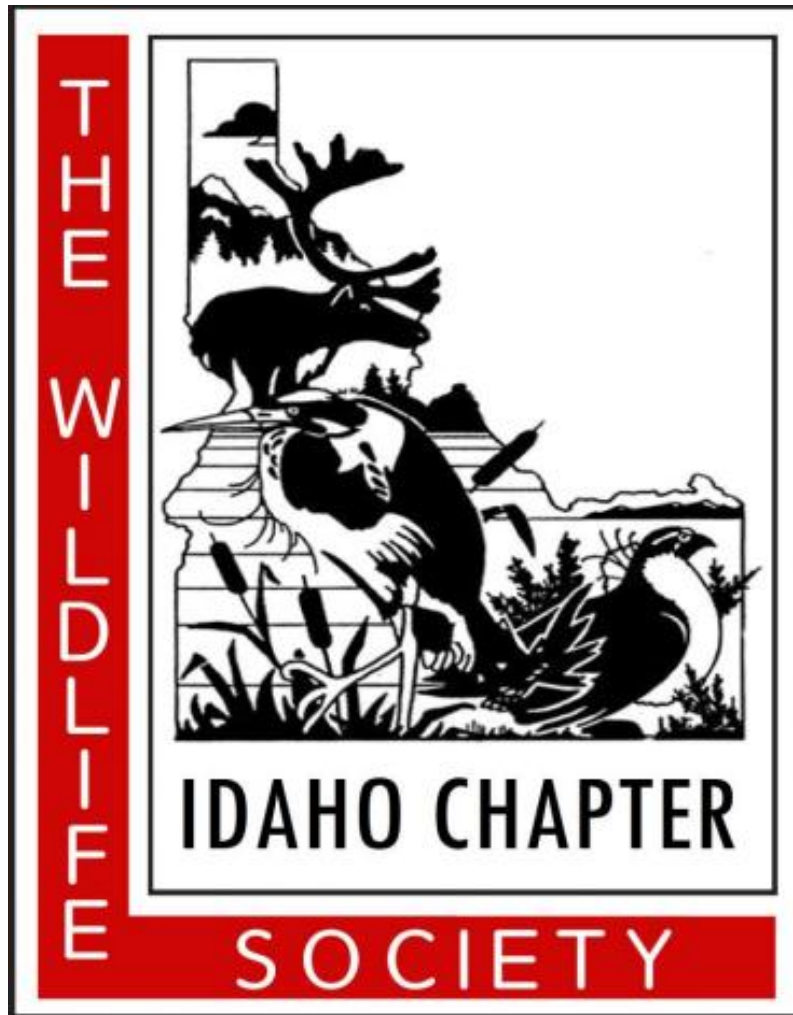


Idaho Chapter of The Wildlife Society

*“Ecological Timelines: Past and Current Trends
in Idaho’s Wildlife Populations and Habitats”*



22-24 February 2022

Virtual Conference

PROGRAM

Table of Contents

Conference Sponsors.....	Pg. 3
Program at a Glance.....	Pg. 4
Special Awards.....	Pg. 5
Workshops and Associated Meetings.....	Pg. 6
Plenary Session	Pg. 7
Scientific Program.....	Pg. 7-12

Conference Sponsors



Program at a Glance

Tuesday 22 February	
Time (MST)	
09:00-11:00	Workshop – Career Preparation
10:00-12:00	Partners in Amphibian and Reptile Conservation Meeting
12:00-13:00	Lunch on your own
13:00-16:00	Idaho Bat Working Group Meeting
13:00-17:00	Workshop - 'Do the Genetics'

Wednesday 23 February	
Time (MST)	
09:00-12:00	Plenary Session
12:00-13:00	Lunch with a Biologist
13:00-15:00	Contributed Papers: Wildlife Disease & Contaminants, Climate Change
15:00-15:10	Break
15:10-16:10	Contributed Papers: Human Dimensions
15:10-16:00	IGNITE Presentations
16:00-17:00	Live Poster Session - virtual EXPO space

