome Social

Refreshments and food provided

Thursday, February 7

7:00 Registration opens

8:30- 8:00 Posters displayed

Plenary Session: "Ecological Disturbances: Are they too hot to handle?"

8:30 **Welcome address**, 2012 CCTWS president

8:40 **Keynote Address, The Drought of 2012: What is the climate trying to tell us?**
Nolan Doesken, State Climatologist, Colorado State University

9:30 **Long-term demography of a white-tailed ptarmigan population in Colorado**
Greg Wann, Colorado State University

10:00 **Can Colorado contribute towards conservation of wolverine in the face of climate change?: Biological, Social and Political considerations**
Eric Odell, Colorado Parks and Wildlife

10:30 **Break**, refreshments provided

- 10:45 **Unwieldy uncertainty about fire, climate, and drought: managing and restoring forests and shrublands for the decades ahead**
Dr. Merrill Kaufman, USFS-Rocky Mtn. Research Station (retired)
- 11:15 **Forest fire and restoration: implications for wildlife**
Dr. Dan Binkley, Colorado State University
- 11:45 **Ungulates and climate change: an examination of the potential impacts**
Dr. Matt Kaufman, University of Wyoming
- 12:15 **Lunch**
CCTWS annual business meeting, lunch provided
- 1:30 **Changing Landscapes and Grassland Birds: Effects and Conservation Strategies**
Dr. Dave Haukos, Kansas State University
- 2:00 **Implications of climate change for breeding birds of the shortgrass prairie**
Susan Skagen, USGS
- 2:30 **Grassland bird conservation in the face of climate change: the importance of sustaining multiple, interacting disturbance processes**
Dr. David Augustine, USDA-Agricultural Resource Service
- 3:00 **Break**, refreshments provided
- 3:15 **National Climate Change Adaptation Strategy: What it means to Colorado**
David Olson, USFWS
- 3:45 **Tying it Together/Panel Discussion- Gunnison Basin Climate Change Working Group**
Betsy Neely- The Nature Conservancy
Jim Cochran- Gunnison County
Dr. Pat Magee- Western State Colorado University
Nathan Seward- Colorado Parks and Wildlife
Bill Zeedyk- Zeedyk Ecological Consulting
Andrew Breibart- Bureau of Land Management
Brett Redden- Landowner
Matt Vasquez- United States Forest Service
- 5:00 **Wrap-up**
- 5:30 **Student- Professional Mixer**
- 6:30 **Banquet and Auction**
Dinner served at 6:30pm
Silent auction & live auction
Awards presentation following dinner

Friday, February 8

8:00-12:00 Posters displayed

Technical Session- Concurrent Sessions

8:30 Announcements, 2013 CCTWS president

Session 1: (times/order subject to change)

- 8:40 **Avian community response to a recent mountain pine beetle epidemic**
Brittany A. Mosher, Colorado State University
- 9:00 **Predicting the Effects of Climate Change: Phenotypic Plasticity in Developmental Rate Insufficient to Offset High Tadpole Mortality in Rapidly Drying Ponds**
Staci Amburgey, Colorado State University
- 9:20 **Anthropogenic Noise Assessment around Gunnison Sage Grouse**
Daniel Piquette, Western State Colorado University
- 9:40 **Practical guidance for robust resource selection function analysis**
Joe Northrup, Colorado State University
- 10:00 **Break**, refreshments provided
- 10:20 **Factors Influencing Survival and Mark Retention in Postmetamorphic Boreal Chorus Frogs**
Jennifer E. Swanson, Colorado State University
- 10:40 **Measuring Glucocorticoids in Feathers Using an Enzyme Immunassay**
Gemara Gifford, Colorado State University
- 11:00 **Investigating the Potential Effects of Greenback Cutthroat Trout on Boreal Toad Recruitment**
Wendy E. Lanier, Colorado State University
- 11:20 **Preble's meadow jumping mouse population change at the U.S. Air Force Academy: loss of riparian habitat may be driving population decline**
Rob Schorr, Colorado Natural Heritage Program
- 11:40 **Acoustic Monitoring of Gunnison Sage-grouse Leks**
Jenny Nehring, Poncha Pass Gunnison Sage-grouse Working Group

Session 2: (times/order subject to change)

