



**AOU • COS • SCO**



## **2014 JOINT MEETING**

*Estes Park, Colorado • USA  
23-28 September 2014*

## **MEETING PROGRAM**

Ornithologists from around the world ascend to the majestic Rocky Mountains for a meeting like no other. This joint meeting will feature six days of intellectually stimulating workshops, plenary talks, scientific sessions, and field trips that will facilitate the exchange of ideas and strengthen the science of avian biology.

### *Sponsored By*

The **American Ornithologists' Union**, the **Cooper Ornithological Society**, and the **Society of Canadian Ornithologists/Société des Ornithologistes du Canada**

### *Co-Chairs*

**Susan K. Skagen** and **Sara Oyler-McCance** U.S. Geological Survey, Fort Collins Science Center

[www.birdmeetings.org/aoucossco2014](http://www.birdmeetings.org/aoucossco2014)

# Ornithological Worldwide Literature (O.W.L.)

(*www.BIRDLIT.ORG*)

## NEEDS YOUR HELP!

OWL is a small project of the AOU to provide a FREE, fully indexed, searchable database of citations to the recent ornithological literature on the World Wide Web. **In the 21<sup>st</sup> Century, published scientific information that cannot be found at a later date is information lost to science.** We must be able to find all those published papers related to our science and not just from those publications that are currently online. Now ornithologists around the globe can access this important resource at no cost. The database already contains ~80,000 citations, many of which go back >25 years. Over 1500 serial publications are cited in the database: from art history to meteorology to electrical engineering, besides the more obvious sources in the biological sciences, not just ornithology.

There are approximately 350 serials worldwide that are not presently being abstracted for OWL and that are of significant importance to ornithology. If you regularly use the OWL QR have any interest in helping in this important effort, please contact Jay Sheppard for additional information. We can really use your help as a volunteer abstractor for OWL. One needs only have access to their selected journals or other serials and to the Internet to help OWL.

Even if you are unable to help OWL, please feel free to access and search the database. Search results are downloadable into several formats.

### **Contact Info:**

Jay Sheppard *jmsheppar@aol.com*  
Managing Editor

Please feel free to pass this information on to others.

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## Welcome

Welcome to the 2014 joint meeting of the American Ornithologists' Union, the Cooper Ornithological Society, and the Society of Canadian Ornithologists held at the YMCA of the Rockies in Estes Park, Colorado! Nestled against the spectacular mountain peaks in Rocky Mountain National Park, the YMCA of the Rockies is an ideal place for ornithologists to gather, learn, share, network, and be inspired by the majestic surroundings.

We have planned five days of intellectually stimulating workshops, plenary talks, and scientific sessions that will facilitate the exchange of ideas and strengthen the science of avian biology. The setting and atmosphere of the YMCA are awe inspiring, yet relaxed and comfortable. We hope that you take advantage not only of the natural beauty and amazing biological diversity of Rocky Mountain National Park, but also the "summer camp" feel of the YMCA. Come ready to take part in our wide variety of social activities. Interact with peers and make new friends at the opening reception and the closing banquet, enjoy the musical talent at the bird band jam, run yourself ragged in the All Out Ostrich 5K Race, bend your brain in the Quiz Bowl, bid early and often at the silent auction, and attend the various movies and field trips. Be sure to check the meeting web site daily for program updates, including cancelled papers: [www.birdmeetings.org/aoucossco2014](http://www.birdmeetings.org/aoucossco2014).

On behalf of the dedicated committees that have toiled during the past two years to pull together the various facets of this meeting, we are delighted that you are here, and please enjoy your time in Colorful Colorado!

- The 2014 AOU/COS/SCO Local Committee

## Sponsoring Societies

This joint meeting is an international gathering of over 800 attendees and is being sponsored by AOU, COS and SCO-SOC.

### American Ornithologists' Union

Founded in 1883, the American Ornithologists' Union is one of the oldest organizations in the world devoted to the scientific study of birds and is the largest and most diverse ornithological society in the New World. Although primarily an organization for professional ornithologists, it welcomes to its ranks many students, conservationists, birders and others who cherish the birds of the world. The mission of the AOU is to advance the scientific understanding of birds, to enrich ornithology as a profession, and to promote a rigorous scientific basis for the conservation of birds. Its publications are the heart and soul of the AOU and are actively overseen by a committee of scientists which ensures scientific integrity, professional management, and fiscal health.

Website: <http://www.aou.org>

### Cooper Ornithological Society

The Cooper Ornithological Society is one of the largest ornithological societies in the world. COS has been in existence since 1893 and the name commemorates an early California naturalist, Dr. James G. Cooper. The Cooper Ornithological Society seeks to advance the scientific study of birds and their habitats through its meetings, its sponsorship of symposia and workshops, and its publications. The objectives of the COS are to encourage and support the scientific study of birds; to disseminate ornithological knowledge through publications, meetings, and direct communication among ornithologists; to encourage and spread interest in the study of birds; and to encourage and support the conservation of birds and wildlife in general.

Website: <http://www.cooper.org>

### Society of Canadian Ornithologists / Société des Ornithologistes du Canada

The SCO-SOC is an organization of Canada's ornithological community. The primary role is to encourage the study of birds as an important first step towards preservation, conservation and public appreciation. The society is open to anyone who is interested in serious studies of birds, regardless of age or profession, and the society is open to anyone who wishes to join. "Canadian ornithologist" encompasses Canadian citizens who study or are interested in birds as well as citizens of other countries with an interest in Canadian birds and in the state of bird study in Canada. The society works to administer awards, produce two publications, a tri-annual newsletter, *Picoides*, and a professional journal, *Avian Conservation and Ecology*, and provide interconnection with other professional ornithological societies.

Website: <http://www.sco-soc.ca>

## Conference Organizers

### Conference Organizers

Susan K. Skagen, U.S. Geological Survey,  
Fort Collins Science Center

Sara Oyler-McCance, U.S. Geological Survey,  
Fort Collins Science Center

### Financial Management Committee

Kim Sullivan, Utah State University  
Melinda Pruett-Jones, American Ornithologists' Union  
Scott Gillihan, American Ornithologists' Union

### Scientific Program Committee

Diana F. Tomback (Co-Chair), University of Colorado, Denver  
Michael B. Wunder (Co-Chair), University of Colorado, Denver  
Lauryn Benedict, University of Northern Colorado  
Matthew D. Carling, University of Wyoming  
Paul Doherty Jr., Colorado State University



T. Luke George, Colorado State University  
 Rebecca J. Safran, University of Colorado-Boulder  
 Brett Walker, Colorado Parks and Wildlife

### **Field Trip Committee**

Tammy VerCauteren (Chair), Rocky Mountain Bird Observatory  
 Natasha Carr, U.S. Geological Survey, Fort Collins Science Center  
 Jason Beason, Rocky Mountain Bird Observatory  
 Jeff Connor, National Park Service  
 Nick Komar, Quetzal Tours  
 Ronald Harden, National Park Service  
 Joe Roller, Colorado Field Ornithologists, Rocky Mountain Bird Observatory  
 Kathy Brazelton, National Park Service  
 Jim Thompson, National Park Service  
 Richard Hahn, National Park Service, Volunteer

### **Social Events Committee**

Anne Bartuzsevice (Co-Chair), Playa Lakes Joint Venture  
 Kate Huyvaert (Co-Chair), Colorado State University  
 Lauryn Benedict, University of Northern Colorado  
 Erin Youngberg, Rocky Mountain Bird Observatory  
 Arvind Panjabi, Rocky Mountain Bird Observatory  
 David Klute, Colorado Parks and Wildlife

### **Fund-Raising Committee**

Cameron Aldridge, Colorado State University and U.S. Geological Survey  
 Helen Sofaer, Colorado State University  
 Viviana Ruiz, Colorado State University

### **Publicity Committee**

Janet Ruth, U.S. Geological Survey, Fort Collins Science Center (logo design)  
 Andree Brisson, Hayes State University  
 Melinda Pruett-Jones, American Ornithologists' Union

### **Joint Student Presentation Awards Committee**

Matt Carling, University of Wyoming  
 Anna Chalfoun, University of Wyoming

### **Joint Student Travel Awards Committee**

Matt Carling, University of Wyoming (AOU Chair)  
 Rolf Koford, Iowa State University (COS)  
 Ryan Germain, University of British Columbia (SCO)

### **Joint Student Activities & Affairs Committee**

Nicholas Mason, Cornell University (AOU Chair)  
 Valerie Steen, Colorado State University and U.S. Geological Survey (COS Chair)  
 Ryan Germain, University of British Columbia (SCO Chair)  
 Phred Benham, University of Illinois, Urbana-Champaign  
 Shawn Billerman, University of Wyoming

Sara Bombaci, Colorado State University  
 Tara Conkling, Mississippi State University  
 Kristen Covino, University of Southern Mississippi  
 Kristin Davis, Texas A&M University  
 Kristen Dillon, University of Arizona  
 Brian Gerber, Colorado State University  
 Rebecca Harris, Washington University  
 Ashley Long, Texas A&M University  
 Carl Lundblad, University of Arizona  
 Mike McCloy, University of Tennessee  
 Stacia Novia, U.S. Air Force and Peregrine Fund  
 Nicholas Sly, University of Illinois, Urbana-Champaign  
 Kathryn Smith, Texas A&M University  
 Jason Tack, Colorado State University and U.S. Geological Survey  
 Jennifer Timmer, Colorado State University  
 Pascal Title, University of Michigan  
 Krysten Zummo, New Mexico State University

### **Young Professional Award Committee (COS)**

Victoria Dreitz, University of Montana (Chair)  
 Matt Carling, University of Wyoming  
 Henry Streby, University of California Berkeley  
 Walter Wehtje, The Crane Trust

### **All-Out Ostrich Uproar**

Kate Huyvaert, Colorado State University

### **Conference and Website Management**

The Schneider Group, Waco, Texas

## *The Meeting Site*

All conference activities, including symposia, workshops, contributed and poster sessions, council and business meetings, student events, social events, the opening reception and closing banquet, will take place at the YMCA of the Rockies. The campus covers 860 acres and is bordered on three sides by Rocky Mountain National Park. We hope you will agree that this is the ideal meeting location, offering wildlife, nature, and iconic mountain vistas. Don't be surprised if you see many of the deer and local elk strolling through the campus as you walk to the meeting each day!

If you are interested in finding out what there is to see and to do at the Y, on-site information and sign-up for activities are available in the Sweet Memorial Building. Brief details are available at the information desk located in the Administration Building, just inside the front door.

You also may go to <http://ymcarockies.org/activities/>. Once you are on this page, click the box entitled "View This Week's Programs" or the one under it entitled "View Next Week's Programs." Sign up is available via the blue box, just to the left of these selections.

## *Meeting Sponsors*

We are deeply grateful to the following sponsors whose generosity enhanced the meeting in ways that we could not have attained otherwise.

### **Brown-Capped Rosy-Finch Level**



### **Black Swift Level**



### **Pygmy Nuthatch Level**



**University of Colorado Denver**  
Graduate School

### **Other In-kind Sponsors**

Colorado Cider Company · Estes Park Brewery · Black Bottle Brewery

## Meeting Information

Updated meeting information will be posted daily at  
<http://www.birdmeetings.org/aoucossco2014/>

### Registration/Information Desk

Housing and meeting registration will take place in the lobby of the Administration Building near the entrance to the YMCA of the Rockies (look for a flagpole). A parking lot near the Administration Building is available during check-in. The meeting registration desk will be open during the following times as listed. (Hours are subject to change.)

Tuesday, 23 September .....	13:00 to 20:00
Wednesday, 24 September.....	7:00 to 17:30
Thursday, 25 September.....	7:30 to 17:30
Friday, 26 September .....	7:30 to 17:30
Saturday, 27 September.....	7:30 to 17:30

### Message/Job Board

A board for job postings and messages will be available in the Assembly Hall foyer throughout the meeting.

### Parking

Parking is complimentary with parking spaces adjacent to the lodge buildings.

### Meals

Breakfast, lunch, and dinner are included with your housing fee. Meals are served every day in an all-you-can-eat buffet-style dining hall, the Aspen Dining Room. All meals will be provided on-site and are included as a package with lodging costs. Please contact the YMCA of the Rockies directly for special dietary concerns or contact Lynda West at [lyndaw@sgmeet.com](mailto:lyndaw@sgmeet.com). If you are not staying at the YMCA there will be a daily fee required of \$15, and if you will be attending any of the functions with meals, you will need to purchase a meal ticket. Both may be paid at the YMCA check-in desk in the Administration Building.

### Aspen Dining Room Hours

6:30 to 9:00.....	Breakfast
11:30 to 13:30 .....	Lunch
17:00 to 19:30 .....	Dinner

### Internet Access and Cell Phone Coverage

The YMCA of the Rockies Estes Park Center has free wireless internet access throughout the property. The signal is strongest in the Administration Building and lodges.

Cell phone reception is dependent on the type of phone and service provider (Verizon and ATT have the strongest reception here), but signals tend to be weak overall. There are public phones available for guest use.

### Climate, Dress, and Staying Healthy

Temperatures in late September in nearby Estes Park, Colorado, average in the mid-60s °F (18-21°C) for highs and the high 30s °F (3-4°C) for lows. Most days are crisp and clear with bright sunshine and gorgeous blue skies. In typical years, average monthly precipitation totals for the region are low, about 1.5" (3.8cm), but rain showers and snow are possible, even likely, at this time of year.

The meeting venues, socials, and meal locations are all heated, if needed. Attendees may wish to bring a sweater or light jacket for cooler meeting locations and a heavier coat or parka for colder evenings and early mornings. A hat and gloves are recommended for early morning walks or evening moments in the mountains. (Layers, layers, layers!) AOU/COS/SCO meetings do not have a dress code; we suggest slacks or pants and comfortable shoes for walking among the meeting venues. For the Banquet, casual business dress is often the norm.

The sun is intense for much of the day, particularly given our elevation at 8,010ft (2,440m). Above 8,000 feet, oxygen is approximately 45% less dense and there is 50% to 80% less humidity than sea level. We recommend using sunscreen, a hat, and long pants and long-sleeved shirts to avoid sunburn.

We also strongly recommend attendees bring a water bottle (there will be bulk water available throughout the premises) and drink plenty of water (64 ounces daily) as people tend to lose more water in the dry conditions. High altitude-related health problems can also occur, and symptoms of altitude sickness include headaches, nausea, swelling of the face, hands, or feet, trouble breathing, and trouble sleeping. To alleviate these symptoms, we recommend drinking plenty of water, get lots of rest, eat lightly, and avoid caffeine and alcohol. Ibuprofen and altitude sickness medication is available for purchase at the General Store in the Administration Building. More information on avoiding dehydration and altitude sickness can be found on the Web ([www.altitudemedicine.org](http://www.altitudemedicine.org)) or by consulting your physician.

### Getting Around

Meeting rooms and lodges are located throughout the campus. There is no designated shuttle or transportation service but if you have limited mobility, please check at the registration desk. Limited rides will be available via golf cart.

### Automated Teller Machines

An automated teller machine (ATM) is located in the Administration Building.

### Coffee Breaks

Coffee breaks for conference attendees will be held Wednesday, Thursday, and Saturday at 9:30 to 10:00 and 15:30 to 16:00. Friday morning's break is from 10:00 to 10:30. All breaks will be held in the Assembly Hall.

## Childcare

This year, the Societies are arranging for professional event child care service to be available on-site, in close proximity to the meeting, dining, and lodging rooms. The company, Tots on the Spot, comes very highly recommended by the YMCA of the Rockies. Interested parents will make arrangements directly with the provider and can find out more information about schedules and costs from their website ([www.totsonthespot.com](http://www.totsonthespot.com)).

## ADA Statement/Special Needs

If you have a disability or limitation that may require special consideration in order to fully participate in the meeting, please contact the YMCA or the conference management office to see how your needs can be accommodated. Call 254-776-3550 or contact Lynda West via e-mail at [lyndaw@sgmeet.com](mailto:lyndaw@sgmeet.com).

## Nearby Medical Services and Facilities

### Hospital and Emergency Room

Estes Park Medical Center, 555 Prospect Avenue, Estes Park (970) 586-2317

### Pharmacies

Estes Park Pharmacy, 600 S. Saint Vrain Avenue, Estes Park (970) 586 - 3366

Rocky Mountain Pharmacy, 453 E. Wonder View Avenue, Estes Park (970) 586 – 5577

## Society Meetings

Following is a schedule of society meetings that will take place throughout the week.

### Monday, 22 September 2014

15:00-21:00	COS Board Meeting	Pine Dining Room
15:00-21:00	1st AOU Council Meeting	Walnut Dining Room

### Tuesday, 23 September 2014

8:00-12:00	COS/AOU Joint Meeting	Longs Peak – Diamond West
8:00-15:30	2nd AOU Council Meeting	Walnut Dining Room
8:00-15:30	COS Board Meeting	Pine Dining Room
9:00-16:00	SCO Executive Meeting	Hobbs
16:00-17:30	AOU Fellows Meeting	Ruesch Auditorium

### Wednesday, 24 September 2014

12:30-13:30	OSNA Meeting	Hobbs
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### Thursday, 25 September 2014

No society meetings scheduled.

## Friday, 24 September 2014

12:00-13:00	SCO AGM Meeting	Longs Peak – Diamond East
12:00-13:30	AOU Editors Meeting	Walnut Dining Room
12:00-13:30	COS Editors Meeting	Pine Dining Room

## Travel Awardees

### Student Travel Awardees

The joint student awards committee comprised of members from all three societies reviewed 106 applications for student travel awards and 15 applications for postdoctoral travel awards. Congratulations to the following award recipients:

Stephanie Aguilon, University of Arizona  
 Alexandra Anderson, Boise State University  
 Priya Balasubramaniam, University of California, Riverside  
 Hope Batcheller, Cornell University  
 Christopher Battey, University of Washington  
 Elizabeth Beckman, University of New Mexico  
 Lisha Berzins, University of Northern BC  
 Alyssa Borowsek, University of Connecticut  
 Andy Boyce, University of Montana  
 Kathryn Brautigam, University of Arkansas at Monticello  
 Laure Cauchard, Université de Montréal  
 Antonio Celis-Murillo, University of Illinois at Urbana-Champaign  
 Kristen Covino, University of Southern Mississippi  
 Merle Crombie, University of British Columbia  
 Claire Curry, University of Manitoba  
 Catherine Dale, Queen's University  
 Petra Deane-Coe, Cornell University  
 Alana Demko, University of Windsor  
 Rachael Derbyshire, University of Guelph  
 Bryant Dossman, The Ohio State University  
 Shawn DuBay, University of Chicago  
 Rachael Eaton, Michigan State University  
 Elisa Elizondo, Oklahoma State University  
 Lisa Elliot, University of Minnesota  
 Katie Faust Stryjewski, Boston University  
 Molly Folkerts, Louisiana State University in Shreveport  
 Erick Gonzalez-Medina, UNAM  
 Brendan Graham, University of Windsor  
 David Grunzel, University of Maine  
 Sarah Gutowsky, Dalhousie University  
 Tyler Hallman, Oregon State University  
 Michael Hallworth, Smithsonian Conservation Biology Institute  
 Rebecca Harris, University of Washington  
 Michael Harvey, Louisiana State University  
 Kristina Hick, University of Windsor



Amanda Holland, University of Georgia/SREL  
 Kate Johnson, University of British Columbia  
 Kristin Jones, Oregon State University  
 Luke Klicka, San Diego State University  
 Eunbi Kwon, Kansas State University  
 Diane Landoll, University of Oklahoma  
 Anna Lehmiche, University of Georgia  
 Carl Lunblad, University of Idaho  
 Sarah MacLean, UC Berkeley  
 Jennifer Malpass, The Ohio State University  
 Nicholas Mason, Cornell University  
 Jennifer McCabe, University of Maine  
 Molly McDermott, The Ohio State University  
 Ashley Ozelski, City University of New York  
 Kathryn Peiman, UCLA  
 Jennifer N. Phillips, Tulane University  
 Jennifer L. Phillips, UC Davis  
 Jeannine Randall, University of Northern BC  
 Angela Ricono, Florida Institute of Technology  
 Karla Rivera-Caceres, University of Miami  
 Angelina Ruiz-Sanchez, UNAM  
 Katharine Ruskin, University of Maine  
 Luis Sandoval, Universidad de Costa Rica  
 Jason Sardell, University of Miami  
 Sarah Saunders, University of Minnesota  
 Taza Schaming, Cornell University  
 Alma Schrage, UC Berkeley  
 Heather Skeen, Loyola University Chicago  
 David Slager, University of Washington  
 Robert Spaul, Boise State University  
 Maria Stager, University of Illinois at Urbana-Champaign  
 Rebecca Stanton, University of Saskatchewan  
 Andrew Sweet, University of Illinois at Urbana-Champaign  
 Anna Tigano, Queen's University  
 Pascal Title, University of Michigan  
 Jorge Tomasevic, University of Washington  
 Brian Trevelline, Duquesne University  
 Anna Tucker, Virginia Commonwealth University  
 Jason Unruh, University of Regina  
 Bram Verheijen, Kansas State University  
 Lauren Walker, University of Washington  
 Jennifer Walsh, University of New Hampshire  
 Shannon Walsh, San Diego State University  
 Alex Wang, University of Hawaii, Hilo  
 Ryan Weaver, Auburn University  
 Emily Weiser, University of Otago  
 Alana Westwood, Dalhousie University  
 Ben Winger, University of Chicago

## Post-doctoral Travel Award Recipients

Andrea Bonisoli-Alquati, University of South Carolina  
 Gustavo Bravo, University of Sao Paulo  
 Graham Fairhurst, University of Saskatchewan  
 Andrea Grunst, Indiana State University  
 Melissa Grunst, Indiana State University  
 Sara Kaiser, Cornell University  
 Jay McEntee, University of Arizona  
 Jeremy Ross, University of Oklahoma  
 Scott Taylor, Cornell University

## Early Professional Activities

### Early Professionals Mini-Talk Symposium

Wednesday, 24 September 2014

Walnut Dining Room, 16:00 to 17:30

The Early Professionals Committee is hosting a special symposium designed to highlight the exciting research performed by professionals in the beginning stages of their careers (i.e., post-doctoral researchers, pre-tenure faculty members, and scientists outside of academia who have received academic degrees within the past five years). During this lively and fast-paced event, early professionals will present 5-minute talks using automatically advancing slides to showcase their recent research advances, the techniques they employ, or the future directions their research will take.

Participants in the Early Professionals Mini-Talk Symposium should load their talks between 13:30 and 15:30 in the Walnut Dining Room on Wednesday, 24 September. Please note that this is a different protocol from other oral presentations. **It is mandatory that all presentations must be in a Power-Point format and use automatically advancing slides, and the entire length of the presentation must be 4 minutes and 40 seconds, total.**

### Presentation Schedule

- |             |  |
|-------------|--|
| 16:00-16:05 | Michael Butler (butlermw@lafayette.edu), <i>Providing Resources to Early-Professional Ornithologists</i>   |
| 16:05-16:10 | Brian Olsen (brian.olsen@maine.edu), <i>Evolutionary succession</i>  |
| 16:10-16:15 | Jeremy Ross (rossjd@ou.edu), <i>Avifaunal impacts of severe storms</i>   |
| 16:15-16:20 | Luis Sandoval (biosandoval@hotmail.com), <i>Avian acoustic communication ecology in tropical urban habitats</i>  |
| 16:20-16:25 | Clark Jones (bacs@uga.edu), <i>Landscape-level influence on the distribution and movement of southeastern pine forest specialists in urban and agricultural settings</i> |

*Continued on page 10...*

# General Schedule

## Monday, 22 September 2014

15:00-21:00	COS Board Meeting	Pine Dining Room
15:00-21:00	First AOU Council Meeting	Walnut Dining Room
17:00-19:30	Dinner	Aspen Dining Hall

## Tuesday, 23 September 2014

06:30-09:00	Breakfast	Aspen Dining Hall
08:00-12:00	COS/AOU Joint Meeting	Longs Peak – Diamond West
08:00-15:30	COS Board Meeting	Pine Dining Room
08:00-15:30	Second AOU Council Meeting	Walnut Dining Room
08:00-12:00	Introduction to R Workshop	Longs Peak – Chasm Lake
08:00-12:00	Bird Demography in Program R Workshop	Longs Peak – Diamond East
09:00-16:00	SCO Executive Meeting	Hobbs
11:30-13:30	Lunch	Aspen Dining Hall
12:00-17:00	Silent Auction Set Up	Assembly Hall
13:00-20:00	Registration Open	Admin Building Lobby
13:00-20:00	Presentation/Speaker Preview Room Open	Bilheimer/Dodge
13:30-17:30	Bird Demography in Program R Workshop	Longs Peak – Diamond East
14:00-18:00	Upper Beaver Meadows Field Trip	Parking Lot Across from Aspen Dining Hall
14:00-18:00	Fern Lake Trail Field Trip	Parking Lot Across from Aspen Dining Hall
16:00-17:30	AOU Fellows Meeting	Ruesch Auditorium
17:00-19:30	Dinner	Aspen Dining Hall
17:30-19:00	AOU Fellows Reception and Dinner	Rams Horn Lodge
18:30-19:00	Student Volunteer Training	Admin Building Lobby
19:00-21:00	Opening Reception and Welcome Social Mixer	Assembly Hall

## Wednesday, 24 September 2014

06:30-09:00	Breakfast	Aspen Dining Hall
07:00-08:30	YMCA Walk	Front of the livery
07:00-17:00	Child Care TBD	Location TBD
07:00-17:00	Presentation/Speaker Preview Room Open	Bilheimer/Dodge
07:00-17:30	Registration Open	Admin Building Lobby
08:00-09:30	Announcements, Plenary Address, Society Business	Ruesch Auditorium
	Speaker: H. Grant Gilchrist, Ph.D.	
09:00-21:00	Silent Auction Open	Assembly Hall
09:30-10:00	Coffee Break	Assembly Hall Foyer and Patio

10:00-12:00	Concurrent Sessions	Various Locations/Rooms
12:00-13:30	Lunch	Aspen Dining Hall
12:00-13:30	Retired Ornithologists' Lunch	Pine Dining Room
12:00-13:30	From Thesis Chapter to Published Article Workshop	Walnut Dining Room
12:00-16:00	Exhibitor Set Up	Assembly Hall
12:00-17:00	Poster Presenter Set Up	Assembly Hall
12:15-13:15	Short Film Viewing: Ornithological Adventures & Bay2Bay	Ruesch Auditorium
12:30-13:30	OSNA Meeting	Hobbs
13:30-15:30	Concurrent Sessions	Various Locations/Rooms
13:30-15:30	Early Professional Mini-Talk Presentation Loading	Walnut Dining Room
15:30-16:00	Coffee Break	Assembly Hall Foyer and Patio
16:00-17:30	Concurrent Sessions	Various Locations/Rooms
16:00-17:30	Early Professionals Mini-Talk Symposium	Walnut Dining Room
17:30-19:30	Dinner	Aspen Dining Hall
17:30-19:00	Early Professionals Social	Walnut Dining Room
17:30-19:30	Elk Echoes Field Trip	Parking Lot Across from Aspen Dining Hall
17:30-22:00	Small Owl Banding Field Trip	Parking Lot Across from Aspen Dining Hall
18:00-21:00	Posters and Exhibits Open	Assembly Hall
19:00-21:00	Poster Session and Social	Assembly Hall
21:00-22:30	Documentary- "From Billions to None"	Ruesch Auditorium

## Thursday, 25 September 2014

06:30-09:00	Breakfast	Aspen Dining Hall
07:00-08:30	All-Out Ostrich Uproar – 5K Race	YMCA Grounds
07:00-17:00	Child Care TBD	Location TBD
07:00-17:00	Presentation/Speaker Preview Room Open	Bilheimer/Dodge
07:30-17:30	Registration Open	Admin Building Lobby
08:00-09:30	Announcements, Plenary Address, Society Business	Ruesch Auditorium
	Speaker: Alexander V. Badyaev, Ph.D.	
09:00-21:00	Silent Auction Open (Bidding closes at 21:00)	Assembly Hall
09:00-21:00	Posters and Exhibits Open	Assembly Hall
09:30-10:00	Coffee Break	Assembly Hall Foyer and Patio
10:00-12:00	Concurrent Sessions	Various Locations/Rooms
12:00-13:30	Lunch	Aspen Dining Hall
12:00-13:30	Ornithologists in the Military: A Tribute	Walnut Dining Room

13:30–15:30	Concurrent Sessions	Various Locations/ Rooms
15:30–16:00	Coffee Break	Assembly Hall Foyer and Patio
16:00–17:30	Concurrent Sessions	Various Locations/ Rooms
17:30–19:30	Dinner	Aspen Dining Hall
17:30–19:00	Women in Ornithology Negotiation Session	Walnut Dining Room
19:00–21:00	Poster Session and Social	Assembly Hall
21:00–24:00	Bird Jam and Poetry Slam	Longhouse

## Friday, 26 September 2014

06:00–09:00	Upper Beaver Meadows Field Trip	Parking Lot Across from Aspen Dining Hall
06:15–09:00	Lumpy Ridge Field Trip	Parking Lot Across from Aspen Dining Hall
06:45–09:00	Lake Estes Trail Field Trip	Parking Lot Across from Aspen Dining Hall
07:00–08:30	YMCA Walk	Meet at mini-golf course, west side of Stutts Field
06:30–09:00	Breakfast	Aspen Dining Hall
07:00–17:00	Presentation/Speaker Preview Room Open	Bilheimer/Dodge
07:00–17:00	Child Care TBD	Location TBD
07:30–17:30	Registration Open	Admin Building Lobby
08:30–10:00	Concurrent Sessions	Various Locations/ Rooms
09:00–12:00	Silent Auction Pick Up	Assembly Hall
09:00–12:00	Poster/Exhibitor Teardown	Assembly Hall
10:00–10:30	Coffee Break	Assembly Hall Foyer and Patio
10:30–12:00	Announcements, Plenary Address, Society Business  Cooper Ornithological Society Young Professional Award Plenary Speakers: Conor C. J. Taff, Ph.D. & Mary Caswell Stoddard, Ph.D.	Ruesch Auditorium
10:30–11:30	Ornithologists in the Military: A Tribute	Longs Peak – Boulder Field
12:00–13:30	Lunch	Aspen Dining Hall
12:00–17:00	Pay for Silent Auction Items	Administration Lobby (Near Registration)
12:00–13:00	SCO AGM Meeting	Longs Peak – Diamond East
12:00–13:30	AOU Editors Meeting	Walnut Dining Room
12:00–13:30	COS Editors Meeting	Pine Dining Room
12:15–13:15	Documentary-“From Billions to None”	Ruesch Auditorium
13:30–14:30	Ornithologists in the Military: A Tribute	Longs Peak – Boulder Field

13:30–15:30	Concurrent Sessions	Various Locations/ Rooms
15:30–16:00	Coffee Break	Assembly Hall Foyer and Patio
16:00–17:30	Concurrent Sessions	Various Locations/ Rooms
17:00–18:30	Young Professional Award Reception (Invitation Only)	Pine Dining Room
17:30–19:30	Dinner	Aspen Dining Hall
17:30–19:30	Elk Echoes Field Trip	Parking Lot Across from Aspen Dining Hall
18:00–20:00	Student-Professional Social	Assembly Hall
20:00–22:00	Quiz Bowl	Assembly Hall

## Saturday, 27 September 2014

06:30–09:00	Breakfast	Aspen Dining Hall
07:00–17:00	Child Care TBD	Location TBD
07:00–17:00	Presentation/Speaker Preview Room Open	Bilheimer/Dodge
07:30–17:30	Registration Open	Admin Building Lobby
08:00–09:30	Announcements, Plenary Address, Society Business  Speaker: Susan M. Haig, Ph.D.	Ruesch Auditorium
09:30–10:00	Coffee Break	Assembly Hall Foyer and Patio
10:00–12:00	Concurrent Sessions	Various Locations/ Rooms
12:00–13:30	Lunch	Aspen Dining Hall
12:15–13:15	Documentary-“From Billions to None”	Ruesch Auditorium
13:30–15:30	Concurrent Sessions	Various Locations/ Rooms
14:30–17:00	Student Judging Room	Pine Dining Room
15:30–16:00	Coffee Break	Assembly Hall Foyer and Patio
16:00–17:30	Concurrent Sessions	Various Locations/ Rooms
18:00–19:00	Reception	Assembly Hall Foyer and Patio
19:00–22:00	Closing Banquet	Assembly Hall

## Sunday, 28 September 2014

06:30–09:00	Breakfast	Aspen Dining Hall
06:30–12:30	Barr Lake State Park Field Trip	Parking Lot Across from Aspen Dining Hall
07:00–12:00	Ouzel Falls Field Trip	Parking Lot Across from Aspen Dining Hall
07:00–12:00	Alpine Tundra Half-Day Field Trip	Parking Lot Across from Aspen Dining Hall
07:00–16:00	Alpine Tundra Full-Day Field Trip	Parking Lot Across from Aspen Dining Hall

Continued from Page 7...