Thursday 24 February	
Time (MST)	
09:00-10:40	Contributed Papers: Methodology, Modeling & Sampling
09:00-12:00	Contributed Papers: Wildlife Ecology & Management
10:40-12:00	Panel Discussion: Are Resource Professions Meeting the Challenges in Idaho?
12:00-12:15	Break
12:15-13:15	Business Lunch
13:15-13:30	Break
13:30-15:30	Contributed Papers: Genetics
13:30-15:30	Contributed Papers: Habitat Use and Management
15:30-16:00	Presentation of Awards & Closing Remarks

ICTWS Special Awards

Charles E. Harris Professional Wildlifer Award

This award honors professionals in wildlife management. It is given to demonstrate outstanding contributions to Idaho's wildlife resources as appreciated by one's peers. The award is meant to recognize outstanding professional contribution and promote public understanding of significant wildlife management accomplishments in Idaho.

Randall B. Smith Emerging Leader Award

This award is intended to honor a professional with five (5) or less years of experience in wildlife conservation, management, or research in Idaho who demonstrates exceptional initiative, leadership skills, and commitment to the field. The award is in memory of Randy Smith, who trained and mentored many young wildlife professionals throughout his career.

Tuesday

Workshop

Time (MST)

9:00 - 11:00 **Student Professional Development**

We will be discussing career paths in natural resources, making yourself marketable, producing an effective resume, interviewing skills for internships and post-graduate work, and employment advice.

Associated Meetings

10:00 - 12:00 **Partners in Amphibian and Reptile Conservation Meeting**

13:00-16:00 **Idaho Bat Working Group Meeting**

Workshop

13:00 - 17:00 **Do the Genetics 101: Matching Techniques and Technologies to Research Questions in Wildlife and Fisheries Genetics**

Do you want to ‘do the genetics’ on your study population? But you’re not even entirely sure what that might entail? The Molecular Ecology Working Group has crafted a workshop for you – the new grad student embarking on wildlife genetics research, the agency professional needing answers to genetic questions to inform management, the early career scientist looking to expand into new technologies.

We will provide an overview of current genetic techniques (including marker types, lab technologies, analytical packages) with particular focus on what techniques are most appropriate to answering different questions in wildlife ecology, conservation, and management. We will also discuss field sampling methods and sample designs well-suited to addressing different questions. The workshop will include a hands-on study design session in which panel members will work with individuals or small groups to design a study targeted at a species and question of interest. Participants are encouraged to bring general information about their study species/system of interest, so that they can get the most out of this session.

Workshop participants will come away with several concrete products including a consumers’ guide for collaborating with genetics labs, a resource guide of recommended analytical programs, and a study design for their project of interest facilitated by our workshop panel.

Wednesday

Plenary Session

Time (MST)

- 09:00-09:05 **Welcome** (Bryan Stevens, President, ICTWS)
- 09:05-9:50 **Climate change and forest disturbances** DR. JEFF HICKE
- 9:50-10:35 **Wildfire, drought, and invasive grass, oh my! Science and decision support tools to inform sage-grouse management within long-term degradation of sagebrush ecosystems** DR. PETER COATES
- 10:35-11:20 **Demographic Responses of Ungulates to Habitat Changes Over Time and Space in Idaho** DR. MARK HURLEY
- 11:20-11:30 BREAK
- 11:30-12:00 *Panel discussion*

Lunch with a Biologist

- 12:00-13:00 *Zoom Expo Event space (lettered booths)*

Wildlife Disease and Contaminants

- 13:00-13:20 **Natural history of a pneumonia outbreak in bighorn sheep: what happened and what might have prevented it?** FRANCES CASSIRER
- 13:20-13:40 **Small mammal shooting as a conduit for lead exposure in avian scavengers** JOHN GOODELL
- 13:40-14:00 **Chronic wasting disease in Idaho: the story to date** TOBY BOUDREAU

Climate Change

- 14:00-14:20 **Identifying snow refugia in complex forested terrain using remote camera data** KAITLYN STRICKFADEN
- 14:20-14:40 **Will reptile diversity in Idaho increase as climates warm?** DAVID PILLIOD
- 14:40-15:00 **Key findings from the Idaho climate-economy impacts assessment** MEGAN FOSTER
- 15:00-15:10 BREAK

