Vol. 54 No.2 Spring 2020

Colorado Birds

The Colorado Field Ornithologists' Quarterly



IN THE SCOPE: BARN SWALLOWS



Colorado Field Ornithologists P.O. Box 1568 Loveland, Colorado 80539 cfobirds.org

Colorado Birds (USPS 0446-190) (ISSN 1094-0030) is published quarterly by the Colorado Field Ornithologists, P.O. Box 929, Indian Hills, CO 80454. Subscriptions are obtained through annual membership dues. Nonprofit postage paid at Louisville, CO. POSTMASTER: Send address changes to Colorado Birds, P.O. Box 1568 Loveland, Colorado 80539.

Officers and Directors of Colorado Field Ornithologists: Dates indicate end of current term. An asterisk indicates eligibility for re-election. Terms expire at the annual convention.

Officers: President: Nicholas Komar (Fort Collins), 2021*, president@cobirds.org; Vice President: Gloria Nikolai (Colorado Springs), 2021*, vicepresident@cobirds.org; Secretary: Peter Burke (Niwot), 2021*, secretary@cobirds.org; Treasurer: Irene Fortune (Loveland), 2021*, treasurer@cobirds.org, Immediate Past President: David Gillilan, 2020.

Directors: Diana Beatty (Colorado Springs), 2021*; Amber Carver (Littleton), 2021*; Julie Frost (Colorado Springs), 2020*; Megan Jones Patterson (Boulder), 2022*; Stephanie Pitt (Greeley), 2022*; Sue Riffe (Lyons), 2020*; Walter Wehtje (Fort Collins), 2022*

<u>Colorado Bird Records Committee:</u> Dates indicate end of current term. An asterisk indicates eligibility to serve another term.

Chair: Mark Peterson (Colorado Springs), mpeterson33@yahoo.com

Committee Members: Lisa Edwards (Palmer Lake), Secretary; Peter Gent (Boulder), 2020*; Rachel Hopper (Fort Collins), 2021*; Tony Leukering (Largo, Florida), 2018; Dan Maynard, Denver, 2020*; Kathy Mihm Dunning (Denver), 2021*; Christian Nunes (Longmont), 2019*; Steven Mlodinow (Longmont), 2019*, Jason St. Pierre (Durango), 2021*, David Dowell, (Longmont), 2021*

Colorado Birds Quarterly:

Editor: Christy S. Payne, editor@cobirds.org

Staff: Monika Edgar, Layout, monika.edgar@gmail.com; George Mayfield and Jim Esten, Photo Editors

Annual Membership Dues (renewable quarterly):

Household membership (digital/web) - \$25;

Household membership (print) - \$35;

Youth/student (digital/web) - \$12;

Institution (print) - \$40;

Foreign (digital) - \$25.

Membership dues entitle members to an online subscription to Colorado Birds, which is published quarterly. Back issues/extra copies may be ordered for \$7.50. Send requests for extra copies/back issues, change of address and membership renewals to membership@cobirds.org. Contributions are tax deductible to the extent allowed by law.

COPYRIGHT ©**2020** by Colorado Field Ornithologists. Reproduction of articles is permitted only under consent from the publisher. Works by U.S. and Canadian governments are not copyrighted.

Colorado Birds

The Colorado Field Ornithologists' Quarterly | Vol. 54 No. 2 | Spring | 2020

President's Message
News From the Field: Spring 2019 (March-May)
The Hungry Bird: Aphids
In The Scope: The Problem of Juvenile and Immature Barn Swallows 60 Tony Leukering



Cedar Waxwing with buckthorn fruit at Pizza Hut in Fort Collins, Larimer County. 02 March 2020. Photo by David Leatherman.

Colorado CBCs: Colorado Christmas Bird
Count Highlights
Brandon K. Percival

Trip	Report:	Nort	heast	Co	lorad	о.	 	72
Nick	Komar an	d Sue	Riffe					

PRESIDENT'S MESSAGE

As I sit down to write this message (19 March 2020), our society is being transformed by a new global pandemic caused by a novel coronavirus called SARS-CoV-2. In Colorado as of this date, 216 cases have been reported with 2 deaths. But this is the tip of the infection iceberg, and unfortunately more deaths will come. The global impact of this pandemic rivals that of the Spanish Flu of 1918. CFO activities have been cancelled for several months. The stock market



Nick Komar

crashed, many jobs have been lost. Worse yet, of course, are the lives that were lost. I can only hope that the pandemic wave has passed by the time you read this, and that life is getting back to normal.

At CFO, we will reschedule our cancelled events for next year. As for birding, I encourage you to use it as a way to maintain balance in your life. Birding is a way to get out of the house and to stay connected with nature. Combine birding with a hike and it's a great way to get exercise as well. Birding is often a social event and fortunately, can be practiced in combination with social distancing, keeping 6 feet apart from other birders, avoiding shaking hands, and sharing optics. Birding can also be a low budget activity, especially when staying local.

The CFO Board of Directors is exploring ways of serving the Colorado birding community in the wake of the 2020 pandemic. We will announce any new initiatives on our website, on the CoBirds listserv and the CFO facebook page.

-Nick Komar

CFO FIELD TRIP ANNOUNCEMENT: SOUTHWEST COLORADO JULY 4-6, 2020

Coen Dexter and Brenda Wright will lead this weekend trip to Montezuma and Dolores Counties. This trip will explore the canyons of Montezuma County and the highlands of Dolores County. Some of the species highlighted might include Lucy's Warbler, Grace's Warbler, Summer Tanager, Gray Vireo, Black-throated Sparrow, Juniper Titmouse, Pinyon Jay, Band-tailed Pigeon, Purple Martin, Lewis's Woodpecker, and much more. Trip limited to 12 participants. Register for this trip online at www.cobirds.org/CFO/FieldTrips/.



Summer Tanager. Photo by N. Komar.

NEWS FR<u>OM</u> T<u>HE FIELD</u>

News From the Field: Spring 2019 (March-May)

DEAN SHOUP



Neotropic Cormorant, Jefferson County, 24 April 2019. Photo by Rob Raker.

"News from the Field" contains reports of rare or unusual birds found in Colorado. The reports contained herein are largely vetted by eBird review and in some cases the Colorado Bird Records Committee (CBRC). In addition, some reports have not been vetted by these groups, and the editors don't necessarily vouch for their authenticity. Species and/or counties in capitals are those for which the CBRC requests documentation. Please submit your sightings of these "review" species through the CFO website at coloradobirdrecords.org.

SEASON OVERVIEW

The spring season started with temperatures in March near average for much of the state. The San Luis Valley had above-average temperatures. In April, the state experienced above-average temperatures throughout, while May had temperatures that were well below average, including a series of storms bringing rain and snow. Precipitation for western Colorado was well above average throughout the season, while most of the eastern half of the state was near average.

Highlights of the season were many, including rare waterfowl such as a Eurasian Wigeon, lingering scoters, Long-tailed Ducks, and Red-necked Grebes. Shorebirds were present in good numbers with variety, including rarities. Piping and Snowy Plovers were found in unusual locations, while Whimbrel were found nearly everywhere and in good numbers. Rarities included a King Rail, Common Gallinule, Hudsonian Godwit, and Red Knot. White-rumped Sandpipers also had a good showing. Western Colorado had its first Tricolored Heron, while Cañon City enjoyed a Yellow-crowned Night-Heron.

Other rarities included multiple Glaucous-winged Gulls, many Caspian Terns, two reports of the rare Arctic Tern as well as many Neotropic Cormorants. It was a great year for rare raptors.



Eurasian Wigeon, Larimer County, 30 March 2019. Photo by Andy Bankert.



Black-billed Cuckoo, Baca County, 15 May 2019. Photo by Randall Siebert.



Lesser Nighthawk, Bent County, 9 May 2019. Photo by Richard Bunn.



Hudsonian Godwit, Kiowa County. 11 May 2019. Photo by John Drummond.



White-tailed Kite, Prowers County, 27 May 2019. Photo by Jill White Smith.



Zone-tailed Hawk, Prowers County, 29 May 2019. Photo by Eric DeFonso.



Black Phoebe, Rio Grande County, 5 May 2019. Photo by John Rawinski.



Scissor-tailed Flycatcher, Larimer County, White-eyed Vireo, El Paso County, 14 May 2019. Photo by Deb Evers.



15 May 2019. Photo by Steve Brown.

A state first White-tailed Kite was found and photographed, along with a Harris's Hawk, Red-Shouldered Hawk, and Zone-tailed Hawk. A Scissor-tailed Flycatcher was found in Rocky Mountain National Park. Rare vireos included reports of White-eyed, Yellow-throated, Blue-headed, and Philadelphia. Pacific, Winter, and even the rare Sedge Wren were all found this season. A Wood Thrush and two Varied Thrush were reported. A very rare Hooded Oriole was discovered, along with an even rarer Bronzed Cowbird.

The spring season is always a good time to see migrant warblers with the hopes of seeing some eastern vagrants. This year provided a few goodies in that department. Three species of tanagers were reported, with high numbers of Western Tanagers, providing birders the opportunity to see this colorful species in many backyards and parks throughout the Front Range.



White-eyed Vireo, Prowers County, 28 April 2019. Photo by David Dowell.



Yellow-throated Vireo, Arapahoe County, 27 April 2019. Photo by Adam Vesely.



Wood Thrush, Lincoln County, 19 May 2019. Photo by Dean Shoup.



Wood Thrush, Lincoln County, 20 May 2019. Photo by Glenn Walbek.



Hooded Oriole, Denver County, 24 April 2019. Photo by Mark Chavez.



Worm-eating Warbler, Pueblo County, 18 April 2019. Photo by Alan Ketcham.



Golden-winged Warbler, Boulder County, 9 May 2019. Photo by Christian Nunes.



Connecticut Warbler. El Paso County, 29 May 2019. Photo by Alan Ketcham.



Blackburnian Warbler, Pueblo County, 13 May 2019. Photo by John Drummond.

In the list of reports below, county names are italicized, and the following abbreviations are used: CBC – Christmas Bird Count; CFO – Colorado Field Ornithologists; CG – Campground; CR-County Road; CU – Colorado University; et al. – and others; m.ob. – many observers; NA – Natural Area; NG – National Grassland; NP—National Park; NWR – National Wildlife Refuge; OS – Open Space; Res. – Reservoir; SP – State Park; SWA – State Wildlife Area; WTP – Water Treatment Plant; West Slope – areas west of Continental Divide.

Trumpeter Swan: Two at Valco Ponds SWA, *Pueblo*, 2-10 Mar (DuWayne Worthington, m.ob.). Two at Highline Lake SP, *Mesa*, 3-13 Mar (Ronda Woodward, m.ob.); one at DeBeque Canyon Tunnel pullout area, *Mesa*, 3 Mar (Carol Ortenzio); two at Canyon View Park Ponds, *Mesa*, 10-24 Mar (Mike Henwood).