- 16:25-16:30 John Withey (jwithey@fiu.edu), *Are migratory birds in North America mistiming their arrival due to climate change, and do they suffer fitness consequences as a result? Testing the phenological mismatch hypothesis at an unprecedented scale*
- 16:30-16:35 Elizabeth Gow (eliz.gow@usask.ca), *Tracking Northern Flickers throughout the annual cycle: linking parental effort to migration*
- 16:35-16:40 Scott Taylor (sat235@cornell.edu), *Avian hybrid zones as windows on evolution and ecology*
- 16:40-16:45 Emma Greig (eig9@cornell.edu), *The transition from behavioral ecologist to citizen science project manager*
- 16:45-16:50 Eugenia Zarza (zarzafranco@oxy.edu), *Towards a comparative phylogeography of the Mexican Highlands: insights from genomic ultraconserved elements in a bird species complex*
- 16:50-16:55 Iris Levin (Iris.Levin@Colorado.edu), *Measuring social interactions in barn swallows (*Hirundo rustica*) using Encounternet proximity tags*
- 16:55-17:00 Helen Sofaer (helen@rams.colostate.edu), *Resource acquisition and allocation in avian life history theory*
- 17:00-17:05 Raymond Danner (danner.ray@gmail.com), *The evolutionary ecology of changing thermal and auditory landscapes*
- 17:05-17:10 James Maley (jmaley@oxy.edu), *Clapper and King Rail hybrid zone genomics*
- 17:10-17:15 Clark Rushing (rushingc@si.edu) *Combining high-resolution remote sensing data with information about migratory connectivity to quantify full annual-cycle drivers of population trends within demographically-defined populations of a migratory bird*
- 17:15-17:20 Richard Feldman (richardf@eco.umass.edu), *Habitat selection at the scale of species ranges*
- 17:20-17:25 Monica Iglecia (miglecia@manomet.org), *Supporting shorebirds on farms and wetlands from coast to coast*
- 17:25-17:30 Graham Fairhurst (graham.fairhurst@usask.ca), *Advances in ecophysiology using feather corticosterone*

## Early Professionals Social

Wednesday, 24 September 2014  
Walnut Dining Room, 17:30-19:00

Immediately following the Early Professionals Mini-talk Symposium, the Early Professionals Committee will host a social event for all individuals in the beginning stages of their careers (including those who did not present during the symposium). At this event, early professionals will mingle with each other and with senior scientists from academia, government co-ops,

and the public sector. This informal event will allow those in the beginning stages of their careers to receive advice and guidance from senior scientists who have served on search committees and tenure review committees as well as to network with their fellow early-stage colleagues. No need to RSVP – just show up. Light snacks and beer will be available.

## Student Activities

The combined student affairs committees of the three societies have planned several events to promote students getting to know each other and to provide opportunities for students and professionals to interact in relaxed settings. In addition, they have organized events to raise funds supporting student travel and activities at future meetings.

### Silent Auction

Items in the Silent Auction will be on display throughout the conference in the Assembly Hall.

Attendees may bid on items between 9:00 and 21:00 Wednesday and 9:00 and 21:00 Thursday.

Potential buyers should record their bids on sheets accompanying each item; we ask participants to consider meaningful increments in bidding. Bidding will close at 21:00 Thursday following the conclusion of the poster presentations. Winners should check to see if their bids won and must pay for and pick up purchased items between noon and 17:00 Friday. Proceeds from the auction will be used to fund student travel and participation at future meetings. This is organized by the joint Student Affairs Committee.

### Student-Professional Social

Friday, 26 September 2014  
Assembly Hall, 18:00 to 20:00

This informal social event will provide an opportunity for students to meet and discuss common research interests with professionals in their field. Academic and non-academic professionals from a diversity of research backgrounds will be in attendance. Students are invited to casually move between tables throughout the event as they wish. Dinner and drinks will be served. This social will immediately be followed by the Quiz Bowl. Registration is free and open to students on a first-come, first-served basis. Space is limited. For additional information and to RSVP, please email SPDinner.SAC@gmail.com.

### Quiz Bowl

Friday, 26 September 2014  
Assembly Hall, 20:00 to 22:00

This event is organized by the joint Student Affairs Committee. In this exciting Jeopardy-style quiz bowl—always one of the most popular events at the meeting—self-assembled teams of three



will first compete in a “pub-trivia” style round of ornithology and bird-influenced pop-culture trivia, ranging from categories like Taxonomy to Avian Anagrams. The winning teams from the open, pub-style round will then play in the head-to-head championship round for great prizes. Faculty and other professionals are encouraged to participate as well! Drinks and light snacks.

## Field Trips

A range of popular half-day to full-day field trips both before and after the meeting are available to help conference attendees sample the avifauna of this beautiful region. Pre-registration is required and many are already sold out. For more complete information on the field trips and participant instructions, please go to: <http://www.birdmeetings.org/aoucossco2014/trips.asp>

Except for the morning bird walks on the YMCA grounds, the field trips will depart from the parking lot across from the Aspen Dining Hall.

### Upper Beaver Meadows Field Trip

*Offered at two different times:*

Tuesday, 23 September, 14:00 to 18:00 (No meal provided.)

Friday, 26 September, 06:00 to 09:00 (Box breakfast provided.)

*Trip Description:* Round trip is an easy two mile hike. Along a stream, the Ponderosa pines, aspens and Lodgepole pines mix with open meadow in the glacial valley to provide a very attractive habitat for a wide variety of birds. Area great for viewing elk, coyotes, badgers, long-tailed weasels, and marmots. Bird species we expect to see include: Mountain and Western Bluebirds, Ruby-crowned Kinglets, American Three-toed woodpeckers, Hairy and Downy woodpeckers, Pygmy, White-breasted and Red-breasted nuthatches; Townsend's Solitaires, Mountain Chickadees, Dark-eyed Juncos, Brown Creepers.

### Fern Lake Trail Field Trip

Tuesday, 23 September, 14:00 to 18:00 (No meal provided.)

*Trip Description:* Round trip three miles. A wide, relatively flat trail passes partially through a wild fire that burned in the fall of 2012. Besides bird watching, there will be an opportunity to discuss succession, fire ecology and climate change that relates to birds. The trail will pass through Rocky Mountain maples, aspen, and conifers and parallels the Big Thompson River. A diversity of species are expected including Three-toed Woodpecker, Dusky Grouse, American Dipper, Mountain Chickadee, Clark's Nutcracker, Stellar's Jay, Red Crossbill, and Pine siskin.

### YMCA Walks

*Offered at two different times. (No meal provided.)*

Wednesday, 24 September, 07:00 to 08:30

Friday, 26 September, 07:00 to 08:30

*Wednesday Trip Description:* Meet in front of the livery. Easy

to moderate walk in montane forest. Species we could see include Pygmy Nuthatch, Mountain Chickadee, Yellow-rumped Warbler, Violet-green Swallow, Pine Siskin, Townsend's Solitaire, Cooper's and Sharp-shinned hawk, Northern Goshawk.

*Friday Trip Description:* Meet at the mini-golf course on the west side of Stutts Field just north of the Administration Building. Easy to moderate hiking in montane and riparian forest. Species we may see include Pygmy Nuthatch, Mountain Chickadee, Yellow-rumped Warbler, other warbler migrants, Violet-green Swallow, Pine Siskin, Townsend's Solitaire, American Dipper, Cooper's Hawk, Sharp-shinned Hawk, Northern Goshawk.

### Elk Echoes Field Trip

*Offered at two different times. (Box dinner provided.)*

Wednesday 24, September, 17:30 to 19:30

Friday, 26 September, 17:30 to 19:30

*Trip Description:* Bull elk bugle to gather harems of cows, their haunting cries ringing through the evening twilight. Join a Park Ranger to learn about elk adaptations, migration, and mating behavior. A 30-minute talk starts at 18:00. This trip requires minimal hiking. Be prepared for cooler temperatures in the evening.

### Small Owl Banding Field Trip with Scott Rashid

*Wednesday, 24 September, 17:30 to 22:00 (Box dinner provided.)*

*Trip Description:* Field trip participants will observe/assist Scott Rashid (naturalist, artist, bander) in setting up and opening mist nets, measuring and banding and releasing any Boreal owls captured, and closing the nets.

### Lumpy Ridge Field Trip

*Friday, 26 September, 06:15 to 09:00 (Box breakfast provided.)*

*Trip Description:* This is a round trip 2-mile moderate hike. Lumpy Ridge has the highest density of nesting raptors in the park and is also the most popular world class rock climbing area in the park. Hike will focus on raptor management. Expected species include Peregrine Falcon, Prairie Falcon, Golden Eagle, Cooper's Hawk, Northern Goshawk, and Red-Tailed Hawk that nest in the area. Migrating raptors include Osprey, Bald Eagle, Turkey Vulture, Sharp-Shinned Hawk, Ferruginous Hawk, Swainson's Hawk, and American Kestrel.

### Lake Estes Trail and Mathews-Reeser Bird Refuge Field Trip

*Friday, 26 September, 06:45 to 09:00 (Box breakfast provided.)*

*Trip description:* The trail is paved, mostly flat and easy walking along 2-mile stretch between Estes Park Visitor Center and Lake Estes Dam. The trail travels through the Mathews-Reeser Bird Sanctuary, a riparian area the Big Thompson River and the north side of Lake Estes. Late migrants may

include western warblers, Swainson's and Hermit Thrush, Mountain Bluebird, American and Lesser Goldfinch, Osprey, Broad-tailed Hummingbird. Resident species include Northern Shrike, Steller's Jay, Belted Kingfisher, Bald Eagle, Pygmy Nuthatch, Clark's Nutcracker.

### **Barr Lake State Park Field Trip with Trip to Denver International Airport**

*Sunday, 28 September, 06:30 to 12:30 (Box breakfast and lunch provided.)*

*Trip description:* We will arrive at Barr Lake State Park at 8:00 AM, visit the Nature Center (bathrooms), then stroll to the banding station with easy hiking. There are big cottonwoods along the shore of this large reservoir and mist nets set among thick willows. In late September, peak migration will likely have passed, but Rocky Mountain Bird Observatory will still be catching and banding a variety of passerines such as Orange-Crowned, Yellow-rumped and Wilson's warblers, a variety of sparrows, Green-tailed and Spotted towhees, Hermit Thrushes, Ruby-crowned Kinglets, and subspecies of Dark-eyed Junco. Extensive mud-flats in the reservoir may yield gulls, terns, shorebirds, Western Grebes, a large gulp of Double-crested Cormorants, American White Pelican.

### **Ouzel Falls Trail Field Trip**

*Sunday, 28 September, 07:00 to 12:00 (Box breakfast and lunch provided.)*

*Trip Description:* Three to five mile moderate hike. This area supports one of the most diverse bird breeding habitats in Colorado. Black bear and moose are occasional, and elk and mule deer are common. The trail passes through Lodgepole Pine, Englemann and Blue Spruce and three waterfalls. Species we expect to see include: MacGillivray's, Virginia's, Wilson's, Townsend's and Yellow warblers; Mountain and Western bluebirds, Broad-tailed Hummingbird. Resident species include Townsend's Solitaire, Cassin's and House finch, American Dipper (Ouzel), Mountain and Black-capped chickadee, Brown Creeper, Pygmy, White-breasted and Red-breasted nuthatch, Gray Jay, Clark's Nutcracker, Steller's Jay, Pine Siskin, Black-billed Magpie; and Hairy, Downy and Three-toed woodpecker.

### **Alpine Tundra – Half-day Field Trip**

*Sunday, 28 September, 07:00 to 12:00 (Box breakfast provided.)*

*Trip Description:* Trail Ridge Road is the highest contiguous highway in the United States with its highest point slightly over 12,000 ft. The ½ day trip will include about 1 mile of moderate to hard hiking; the elevation will affect you, so drink a lot of water, take frequent breaks, and pace yourself. Species we expect to see include: White-Tailed Ptarmigan, Brown-Capped Rosy Finches, possibly the more irregular Gray-Crowned Rosy-Finch, White-Crowned Sparrow, Dark-Eyed Junco. At the Alpine Visitor Center, you may see Swainson's Hawks migrating through, or the Ferruginous Hawk or Golden Eagle hunting yellow-bellied marmots in the basin below. While driving along Trail Ridge Road, other raptors of the tundra are

prairie falcons and Northern harriers. Other wildlife includes elk and possibly bighorn sheep.

### **Alpine Tundra – Full-day Field Trip**

*Sunday, 28 September, 07:00 to 16:00 (Box breakfast and lunch provided.)*

*Trip Description:* See description for ½-day Alpine Tundra trip. Other wildlife includes elk in rut, so expect to hear bugling bulls at Milner Pass, possibly bighorn sheep, and in Kawun-eeche Valley possibly moose and elk as well as bluebirds, Clark's Nutcracker, Red Crossbills and more.

## **Organized/Off-site Trips**

Arrangements for any of the following trips originating outside of the YMCA of the Rockies must be made directly with the trip organizers who are listed with each of the write-ups. Attendees of these field trips will also be responsible for your own transportation to and from the locations listed for the field trips. For additional information please contact the organizer shown. Complete information on these trips also is located at <http://www.birdmeetings.org/aoucossco2014/offsite-trips.asp>

### **Pre- and Post-Meeting Birding Opportunities at Sylvan Dale Guest Ranch**

#### **Trip #1 – Pre-Meeting Field Trip**

*Tuesday, 23 September 2014*

8:00: Meet at Sylvan Dale Guest Ranch. Welcome and introduction by David Armstrong, Resident Naturalist: "The Foothills of the Southern Rockies, Hinge-point of North America"

9:00 to 11:00: Natural History of the Foothills: interpretive hike focused on birds and general ecology of the "hinge-point of North America." Led by Dr. Ron Harden (renowned local birder) and Dr. David Armstrong (retired CU-Boulder ecology/evolution professor, co-author of Mammals of Colorado).

#### **Trip #2 – Post-Meeting Field Trip**

*Sunday, 28 September 2014*

7:00: Meet at Sylvan Dale Guest Ranch. Welcome and introduction by David Armstrong, Resident Naturalist

8:00 to 11:00: Natural History of the Foothills of the Front Range: interpretive hike focused on birds and general ecology of the "hinge-point of North America." Led by Dr. Ron Harden (renowned local birder) and Dr. David Armstrong (Sylvan Dale's resident naturalist, retired CU-Boulder ecology/evolution professor, co-author of Mammals of Colorado).

Lodging and meals may be available at Sylvan Dale. Please contact the ranch for pricing and availability. Accommodations are also available in Loveland, just 6 miles east of the ranch; Estes Park is about 30 minutes west of the ranch. A \$10 fee will be charged per person for folks interested in the talks and hikes on the 23rd or 28th.

Contact: Laura Armstrong, Heart J Center for Experiential Learning at Sylvan Dale Ranch, [laura@heartjcenter.org](mailto:laura@heartjcenter.org), [www.heartjcenter.org](http://www.heartjcenter.org)

### **Chico Basin Ranch**

*Monday, 29 September 2014, 7:30 to 15:00*

Round trip of 70 miles from Colorado Springs or 200 miles from Denver. Provide your own transport (high clearance vehicle recommended).

The ranch lies in a major flyway for migrant birds and Rocky Mountain Bird Observatory runs a banding station here in spring and fall. Expect to see many empids, sparrows, warblers, thrushes in the hand and there will be a good chance for a rarity.

Contact: Joe Roller, Board member, Rocky Mountain Bird Observatory and Colorado Field Ornithologists, [jroller9@gmail.com](mailto:jroller9@gmail.com)

### **Northeast Colorado Reservoirs**

*Tuesday, 23 September 2014, 7:30 to 15:30*

Cost : \$10 Habitat Stamp (free for seniors)

Birders on this trip will provide their own vehicles and plan to arrive in Colorado on Monday, 22 September 2014. They arrange for lodging in the town of Sterling, CO, which is about a 2.5 hour drive from Denver International Airport.

Bill Kaempfer of the Colorado Field Ornithologists will meet the group Tuesday morning at 7:30 AM at the Sterling Visitor's Center. Participants will carpool to hotspots along the South Platte River corridor from just west of Sterling (Prewitt Reservoir) to far northeast Colorado (Tamarack Ranch, Red Lion State Wildlife area, and Jumbo Reservoir).

Food provided: You're on your own. Bring a bag lunch, snacks, and beverages from stores in Sterling.

Contact: Joe Roller, Board member, Rocky Mountain Bird Observatory and Colorado Field Ornithologists, [jroller9@gmail.com](mailto:jroller9@gmail.com)

### **Quetzal Meeting Tours From Estes Park**

#### **Trip #1 - Pre-meeting All-Day Colorado Mountain Tour from Estes Park**

*Tuesday, 23 September 2014, 6:00 am to 17:00*

Depart YMCA of the Rockies in Estes Park, and visit a variety of trails and public access picnic areas at elevations between 7000 and 11000 feet in the southern part of Rocky Mountain National Park in Boulder County and in the Indian Peaks Wilderness.

#### **Tour #2 - Post-meeting All-Day Colorado Mountain Tour from Estes Park**

*Sunday, 28 September 2014, 6:00 to 18:00. Return time on Sunday tour may be later (18:00 or 19:00).*

Depart YMCA of the Rockies in Estes Park, and visit a variety of trails and public access picnic areas at elevations between 7000

and 11000 feet in the southern part of Rocky Mountain National Park in Boulder County and in the Indian Peaks Wilderness.

Contact: Quetzal Tours at [info@quetzal-tours.com](mailto:info@quetzal-tours.com).

#### **Tour #3 - Post-meeting All-Day Colorado Prairie Tour from Estes Park**

*Sunday, 28 September 2014, 6:00 to 17:00. Return time on Sunday tour may be later (18:00 or 19:00).*

Drop-off Option: Either Denver Airport hotel district or Estes Park.

Tour will visit a variety of prairie habitats including grasslands, Great Plains reservoirs, and riparian woodlands that serve as major migration stopover sites for both land birds and shorebirds.

Contact: Quetzal Tours at [info@quetzal-tours.com](mailto:info@quetzal-tours.com).

### **Quetzal Pre-Meeting Tours from Denver**

#### **Tour #1 – Pre-Meeting – 3 Day/2 Night Colorado Birding Tour from Denver**

*Sunday, September 21, 2014, 7:00 Sunday - 17:00 Tuesday*

Tours starts with pickup at Denver International Airport hotel district. Lodging both nights at Horseshoe Lodge, Pueblo Mountain Park in south-central Colorado. Day 1, visits Eastern plains migrant traps and prairie grasslands; John Martin Reservoir for migrant shorebirds (20 species). Overnight at Pueblo Mountain Park Horseshoe Lodge. Day 2, mountain birding around Rye; Pueblo Reservoir State Park; owling in Wet Mountains. Day 3, morning birding at migrant traps at Chico Basin Ranch; visit to Rocky Mountain Bird Observatory banding station. Drop-off at Estes Park lodging in time to attend conference opening reception.

Meals provided: Breakfasts and dinners at Horseshoe Lodge.

#### **Tour #2 – Pre-meeting All-Day Tour from Denver - Colorado Prairie Tour**

*Tuesday, September 23, 2014, 6:00 - 17:00 (pickup Denver International Airport hotel district, drop-off Estes Park lodging)*

Tour will visit a variety of prairie habitats including grasslands, Great Plains reservoirs, and riparian woodlands that serve as major migration stopover sites for both land birds and shorebirds.

Meals provided: Bag lunch.

Contact: Quetzal Tours at [info@quetzal-tours.com](mailto:info@quetzal-tours.com).

#### **Quetzal Post-Meeting 3 Day/2 Night Colorado Birding Tour from Denver**

*Sunday, September 28, 2014, 6:30 Sunday - 17:00 Tuesday. 6:30 departure from DIA Hotel district, return 17:00 Tuesday.*

Tour starts with pickup at Denver International Airport hotel district. Lodging both nights at Horseshoe Lodge, Pueblo Mountain Park in south-central Colorado. Day 1, visits Eastern plains migrant traps and prairie grasslands; John Martin Reservoir for migrant shorebirds (20 species). Overnight at Pueblo Mountain



Park Horseshoe Lodge. Day 2, mountain birding around Rye; Pueblo Reservoir State Park. owl in Wet Mountains. Day 3, morning birding at migrant traps at Chico Basin Ranch; visit to Rocky Mountain Bird Observatory banding station

Contact: Quetzal Tours at [info@quetzal-tours.com](mailto:info@quetzal-tours.com).

## Self-guided Trips

Following are some birding options near Estes Park to explore on your own before, during or after the AOU meeting. Locations near Estes Park outside of Rocky Mountain National Park offer excellent birding opportunities during fall migration. In late-September, many of the species that breed in the area have already migrated south. However, this is a very exciting time to go birding in the area with migrants from just about anywhere in the country coming through the region. Recommended locations and distances from Estes Park:

1. Pawnee National Grassland (including Crow Valley) - 83.6 miles (1 hr 49 min) to Briggsdale, CO which is adjacent to Crow Valley (USFS campground).

The campground at Crow Valley is an excellent location to search for migrating landbirds and one of the best migrant "traps" in Colorado. The grasslands around Crow Valley are excellent examples of shortgrass prairie.

2. Jackson Lake State Park – driving distance: 92 miles (2 hr 3 min).

Located in the central flyway, this reservoir is outstanding for migrating shorebirds and waterbirds and the trees around the reservoir are good for migrating landbirds.

3. North Park – 116 miles (to Walden is 2 hr 43 min).

Greater Sage-Grouse and other sage species can be found here and reservoirs are great for breeding and migrating waterbirds.

4. Barr Lake State Park – 70 miles (1 hr 43 min).

This reservoir is great for breeding and migrating shorebirds and waterbirds and the trees surrounding the reservoir are great for migrating landbirds (RMBO banding station will be operating mornings).

5. Cherry Creek State Park – 79 miles (1 hr 47 min).

Another reservoir surrounded by forests that is great for migrating waterbirds and landbirds.

6. Hereford Ranch (Wyoming) – 88 miles (to Cheyenne, Wyoming is 1 hr 40 min).

This private ranch welcomes birders and is one of the best places in the region for migrating landbirds.

7. Matthews-Reeser Bird Sanctuary and Lake Estes – In Estes Park

The area where the Big Thompson River flows into Lake Estes has attracted many rare landbirds the past few years. In the event of foul weather mountain birds can be present also. Look for waterbirds on Lake Estes.

8. Watson Lake State Wildlife Area – 43.6 miles (to Bellvue, CO is 1 hr 12 min)

The short trail along the Poudre River is great for migrating landbirds and the cliffy areas along the river are great for raptors and aerial insectivores. The lake could have a good diversity of waterbirds in the fall.

9. Cameron Pass – 90 miles (2 hrs 7 min) on the way to Walden, CO.

This is one of the best places in Colorado for Boreal Owl. All of the expected mountain species can be found here.

10. Poudre River Trail – 42 miles (1 hr 10 min) to convenient parking lot at Lee Martinez Park.

A great place to take a walk and bird as you go, looking for migrating landbirds.

To explore other options, please visit Colorado Field Ornithologists county-birding website: <http://coloradocountybirding.com/>

## Workshops

A number of workshops will be featured throughout the week. For more information about the content of the various workshops, please go to: <http://www.birdmeetings.org/aoucoss-co2014/workshops.asp> or contact one of the instructors listed below. In some cases, preregistration is required and some may be already full.

### Introduction to R

Tuesday, 23 September 2014

Longs Peak – Chasm Lake, 08:00 to 12:00

Workshop Instructors: Nicholas Mason ([nicholas.albert.mason@gmail.com](mailto:nicholas.albert.mason@gmail.com)); Shawn Billerman ([s.m.billerman@gmail.com](mailto:s.m.billerman@gmail.com)); Tara Conkling ([tconkling@cfr.msstate.edu](mailto:tconkling@cfr.msstate.edu)); Kristen Corvino ([covinnok@gmail.com](mailto:covinnok@gmail.com)); Brian Gerber ([bgerber@colostate.edu](mailto:bgerber@colostate.edu)); Brett Sandercock ([bsanderc@ksu.edu](mailto:bsanderc@ksu.edu)); Jason Tack ([jasontack@gmail.com](mailto:jasontack@gmail.com)); and Jennifer Timmer ([timmerj3@gmail.com](mailto:timmerj3@gmail.com)).

Description: This half-day workshop will introduce attendees to R, a free, open-source statistical software program. The workshop is aimed at students, post-doctoral researchers, and early-career professionals who have little or no experience with R. The main objective will be to confer a basic familiarity and understanding of what R is, what it is capable of, and learning how to perform some basic tasks and functions using rudimentary data structures. Attendees will be asked to bring their own laptops and have R installed prior to attending the workshop. Participants will generate their own code and also follow scripts that have been provided by the instructors.

