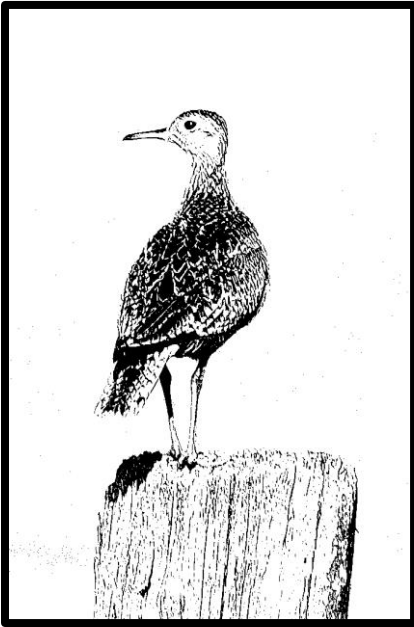


Western Bird Banding Association

2019 Annual Meeting

Preliminary Program 8/25/19



Hosted by **Bird Conservancy of the Rockies** at the Old Stone House Environmental Learning Center and Barr Lake State Park, Brighton, Colorado, September 19-22, 2019

The **Bird Conservancy of the Rockies** conserves birds and their habitats through an integrated approach of science, education, and land stewardship. From the Rocky Mountains to the Great Plains, Mexico, and beyond, they collaborate with private and public landowners to improve native bird populations by conducting sound science, empowering people, and sharing information.



Contents

Meeting at a Glance.....	3
Field Trips.....	4
Friday Afternoon Workshops	5
Invited Speakers	5
Detailed Conference Schedule	6
Silent Auction Fundraiser.....	7
Directions, Contact Information, and Rates	7
Brighton Area Map	9
Denver Area Map	10

Meeting at a Glance...

Thursday, September 19th

Thursday Evening

- Registration and BBQ at the Old Stone House

Friday, September 20th

Friday Morning

- Registration and breakfast at Barr Lake SP
- Banding demonstration at Bird Conservancy of the Rockies' Barr Lake station
- Tour of the collection at the Denver Museum of Nature and Science
- Birding at the Rocky Mountain Arsenal National Wildlife Refuge

Friday Afternoon

- Lunch at Barr Lake SP
- General workshops

Friday Evening

- Dinner and social at the Old Stone House
- Plenary talk Dr. Kristin Ruegg on the Bird Genoscape Project.

Saturday, September 21st

Saturday Morning

- Breakfast at Barr Lake SP
- Banding demonstration at Bird Conservancy of the Rockies' Barr Lake station
- Plenary Talk by C. John Ralph, Klamath Bird Observatory
- Morning scientific session

Saturday Afternoon

- Lunch at Barr Lake SP
- Afternoon Scientific Session

Saturday Evening

- Poster session, silent auction, social, and drinks
- Happy hour and dinner at the Old Stone House
- Keynote talk by Dr. Lauryn Benedict, Northern Colorado University

Sunday, September 22nd

Sunday Morning

- Breakfast at Barr Lake SP
- Banding demonstration at Bird Conservancy of the Rockies' Barr Lake station
- Tour of the Pawnee National Grassland

Field Trips

Friday, September 19th

Tour of the Denver Museum of Nature and Science bird collection

Times: 9:30 AM – 11:30 AM. Tour the state-of-the-art collection facility at the Denver Museum of Nature and Science and learn about the museum's expansive bird collection and ornithological research program.

Enrollment: Limited to 20 participants, waitlist available

Fee: \$10; Proceeds to benefit WBBA and BCR

Birding at the Rocky Mountain Arsenal NWR

Times: 9:30 AM – 11:30 AM

Spend a morning birding at a nearby National Wildlife Refuge that has a mix of grassland, shrubland, forest, and marsh habitats. Learn about local efforts to restore the endangered black-footed ferret and view bison in their natural habitat. This trip will include a short hike (1 mile) and a driving tour of the 11-mile Wildlife Drive loop.

Enrollment: Limited to 12 participants, waitlist available

Fee: \$10; Proceeds to benefit WBBA and BCR

Birding at the Audubon Center and Chatfield State Park

Times: 9:30 AM – 12:30 PM

Join a guided tour of the Audubon Center, an education and outreach facility operated by Denver Audubon within Chatfield State Park. Chatfield State Park was designated an Important Bird Area by the Audubon Society. In cooperation with Bird Conservancy of the Rockies, Denver Audubon runs a banding station here each spring. This station will not be in operation during our visit, but

representatives from Denver Audubon will provide an overview of local conservation challenges and initiatives, and they will lead a bird walk on the property.

