

IV. Detailed Agenda



Photo: Tom Koerner, USFWS

* denotes Student Presenter

TUESDAY, NOVEMBER 19	
7:00 – 8:00	Registration open
8:00 – 5:00	<i>Workshop: Collaborative Learning Strategies @ Sheridan Inn Ballroom</i>
8:00 – 12:00	<i>Workshop: Camera Trapping @ Sheridan Inn’s Conference Room</i>
1:00 – 4:00	<i>Workshop: Demystifying Policy @ Sheridan Inn’s Conference Room</i>
1:00 – 5:00	Golden Eagle Working Group @ WGFD Sheridan Office, 700 Valley View Dr.
1:00 – 5:00	Wyoming Bat Working Group @ USFS Sheridan Office, 2013 Eastside 2 nd St.
5:00 – 7:00	Registration open
6:00 – 10:00	POSTER SESSION AND SOCIAL @ Sheridan Inn’s Wyoming Room (cash bar and light finger foods)

WEDNESDAY, NOVEMBER 20	
7:00 – 12:00	Registration open
8:30 – 8:45	Welcome and opening remarks by WY-TWS and Wyoming Wildlife Federation
MOVEMENT AND MIGRATION OF WILDLIFE	
<i>Moderator: Dave Edmunds and Aly Courtemanch</i>	
8:45 – 9:00	MIGRATION DISTANCE AND MATERNAL RESOURCE ALLOCATION SHAPE THE TIMING OF REPRODUCTION IN A LARGE HERBIVORE Ellen O. Aikens * , Samantha P.H. Dwinell, Tayler N. LaSharr, Rhiannon P. Jakopak, Gary L. Fralick, Jill Randall, Rusty Kaiser, Mark Thonhoff, Matthew J. Kauffman, Kevin L. Monteith
9:00 – 9:15	SURFING THE GREEN WAVE: DOES DISTANCE MATTER? Anna Ortega * , Hall Sawyer, Ellen Aikens, Jerod Merkle, Kevin Monteith, Matthew Kauffman

9:15 – 9:30	SURFING SNOW-OFF: NORTHERN MIGRATORY UNGULATES TRACK SNOW MELT TO ARRIVE ON CALVING GROUNDS DURING OPTIMAL FORAGE CONDITIONS Michel P. Laforge * , Maegwin Bonar, Eric Vander Wal
9:30 – 9:45	WEATHER AND SEX INFLUENCE MIGRATORY BEHAVIORS AND HABITAT SELECTION IN A TEMPERATE UNGULATE Patrick Rodgers * , Hall Sawyer, Tony W. Mong, Sam Stephens, Matthew J. Kauffman
9:45 – 10:00	TRANSCONTINENTAL TRAVEL: MIGRATION OF WESTERN BURROWING OWLS THROUGHOUT NORTH AMERICA Andrea C. Orabona , Courtney J. Conway, Troy I. Wellicome, Carl G. Lundblad
Break (15 minutes) sponsored by <i>Maven Optics</i>	
10:15 – 10:30	THE MECHANISMS OF MULE DEER NAVIGATION Holly Copeland , Kevin Monteith, Kristi Gebhart, Tayler LaSharr, Katey Huggler, Gary Fralick, Jerod Merkle
10:30 – 10:45	NOT ALL WHO WANDER ARE LOST: NAVIGATION AND MEMORY IN MULE DEER Rhiannon P. Jakopak * , Tayler N. LaSharr, Samantha P. H. Dwinell, Gary L. Fralick, Kevin L. Monteith
10:45 – 11:00	PREDICTING MIGRATION CORRIDORS: USING MAXIMUM LIKELIHOOD TO FIT CORRIDOR MODELS TO MOVEMENT DATA Tristan Nuñez , Mark Hurley, Julien Fattebert, Jerod Merkle, Matthew Kauffman
11:00 – 11:15	BEYOND BORDERS: BIRD MIGRATIONS TO, FROM, AND THROUGH THE GREATER YELLOWSTONE ECOSYSTEM Bryan Bedrosian
11:15 – 11:30	TIMING, DURATION, AND PATHWAYS OF HARLEQUIN DUCK MIGRATION TO PACIFIC MOLTING AND WINTERING AREAS Lucas Savoy, Susan Patla, John Stephenson, Sarah Hegg, Doug Smith, Sean Boyd, Beth MacCallum, Malcolm McAdie, Lisa Bate, Chris Hammond, Joseph Evenson, Andrea Orabona
11:30 – 11:45	WY-TWS Volunteer and Leadership Recognition
11:45 – 1:15	MENTOR LUNCH (free; registration required) <i>or</i> lunch on your own