### Bird Demography in Program R (Two Workshops)

Tuesday, 23 September 2014

Longs Peak – Diamond East, 08:00 to 12:00



Tuesday, 23 September 2014

Longs Peak – Diamond East, 13:30 to 17:30

Workshop Instructors: Brett K. Sandercock, bsanderc@ksu.edu; Viviana Ruiz-Gutierrez, vruizg@colostate.edu; and Conor P. McGowan, cgowan@usgs.gov

Quantitative tools for analyses of demographic data are an important area of active development. Many of the new statistical tools have been adapted as packages for Program R, an open-source software that is freely available to the scientific community. Learning new demographic analyses can be challenging if the concepts are technically difficult or if the software tools are not well-documented. The purpose of this workshop is to introduce some of the new packages in Program R that can be used for estimation of demographic parameters and population models. A series of instructors will present short lectures on background concepts, and lead participants through example analyses in Program R. Our workshop on Bird Demography in Program R will complement a planned symposium on Quantitative Advances and Applications in Avian Ecology. Attendees will be asked to bring their own laptops and have R installed (also MARK executable if using RMark) prior to attending the workshop.

### **From Thesis Chapter to Published Article: Navigating the Publication Process for New Authors**

Wednesday, 24 September 2014

Walnut Dining Room, 12:00 to 13:30

Workshop Instructors: Mark Hauber, Editor-in-Chief of *The Auk: Ornithological Advances*, mark.hauber@hunter.cuny.edu and Phil Stouffer, Editor-in-Chief of *Condor: Ornithological Applications*, pstouffer@lsu.edu

Description: As the editors in chief of the newly renamed society journals, Mark Hauber (Editor-in-chief of *The Auk: Ornithological Advances*) and Phil Stouffer (Editor-in-chief of *Condor: Ornithological Applications*) are excited to lead this workshop/discussion forum and share their experiences and recommendations about the publication process. This drop-in workshop is aimed at young investigators (graduate students and postdocs) at AOU/COS, focusing on a successful strategy to prepare manuscripts for submission and working through the review/revision process. You need bring only your curiosity and questions. A buffet line will be set up for lunch at this workshop.

### **Negotiation Strategies for Women in Ornithology**

Thursday, 25 September 2014

Walnut Dining Room, 17:30 – 19:00

Workshop Instructor: Kimberly Sullivan, kim.sullivan@usu.edu

Description: A dinner-hour symposium that will feature a multi-media presentation and opportunities for women scientists to practice negotiation skills. A reception and dinner buffet will be available.

## *Special Events*

### **Documentary-From Billions to None:**

#### **The Passenger Pigeon's Flight to Extinction**

Three separate showings in Ruesch Auditorium:

Wednesday, 24 September 2014..... 21:00 to 22:30

Friday, 26 September 2014 ..... 12:15 to 13:15

Saturday, 27 September 2014..... 12:15 to 13:15

A showing of this one-hour documentary is planned as part of the symposium "A Century Later: Lessons from the Extinction of the Passenger Pigeon." Three separate showings are planned so that as many attendees as are interested can attend.

On September 1, 1914, the last known passenger pigeon in existence died in the Cincinnati Zoo. Martha, named after Martha Washington, was the last of her kind, an amazingly abundant species that went from billions that darkened the entire sky - to none - in a matter of decades. What happened to the passenger pigeon? You could say we happened. From *Billions to None: The Passenger Pigeon's Flight to Extinction* follows naturalist and author Joel Greenberg on a quest to reveal the incredible story of how the most abundant bird species in North America became extinct by human hands in a geologic heartbeat.

Planned for a fall 2014 broadcast on public television, this one-hour documentary retells the remarkable tale of the passenger pigeon and explores its striking relevance to conservation challenges today. Interweaving rare archival material, computer animation that brings the flocks of billions to life, stunning nature footage and aerial cinematography, the film recreates the awe-inspiring reality of these birds, and presents passionate scientists, artists, teachers and young people who reveal why, 100 years later, it's important to remember the event - and act. You can watch the latest video trailer at <https://vimeo.com/91863820> and check out the website at: [e-int.com/billionstonone](http://e-int.com/billionstonone)

### **Short-Film Presentations**

Wednesday, 24 September 2014

Ruesch Auditorium, 12:15 to 13:15

#### **Ornithological Adventures: A short film from Equatorial Guinea**

This past November, three young ornithologists set out on a 10-day expedition to Equatorial Guinea, a little-known but ornithologically-rich country in West Central Africa. Equatorial Guinea is a unique case: it is tiny, Spanish-speaking and brings in enormous revenues generated from offshore oil reserves, making it the richest country per capita in Africa. The country is developing at a furious pace, with new four-lane highways suddenly crisscrossing formerly inaccessible areas. In this fast-paced documentary, director Mo Twine captures the adventures of these three ornithologists as they attempt to establish a precedent for ornithology

in a remote corner of Africa. For questions about the film, please contact Dr. Luke Powell at [luke.l.powell@gmail.com](mailto:luke.l.powell@gmail.com).

**Bay2Bay: A short film about the work of VCU's Biology and Life Sciences programs with Prothonotary Warblers**  
Preservation of habitats critical to migratory birds is important to environmental, economic, and cultural well-being of nearby communities and requires cross-cultural cooperation. Bay2Bay documents Virginia Commonwealth University biologists studying Prothonotary Warblers, Neotropical songbirds, from breeding grounds in the U.S. along the Chesapeake Bay to wintering grounds in Panama mangroves along Panama Bay. For questions about the film, please contact Laura Chessin, [lchessin@vcu.edu](mailto:lchessin@vcu.edu).

### **Ornithologists in the Military: A Tribute**

Thursday, 25 September 2014  
Walnut Dining Room, 12:00 to 13:30

Do you realize how many professional ornithologists have served in the military through the eras of World War I, World War II, Korea, Vietnam, and Iraq/Afghanistan? Come see a special tribute that has been masterfully produced by Dr. David Manuwal.

This 40-minute presentation will also be shown in Longs Peak in the Boulder Field Room on Friday, 26 September 2014, at 10:30 and 13:30.

### **All-Out Ostrich Uproar 5K Race**

Thursday, 25 September 2014  
YMCA Grounds, 7:00 to 8:30

The 28th running of AOU's traditional 5K (3.1 miles) fun race will take place early morning, Thursday, September 25, before morning talks and with time for participants to snag breakfast afterwards. The course will wind in and around the YMCA grounds (located at ~8,010 ft/2,440 m of elevation) on paved and unpaved roads with some short stretches on trails to keep you hopping. The course winds through the forest in places and soaring views of the Rockies promise to make this an Uproar participants will not soon forget. Water will be available on the course. The \$20 race participation fee benefits student scholarships and includes eligibility for ostrich-egg prizes. Those who sign up on site will not receive a t-shirt. For additional details, please contact Kate Huyvaert ([kate.huyvaert@colostate.edu](mailto:kate.huyvaert@colostate.edu)). The breakfast buffet in Aspen Dining Hall will be available for runners that morning until 9:30.

## ***Social Events***

Several events will have beer and wine served for your enjoyment. Alcohol is not available for purchase on the YMCA campus. Please keep in mind that the inventory is limited and more importantly, you are at high altitude and low humidity. Please drink responsibly.

### **AOU Fellows Reception and Dinner**

Tuesday, 23 September 2014, Invitation Only  
Rams Horn Lodge, 17:30 to 19:00

Cost: \$30.00, Registration: Pre-Registration Required

### **Opening Reception and Welcome Social Mixer**

Tuesday, 23 September 2014  
Assembly Hall, 19:00 to 21:00

This is a welcome to incoming participants and guests and a chance to visit with your friends and colleagues. Light snacks and drinks will be available.

### **Retired Ornithologists' Lunch**

Wednesday, 24 September 2014  
Pine Dining Room, 12:00 to 13:30

Emeritus ornithologists' are invited to dine together to reconnect with each other over lunch. Pre-registration is recommended.

### **Poster Session Receptions**

Wednesday and Thursday evenings, 24 and 25 September 2014  
Assembly Hall, 19:00 to 21:00

Drinks, lights snacks, and hundreds of posters about birds to view and discuss with authors.

### **Bird Band Jam and Poetry Slam**

Thursday, 25 September 2014  
Longhouse, 21:00 to Midnight

Join us at the Bird Band Jam on Thursday evening after the poster session. We'll have great live music plus original poetry. Bring your guitar or your fiddle! Write a winning Haiku about your research! Or just come and dance to the sounds of Finnders & Youngberg plus other local bands.. Fifteen dollars covers admission plus snacks and two drinks. Local beer and live music played by your colleagues – what could be better? Estes Park seems like the perfect place to continue the Bird Jam that happened in Vancouver, B.C. The Rocky Mountains, big porches with fireplaces, and cool autumn air – perfect for music anytime during the meeting! Cost: \$15.00 Registration is required no later than noon on Wednesday.

### **Young Professional Award Reception**

Friday, 26 September 2014, Invitation Only  
Pine Dining Room, 17:00 to 18:30

### **Closing Banquet and Awards Ceremony**

Saturday, 27 September 2014  
Assembly Hall, 19:00 to 22:00

At this closing banquet, awards will be presented for student presentations, the Ned Johnson Young Investigator Award, and prestigious lifetime achievement awards of the societies.

## Photo Contest

The meeting location this year is truly stunning. We'd like to see what you see. Take a picture – with your phone or big fancy camera – and send it to the photo committee. Pictures taken prior to and/or outside of the meeting are welcomed, too. Send a copy of your photo along with your ballot number (which shows you paid the entry fee) to [birdmeetingphotos@gmail.com](mailto:birdmeetingphotos@gmail.com) and tell us into which category you would like to enter. After making sure the photo is not career-limiting in any way, a member of the photo committee will post it to the meeting Facebook page where meeting attendees will vote by “liking”. We will also have locations for physical ballots in the Assembly Hall. The pictures with the greatest number of “likes” in each category on each day will be entered to win the overall category prize which will be determined via “liking” on Saturday. The picture with the most votes in each category will win a fabulous prize – or, you know, a prize. The top vote-getter in each category throughout the week will be eligible for Best in Show. Categories include: Best Bird, Best Nest, Best Representation of a Bird (cloud/rock/stick that looks like a bird, sculpture or drawing of a bird), Best Selfie (extra credit if there's a bird involved), Best Photobomb, Best Landscape/Nature, Best Candid, Best Fieldwork, and Best Photo from Phone. The committee will also decide on a committee favorite. A slideshow will run at the banquet of all the submitted pictures. There will be a \$2 entry fee for each photo submitted. Proceeds will go to the Student Activities Committee.

## *Vendor & Sponsor Exhibitors*

Exhibits will be located in the Assembly Hall where the socials, coffee breaks and poster sessions will be held and will be open Wednesday at 18:00 through Friday at noon.

### Society Exhibits

#### American Ornithologists' Union

Website: <http://www.aou.org/>

#### Central Ornithology Publication Office

Website: <http://aoucospubs.org/>

#### Cooper Ornithological Society

Website: <http://www.cooper.org/>

#### Society of Canadian Ornithologists

Website: [www.sco-soc.ca/](http://www.sco-soc.ca/)

### Sponsor Exhibits

#### Colorado State University

Warner College of Natural Resources

Natural Resources 101

Fort Collins, CO 80523

Contact: Julie Orwick

Phone: (970) 491-0979

Email Address: [Julie.Orwick@colostate.edu](mailto:Julie.Orwick@colostate.edu)

#### USGS Fort Collins Science Center

2150 Centre Ave. Building C

Fort Collins, CO 80526-8118

Contact: David Hamilton

Phone: 970-226-9383

Email Address: [hamiltond@usgs.gov](mailto:hamiltond@usgs.gov)

#### University of Colorado Denver

Department of Integrative Biology and Graduate School

1151 Arapahoe, SI 2071

Denver, CO 80204

Contact: Michael Wunder

Phone: 303-556-8870

Email Address: [Michael.Wunder@ucdenver.edu](mailto:Michael.Wunder@ucdenver.edu)

#### University of Wyoming

Department of Ecosystem Science and Management

Dept 3354

1000 E. University Ave.

Laramie, WY 82071

Contact: Dr. John Tanaka

Phone: 307-766-5130

Email Address: [jtanaka@uwyo.edu](mailto:jtanaka@uwyo.edu)

### Exhibitors

#### Cornell University Press

512 E State Street

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Contact: David W Mitchell

Phone: 607-277-2338 x-248, Fax: 607-277-2397

E-Mail Address: [dwm23@cornell.edu](mailto:dwm23@cornell.edu)

#### Environment for the Americas

5171 Eldorado Springs Drive

Boulder, CO 80303

Contact: Dr. Susan Bonfield

Phone: 970-393-1183

Email Address: [sbbonfield@gmail.com](mailto:sbbonfield@gmail.com)

#### Hawk-Owl Systems

454 Parma Drive

Essex, MT 59916

Contact: Doug Bonham

Phone: 406-830-0373

E-Mail Address: [doug@hawkowl.com](mailto:doug@hawkowl.com)

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## *Special Guest of the Cooper Ornithological Society*



The Cooper Ornithological Society, whose name commemorates an early Western naturalist, James Graham Cooper, has grown from a small band of naturalists in 1893 to the internationally recognized scientific society it is today. The success of the COS depends essentially on those who, first and foremost, are passionate about birds. Today we are re-

minded of our heritage and that passion for birds: Joining us

at this year's meeting is a young bird enthusiast, David Martin Cuntz, Jr., who is the great-great-great nephew of James Graham Cooper. James Graham Cooper's father – Martin's great, great, great, great grandfather – is William Cooper, namesake of the Cooper's Hawk, and founder of the New York Natural History Lyceum. Martin is an avid birder whose natural history project "Saving the California Condor" was selected by his school this year to present at the Fort Lewis College - Colorado Southwest Regional History Day. This summer, Martin got caught up in banding birds at a MAPS station near his home in Durango, CO. Besides a passion for birds, Martin loves playing the banjo. Find a minute to talk birds and banjo with Martin; he, his Dad and his sister will be playing at the Bird Band Jam.

## *Plenary Sessions*

There will be a plenary address, followed by society business, the mornings of 24, 25 and 27 September in the Ruesch Auditorium, adjacent to the dining hall. On Friday morning, the plenary time slot will be devoted to presentations of the 2014 winners of the Cooper Ornithological Society's Young Professional Award. The three invited plenary speakers this year are as follows:

*Wednesday, 24 September 2014, Ruesch Auditorium, 08:00 to 09:30*

**H. Grant Gilchrist, Ph.D.**

Research Scientist, National Wildlife Research Centre, Environment Canada, Ottawa, Ontario, Adjunct Professor, Carleton University, Ottawa, Ontario, Acadia University, Wolfville, Nova Scotia, Canada

Dr. Gilchrist leads multi-disciplinary research programs which investigate the behavior, demographics, migration, and distribution of Arctic seabirds, particularly in relation to perturbations such as disease and climate change. Several of his projects focus on seabird harvest by Aboriginal Peoples and include collaboration with First Nation organizations in order to devise conservation and management strategies that incorporate both sustainable harvest levels and Aboriginal traditions. Grant Gilchrist received a B.S. (honors) in Biology from Trent University and his Ph.D. in Zoology from the University of British Columbia. After completing his doctorate, he was hired by Environment Canada. In addition to his adjunct appointments, Dr. Gilchrist is an Honorary Research Associate at the University of New Brunswick. He is the current Chair of the Circumpolar Seabird Expert Group under the Arctic Council's umbrella biodiversity organization, Conservation of Arctic Flora and Fauna (CAFF); a member of the Sea Duck Joint Venture Scientific Technical Committee; and, chair of the Northern Studies Trust Committee. In addition, he is co-chair of the 2014 Sea Duck Conference, which will be held in Iceland.



*Presentation:* Research in a Changing Arctic: Conservation Biology of the Northern Common Eider Duck

*Abstract:* We often view the Arctic as a pristine wilderness largely free of environmental threats. Times are changing. I will review the effects of three factors currently affecting eider duck (*Somateria mollissima*) populations in Arctic Canada: harvest, emerging diseases, and changing predatory regimes. Infectious disease is a potentially important driver of wildlife population dynamics; however the demographic effects of disease in free-ranging hosts have proven difficult to quantify. Avian cholera is a highly virulent disease of birds that has circulated among common eider populations in Europe and North America for several decades. The disease has recently appeared in the Canadian Arctic where high annual mortality, coupled with near total reproductive failure on affected colonies, has raised fears over local extirpation and severe population decline. In this study our group used data from a marked population of northern common eiders (*S. m. borealis*) to estimate vital rates before and during a multi-year cholera outbreak. Nesting success remains below replacement level and there has been no evidence for population recovery. Climate change can also influence species directly by modifying their physical environment or indirectly by altering interactions among organisms. Changes affecting the ecology of top predators are expected to be a particular concern because variation in predator behaviour has the potential to restructure food webs and lead to cascading ecological impacts on prey populations. Polar bears (*Ursus maritimus*) are a top predator in the circumpolar Arctic and are adapted to use sea ice as a platform to hunt seals. Advancement in the timing of spring sea ice break-up has recently reduced the access of seals to bears, and has been associated with increased bear predation of eider eggs on islands in summer. The proportion of days on which bears are present on eider duck colonies before their median annual laying date has more than doubled during the past two decades. Nest success has also declined raising concern about the long-term viability of ground-nesting bird populations such as eiders that are unaccustomed to such intensive depredation by bears.

Thursday, 25 September 2014, Ruesch Auditorium, 08:00 to 09:30



**Alexander V. Badyaev, Ph.D.**  
Professor, Department of Ecology and Evolutionary Biology, University of Arizona, Tucson, Arizona USA

Dr. Badyaev's innovative research examines mechanisms of inheritance and developmental biology to understand response to selection, with specific focus on the origin of adaptations. His work has explored adaptation and evolution in birds with respect to plumage colors, the interaction between epigenetic and genetic inheritance, the role of stress

in evolution, behavioral and life history strategies, and sexual dimorphism. Alexander Badyaev received his B.S. and M.S. degrees in Mathematical Biology and Comparative Anatomy and Population Ecology, respectively, from Moscow State University; M.S. in Biological Sciences from the University of Arkansas; and, Ph.D. in Organismal Biology and Ecology from the University of Montana. In 2002, he joined the Department of Ecology and Evolutionary Biology at the University of Arizona as an Assistant Professor. Dr. Badyaev has been widely recognized for his research contributions; among his achievements, he was elected as a Fellow of the AOU in 2009, a Packard Fellow in Science and Engineering in 2005, a Fellow of the American Association for the Advancement of Science in 2012, and as a Kavli Foundation Fellow of the National Academy of Sciences in 2013.

*Presentation:* Colors of the Past: Can ancient metabolic pathways direct contemporary avian color evolution?

*Abstract:* Essentially all known genomic and metabolic elements that make birds birds, have originated outside the context of avian evolution such that the tremendous phenotypic diversity in avian form and function is produced by rearrangement and differential expression of these elements. We routinely use the well-known discrepancy between genomic and phenotypic evolution to uncover correct historical relationships between phenotypically convergent species. A less common approach is to see how the legacy of such ancient "non-avian" acquisitions has biased evolution of birds. For example, is avian carotenoid-color diversification directed by the structure of a carotenoid genomic network that evolved in the context of bacterial diversification, has remained virtually unchanged since, and was fully in place a billion years prior to the origin of birds? What fraction of this network has already been explored in avian evolution? Are birds less diverse in color now than in the past? What fraction of this color space or combination of its elements are inaccessible to birds? And what would the avian world look like if such constraints did not exist?

Saturday, 27 September 2014, Ruesch Auditorium, 08:00 to 09:30



**Susan M. Haig, Ph.D.**  
Supervisory Research Wildlife Biologist, USGS Forest and Rangeland Ecosystem Science Center, Professor of Wildlife Ecology, Oregon State University, Corvallis, Oregon USA

Dr. Haig's research interests are broadly within the fields of conservation genetics and the ecology, behavioral ecology, and population biology of species at risk, especially shorebirds. Her specific interests include the population genetics and demographics of small populations, impacts of environmental stressors such as climate change on population persistence, and the conservation implications of

avian population movements and dynamics. Susan Haig received her B.S. degree in Biology from Northland College and her Ph.D. in Biology from the University of North Dakota. She spent the next two years as a postdoctoral fellow at the Smithsonian Institution, and continues her affiliation as a Research Associate. In 1989, she became Assistant Professor/Assistant Wildlife Unit Leader at Clemson University; and, in 1994, she moved to her current position at Oregon State University. In 2011, she received the Loye and Alden Miller Research Award from the Cooper Ornithological Society, which recognizes lifetime achievement in ornithology, and has served as president of the American Ornithologists' Union since 2012.

**Presentation:** Avian Conservation Geneticists: A Jack of All Trades, A Master of ...Pretty Many!

**Abstract:** This century's explosion of molecular technology has thrown down the gauntlet to avian behavioral ecologists, landscape ecologists, toxicologists, policy-makers, and other scientists not traditionally aligned with molecular biology in a challenge to use these new tools to answer questions previously unattainable in their field. As conservation geneticists, we tap into many of these fields to address the ever-changing and always critical questions related to conservation of endangered birds. Therefore, at the beginning of a study, and often to assist U.S. Fish and Wildlife Service in their evaluation of how to list a taxon under the ESA, we assess taxonomic units. Most recently, we examined whether Micronesian Kingfishers (*Todiramphus cinnamomina*) from Guam, Pohnpei, and Palau were a species or subspecies before translocations plans are implemented. We also need to know a species history. Thus DNA from museums skins have shown us that there was more genetic diversity in Least Terns (*Sterna antillarum*) 60 years ago than in the 21st century. We found significant recent population bottlenecks in Northern Spotted Owls (*Strix occidentalis caurina*) and the decline in California Condors (*Gymnogyps californianus*) was so fast that they did not suffer from population genetic differentiation. Understanding a species relationship to the landscape helps prioritize management actions. For example, using circuit theory to examine dry tropical forest fragmentation in Brazil's Cerrado region and genetic structure in Pfrimer's Parakeet (*Pyrrhura pfrimeri*) lead us to warn managers of the speed of the species decline. In our Great Basin work, we are using molecular markers to predict changes in waterbird food distribution across the region as a result of changing climate. Our work is not complete unless we take the broadest view possible and understand the migratory connectivity of a species ([www.migratoryconnectivityproject.org](http://www.migratoryconnectivityproject.org)). A good example is our Dunlin (*Calidris alpina*) study where we have developed genetic markers so we can now tell people in California when birds carrying a disease from Asia are on their way. Hopefully, it is clear that conservation geneticists need many skills in addition to molecular expertise. A well-rounded education in ornithology can provide these tools.

## Cooper Ornithological Society

### *Young Professional Award Plenary Speakers*

Friday, 26 September 2014, Ruesch Auditorium, 10:30 to 12:00



**Conor C. J. Taff, Ph.D.**

USDA NIFA Postdoctoral Fellow,  
Department of Wildlife, Fisheries,  
and Conservation Biology, University  
of California-Davis

Dr. Taff studies the expression and evolution of sexually selected signals from an integrative perspective. His dissertation research focused on

multi-modal signaling in a population of individually marked Common Yellowthroat warblers (*Geothlypis trichas*). Dr. Taff investigates both the proximate and ultimate factors that control the physiology of signal production and influence selection on signaling traits. His analyses of signal production and survival—coupled with oxidative stress and telomere dynamics—link signaling directly with life history evolution and senescence. Conor Taff received his B.A. in Environmental Sciences from Skidmore College in 2005 and his Ph.D. in Animal Behavior from the Department of Evolution & Ecology at the University of California—Davis in 2013. For his postdoctoral research, he is currently studying social behavior and disease transmission in wild American Crows (*Corvus brachyrhynchos*).

**Presentation:** Sex, Signals, and Senescence: Telomere Dynamics and Oxidative Stress Link Ornament Expression to Survival and Lifetime Reproductive Success in the Common Yellowthroat (*Geothlypis Trichas*)

**Abstract:** In order for receivers to continue responding to sexual signals, signals must be honest on average, suggesting that some mechanism prevents signalers from cheating. For species that breed over multiple years, physiological aging processes—such as accumulated oxidative damage and telomere erosion—may ensure signal honesty by enforcing a trade-off between investment in sexual displays and investment in longevity. Much recent attention has focused on the way that signal investment alters oxidative metabolism by increasing the production of reactive oxygen species or by decreasing oxidative defenses. Similarly, telomere erosion has been a recent focus of evolutionary ecologists studying life history tradeoffs, but no study to date has demonstrated a link between signal production and telomere dynamics. My collaborators and I have previously shown that, in Common Yellowthroats (*Geothlypis trichas*), oxidative damage to DNA is related to both plumage coloration and overwinter survival and that these same plumage measures are related to within

and extra-pair reproductive success. Here, we show that plumage coloration also acts as reliable signal of the rate of telomere erosion between years. Males that achieve bright plumage in their first breeding season have longer telomeres and lower rates of telomere erosion than dull males. Although dull males typically achieve brighter plumage in their second breeding season, changes in plumage brightness and relative telomere length are negatively correlated, suggesting that investment in sexual signals is costly for these males. Our findings provide a foundation for understanding the maintenance of sexual signal honesty by considering trade-offs between signal production and cell-level processes that can influence aging and reproductive senescence.



**Mary Caswell Stoddard, Ph.D.**  
Junior Fellow, Harvard Society of Fellows, Department of Organismic and Evolutionary Biology, Harvard University

Dr. Mary Caswell Stoddard uses a multidisciplinary approach to explore key questions in evolution, behavior and sensory systems, emphasizing

avian vision and communication. As an undergraduate at Yale University, she investigated avian color vision, devising a color quantification tool called TETRACOLORSPACE. For her Ph.D. research at the University of Cambridge, Dr. Stoddard combined techniques from sensory ecology, computer science and engineering to study the evolution of avian egg coloration and structure. In particular, Dr. Stoddard investigated the Common Cuckoo (*Cuculus canorus*), a brood parasite that lays its eggs in the nests of unrelated species. With colleagues, she has developed new methods for quantifying pattern and color mimicry, including a novel pattern recognition tool, NATURE-PATTERNMATCH, to determine how host birds recognize their own distinctive egg patterns. At Harvard University, Dr. Stoddard is currently pursuing interdisciplinary work on the genomic and structural basis of eggshell evolution.

*Presentation:* Avian Vision and the Coevolution of Bird Eggs: Cuckoo Mimicry and Host Defenses

*Abstract:* Coevolutionary arms races are a powerful force in evolution, and brood parasite-host dynamics provide a key example. Different host-parasite dynamics of the Common Cuckoo, *Cuculus canorus*, lay eggs — which are often mimetic — in the nests of other species. Most studies of egg mimicry focus on subjective human assessments, which fail to account for avian vision. Here, my colleagues and I develop new techniques for quantifying egg pattern and color mimicry by Cuckoos, revealing that mimicry is better when hosts show strong rejection. Once Cuckoos evolve mimicry, can their hosts fight back by evolving highly recognizable signatures on their own eggs? We introduce a new computer program, NaturePatternMatch, which approximates visual and cognitive processes involved in recognition tasks. Hosts subjected to the best Cuckoo mimicry

have evolved highly recognizable egg pattern signatures as a defense. Overall, these findings reveal new insights into the complex coevolutionary interactions between Cuckoos and their hosts. Our approach combines behavioral ecology with new tools from sensory biology and computer vision and can be applied to diverse studies of visual signaling and recognition in the animal world.

## Meeting Abstracts & Scientific Program Addendum

Abstracts for all scientific sessions can be found at:  
<http://www.birdmeetings.org/aoucossco2014/>.

Any changes in the schedule during the meeting will be posted at this site daily and a copy of an addendum sheet will be posted as well.

## Instructions for Presenters

Concurrent sessions will be held in breakout rooms in the Long's Peak and Emerald Mountain lodges and the Ruesch Auditorium.

*Please note: Internet access may not be available in the meeting rooms.*

### Preparing For Your Presentation

#### Advance Submission Via Email

Presenters who wish to submit their presentations in advance can email them to [michellesherry@ceavco.com](mailto:michellesherry@ceavco.com). Please use the subject line 2014 AOU/COS/SCO Presentation with your last name. Online submission of your presentation files via email is not required, but is strongly encouraged as presenters who send in their files via email will have a faster check in at the Presentation Room (Bilheimer/Dodge-located behind the Ruesch Auditorium). Please make sure to email all media files required for your presentation. Deadline for online submission is Friday, 19 September at 17:00.

#### On-Site Submission and Presentation Review/Editing

Check in at the Presentation Room (Bilheimer/Dodge, located behind the Ruesch Auditorium) to submit your files, if you did not do so in advance, and to preview your presentation. You must come to the Presentation Room by 17:00 the day before your talk. The CEAVCO technicians will assist with the upload of your files and provide the opportunity to preview and/or edit your presentation as necessary.