Painted Redstart, Kiowa County, 3 May 2019. Photo by Van Truan.



Hermit Warbler, Boulder County, 24 May 2019. Photo by Steve Larson.



Scarlet Tanager, Rio Grande County, 8 May 2019. Photo by John Rawinski.



Prairie Warbler, Jefferson County, 12 May 2019. Photo by Mark Chavez.



Hermit Warbler, 17th Street near Boulder Creek, Boulder County, 25 May 2019. Photo by Jane Baryames.

Tundra Swan: Two at Highline Lake SP, *Mesa*, 9 Feb – 10 Mar (m.ob.), continuing since 9 Feb. One at North Gateway Park, *Prowers*, 1 Mar – 14 Apr (Tony Leukering). Two at Plaster Res., *Broomfield*, 10 Mar (Chipper Phillips). One at Jumbo Res., *Sedgwick*, 11 Mar (DFO Field Trip led by David Suddjian). Three at Cozzens Lake, *Weld*, 12 – 25 Mar (Steven Mlodinow, Scott Somershoe). Four at Andrick Ponds SWA, *Morgan*, 16 Mar (Charles Hundertmark). Two at Bud Mielke Res., *Larimer*, 23 – 25 Mar (Christine Sparks, m.ob.). One at Valmont Res. Complex, *Boulder*, 24 Mar (Mark Minner-Lee). Three at De Beque Canyon, *Mesa*, 16 Apr (Sue Riffe, et al.). One at Upper Queens/Neeskah Res., *Kiowa*, 20 Apr (Steven Mlodinow, Tony Leukering).

EURASIAN WIGEON: One at Orlando Res., *Huerfano*, 18 – 26 Mar (David Suddjian, m.ob.). One at Wellington SWA—Cobb Lake Unit, *Larimer*, 29 – 31 Mar (Andy Bankert, Carrie Olson).

White-winged Scoter: One first spring female at St. Vrain SP, *Weld* 5 Mar (Steven Mlodinow).

Black Scoter: One at Pueblo SWA, *Pueblo*, 8 Mar (Al Garner). One at Lathrop SP, *Huerfano*, 17 Mar – 17 Apr (Cody Ensanian, Kara Carragher, m.ob.). One at Rocky Mountain Arsenal NWR, *Adams*, 23 Mar (Kim Mauritz). One at Cherry Creek SP, *Arapahoe*, 22 Apr (Loch Kilpatrick).

Long-tailed Duck: One at Firestone Gravel Pits, *Weld*, 5 Mar – 25 May (Steven Mlodinow). Two at Blue Heron Ponds, *Fremont*, 6 Mar – 23 Apr (Rich Miller). One at Fossil Creek Res. NA, *Larimer*, 7 Mar – 13 Apr (Nick Komar). One at Cherry Creek SP, *Arapahoe*, 14 – 18 Apr (Cynthia Madsen). One at Aurora Res., *Arapahoe*, 24 Apr (David Suddjian, Diane Roberts). One at Wellington SWA—Cobb Lake Unit, *Larimer*, 29 May (Robin Welsh et al.).

Red-necked Grebe: One at Pueblo Res., *Pueblo*, 10 Mar – 22 Apr (Glenn Walbek, m.ob.). One at Aurora Res., *Arapahoe*, 9 Apr (David Suddjian). One at Rueter-Hess Res., (restricted access), 7 – 12 May (Tim Ryan).

Greater Roadrunner: One at Barr Lake SP, *Adams*, 6 Apr (Ira Sanders). Second county record; first county record by same observer in July, 2013.

BLACK-BILLED CUCKOO: One at Carizzo picnic area, *Baca*, 15 May (Randy Siebert).

LESSER NIGHTHAWK: One at Van's Grove, *Bent*, 3 May (Duane Nelson, m.ob.).

Black Swift: One at Connected Lakes, *Mesa*, 4 May (Darren Lawley). First early May record by two weeks. Eight at Pueblo Res., *Pueblo*, 29 May (Brandon K. Percival).

ANNA'S HUMMINGBIRD: One at Roxborough SP, *Douglas*, 22 Apr (Thomas Cote Stevens).

KING RAIL: One at Brett Gray Ranch (restricted access), *Lincoln*, 29 Apr – 7 May (Mark Peterson, Steven Mlodinow, Christopher Pague).

COMMON GALLINULE: One at Wellington SWA—Schware Unit & Morris Res., *Larimer*, 29 Apr – 30 May (Josh Bruening, m.ob.).

Piping Plover: One at Clear Creek Valley Park, *ADAMS*, 7 May (Gabriel Wiltse). One at Cherry Creek SP, *ARAPAHOE*, 8 May (Santi Tabares). One at Rueter-Hess Res. (restricted access), *DOUGLAS*, 9 May (Tim Ryan). Other reports from the typical counties of *Bent, Kiowa*, and *Prowers* from 23 Apr – 31 May.

Snowy Plover: One at Topminnow NA, *LARIMER*, 27 Apr (Jim Nachel). One at Crom Lake, *WELD*, 24 May (Grant Beauprez). Four at Blanca Wetlands NWR, *ALAMOSA*, 29 May (Robert Martinez). Other reports in the typical counties of *Bent, Crowley, Kiowa*, and *Otero* from 6 Apr – 31 May.

Whimbrel: A season high count of 33 were observed at Burlington WTP, KIT CARSON, 17 May (Tim Smart, et al.). Many more reports throughout the state in Adams, Arapahoe, Boulder, Denver, El Paso, Kiowa, La Plata, Larimer, Lincoln, Logan, MONTEZUMA, Morgan, Pueblo, and Weld from 13 Apr – 20 May.

HUDSONIAN GODWIT: One at Upper Queens/Neeskah Res., *Kiowa*, 11 – 12 May (Steven Mlodinow).

Ruddy Turnstone: One at John Martin Res., *Bent*, 21 Apr (Duane Nelson). One at Arapahoe Bend NA, *Larimer*, 1 – 2 May (Jim Nachel m.ob). One at Neenoshe Res., *Kiowa*, 8 May (Tim Mitzen, Bez Bezuidenhout). One at Rueter-Hess Res. (restricted access), *Douglas*, 9 May (Tim Ryan).

RED KNOT: One at Stewart's Pond, Weld, 25 May (Doug Kibbe).

Dunlin: One at Neenoshe Res., *Kiowa*, 25 Mar (David Suddjian). Five at Lower Queens Res., *Kiowa*, 15 Apr (Mark Peterson).

White-rumped Sandpiper: A season high count of 29 were observed at Lower Queens Res., *Kiowa*, 26 May (David Dowell); at least one was observed at this same location beginning 4 May (Brandon K. Percival, m.ob.). Other reports from *Arapahoe*, *Denver*, *Douglas*, *Lincoln*, *Morgan*, *Prowers*, *Pueblo*, and *Weld* from 6 – 27 May.

Red Phalarope: One at Baxter Lake, *Weld*, 24 May (Steven Mlodinow).

Franklin's Gull: A migrating spectacle of 500 were reported at Boulder Res., *Boulder*, 22 Apr (Ted Floyd).

Mew Gull: One at Neenoshe Res., *Kiowa*, 17 Mar (Steven Mlodinow, Sean Walters). One at South Platte River—McKay Rd & 100th area, *Adams*, 20 – 24 Mar (Chuck Aid, Greg Levandoski, Michael Kiessig, m.ob.). One at Elaine T. Valente OS, *Adams*, 22 Mar (Charlie Chase). One at Robert A. Eason Regional Park, *Jefferson*, 22 Apr (David Suddjian, m.ob.).

GLAUCOUS-WINGED GULL: One immature at Pueblo Res.—South Marina area, *Pueblo*, 6 – 9 Mar (David Tønnessen); likely a continuing bird from February. One adult at Horseshoe Res., *Larimer*, 13 Apr (Andy Bankert, Nick Komar). One adult at Upper Queens/Neeskah Res., *Kiowa* 13 – 15 Apr (David Dowell, David Tønnessen, m.ob.).

Glaucous Gull: One at Warren Lake, Larimer, 18 Mar (Nick Komar).

Great Black-backed Gull: One at Weld CR 3.25 and Weld CR 16.5, *Weld*, 9 Mar (Bruce Snyder). One at Warren Lake, *LARIMER*, 18 Mar (Nick Komar). One at North Sterling Res., and SP, *Logan*, 6 Apr (Chris Wood).

Caspian Tern: Rare for the northwest region, one was observed near Craig, *Moffat*, 22 Apr (Forrest Luke). Two at Elkhead Creek Res., *Moffat*, 27 Apr (Jan Leonard, Judith Orton). One near Steamboat Springs, *Routt*, 28 – 29 May (Barry Kaplan). Other reports in *Adams, Baca, Bent, Boulder, Delta, Denver, Douglas, Jefferson, Kiowa, La Plata, Larimer, Mesa, Montezuma, Morgan, Pueblo, Washington, Weld*, and *Yuma* from 15 Apr – 31 May.

ARCTIC TERN: One adult at Neenoshe Res., *Pueblo*, 11 May (Steven Mlodinow, Brandon K. Percival). One at Chico Basin Ranch, *Pueblo*, 31 May (John Drummond).

Red-throated Loon: One at the pond across from Elaine T. Valente OS, *Adams*, 15 Mar – 6 Apr (Peter Ruprecht); also seen at McKay and 100th, and 89th Ave. pond during this time. One at Pueblo Res., *Pueblo*, 22 Apr (Brandon K. Percival). One at Wellington SWA—Cobb Lake Unit, *Larimer*, 4 – 6 May (David Wade, m.ob.).

Pacific Loon: One at Arvada Blunn Res., *Jefferson*, 27 – 31 May (Steven Snyder, m.ob.).

NEOTROPIC CORMORANT: One at McKay ponds, *Adams*, 20 – 27 Mar (Chuck Aid, Greg Levandoski, Michael Kiessig, m.ob.). One at Belmar Park, *Jefferson*, 11 – 13 Apr (Bez Bezuidenhout). One at Robert A. Easton Regional Park, *Jefferson*, 12 Apr – 15 May (James McCall, David Suddjian). One at Upper Queens/Neeskah Res., *Kiowa*, 15 Apr (Tony Leukering, Mark Peterson). One at Neegronda Res., *Kiowa*, 20 Apr (Steven Mlodinow). One at Pastorius Res., *La Plata*, 14 – 19 May (Susan Allerton, m.ob.).

TRICOLORED HERON: One at Carpenter Ranch, *Routt*, 18 May (Tresa Moulton); first western Colorado record. One at Prewitt Res., *Washington*, 5 May (Robert Beauchamp).

YELLOW-CROWNED NIGHT-HERON: One at Sells Pond, *Fremont*, 23 Apr – 4 May (Derek Hudgins, Shelly Rutkin); continued further east along Cañon City Riverwalk after initial sightings.