Human Dimensions

- 15:10-15:30 **Tolerance for carnivore nuisance behavior and acceptance of management actions** NATALIE REDMOND
- 15:30-15:50 **Diversity in university fish and wildlife programs** LISETTE WAITS
- 15:50-16:10 **Impacts of outdoor recreation on multiple levels of a modified sagebrush-steppe ecosystem** MADELINE ABERG

IGNITE Presentations

- 15:10-15:17 **Get to know your ~~museles~~ mussels!** JOEL SAUDER
- 15:17-15:24 **Duck, duck, cow? An update on high intensity, short duration winter cattle grazing as a tool for WMA wetland vegetation management** MARIA PACIORETTY
- 15:24-15:31 **Wrangling big data: introducing the new USGS GIS clipping and summarization toolbox** JUSTIN WELTY
- 15:31-15:38 **Farming for wildlife: a story where wild animals are benefitted occupants. Based on a true story in Deer Parks WMU** JOSH RYDALCH
- 15:38-15:45 **Should I use fixed effects or random effects when I have fewer than five levels of a grouping factor in a mixed-effects model?** DYLAN GOMES
- 15:45-15:52 **Simulating across-highway connectivity for Mojave Desert tortoises** JODI BERG

Poster Session

- 16:00-17:00 *Live Poster Session with poster presenters in the virtual EXPO space*

Poster Session

*Names of presenters are capitalized; those presenters with an * are students*

1. **Noninvasive genetic sampling of Mexican wolves.** KENDALL BANCROFT*
2. **Unexpected habitat properties influenced by an ecosystem engineer: preliminary findings.** SARAH BURGETT*
3. **White-nose syndrome baseline research in the Upper Snake River Plain in southeastern Idaho.** JESSICA CALL*
4. **Fecal DNA analysis of the Columbia Basin pygmy rabbit to determine sex and species ID.** JONATHON DIXON*
5. **Announcing the East Boise Riparian Corridor project.** SEAN FINN
6. **Assessing the impact of ancestry, ploidy level, size, and environment on arthropod richness for two subspecies of *Artemisia tridentata*.** HARRAH FRIEDLANDER*
7. **City Nature Challenge: a springboard for biodiversity inventories and conservation in the Pacific Northwest and Northern Rockies.** GEORGE GEHRIG
8. **Evaluating the influence of subspecies, ploidy level, hybridization, and gall associated arthropods on gall abundance and diversity of Big Sagebrush (*Artemisia tridentata*).** ELLIE HIGGINS*
9. **A proposal to study the environmental cues affecting the timing of autumn departure in migratory raptors.** NORA HONKOMP*
10. **Distribution and breeding phenology of Great Basin spadefoot toads at Egin Lakes, Idaho.** SAAC LEE*
11. **Genetic monitoring for the endangered Sonoran pronghorn (*Antilocapra americana sonoriensis*).** MELINA LIEDTKE*
12. **Hide and don't seek: how broad-scale juniper removal, mesopredator habitat use, and sage-grouse nest site selection influence depredation risk.** SARAH MCINTIRE*
13. **Tracking Columbia Basin pygmy rabbit reintroduction to Beezley Hills via noninvasive genetic analysis.** DELANEY SNAADT*
14. **Measuring wildlife habitat: a case study on the efficacy of an experiential learning course for undergraduates.** RACHEL STEIN*
15. **Understanding the effects of vital rate importance and spatial variation on Shiras moose populations across Idaho.** ERIC VAN BEEK*
16. **Diversity and abundance of bat species in Egin Lakes, Idaho.** BRANDON JOHN VANSLOCHTEREN*
17. **Northern Goshawk (*Accipiter gentilis*) Territory Occupancy and Nest Success Between the Caribou and Targhee National Forests** JACK HANSEN*

Thursday

*Names of presenters are capitalized; those presenters with an * are students*

Methodology, Modeling & Sampling

Time (MST)