If you submit your files in advance, you may edit your presentation up to the deadlines above. After you have submitted your files and have finished reviewing and/or making changes to your presentation, you must tell CEAVCO personnel that you have viewed and approved your presentation file before you leave the Presentation Room. CEAVCO will then transfer the updated file to your meeting room.



### Presentation Room Hours

The Presentation Room will be open as follows:

Tuesday, 23 September 23.....	13:00 to 20:00
Wednesday, 24 September.....	7:00 to 17:00
Thursday, 25 September.....	7:00 to 17:00
Friday, 26 September .....	7:00 to 17:00
Saturday, 27 September .....	7:00 to 17:00

### Quality Control

Giving your presentation a last “once-over” in the Presentation room is the most important step you will take to ensure your success. When reviewing your presentation, make sure all fonts, images, and animations appear as expected and that all audio or video clips are working properly. The computers in the meeting room are the same as the computers in the Presentation Room therefore:

**IF THE PRESENTATION DOES NOT PLAY PROPERLY IN THE PRESENTATION ROOM, IT WILL NOT PLAY PROPERLY IN THE MEETING ROOM.**

### Security

Presenters are required to provide identification in order to submit their presentation as well as access it in the Presentation Room. Cameras and video equipment are not permitted in the Presentation Room.

All files are deleted at the end of the conference, unless permission has been granted to the conference association to retain the presentation files.

### Your Meeting Room Experience

Your session room laptop will have your presentation clearly viewable on the desktop. Simply double-click your presenta-

tion and control it from the podium using the computer mouse or the up/down/right/left keys on a keyboard. Audio Visual technicians will be located in close proximity to all meeting rooms and will be available to provide assistance if required.

### Contact Information

For questions regarding email submission or preparing your presentation, please contact: Michelle Sherry, CEAVCO, (michellesherry@ceavco.com); Phone: 1-303-507-2109.

## Poster Instructions

Poster sessions are scheduled Wednesday and Thursday evenings from 19:00 to 21:00 in the Assembly Hall. Posters must be set up on Wednesday from 12:00 to 17:00. Posters will remain up Wednesday afternoon through Thursday evening. Odd-numbered posters will be presented on Wednesday, and even-numbered posters will be presented on Thursday. Posters must be removed from the Assembly Hall before noon on Friday.

To achieve maximum exposure of posters, the Assembly Hall will also be the location of our daily coffee breaks, vendor exhibits, and silent auction. Limited snacks, beer, wine, and soft drinks will be available during the poster sessions.

Your poster must fit on one side of the board provided. Poster boards are landscape format with dimensions 8 ft. wide x 4 ft. tall (2.4 m wide x 1.2 m tall). To ensure the poster will fit, presenters should design posters to be at least 2 inches (5 cm) smaller on each margin. Posters that are in the 3 to 4 ft. tall x 4 to 5 ft. wide range will allow the presenter room to stand next to the poster without blocking its line of sight. Push pins will be provided for mounting.



YMCA Main Grounds Map

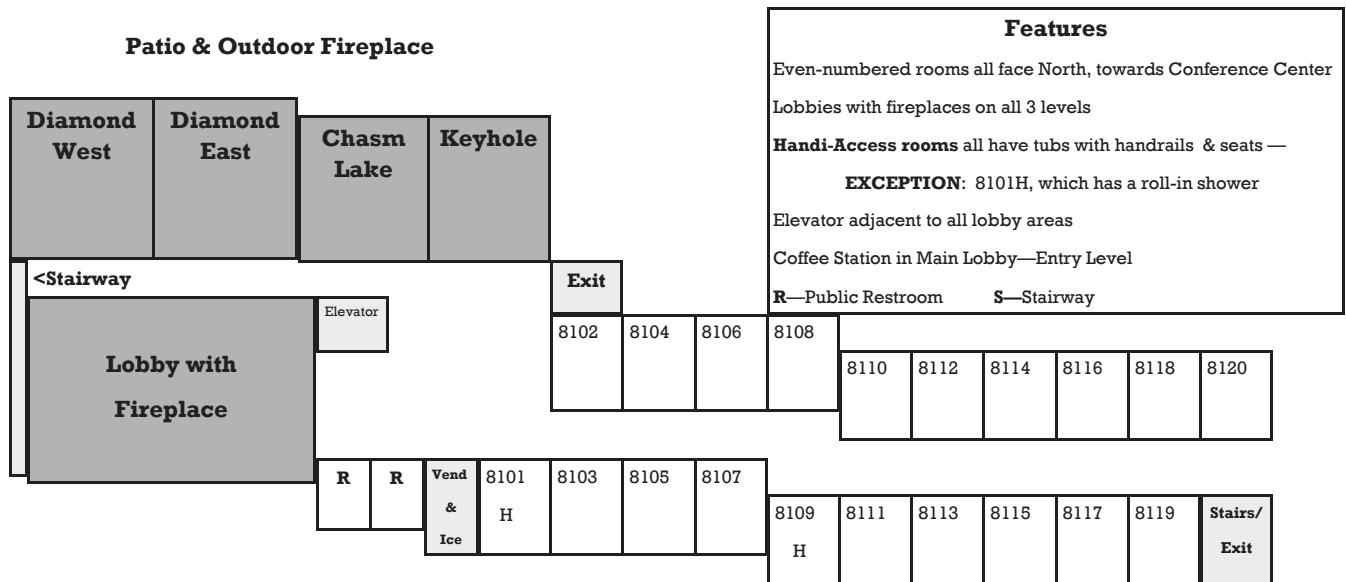


Administration Building	1
ATM	1
Alpen Inn	2
Aspen Dining Room	3
Conference Hall	4
Conference Office	1
Mooz Family Craft & Design Center	5
Dakota Meeting Cabin	6
Deer Ridge Lodge	7
Eagle Cliff Lodge	8
Emerald Mountain Lodge	9
Gaylord First Aid Station	10
General Store	1
Group Reservations Office	11
Hempell Family Program Building	12
Henry Dorsey Jr. Memorial Pool	13
Hyde Chapel/Dannen Chapel	14
Laundry	15
Leggett Christian Center	16
Lewis A. Dick Hall	17
Longhouse Conference Center	18
Long Peak Lodge	19
Lula W. Dorsey Museum	20
Maintenance	21
Moude Jellison Library	22
Mt. Ypsilon Lodge	23
Pattie Hyde Barclay Retreat Cabin	24
Photo Park	25
Pine Room Restaurant	26
Post Office	26
Pharmigan Meeting Cabin	27
Rainbow Lodge	28
Ramshorn Lodge	29
Recreation Center	18
Retreat Cabins (8-bedroom)	30
State Meeting Cabins	31
Sweet Memorial Program Building	32
Schlesman Executive Offices	11
Waller G. Reusch Auditorium	34
Williams Conference Center	35
Wind River Lodge	36
Women's Building	37

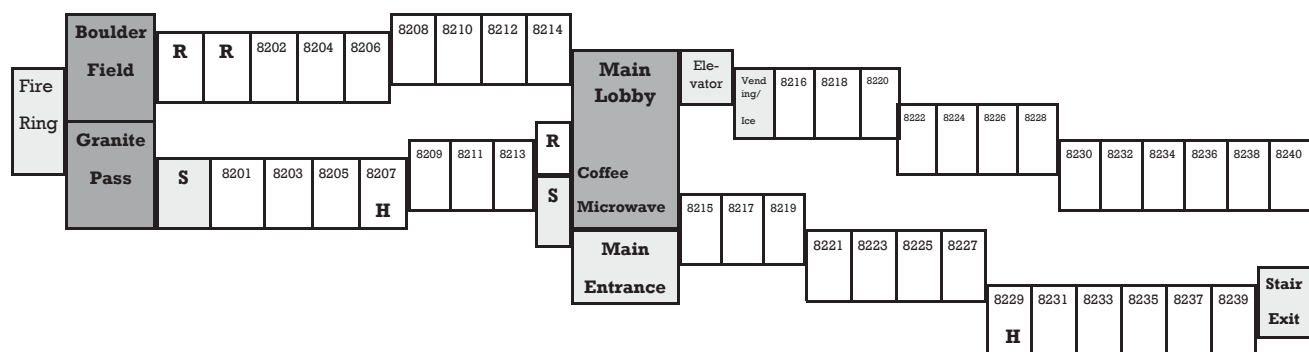
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# Long's Peak Lodge

## Lower Level (8100's)



## Entry Level (8200's)



&lt;To Emerald Mountain Lodge

**Parking**

To Ram's Horn Lodge&gt;

# Wednesday Morning Schedule

Room	Ruesch Auditorium	Longs Peak–Diamond East	Emerald Mountain–Bible Point	Longs Peak–Diamond West	Longs Peak–Chasm Lake	Longs Peak–Keyhole	Longs Peak–Granite Pass	Longs Peak – Boulder Field
	<b>S02: Ecological Principles of Emerging Infectious Diseases in Birds</b>	<b>S03: Ecology and Conservation of Aerial Insectivores</b>	<b>C04A: Population Genetics and Genomics</b>	<b>S12: Frontiers in Modeling Bird Populations</b>	<b>S20: Avian Interactions With Energy Infrastructure: Challenges of Being Green</b>	<b>C06A: Seabird Tracking, Shorebird Migration</b>	<b>C15B: Signal Evolution</b>	
Mod	S.Shriner	N. Michel	E. Derryberry	C. McGowan	J. Smith	P. Jodice	G. E. Hill	
10:00	<b>Franklin, A. B.</b> ; Huyvaert, K. P.; Root, J. J.; Shriner, S. A.: OPENING REMARKS: ECOLOGICAL PRINCIPLES OF EMERGING INFECTIOUS DISEASES IN BIRDS SYMPOSIUM	<b>Michel, N. L.</b> ; Clark, R. G.; Hobson, K. A.; Morrissey, C. A.: POPULATION DYNAMICS OF AERIAL INSECTIVOROUS BIRDS: OVERVIEW AND CLIMATIC DRIVERS <sup>5</sup>	<b>Chevion, Z. A.</b> ; Jones, M. R.; Carling, M. D.: POPULATION GENOMICS OF HIGH ALTITUDE ADAPTATION IN RUFOUS-COLLARED SPARROWS (ZONTRICHIA CAPENSIS).	<b>Arnold, T. W.</b> : ESTIMATING ANNUAL SURVIVAL FROM BAND RECOVERY DAT <sup>7</sup>	<b>Smith, J. P.</b> ; Seay, J. L.; Zirpoli, J. A.; Terrill, S. B.; Boroski, B. B.: INITIAL RESPONSES OF RAPTORS AND OTHER BIRDS TO DEVELOPMENT OF A UTILITY-SCALE PHOTOVOLTAIC SOLAR FACILITY IN GRASSLAND HABITAT IN CALIFORNIA <sup>7</sup>	<b>Gutowsky, S. E.</b> ; Leonard, M.; Jonsen, I.; Shaffer, S.: SHIFTING ACTIVITY BUDGETS WITHIN THE OVERWINTER PHASE OF NON-BREEDING IN TWO SISTER ALBATROSS SPECIES	<b>Wilkins, M. R.</b> ; Joseph, M. B.; Hubbard, J. K.; Safran, R. J.: MULTIMODAL SIGNALING IN THE NORTH AMERICAN BARN SWALLOW: INFLUENCES OF INTRA- AND INTERSEXUAL SELECTION ON SIGNAL EVOLUTION	
10:15	<b>Hudson, P. J.</b> ; Almborg, E. S.; Manlove, K. R.; Aiello, C. M.: PATTERNS AND ECOLOGICAL PRINCIPLES OF DISEASE INVASION <sup>7</sup>		<b>Semenov, G.</b> ; Drovetski, S. V.; Gay, L.; Derryberry, G.; Khaydarov, D. R.; Malykh, I. M.: WHEN WAGTAILS GET UNMASKED: HYBRIDIZATION, INTROGRESSION AND INCOMPLETE LINEAGE SORTING BETWEEN THE WHITE AND THE MASKED WAGTAILS			<b>Jodice, P.</b> ; Ronconi, R.; Rupp, E.; Freifeld, H.; Wallace, G.: FIRST SATELLITE TRACKS FOR BLACK-CAPPED PETRELS		
10:30		<b>Silverio, C. A.</b> ; Stutchbury, B. J.: FITNESS COSTS OF MALARIA PARASITES IN A DECLINING SWALLOW SPECIES	<b>Billerman, S. M.</b> ; Carling, M. D.: GENOMIC ANALYSIS OF A SAPSUCKER HYBRID ZONE	<b>Dinsmore, S. J.</b> : ADVANCES AND TECHNIQUES IN NEST SURVIVAL MODELING <sup>7</sup>	<b>DeVault, T. L.</b> ; Belant, J. L.; Blackwell, B. F.; Martin, J. A.: BIRD USE OF SOLAR PHOTOVOLTAIC INSTALLATIONS AT U.S. AIRPORTS: IMPLICATIONS FOR AVIATION SAFETY AND BIRD CONSERVATION <sup>7</sup>	<b>Jodice, P.</b> ; Mackin, W.; Satge, Y.; Harrison, A. L.; Phillips, R.: USE OF MID-LATITUDE AND PELAGIC WATERS BY BAHAMIAN SEABIRDS	<b>Bulluck, L. P.</b> ; Foster, M. J.; Huber, S.: CAROTENOID CONTENT IN FEATHERS INDICATES REPRODUCTIVE SUCCESS IN EARLY BREEDING FEMALE PROTHONOTARY WARBLERS	
10:45	<b>Parker, P. G.</b> ; Levin, I. I.; Hartman, D. A.; Jaramillo, M. C.; Asigau, S. S.: PLASMODIUM IN GALAPAGOS BIRDS: DO WE KNOW ENOUGH ABOUT ITS TRANSMISSION ECOLOGY TO CONSIDER INTERVENTION? <sup>7</sup>	<b>Hund, A. K.</b> ; Hubbard, J. K.; Safran, R. J.: PARASITE-MEDIATED SEXUAL SIGNALING: WHAT DO FEMALE'S GAIN?	<b>Beckman, E. J.</b> ; Witt, C. C.: INTROGRESSION AMONG HIGH ANDEAN SISKINS			<b>Churchwell, R. T.</b> ; Powell, A. N.; Kendall, S.; Brown, S.: ASSESSING EASTERN BEAUFORT SEA DELTAS AS FALL STOPOVER SITES FOR SEMIPALMATED SANDPIPERS	<b>Reudink, M. W.</b> ; McKellar, A. E.; Marini, K. L.; McArthur, S.; Marra, P. P.; Ratcliffe, L. M.: INTER-ANNUAL VARIATION IN AMERICAN REDSTART (SETOPHAGA RUTICILLA) PLUMAGE COLOUR IS ASSOCIATED WITH RAINFALL AND TEMPERATURE DURING MOULT	
11:00		<b>Hobson, K. A.</b> : COMBINING GEOLOCATORS AND STABLE ISOTOPES TO INVESTIGATE MIGRATORY CONNECTIVITY IN BARN SWALLOWS	<b>Derryberry, E. P.</b> ; Lipshutz, S. E.: ASYMMETRIC GENE FLOW AND TERRITORIAL RESPONSE TO SONG ACROSS A SUBSPECIFIC CONTACT ZONE IN THE WHITE-CROWNED SPARROW	<b>Sandercrook, B. K.</b> ; Winder, V. L.; Hagen, C. A.; Haukos, D. A.; Kesler, D. C.; Patten, M. A.; Powell, L. A.: REGIONAL VARIATION IN THE SEASONAL SURVIVAL OF PRAIRIE CHICKENS <sup>7</sup>	<b>Dietsch, T. V.</b> : AVIAN INTERACTIONS WITH UTILITY-SCALE SOLAR PROJECTS IN SOUTHERN CALIFORNIA <sup>7</sup>	<b>Hope, D. D.</b> ; <b>Drever, M. C.</b> ; Buchanan, J. B.; Lemon, M. J.: ESTIMATING MIGRATORY PROGRESSION OF SHOREBIRDS THROUGH FIELD COUNTS ALONG THE NORTHERN PACIFIC FLYWAY	<b>Lantz, S. M.</b> ; Karubian, J. O.: ADVENTITIOUS MOLT INCREASES REDNESS IN CAROTENOID-BASED PLUMAGE OF A TROPICAL PASSERINE	
11:15	<b>Samuel, M. D.</b> ; Atkinson, C. T.; LaPointe, D. A.; Woodworth, B. L.; Liao, W.; Hart, P. J.: DISEASE IN HAWAIIAN FOREST BIRDS: CURRENT PATTERNS AND FUTURE THREATS <sup>7</sup>	<b>Bradley, D. W.</b> ; Clark, R. G.; Dawson, R. D.; Taylor, C. M.; Winkler, D. W.; Norris, D. R.: PRIMARY PRODUCTIVITY AND VARIABLE MOLT STRATEGIES IN AN AERIAL INSECTIVORE (Abstract ID# 16122)	<b>Sardell, J. M.</b> ; Uy, J. A.: ASYMMETRIC GENETIC AND PHENOTYPIC INTROGRESSION IN A RECENTLY-ESTABLISHED HYBRID ZONE BETWEEN MYZOMELA HONEYEATERS			<b>Gratto-Trevor, C. L.</b> ; Tibbitts, T. L.: POTENTIAL SEX DIFFERENCES IN MIGRATORY CONNECTIVITY OF MARBLED GODWITS BREEDING IN ALBERTA, CANADA	<b>Webster, M. S.</b> ; Reeve, H. K.: HONEST SIGNALING OF COMPETITIVE ABILITY WITHOUT DIRECT SIGNAL COSTS: HOW COMMUNICATION CAN LESSEN THE COSTLINESS OF COMPETITION	
11:30		<b>Taylor, C. M.</b> ; Laughlin, A. J.; Hall, R. J.: MIGRATORY FLOW NETWORK MODELS: PREDICTING THE MOVEMENTS AND POPULATION DYNAMICS OF AN AERIAL INSECTIVORE <sup>7</sup>	<b>Walsh, S. E.</b> ; Burns, K. J.; Cicero, C.: GENETIC AND PHENOTYPIC DIVERGENCE OF THE SPOTTED TOWHEE (PIPILO MACULATUS) ON THE CALIFORNIA CHANNEL ISLANDS	<b>Broms, K. M.</b> ; Johnson, D. S.; Altwegg, R.; Conquest, L. L.: INTRODUCTION TO BAYESIAN METHODS FOR AN OCCUPANCY MODEL <sup>7</sup>	<b>Rogers, A. M.</b> ; Gibson, M. R.; Pockette, T.; Alexander, J. L.; Dwyer, J. F.; <b>Dwyer, A. M.</b> : SCAVENGING OF MIGRATORY BIRD CARCASSES IN THE SONORAN DESERT <sup>7</sup>	<b>Gillespie, C. R.</b> ; Fontaine, J. J.: STOPOVER HABITAT DECISIONS IN A VANISHING LANDSCAPE	<b>Hill, G. E.</b> : THE DUAL NATURE OF AVIAN ORNAMENTATION	
11:45	<b>Robertson, G. J.</b> ; Whitney, H. G.; Lang, A. S.: THE ROLE OF MARINE BIRDS IN THE TRANS-ATLANTIC MOVEMENT OF AVIAN INFLUENZA VIRUSES		<b>Curry, C. M.</b> ; Patten, M. A.: EVOLUTION OF REPRODUCTIVE ISOLATION IN A TEMPORALLY COMPLEX HYBRID ZONE BETWEEN TUFTED AND BLACK-CRESTED TITMICE (PARIDAE)			<b>Johnson, A. S.</b> ; Perz, J. S.; Senner, N. R.; Nol, E.; Lovette, I. J.; Van Doren, B. M.: CONNECTING HABITATS AND HEMISPHERES: NON-STOP MIGRATORY FLIGHTS IN WHIMBRELS (NUMENIUS PHAEOPUS)	<b>Najar, N. A.</b> ; Benedict, L.: SIGNAL EVOLUTION AND SEXUAL SELECTION IN THE ROCK WREN (SALPINCTES OBSOLETUS)	





# Wednesday Afternoon Schedule

Room	Ruesch Auditorium	Longs Peak-Diamond East	Emerald Mountain-Bible Point	Longs Peak-Diamond West	Longs Peak-Chasm Lake	Longs Peak-Keyhole	Longs Peak-Granite Pass	Longs Peak – Boulder Field
	S02 Ecological Principles of Emerging Infectious Diseases in Birds	S03: Ecology and Conservation of Aerial Insectivores	S08 Alpine Ornithology in 2014: Ecological Adaptations and Challenges for Birds Breeding in Mountain Ecosystems	C17A: Breeding Biology/ Parental Care	S20: Avian Interactions With Energy Infrastructure: Challenges of Being Green	C02C: Climate Change: Wetland Species and Shorebirds	C06E: Migration Tracking, Evolution of Migration and Flightlessness	
Mod	S. Shiner	N. Michel	K. Martin	MT. Murphy	J. Smith	R. Gibbons	R.S. Terrill	
1600	<b>Owen, J. C.</b> : PRINCIPLES OF ECOIMMUNOLOGY: LESSONS LEARNED FROM EMERGING VIRAL DISEASES IN BIRDS <sup>1</sup>	<b>Smith, A. C.</b> : Hudson, M. A.; Francis, C. M.: WHAT HAPPENED IN THE '80S? NORTH AMERICAN AERIAL INSECTIVORE SPECIES SHARE COMMON CHANGE POINTS IN THEIR POPULATION TRENDS	<b>Oyle, J. C.</b> : Braun, C. E.; Fike, J. A.; Aldridge, C. L.; Warm, G. T.; Schroeder, M. A.; Benson, D. P.; Martin, K. M.: EXAMINING RANGE-WIDE CONNECTIVITY IN WHITE-TAILED PTARMIGAN USING GENETIC TECHNIQUES	<b>Power, H. W.</b> : PARENTAL ALLOCATION AND NESTLING SEX RATIOS IN MOUNTAIN BLUEBIRDS	<b>Chalfoun, A. D.</b> : Mahoney, A. C.: CONTRASTING INDIRECT EFFECTS OF WIND TURBINE COMPLEXES VERSUS NATURAL GAS DEVELOPMENT ON GRASSLAND AND SHRUBSTEPPE SONGBIRDS <sup>2</sup>	<b>Doll, A. C.</b> : Wunder, M. B.; Landolt, R. B.; Stricker, C. A.: REVEAL: TRADEOFF BETWEEN TIMING OF MIGRATORY AND NESTING BEHAVIORS	<b>Pletschet, S. M.</b> , Kelly, J. E.; Fagin, T.; Bridge, E. S.; Chilson, P. B.: BIOGEOGRAPHY AND PHENOLOGY OF A MIGRANT SONGBIRD IN NORTH AMERICA QUANTIFIED VIA WEATHER SURVEILLANCE RADAR	
1615		<b>Winkler, D. W.</b> : CLIMATE CHANGE, NESTING AND FORAGING ECOLOGY, AND GLOBAL LIFE-HISTORY VARIATION IN TACHYCINETA SWALLOWST	<b>Wilson, S.</b> ; MacDonald, E. C.; Martin, M.; Canfield, A. F.; Martin, K.: NEST SUCCESS OF ALPINE SONGBIRDS IN CENTRAL BRITISH COLUMBIA: VARIABLE RESPONSES TO HABITAT AND SEVERE WEATHER	<b>Maness, T. J.</b> : Anderson, D. J.: PREDICTORS OF JUVENILE SURVIVAL	<b>LeBeau, C. W.</b> : Beck, J. L.; Johnson, G. D.; Holoran, M. J.: SHORT-TERM IMPACTS OF WIND ENERGY DEVELOPMENT ON GREATER SAGE-GROUSE <sup>3</sup>	<b>Saunders, S. P.</b> : Cuthbert, F. J.: GENETIC AND ENVIRONMENTAL INFLUENCES ON FITNESS-RELATED TRAITS IN AN ENDANGERED SHOREBIRD POPULATION	<b>Horton, K. G.</b> : Stepanian, P. M.; Kelly, J. F.: SPRING MIGRATION ALONG THE EAST COAST, A LOOK AT REFLECTIVITY AND POLARIMETRIC MOMENTS	
1630	<b>Ardia, D. R.</b> : TEMPERATURE AND IMMUNITY: TEMPERATURE MANIPULATION DURING EMBRYONIC DEVELOPMENT AND ITS EFFECT ON THE IMMUNE SYSTEM AND THERMOREGULATORY PERFORMANCE <sup>1</sup>		<b>Jackson, M. M.</b> ; Martin, K.; Gegel, S.: CLIMATE-INDUCED HABITAT DECLINES FOR AN ENDEMIC ALPINE SPECIALIST IN A COASTAL ALPINE ECOSYSTEM	<b>Cornell, A.</b> : Williams, T. D.: INDIVIDUAL QUALITY AND MULTIPLE BROODING		<b>Gibbons, R. E.</b> : Otto, M.: CLIMATE CHANGE DRIVEN IMPLICATIONS FOR BIRDS ASSOCIATED WITH HIGH ANDEAN PEATLANDS	<b>Contina, A. J.</b> : Bridge, E. S.; Ross, J. D.; Kelly, J. F.: TESTING CANDIDATE GENES FOR MIGRATION IN THE PAINTED BUNTING	
1645			<b>Schroeder, M. A.</b> ; Shirk, A. J.; Robb, L. A.: LONG TERM CHANGES IN DISTRIBUTION, ABUNDANCE AND ELEVATION OF GROUSE IN WESTERN NORTH AMERICA: IS CLIMATE CHANGE A FACTOR?			<b>Kwon, E.</b> : Sandercock, B. K.: TEST OF ECOLOGICAL MISMATCHES IN AN ARCTIC NETWORK	<b>Johnston, R. A.</b> : Paxton, K. L.; Moore, F. R.; Smith, T. B.: IDENTIFYING GENES ASSOCIATED WITH MIGRATION IN THE SWAINSON'S THRUSH	
1700	<b>Huyvaert, K. P.</b> : Franklin, A. B.; Root, J. L.; Shiner, S. A.: CLOSING REMARKS: ECOLOGICAL PRINCIPLES OF EMERGING INFECTIOUS DISEASES IN BIRDS SYMPOSIUM <sup>1</sup>		<b>Beissinger, S. R.</b> : Tingey, M. W.: THE UPS AND DOWNS OF CLIMATE CHANGE: HETEROGENEOUS ELEVATIONAL SHIFTS OF SIERRA NEVADA BIRDS AND OTHER TAXA OVER THE PAST CENTURY	<b>Jennings, S.</b> : Varsani, A.; Dugger, K. M.; Ballard, G.; Ainley, D. G.: SEX-BASED DIFFERENCES IN ADULT PENGUIN CHICK GROWTH RATES ON ROSS ISLAND, ANTARCTICA	<b>Johnson, D. H.</b> : ESTIMATING THE FATALITY RATES: FINDING THE RIGHT DENOMINATOR <sup>4</sup>	<b>Messmer, D. L.</b> : Clark, R. G.; Slattery, S. M.; Deane, M. C.; Deane, C.: INFLUENCE OF SPRING PHENOLOGY ON POPULATION DYNAMICS OF WESTERN BOREAL FOREST WATERBIRDS: A MULTISCALE AND SPECIES INVESTIGATION	<b>Wright, N. A.</b> : Witt, C. C.: A NEW ISLAND RULE FOR BIRDS: EVOLUTION TOWARDS FLIGHTLESSNESS	
1715			<b>Jankowski, J. E.</b> : Londoño, G. A.; Robinson, S. K.: COMPETITION, NEST PREDATION, AND ELEVATIONAL RANGE LIMITS OF TROPICAL BIRDS	<b>Ross, J. D.</b> : Kelly, J. F.; Bridge, E. S.; Boyle, W. A.: SEVERE WEATHER, FAULT BARS, AND STABLE ISOTOPE SIGNATURES OF STRESS			<b>Terrill, R. s.</b> : NEOTENOUS FEATHER REPLACEMENT FACILITATES LOSS OF FLIGHT IN BIRDS	