Glossy Ibis: One at Union Res., *Weld*, 30 Apr (Steven Mlodinow). One at Pastorius Res., *La Plata*, 15 – 27 Apr (Susan Allerton). One at Lower Queens Res., *Kiowa*, 26 Apr – 4 May (Mark Peterson, m.ob.). One at Chico Basin Ranch, *Pueblo*, 26 – 29 Apr (Richard Bunn, Jim Merritt). One at Cherry Creek SP, *Arapahoe*, 30 Apr (Ken Wat).

Turkey Vulture: A total of 126 birds in six different kettles, moving northward, was quite a spectacle in Longmont, *Boulder*, 5 Apr (Bryan Guarente).

WHITE-TAILED KITE: First state record, seen and photographed near Holly, *Prowers*, 27 May (Jill White Smith).

HARRIS'S HAWK: One in Fort Collins, *Larimer*, 16 – 18 Mar (Nathan Pieplow). Quite possibly a returning or continuing bird, first observed in Nov 2017 and again in 2018.

RED-SHOULDERED HAWK: One seen and photographed on Willow Lake Drive, *Douglas*, 29 May (Urling Kingery, Hugh Kingery).

ZONE-TAILED HAWK: One at Lamar Community College, *Prowers*, 29 May (Eric DeFonso).

Boreal Owl: One near State Forest SP, *Jackson*, 30 Mar – 4 May (Andy Bankert).

Red-bellied Woodpecker: Continuing from the fall and winter. One was reported at Pueblo Nature Center, *Pueblo*, last seen on 2 Mar (DuWayne Worthington). Originally reported to eBird 25 Nov 2018 (Steven Mlodinow, David Tønnessen), First reported in 2019, 15 Jan (Bill Maynard); it was noted that the bird had not been seen since 1 Dec 2018.

Yellow-bellied Sapsucker: One at Boulder Community Gardens, *Boulder*, 16 Mar (Richard Trinker). One at Rocky Mountain Lake Park, *Denver*, first observed in January through 2 Mar (m.ob.). Male and female at Grandview Cemetery, *Larimer*, continuing from winter through 8 Mar (John Shenot m.ob).

Black Phoebe: Two at Walsenburg, *HUERFANO*, 4 Apr (Julia Auckland). One at CR 85 Beaver Pond, *COSTILLA*, 6 Apr (Kathy Mihm Dunning, David Dowell). One at Arvada Blunn Res., *JEFFERSON*, 6 – 8 Apr (Lorraine Lanning, m.ob.). Up to two at Billy Creek SWA, *OURAY*, 9 Apr – 30 May (Bruce Ackerman). One at Barr Lake SP, *ADAMS*, 15 Apr (Heidi Burgess). One near Monte Vista, *RIO GRANDE*, 5 May (John Rawinski). One at Wingate South Park, *JEFFERSON*, 23 May (Alex Hoffman). Two at Apishapa SWA, *LAS ANIMAS*, 29 May (David Suddjan). These all represent counties in which the CBRC requests documentation. Other reports more typical.

Eastern Phoebe: One at Gateway Cottonwoods, *Mesa*, 25 Mar (Eileen Cunningham). First San Luis Valley record found at Carrol Woods, *Alamosa*, 13 Apr (Lance Cheslock).

Vermilion Flycatcher: One male observed at Sheridan Lake, Kiowa, 5 Apr (Geoff Hill). A female was observed at Comanche NG, *Baca*, 5 May (Christine Alexander, et al.). One at May Ranch, *Prowers*, 18 May (Tony Leukering). A male and female were observed at Higbee Valley Road, *Otero*, 27 – 28 May (David Dowell, m.ob.). One at Apishapa SWA, *Las Animas*, 29 May (David Suddjian).

Scissor-tailed Flycatcher: One at Upper Beaver Meadows—Rocky Mountain NP, *Larimer*, 14 May (Deb Evers).

WHITE-EYED VIREO: One at Lamar Community College, *Prowers*, 28 Apr (David Dowell). One at CU East Campus, *Boulder*, 30 Apr (Mark Minner-Lee). One banded at Clear Spring Ranch, *El Paso*, 15 May (Steven Brown).

YELLOW-THROATED VIREO: One at South Platte Park, *Arapahoe*, 26 – 27 Apr (Mark Willms, m.ob.). One at a private residence, *El Paso*, 5 May (Mark Peterson). One at Lamar Community College, *Prowers*, 6 – 15 May (James McCall, m.ob.). One at Lion's Club Fishin' Hole, *Phillips*, 17 May (Joey Kellner, et al.). One at Pawnee NG—Crow Valley CG, *Weld* (Josh Bruening). One at Haxtun City Park, *Phillips*, 26 May (Joey Kellner, et al.). One at Roselawn Cemetery, *Pueblo*, 27 May (Van Truan).

BLUE-HEADED VIREO: One at Lamar Community College, *Prowers*, 5 May (Heidi Eaton).

Philadelphia Vireo: One at North Shields Ponds, *Larimer*, 8 May (Rachel Hopper).

PACIFIC WREN: One in Boulder along the LOBO trail west of 63rd St, *Boulder*, 21 - 23 Apr (Nathan Pieplow, m.ob.).

Winter Wren: First reported in January, one continued at Bear Creek Greenbelt, *Jefferson*, 2 Mar – 4 Apr (m.ob.). One at Ralston Creek – Maple Valley Park, *Jefferson*, 8 Mar (James McCall). One at Prospect Ponds NA, *Larimer*, 29 Mar – 14 Apr (Josh Bruening, m.ob.). One at Wray Fish Hatchery, *Yuma*, 12 May (Michael O'Brien). One at a farm yard, *Prowers*, 16 Apr (Jane Stulp). One at Deadman's Gulch, *Boulder*, 20 Apr (Christian Nunes). One at Main Res., *Jefferson*, 29 Apr (James McCall).

SEDGE WREN: One in Louisville, *Boulder*, 20 Apr (Jack Bushong).

Eastern Bluebird: Two at Rio Grande wetland, *ALAMOSA*, 17 Mar (Kara Carragher, Cody Ensanian). One at Zapata Ranch, *ALAMOSA*, 17 Mar (Ted Floyd); these two reports represent the first San Luis Valley records. One near Rifle, *GARFIELD*, 24 – 28 Mar (Benjamin Althouse). One near Cotopaxi, *Fremont*, 11 Apr (Win Shafer). Two near Estes Park, *Larimer*, 26 May (Margaret Fontaine).

WOOD THRUSH: One at Chico Basin Ranch, *El Paso* 5 – 25 May (Kevin DeBoer). One at Thompson Ranch (private), *Lincoln*, 19 – 25 May (Tim Smart, m.ob.).

Varied Thrush: One at Bosque Ct., *Boulder*, continuing from 23 Jan - 3 Mar (Ernest Crvich). One reported from a private residence feeder, *Elbert*, 12 - 15 Mar (Hugh Kingery reporting for friend Jackie).

Brown Thrasher: One along CR 241, *Arapahoe*, 12 Mar (David Suddjian, Diane Roberts); either an early migrant or overwintering bird. One at Magrew Farm, *Larimer*, overwintering through 2 Mar (Nick Komar).

Bohemian Waxwing: As many as 18 reported at Steamboat Springs Ski Area, *Routt*, 16-20 Mar (Janet Anderson-Ray).

White-winged Crossbill: One at Blue River Trail Crossing, *Summit*, 7 Apr (David Tønnessen).

Chestnut-collared Longspur: One at Guanella Pass, CLEAR CREEK, 30 Mar (Tyler Stewart).

McCown's Longspur: One at Lagerman Res., *Boulder*, 11 Apr (Luke Pheneger). One at Clear Creek Valley Park, *Adams*, 11 Apr (Gabriel Wiltse). One at Arapahoe NWR—Auto Loop, *JACKSON*, 18 Apr (Steve Landes, et al.).

Field Sparrow: One at Red Rock Canyon OS, *El Paso*, 3 Mar – 3 May (David Tønnessen, Jim Merritt). One at Chico Basin Ranch, *El Paso*, 25 Apr (David Tønnessen). Other reports in *Baca, Bent, Kiowa, Kit Carson, Larimer, Logan, Prowers, Sedgwick,* and *Weld* from 4 Apr – 31 May.

Fox Sparrow (Red): One at Red Rocks Trading Post, *Jefferson*, 2 – 6 Mar (Bez Bezuidenhout). One at Waterton Canyon, *Jefferson*, 31 Mar (Bez Bezuidenhout).

Fox Sparrow (Slate-colored): Rare migrant found at Reynolds Ranch, *Jefferson*, 7 Apr (Chris Wood).

Golden-crowned Sparrow: One at Cheyenne Mountain SP, *El Paso*, 4 – 5 Mar (Tyler Stewart). One at Riverbend Ponds NA, *Larimer*, 25 Apr – 10 May (Rachel Hopper, m.ob.). One at CR 84 (private property), *Fremont*, 14 May (Dale Adams, Joel Adams).

Harris's Sparrow: Totals for this species were higher than in recent years, especially during the week of 1 May, where eBird tallied a whopping 53, compared to 27 in 2018. The West Slope had reports from eight locations in as many counties.

White-throated Sparrow: Species was found in 22 counties with more frequency and in higher numbers than in recent years. Totals in eBird the week starting 22 Apr were 41, compared to 11 during the same week in 2018, and 15, the same week in 2017. The next highest total in recent years was 35, the week beginning 1 May 2015.

Sagebrush Sparrow: One at Bear Creek Lake Park, *Jefferson*, 10 - 23 Apr (Chris Wood, m.ob.). One at South 66th St, *Boulder*, 6 - 10 May (Aidan Coohill).

EASTERN TOWHEE: One at Olney Springs SWA, *Crowley*, 3 May (Van Truan). One at Brett Gray Ranch (restricted access), *Lincoln*, 7 May (Steven Mlodinow, Christopher Pague). One at Tamarack Ranch SWA, *Logan*, 11 – 12 May (Cheryl Teuton, Dan Brooke).

HOODED ORIOLE: With only four accepted state records, one found and photographed at Westerly Creek Park, *Denver*, 24 Apr (Jason Bidgood, m.ob.), was exceptional.

BRONZED COWBIRD: If accepted by the CBRC, this would be the third state record. One was found at Scroggs Canyon, *Pueblo*, 28 Apr (Dave Silverman).

Rusty Blackbird: Two at Cherry Creek SP, *Arapahoe*, 12 – 27 Mar (Edward Donnan). One at Union Res. *Weld* 30 Apr (Steven Mlodinow). Up to four at First Creek at Denver OS, *Denver* (Chris Petrizzo, m.ob.).

Worm-eating Warbler: One at Valco Ponds, *Pueblo*, 18 Apr (Alan Ketcham). One at Lamar Community College, *Prowers*, 23 Apr – 10 Mary (Kathy Mihm Dunning). One at Melody Tempel Grove, *Bent*, 28 Apr (Luke Pheneger). One at Brett Gray Ranch (restricted access), *Lincoln*, 23 May (Mark Peterson, Glenn Walbek).