<i>Concurrent Sessions</i>	CONSERVATION AND RESEARCH OF SENSITIVE SPECIES (Sage and Sharp-tailed Grouse)	NEW TRICKS: METHODS, MODELS, & MORE
	<i>Moderator: Nyssa Whitford</i>	<i>Moderator: Ben Wise</i>
1:15 – 1:30	MICROHABITAT SELECTION BETWEEN BROOD-REARING AND BROODLESS GREATER SAGE-GROUSE Erin L. Gelling * , Aaron C. Pratt, Jeffrey L. Beck	A NEW METHOD FOR MAPPING IMPORTANT HABITATS FOR PRONGHORN Hall Sawyer, Jerod A. Merkle , Matthew J. Kauffman
1:30 – 1:45	COMPARISON OF AVIAN AND MAMMALIAN PREDATORS IN SAGE-GROUSE CORE AND NON-CORE AREAS Claire L. Revekant * , Jonathan B. Dinkins	CHANGING UNGULATE FORAGE IN THE WEST: A LENS ON MIGRATION AND HABITAT USE Tabitha Graves , Ethan Berman, Nate Mikle, Jerod Merkle
1:45 – 2:00	A RANGE-WIDE HIERARCHICAL NESTED POPULATION MONITORING FRAMEWORK FOR GREATER SAGE-GROUSE Michael S. O’Donnell, David R. Edmunds , Cameron L. Aldridge, Julie A. Heinrichs, Peter S. Coates, Brian G. Prochazka, Steve E. Hanser	INCORPORATING MORE (AND BETTER) SNOW SCIENCE IN WILDLIFE RESEARCH Adele K. Reinking , Glen E. Liston, Kelly Elder, Stine H. Pedersen, Jennifer A. Feltner, Kristin J. Barker
2:00 – 2:15	DELINEATING AND DEVELOPING MANAGEMENT RECOMMENDATIONS FOR SAGE-GROUSE WINTER CONCENTRATION AREAS IN WYOMING Kurt Smith , Aaron Pratt, Jonathan Dinkins, Jeffrey Beck	CAMERA DETECTIONS AND CAPTURE SUCCESS OF SPOTTED SKUNKS IN WYOMING Robert J. Riotto * , Zachariah H. Bell, and Merav Ben-David
2:15 – 2:30	SAGEBRUSH ECOSYSTEM CONSERVATION STRATEGY - OPPORTUNITIES FOR HOLISTIC LANDSCAPE CONSERVATION Pat Deibert , Tom Remington, Steve Hanser	EVALUATING THE BEST MONITORING PROTOCOLS FOR BEES: VANE TRAPS, BEE CUPS, AND NETTING ARE NOT EQUAL Christine Bell * , Lusha Tronstad, Michael Dillon
2:30 – 2:45	UNDERSTANDING SHARP-TAILED GROUSE SUBSPECIES STATUS IN SOUTH-CENTRAL WYOMING Jonathan D. Lautenbach * , Jeffrey L. Beck, Aaron C. Pratt, Andrew J. Gregory	HOW BLOOM DENSITY ALTERS THE EFFECTIVENESS OF POLLINATOR TRAPS Madison Crawford , Christy Bell, Lusha Tronstad