# Thursday Morning Schedule

Room	Ruesch Auditorium	Longs Peak-Diamond East	Emerald Mountain-Bible Point	Longs Peak-Diamond West	Longs Peak-Chasm Lake	Longs Peak-Keyhole	Longs Peak-Granite Pass	Longs Peak – Boulder Field
	<b>S17: The Future of Migratory Connectivity Research</b>	<b>S10: Conservation Ecology of Montane Birds</b>	<b>S05: Molecular Biogeography and the Classification Crisis</b>	<b>C05D: Conservation: Habitat Influences</b>	<b>S01: Advances in Aerocology</b>	<b>C04C: Evolution Across Ecological and Geographical Gradients</b>	<b>C08A: Population Ecology and Demography</b>	<b>C10: Foraging Ecology</b>
Mod	E. Cohen	B. DeLuca	G. Barrowclough	K.E. Miller	R. Diehl	NR. Friedman	S. J. Dinsmore	J. O. Karibian
1000	<b>Cohen, E. B.</b> , Hostetler, J. A., Sillett, T. S., Marra, P. P., A. Sillett, T. S., Marra, P. P. A. Quantitative Definition For The Strength Of Migratory Connectivity	McFarland, K. P., Rimmer, C. C., Frey, S., DeLuca, W. V., <b>Scari, J. C.</b> : EFFECTS OF A PULSED RESOURCE IN MONTANE FIR FORESTS OF NORTHEASTERN NORTH AMERICA	<b>Klicka, J.</b> : ON THE RELATIVE WORTH OF "BIO-SPECIES", "PHYLO-SPECIES" AND SUBSPECIES IN AVIAN EVOLUTIONARY STUDIES	<b>Gallo, T.</b> , Pechlar, L. LONG-TERM METEOROLOGICAL IMPACTS ON THE ECOLOGY AND BEHAVIOR OF FLYING ANIMALS	<b>Chilson, P. B.</b> :	<b>Seeholzer, G. F.</b> , Brumfield, R. T.: IDENTIFICATION OF EXCEPTIONAL RATES OF SPECIFICATION AND NICHE EVOLUTION IN THE FAMILY FURNARIIDAE	<b>Forrester, T. R.</b> , Green, D. J., Bishop, C. A.: TEMPORAL VARIATION IN THE DEMOGRAPHY AND TERRITORY QUALITY OF RIPARIAN SONGBIRDS IN THE OKANAGAN VALLEY	<b>Behney, A. C.</b> , O'Shaughnessy, R., Eicholz, M. W., Stafford, J. D.: AN ASSESSMENT OF FORAGING RISK-TAKING BEHAVIOR USING FIELD-LEVEL FOOD MANIPULATIONS
1015	<b>Rushing, C. S.</b> , Hostetler, J. A., Marra, P. P.: THE ROLE OF DISPERSAL IN DETERMINING MIGRATORY CONNECTIVITY PATTERNS	<b>McCain, C. M.</b> : ELEVATION TRENDS IN BIRD DIVERSITY AND CONSERVATION PRIORITIES		<b>Velas, K. L.</b> , Soykan, C., Schuetz, J. G., Distler, T. K.: WE ARE NOT IN EUROPE ANYMORE: AVIAN RESPONSE TO NATIVE HEDGEROWS IN CALIFORNIA'S CENTRAL VALLEY		<b>Friedman, N. R.</b> , Remeš, V.: GLOBAL GEOGRAPHIC PATTERNS OF SEXUAL SIZE DIMORPHISM IN BIRDS: SUPPORT FOR A LATITUDINAL TREND?	George, T. L., <b>Shenk, T.</b> , Engelman, F., Engelman, T.: FACTORS INFLUENCING ANNUAL SURVIVAL OF BROAD-TAILED HUMMINGBIRDS IN ROCKY MOUNTAIN NATIONAL PARK	<b>Latimer, C. E.</b> , Zuckerberg, B.: WEATHER AND LANDSCAPE MEDIATED FORAGING PATTERNS IN WINTERING BIRDS
1030	<b>Paxton, K. L.</b> , Moore, F. R.: REINTERPRETING MIGRATORY BEHAVIOR: MIGRATORY STRATEGIES IN THE CONTEXT OF OTHER PERIODS OF THE ANNUAL CYCLE	<b>DeLuca, W. V.</b> , McGarigal, K., Compton, B., Grand, J., Punnett, E.: SPECIES DISTRIBUTION MODELS APPLIED TO LANDSCAPE AND CLIMATE CHANGE PROJECTIONS	<b>Barber, P. K.</b> : TAXONOMIC VARIATION IN CRYPTIC: A SURVEY WITH EXAMPLES FROM WRENS AND BLACKBIRDS	<b>Miller, K. E.</b> , Faullhaber, C. A.: HABITAT SATURATION AND LANDSCAPE PATTERN IN THE LARGEST REMAINING POPULATION OF FLORIDA SCRUB-JAYS	<b>Diehl, R. H.</b> , Peterson, A. C.: THE AIRSPACE AS HABITAT	<b>Danner, R. M.</b> , Greenberg, R. A.: CRITICAL SEASON APPROACH TO ALLEN'S RULE: BILL SIZE DECLINES WITH WINTER TEMPERATURE IN A COLD TEMPERATE ENVIRONMENT	<b>Ruskin, K. J.</b> , Ettersen, M. A., Olsen, B. J., Hodgman, T. P., Biphick, C. S., Kovach, A. I., Shiver, W. G., King, E.: LATITUDINAL TRENDS IN SALT MARSH SPARROW (AMMODRAMUS CAUDATUS) NEST FAILURE FROM COMPETING RISKS	<b>Lansdorf, O. C.</b> , Terspena, C.: FORAGING VALUE OF TEMPORARY GRASSLANDS TO BARN SWALLOWS IN AN AGRICULTURALLY DOMINATED LANDSCAPE
1045	<b>Ruegg, K. C.</b> , Anderson, E. C., Paxton, K., Apkenas, V., Leo, S., Siegel, R. B., Moore, F. M., Smith, T. B.: MAPPING MIGRATION IN A SONGBIRD USING HIGH-RESOLUTION GENETIC TAGS	<b>Benkman, C. W.</b> : SURVIVAL AND POPULATION SIZE OF A RESIDENT BIRD SPECIES ARE DECLINING WITH INCREASES IN HOT SUMMER DAYS		<b>Plumb, R. T.</b> , Lauenbach, J., Robinson, S. G., Kraft, J., Sulins, D., Fradette, D. A., Pinnau, J. C., Deligen, D.: EFFECTS OF HABITAT PATCH USE ON BREEDING SEASON SURVIVORSHIP OF LESSER PRAIRIE-CHICKENS IN KANSAS AND COLORADO		<b>Balasubramanian, P.</b> , Rosenberry, J. T.: A TEST OF THE FREQUENCY / OFFSPRING QUALITY TRADE-OFF AT HIGH ELEVATIONS: PATTERNS OF LIFE HISTORY VARIATION IN GALLIFORMES ACROSS ELEVENTAL GRADIENTS	<b>Dinsmore, S. J.</b> , Knopf, F. L.: CASCADING ECOLOGICAL EVENTS: DO BURROWING OWLS REDUCE POPULATION RECRUITMENT OF MOUNTAIN PLOVERS?	<b>Geary, B.</b> , Walters, S. T., Leberg, P. L., Karibian, J.: USE OF GPS TELEMETRY TO RELATE BROWN PELICAN FORAGING AND BREEDING ECOLOGY IN THE GULF OF MEXICO
1100	<b>Hobson, K. A.</b> , Van Wilgenburg, S. L.: THE FUTURE OF STABLE ISOTOPE METHODS TO DETERMINE MIGRATORY CONNECTIVITY IN A GEOLOCATOR WORLD	<b>Studds, C. E.</b> , McFarland, K. P., Aubrey, Y., Rimmer, C. C., Hobson, K. A., Marra, P. P., Vassenaar, L. I.: STABLE-HYDROGEN ISOTOPE MEASURES OF NATAL DISPERSAL REFLECT OBSERVED POPULATION DECLINES IN A THREATENED MIGRATORY SONGBIRD	<b>Chesser, R. T.</b> , Isler, M. L.: ANTBIRDS FROM THE AMAZON TO THE ANDES: HOW MUCH DIVERSITY ARE WE OVERLOOKING?	<b>McDermott, M. E.</b> , Rodewald, A. D., Matthews, S. N.: THE CONTRIBUTION OF AGROFORESTRY SYSTEMS TO CONSERVATION OF OVERWINTERING NEOTROPICAL MIGRANTS	<b>Bowlin, M. S.</b> , Enstrom, D. A., Murphy, B. J., Plaza, E., Jurich, P., Cochran, W. W., Cochran, J.: THRUSSHES USE AN ENERGETICALLY INEFFICIENT STRATEGY WHILE MIGRATING?	<b>Magna, L. C.</b> , Carling, M. D.: ENVIRONMENTAL NICHE DIVERGENCE FOR HYBRIDIZING AND NON-HYBRIDIZING PASSERINES	<b>Tremblay, J. A.</b> , Ibarzabal, J., Savard, J. P.: DEMOGRAPHY OF THE BLACK-BACKED WOODPECKER IN UNBURNED BOREAL FOREST STANDS IN EASTERN CANADA	<b>Eaton, R. A.</b> , Lindell, C. A., Homan, H. J., Linz, G. M.: INTER-SPECIFIC VARIATION IN AMERICAN ROBIN AND CEDAR WAXWING USE OF CULTIVATED CHERRY ORCHARDS
1115	<b>Hostetler, J. A.</b> , Marra, P. P., Sillett, T. S.: THE EFFECTS OF MIGRATORY CONNECTIVITY ON AVIAN POPULATION VIABILITY	<b>Freeman, B. G.</b> : CLASS FREEMAN A. M.: NEW GUINEAN MONTANE BIRDS ARE RESPONDING TO GLOBAL WARMING BY RAPIDLY SHIFTING THEIR DISTRIBUTIONS UPSLOPE		<b>Wingert, A. K.</b> , Benson, T. J.: FACTORS ASSOCIATED WITH OCCUPANCY OF BARN OWL NEST BOXES IN ILLINOIS		<b>Walsh, J.</b> , Kovach, A. I., Rowe, R. J., Olsen, B. J., Shriver, W. G.: EXOGENOUS SELECTION IN AN AVIAN HYBRID ZONE: INFERENCES FROM GENOTYPE-HABITAT ASSOCIATIONS AND ECOLOGICAL NICHE MODELS	<b>Holland, A. E.</b> , Byrne, M. B., Bryan, A. L., DeVault, T. L., Rhodes, O. E., Beasley, J. C.: FINE-SCALE ASSESSMENT OF SEASONAL HOME RANGES FOR RESIDENT BLACK AND TURKEY VULTURES IN THE SOUTHEASTERN UNITED STATES	<b>Wang, A. X.</b> , Hart, P. J.: THE PRESENCE OF AN ECOLOGICAL TRAP IN THE JUVENILE DISPERSAL OF A CRITICALLY ENDANGERED HAWAIIAN HONEYCREEPER, THE AKOHEKOHE (PALMERIA DOLEI), A POPULATION-LIMITING LIFE STAGE?
1130	<b>Taylor, C. M.</b> , Stutchbury, B.: MODELING THE EFFECTS OF BREEDING VERSUS WINTER HABITAT LOSS ON THE POPULATION DYNAMICS OF A NEOTROPICAL MIGRATORY SONGBIRD	<b>Parrish, C.</b> , Reitsma, L., Hunt, P., McFarland, K.: IMPACTS OF WIND DEVELOPMENT ON HIGH-ELEVATION BIRDS IN NORTHERN NEW HAMPSHIRE	<b>Cracraft, J.</b> : UNDERSTANDING THE NATURE OF DIVERSITY THROUGH UNDERSTANDING THE NATURE OF TAXA	<b>de Zwaan, D. R.</b> , Reithberg, B.: WESTERN SLAY-ANTSHRINKS HAVE COMPARABLE FORAGING PERFORMANCE ACROSS OLD AND REGENERATING TROPICAL MOIST FOREST IN PANAMA BY ALTERING FORAGING BEHAVIOUR	<b>Bolis, R. T.</b> , Diehl, R. H., Deppe, J. L., Ward, M. P., Moore, F. R., Bohrer, G., Schofield, L. N., Zenzal, T. J.: AVAILABILITY AND USE OF SUPPORTIVE WINDS BY MIGRATING LANDBIRDS THAT CROSS THE GULF OF MEXICO	<b>Strazier, L. S.</b> , Reddy, S., Goodman, S., Rahenilala, M. J.: CRYPTIC DIVERSIFICATION ON WIDESPREAD SPECIES IN MADAGASCAR	<b>Ortega, J. C.</b> , Ortega, C. P.: NEST SURVIVAL OF A TRUE HABITAT GENERALIST, THE AMERICAN ROBIN, IN SOUTHWEST COLORADO	<b>Betts, M. G.</b> , Hadley, A. S.: HUMMINGBIRD FOREPLAY: EXPERIMENTAL EVIDENCE THAT A TROPICAL PLANT DISTINGUISHES AMONG HUMMINGBIRD SPECIES
1145	<b>Martin, T. G.</b> , Nicol, S., Chades, I.: OPTIMAL CONSERVATION STRATEGIES FOR MIGRATORY SPECIES	<b>Cutting, K. A.</b> , Anderson, M. L., Beaver, E. A., Schrott, S., Korb, N.: SYMPATRY OF SPARROWS IN HIGH-ELEVATION SAGEBRUSH APPEARS MORE STRONGLY DRIVEN BY OPTIMAL-FORAGING THAN COMPETITIVE DYNAMICS		<b>Rivers, J. W.</b> , Betts, M. G.: INTENSIVE FOREST MANAGEMENT PRACTICES REDUCE NEST SURVIVAL AND OFFSPRING PRODUCTION: EVIDENCE FROM A LANDSCAPE-SCALE EXPERIMENT		<b>Title, P. O.</b> , Burris, K. J.: NICHE EVOLUTION AND ITS ROLE IN THE DIVERSIFICATION OF TANAGERS	<b>Macias-Duarte, A.</b> , Panjabi, A., Ojasson, E. H., Levandoski, G., Ruvalecaba-Ortega, I., Doherty, P. E.: WINTER SURVIVAL OF BAIRDS AND GRASSHOPPER SPARROWS IN CHIHUAHUA DESERT GRASSLANDS OF MEXICO	<b>Karibian, J. O.</b> , Otwell, K., DiFlori, A., Browne, L., Link, A.: A COMPARISON OF THE GENETIC CONSEQUENCES OF SEED DISPERSAL BY LONG-WATTLED UMBRELLABIRDS VS SPIDER MONKEYS IN ECUADORIAN RAINFOREST



# Thursday Mid-day Schedule

Room	Ruesch Auditorium	Longs Peak-Diamond East	Emerald Mountain-Bible Point	Longs Peak-Diamond West	Longs Peak-Chasm Lake	Longs Peak-Keyhole	Longs Peak-Granite Pass	Longs Peak – Boulder Field
	C06C: Migration Strategies, Timing, and Routes 1	C09A: Models and Methods 1	S05: Molecular Biogeography and the Classification Crisis	S16: Successes and Challenges in Riparian Restoration: Brds as the Yardstick	S01: Advances in Aerocology	S14: Alternative views of the origin of birds and the origin of feathers	C08C: Population Ecology	C01A: Behavior 1-Heterospecific Interactions
Mod	E. M. Kirsch	DB. McDonald	G. Barrowclough	C. Torra	R. Diehl	F. James	V. L. Winder	L. Benedict
1330	Hecksher, C. M.: Gateway Rimner, M.; Kessler, J. H.: NON-TRADITIONAL USE OF GEOLOGICATORS REVEAL PRECISE SPATIODIAPYCNAL ASPECTS AND EFFECTS OF VERY TRANS-GULF CARIBBEAN SEA MIGRATION ROUTES TO SOUTH AMERICA	Hockman, E. V.: Buehler, D. A.; Prevost, S.: GEOGRAPHIC VARIATION IN BIRDSONG: WILL AUTOMATED DETECTION ALGORITHMS EVER WORK?	Gill, F. B.: WORLD BIRD SPECIES – PAST AND FUTURE†	Gardali, T.: Gilbert, M. M.; Seavy, N. E.: LARGE-SCALE, LONG-TERM BIRD RESPONSE TO RIVER RESTORATION IN CALIFORNIA'S GREAT CENTRAL VALLEY	Winkler, D. W.: LIVING ALOFT: PERSPECTIVES ON THE AEROSPHERE AND HOW BIRDS USE IT. †	Madderson, P. F.: REPRESENTING TIME AND SPACE IN ILLUSTRATIONS OF FEATHER REGENERATION. †	Sparks, R. A.: PAVLACKY, D. C.; HANNI, D. J.; PANJABI, A. O.: A MULTISCALE VIEW OF SHORTGRASS PRAIRIE BIRD ABUNDANCE AND DISTRIBUTION	
1345	Hanser, S. B.: Knick, S. T.: FALL HABITAT SELECTION AND MIGRATORY PATHWAYS OF SAGEBRUSH-OBLIGATE PASSERINES IN THE INTERMOUNTAIN WEST	Buehler, D. A.: Hockman, E. V.; Prevost, S. C.; Wilkerson, J. B.; Smith, D. B.; Fischer, R. A.: DEMONSTRATION AND IMPLEMENTATION OF AUTONOMOUS AERIAL ACOUSTIC RECORDING SYSTEMS TO MONITOR BIRD POPULATIONS IN INACCESSIBLE AREAS		Heath, S. K.: McCreedy, C.; Latif, Q. S.; Torra, C. M.: BIRDS TO (MOSTLY) PASSIVE RESTORATION OF MONO LAKE TRIBUTARIES			Pope, T. L.: 20-YEAR TRENDS FOR RIPARIAN BIRDS IN UTAH	West, E. H.: Perry, M. Z.: FOOD FOR THOUGHT: THE INFLUENCE OF RESOURCE SUBSIDIES ON THE ECOLOGY AND BEHAVIOR OF STELLER'S JAYS IN PROTECTED AREAS
1400	Cormier, R. L.: Humphe, D. L.; Seavy, N. E.; Gardali, T.: EVIDENCE OF A MIGRATORY DIVIDE ACROSS THE CALIFORNIA WINTERING RANGE OF THE GOLDEN-CROWNED SPARROW	Williams, K. A.: Searhouse, J. L.; Adams, E. M.; Connolly, E.; Dunn, M.; Gilbert, A. T.: COMPARISON OF SHIPBOARD AND HIGH DEFINITION VIDEO AERIAL SURVEY TECHNIQUES FOR CONDUCTING SURVEYS OF AVIAN DISTRIBUTIONS AND ABUNDANCE ON THE MID-ATLANTIC OUTER CONTINENTAL SHELF	Baker, A. J.: Weir, J.; Tavares, E.: RELEVANCE OF NEWLY DISCOVERED GENETIC DIVERSITY TO SPECIATION AND CONSERVATION OF ENDANGERED BIRDS. †	Tweedt, D. J.: BIRD RESPONSE TO RESTORATION AND MANAGEMENT OF BOTTOMLAND HARDWOOD FOREST	Gehring, J. L.: Erickson, W.: UNDERSTANDING THE IMPACTS OF COMMUNICATION TOWERS ON BIRDS AND THE POTENTIAL TO REGULATE AS BIRD HABITAT†	Hillenius, W. J.: GROWING A RACHIS: THE TALE OF THE MARCHING BARBS†	Slater, S. J.: Frye, K. W.; Knight, R. N.: GOLDEN EAGLE TERRITORY OCCUPANCY AND EGG LAYING DEPRESSION IN RELATION TO FIRE AND PREY ABUNDANCE IN THE WEST DESERT OF UTAH	Swift, K. N.: Marzluff, J. M.: AMERICAN CROW "FUNERALS" SERVE AS MECHANISM OF DANGER LEARNING
1415	Green, D. J.: Richmond, A.; Drake, A.: ENSO-RELATED CLIMATE CONDITIONS AND ANNUAL SURVIVAL OF YELLOW WARBLERS: UNRAVELLING THE EFFECTS OF WESTERLY WINDS, STORMS AND RAINFALL ON MIGRATION	Rigby, E. A.: Johnson, D. H.: MODELING DETECTABILITY IN BIRD SURVEYS: A NEW, EXTENSIVE SIMULATION		Kus, B. E.: RESTORING HABITAT FOR ENDANGERED SPECIES: THE CASE OF THE LEAST BELLS VIREO			Derbyshire, R. E.: Strickland, D.; Norris, D. R.: AN EXPERIMENTAL SUPPLEMENTATION AND OVER 40 YEARS OF POPULATION MONITORING SHOW THAT A BOREAL FOOD-CACHING SONGBIRD IS FOOD-LIMITED	McGowan, K. J.: Mandelbaum, G. E.; Clark, A. B.: WHAT ME WORRY? CHANGES OVER TIME IN MOBBING OF HUMAN "NEST PREDATORS" BY AMERICAN CROWS
1430	Ross, E. J.: Prince, K.; Zuercher, B.: CLIMATE CONDITIONS ON OVERWINTERING GROUNDS INFLUENCE THE PHENOLOGY AND SPEED OF SPRING MIGATION FOR TEMPERATE MIGRANTS IN THE UPPER MIDWEST	Olsen, A. M.: UNLOCKING THE DIET DATA OF THE PAST: A NEW R PACKAGE FOR COMPILING AND QUERYING DIET DATASETS	Reddy, S.: ONE STEP FORWARD TWO STEPS BACK: TAXONOMIC CONFUSION IN TROPICAL ASIA†	Paxton, E. H.: Sogge, M. K.; Theimer, T. C.: DYNAMIC STRATEGIES FOR A DYNAMIC HABITAT: CONSERVING RIPARIAN HABITAT FOR BIRDS IN THE SOUTHWEST	Erickson, W.: Gehring, J. L.: THE IMPACTS OF WIND ENERGY ON BIRDS: ATTRACTIVE ILLUSIONS OF THEROPOD DINOSAURS†	Quick, D. E.; Ruben, J. A.: THE DISTINCTLY UN-BIRD LIKE ILLUSIONS OF THEROPOD DINOSAURS†	Winder, V. L.: Sandercock, B. K.; Hagen, C. A.; Haukos, D. A.; Kessler, D. C.; Patten, M. A.; Powell, L. A.: LEX SITES DRIVE FEMALE RESOURCE USE IN TEN POPULATIONS OF PRAIRIE-CHICKENS	
1445	Adams, E. M.: Olsen, B. J.: EFFECTS OF CHANGING GLOBAL CLIMATE, LOCAL WEATHER, AND HABITAT ON SONGBIRD MIGRATORY PHENOLOGY AND ABUNDANCE	Vander Zanden, H. B.: Winder, M. B.; Hobson, K. A.; Van Wilgenburg, S. L.; Wassenaar, L. I.; Welker, J. M.; Bowen, G. J.: DO YEAR-SPECIFIC PRECIPITATION ISOSCAPES IMPROVE PREDICTIONS OF MIGRATORY ORIGIN?		Call, E. M.: Hunter, M. L.: RIVER BIRDS AS RESTORATION BASELINES – TRACKING IMPLICATIONS OF DAM REMOVAL AND RETURN OF DIADROMOUS FISH IN MAINE WATERSHEDS			Lautenbach, J. M.: Plumb, R. T.; Haukos, D. A.; Pitman, J. C.: SURVIVAL AND HABITAT SELECTION OF LESSER PRAIRIE-CHICKEN CHICKS AND BROODS	Bowman, J. R.: Moldoff, D.; Shipley, A.: HETERO SPECIFIC EAVESDROPPING BY EASTERN TOWHEES
1500	Gow, E. A.: Wiebe, K. L.: THE INFLUENCE OF EXTRINSIC FACTORS ON MIGRATORY TIMING AND REPRODUCTION IN A DIFFERENTIAL MIGRANT	Landolt, D. V.: Husak, M. S.: TESTING THE PREDICTED RELATIONSHIP BETWEEN WING AND TAIL MORPHOLOGY AND FLIGHT PERFORMANCE USING SCISSOR-TAILED FLYCATCHERS	Joseph, L.: AUSTRALO-PAPUAN PERSPECTIVES ON MOLECULAR BIOGEOGRAPHY AND THE CLASSIFICATION CRISIS†	Torra, C. M.: Sage-Fradette, K.; Marra, P. P.: TRACKING THE RETURN OF CRITICAL NUTRIENT SUBSIDIES TO WESTERN RIPARIAN ECOSYSTEMS FOLLOWING DAM REMOVAL: THE VALUE OF SONGBIRDS AS BIO-INDICATORS	Buler, J. J.: WHAT COMES DOWN MUST GO UP: USING WEATHER SURVEILLANCE RADAR TO LINK FLIGHT LIFTOFF OF BIRDS WITH THEIR TERRESTRIAL HABITAT USE†	Feduccia, A.: BIRD ORIGINS: PALEONTOLOGY'S TOPSY-TURVY PHYLOGENY†	Dugger, K. M.; Forsman, E. D.; Clark, D. A.; Davis, R. J.; and 33 others. .: NORTHERN SPOTTED OWL, STRIX OCCIDENTALIS CAURINA) RESULTS OF A RANGE-WIDE META-ANALYSIS	
1515	Williams, K. A.: Keenan, P. C.; Tish, J.; Adams, E. M.; Goodale, M. W.: THE INFLUENCE OF WEATHER, LANDCOVER AND GEOGRAPHY ON NORTHERN SAW-WHET OWL (AEGOLIOS ACADICUS) MIGRATION IN COASTAL MAINE	McDonald, D. B.: GENETIC ALGORITHMS FOR NON-GENETIC SOCIAL NETWORK ANALYSES OF DISEASE OR INFORMATION TRANSMISSION		Seavy, N. E.: Cormier, R. L.; Golet, G.; Kelsey, R.; Gardali, T.: HOW DO WE DESIGN RESTORATION FOR RIPARIAN BIRDS? CHALLENGES AND OPPORTUNITIES			Harris, J. P.: O'Connell, T. J.: HABITAT USE OF GROUND-BASED PREDATORS: UNDERSTANDING RISK FOR NESTING NORTHERN BOBWHITE (COLINUS VIRGINIANUS)	Benedict, L.: Warming, N.: SPATIAL AND BEHAVIORAL RESPONSES OF ROCK WRENS TO CANYON WRENS