Enrollment: Limited to 12 participants, waitlist available

Fee: \$11; Proceeds to benefit Denver Audubon

Sunday, September 20th

Tour of the Pawnee National Grassland and Central Plains Experimental Range

Times: 6:00 AM – 3:00 PM. Visit one of the largest remaining tracts of shortgrass steppe habitat. This trip will be led by Amber Carver, who completed her graduate research on shortgrass steppe breeding birds and will share her knowledge of local ecology, birds, and research.

We will start the morning at Crow Valley Campground, one of Colorado's best migration hotspots. It is located in prime riparian habitat surrounded by grassland and attracts a wide array of species in migration.

We will then drive across the west unit of the Pawnee National Grassland, stopping along the way to view grassland birds and learn about shortgrass steppe ecology and Pawnee National grassland management practices.

The final stop on this trip is the Central Plains Experimental Range (CPER), a long-term (1939 – present) grazing research facility where rangeland scientists are currently studying the effects of cattle on grassland birds. It is a restricted-access facility, so this is a special opportunity to visit a site normally closed to the public.

Enrollment: Limited to 12 participants, waitlist available

Fee: \$10; Proceeds to benefit WBBA and BCR.

Friday Afternoon Workshops

This year's meeting will feature a variety of interesting and informative workshops. All workshops will take place Friday afternoon (1:00 PM – 5:00 PM). Most workshops will be free-of-charge, but we are collecting a small fee for the following special workshop:

Crash Course in Data Entry and Management in R

Times: 1:00 PM – 2:00 PM

Led By: Amber Carver (University of Colorado Denver)

The R programming language is one of the best ways to streamline data management, manipulation, analysis, and visualization. Unlike traditional tools (e.g., Excel), R provides a way to easily document, replicate, and modify procedures. This workshop is intended for beginners who have little or no knowledge of R and would like to learn how to get started.

Amber is a PhD student at the University of Colorado Denver who teaches R programming to undergraduates. Using the RStudio interface, this workshop will cover: 1) basic R syntax and logic, 2) importing, entering, manipulating, visualizing, and exporting data; and 3) how to create, use, and modify scripts. You will need to bring your own computer and install R and Rstudio before attending the workshop. Detailed instructions will be provided in advance.

Enrollment: Limited to 10 participants
Fee: \$10; Proceeds to benefit WBBA and BCR.

Dipper Research Techniques: Trapping, color-banding and nest-box design

Times: TBD

Led By: Nancy Drilling (Bird Conservancy of the Rockies)

Rocky Mountain Avian Data Center: A tool for conservation

Times: TBD

Led By: Jennifer Timmer (Bird Conservancy of the Rockies)

And.... Several other workshops to be announced soon.

Invited Speakers

Friday Evening Plenary

Kristen Ruegg is an assistant professor at Colorado State University – Fort Collins. She received her bachelor's degree from the University of Oregon, master's degree from San Francisco University, and PhD from the University of California Berkeley. Kristen uses a diverse array of tools (behavioral studies, genetics, GIS, and acoustic analysis) to investigate mechanisms regulating species diversity. She is now Principal Investigator for the Bird Genoscape Project, whose mission is to better our understanding of migratory connectivity through genomics.

Saturday Evening Keynote

Lauryn Benedict is an associate professor at the University of Northern Colorado. She received her bachelor's degree from Cornell University and her PhD from UC Berkeley. She currently studies animal communication and behavior, using bird song as a model system for understanding how signals evolve in nature. Research in her lab combines field observation, population-monitoring, and sound recording analyses within a phylogenetic context.

Detailed Conference Schedule

Thursday, September 19th, 2019

4:00 PM – 9:00 PM: Registration opens at the Old Stone House

5:30 PM – 9:00 PM: BBQ dinner and social at the Old Stone House

Friday, September 20th, 2019

6:00 AM – 8:00 AM: Breakfast at Barr Lake State Park

7:00 AM – 11:00 AM: Bird banding demonstration and bird walk at Barr Lake State Park (*free; sign-up required*)

9:30 AM – 11:30 AM: Tour of the bird collection at the Denver Museum of Nature and Science (\$10 fee; sign-up required)

9:30 AM – 11:30 AM: Field Trip to the Rocky Mountain Arsenal National Wildlife Refuge (\$10 fee; sign-up required)

9:30 AM – 4:00 PM: Field Trip to the Audubon Center and Chatfield State Park (\$15 fee; sign-up required)