- 09:00-09:20 **Leveraging technologies and experience to tackle the past, present, and future of data at the Idaho Department of Fish and Game** MATT BOONE
- 09:20-09:40 **Towards a statewide fine-scale vegetation model** ROBERT RITSON
- 09:40-10:00 **Efficiency of time-to-event and space-to-event models in estimating American black bear (*Ursus americanus*) populations in Idaho** MATT NELSON*
- 10:00-10:20 **Have past sampling bias, lek count averaging, and increased sampling led to some overestimates of greater sage-grouse population declines?** ROBERT ARKLE
- 10:20-10:40 **Remote sensed land cover classification of dryland riparian ecosystems** TARITA HARJU

Wildlife Ecology and Management

- 09:00-09:20 **Daily foraging activity of an imperiled ground squirrel: effects of hibernation, thermal environment, body condition, and population density** AUSTIN ALLISON
- 09:20-09:40 **Efficacy of manipulating reproduction of common ravens to conserve sensitive prey species: three case studies** CORINA SANCHEZ
- 09:40-10:00 **“Dead-birds flying” Can raptor rehabilitation mitigate anthropogenic mortality? A demographic analysis of North American post-rehabbed birds** JOHN GOODELL
- 10:00-10:20 **Fifty years of studying nesting golden eagles in southwestern Idaho: what have we learned?** MICHAEL KOCHERT
- 10:20-10:40 **Nesting success and recruitment of western and Clark's grebes in Idaho** ANNE YEN
- 10:40-11:00 **The effect of group size on reproduction in gray wolves depends on density** DAVID AUSBAND
- 11:00-11:15 **BREAK**
- 11:15-11:35 **Behavioral responses of bighorn sheep following a large-scale wildfire** KATEY HUGGLER

11:35-11:55 **Grizzly bears and their management in the western bitterroot ecosystem**
KAITLYN SHAW

Special Session

10:40-12:00 **Panel Discussion: Are Resource Professions Meeting the Challenges in Idaho?**

Hosted by GREGG SERVHEEN & featuring panelists from: Idaho Chapter of the Wildlife Society, Idaho Chapter of the American Fisheries Society, Society for Range Management- Idaho Section, and Society of American Foresters.

12:00-12:15 BREAK

Business Lunch

12:15-13:15 **Chapter Business Meeting**

13:15-13:30 BREAK

Genetics

13:30-13:50 **Landscape genetics and genomics of North American wolverines** ELISE STACEY

13:50-14:10 **Genotyping-in-thousands by sequency (GT-SEQ) panel development and application to fecal DNA samples to monitor the endangered Columbia basin pygmy rabbit (*Brachylagus idahoensis*)** STACEY NERKOWSKI

14:10-14:30 **Genetic monitoring of the northern idaho ground squirrel for species recovery plan** MOLLY GARRETT

14:30-14:50 **Who dunnit? A non-invasive method for identifying sage-grouse nest predators** NOLAN HELMSTETTER

14:50-15:10 **Using harvest samples to identify breeding pairs in a population** PETER REBHOLZ

15:10-15:30 **Gene flow of Great Basin rattlesnakes across disturbed landscapes in southwest Idaho** KRISTINA PARKER

Habitat Use and Management

13:30-13:50 **The effects of broad-scale juniper removal on habitat use by mammalian mesopredators** SARAH MCINTIRE

13:50-14:10 **Applications of the Land Treatment Exploration Tool for Sage-grouse Conservation** MICHELLE JEFFRIES

- 14:10-14:30 **The Blackfoot River ecosystem project update** JASON BECK
- 14:30-14:50 **Mule deer population classification using meteorological, phenological and movement data** SCOTT BERGEN
- 14:50-15:10 **Update on the Idaho National Laboratory Site Bat Protection Plan** JERICHO WHITING
- 15:10-15:30 **Long-term (1870-2015) retrospective evaluation of forage resources for elk in north-central Idaho** DEBORAH MONZINGO

Closing Remarks

- 15:30-16:00 **Special Recognition, Scholarship and Presentation Awards announcements and closing remarks** SETH HARJU