# Thursday Afternoon Schedule

Room	Ruesch Auditorium	Longs Peak–Diamond East	Emerald Mountain–Bible Point	Longs Peak–Diamond West	Longs Peak–Chasm Lake	Longs Peak–Keyhole	Longs Peak–Granite Pass	Longs Peak – Boulder Field
	<b>C06D: Migration Strategies, Timing, and Routes 2</b>	<b>C09B: Models and Methods 2</b>	<b>S05: Molecular Biogeography and the Classification Crisis</b>	<b>C02A: Climate Change and Distribution</b>	<b>S01: Advances in Aerocology</b>	<b>S14: Alternative views of the origin of birds and the origin of feathers</b>	<b>C17B: Nests, Nest Site Selection, and Reproductive Synchrony</b>	<b>C15A: Extrapair Mating and Divorce</b>
Mod	D. J. Green	N. Luzziaga	G. Barrowclough	D. N. Bonter	R. Diehl	F. James	T. J. Lorenz	E. H. DuVal
16:00	<b>Lundblad, C. G.</b> : Conway C. J.: WHY DO SOME BUT NOT ALL BIRDS MIGRATE? TESTS OF MECHANISTIC HYPOTHESES IN YELLOW-EYED JUNCOS.	<b>Luzziaga, N. L.</b> : Jiguet, F.; Veran, S. V.; Henry, H. P.; Tapia, W. T.: HETEROGENEITY IN OBSERVER SKILLS OF NATIONAL PARK WARDENS AT COUNTING BIRDS IN THE GALPAGOS ISLANDS	<b>Bowie, R. C.</b> : SUBSPECIES AS TAXONOMIC ENTITIES OR AS EARLY INDICATORS OF ADAPTIVE DIVERGENCE: AN AFRICAN PERSPECTIVE	<b>Rodewald, P. G.</b> : Shumar, M. B.; Batdorf, K. E.; Matthews, S. N.: TWENTY-FIVE YEAR CHANGES IN BREEDING BIRD DISTRIBUTIONS BASED ON THE SECOND OHIO BREEDING BIRD ATLAS	<b>Kelly, J. F.</b> : Horton, K.; Stepanian, P.; Chilson, P. B.: INTEGRATING HUMAN AND RADAR OBSERVATION NETWORKS TO UNDERSTAND PHENOLOGY OF SONGBIRD MIGRATION. †	<b>Falk, A. R.</b> : R. Burnham, D. A.: NEW INSIGHTS ON THE LIFE HABITS OF <i>CONFUCIOSORMS</i>	<b>Alresh, M. E.</b> : King, D. L.: CLIMATE, PLANT LEAFING PHENOLOGY AND OTHER FACTORS AFFECT NEST-SITE SELECTION AND NEST SURVIVAL OF PRAIRIE WARBLERS IN A MIXED-OAK SHRUBLAND	<b>Celis Murillo, A.</b> : Benson, T. J.; Brown, J.; Schelsky, W.; Ward, M. P.: IS CHEATING FOR EVERYONE? PATTERNS OF EXTRATERRITORIAL FORAYS AND EXTRA-PAIR PATERNITY IN FIELD SPARROWS ( <i>SPIZELLA PUSILLA</i> )
16:15	<b>Dale, C. A.</b> : Nocera, J. J.; Franks, S. E.; Kyser, T. K.; Ratcliffe, L. M.: CORRELATES OF ALTERNATIVE MIGRATORY STRATEGIES IN A PARTIALLY MIGRATORY PASSERINE	<b>Tsai, W. L.</b> : McCormack, J. E.; Faircloth, B. C.: PERFORMANCE OF SEQUENCE CAPTURE TARGETING THOUSANDS OF LOCI ON BIRD MUSEUM SPECIMENS FROM THE 1880S TO PRESENT		<b>Steen, V. A.</b> : Skagen, S. K.; Noon, B. R.: CLIMATIC IMPACTS ON THE HABITAT RELATIONSHIPS AND DISTRIBUTION PATTERNS OF MIGRATING SHOREBIRDS IN THE PRAIRIE POTTHOLE REGION		<b>Geist, N. R.</b> : DIFFERENCES IN REPRODUCTIVE BEHAVIOR AND EMBRYONIC AND JUVENILE DEVELOPMENT IN DINOSAURS AND BIRDS: IMPLICATIONS FOR AVIAN ORIGINS	<b>Deaner, L. M.</b> : Chandler, C. R.: NEST SITE SELECTION AND REPRODUCTIVE SUCCESS OF WILSON'S PLOVERS ON CUMBERLAND ISLAND NATIONAL SEASHORE, GEORGIA	<b>Kaiser, S. A.</b> : Risk, B. B.; Silett, T. S.; Webster, M. S.: ECOLOGICAL AND TEMPORAL CONSTRAINTS AFFECT THE OPPORTUNITY FOR EXTRA-PAIR MATING IN THE BLACK-THROATED BLUE WARBLER
16:30	<b>Peterson, A.</b> : Niemi, G.; Johnson, D.: PATTERNS IN DIURNAL AIRSPACE USE BY MIGRATORY LANDBIRDS ALONG AN ECOLOGICAL BARRIER	<b>Brauch, J.</b> : EVALUATION OF POPULATION MONITORING STRATEGIES FOR GREATER SAGE-GROUSE: GENETIC MARK-RECAPTURE AS AN ALTERNATIVE TO TRADITIONAL LEK COUNTS.	<b>Zink, R. M.</b> : THE IMPORTANCE OF VALID TAXONOMY AT THE INTRA-SPECIFIC LEVEL	<b>Feldman, R. E.</b> : Miller-Rushing, A. J.; King, D. L.; Griffin, C. R.: THE SHAKE-UP OF THE SPECIES RANGE: TEMPERATURE CHANGE SHIFTS THE INTERNAL STRUCTURE OF AVIAN SPECIES RANGES	<b>Farnsworth, A.</b> : Van Doren, B. M.; Sheldon, D.; Geevarghese, J.; Winner, K.; Irvine, J.; Fink, D.; La Sorte, F.; Dietrich, T. G.; Kelling, S. T.: STRATEGIES FOR MASS TRANSIT IN THE AEROSPHERE: RELATING PATTERNS OF AUTUMN NOCTURNAL MIGRATION FROM RADAR TO OBSERVATIONAL DATA IN THE NORTHEASTERN US†	<b>Hertel, F.</b> : Campbell, Jr., K. E.: FLIGHT ARCHITECTURE, SPYGLASS LEGS, AND THE EVOLUTION OF WADDLING IN BIRDS	<b>Lorenz, T. J.</b> : Vieding, K. T.; Johnson, T. R.; Fischer, P. C.: CHOICE OR CONSTRAINT? THE ROLE OF WOOD HARDNESS IN LIMITING NEST SITE SELECTION IN NORTH AMERICAN WOODPECKERS	<b>Berzins, L. L.</b> : Shrimpton, J. M.; Dawson, R. D.: EXPERIMENTAL ALTERATION OF PRE-BREEDING HORMONES IN FEMALE TREE SWALLOWS INFLUENCES EXTRA-PAIR COPULATIONS AND REPRODUCTIVE SUCCESS
16:45	<b>Dosman, B. D.</b> : Mitchell, G. W.; Rodewald, P. G.; Matthews, S. N.: INDIVIDUAL ROUTE CHOICE IS DRIVEN BY FAVORABLE WIND CONDITIONS IN TWO MIGRATORY SONGBIRDS	<b>Phillips, J. L.</b> : Kelley, J. P.; Parnell, G. L.: SO WHAT IS GLOGER'S RULE? NO ONE DEFINITION IS SUPPORTED BY FIVE AVIAN SPECIES THAT FOLLOW IT		<b>MacLean, S. A.</b> : Beissinger, S. R.: DO SPECIES TRAITS PREDICT VARIATION IN RANGE SHIFTS OF BIRDS?		<b>Pourfless, J. A.</b> : James, F. C.: CONFLICTING INTERPRETATIONS OF THE "THERMOPOLIS" ARCHAEOPTERYX AND THE COMPLEX PROBLEM OF BIRD ORIGINS	<b>Henson, S. M.</b> : Saint Martin, W.; Hayward, J. L.: TRADEOFF BETWEEN DAILY AND YEARLY REPRODUCTIVE SYNCHRONY IN COLONIAL SEABIRDS	<b>Lehmiche, A. J.</b> : Naim, C. J.; Cooper, R. J.: NEST-LEVEL AND INDIVIDUAL CORRELATES OF EXTRA-PAIR PATERNITY IN THE SEASIDE SPARROW ( <i>AMMODRAMUS MARITIMUS</i> )
17:00	<b>Kirsch, E. M.</b> : Welik, M. J.: SPRING WEATHER AND TREE PHENOLOGY INFLUENCES TREE PREFERENCES OF FORAGING BIRDS DURING SPRING MIGRATION IN UPPER MISSISSIPPI RIVER FLOODPLAIN FORESTS	<b>Hayward, J. L.</b> : Henson, S. M.: HOT AND BOTHERED: CLIMATE CHANGE, CANNIBALISM, AND OVULATION SYNCHRONY IN GULLS	<b>Barrowclough, G. F.</b> : EFFECTIVE POPULATION SIZE, COALESCENCE, AND EPHEMERAL DIVERSITY: A TAXONOMIC CHALLENGE†	<b>Bonter, D. N.</b> : Greig, E. I.: WINTER RANGE EXPANSION IN ANNA'S HUMMINGBIRDS: THE INTERPLAY OF CLIMATE, HABITAT, AND SUPPLEMENTAL FEEDING	<b>Bridge, E. S.</b> : EMERGING TECHNOLOGIES FOR MONITORING SMALL BIRDS IN THE AEROSPHERE†	<b>Ruben, J.</b> : OVERLOOKED SPECIMENS, OVERLOOKED ANALYSES: AVIAN ORIGINS RECONSIDERED	<b>Sandler, A. G.</b> : Megna, L. C.; Henson, S. M.; Hayward, J. L.: EVERY-OTHER-DAY OVULATION SYNCHRONY, HIGH NESTING DENSITY, AND EGG LOSS IN A COLONY OF RING-BILLED GULLS ( <i>LARUS DELAWARENSIS</i> )	<b>DuVal, E. H.</b> : SHOWING YOUR AGE: AGE-LINKED MALE PHENOTYPES ARE UNRELATED TO FEMALE MATE CHOICE IN THE LANCE-TAILED MANAKIN, DESPITE AGE-SPECIFIC MALE REPRODUCTIVE SUCCESS
17:15	<b>Bridge, E. S.</b> : Ross, J. D.; Contina, A.; Kelly, J. F.: HOW WELL DOES PRIMARY PRODUCTIVITY EXPLAIN MOLT-MIGRATION IN WESTERN SONGBIRDS?	<b>Skeen, H. R.</b> : Weckstein, J. D.; Hacklett, S. J.; Reddy, S.: ORIGIN AND DIVERSIFICATION OF AFRICAN <i>LEUCOCYTIZOON</i> IN A GLOBAL CONTEXT		<b>Sofaer, H. R.</b> : Steen, V. A.; Skagen, S. K.; Hoeting, J. A.; Noon, B. R.: PROJECTED EFFECTS OF CLIMATE CHANGE ON THE UTILITY OF SURROGATE SPECIES APPROACHES IN THE PRAIRIE POTTHOLE REGION			<b>Warning, N.</b> : Benedict, L.: PAVING THE WAY: FUNCTIONAL NEST ARCHITECTURE OF THE ROCK WREN	<b>Wheelwright, M. T.</b> : Teplicksky, C.: INHERITANCE OF DIVORCE IN SAVANNAH SPARROWS: NEITHER GENETIC NOR CULTURAL

# Friday Morning Schedule

Room	Ruesch Auditorium	Longs Peak-Diamond East	Emerald Mountain-Bible Point	Longs Peak-Diamond West	Longs Peak-Chasm Lake	Longs Peak-Keyhole	Longs Peak-Granite Pass	Longs Peak-Boulder Field
	<b>C05B: Conservation: Energy Development</b>	<b>C11B: Habitat Relationships: Agriculture and Grasslands</b>	<b>C17C: Breeding Biology</b>	<b>C13A: Songs and Vocalizations</b>	<b>C06B: Migration Physiology: Energetics, and Risk</b>	<b>C03B: Community Ecology: Exotics, Disturbance, and Urbanization</b>	<b>C02B: Climate Change Response</b>	
Mod	B.L. Walker	C. M. Lituma	A.C. Borowski	K. D. Rivera-Caceres	Z. R. Cooper	R. Y. Conrey	B. O. Wolf	
0830	<b>Walker, B. L.</b> : GREATER SAGE-GROUSE CONSERVATION AND MANAGEMENT IN OIL AND GAS FIELDS OF NORTH WESTERN COLORADO: HOW WELL DO LEK BUFFERS WORK?	<b>Gasteiz-Arias, P.</b> : Vargas-Masis, R.; Di Mare-Heng, M.; Martinez, D.; Magüenes-Sandoz, M.: COMPARISON OF BIRDS REPRODUCTIVE EVENTS IN CONVENTIONAL AND ORGANIC PINEAPPLE CROPS IN SAN CARLOS, COSTA RICA (2012/2013)	<b>Newbrey, J. L.</b> : Paszkowski, C. A.; McGraw, K. J.; Ogle, S.: LAYING-SEQUENCE VARIATION IN YOLK CHARACTERISTICS AND EGG CHARACTERISTICS IN THE RED-WINGED BLACKBIRD	<b>Gentry, K. E.</b> : Luther, D. A.: ANTHROPOGENIC NOISE AFFECTS SINGING BEHAVIOR AND PHENOLOGY OF DAWN CHORUS	<b>Covino, K. M.</b> : Moore, F. R.; Morris, S. R.: PATTERNS OF CIRCULATING TESTOSTERONE IN BLACK-AND-WHITE WARBLERS DURING SPRING MIGRATION	<b>Conrey, R. Y.</b> : Tripp, D. W.; Youngberg, E. N.; Pajabai, A. O.: AVIAN RESPONSE TO PLAGUE MANAGEMENT ON BLACK-TAILED AND GUNNISON'S PRAIRIE DOG COLONIES	<b>Wolf, B. O.</b> : McEachnie, A. E.; Gerson, A. R.; Smith, E. K.; Talbot, W. A.; Whitfield, M. C.; Smit, B.; O'Neil, J. J.; McWhorter, T. J.: SENSITIVITY TO EXTREME HEAT VARIES GREATLY AMONG AVIAN ORDERS	
0845	<b>Mason, J. T.</b> : McClure, C. J.; Barber, J. R.: THE IMPACT OF NATURAL GAS COMPRESSOR STATION NOISE ON NORTHERN SAW-WHET OWL HUNTING ABILITY	<b>Tsai, J.</b> : Chang, K.; Hsu, F.: AVIAN COMMUNITY COMPOSITION OF BETEL NUT PLANTATIONS AND SECONDARY FOREST: THE INFLUENCES OF VEGETATION STRUCTURE ON FORAGING GUILDS	<b>Folkerts, M. M.</b> : Ingold, J. L.; Johnson, E. I.; Westphal, K. A.; Vincent, T. J.: VARIATION IN GREEN HERON NESTING SUCCESS IN COASTAL LOUISIANA MARSHES	<b>Aultze, B. E.</b> : Koper, N.: DOES INFRASTRUCTURE NOISE INTERFERE WITH ALARM COMMUNICATION IN SAVANNAH SPARROWS?	<b>Gutierrez Ramirez, M.</b> : Kneidel, A. H.; Lester, L. A.; Heckscher, C. M.: AN ASSESSMENT OF REFUELING PERFORMANCE BY SELECT SPRING TRAINS-GULF MIGRANTS ON A FLORIDA GULF COAST BARRIER ISLAND	<b>Johnson, K. M.</b> : Arcese, P.: COMPETITION BETWEEN SONG SPARROWS AND FOX ISLAND SPARROWS ON MANDARTE ISLAND	<b>Cooper, C. B.</b> : Hochachka, W.; Andre Dhondt, A. A.; Degetano, A.: SHIFTS IN LAYING DATE AND STASIS IN PARTIAL HATCHING IN RESPONSE TO A CHANGING CLIMATE	
0900	<b>Koper, N.</b> : Rosa, P.; Swider, C.; Nenniger, H.; Bernath-Plaisted, J.: EFFECTS OF OIL INFRASTRUCTURE AND OPERATING NOISE ON GRASSLAND SONGBIRDS	<b>Pringle, H. E.</b> : Leather, S. R.; Crawley, M. J.; Sage, R. B.: THE BREEDING ECOLOGY OF LAPWINGS IN ENERGY CROPS	<b>Inselman, W. M.</b> : Datta, S.; Jenks, J. A.; Jensen, K. C.; Swanson, C. C.; Groeneweg, T. W.: BUTEO ECOLOGY: AN INTENSIVE STUDY OF SWAINSON'S HAWKS (BUTEO SWAINSONI) ON THE NORTHERN GREAT PLAINS	<b>Shah, S. S.</b> : Bonter, D. N.; MacLean, S. A.; Greig, E. I.: RISK-BASED ALARM CALLING IN HERRING GULLS	<b>DuBay, S. G.</b> : PHYSIOLOGICAL MECHANISMS OF DIFFERENTIAL ALTITUDINAL MIGRATION BY AGE AND SEX CLASS IN THE HIMALAYAN BLUETAIL (TARSIGER RUFLATUS)	<b>Crombie, M. D.</b> : Germain, R. R.; Arcese, P.: INVASIVE PLANTS WITH DIFFERENT TRAITS SOLICIT A DISPARATE RESPONSE BY AN ISLAND SONG SPARROW POPULATION	<b>Anderson, A. M.</b> : Heath, J. A.; Novak, S. J.; Smith, J. F.; Steinhof, K.: DO WINTERING STRATEGY CARRY-OVER EFFECTS ON NEST INITIATION AND MATE CHOICE FACILITATE POPULATION RESPONSE TO CLIMATE CHANGE IN A PARTIAL MIGRANT, THE AMERICAN KESTREL?	
0915	<b>Unruh, J. H.</b> : Davis, S. K.: EFFECTS OF OIL DEVELOPMENT ON GRASSLAND SONGBIRDS	<b>Lituma, C. M.</b> : Keyser, P. D.; Harper, C. A.; Morgan, J.; Holcomb, E. D.: RESTORING IMPERILED GRASSLAND BIRDS THROUGH GRAZING INNOVATION IN THE EASTERN UNITED STATES	<b>Michelson, C. L.</b> : Morrissey, C. A.; Stanton, R. L.; Clark, R. G.: EFFECTS OF AGRICULTURAL INTENSIFICATION ON TREE SWALLOW (TACHYCHETA BICOLOR) REPRODUCTION AND NESTLING BODY CONDITION	<b>Randall, C. A.</b> : Neudorff, D.: THE FUNCTION AND STRUCTURE OF SONG DELIVERED BY MALE CAROLINA WRENS (TROCHILUS LUDOVICIANUS) DURING NESTLING PROVISIONING IN URBAN AND RURAL HABITATS	<b>Cooper, Z. R.</b> : O'Connell, T. J.; Cox, S. W.; Garbet, A. C.: AGE-RELATED DIFFERENCE IN BODY CONDITION FOR FALL-MIGRANT CHIPPING SPARROWS IN THE MIDDLE RIO GRANDE VALLEY, NEW MEXICO	<b>Rodewald, A. D.</b> : EXPERIMENTAL REMOVAL OF HOMEYUCKLE AND CONSEQUENCES FOR PLANT-BIRD-PREDATOR COMMUNITIES	<b>Borgman, C. C.</b> : Wolf, B. O.: REPRODUCTIVE DYNAMICS OF LOGGERHEAD SHRIKES IN THE ARID SOUTHWEST: EFFECTS OF PRECIPITATION AND TEMPERATURE	
0930	<b>Bombaci, S. P.</b> : Pejchar, L.; Gallo, T.: BIRDS LOSING GROUND TO HABITAT MITIGATION IN A REGION UNDERGOING RAPID ENERGY DEVELOPMENT	<b>Withey, J. C.</b> : Lopez, L.: BREEDING AND MIGRATORY LANDBIRD COMMUNITY RESPONSES TO HARDWOOD HAMMOCK PATCH SIZE AND LANDSCAPE CONTEXT IN SOUTH FLORIDA	<b>Tucker, A. M.</b> : Dyer, R. J.; Huber, S. K.; Bullock, L. P.: CONSPECIFIC BROOD PARASITISM AS AN ALTERNATIVE BREEDING STRATEGY IN BOX-NESTING PROTHONOTARY WARBLERS (PROTHONOTARIA CITREA)	<b>Sandoval, L.</b> : Méndez, C.: WHITE-EARED GROUND-SPARROW (MELOZONA LEUCOTIS) CALL IS A DOUBLE FUNCTION SIGNAL: THE IMPORTANCE OF THE CALL RATE	<b>Grunzel, D. P.</b> : Olsen, B. J.: LONGER DISTANCE MIGRANT PASSERINES ARE MORE AVERSE TO PREDATION RISK DURING MIGRATION	<b>DeLap, J. H.</b> : Marzluff, J. M.: THE RESPONSE OF BIRD COMMUNITIES TO NEWLY ESTABLISHING HUMAN COMMUNITIES	<b>Cruz-McDonnell, K. K.</b> : Wolf, B. O.: EFFECTS OF INCREASING TEMPERATURES AND DROUGHT ON THE POPULATION DYNAMICS AND REPRODUCTION OF BURROWING OWLS IN THE ARID SOUTHWEST	
0945		<b>Jirinec, V.</b> : Leu, M.: WOOD THRUSH MICROHABITAT ASSOCIATIONS: IMPLICATIONS FOR SPECIES PERSISTENCE IN A HUMAN-MODIFIED LANDSCAPE	<b>Borowski, A. C.</b> : Elphick, C. S.; Kern, R.; Shriver, W. G.: IMPLICATIONS OF FEATHER WEAR AND FAULT BARS: A COMPARISON OF SPECIES, SEXES, AND AGES	<b>Rivera-Caceres, K. D.</b> : Quirós Guerrero, E.: DUET COORDINATION AND DUET CODE IN JUVENILE PLAIN WRENS	<b>McCabe, J. D.</b> : Olsen, B. J.: THE INTERACTION BETWEEN RISK AVOIDANCE AND FORAGING QUALITY ON THE STOPOVER HABITAT USE OF MIGRANT LANDBIRDS	<b>Fristoe, T. S.</b> : Murthy, A.; Burger, J. R.: THE HOMOGENIZING EFFECT OF URBAN LAND COVER ON NORTH AMERICAN WINTER BIRD DIVERSITY	<b>Fischelli, N. A.</b> : Monahan, W. B.; Peters, M. P.; Matthews, S. N.: FORECASTING BREEDING BIRD HABITAT SUITABILITY FOR THE ACADIA NATIONAL PARK REGION: IMPLICATIONS FOR MONITORING, MANAGEMENT, AND EDUCATION	

# Friday Mid-day Schedule

Room	Ruesch Auditorium	Longs Peak–Diamond East	Emerald Mountain–Bible Point	Longs Peak–Diamond West	Longs Peak–Chasm Lake	Longs Peak–Keyhole	Longs Peak–Granite Pass	Longs Peak – Boulder Field
	S11: Effects on Birds of Unconventional Shale Gas Extraction and the New Energy Boom S. Latta	S18: Use of the Fire-grazing Interaction in Avian Conservation T. Horvick	S13: North American Breeding Bird Survey: Tackling New Challenges and Addressing Old Questions K. Partideck	C01B: Behavior 2-Group Living D. Shizuka	C19: Systematics /Taxonomy D. L. Slager	C03D: Community Ecology: Interactions Across Time and Space V. J. Dretz	S19: Value Added in Bird Monitoring: Capture and Banding Provide New Insights C. J. Ralph	
1330	Thomas, E. H.; Stoleston, S. H.; Brittingham, M. C.: CONVENTIONAL OIL AND GAS DEVELOPMENT ALTERS COMMUNITY STRUCTURE AND PRODUCTIVITY OF FOREST BIRDS IN EASTERN DECIDUOUS FORESTS <sup>†</sup>	Fuhlendorf, S. D.; Engle, D. M.; Elmore, R. D.; Davis, C. A.; Horvick, T. J.; Allred, B. W.; Hamilton, R.: PYRIC HERBIVORY: INTERACTIVE DISTURBANCE PROCESSES THAT SHAPE GRASSLAND ECOSYSTEMS <sup>†</sup>	Downes, C.; Francis, M. R.; Smith, A. C.; Prados, C. M.: THE STATUS OF BIRDS IN CANADA WEBSITE: THE TRIALS AND TRIBULATIONS OF SYNTHESIZING MULTIPLE, DISPARATE DATA SOURCES	Freeman, F.: IMPACTS OF COOPERATIVE GROUP PERSONALITY ON THE REPRODUCTIVE SUCCESS OF THE ENDANGERED WHITE-BREADED THRASHER	Kimball, R. T.; Braun, E. L.; Hosner, P. A.; Glenn, T. C.; Faircloth, B. C.: RESOLVING CONFLICTS AMONG GALLIFORM PHYLOGENIES USING ULTRA-CONSERVED ELEMENTS	Tomback, D. F.; Scott, J. D.; Wunder, M. B.; McKinney, G. J.: WHITEBARK PINE CONE PRODUCTION AND THE PROBABILITY OF STAND VISITATION BY CLARK'S NUTCRACKER: ASSESSMENTS FROM GLACIER AND WATERTON LAKES NATIONAL PARKS	Ralph, C. J.: INTRODUCTION TO SYMPOSIUM S19	
1345			Smith, A. C.: GO NORTH YOUNG BIRDER! THE BBS FRONTIER HIGHLIGHTS THE NEED FOR A DISCUSSION ON WHAT WE WANT FROM PUBLISHED ESTIMATES OF THE ENDANGERED WHITE-BREADED THRASHER (AND THE STATUS AND TREND) (AND THE NEED FOR MORE DATA)	Freeman, F.: IMPACTS OF COOPERATIVE GROUP PERSONALITY ON THE REPRODUCTIVE SUCCESS OF THE ENDANGERED WHITE-BREADED THRASHER	Kimball, R. T.; Braun, E. L.; Hosner, P. A.; Glenn, T. C.; Faircloth, B. C.: RESOLVING CONFLICTS AMONG GALLIFORM PHYLOGENIES USING ULTRA-CONSERVED ELEMENTS	Pausing, E. R.; Tomback, D. F.; Wunder, M. B.; Wagner, A. C.; French, J. P.: GERMINATION AND SEEDLING SURVIVAL OF COMMON CLARK'S NUTCRACKER CACHE LOCATIONS AND CONSEQUENCES OF CACHE PILFERAGE	Brunton, D. H.; Baillie, S. M.; Blanchard, W.: UNDERSTANDING DISPERSAL, BODY CONDITION AND DISEASE DYNAMICS BY MONITORING Banded INDIVIDUALS WITHIN AND BETWEEN POPULATIONS: INFORMING SPECIES CONSERVATION	
1400	Brittingham, M. C.; Barton, E. P.; Frank, N. R.; Langlois, L. A.; Peblan, S. E.: BIRD COMMUNITY RESPONSE TO SHALE GAS DEVELOPMENT IN CORE FOREST <sup>††</sup>	Miller, J. R.; Duchardt, C. J.; Horvick, T. J.; Lyons, T. P.; Pillsbury, F. C.; Debinski, D. M.; Engle, D. M.: AVIAN RESPONSE TO THE FIRE-GRASSLAND INTERACTION IN GRASSLANDS OF THE UPPER MIDWEST <sup>††</sup>	Bled, F.; Sauer, J. R.; Partideck, K. L.; Dobery, P. P.; Royle, K. A.: MODELING TRENDS FROM NORTH AMERICAN BREEDING BIRD SURVEY DATA: A SPATIALLY EXPLICIT APPROACH	Leighton, G. M.; Echeverri, S.; Heinrich, D.; Kolberg, H.; Searcy, W. A.: RELATEDNESS PREDICTS MULTIPLE MEASURES OF INVESTMENT IN COOPERATIVE NEST CONSTRUCTION IN SOCIABLE WEAVERS	Braun, E. L.; Kimball, R. T.; Meeklejohn, K. A.; Hosner, P. A.; Kumar, A.; Glenn, T. C.; Faircloth, B. C.: SMALL GENOMES IN THE ERA OF BIG DATA: PHYLOGENY AND PATTERNS OF MOLECULAR EVOLUTION FOR MITOGENOMES IN GALLIFORMES	Gardinkel, M.; Johnson, M.: PEST-REMOVAL SERVICES PROVIDED BY SONGBIRDS ON SMALL ORGANIC ROW CROP FARMS IN HUMBOLDT COUNTY, CA	Cardale, J. D.; Miller, R. A.; Vane, H. E.; Barber, J. R.; Heath, J. A.; McClure, C. J.; Paprocki, N.; Kalkreuth, G. S.: BEYOND MIGRATION BANDING: UNDERSTANDING FACTORS AFFECTING STOPOVER SUCCESS IN AUTUMN LANDBIRD MIGRANTS	
1415			Veech, J. A.; Jensen, J.: ASSESSING LAND COVER COMPOSITION AND CONFIGURATION ALONG ROUTES OF THE NORTH AMERICAN BREEDING BIRD SURVEY	Zeng, L.; Rotenberry, J. T.; Zuk, M.; Pratt, T.: SOCIAL BEHAVIOR AND COOPERATIVE BREEDING IN A PRECOCIAL SPECIES: KALI PHEASANTS ( <i>LOPHURA LEUCOMELANOS</i> ) IN HAWAII	Cuervo, A. M.; Aleixo, A.; Bravo, G. A.; Brumfield, R. T.; Chesser, T.; Cracraft, J.; Moyle, R.; Silveira, L. P.; Harvey, M. G.; Derryberry, E. P.: PHYLOGENOMICS OF THE PAN-TROPICAL RADIATION OF SUBOSCINE PASSERINES	Dreiz, V. J.; Simson, L. T.; Hahn, B. A.; Lukacs, P. M.: A MULTI-SCALE PERSPECTIVE FOR MANAGING PRAIRIE AVIFAUNA ASSEMBLAGES ACROSS THE WESTERN US	Ruegg, K. C.: INTEGRATION OF GENETIC AND BANDING DATA TO INFORM MIGRANT ECOLOGY, EVOLUTION AND CONSERVATION	
1430	Wood, P. B.: LONG-TERM AVIAN RESPONSE TO FOREST FRAGMENTATION FROM SHALE GAS DEVELOPMENT <sup>†</sup>	Horvick, T. J.; Elmore, R. D.; Fuhlendorf, S. D.; Engle, D. M.; Hamilton, R. G.: SPATIAL HETEROGENEITY INCREASES DIVERSITY AND STABILITY IN GRASSLAND BIRD COMMUNITIES	Handel, C. M.; Sauer, J. R.; Amundson, C. L.; Matsuko, S. M.: HIERARCHICAL ANALYSIS OF BREEDING BIRD SURVEY DATA FROM ROADSIDE AND REMOTE AREAS TO ESTIMATE POPULATION TRENDS IN ALASKA	Cusick, J. A.; Cox, J. A.; DuVal, E. H.: HOW DO HELPERS HELP? THE CUMULATIVE BENEFITS OF HELPERS IN A FACULTATIVE COOPERATIVE BREEDING SPECIES: THE BROWN-HEADED NUTHATCH ( <i>Sitta pusilla</i> )	Andersen, M. J.; Olveros, C. H.; Benz, B. W.; Moyle, R. G.: HIGHER-LEVEL PHYLOGENY OF CROWS AND ALLIES INFERRED FROM ULTRA-CONSERVED ELEMENTS	Atuo, F. A.; O'Connell, T. J.: QUANTIFYING THE SPATIO-TEMPORAL DISTRIBUTION OF MULTIPLE RAPTORS IN MIXED-GRASS PRAIRIE LANDSCAPES	Alexander, J. D.; Ralph, C. J.; Rockwell, S. M.; Frey, R. L.; Stephens, J. L.: TRENDS IN ABUNDANCE AND PRODUCTIVITY FROM 12 YEARS OF CONSTANT EFFORT MIST NETTING IN THE KLAMATH-SISKIYOU BIOREGION OF SOUTHERN OREGON AND NORTHERN CALIFORNIA	
1445		Augustine, D. J.; Derner, J. D.: PATCH BURN GRAZING MANAGEMENT AND GRASSLAND BIRD HABITAT IN THE WESTERN GREAT PLAINS	Solymos, P.; Bayne, E. M.; Mahon, C. L.; Heiche, S.; Fontaine, P.; Cumming, S. G.; Schenberg, P.; Schmiegloff, F.; Song, S.: UNDERSTANDING THE SOURCES OF BIASES IN POPULATION SIZE ESTIMATES BASED ON ROADSIDE SURVEYS IN CANADA	Agullon, S. M.; Duckworth, R. A.: RESOURCE-MEDIATED BEHAVIORAL DYNAMICS AMONG KIN DRIVE DISPERSAL IN FIRST-YEAR WESTERN BLUEBIRDS ( <i>Sialia mexicana</i> )	Hosner, P. A.; Kimball, R. T.; Braun, E. L.: PHYLOGENY AND DIVERSIFICATION OF THE NEW WORLD QUAIL (ODONTOPHORIDAE)	Forzic, E. L.; Seavy, N. E.; Badle, J. M.; Humple, D. L.; Geupel, G. R.; Gardali, T.: INTERSPECIFIC INTERACTIONS, POPULATION VARIATION AND ENVIRONMENTAL FORCING IN THE CONTEXT OF THE COMMUNITY	Ruiz-Gutiérrez, V.; Saracco, J. F.; DeSante, D. F.: BROAD-SCALE BIRD-BANDING TO INFORM THE DYNAMICS, DEMOGRAPHY, AND MIGRATORY CONNECTIVITY OF LANDBIRDS	
1500	Frands, C. D.: BEYOND THE HABITAT EDGE: LARGE-SCALE UNCONVENTIONAL GAS EXTRACTION IMPACTS ON BIRD COMMUNITIES VIA SENSORY POLLUTION <sup>†</sup>	Davis, C. A.; Holcomb, E. D.; Fuhlendorf, S. D.: APPLYING FIRE-DEPENDENT INTERACTIONS IN FIRE-DEPENDENT SAGEBRUSH ECOSYSTEMS: IMPLICATIONS FOR AVIAN COMMUNITIES	Van Wigenburg, S. L.; Obermayer, B.; Joyce, T.; Weddle, B.: EXPANDING BBS COVERAGE FOR BOREAL CANADA: ARE THERE DISTURBANCE RELATED BIASES IN ROAD NETWORKS NEEDING FURTHER CONSIDERATION?	Rolland, V.; Fowler, J. A.: WINTER ROOSTING BIOLOGY OF EASTERN BLUEBIRDS IN NE ARKANSAS	Vaidya, G.; Lepage, D.; Lapp, H.; Gurdinick, R. P.: MEASURING THE OUTPUTS OF TAXONOMY: HOW MANY SPECIES OF NORTH AMERICAN BIRDS HAVE BEEN RECIRCUMSCRIBED IN THE LAST 128 YEARS?	Ozalski-Mckelvey, A.; Nott, M. P.; Mame, L. L.: PREDICTING DEMOGRAPHY ACROSS LANDSCAPES AND IMPLICATIONS FOR SOURCE-SINK APPLICATIONS: AN EXAMPLE USING YELLOW WARBLERS ( <i>Setophaga petechia</i> )	Moore, F. R.; Paxton, K. L.; Cohen, E. B.; Lain, E. J.; Paxton, E. B.; Zenzal, T. J.; Nemeth, Z.; Diehl, R.: LONG TERM BANDING ENVIRONMENTAL CHANGE AND MIGRATION BIOLOGY	
1515		Igl, I. D.: DECISION SUPPORT FOR RESTORATION AND MANAGEMENT OF NATIVE PRAIRIES IN THE NORTHERN GREAT PLAINS: IMPLICATIONS FOR GRASSLAND BIRD COMMUNITIES	Rodriguez-Contreras, V.; Berlanga, H.; Partideck, K.: EXPANSION OF THE BREEDING BIRD SURVEY TO NORTHERN MEXICO: WORTH THE EFFORT	Shizuka, D.; Chaine, A. S.; Anderson, J.; Johnson, O.; Laursen, I. M.; Lyon, B. E.: WITHIN- AND ACROSS-YEAR SOCIAL COHESION IN WINTERING MIGRANT SPARROWS REVEALED BY SOCIAL NETWORK ANALYSIS	Yuni, T.; Graybowski, J. A.; Siler, C. D.; Schnell, G. D.: GENETIC ANALYSIS OF RECENT HYBRIDIZATION BETWEEN WHITE-FACED AND GLOSSY IBIS	Feiman, K. S.: GREYHER, G. F.: INTERREFERENCE AND EXPLOITATIVE COMPETITION BETWEEN A MIGRANT AND RESIDENT PASSERINE DURING THE NON-BREEDING SEASON	Letner, W. A.; Ralph, P. L.; Ralph, C. J.: ESTIMATING SHIFTS IN THE ARRIVAL TIMES OF MIGRANT BREEDING BIRDS FROM CONSTANT EFFORT MONITORING DATA	