- 8:40 **Grazing on Riparian Vegetation throughout South Central and Southwest Colorado**
Rick Schnaderbeck, USFWS- Partners for Fish & Wildlife (retired) and
Corey Kanuckel, USFWS- Partners for Fish & Wildlife
- 9:00 **Understanding the social context of human-wildlife conflict: results from a multi-state investigation**
Alia M. Dietsch, Colorado State University
- 9:20 **Understanding beliefs, attitudes, and risk perceptions regarding free-ranging domestic cats in Colorado**
Ashley Gramza, Colorado State University
- 9:40 **Front Range Cougar Predation Study: A Preliminary Summary**
Kevin Blecha, Colorado State University
- 10:00 **Break**, refreshments provided

10:20	Spatially-Explicit Modeling of Lesser Prairie-Chicken Lek Density in Texas Jennifer M. Timmer, Texas Tech University
10:40	TBD
11:00	TBD
11:20	TBD
11:40	TBD
12:00	Closing remarks and best student poster and technical presentation awards
12:30	CCTWS board meeting

2013 CCTWS Annual Winter Meeting Planning Committee:

Workshop Programs: Chuck Anderson & Ryan Monello
Plenary Session Program: Ryan Monello, Ruth Lewis, & Raquel Wertsbaugh
Technical Session Program: Raquel Wertsbaugh
Facilities: Nathan Schmitz
Auction: Nathan Schmitz

Large Carnivore Conflict Management Workshop

WY Game and Fish Department Large Carnivore Conflict Program

Brian DeBolt, Large Carnivore Conflict Coordinator, Mark Bruscano, Large Carnivore Program Supervisor

Large carnivore conflict management experts from Wyoming Game and Fish Department will present their experience addressing black bear, grizzly bear, and wolf – human conflicts. Brian and Mark have over 40 years combined experience dealing with the contentious aspects of carnivore/human interactions and will discuss the practical and political components of successful nuisance wildlife management.

Tentative Agenda

10:00 – 11:00	Wyoming Conflict Management Program Structure
11:00 – 12:00	Predator Attack Team and Protocols
12:00 – 1:00	Lunch, provided
1:00 – 2:00	Trapping Techniques and Tools
2:00 – 3:30	Addressing sociopolitical issues

Don't miss a full-day workshop to be presented by Dr. Edward O. Garton on February 6, 2013 at the Colorado Chapter of The Wildlife Society Annual Meeting.

Synoptic Modeling of Animal Location Data Combining Animal Movements, Home Range and Resource Selection

Authors: Edward O. Garton, Jon S. Horne, Adam G. Wells, Janet Rachlow and Kerri Nicholson Dept. of Fish and Wildlife Science, University of Idaho, Moscow, Idaho, USA and Moses M. Okello, SFS Centre for Wildlife Management Studies, Nairobi, Kenya.

Abstract: The goals of this workshop are to expose participants to a new approach to analysis of animal location data that combines animal movements, home range and resource selection analyses into a synoptic model of space use and to provide them with experience using analytical software to perform the statistical analyses required. Participants will learn the details of the following steps to develop a synoptic model: 1) State research question clearly with details of why location data are required to answer it. 2) Define animal population of interest and sampling approach providing inference to it. 3) Identify potentially important strata (e.g. age-sex-behavior classes, temporal seasons). 4) Select either to delineate a sharp boundary (polygon) or a smooth boundary or density estimator (kernel) or continue to model movement or space use (synoptic model of movement or home range and resource selection). 5) List potential ecological factors/processes/drivers to evaluate for models (e.g., food resources, inter-specific and intra-specific competitors, predators, security or thermal cover, water or salt sources, energetic demands, hazards). 6) Formulate set of competing synoptic models. 7) Assemble potentially predictive covariate maps. 8) Fit multiple competing synoptic models for each stratum. 9) Re-evaluate original strata by evaluating/testing differences and collapsing strata where feasible. 10) Refit models. 11) Write it up, present it, use it for adaptive management and start validating and improving it. Instructors will present numerous examples of synoptic models including space use of white rhino males in Matobo National Park, Zimbabwe, mountain goats in Cascade Mountains, Washington, USA, golden eagles migrating from Idaho, USA to British Columbia, Canada and Alaska, USA, wood thrush in Costa Rica and Ocelot in Texas, USA. Instructors will compare results and estimates obtained from synoptic models to alternative approaches. Each participant bringing a laptop computer will be guided through analysis of synoptic models from software and data provided to workshop participants and instructions on obtaining all required software free from internet web sites (R and R packages, University of Idaho web sites maintained by workshop authors, etc.).

http://www.cnr.uidaho.edu/population_ecology/