GOLDEN-WINGED WARBLER: One at CU Boulder—Varsity Pond area, *Boulder*, 7 – 11 May (Anna Gilmour, m.ob.).

Prothonotary Warbler: One at CR 40 at Kiowa Creek, *Kiowa*, 5 – 6 May (Brandon K. Percival, m.ob.). One at Yampa River Botanic Park, *Routt*, 22 – 30 May (Dave and Ann Jones, m.ob.); second West Slope record.

Tennessee Warbler: This species was widespread this season. Highlights included two at Two Buttes Res., *Baca*, 3 May (Brandon K. Percival). Three in one tree at Lamar Community College, *Prowers*, 4 May (Brandon K. Percival). Two at Hasty Campground, *Bent*, 4 May (Kathy Mihm Dunning, m.ob.). Six at Brett Gray Ranch (restricted access), *Lincoln*, 23 May (Mark Peterson, Glenn Walbek). Many more reports in *Adams, Boulder, El Paso, Jefferson, Kiowa, Kit Carson, Larimer, Logan, Phillips, Pueblo, Sedgwick, Washington*, and *Weld* from 4 – 29 May.

Nashville Warbler: First of the year was found at Sinton Pond OS, *El Paso*, 19 Apr (m.ob.). Many more reports in *Baca, Boulder, Cheyenne, Jefferson, Larimer, Lincoln, Montrose, Pueblo*, and *Yuma* from 28 Apr – 24 May.

CONNECTICUT WARBLER: One at Clear Spring Ranch, *Pueblo*, 29 May (Alan Ketcham).



Painted Redstart, Kiowa County, 4 May 2019. Photo by Rob Raker.



Short-billed Dowitcher, Larimer County, 29 May 2019. Photo by N. Komar.



Golden-winged Warbler, Boulder County, 9 May 2019. Photo by Peter Burke.



Whimbrel, Boulder County, 2 May 2019.
Photo by Peter Burke.



Mountain Plover, Weld County, 13 Apr 2019. Photo by N. Komar.

MOURNING WARBLER: One at Lee Martinez Park, *Larimer*, 19 – 24 May (David Wade, m.ob). One at Chico Basin Ranch, *El Paso* and *Pueblo*, 20 – 24 May (Brandon K. Percival, –). One at Last Chance Rest Area, *Washington*, 23 May (Ira Sanders). One at Hale Ponds, *Yuma*, 26 May (David Dowell). One at Dixon Res., *Larimer*, 27 May (Jim Nachel). One at Wray City Park, *Yuma*, 28 May (Steven Mlodinow).

Hooded Warbler: Reports from nine locations in the eight counties of *Adams, Bent, Crowley, El Paso, Jefferson, Lincoln, Washington*, and *Weld* from 28 Apr – 27 May.

Northern Parula: Many reports in *Arapahoe, Baca, Bent, Douglas El Paso, Fremont, Jefferson, Kiowa, Larimer, Lincoln, Prowers Pueblo*, and *Saguache* from 8 Apr – 29 May.

Magnolia Warbler: One at Lake Hasty CG, *Bent*, 3 May (Steve Larson). One at Pueblo Res., *Pueblo* 20 – 21 May (Evan Carlson). One at Brett Gray Ranch (restricted access), *Lincoln*, 23 May (Mark Peterson, Glenn Walbek). One at Boulder Creek – CU Campus, *Boulder*, 25 – 26 May (Steve Frye, m.ob.). One in Buena Vista, *Chaffee*, 26 May (Zach Millen). One at Pawnee NG – Crow Valley CG, *Weld*, 26 – 29 May (Sandra Blair, m.ob.). One at Pawnee NG – Norma's Grove, *Weld*, 26 May (Gene Rutherford). One at Clear Spring Ranch, *El Paso*, 29 May (Alan Ketcham).

Bay-breasted Warbler: One at Brett Gray Ranch (restricted access), *Lincoln*, 23 May (Mark Peterson, Glenn Walbek).

Blackburnian Warbler: One at Chico Basin Ranch, *Pueblo*, 13 May (John Drummond). One at Brett Gray Ranch (restricted access), *Lincoln*, 18 May (Mark Peterson).

Chestnut-sided Warbler: One at James M. Robb Colorado River SP, *Mesa*, 21 May (Ryan Claar); rare for the West Slope. Other reports from *Boulder, El Paso, Jefferson, Larimer, Lincoln, Prowers, Pueblo, Rio Grande, Weld*, and *Yuma* from 5 – 30 May.

Blackpoll Warbler: Many reports in Adams, Arapahoe, Bent, Boulder, Chaffee, Crowley, El Paso, Jefferson, Kiowa, Lincoln, Logan, Phillips, Prowers, Pueblo, Sedgwick, Washington, and Weld from 4 – 29 May.

Black-throated Blue Warbler: One male at Bear Creek Greenbelt – South Wadsworth Blvd to South Sheridan Blvd, *Denver*, 15 May (Mackenzie Goldthwait, Doug Kibbe).

Palm Warbler: Many reports in *Arapahoe, Boulder, Broomfield, Denver, El Paso, Jefferson, Kit Carson, Larimer, Pueblo*, and *Yuma* from 23 Apr – 29 May.

Pine Warbler: One in Wray, Yuma, 20 Apr (Barry Southard).

Yellow-throated Warbler: One at Pueblo City Park, *Pueblo*, 17 Apr (Brandon K. Percival). One at Melody Tempel Grove, *Bent*, 6 – 8 May (Scott Shaum, m.ob.). One at Roselawn Cemetery, *Pueblo*, 11 – 30 May (Evan Carlson, m.ob.).

PRAIRIE WARBLER: One at Chatfield SP – Audubon Nature Center and Trails, *Jefferson*, 11 - 12 May (Sabrina Hepburn, m.ob.).

Black-throated Gray Warbler: One at Lamar High School shelterbelt, *Prowers*, 11 – 12 May (Kathy Mihm Dunning, m.ob.). One at Wiley Cemetery, *Bent*, 5 May (Brandon K. Percival, Lisa Edwards). Other reports from *Crowley, El Paso, Lincoln*, the Front Range, and typical West Slope locations.

HERMIT WARBLER: One at CU Boulder – Varsity Pond area, *Boulder*, 24 – 25 May (Steve Larson, m.ob.).

Black-throated Green Warbler: One at Olney Springs SWA, *Crowley*, 2 May (Brandon K. Percival).

Townsend's x Black-throated Green Warbler (hybrid): One at Chico Basin Ranch, *Pueblo*, 7 May (Bill Maynard).

CANADA WARBLER: One at Chico Basin Ranch, Pueblo, 20 May (Brandon K. Percival, m.ob).

PAINTED REDSTART: One at Kiowa County Courthouse – Eads, *Kiowa*, 2 – 4 May (Joey Kellner, m.ob.).

Summer Tanager: Many reports in *Baca, Bent, Denver, El Paso, Jefferson, Kiowa, Las Animas, Lincoln, Montezuma, Otero, Prowers*, and *Pueblo* from 27 Apr – 30 May.

SCARLET TANAGER: One in Lyons, *Boulder*, 28 Apr – 1 May (Joel Such, m.ob.). One at Lamar Community College, *Prowers*, 2 May (Jessica Miller, John Malenich). One at Home Lake, *Rio Grande*, 5 May (John Rawinski). One at Bear Creek Park, *Denver*, 17 May (Dustin Murray). One in Louviers, *Douglas*, 26 – 27 May (Thomas Halverstadt, m.ob.). One, perhaps the same bird, was seen in three private resident locations in *Broomfield* and *Boulder* 27 – 30 May (Chris Petrizzo, et al.).

Western Tanager: An amazing year for the species along the Front Range, a Bomb Cyclone storm in early April brought many birds to backyards and heavily birded areas. The species even made the local news due high numbers of birds being seen. Lingering late into the season, totals in eBird during the week of 22 May were an astounding 5,185 compared to 1,411 in 2017, and only 746 in 2018 during the same week.

Northern Cardinal: One at CO 266 near Rocky Ford SWA, *Otero* 31 Mar (David Chartier). One continued at a private residence, *Larimer*, from 1 Jul 2018 to 1 Mar (Steve Martin). One at Purgatoire and Arkansas Confluence area, *Bent*, 22 Apr (Scott Shaum). One near Catalpa Park, *Boulder*, 3 May (Merritt Deeter). Other reports in typical locations around Lamar, northeastern CO, and the eastern plains.

ACKNOWLEDGMENTS

The sightings reported by contributing observers to eBird and COBirds are greatly appreciated. Volunteer compilers contributed significantly to this report: Coen Dexter (west), Forrest Luke (northwest), John Rawinski (San Luis Valley), Brandon K. Percival and David Silverman. Joey Kellner, for review of the article and technical support. Much of the information in this report was obtained from the eBird Basic Dataset from the Cornell Lab of Ornithology, Ithaca, New York.

CITATIONS

COBirds. 2018/2019. Colorado Birds Google Group by Colorado Field Ornithologists [Google Group]. Available: https://groups.google.com/forum/#!forum/cobirds

eBird. 2012. eBird: An online database of bird distribution and abundance [web application]. eBird, Ithaca, New York. Available: http://www.ebird.org

AUTHOR

Dean Shoup

deshoup723@gmail.com

THE HUNGRY <u>BIRD</u>

The Hungry Bird: Aphids

DAVID LEATHERMAN

When I helped teach a junior-level class on tree insects and diseases at Colorado State University, we had a unit consisting of a few lectures and a lab on insects that extract nutrition from their hosts via sucking mouthparts. That is, six-legged creatures evolved to feed by way of sharp-tipped "drinking straws" termed stylets. Certain class assignments emphasized elements of writing. Over the years, both the professor and I became increasingly alarmed by the compositional skills of many undergraduates. We made an effort to beef up this aspect of the course out of the belief practice makes better and that it exposes areas needing improvement.

The requirement on the lab quiz was to, "Describe an aphid without using the word 'aphid'." Birders know, as everybody should know, that being able to accurately describe things is important. In lab the week before, the students had seen, or should have seen, many examples of aphids. They should know they are 2-5 millimeters in length, with longish antennae and legs; that most species are gray or lime green or black or yellow; that they can be winged or wingless, depending on the life stage and gender; that the head and thorax are small in comparison to the plump abdomen; and that essentially all possess a pair of structures appearing as mere pores, or more commonly, elongated tubes protruding from the top of the 5th abdominal segment.

I forget the bulk of one student's answer to the above question, but part will remain for a long time. He or she said, "...and they have exost pipes sticking out the back." Exost? Hmmm. Sound it out. Think: *phonics.* "Exhaust." The student was, of course, referring to an aphid's defensive chemical-emitting structures called "cornicles." Spelling aside, and being a visual thinker, I liked the gist of the answer.