# Friday Afternoon Schedule

Room	Ruesch Auditorium	Longs Peak-Diamond East	Emerald Mountain-Bible Point	Longs Peak-Diamond West	Longs Peak-Chasm Lake	Longs Peak-Keyhole	Longs Peak-Granite Pass	Longs Peak-Boulder Field
	S11: Effects on Birds of Unconventional Shale Gas Extraction and the New Energy Boom	S18: Use of the Fire-grazing Interaction in Avian Conservation	S13: North American Breeding Bird Survey: Tackling New Challenges and Addressing Old Questions	C13B: Song	C01C: Nesting Behavior	C03C: Community Ecology: Interactions and Diversity	S19: Value Added in Bird Monitoring: Capture and Banding Provide New Insights	
Mod	M. Brittingham	T. Horvick	M.-A. Hudson	E. Greig	M. E. Hauber	M. W. Eichholz	C. J. Ralph	
1600	<b>McClung, M. R.</b> , Block, M. G., McFadden, M. A.: EFFECTS OF CHRONIC NOISE FROM UNCONVENTIONAL GAS EXTRACTION ON BREEDING BIRD COMMUNITIES AND COMMUNICATION IN THE FAYETTEVILLE SHALE, ARKANSAS	<b>Gregory, N. C.</b> , Sensenig, R. L., Wilcove, D. S.: SAVANNA HOME COMPANIONS: FIRE, PASTORALISM, DROUGHT, BIRDS, AND DEVELOPMENT IN EAST AFRICA	<b>Clement, M. J.</b> , Nichols, J. D., Pardieck, K. L.: AVIAN INDICATORS OF CLIMATE CHANGE BASED ON THE NORTH AMERICAN BREEDING BIRD SURVEY	<b>Pervost, S. C.</b> , Jaehler, D. A., Hickman, E. V., Fisher, R. A., Wilkerson, J. B., Smith, D. R.: USE OF AUTOMATED RECORDING DEVICES FOR MONITORING SONGBIRDS: CAN SONG RATES BE USED AS A MEASURE OF RELATIVE ABUNDANCE?	<b>Clatterbuck, C. A.</b> , Young, L. C., VanderWerf, E. A., Nairnan, D., Bower, G. C., Shaffer, S. A.: DO PARENTS ROCK AND ROLL ALL NIGHT? TEMPORAL EGG-TURNING PATTERNS IN LONG-LIVED SEABIRDS	<b>Cadioux, P. M.</b> , Depaau, P.: CHANGES IN THE FUNCTIONAL STRUCTURE OF NEST WEBS FROM MIXED WOOD TO BLACK SPRUCE/CEMOS DOMINATED LANDSCAPES: THE PERSISTENCE OF LARGE CAVITIES DUE TO THE NORTHERN FLICKER	<b>Humble, D. L.</b> , Cornier, R. L., Seavy, N. E., Geipel, G. R., Gardali, T.: BANDING DATA AS A RESOURCE FOR STUDYING LONG-TERM PATTERNS IN AVIAN PHENOLOGY	
1615	<b>Latta, S. C.</b> , Marshall, L., Frantz, M., Toms, J.: WIDESpread EVIDENCE INDICATES BIOACCUMULATION OF CONTAMINANTS FROM HYDRAULIC FRACTURING IN A RIPARIAN-OBLIGATE SONGBIRD	<b>McGranahan, D. A.</b> , Kirkman, K. P.: RESEARCH ON RANGELAND BIRD RESPONSES TO DISTURBANCE IN SUB-SAHARAN AFRICA LACKS ATTENTION TO SPATIAL, TEMPORAL SCALE	<b>Wilson, S.</b> , Pillar, A. G., Readink, M. W., Ladeau, S. L., Tétrault, A. P., Mena, P. P.: COMBINING BREEDING BIRD SURVEY DATA WITH REMOTE SENSING TO ASSESS THE EFFECTS OF BREEDING AND WINTER CLIMATE ON TROPICAL MIGRANTS	<b>Larned, A. F.</b> , Lohr, B.: SONG OF THE PUERTO RICAN GRASSHOPPER SPARROW ( <i>AMMODRAMUS SAVANNAHENSIS BORINQUENSIS</i> )	<b>Yoon, J.</b> , Jung, J., Kim, B., Joo, E., Yoon, H., Park, S.: PLASTICITY IN INCUBATION BEHAVIOR UNDER PROLONGED AND PULSE RISKS OF NEST PREDATION IN TWO CAVITY-NESTING PASSERINES	<b>Pinney, T. A.</b> , Gutzwiller, K. J., White, J. D.: THE RELATIVE IMPORTANCE OF NICHE AND NEUTRAL PROCESSES IN GUILD-LEVEL BIRD COMMUNITY ASSEMBLY	<b>Toms, J. D.</b> , <b>Faaborg, J.</b> , Arendt, W. J., Cox, W. A.: BANDING ADDS VALUE TO LONG-TERM MONITORING STUDIES IN PUERTO RICO	
1630	<b>Kleist, N. J.</b> , Guralnick, R., Cruz, A., Francis, C. D.: THE COSTS OF NOISE POLLUTION: STRESS, BEHAVIOR AND FITNESS IN HIGH DESERT SECONDARY CAVITY NESTERS	<b>Sandercock, B. K.</b> , Whinder, V. L., Casey, A. E., Mong, T. W., Johnson, T. N., Odum, K. J., Strum, K. M., Alfaro, M.: BLAZING AND GRAZING FOR CONSERVATION: HABITAT USE BY UPLAND SANDPIPERS IN AN EXPERIMENTAL LANDSCAPE	<b>Frei, B.</b> , Fyles, J. W., Cardille, J. A., Nocera, J. J.: MISSING THE SMALL PICTURE: MAPPING GEOGRAPHIC-DEPENDENCY IN THE RELATIONSHIP BETWEEN A THREATENED WOODPECKER AND ITS COMPETITOR	<b>Hudson, E. J.</b> , Shizuka, D.: DIALECT DISCRIMINATION IN NESTLING, BUT NOT ADULT GOLDEN-CROWNED SPARROWS	<b>Chinacchi, S. J.</b> , Ward, M. P., Benson, T. J.: WHY DO NESTLINGS FLEDGE EARLY IN THE DAY? EXAMINING THE ROLE OF PREDATION RISK IN SHAPING FLEDGING BEHAVIOR	<b>Eichholz, M. W.</b> : MECHANISMS FOR LATITUDINAL VARIATION IN SPECIES RICHNESS: WATERFOWL AS A CASE STUDY	<b>Elizondo, P.</b> , Ralph, C. J., Wolfe, J. D.: USING BANDING DATA IN THE UNDERSTANDING OF THE NATURAL HISTORY OF TROPICAL SPECIES: THE CASE OF COSTA RICA	
1645	<b>Frantz, M. W.</b> , Wood, P. B., Sheehan, J., George, G.: RESPONSE OF LOUISIANA WATERTHRUSH TO SHALE GAS DEVELOPMENT	<b>Whinder, V. L.</b> , McNew, L. B., Sandercock, B. K.: DEMOGRAPHIC AND MOVEMENT RESPONSES OF GREATER PRAIRIE-CHICKENS TO PATCH-BURN GRAZING ON PRIVATE LANDS	<b>Sauer, J. R.</b> , Zimmerman, G. S.: USING BBS AND THE ATLANTIC FLYWAY BREEDING WATERFOWL SURVEY TO ESTIMATE COMPOSITE TRENDS OF WOOD DUCK IN EASTERN NORTH AMERICA	<b>Schrago, A.</b> , Cicero, C., Bowie, R.: GEOGRAPHIC AND TEMPORAL VARIATION IN SONGS OF BAEOLOPHUS INORNATUS AND B. RIDGWAYI	<b>Beckmann, C.</b> , Bro, P., Martin, K.: HIERARCHICAL ASSESSMENT OF AVIAN RE-NESTING BEHAVIOR UNDER RISK OF PREDATION: POPULATION-LEVEL, ACROSS- AND INTRA-INDIVIDUAL RESPONSES	<b>Brady, M. L.</b> : TEMPORAL VARIATION IN DIVERSITY AT THE EDGE OF THE TROPICS	<b>Wolfe, J. D.</b> , Stouffer, P. C.: INSIGHTS FROM THE LONGEST OPERATING BIRD BANDING EFFORT IN THE AMAZON BASIN: THE BIOLOGICAL DYNAMICS OF FOREST FRAGMENTS PROJECT	
1700	Taylor, R. L., <b>Tack, J. D.</b> , Nangle, D. E., Mills, L. S.: COMBINED EFFECTS OF ENERGY DEVELOPMENT AND DISEASE ON GREATER SAGE-GROUSE	<b>Hamilton, R. G.</b> : APPLICATION OF THE FIRE-GRAZING INTERACTION MODEL FOR BIODIVERSITY CONSERVATION IN THE TALLGRASS PRAIRIE OF OKLAHOMA, USA	<b>Miller, D. A.</b> , Smith, A. C., Cadman, M., Russell, R., Weber, R. C.: DIFFERENT FOREST BIRD POPULATION TRENDS FROM BBS AND FOREST INTERIOR MONITORING SITES	<b>Cicero, C.</b> , Benedict, L., King, C., Karim, B.: CULTURAL EVOLUTION IN BELL'S AND SAGEBRUSH SPARROWS (ARTEMISIOSPIZA BELLI AND A. NEVADENSIS): DOES SONG REFLECT PHYLOGENY AND ECOLOGY?	<b>Ringelman, K. M.</b> , Eadie, J. M., Adelman, J. T., Shi, A., Longman, D., Yarns, G., Oldenburger, S. L., McAndrew, M. R.: SHIFTING PATTERNS OF NEST DENSITY AND PREDATION RISK: A SPATIAL ANALYSIS OF 15 YEARS OF DUCK NESTING DATA FROM CALIFORNIA	<b>Simont, E. A.</b> , O'Connell, T. J.: PATTERNS OF EASTERN SONGBIRD DISTRIBUTION IN CENTRAL OKLAHOMA'S CROSS TIMBERS FORESTS	<b>van Riper III, C.</b> , Puckett, S. L., Darrah, A. J.: CAPTURE AND BANDING PROVIDE INSIGHTS REGARDING THE IMPACT OF THE TAMARISK LEAF BEETLE (DIORHABDA CARINULATA) ON INSECTIVOROUS BIRDS	
1715	<b>Thompson, S. J.</b> , Johnson, D. H., Niemuth, N. D., Ribic, C. A.: ASSESSING THE IMPACT OF OIL DEVELOPMENT ON GRASSLAND BIRDS		<b>Link, W. A.</b> , Sauer, J. R.: CRITICIZING THE BBS MODEL	<b>Greig, E. I.</b> , Webster, M. S.: HOW DO NOVEL SIGNALS ORIGINATE? THE EVOLUTION OF FAIRY-WREN SONGS FROM PREDATOR TO DISPLAY CONTEXTS	<b>Hauber, M. E.</b> : MAFIA OR FARMER? COEVOLUTIONARY CONSEQUENCES OF RETALIATION AND FARMING AS PREDATORY STRATEGIES UPON HOST NESTS BY AVIAN BROOD PARASITES	<b>Curtis, J. R.</b> , Robinson, W. D.: 60 YEARS OF AVIAN COMMUNITY COMPOSITION CHANGE IN OREGON'S WILLAMETTE VALLEY	<b>Alexander, J. D.</b> : SUMMARY OF SYMPOSIUM: THE NEXT STEPS IN VALUE-ADDED METRICS FROM CAPTURE AND MARKING OF BIRDS	



# Saturday Morning Schedule

Room	Ruesch Auditorium	Longs Peak-Diamond East	Emerald Mountain-Bible Point	Longs Peak-Diamond West	Longs Peak-Chasm Lake	Longs Peak-Keyhole	Longs Peak-Granite Pass	Longs Peak - Boulder Field
	S04: Genomic Approaches to Understanding Avian Speciation	S21: Western Yellow-billed Cuckoo: Current Research and Management Needs	C08B: Habitat Fragmentation and Human Impacts	C11A: Habitat Relationships	C05E: Conservation 1	C07A: Phylogeography and Biogeography 1	C14: Physiology & Hormones	
Mod	L. Campagna	J. Stanek	M. S. Pruett	R. J. Fletcher	J. A. Cox	M. J. Miller	M.L. Grunst	
1000	<b>Taylor, S. A.</b> : INTRODUCTION TO SYMPOSIUM S04	<b>Lloyd, J. D.</b> , Mullin, R. D.: NATURAL HISTORY OF MANGROVE CUCKOOS IN SOUTH FLORIDA	<b>Evans, B. S.</b> , Ryder, T. B., Reitsma, R., Hurlbert, A. H., Marra, P. P.: ANNUAL SURVIVAL OF LAND BIRDS ALONG A RURAL-TO-URBAN LAND USE GRADIENT USING CITIZEN AND SCIENTIST GENERATED DATA	<b>Fletcher, R. J.</b> , Robertson, E. P., Kitchens, W. M.: THERE'S NO PLACE LIKE HOME: NATAL HABITAT EFFECTS ON DISPERSAL, NEST-SITE SELECTION, AND POPULATION STRUCTURE IN AN ENDANGERED BIRD	<b>Callicrate, T. E.</b> , Conant, S., Seward, J. F., Fleisch, R.: POPULATION DECLINES AND GENETIC VARIATION: EFFECTS OF SERIAL BOTTLENECKS IN THE LAYSAN FINCH	<b>Battey, C. J.</b> , Slager, D. L., Byson, R. W., Klicka, J.: PARAPHYLY AND MIGRATION IN THE RED-EYED VIREO SUPERSPECIES	<b>Slager, M.</b> , Pollock, H. S., Benham, P. M., Sly, N. D., Brawn, J. J., Cheviron, Z. A.: CLIMATIC INDICES UNDERLYING LATITUDINAL PATTERNS IN AVIAN METABOLIC SCOPE	
1015	<b>Campagna, L.</b> : INTRODUCTION TO VARIOUS GENOMIC METHODS	<b>Dettliff, M. D.</b> , Seavy, N. E., Gardali, T.: CURRENT STATUS OF WESTERN YELLOW-BILLED CUCKOO ALONG THE SACRAMENTO AND FEATHER RIVERS, CALIFORNIA	<b>Malpass, J. S.</b> , Rodewald, A. D.: NEST SURVIVAL OF URBAN-ADAPTED SONGBIRDS IN RESIDENTIAL YARDS AND ADJACENT FOREST PARKS	<b>Specht, H. M.</b> , Arnold, T., W. Trosen, C.: ADAPTING ROADSIDE SURVEY METHODS TO ENHANCE GREAT LAKES WATERFOWL MANAGEMENT	<b>Wolmann, S.</b> , Stouffer, P. C., Woodrey, M. S., Bergen Burns, C. M., Taylor, S.: POPULATION GENETICS OF THE GULF COAST SUBSPECIES OF THE SEASIDE SPARROW ( <i>AMMODRAMUS MARITIMUS</i> ): SUBSPECIES VALIDITY AND CONSERVATION IMPLICATIONS	<b>Klicka, L. B.</b> , Burns, K. J., Title, P. O., Kus, B. E.: PHYLOGEOGRAPHY AND CONSERVATION GENETICS OF THE BELLS VIREO	<b>Pollock, H. S.</b> , Cheviron, Z. A., Brawn, J. D.: TESTING JANZEN'S HYPOTHESIS: VARIATION IN AVIAN THERMAL TOLERANCES ACROSS LATITUDE	
1030	<b>Safra, R. J.</b> , Wilkins, M. R., Albrecht, T., Chan, S., Evans, M. R., Flaxman, S. M., Kaarstad, H., Loren, A., Noell, P., Buerkle, C. A.: ISOLATION BY DISTANCE OR ADAPTATION? THE ROLE OF SEXUAL SELECTION IN GENOME WIDE DIVERGENCE	<b>Carstensen, D. L.</b> , Ahlers, D. D., Moore, S. D.: SURVEY RESULTS AND BREEDING PAIR DELINEATION TECHNIQUES OF THE YELLOW-BILLED CUCKOO ON THE MIDDLE RIO GRANDE, NEW MEXICO	<b>Pruett, M. S.</b> , Bowman, R., Fitzpatrick, J. W., Dent, M.: POPULATION-SPECIFIC PATTERNS OF PARTIAL BROOD LOSS HIGHLIGHT DIFFERENCES IN ENVIRONMENTAL CONSTRAINTS ON PRODUCTIVITY	<b>Devries, J. H.</b> , Clark, R. G.: ADAPTIVE NEST SITE SELECTION IN BIRDS? EFFECTS OF LANDSCAPE COMPOSITION AND BREEDING DENSITY	<b>Correll, M. D.</b> , Olsen, B. J., Hodgman, T. P., West, W. A., Shriver, W. G.: A REGIONAL CHANGE COMPARISON OF OBLIGATE AND NON-OBLIGATE BIRDS IN TIDAL MARSHES OF THE NORTH ATLANTIC	<b>Boye, A. J.</b> , Martin, T. E., Wolf, B. O.: DIVERGENT PHYSIOLOGICAL TOLERANCE IN TWO ALLOPATRIC SPECIES OF WHITE-EYE (ZOSTEROPSIDAE) ON A TROPICAL ELEVATIONAL GRADIENT		
1045	<b>McCormack, J. E.</b> , Fariello, B. C.: WHOLE-GENOME APPROACH TO SPECIATION IN SCRUB-JAYS	<b>Sechrist, J. D.</b> , Ahlers, D. D., Paxton, E. H., Dorser, R. H., Ryan, V. M.: HOME RANGE AND MIGRATION STUDIES OF THE YELLOW-BILLED CUCKOO IN NEW MEXICO	<b>Brautigam, K. J.</b> , Osborne, D. C., White, D., Honey, J. P.: EFFECTS OF SUPPLEMENTAL WILDLIFE FEEDERS ON SURVIVAL OF ARTIFICIAL GROUND NESTS IN SOUTHEAST ARKANSAS	<b>Lehnen, S. E.</b> , Rowin, S. M., Sennie, S. E., Mueller, J. J., White, L., Zuckenberg, B.: USING CITIZEN SCIENCE TO EXPLORE SPATIOTEMPORAL PATTERNS OF AVIAN BOTULISM MORTALITY EVENTS IN LAKE MICHIGAN	<b>Prince, K.</b> , Chipault, J. White, L., Zuckenberg, B.: USING CITIZEN SCIENCE TO EXPLORE SPATIOTEMPORAL PATTERNS OF AVIAN BOTULISM MORTALITY EVENTS IN LAKE MICHIGAN	<b>Cabane, G. S.</b> , Trujillo-Arias, N., Charant, S., Viera, Chavez, A., Noaki, K., Darias, G., Santos, F., Mjeki, C. Y., Aleixo, A., Tabora, P. L.: HETEROGENEOUS BIOGEOGRAPHIC HISTORY AND HIGH LEVELS OF CRYPTIC BIRD DIVERSITY BETWEEN THE ATLANTIC AND TROPICAL ANDES FORESTS	<b>Stanton, R. L.</b> , Morrissey, C., Clark, R. G.: INDIRECT EFFECTS OF AGRICULTURAL INTENSIFICATION ON COMPONENTS OF TREE SWALLOW ( <i>TACHYCINETA BICOLOR</i> ) STRESS PHYSIOLOGY	
1100	<b>Harvey, M. G.</b> , Seeholzer, G. F., Judy, C. D., Maley, J. M., Brumfield, R. T.: COMPARATIVE PHYLOGEOGRAPHY USING GENOMIC DATASETS	<b>Stanek, J. R.</b> , McNeil, S. E., Tracy, D. D.: FACTORS AFFECTING DETECTION OF YELLOW-BILLED CUCKOOS DURING STANDARDIZED SURVEYS	<b>Peak, R. G.</b> , Thompson III, F. R.: SEASONAL PRODUCTIVITY AND NEST SURVIVAL OF GOLDEN-CHEEKED WARBLERS VARY WITH FOREST TYPE AND EDGE DENSITY	<b>Wood, E. M.</b> , Barker, S. E., Hochachka, W. M., Rohrbough, R. W., Rosenberg, K. V., Rodewald, A. D.: MEET YOU IN THE MIDDLE: HYBRID HABITAT PREFERENCES AND GENETIC INTROGRESSION IN GOLDEN-WINGED WARBLER	<b>Oswald, J. A.</b> : FOSSILS, MOLECULES AND ECOLOGY: THE HISTORICAL MECHANISMS SHAPING BIRD COMMUNITIES IN NW PERU	<b>Gonzalez-Medina, F.</b> , Castillo-Guerrero, J. A., Santiago-Quesada, F., Villegas, A., Masero, J. A., Sanchez-Guaman, J. M., Fernandez, C.: EXPERIMENTALLY MODIFIED DEMANDS ON PARENTS IN A LONG-LIVED SEABIRD: INTERGENERATIONAL CONSEQUENCES		
1115	<b>Deane-Coe, P. E.</b> , Bogdanowicz, S., Lovette, J. J., Harrison, R. G.: GENOMIC SIGNATURES OF RAPID ADAPTIVE DIVERGENCE IN THE SWAMP SPARROW	<b>McNeil, S. E.</b> , Culver, M.: POPULATION GENETIC DIVERSITY AND STRUCTURING OF YELLOW-BILLED CUCKOOS	<b>Walker, L. E.</b> , Marzluff, J. M.: SMALL PATCHES OF LOWER QUALITY HABITAT CONTRIBUTE TO THE POPULATION OF AN ENDANGERED SONGBIRD, THE BLACK-CAPPED VIREO ( <i>VIREO ATRICAPILLA</i> )	<b>Farquhar, M. L.</b> , Nocera, J. J., Morin, A. M.: HABITAT USE WITHIN AND AMONG ROOSTS OF CHIMNEY SWIFTS	<b>Weiser, E. L.</b> , Grueber, C. E., Kennedy, E. S., Jamieson, I. G.: UNEXPECTED POSITIVE EFFECTS OF INBREEDING IN THE HIGHLY INBRED CHATHAM ISLAND BLACK ROBIN	<b>Sweet, A. D.</b> , Johnson, K. P.: PATTERNS OF DIVERSIFICATION IN SMALL NEW WORLD GROUND DOVES ARE CONSISTENT WITH MAJOR NEW WORLD GEOLOGIC EVENTS	<b>Gillespie, L. M.</b> , Javor, J. M.: BEHAVIOR, PHYSIOLOGY, AND ORNAMENTATION OF MALE BLUEBIRD NEST DEFENSE AGAINST CONSPECIFIC INTRUDERS IN A CHRONICALLY DISTURBED AREA	
1130	<b>Tigano, A.</b> , Shultz, A. J., Edwards, S. V., Friesen, V. L.: TESTS OF LOCAL ADAPTATION ALONG A LATITUDINAL CLINE: A STUDY OF AN ARCTIC SEABIRD	<b>Jenkins, J. M.</b> , Thompson, F. R., Feaborg, J. R.: POSTLEDDING DISPERSAL AREA LANDCOVER AND SURVIVAL OF ACADIAN FLYCATCHERS AND OWENBIRDS IN A MISSOURI FOREST FRAGMENT	<b>Rice, M. B.</b> , Rossi, L., Apa, A. D.: REFINING SEASONAL RESOURCE SELECTION MODELS FOR THE MANAGEMENT OF GREATER SAGE-GROUSE IN NORTH PARK, COLORADO	<b>Peiffer, J.</b> , Benford, R.: CAUSES OF MORTALITY OF GODLEEN WHITE-EYES ON SAIPA	<b>Salter, J. F.</b> , Maley, J. M.: DNA FROM MUSEUM SPECIMENS ELUCIDATES DISPUTED LOCALITIES IN THE FULVUS OWL ( <i>STRIX FULVESCENS</i> )	<b>Preston, P. J.</b> , Brigham, R. M.: THE INFLUENCE OF PREY AVAILABILITY ON THE THERMOREGULATORY BEHAVIOUR OF THE COMMON POORWILL ( <i>PHALAENOPTILUS NUTTALLII</i> )		
1145	<b>Winger, B.</b> , Bates, J.: A TIME THRESHOLD FOR PLUMAGE DIVERGENCE IN ALLOPATRIC ANDEAN BIRDS	<b>Eiterson, M. A.</b> , Greenberg, R., Hollenhorst, T.: LANDSCAPE AND REGIONAL CONTEXT DIFFERENTIALLY AFFECT NEST PARASITISM AND NEST PREDATION FOR WOOD THRUSH IN CENTRAL VIRGINIA, USA	<b>Wagner, M. A.</b> , Reynolds, J. D.: IMPACTS OF SALMON ON SONGBIRD COMMUNITIES	<b>Gutzwiller, K. J.</b> , Riffell, S. K., Flather, C. H.: THE PREVALENCE OF RELATIVELY SIMPLE BROAD-SCALE LIMITING FACTORS ON AVIAN PERSISTENCE BELIES THE COMPLEXITY OF ASSEMBLAGE-LEVEL CONSERVATION	<b>Harris, R. B.</b> : SPECIATION IN EURASIAN WAGTAILS (AVES: MOTACILLIDAE): INFERRING PHYLOGENY, DELIMITING SPECIES, AND ESTIMATING GENE FLOW USING SNPS	<b>Grunst, M. L.</b> , Grunst, A. S., Parker, C., Romero, M., Rosenberg, J. T.: PIGMENT-SPECIFIC RELATIONSHIPS BETWEEN FEATHER CORTICOSTERONE LEVELS AND SEXUAL COLORATION IN THE YELLOW WARBLER ( <i>SETOPHAGA PETECHIA</i> )		