12:00 PM – 1:00 PM: Lunch at Barr Lake State Park

1:00 PM – 5:00 PM: Workshops at Barr Lake State Park

1:00 PM – 5:00 PM: Board meeting at the Old Stone House

5:30 PM – 7:30 PM: Dinner and social at the Old Stone House

7:30 PM – 8:30 PM: Plenary talk Dr. Kristin Ruegg: Bird Genoscape Project

Saturday, September 21st, 2019

6:00 AM – 8:00 AM: Breakfast at Barr Lake State Park

7:00 AM – 9:00 AM: Bird banding demonstration and bird walk at Barr Lake State Park (*free; sign-up required*)

9:00 – 9:30: Plenary talk (Traits of Successful Bird Observatories: Three Generations in the New World. Dr. C. John Ralph

)

9:30 AM – 12:00 PM: Morning scientific sessions at Barr Lake SP

12:00 PM – 1:00 PM: Lunch at Barr Lake State Park

1:00 PM – 4:00 PM: Afternoon scientific session at Barr Lake State Park

4:30 PM – 5:30 PM: Poster session and social at the Old Stone House

5:30 PM – 7:30 PM: Dinner and social at the Old Stone House

7:30 PM – 9:00 PM: Keynote speaker Dr. Lauryn Benedict at Barr Lake State Park

Sunday, September 22nd, 2019

6:00 AM – 8:00 AM: Breakfast at Barr Lake State Park

6:15 AM – 3:00 PM: Birding tour of the Pawnee National Grassland (\$10 fee; sign-up required)

7:00 AM – 11:00 AM: Bird banding demonstration and bird walk at Barr Lake State Park (*free*; sign-up required)

Silent Auction Fundraiser

WBBA's annual silent auction is a key fundraiser for our student grant program. You can support this endeavor by bidding on items during the meeting and/or by donating auction items. We welcome all bird-related items, including but not limited to books, art, feeders, and banding equipment. Bidding will commence on Friday morning and end at 7:00 PM Saturday evening. We thank you in advance for helping WBBA raise the funding necessary to continue our mission.

Directions, Contact Information, and Rates

Event Venues

The Old Stone House Environmental Learning Center (Meeting HQ):
14500 Lark Bunting Lane, Brighton, CO 80603 ([Map](#), [Website](#))

Barr Lake State Park Nature Center:

13401 Picadilly Road, Brighton, CO 80603 ([Map](#), [Website](#))
General Inquiries: (303) 659-6005
Website: cpw.state.co.us/placestogo/parks/barrlake
Daily Admission Fee: \$8/vehicle
Distance from Meeting HQ: 5 miles (13 minutes)

Hotels with Meeting Rates

Holiday Inn Express and Suites:

2212 S Medical Center Drive, Brighton, CO 80601 ([Map](#), [Website](#))
General Inquiries and Reservations: (303) 659-8574
Room Type: One King or Two Queens. Meeting Rate: \$114.99 plus tax
Distance from Meeting HQ: 2.9 miles (7 minutes)

Candlewood Suites:

2204 S Medical Center Drive, Brighton CO 80601 ([Map](#), [Website](#))
General Inquiries and Reservations: (303) 659-6929
Room Type: One King or Two Queens. Group Rate: \$99.99 plus tax
Distance from Meeting HQ: 2.9 miles (7 minutes)

Nearest Camping

Cherry Creek State Park:

4201 S Parker Rd, Aurora, CO 80014 ([Map](#), [Website](#), [Reservations](#))
General Inquiries: (303) 693-3957. Daily Admission Fee: \$10/vehicle
Site Type (Nightly Fee): Basic (\$28) or Full Hook-up (\$41)
Distance from Meeting HQ: 31.7 miles (33 minutes)

St. Vrain State Park:

3785 Weld County Road 24 ½, Firestone, CO, 80504 ([Map](#), [Website](#), [Reservations](#))
General Inquiries: (303) 678-9402. Daily Admission Fee: \$8/vehicle
Site Type (Nightly Fee): Electric Hook-up (\$36) or Full Hook-up (\$41)
Distance from Meeting HQ: 27.9 miles (39 minutes)