2:45 – 2:50 <i>(Lightning Talk)</i>		WHAT DOES THE FROG SAY?: DEVELOPING TOOLS TO MONITOR THE DISTRIBUTION OF AMPHIBIANS USING ACOUSTIC RECORDING EQUIPMENT AND AUTOMATED DETECTION SOFTWARE Ken Honeycutt , Wendy Estes-Zumpf, Asila Bergman
Break (25 minutes) sponsored by <i>Advanced Telemetry Systems</i>		
Concurrent Sessions	CONSERVATION AND RESEARCH OF SENSITIVE SPECIES (Butterflies, Bats, and Birds)	CONSERVATION AND RESEARCH OF SENSITIVE SPECIES (Amphibians and Skunks)
	<i>Moderator: Daly Edmunds</i>	<i>Moderator: Embere Hall</i>
3:15 – 3:30	INSIGHTS GAINED FROM LONG-TERM MONITORING OF GOLDEN EAGLES (AQUILA CHRYSAETOS) IN WYOMING'S BIGHORN BASIN Corey Anco , Nathan S. Horton, Charles R. Preston	FACTORS AFFECTING THE DISTRIBUTION OF AMPHIBIANS IN WESTERN WYOMING Zach Wallace , Lusha Tronstad
3:30 – 3:45	PRIORITIZING LANDSCAPES FOR BIRD-FRIENDLY RANCHING Adrian Monroe , David Edmunds, Alison Holloran, Cameron Aldridge, Matthew Holloran	DOES HABITAT DISTURBANCE REDUCE BREEDING SITE FIDELITY OF BOREAL TOADS IN WESTERN WYOMING? Gabriel Maturani Barrile * , Anna D. Chalfoun, Annika Walters
3:45 – 4:00	IMPLEMENTATION OF A NATIONAL BAT MONITORING SCHEME IN WYOMING Laura Beard , Alexander Lewis, Nichole Bjornlie	STATUS OF A CRYPTIC ENDEMIC AMPHIBIAN (GREAT PLAINS TOAD, ANAXYRUS COGNATUS) IN NORTHEAST WYOMING Andrew Gygli , Wendy Estes-Zumpf
4:00 – 4:15	WHITE-NOSE SYNDROME SURVEILLANCE IN WYOMING Ian Abernethy , Laura Beard, Nichole Bjornlie	PRELIMINARY FINDINGS: GENOMICS OF SPOTTED SKUNKS Zachariah Bell * , Robert J. Riotto, Vikram Chatre, Merav Ben-David
4:15 – 4:30	THE STATUS AND DISTRIBUTION OF REGAL FRITILLARY BUTTERFLIES IN WYOMING Lusha Tronstad , Madison Crawford	THE EXTENT AND POTENTIAL EFFECTS OF A DAMAGING NON-NATIVE AMPHIBIAN (AMERICAN BULLFROG, LITHOBATES CATESBEIANUS) OUTBREAK IN NORTHEAST WYOMING Andrew Gygli , Wendy Estes-Zumpf
4:30 – 4:45	Closing announcements	

6:00 – 7:00	PANEL DISCUSSION: <u>HOW DO WE VALUE WILDLIFE?</u> @ Luminous Brewhouse Hosted by Wyoming Wildlife Federation and Greater Yellowstone Coalition <i>Moderator: Jessica Western</i> , Ruckelshaus Institute, Haub School of Environment and Natural Resources, University of Wyoming
7:30 – 9:00	QUIZ BOWL @ Luminous Brewhouse ('Bonafide' Food Truck)