# Saturday Mid-day Schedule

Room	Ruesch Auditorium	Longs Peak-Diamond East	Emerald Mountain-Bible Point	Longs Peak-Diamond West	Longs Peak-Chasm Lake	Longs Peak-Keyhole	Longs Peak-Granite Pass	Longs Peak - Boulder Field
	S04: Genomic Approaches to Understanding Avian Speciation	S15: Recent Advances in Rusty Blackbird Research: A Symposium Honoring the Memory of Russell S. Greenberg	S08: A Century Later: Lessons from the Extinction of the Passenger Pigeon ( <i>Ectopistes migratorius</i> )	C05C: Grassland Management and Conservation	C05F: Conservation 2	C11C: Habitat Relationships: Forests	C03A: Landscape Ecology and Fragmentation	
Mod	L. Campagna	C. Foss	D. Blockstein	C. B. Wilsey	S. Taylor	J.A. Tomasevic	R. Rueda-Hernández	
13:30	<b>Mason, M. A.</b> : Taylor, S. A.: DIFFERENTIALLY EXPRESSED GENES UNITE PHENOTYPES AMIDST UNDIFFERENTIATED ANONYMOUS LOCI IN THE PHENOTYPICALLY DIVERSE REDPOLL FINCHES (ACANTHIS)	<b>Powell, L. L.</b> : AN INTRODUCTION TO THE RUSTY BLACKBIRD SYMPOSIUM: FOUNDATION ON THE BUILDING BUILT BY RUSS GREENBERG	<b>Blockstein, D. E.</b> : OVERVIEW: THE ECOLOGY AND EXTINCTION OF THE PASSENGER PIGEON ( <i>ECTOPISTES MIGRATORIUS</i> )	<b>Verheijen, B. H.</b> : SANDERCOCK B K: EFFECTS OF PATCH-BURN GRAZING MANAGEMENT ON NEST SURVIVAL AND BROOD PARASITISM RATES OF DECLINING SPECIES OF GRASSLAND SONGBIRDS	<b>Pejchar, L.</b> : Culliney, S.: KAUSHIK, M.: CRAMTON, L.: SEED DISPERSAL AND THE DECLINE OF HAWAII'S FRUIT-EATING BIRDS	<b>Tomasevic, J. A.</b> : MARZLUFF, J. M.: SUCCESSFUL EXPLOITATION OF SUBURBAN LANDSCAPES BY THE PILEATED WOODPECKER	<b>Rueda-Hernández, R.</b> : MACGREGOR-FORS, L.: RENTON, K.: SHIFTS IN RESIDENT BIRD COMMUNITIES ASSOCIATED WITH CLOUD FOREST PATCH SIZE IN CENTRAL VERACRUZ, MEXICO	
13:45	<b>Strýkowski, K. F.</b> : Sorenson, M.: D. ISLANDS OF DIVERGENCE IN AN EXTRAORDINARY RADIATION OF FINCHES (LONGICURIA SPP.) FROM PAPUA NEW GUINEA	<b>Westwood, A. R.</b> : Staicer, C.: HABITAT ASSOCIATIONS OF THE RUSTY BLACKBIRD IN NOVA SCOTIA, AND OPPORTUNITIES FOR CONSERVATION WITHIN A MULTI-SPECIES SUITE	<b>Westwood, A. R.</b> : Staicer, C.: HABITAT ASSOCIATIONS OF THE RUSTY BLACKBIRD IN NOVA SCOTIA, AND OPPORTUNITIES FOR CONSERVATION WITHIN A MULTI-SPECIES SUITE	<b>Levandovski, G. J.</b> : PANJABI, A. O.: GALLAGHER, S.: QUATTINI, L.: VERCAUTEREN, T.: YES, IN YOUR BACKYARD: A MODEL FOR INCREASED PRIVATE GRASSLANDS CONSERVATION	<b>Mack, A. L.</b> : CONSERVATION AND ECOLOGY OF SEED DISPERSAL BY THE DWARF CASSOWARY CASIARIUS BENNETTI: A SYNTHESIS OF 25 YEARS OF RESEARCH AND CONSERVATION	<b>Ruiz-Sanchez, A.</b> : Rueda-Hernández, R.: RENTON, K.: BIRDS AND DISTURBANCE: EFFECT OF HABITAT MODIFICATION ON WILSON'S WARBLER DENSITY, TERRITORY SIZE AND BODY CONDITION		
14:00	<b>Baldassarre, D. T.</b> : White, T.: KARDIAN, J.: WEBSTER, M. S.: GENOMIC AND MORPHOLOGICAL ANALYSIS OF A SEMIPERMEABLE AVIAN HYBRID ZONE SUGGESTS ASYMMETRICAL INTROGRESSION OF A SEXUAL SIGNAL	<b>Luepold, S. B.</b> : Hodgman, T. P.: McNULTY, S. A.: COHEN, J.: FOSS, C. R.: A MULTI-SCALE ANALYSIS OF RUSTY BLACKBIRD NEST SURVIVAL AND NEST PREDATORS IN NEW ENGLAND	<b>Shapiro, B.</b> : Green, R. E.: RODRIGUES SOARES, A. E.: NOVAK, B.: THE GENOMICS OF EXTINCTION-USING ANCIENT DNA TO UNDERSTAND THE RISE AND FALL OF THE PASSENGER PIGEON*	<b>Panjabi, A. O.</b> : MACIAS-DUARTE, A.: LEVANDOVSKI, G. J.: RUVALCABA-ORTEGA, I.: GONZALEZ-ROJAS, J. I.: POOL, D. B.: WHERE DO GRASSLAND BIRDS OVERWINTER? DENSITY AND ABUNDANCE OF GRASSLAND BIRDS IN THE CHIHUAHUA DESERT	<b>Sandercock, B. K.</b> : EFFECTS OF TAMARIX REMOVAL ON COMMUNITY DYNAMICS OF RIPARIAN BIRDS	<b>Schaming, T. D.</b> : CLARK'S NUTCRACKER DEMOGRAPHY AND HABITAT SELECTION IN THE FACE OF HABITAT DECLINE	<b>Knight, E. C.</b> : <b>Mahony, N.</b> : A.: GREEN, D. J.: LOCAL AND LANDSCAPE EFFECTS ON THE BIRD COMMUNITY IN SAGEBRUSH SHRUBSTEPPE	
14:15	<b>Scordato, E.</b> : Wilkins, M.: SEMENOV, G.: RUBISOV, A.: KANE, N.: PARCHMAN, T.: BUEKLE, A.: SAFAN, R.: PHENOTYPIC AND GENOMIC CLINES IN TWO BARN SWALLOW CONTACT ZONES	<b>Wohner, P. N.</b> : <b>Foss, C. R.</b> : GREENBERG, R.: COOPER, R.: RUSTY BLACKBIRD SURVIVORSHIP AND HABITAT SELECTION DURING THE POSTFLEDGING PERIOD		<b>Shew, J. J.</b> : SPARTLING, D. W.: NIELSEN, C. K.: GRASSLAND BIRD RESPONSE TO MID-CONTRACT MANAGEMENT AND MULTI-SCALE FACTORS ON PRIVATE CONSERVATION RESERVE PROGRAM LANDS	<b>McLeod, M. A.</b> : PELLEGRINI, A.: RE: EFFECTS OF TAMARISK DEFOLIATION ON SOUTHWESTERN WILLOW FLYCATCHERS ALONG THE VIRGIN RIVER	<b>Ginde, A. R.</b> : NIEMI, G. J.: OCCUPANCY DYNAMICS OF CANADA WARBLERS IN MINNESOTA'S NATIONAL FORESTS	<b>Joos, C. J.</b> : KENDRICK, S. W.: POMELTZI, P. A.: THOMPSON, F. R.: FAABORG, J. M.: TERRITORY DENSITY RESPONDS TO STAND LEVEL FOREST STRUCTURE: EVIDENCE FROM A LONG-TERM EXPERIMENT	
14:30	<b>Balakrishnan, C. N.</b> : Bergland, A. O.: GONZER, R. A.: WARREN, W. C.: TUTTLE, E. M.: THE GENOMICS OF NONSPECIATION IN THE BEHAVIORALLY POLYMORPHIC WHITE-THROATED SPARROW	<b>Matsuoka, S. M.</b> : Tiesler, D. F.: SHAW, D.: HARDING-SMITH, A.: LOONIS, D.: COOPER, E.: HADJIKOVICH, N.: IDENTIFYING DEMOGRAPHIC DEFICITS AMONG RUSTY BLACKBIRD BREEDING IN ALASKA: CLUES TO UNDERSTANDING POPULATION DECLINE?	<b>Temple, S. A.</b> : ZUCKERBERG, B.: STANTON, J. C.: REVISITING HISTORICAL PASSENGER PIGEON DATA: REINFORCING SOME INTERPRETATIONS AND QUESTIONING OTHERS*	<b>Wilsey, C. B.</b> : POLLOCK, J.: SCHWETZ, J. G.: CONSERVING GRASSLAND BIRDS IN THE CHICAGO WILDERNESS USING CITIZEN SCIENCE AND REMOTE-SENSING	<b>Pruett, H. L.</b> : MATHEWSON, H. A.: MORRISON, M. L.: <b>Davis, K. P.</b> : NEWMAN, C.: STUDY OF THE POTENTIAL IMPACTS OF HIGHWAY CONSTRUCTION ON SELECTED BIRDS WITH EMPHASIS ON THE GOLDEN-CHEEKED WARBLER	<b>Rose, E. T.</b> : SIMONS, T. R.: UNDERSTANDING LONG-TERM TRENDS IN BIRD OCCURRENCE FOLLOWING AN INCREASE IN THE PREVALENCE OF FIRE ON A SOUTHERN APPALACHIAN LANDSCAPE	<b>Stanton, R. A.</b> : Thompson III, F. R.; Kesler, D. C.: UNDERSTANDING LANDSCAPE FOREST COVER AND BIRD OCCUPANCY IN MANAGED SAVANNAS AND WOODLANDS	
14:45	<b>Taylor, S. A.</b> : Curry, R. L.; White, T. A.; Perretti, V.; Lovette, I. J.: CONSISTENT GENOMIC SIGNATURES OF REPRODUCTIVE ISOLATION IN A MOVING AVIAN HYBRID ZONE	<b>Scard, J. C.</b> : FOSS, C.: DEMAREST, D.: HEYDEN, K.: SINDLAR, P.: MOBILIZING TWO COUNTRIES FOR CONSERVATION: RUSTY BLACKBIRD SPRING MIGRATION BLITZ		<b>MacDonald, N. M.</b> : NOI, E.: THE EFFECTS OF ROTATIONAL GRAZING AND HAY MANAGEMENT ON THE REPRODUCTIVE SUCCESS OF BOBOLINK AND EASTERN MEADOWLARK IN EASTERN ONTARIO	<b>Apa, A. D.</b> : WIECHMAN, L. A.: PHILLIPS, M. L.: GUNNISON SAGE-GROUSE CONSERVATION: SUCCESSFUL DEVELOPMENT OF CAPTIVE-REARING TECHNIQUES FOR THE COLLECTION, STORAGE AND HATCH OF WILD AND CAPTIVE-SOURCE EGGS	<b>Dunham, S. W.</b> : HARRISON, D. J.: HABITAT SELECTION OF FEMALE SPRUCE GROUSE DURING BROOD REARING IN COMMERCIALY MANAGED FORESTS	<b>Wolfe, J. D.</b> : MOKROSS, K.: STOFFER, P. C.: INFLUENCE OF SECOND GROWTH AND FOREST FRAGMENTATION ON THE COMPOSITION DEMOGRAPHY AND FLOCK DYNAMICS OF AMAZONIAN BIRDS	
15:00		<b>Evans, B. S.</b> : POWELL, L. L.: ASSESSING THE DISTRIBUTION OF WINTERING RUSTY BLACKBIRD POPULATIONS USING CITIZEN SCIENTIST GENERATED DATA	<b>Meine, C.</b> : THE IMPACT OF THE PASSENGER PIGEON'S EXTINCTION ON CONSERVATION SCIENCE AND POLICY*	<b>Plumb, R. T.</b> : LAUTENBACH, J.: ROBINSON, S. G.: KRAFT, J.: SULLINS, D.: HAUKOS, D. A.: PIMAN, J. C.: DAUGHER, D.: BREEDING SEASON HABITAT PATCH USE BY FEMALE LESSER PRAIRIE-CHICKENS IN KANSAS AND COLORADO	<b>Cox, J. A.</b> : MCCORMICK, J. K.: REINTRODUCTION OF THE RED-COCKADED WOODPECKER TO A SITE IN NORTH FLORIDA	<b>Eyes, S. A.</b> : ROBERTS, S. L.; JOHNSON, M. D.: THE EFFECTS OF FIRE SEVERITY ON CALIFORNIA SPOTTED OWL HABITAT USE PATTERNS	<b>English, P. A.</b> : NOCERA, J. J.; GREEN, D. J.: HOMELESS AND HUNGRY: FACTORS INFLUENCING DISTRIBUTION AND ABUNDANCE OF A NOCTURNAL AERIAL INSECTIVORE	
15:15	<b>Judy, C. D.</b> : GRAVES, G. R.: BRUMFIELD, R. T.: SPECIATION AND HYBRIDIZATION IN JAMAICAN-ENDEMIC STREAMTAIL HUMMINGBIRDS	<b>Borchert, S. M.</b> : STOFFER, P. C.: SITE-SPECIFIC HABITAT AND LANDSCAPE ASSOCIATIONS OF RUSTY BLACKBIRDS WINTERING IN LOUISIANA		<b>Youngberg, E. N.</b> : PANJABI, A. O.: DENSITY AND TRENDS OF GRASSLAND BIRDS ON CITY OF FORT COLLINS PROPERTIES IN THE MOUNTAINS TO PLAINS AREA OF NORTHERN COLORADO	<b>Spellmeyer, A. J.</b> : ROGERS, C. M.: REVERSING SONBIRD DECLINE: OVERWINTER FOOD SUPPLEMENTATION INCREASES SURVIVAL OF THE DARK-EYED JUNCO	<b>Johnson, K.</b> : <b>Wickersham, L.</b> : SMITH, J.: SEDITO, G.: NEVILLE, T.: WICKERSHAM, J.: NEST-SCALE HABITAT USE BY PINYON-JUNIPER BIRDS ON DEPARTMENT OF DEFENSE LANDS	<b>Lockhart, J.</b> : KOPEL, N.: RELATIVE EFFECTS OF HABITAT LOSS AND FRAGMENTATION ON GRASSLAND SONGBIRD COMMUNITIES	

# Saturday Afternoon Schedule

Room	Ruesch Auditorium	Longs Peak-Diamond East	Emerald Mountain-Bible Point	Longs Peak-Diamond West	Longs Peak-Chasm Lake	Longs Peak-Keyhole	Longs Peak-Granite Pass	Longs Peak - Boulder Field
	S04: Genomic Approaches to Understanding Avian Speciation	S06: The Effects of Environmental Contaminants on Birds, and the Utility of Birds as Biomarkers of Pollution	S08: A Century Later: Lessons from the Extinction of the Passenger Pigeon ( <i>Ecopistes migratorius</i> )	C05A: Conservation: Population Trends	C05G: Conservation 3	C07B: Phylogeography and Biogeography 2	C06F: Migration, Within-Season Movement/Dispersal	
Mod	L. Campagna	A. B. Alquati	D. Blockstein	L. Hargrove	D.C. Pavlacky	J. A. Oswald	M. S. Martell	
1600	<b>Campagna, L.</b> , Shvetra, L. F.; Lovette, J. J.: DIVERGENT PHENOTYPES DESPITE (MOSTLY) HOMOGENEOUS GENOMES: INSIGHTS FROM A RECENT NEOTROPICAL AVIAN RADIATION	<b>Kearns, B. V.</b> , McDowell, S.; Moon, J.; Rigby, E.; Conway, W.; Haukoos, D. A.: LEAD EXPOSURE IN WATERFOWL: SOURCES, PATHWAYS, AND SOLUTIONS	<b>Wegner, S.</b> : STARS, PIES AND CASH: THE PASSENGER PIGEON IN NORTH AMERICAN ART AND CULTURE, 1500-2014*	<b>Smith, P. A.</b> , Pollock, L.; Bart, J.: CORRELATES OF GLOBAL SHOREBIRD POPULATION DECLINE AND IMPLICATIONS FOR ARCTIC BREEDERS	<b>Pavlacky, D. C.</b> , Hami, D. J.; Gallagher, S.: INTEGRATING MONITORING DATA AND ECOLOGICAL SITE DESCRIPTIONS TO ACHIEVE MULTI-SPECIES BIRD CONSERVATION IN WORKING LANDSCAPES	<b>Manthey, J. D.</b> , Moyle, R. C.: ISOLATION BY ADAPTATION: LANDSCAPE GENOMICS OF WHITE-BREASTED NUTHATCHES (SITTA CAROLINENSIS) IN THE SKY ISLANDS OF ARIZONA	<b>Ware, H. E.</b> , McClure, C. J.; Carlisle, J. D.; Barber, J. R.: ROAD NOISE REDUCES FORAGING AND STOPOVER EFFICIENCY OF MIGRATING SONGBIRDS	
1615	<b>Uy, J. A.</b> , Cooper, E. A.: THE GENOMICS OF SPECIATION-FLY-CATCHERS OF THE SOLOMON ISLANDS	<b>Jackson, A. K.</b> , Eagles-Smith, C. A.: AQUATIC NUTRIENT AND MERCURY CONTAMINANT SUBSIDIES TO WILLAMETTE VALLEY RIPARIAN SONGBIRDS		<b>Hille, D. C.</b> , Wiedenfeld, D. A.; Lezama-Lopez, M.; Brightsmith, D.; Paton, M. A.: OCCUPANCY TRENDS OF THE AVIAN FAMILY PSITTACIDAE IN NICARAGUA OVER A 20-YEAR MONITORING PERIOD	<b>Bartuszevige, A. M.</b> , Vazquez, M.; Carter, M.: INTEGRATING HUMAN DIMENSIONS INTO BIOLOGICAL PLANNING FOR BIRD CONSERVATION IN THE WESTERN GREAT PLAINS	<b>Luttrell, S. A.</b> , Fleischer, R.; Greenberg, R.; Loh, B.: MICROSTELLITE ANALYSIS OF MARSH WRENS (CISTOTHORUS PALUSTRIS) REVEALS SURPRISING LACK OF GENETIC DIVISION AMONG ECOLOGICALLY AND GEOGRAPHICALLY VARIABLE POPULATIONS	<b>Martell, M. S.</b> , Katzner, T.; Miller, T.; Hall, K.; Metus, S.; Somersho, S.; Soehren, E.: GOLDEN EAGLE MIGRATION AND WINTERING IN THE GREAT LAKES REGION	
1630	<b>Hooper, D. M.</b> , Price, T. D.: GENOMIC REARRANGEMENT IN ESTERLID FINCHES: GENE FLOW AND POPULATION SIZE PREDICT EXTENT OF KARYOTYPE DIVERGENCE		<b>Sullivan, S. M.</b> , Greenberg, J.: PROJECT PASSENGER PIGEON: RESOURCES FOR INDIVIDUALS THAT PROMOTE LEARNING FROM THE PAST FOR A SUSTAINABLE FUTURE*	<b>Noera, J. J.</b> , Redink, M. W.; Campomizzi, A. J.: POPULATION TRENDS OF AERIAL INSECTIVORES BREEDING IN NORTH AMERICA CAN BE LINKED TO TRADE IN INSECTICIDES ON WINTERING GROUNDS IN CENTRAL AND SOUTH AMERICA	<b>Ramsdell, C. P.</b> , <b>Dwyer, A. M.</b> ; Snyder, L. H.; Sorice, M. G.: WHAT MOTIVATES PRIVATE LANDOWNERS TO PARTICIPATE IN A CONSERVATION PROGRAM TO PROTECT MOUNTAIN FLOWER NESTS?	<b>Tesler, D. E.</b> , Johnson, J. A.; Masucka, S. A.; Greenberg, R. S.; Ross, A. R.; Hudson, K. A.; Newell, P. J.; DiCico, L. H.: INVESTIGATING MIGRATION PATTERNS OF THE RUSTY BLACKBIRD USING LIGHT-LEVEL GEOLOCATORS AND STABLE ISOTOPES	<b>Robinson, S. G.</b> , Plumb, R. T.; Lautenbach, J. M.; Kraft, J. D.; Sullins, D. S.; Haukoos, D. A.; Pittman, J. C.: NONBREEDING SEASON MOVEMENT AND HABITAT USE OF LESSER PRAIRIE-CHICKENS IN KANSAS	
1645	<b>Toews, D. P.</b> , Brelsford, A.; Grossen, C.; Mita, B.; Irwin, D. E.: GENOMIC VARIATION IN YELLOW-RUMPED WARBLERS	<b>Henkel, J. R.</b> , Sigel, B. J.; Taylor, C. M.: OILING RATES AND CONDITION INDICES OF SHOREBIRD COMMUNITIES IN THE NORTHERN GULF OF MEXICO FOLLOWING THE DEEPWATER HORIZON OIL SPILL		<b>Buechley, E. R.</b> : ECOLOGICAL AND ANTHROPOGENIC FACTORS CAUSING AVIAN SCAVENGER DECLINES	<b>Farr, C. M.</b> , Peghcar, L.; Reed, S. E.: EFFECTS OF CONSERVATION DEVELOPMENT DESIGN AND STEWARDSHIP ON BIRD COMMUNITIES IN NORTHERN COLORADO	<b>Benham, P. M.</b> , Cheviron, Z. A.: HISTORICAL AND ECOLOGICAL CORRELATES OF POPULATION STRUCTURE IN THE SAVANNAH SPARROW ( <i>PARASERCULUS SANDWICHENSIS</i> )	<b>Jones, C. D.</b> , Stodola, K. W.; Combs, J.; Cooper, R. J.; Ward, M. P.: EFFECTS OF FRAGMENTATION ON MOVEMENTS OF BACHMAN'S SPARROWS ( <i>PELICAEA AESTIVALS</i> ) AND PRAIRIE WARBLERS ( <i>SETOPHAGA DISCOLOR</i> ) OVER THE FIELD OR THROUGH THE WOODS?	
1700	<b>McCracken, K. G.</b> : Natarajan, C.; Montyama, H.; Weber, R. E.; Fago, A.; Projerio-Garcia, J.; Storz, J. F.: PARALLEL ADAPTATION IN THE MAJOR HEMOGLOBIN GENES OF ANDEAN DUCKS	<b>Bergeson Burns, C. M.</b> ; Wolmann, S.; Stouffer, P. C.; <b>Taylor, S.</b> : PHYSIOLOGICAL AND ECOLOGICAL EFFECTS OF THE DEEPWATER HORIZON OIL SPILL ON SEASIDE SPARROWS		<b>Hargrove, L.</b> , Unitt, P.: POOR REPRODUCTIVE SUCCESS OF THE GRAY VIREO ( <i>VIREO VICINIOR</i> ) IN CALIFORNIA WHERE POPULATIONS ARE DECLINING	<b>Loss, S. R.</b> , Will, T.; Marra, P. P.: ANTHROPOGENIC BIRD MORTALITY IN THE UNITED STATES: COMPARISON OF DATA-DRIVEN ESTIMATES FOR MULTIPLE THREATS AND IDENTIFICATION OF OVERARCHING RESEARCH NEEDS		<b>Williams, E. J.</b> , Boyle, W. A.: GRASSHOPPER SPARROWS ON THE MOVE: WHAT EXPLAINS VARIATION IN WITHIN-SEASON BREEDING DISPERSAL IN A DECLINING SONGBIRD?	
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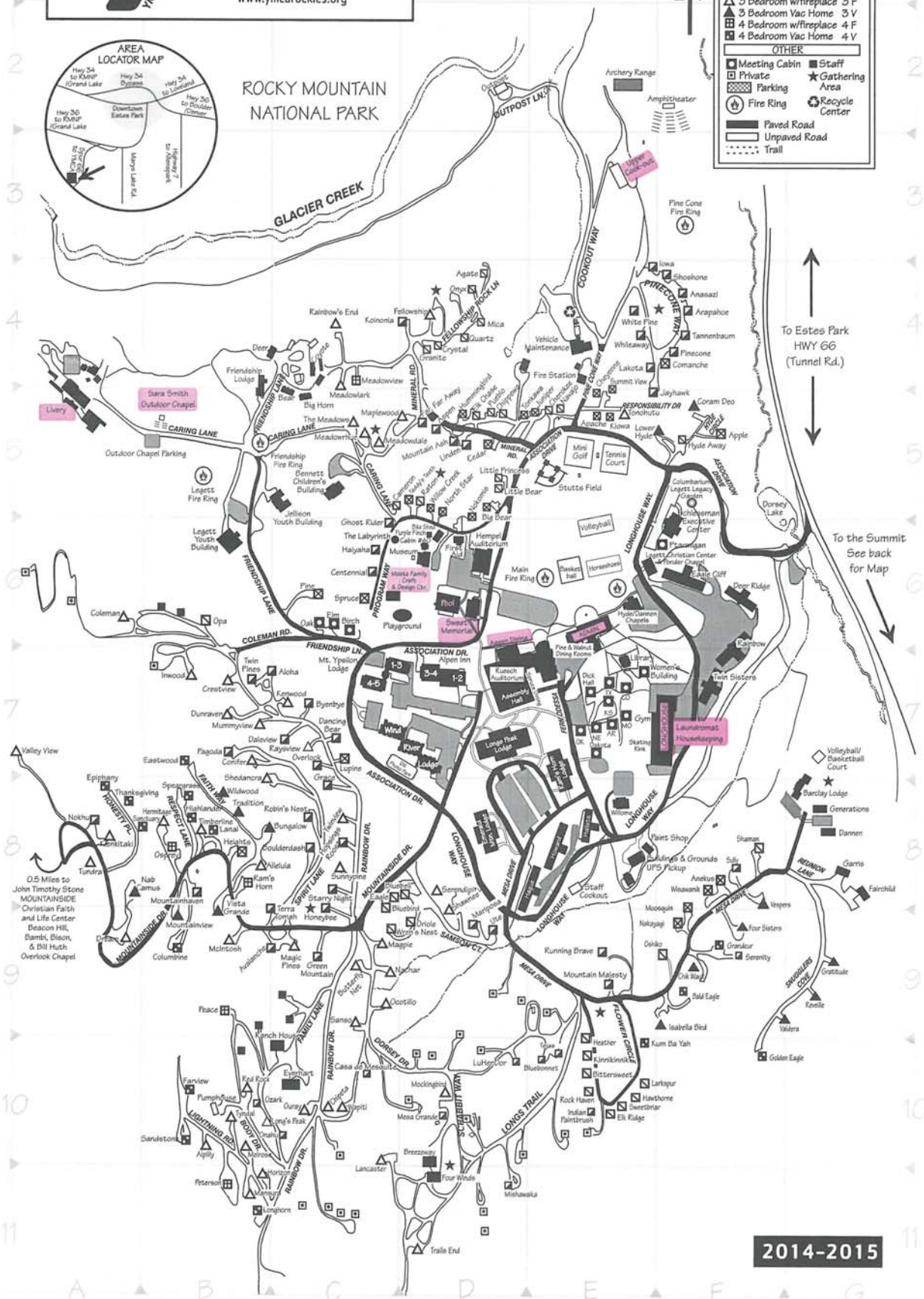


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4 Bedroom w/fireplace	4 F
4 Bedroom Vac Home	4 V
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2014-2015





## 2014 JOINT MEETING

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