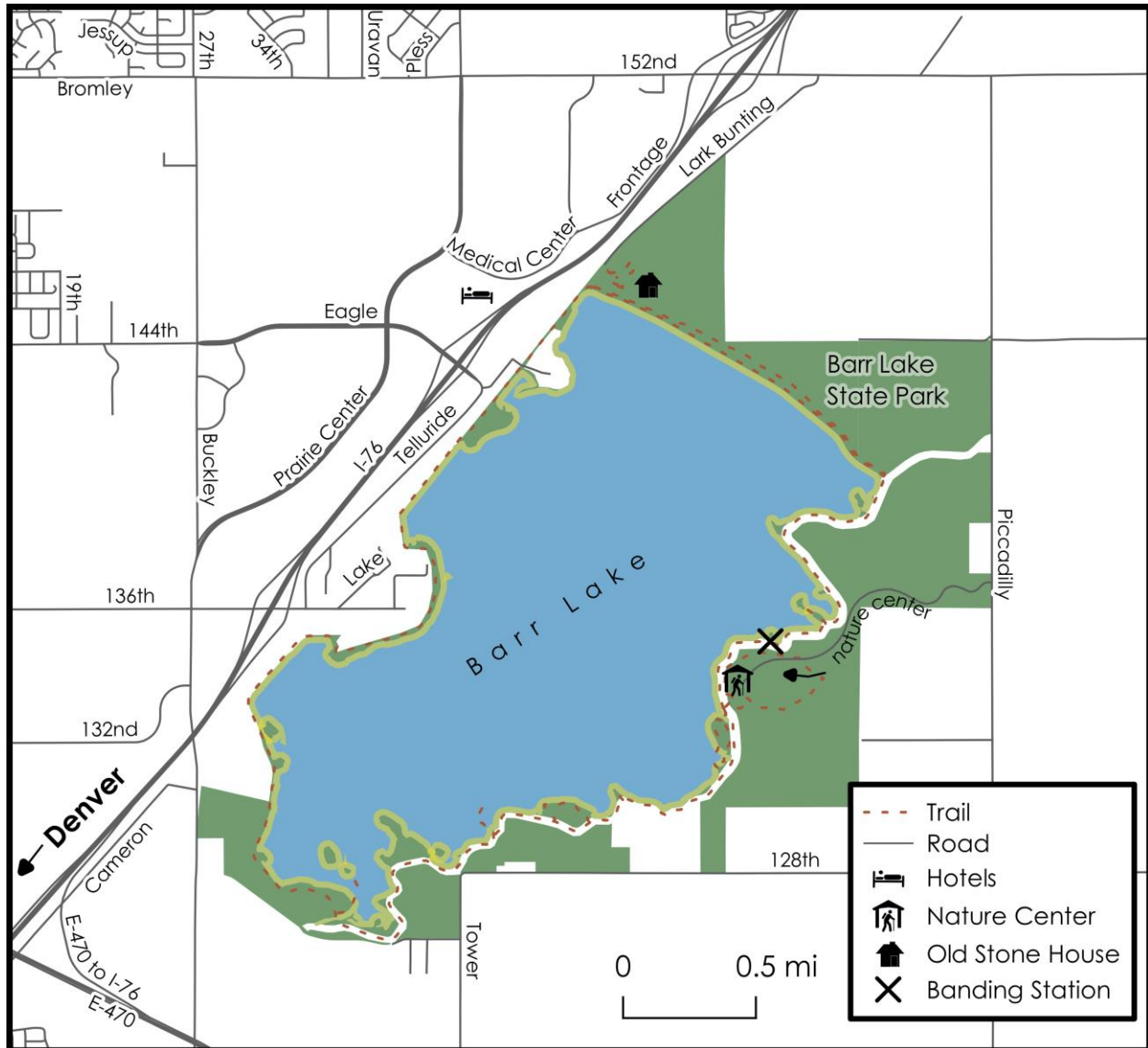
Jackson Lake State Park:

26363 County Road 3, Orchard, CO 80649 ([Map](#), [Website](#), [Reservations](#))
General Inquiries: (970) 645-2551. Daily Admission Fee: \$8/vehicle
Site Type (Nightly Fee): Basic (\$28) or Electric (\$36)
Distance from Meeting HQ: 53.5 miles (56 minutes)

Chaffield State Park:

11500 N Roxborough Park Rd, Littleton, CO 80125 ([Map](#), [Website](#), [Reservations](#))
General Inquiries: (303) 791-7275. Daily Admission Fee: \$9/vehicle
Site Type (Nightly Fee): Electric (\$36) or Full hook-up (\$41)
Distance from Meeting HQ: 52.9 miles (1 hour, 7 minutes).