THURSDAY, NOVEMBER 21	
7:00 – 8:15	WY-TWS Board & Members Meeting
8:30 – 8:45	Opening remarks and announcements from WY-TWS and WWF
8:45 – 9:45	INVITED TALK: <i>There and Back Again – One Person's Life Journey</i> Terry Kreeger (retired WY Game and Fish Department wildlife veterinarian)
<i>Break (15 minutes) sponsored by Maven Optics</i>	
10:00 – 10:30	WY-TWS Committee Updates
MOVEMENT AND MIGRATION OF WILDLIFE (continued)	
<i>Moderator: Holly Copeland</i>	
10:30 – 10:45	SURVIVING A HARSH WINTER: DO MOVEMENT STRATEGY, LIFE HISTORY, AND NUTRITION INTERACT TO INFLUENCE SURVIVAL? Taylor N. LaSharr * , Samantha P. H. Dwinnell, Gary L. Fralick, Rusty C. Kaiser, Mark Thonhoff, Jill Randall, Kevin L. Monteith
10:45 – 11:00	BEHAVIORAL PLASTICITY OF LARGE MAMMALS TO EXTREME HEAT IN THE ROCKY MOUNTAINS Rebecca Thomas-Kuzilik * , Jerod Merkle, collaborators
11:00 – 11:15	THERMAL SHELTERS: EFFECTS OF HABITAT AND MICROCLIMATE ON BED SITE SELECTION OF A HEAT-SENSITIVE UNGULATE Tana Verzuh * , Teal Cufaude, Corey Class, Will Schultz, Lee Knox, Mary Wood, Kevin Monteith
11:15 – 11:30	RISKY BUSINESS: MINIMIZING THE MAXIMUM DETRIMENT IN A SPATIALLY AND TEMPORALLY VARIABLE ENVIRONMENT Katey Huggler * , Matthew M. Hayes, Patrick Burke, Daniel Thompson, Justin Clapp, Joseph D. Holbrook, Patrick Lionberger, Miguel Valdez, Kevin L. Monteith
11:30 – 11:45	ASSESSING COUGAR HABITAT AND KILL SITE SELECTION AS WOLF AND GRIZZLY BEAR POPULATIONS INCREASED IN THE SOUTHERN GREATER YELLOWSTONE ECOSYSTEM (SGYE) Jennifer Feltner * , Mark Elbroch, Howard Quigley, Peter Alexander, L. Scott Mills

11:45 – 11:50 <i>(Lightning Talk)</i>	UPDATE ON GYE GRIZZLY BEAR DISTRIBUTION, 1990-2018 Dan Bjornlie , Mark Haroldson
11:50 – 11:55 <i>(Lightning Talk)</i>	BLACK BEAR POPULATION MONITORING IN WYOMING USING CLUSTERED DESIGN AND SPATIALLY EXPLICIT CAPTURE-RECAPTURE MODELS Ryan Kindermann , Dan Bjornlie, Kole Stewart, Sean Ryder, Sterling Spilnik
12:00 – 1:30	WY-TWS PRESIDENTS AND MEMBERS LUNCH (free; registration required) <i>or</i> lunch on your own
CONSERVATION AND RESEARCH OF SENSITIVE SPECIES (Habitat Relationships)	
<i>Moderator: Tim Thomas</i>	
1:30 – 1:45	DESIGN MATTERS: CAN VARIATION IN HOME ARCHITECTURE MEDIATE RISK FOR SEDENTARY PREY Embere Hall , Jason Carlisle, Lindsey Sanders, Trent McDonald, Anna Chalfoun
1:45 – 2:00	GREAT GRAY OWL HABITAT SELECTION AND HOME RANGE CHARACTERISTICS DURING THE BREEDING SEASON Katherine Gura * , Bryan Bedrosian, Susan Patla, Anna Chalfoun
2:00 – 2:15	HABITAT-FITNESS RELATIONSHIPS OF CANADA LYNX: WHY LYNX ARE NOT A NEW SPOTTED OWL Joseph D. Holbrook , John R. Squires, Lucretia E. Olson
2:15 – 2:30	DETERMINING THE LONG-TERM RESPONSES OF SAGEBRUSH SONGBIRDS TO ENERGY DEVELOPMENT Max Carlin * , Anna D. Chalfoun
2:30 – 2:45	INVESTIGATING ECOLOGICAL EFFECTS OF WIND TURBINES ON NATIVE BEE COMMUNITIES IN WYOMING, USA Delina E. Dority * , Christy Bell, Lusha M. Tronstad, Michael E. Dillon
Break (15 minutes) sponsored by Advanced Telemetry Systems	
COSTS OF CREATURE COMFORTS: IMPACTS OF HUMANS ON WILDLIFE	
<i>Moderator: Anika Mahoney</i>	
3:00 – 3:15	OUR PLAYGROUND, THEIR HOME: CHALLENGES IN BALANCING OUTDOOR RECREATION AND WILDLIFE CONSERVATION Courtney L. Larson , Sarah E. Reed, and Kevin R. Crooks
3:15 – 3:30	REDUCED SPEED LIMIT: AN EFFECTIVE WAY TO REDUCE WILDLIFE-VEHICLE COLLISIONS? Corinna Riginos , Elizabeth Fairbank, Erica Hansen, Jaron Kolek, Marcel Huijser