The point of this lengthy introduction to aphids is to provide a way perhaps you will not forget about cornicles, either. If a bird leads you to a tiny insect, hiding in a crowd of lookalikes, sporting two very tiny protruding "exhaust pipes," it is in all likelihood an aphid. The pair of cornicles stick up like artillery guns, elevated to an angle yielding maximum range, and are unique to aphids (Figure 1).

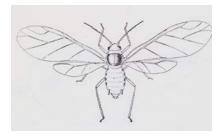


Figure 1. A typical winged aphid showing two modest cornicles protruding from the 5th abdominal segment (Borror 1955). In some species they appear as dots, in others they are longer.

The world hosts over 5000 species of aphids in the family Aphididae, North America over 1350, Colorado perhaps 500 (Cranshaw and Redak 2013, Palmer 1950). Aphids are currently placed in the order Hemiptera, the "true bugs," and in the suborder Sternorrhyncha. One notable subset of aphids is the "woolly aphids," most of which are in the subfamily Pemphaginae, and get their name from the white waxy substances coating their bodies.

In England, and sometimes here, aphids are often called "plant lice." Many species are damaging to crops and ornamental plantings. No doubt farmers and gardeners have other names for them.

Almost every plant has at least one species of aphid, and where host indices exist, knowing the plant provides an identification shortcut to the insect. Many aphid species have very narrow host preferences and occur on only one specific plant. However, considering the vast size of the aphid group, it is not surprising certain plants support multiple species. For example, the "bible" for our area, The Aphids of the Rocky Mountain Region, lists 12 from ponderosa pine (*Pinus ponderosa*), 13 from cottonwood (*Populus deltoides* ssp. *monilifera*), 17 from rubber rabbitbrush (*Ericameria nauseosa*), 21 from various willows (*Salix* spp.) and a whopping 37 from big sagebrush (*Artemisia tridentata*) (Palmer 1950).

Few taxonomists specialize in aphids. Identification to species requires specimens mounted on slides for microscopic examination of minute details pertaining to antennae, hairs, color/pattern, cornicles, and other anatomical features. Most of the aphids I have collected and preserved in alcohol from bird feeding episodes remain unidentified due to the lack of: 1) reliable, responsive taxonomists, 2) funds to pay these identification specialists for their efforts, and 3) the best materials necessary to do proper slide mounting (Kondratieff, personal communication).

A typical field observation of aphids involves dozens or hundreds of individuals, clustered like a miniature sheep herd viewed from above. Their "pasture" is usually the surface of a leaf, but could also be a twig, flower, bud, or branch (Figures 2-4).



Figure 2. Black willow bark aphids (*Pterocomma salicis*) coating a stem of an undetermined willow species in Rocky Mountain National Park, 2 July 2008. Note the conspicuous pair of orange cornicles characteristic of this species. Photo by David Leatherman.



Figures 3 and 4. At left shows one of the rose aphids (probably *Macrosiphum* sp.) coating a flower bud in Grandview Cemetery, Fort Collins, CO. Black-capped Chickadees and Bushtits have eaten these at this site. At right is a group of mealy plum aphids (*Hyalopterus pruni*) on plum, also at Grandview Cemetery. Local Black-capped Chickadees, Cedar Waxwings, Downy Woodpeckers, House Finches, and Bushtits eat these on occasion. Photos by David Leatherman.

Dispersing winged (alate) aphid life stages are encountered singly, almost invisibly without backlight, plying airspace by their own flaps or at the whim of the wind, from one plant to another (Figure 5).



Figure 5. Winged form of an undetermined aphid species from viburnum, CSU research gardens, Fort Collins, CO. Photo by David Leatherman.

Typical aphid dispersal is mostly triggered by daylength, over-crowding, and declining host vigor. Perhaps the most infamous episode of travel by what is now a Colorado resident is the case of the Russian wheat aphid (*Diuraphis noxia*). It arrived in 1986 from Russia, apparently with an assist from jet stream winds. Along with several other species, it is a serious issue for our wheat farmers.

Aphid annual life cycles can be quite complicated, involving many different life stages, usually an alternation from one plant type to another, winged and wingless forms and much more. (During my career, I tried memorizing cycles for a few important forest species and either gave up or forgot after the first subsequent trip down maddening I-25). Typically, a graphic of a cycle for one species involves half a printed page, lots of terms like "oviparae," "sexuales," "apterous summer vivipara," "fundatrix," "alate male," "early instar nymph," circles and arrows," and all manner of reproductive variety. Trust me, it is complex.

Females proliferating asexually (without male involvement, called "parthenogenesis"), combined with their born-pregnant daughters being capable of the same, is what gives aphid populations such great growth potential (Cranshaw and Redak 2013). A calculation by Walter Collinge in 1913 estimated a single female hop aphid in one year, without natural checks and balances, would result in 12 generations of offspring numbering 10,000,000,000,000,000,000,000 individuals (Henderson, 1927). Yikes! Another factoid to mull over while driving to a field trip comes from famous nature writer Edwin Way Teale. He figured one female in one year, again in the absence of natural attrition, could produce enough children laid out single-file to reach 2500 light-years (Teale 1962). Even if the abacus or slide rule these gentlemen used was off a bead or got bumped by the cat, you get the idea.

Birds recognize that plant defects might be caused by something edible. Aphids most often feed on the underside of leaves, with the most common symptom being discoloration such as yellowing. Their feeding stabs often lead to mottling in the form of small pale patches amid otherwise green tissue. Leaf vein feeding can produce puckering (Figure 6), curling (Figure 7) or wilt. The feeding of still other species incites gall formation (Figure 8) or even dense branching areas called "witches'-brooms" (Figure 9) (Cranshaw and Redak 2013, Blackman and Eastrop 1994).





Figures 6 and 7. At left, discoloration and puckering of plum leaves caused by mealy plum aphid. At right, leaf curl caused by woolly elm aphid (*Eriosoma americana*) on American elm. Both Grandview Cemetery, Fort Collins, CO. Photos by David Leatherman.





Figures 8 and 9. At left, aphid-containing gall on hybrid elm caused by *Tetraneura* sp. At right, honeysuckle witches'-broom caused by *Hyadaphis tartaricae*. Both Fort Collins, CO. Photos by David Leatherman.

Birds key in with precision on all of these signs and symptoms the way some lawyers follow ambulances. Ever observant, able to recall past successes and failures, they scour the undersurface of leaves (Figure 10), pry leaf origami, and peck open gall piñatas (Figures 11 and 12). Judging by the frequency these activities occur, the effort to obtain such small morsels must be worth it. The key birds understand is this: if a bird finds one aphid, it usually finds a treasure trove of aphids.

-



Figure 10. Tennessee Warbler searching the underside of European beech (*Fagus sylvatica*) leaves for aphids at the CSU PERC gardens, Fort Collins, CO, 20 November 2015. Photo by David Leatherman.



Figures 11 and 12. Poplar petiolegall woolly aphids (*Pemphigus* sp.) on cottonwood (*Populus* sp). Shown at left are galls just beginning to open (note the slit), and at right a hand-opened gall filled with mostly winged forms (gray) and nymphs/shed exoskeletons (both white). Various birds and fox squirrel prey on this type of aphid by breaking open the galls. I have seen this performed by Red Crossbills in late spring in Lamar, CO. Photos by David Leatherman.

The sugar-rich liquid obtained from plant phloem, and to a lesser extent xylem, is not all that beneficial or nutritious in raw form and when concentrated can even be dangerous to them. Aphids deal with this mixed-bag called sugar in two ways. First, they have evolved relationships with certain microbes, particularly one bacterium, that improve and convert sugars. This has been aptly called "refining" (Eaton and Kaufman 2007). The key contribution of these "endosymbionts" is multistep transformation of sucrose to amino acids, the later having all manner of uses to the aphid. Secondly, the excess, potentially toxic sugar is excreted as "honeydew." Honeydew is important material in nature because of its utility to other organisms. Included in the honeydew-seeking guild are many insects such as wasps, bees, ants, flies, and certain beetles.

Birds are attracted to it as a food source, but even more so to honeydew-loving insects like yellowjackets. This is particularly true of large flycatchers such as pewees (Figure 13), Olive-sided Flycatcher, and kingbirds. Honeydew-coated leaves are shiny, a clue to aphid presence not lost on birds (Figure 14). Further, chronic deposits of this material serve as a substrate for certain black fungi called "sooty molds." Falling honeydew ejected from the hindgut of aphids accumulates on the upper side of leaves, branches and flaring trunks. Dark patches of sooty mold further inform birds of aphid whereabouts (and those of other honeydew-producing insects like scales). Fox squirrels gnaw at this mold. Cedar Waxwings obtain water preferentially from snow that falls on such branches. In all, these various participants comprise a food web, an ecological cascade if you will, with sap-filled plants, then aphids, at the headwaters.



Figure 13. Western Wood-Pewee with yellowjacket. Fort Collins, CO, 12 September 2014. Photo by David Leatherman).



Figure 14. Mapleleaf viburnum (*Viburnum acerifolium*) exhibiting shiny leaves indicative of heavy aphid infestation. Grandview Cemetery, Fort Collins, CO. Photo by David Leatherman.

Birds consuming aphids are predictably mostly passerines, and North American species eating them at least occasionally probably number in the hundreds. By far, warblers in the family Parulidae appear to be the most important group (Bayly et al. 2019, Dransford and Brightwell 2020, Terres 1980). Several warbler anecdotes follow. However, for other bird groups, the species accounts in Cornell University's massive "The Birds of North America" (BNA) database make

infrequent specific mention of them. To be fair, of necessity, these reviews must summarize the extensive literature available. Many studies only list dietary items under large taxonomic divisions. Thus, reference to "aphid" could be effectively invisible within listings of their overarching parent group, the order Hemiptera (or in older texts, Homoptera).

Because word searches of BNA are apparently no longer possible, my attempts to find aphid information in that source consisted of scanning diet descriptions for a broad subset of Colorado species. "Aphid" or "plant lice" is found in treatments of Broad-tailed Hummingbird (Bent 1940), Scarlet Tanager (Prescott 1965), Song Sparrow (Tompa 1971), and Bullock's Oriole (Edinger 1985).

As for the internet, an undated but wonderful English website (InfluentialPoints.com) verified North American warblers (Palm, Blackpoll, Magnolia, Tennessee, Cape May, Black-throated Gray and Yellow-rumped) as important consumers of aphids (Dransfield and Brightwell 2020). Aphid-eaters this site also mentioned were "tits and chickadees," sparrows (Vesper, Chipping, Savannah, and Field), American Goldfinch, and Downy Woodpecker (including fantastic photos of them eating *Pterocomma salicis* aphids on willow, see Figure 2), and *Prociphilus tessellatus*, the woolly alder aphid found in CO.