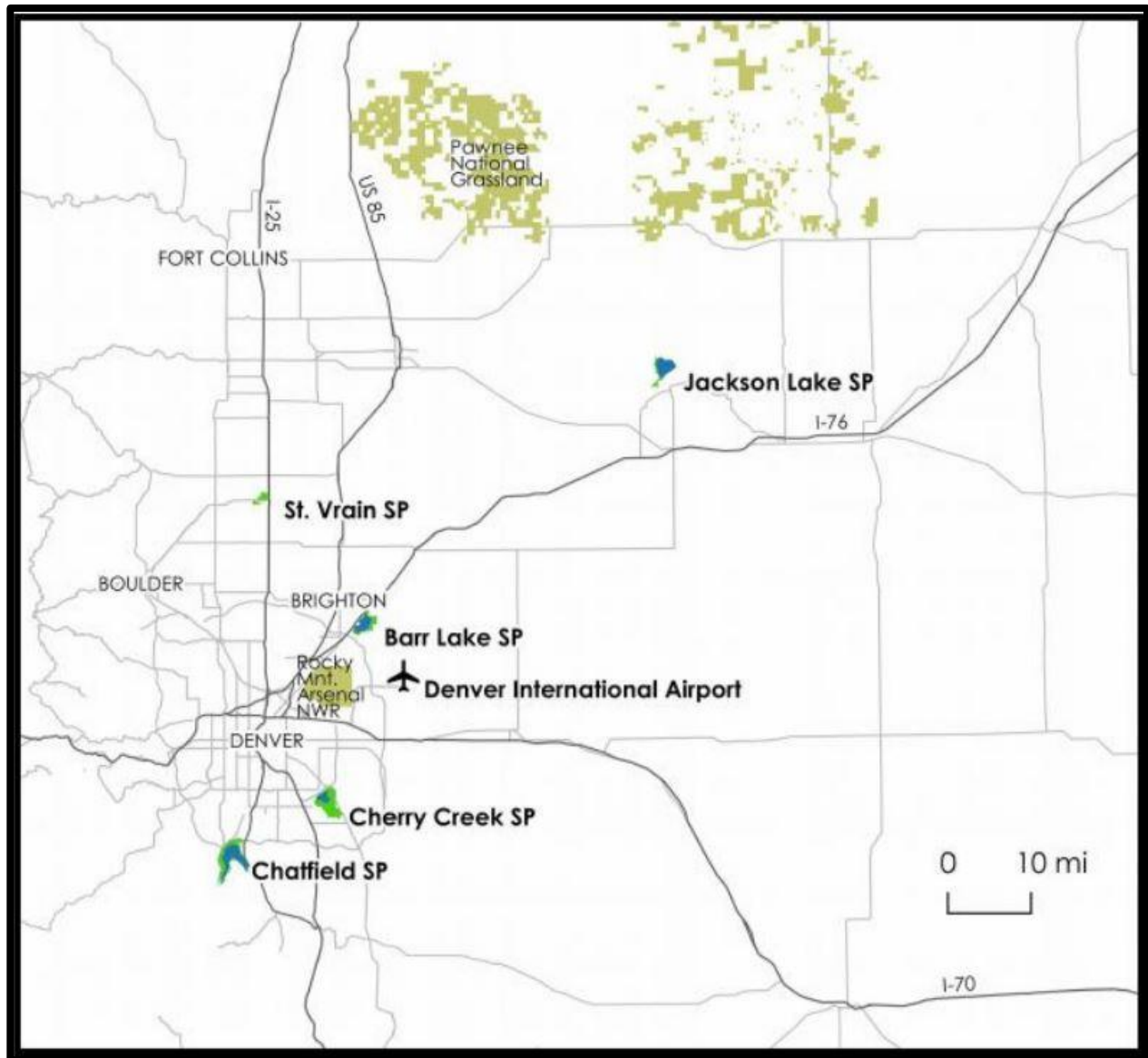
Brighton Area Map



During this year's meeting, most social events will be held at the Old Stone House, headquarters for Bird Conservancy of the Rockies. Workshops and talks will be held at the Barr Lake State Park Nature Center. The park is used by many bird species during migration, and the footpath around the lake affords easy access to high-quality birding spots.

During fall migration, Bird Conservancy of the Rockies operates a banding station near the nature center, and you will have the opportunity to visit the station and learn about the important work that goes on there. Both the Old Stone House and the nature center/banding station are less than 10 minutes' drive from the Holiday Inn Express and Candlewood Suites Hotels.

Denver Area Map



Brighton is located near the Denver International Airport. Several nearby state parks provide excellent habitat for birds and host a wide array of species during fall migration. Barr Lake State Park does not permit camping, but several nearby state parks do. Chatfield, Cherry Creek, Jackson Lake, and St. Vrain State Parks all allow camping and are within an hour's drive of Brighton.

During this year's meeting, we will take several field trips: we will visit Chatfield State Park to learn about Denver Audubon's research and education program; tour the bird collection at the Denver Museum of Nature and Science in downtown Denver; take a bird walk at the Rocky Mountain Arsenal National Wildlife Refuge; and spend a day exploring the Pawnee National Grassland.