3:30 – 3:45	PRONGHORN AND THE GHOSTS OF CORRIDORS PAST: USING GPS-TELEMETRY TO DETERMINE WHERE MIGRATION CORRIDORS ONCE OCCURRED ALONG THE I-80 BARRIER Benjamin S. Robb * , Jerod A. Merkle, Hall Sawyer, Jeffrey L. Beck, Matthew J. Kauffman
3:45 – 4:00	THE IMPACT OF TOWNS ON MULE DEER MIGRATION IN THE AMERICAN WEST Julien Fattebert , Jerod Merkle, Hall Sawyer, Holly Copeland, Tristan Nuñez, Jodi Berg, Scott Bergen, Mark Hurley, Greg Anderson, Gary Fralick, Cody Schroeder, Daniel Olson, Kent Hersey, Anna Ortega, Samantha Dwinnell, Tayler LaSharr, Rhiannon Jakopak, Kevin Monteith, Matthew Kauffman
4:00 – 4:15	DEVELOPMENT IN UNGULATE MIGRATION ROUTES: HOW MUCH IS TOO MUCH? Mallory Sandoval Lambert * , Hall Sawyer, Jerod Merkle
4:15 – 4:20 <i>(Lightning Talk)</i>	QUANTIFYING BEHAVIORAL RESPONSES OF UNGULATE TO FENCES IN RANGELANDS Wenjing Xu * , Nandintsetseg Dejid, Benjamin Robb, Hall Sawyer, Arthur Middleton
4:20 – 4:30	Closing announcements

6:00 – 10:00	BANQUET AT THE SHERIDAN INN
---------------------	------------------------------------

- **Keynote Speaker:** Samantha Dwinnell, “Breaking Down the Walls of the Ivory Tower: Engaging New Audiences with Stories of Science”
- **WY-TWS Awards:** See below plus Best Student poster and oral presentations
- **Silent Auction**

WY-TWS AWARD DESCRIPTIONS:

- **Professional of the Year** | Recognizes a wildlife professional who best exemplifies values consistent with The Wildlife Society code of ethics and makes outstanding contributions to the wildlife profession in WY, in the given year. Contributions include excellence in research, management, public relations, and/or policy.
- **Citizen of the Year** | Recognizes an individual who does not have a 'wildlife' job but whose efforts directly benefit wildlife and/or associated habitats. Previous recipients range from science teachers to Governors.
- **Roger Wilson Lifetime Achievement** | Recognizes an outstanding wildlife professional that has tirelessly dedicated themselves throughout their career to promoting wildlife values, conservation, education, and advancing the science of wildlife management.