A personal favorite anecdote for non-warblers foraging on aphids in CO involves my following a mixed flock for a half mile along the Poudre River in Fort Collins on 28 October 2012. This group of birds was comprised of Black-capped Chickadees, a Mountain Chickadee, Goldencrowned Kinglets, Downy Woodpeckers, Dark-eyed Juncos and White-breasted Nuthatches. As they noisily jostled along, their primary prey was giant willow aphids (*Tuberolachnus salignus*) and another species on crack willow (Figure 15). The Mountain Chickadee also got a third aphid species from snowberry bushes.



Figure 15. Mountain Chickadee gleaning leaf aphids from crack willow (note, two on beak). Poudre River, Fort Collins, CO, 28 October 2012. Photo by David Leatherman.

My formative birding years in Ohio included lots of warblers. As a result, I love warblers. Warblers, especially on autumn migration, love aphids. My theory about the fall timing of warbler reliance on aphids is derived as follows: aphid populations cannot be as robust in spring as they are in autumn. Winter conditions take a toll on life. When temperatures allow, overwintering aphid

stages, mostly eggs and mature females, do their thing. Influenced by math and hit-or-miss natural regulation, they hatch, feed, reproduce, and reproduce some more. In short, they throw a lot at the world and a lot of it sticks. By summer's end, as southbound bird migrations begin to peak, their populations can be astounding.

And locating trees full of aphids, especially pines, is a key to finding "good" warblers.

During spring migration and in summer on warbler breeding grounds, the chemistry of caterpillars and other insect groups is adequate for traveling adult birds and superior for the growth and development of young birds. But in autumn, the abundance of aphids filled with high-octane sugar water is the perfect fuel. Along with fruits and a few other staples like psyllids and midges, migrant warblers flying long distances have a reliable energy source.

Here in Colorado those of us who think "warbler neck" hurts so good are beginning to look forward to late autumn as much or more than early May. If recent years are any indicator of the new normal, I would argue our chances of finding vagrant eastern warblers are better in late October through early December than in any other season. And locating trees full of aphids, especially pines, is a key to finding "good" warblers.

For Pine Warblers, having a suet feeder near aphid-loaded pines might even entice an extended stay that lasts all winter (Figure 16).



Figure 16. Male Pine Warbler in pine where it found needle aphids, near its "go-to" suet feeder outside the Reichhardt's apartment in Loveland, CO. Winter 2018-2019. Photo by David Leatherman.

A number of historical locations and famous individual episodes serve as introducible evidence. Pueblo City Park, Denver Office Park, various locations in Boulder, certain cemeteries on both sides of the Continental Divide, Matthew-Reeser Sanctuary in Estes Park, and probably many others have noteworthy pasts.

THE HUNGRY <u>BIRD</u>

Lately, just about every late autumn, multiple warblers are found feasting on pine needle aphids in Pueblo's City Park. Among them have been Pine, Cape May, Northern Parula, Yellow-rumped, Orange-crowned, and Yellow-throated warblers. The same can be said for the pines gracing the grounds of the Denver Office Park. "Special" warblers there, in terms of timing or species, have been Pine, Nashville, Townsend's, and Yellow-rumped. Late fall-discovered Blackburnian Warblers were in pines eating aphids in Greeley (2011) and Longmont (2018 and 2019) (Figure 17).



Figure 17. Blackburnian Warbler on 15 November 2018 in Austrian pine (*Pinus nigra*) where it fed on needle aphids for days, Longmont, CO. Photo by David Leatherman.

In a Boulder office park in 2013 birders enjoyed a Bay-breasted, Northern Parula, and other more common warblers in the same Austrian pine <u>for weeks</u> (Figures 18 and 19).





Figures 18 and 19. Aphids in Austrian pine attractive to Bay-breasted and other warblers in Boulder, CO. 9 November 2013. They are tentatively identified as powdery pine needle aphids (*Eulachnus rileyi*). This same type is apparently also responsible for many of the other late fall occurrences in pines along the Front Range and in Estes Park. Photos by David Leatherman.

Belmar Apartments in Lakewood in December 2018 had aphids very similar to the ones in Figures 18 and 19 in pines that attracted Prairie, Yellow-throated, and Yellow-rumped warblers.

One key to a group of nice warblers appearing in the Reeser-Matthews Sanctuary at Estes Park in October 2010 was a leaf aphid in planted crabapples. A female Black-throated Blue Warbler (Figure 20) with Nashville Warbler buddy garnered most of the attention.



Figure 20. Black-throated Blue Warbler female at Matthew-Reeser Sanctuary by Lake Estes. Note dark aphids it targeted along crabapple leaf mid-veins above the bird's nape and breast. Photo by David Leatherman.

Just before Thanksgiving 2015 I spent several hours over multiple days following one individual Tennessee Warbler that chose the Plant Experimental Research Center (PERC) gardens at Colorado State University in Fort Collins for a migration stopover. This event involved the bird gorging on multiple unidentified aphid species found over seven days on various beeches, oaks, and viburnums, plus probably a few supplemental fruits. By the end of its stay this bird actually acquired "cleavage" (Figure 21). I do not believe the gender of this individual is discernible but for some reason the name "Dolly" seemed to fit. The number of aphids its breast enhancement took is hard to comprehend.



Figure 21. Tennessee Warbler so full of aphids it seems about to burst, November 2015, CSU PERC garden, Fort Collins, CO. Photo by David Leatherman.



Figure 22. Highly cropped, background-erased photo of the same Tennessee Warbler as Figure 21, showing three European beech aphids on its beak. Photo by David Leatherman.

The list of anecdotes could go on and on. These are just some of the special situations I know about in the last decade. Oh, to have documentation going back 100 years!

In conclusion, if, as a gardener dealing with pestiferous insects, you have exclaimed, "Aphids suck!", you are correct. That they do. But for their value to hungry birds, they deserve no strong negativity. As individual bites they do not amount to much. But after a meal of 50 or 10,000, they get a bird through the day, up on a snowy morning, down the terrain 100 migratory miles. When combined with other necessities of life, they are the type of abundant, sustaining nutrition our continent's birds need if they are to recover 3 billion losses since 1970 (Rosenberg et al. 2019).

LITERATURE CITED

Bayly, N. J., K. V. Rosenberg, C. Gómez, and K. A. Hobson. 2019. Habitat Choice Shapes the Spring Stopover Behavior of a Neartic-Neotropical Migratory Songbird. Retrieved from: Journal of Ornithology, https://doi.org/10.1007/s10336-019-01624-3

Bent, A. C. 1940. Life Histories of North American Cuckoos, Goatsuckers, Hummingbirds and Their Allies. US Natural Museum Bulletin 176.

Blackman, R. L. and V. F. Eastrop. 1994. Aphids on the World's Trees. An Identification and Information Guide. Wallingford: CAB International.

Borror, D. J., & Delong, D. M. 1955. An Introduction to the Study of Insects. (Second printing.). New York: Rinehart & Co.

Cranshaw, W. and R. Redak. 2013. Bugs Rule. Princeton University Press. Princeton and Oxford.

Dransford, R. D. and R. Brightwell. 2020. Retrieved from: https://influentialpoints.com/biocontrol/Birds that kill aphids identification biological control.htm

Eaton, E. R., and K. Kaufman. 2007. Kaufman Field Guide to Insects of North America. Houghton Mifflin, New York.

Edinger, B. B. 1985. Limited Hybridization and Behavioral Differences Among Sympatric Baltimore and Bullock's Orioles. M.S. Thesis. University of Minnesota, Minneapolis, MN.

Henderson, J. 1927. The Practical Value of Birds. Macmillan Co., New York.

Palmer, M. 1950. Aphids of the Rocky Mountain Region. The Thomas Say Foundation, Vol. 5. Hirschfield Press, Denver.

Prescott, K. W. 1965. The Scarlet Tanager (Piranga olivacea). New Jersey State Museum Invest.

Rosenberg, K. V., A. M. Dokter, P. J. Blancher, J. R. Sauer, A. C. Smith, P. A. Smith, J. C. Stanton, A. Panjabi, L. Helft, M. Parr, and P. P. Marra. 2019. Decline of the North American Avifauna. Science 366: 120-124.

Teale, E. W. 1962. The Strange Lives of Familiar Insects. Apollo Editions, Thomas Y. Crowell Co., New York.

Terres, J. K. 1980. The Audubon Encyclopedia of North American Birds. Alfred A. Knopf, New York.

Tompa, F. S. 1971. Catastrophic mortality and its population consequences. Auk 88: 753-759.

AUTHOR

David Leatherman

daleatherman@msn.com

The Problem of Juvenile and Immature Barn Swallows

TONY LEUKERING

Adult Barn Swallows are, for swallows, so distinctive in the western hemisphere that many birders may not learn the entire suite of features that make the species so distinctive. The rufous-orange forehead, buffy-orange underparts, and the long, forked tail are characters that nearly all birders learn early as they are all unique in Colorado-occurring swallows (Figure 1). Unfortunately, many juvenile and immature Barn Swallows lack all those distinctive features!



Figure 1. Many of the distinctive features of adult Barn Swallows are easily seen on this bird gathering mud for its nest. These features include the rufous-orange forehead; buffy-orange underparts; and long, forked tail. One distinctive feature that seems unknown to many, and which is true in all plumages, is that the eyes of Barn Swallow are well within the dark (here, steely-blue) head plumage. Another is that the back is unmarked, unlike on Cliff and Cave swallows. Stone Ledge Lake, Wexford County, Michigan. 16 July 2014. Photo by Tony Leukering.

FIRST-CYCLE PLUMAGES

As one might expect for such an abundant species, the appearance of Barn Swallows in their first plumage cycle is quite variable across individuals. Many appear somewhat adult-like, but others are different enough to encourage misidentification. As juvenile plumage ages, colors become muted: buff and orange fade to whitish and blue plumage turns dull and dark. Additionally, dark-light patterns become more contrasting, a phenomenon that can produce surprisingly Bank Swallow-like appearance. While discerning the precise plumage that a first-cycle Barn Swallow is wearing is not critical to identifying it, knowing the general molt strategy of the species can be helpful.

Juvenile plumage (= first basic plumage): This is the plumage that young birds of altricial species (see Leukering 2019) grow in the nest, the first set of non-downy feathers (Leukering 2010, 2013, 2019). Unlike in most passerine species (e.g., sparrows and warblers), swallows tend to retain much or all of their juvenile plumage for substantial time periods, typically not replacing it until on or near winter grounds (Pyle 1997, Howell et al. 2006). Thus, the problem of juvenile-plumaged swallows is not a problem of short duration.

Immature plumage: I use this term, here, in the first sense of the term as noted by Leukering (2019); that is, an individual not wholly in juvenile plumage and not wholly in an adult plumage. Immature swallows typically sport a mix of juvenile-like and adult-like characters. The more such birds exhibit adult-like characters, the more readily they are correctly identified. Despite that Barn Swallow is, generally, the last species to vacate Colorado in the fall for warmer climes (particularly on the eastern plains), with numbers present into and through October (eBird 2020, Leukering 2016), birds transitioning between plumages in Colorado is very unlikely. That is, most or all of the plumage variation noted in first-cycle Barn Swallows in Colorado is due to effects of wear.

ΙN THE SCOPE

IDENTIFICATION FEATURES

Tail spots2

Throat

Breast band

Bellv

Under-tail

coverts

Wing linings³

While a print medium is not conducive to getting the point across, all seven regularly occurring swallow species in Colorado have styles of flight that are different from those of the others, and Barn Swallow's languid, swooping flight is, perhaps, the most distinctive of the lot. Table 1 presents detailed comparison of 11 aspects of Barn Swallow plumage that differ from that of Cliff and Bank swallows.

Table 1. Plumage features of adult and first-cycle Barn Swallows. Characters that are particularly useful for differentiating first-cycle Barn Swallows from other swallow species are in boldface type.

Plumage	<u>Barn</u>	Swallow	Cliff Swallow ¹	Bank Swallow ¹		
feature	Adult	First-cycle	Oiiii Ovvaiiov	Zu Svvullov		
Forehead patch			White, off white, creamy- buff, occasionally lacking or nearly unnoticeable in juveniles	Little or no contrast to crown		
Crown and nape	Concolorous steely blue; first-summer females often duller	Concolorous flat dark color with blue aspect to dull, dark brown*	Crown dark, medi- um-strong contrast with paler nape	Concolorous dark brown		
Auriculars	Dark, same color as crown	Dark, same color as crown	Orange-rufous with strong contrast to dark crown in adults; variable in first-cy- cle birds, some fairly dark	Blackish, weak-me- dium contrast with browner crown		
Back and rump	tirst-summer temales with very little blue aspect to		Back steely blue to dark with blue aspect; white or whitish streaks; rump buffy-orange	Dark brown, fading to paler, grayish-brown on rump		
Tail	Long, deeply forked; par- ticularly long and forked in males	Short-medium, square-tipped; older first-cycle birds in late fall can exhibit distinct, but	Short-medium, square- tipped	Short-medium, notched		

shallow, forked Small, off-white to white, often

> indistinct Off white*, pale buff,

orange-buff, often noticeably

paler than throat

extent than most adults

Off white, peach, buffy-orange

unmarked

Off white, peach, buffy-orange,

generally same color as belly.

medium-strong contrast with

dark flight feathers

to complete, usually limited Variable, but usually of greater

Generally same color as Generally same color as belly,

Lacking

White, off white, creamy-

buff, often with scattered

small white spots

Typically lacking

White to off white

Pale with large, smudgy

dark centers

Gray, weak to very weak

contrast to darker gray

flight feathers

Large, white

Rufous to rufous-orange,

same color as forehead

Greatly variable in extent, ranging from virtually absent

to extensions from back onto

upper sides; dark, some

with blue aspect Off white, peach, buffy-orange, though off white is

somewhat rare in western hemisphere subspecies

belly, unmarked

Off white, peach,

buffy-orange, generally

same color as belly, me-

dium-strong contrast with

dark flight feathers

Lacking

White to off white

Typically complete,

contrasting strongly

with white or off

white throat

White

White

Dark brown, weak

contrast with paler

brown flight feathers

¹ While first-cycle Barn Swallows might be confused with other species not presented here, Cliff and Bank swallows are the likeliest confusion species.

² Spots are basal to tail fork on inner webs of all rectrices except for central pair. No other Colorado-occuring swallow species has tail spots.

³ No other Colorado-occuring swallow species has such strongly contrasting wing linings

^{*} Indicates colors more likely on worn plumages

While I have seen the subjects of photos of Barn Swallows misidentified as other species, most of those misidentifications have been as Bank Swallow and, <u>particularly, Cliff Swallow</u>. **Another very important consideration is seasonal timing,** which is an identification feature (Leukering 2016). As Barn Swallow is the latest swallow species to depart the state in fall, for late occurrences of swallows, observers should always consider the possibility of Barn Swallow. After the third week of September, the chance of running across a swallow of a species other than Barn Swallow in Colorado becomes very slim (Figure 2). I also present identification information in the captions of Figures 3-7, the last three of which are on this issue's back cover.

			Jan	Feb	Mar	Арг	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Northern Rough-winged Swallow	0	~												
Purple Martin	O	~						-		enne:		-		
Tree Swallow	0	~		100	-								(50)	=
Violet-green Swallow	O	~			2.17.0		-				man-			
Tree/Violet-green Swallow	O	~				HHID.				SHLES.				
Tachycineta sp.	O	N					-	5						
Bank Swallow	O	~			-				-				-	
Barn Swallow	O	~			-							Man-		-
Cliff Swallow	0	~			1.5		-							

Figure 2. Colorado eBird (2020) data presented as bar charts of temporal occurrence. Note that Barn Swallow becomes the only expected species in the state after the third week (after the 21st) of September.



Figure 3. This adult Barn Swallow exhibits the typical deeply forked tail of the species. However, the bird also exhibits two other features that are definitive, but of which many birders seem unaware. The first is the pale wing linings contrasting strongly with the dark flight feathers (Table 1), while the second is the white tail spots basal to the tail fork (Table 1). Goodwell, Texas County, Oklahoma. 18 June 2017. Photo by Tony Leukering.



Figure 4. This adult Cliff Swallow shows the obvious orange-rufous rump patch typical of the species. Another useful feature is the placement of the eye at the bottom of the dark patch on the head, with the dark rufous auriculars contrasting noticeably with that dark head patch. Note also the contrastingly pale nape. Compare with Figure 1. Near Firestone, Weld County, Colorado. 20 May 2017. Photo by Steven G. Mlodinow.

Figure 5 (back cover, top). This trio of fledgling Barn Swallows present what may be considered typical juvenile plumage in the species. Though they exhibit a rufous forehead patch much smaller than that of adults, which is typical of the plumage, most of the rest of the plumage visible here is very reminiscent of adult Barn Swallows. These three are unlikely to be misidentified in the field. Note that the birds' auriculars are dark, not rufous, and the eyes are well within the dark part of the head plumage. Martinez. Contra Costa County. California. 4 July 2014. Photo by Carole Rose.

Figure 6 (back cover, middle). This juvenile-plumaged Barn Swallow, though superficially similar to the trio in Figure 5, exhibits many important plumage differences that can encourage misidentification. Among these are the paler forehead patch, which is almost whitish; the nearly whitish belly; and the relatively short, square-tipped tail. Note, though, that the auriculars are dark, the dark plumage on the head extends below the gape, and that the eye is well within that dark plumage. Also note the lack of white braces or streaks on the back and that the nape does not contrast in color or tone with either the crown or the back. Cliff Swallow (and Cave Swallow) show a distinct color contrast here (see Figure 4). John Heinz National Wildlife Refuge, Philadelphia County, Pennsylvania. 15 July 2015. Photo by George Armistead.

Figure 7 (back cover, bottom). This immature Barn Swallow exhibits the plumage appearance most likely to cause misidentification as Bank Swallow, as might be expected from the bird's whitish underparts and obvious breast band. However, note the contrastingly pale wing linings and the bits of buff-orange plumage on the underparts. This bird presents the appearance of immature Barn Swallows after extensive wear and bleaching of the juvenile plumage and the initiation of the preformative molt that replaces juvenile plumage, as can be readily discerned by the new, darker inner primaries.

This bird also represents a recent phenomenon of breeding by Barn Swallow in southern South America, an area in which the species was formerly only a boreal-winter resident. The species was first noted breeding on what is the species' winter grounds in Argentina in the 1980s (Winkler et al. 2017 and references therein). Recent research has found that most individuals in that population migrate north to spend the austral winter in northern South America. However, as for other species

of austral migrants (e.g., Fork-tailed Flycatcher), some migrant Barn Swallows overshoot their northward migration and wind up in North America. The immatures that arrive there are in a plumage that is not present in North American-breeding populations at the time of their arrival, as in the depicted bird found in Michigan in what is, essentially, the southern hemisphere's November. The combination of season and plumage greatly encourage misidentification. Immature Barn Swallows that linger late into the fall are often nearly as whitish below as this individual, though they probably do not replace flight feathers, and those that also have a strong breast band are most likely to be confused with Bank Swallow as this plumage is not well represented in field guides. Nayanquing Point State Wildlife Area, Bay County, Michigan. 29 May 2014. Photo by Tony Leukering.

ACKNOWLEDGMENTS

I greatly appreciate the review of a draft of this essay by Cameron Cox and Kathy Mihm Dunning.

LITERATURE CITED

eBird. 2020. eBird: An online database of bird distribution and abundance [web application]. eBird, Ithaca, New York. Available: http://www.ebird.org. (Accessed: 29 January 2020).

Howell, S. N. G. H., J. H. Barry, and J. E. Pike. 2006. Delayed preformative molt in the Barn Swallow. Western Birds 37:61-63. https://tinyurl.com/BARS-preform

Leukering, T. 2010. Molt and plumage: A primer. Colorado Birds 44:135-142. https://cobirds.org/CFO/ColoradoBirds/InTheScope/24.pdf

Leukering, T. 2013. Juvenal plumage in Colorado birds. Colorado Birds 47:215-221. https://cobirds.org/CFO/ColoradoBirds/InTheScope/60.pdf

Leukering, T. 2016. The most underused ID feature. Birding 48:54-59.

Leukering, T. 2019. Non-adult plumages: Terminology matters. Colorado Birds 52/53:23-29. https://cobirds.org/CFO/ColoradoBirds/InTheScope/87.pdf

Pyle, P. 1997. Identification Guide to North American Birds, part I. Slate Creek Press, Bolinas, CA.

Winkler, D. W., F. A. Gandoy, J. I. Areta, M. J. Illiff, E. Rahkimberdiev, K. J. Kardynal, and K. A. Hobson. 2017. Long-distance range expansion and rapid adjustment of migration in a newly established population of Barn Swallow breeding in Argentina. Current Biology 27:1080-1084. https://tinyurl.com/BARS-Arg

AUTHOR

Tony Leukering

771 Hidden Valley Ct., Fairborn, OH 45324 (greatgrayowl@aol.com)

Colorado Christmas Bird Count Highlights

BRANDON K. PERCIVAL



Pacific Wren, Jefferson County, 23 Dec 2019. Photo by Rob Raker.

Colorado Christmas Bird Count Highlights

BRANDON K. PERCIVAL



Great Black-backed Gull, Lake Pueblo State Park, Pueblo County, 05 Jan 2020. Photo by Bill Maynard.

There were 51 Christmas Bird Counts in Colorado this past winter (December 14, 2019-January 5, 2020). A total of 201 species of birds were counted on count day and the only other count week species found was White-tailed Ptarmigan at Aspen. Only three Colorado Bird Records Committee review species were found. A Gyrfalcon appeared for the second year in a row on the Loveland CBC on 1 January. A Brant (Black) was found on the new North JeffCo CBC on 20 December, which is in northern Jefferson County. Photos of a Pacific Wren were submitted from the Colorado Springs CBC on 14 December, and audio was submitted for another Pacific Wren on the Penrose CBC on 22 December.

CBC HIGHLIGHTS

Trumpeter Swans were found on a few counts. Two at Crook, two at Denver, and two at Evergreen-Idaho Springs were all considered wild birds. Nine at Roaring Fork River Valley were considered feral, not countable birds. Four Tundra Swans were at Boulder and found during count week at Denver. Rare in winter, two Blue-winged Teal were at Fort Collins. There were 21 Greater Scaup found including one at Eagle Valley which was particularly unusual. The only scoter was a White-winged at Denver. Six Long-tailed Ducks were found, including one at Grand Junction in western Colorado. Statewide, 206 Barrow's Goldeneyes were found on counts.

More loons were reported this past winter. Single Red-throated Loons were found at both Pueblo Reservoir and Pueblo; four Pacific Loons were found, two at Pueblo Reservoir, one each at Denver and North JeffCo; and five Common Loons were found as well. Two Red-necked Grebes

were at Pueblo Reservoir. A large flock of 46 American White Pelicans graced Barr Lake, three each were found at Denver (Urban) and John Martin Reservoir.

An injured Turkey Vulture was seen at Hotchkiss, and an Osprey was seen at Grand Junction, both unexpected on Colorado CBCs. The marshes in Colorado had a good number of rails this winter. There were 105 Virginia Rails and five Sora. West Slope CBCs had the only Sandhill Cranes: Montrose, Delta, Grand Junction, and Cortez.

This was a better winter for odd shorebirds including two Spotted Sandpipers at Hotchkiss; three Greater Yellowlegs at Monte Vista NWR.; a Dunlin at Rocky Ford; and Least Sandpipers at Denver, Longmont, and Pueblo Reservoir (two).

Ten species of gulls were reported this winter: 369 Bonaparte's; a very unexpected dark headed gull, either Laughing or Franklin's at Colorado Springs; two Mew at Pueblo Reservoir; 19 Iceland (Thayer's); 21 Lesser Black-backed; five Glaucous; and the usual Great Black-backed at Pueblo Reservoir.

Remember when White-winged Doves were rare in Colorado in the 1990s? Lots of them now occur on Colorado CBCs, with 253 counted this winter. Seven Greater Roadrunners were also found.



Pacific Wren with screw, Jefferson County, 23 Dec 2019. Photo by Rob Raker.

Owl totals include: six Barn; 84 Western Screech-; 25 Eastern Screech-; 318 Great Horned; 9 Northern Pygmy-; 12 Long-eared; two Short-eared; and 13 Northern Saw-whet.

A Lewis's Woodpecker was found for the first time on the Rocky Mountain NP count. Rare in winter, three Red-headed Woodpeckers were found at Sterling. Crook and Sterling counters also found Red-bellied Woodpeckers.



Brant and Mallard, Ake Arbor, Jefferson County, 22 Dec 2019. Photo by Rob Raker.



Bonaparte's Gull, Lake Pueblo State Park, Pueblo County, 20 Dec 2019. Photo by Bill Maynard.



Barrow's Goldeneye on Prospect Lake, El Paso County, 9 Jan 2020. Photo by Bill Maynard.



Pacific Wren, Jefferson County, 23 Dec 2019. Photo by Rob Raker.



Lesser Black-backed Gull, Lake Pueblo State Park, Pueblo County, 07 Jan 2020. Photo by Bill Maynard.

Williamson's Sapsuckers winter in small numbers in Colorado and a few CBCs found them: four at Penrose, one at North JeffCo, one at Roaring Fork River Valley, and count week at Lake Isabel. Five Yellow-bellied Sapsuckers were found: four on Northern Front Range counts (Boulder, Denver, Fort Collins, North JeffCo), and one in western Colorado at Roaring Fork River Valley. A Red-naped Sapsucker was at Grand Junction. Four Ladder-backed Woodpeckers and eight American Three-toed Woodpeckers were also found.

Three Peregrine Falcons were found (Grand Junction, Grand Mesa, and Monte Vista NWR.).

It was a big winter for phoebes, 11 Black Phoebes and 33 Say's Phoebes were more than usual. North of their usual range, three Chihuahuan Ravens were detected at Boulder. A Tree Swallow was at Grand Junction. A House Wren was well photographed at Fountain Creek. Only two Winter Wrens were found, one at John Martin Reservoir and one at Penrose (near the Pacific Wren). A Carolina Wren was at Pueblo Reservoir. Delta, Hotchkiss, and Grand Junction found Bluegray Gnatcatchers. Six Hermit Thrushes were found, and one Varied Thrush was at Denver. Five Gray Catbirds, two Brown Thrashers, three Sage Thrashers, and one Northern Mockingbird were also found.

No eastern warblers were found on any counts. Two Common Yellowthroats (North JeffCo and Pueblo Reservoir); a Yellow Warbler (at Pueblo Reservoir); and two Wilson's Warblers (Boulder and Grand Junction) were all of note for winter.

There are always interesting sparrows found each winter including single Chipping Sparrows at Durango and Pueblo Reservoir; a very rare Lark Sparrow at John Martin Reservoir; 14 Harris's Sparrows, including one in southwest Colorado at Cortez and count week at Fairplay; 16 White-throated Sparrows (Montrose and Grand Junction in western found one each), a Savannah Sparrow at John Martin Reservoir; 17 Lincoln's Sparrows; and 20 Swamp Sparrows. Additionally, three counts found Rufous-crowned Sparrows (John Martin Reservoir, Penrose and Pinon Canyon).

Nine Northern Cardinals were found, one in Boulder was the most unusual. Nine Rusty Blackbirds were seen, including four on the Roaring Fork River Valley count. Only 13 Common Grackles were found and 20 Brownheaded Cowbirds. This season seemed to be a good winter for Red Crossbills on CBCs; there were 2,054 counted including two at Pinon Canyon, which was unusual for that location. Lesser Goldfinches seem to be possible on many counts nowadays, 135 were counted statewide. There were 646 Evening Grosbeaks around the state, which seemed like a good total.

Thanks to the all the compilers and participants for making this another successful Christmas Bird Count Season.

AUTHOR

Brandon K. Percival

Colorado CBC Regional Editor 835 S. Harmony Drive, Pueblo West, CO 81007 Flammowl17@gmail.com

COLORADO CBC SUMMARY

Count Name	Species Counted ¹	Total Birds ¹
Pueblo Reservoir	132	22199
Penrose	110	11130
Grand Junction	108	30144
Boulder	108	24818
North Jeffco	106	14811
Pueblo	103	69649
Denver	101	24147
Loveland	97	32626
John Martin Reservoir	96	82867
Rocky Ford	93	31206
Fort Collins	93	31699
Colorado Springs	93	16997
Longmont	87	40723
Denver (Urban)	85	46576
Fountain Creek	84	6038
Crook	82	114110
Durango	80	6380
Delta	71	20226
Weldona-Fort Morgan	71	21499
Montrose	71	12191
Rawhide Energy Station	71	5617
Cortez	70	11302
Salida		3988
	69	
Sterling	67	30,388
Hotchkiss	66	6297
Barr Lake	65	26942
Roaring Fork River Valley	65	3852
Pagosa Springs	61	3142
Rocky Mountain N.P.	57	4528
Lake Isabel	56	2449
Monte Vista N.W.R.	55	3282
Douglas County	54	3628
Greeley	53	19225
Grand Mesa	50	2741
Evergreen-Idaho Springs	49	8480
Air Force Academy	48	2876
Gunnison	47	4566
Westcliffe	47	1366
Spanish Peaks	46	1042
Eagle Valley	45	1556
Granby	42	2334
Steamboat Springs	42	2334
Black Forest	41	1669
Dotsero	41	554
Aspen	35	1074
Flagler	30	2521
Pinon Canyon	30	1394
Great Sand Dunes N.P.	30	461
Nunn	26	607
Fairplay	26	614
Pawnee National Grasslands-East	20	3228

¹High count in bold

COLORADO CBC SUMMARY

	Most Counted Species	Total	Percent of Count
Ring-billed Gu	ıll	6508	29%
European Sta	rling	4434	40%
European Sta	rling	11773	39%
Canada Goos	e	4247	17%
Cackling Goo	se	4656	31%
Red-winged E	Blackbird	51386	74%
Canada Goos		5144	21%
Canada Goos	e	7118	22%
Snow Goose		33490	40%
Red-winged E	Blackbird	15151	49%
Canada Goos		5546	17%
Canada Goos		2210	13%
Canada Goos	e	16862	41%
Canada Goos		16145	35%
Canada Goos	·	908	15%
Snow Goose	-	85055	75%
Canada Goos		1196	19%
Canada Goos		10473	52%
Snow Goose	<u> </u>	10235	48%
Canada Goos		2603	21%
Canada Goos		1500	27%
European Sta		2469	22%
European Sta	-	593	15%
Snow Goose	Tillig	12771	42%
	wlin a	2288	36%
European Sta			
Common Mer	•	7123	26%
American Cro	• • • • • • • • • • • • • • • • • • • •	583	15%
American Cro		570	18%
Pygmy Nutha		508	11%
Dark-eyed Ju		418	17%
European Star	_ •	636	19%
American Cro		535	15%
Canada Goose		8699	45%
Dark-eyed Jui		656	24%
American Cro		1056	12%
Canada Goose		824	29%
House Sparro	W	1721	38%
Horned Lark		151	11%
Dark-eyed Jui	100	189	18%
Rock Pigeon		282	18%
House Sparro		528	23%
European Star	-	280	12%
Red-winged B	lackbird	409	25%
Wild Turkey		94	17%
American Cro	w	231	22%
Horned Lark		949	38%
Mountain Blue	ebird	849	61%
Dark-eyed Jui	nco	176	38%
European Star	rling	305	50%
Brown-cappe	d Rosy-Finch	150	24%
Horned Lark		3092	96%

TRIP REPORT

Trip Report, Northeast Colorado, February 21-23, 2020

LEADERS: NICK KOMAR, SUE RIFFE



Trumpeter Swan pair at Red Lion State Wildlife Area, Logan County, 22 Feb 2020.

The first CFO field trip of 2020 to Northeast Colorado began in Loveland at 8:30 am, on Friday, 21 Feb. We piled in and headed to West Trilby Road in hopes of finding the wintering Gyrfalcon near the Larimer County Landfill. Winter birding, however, is fickle and the Gyrfalcon did not show. A Ferruginous Hawk was our consolation prize and one of several we would see during the 3-day field trip. Next, we stopped at Warren Lake in Fort Collins on the way to Hamilton Reservoir in Larimer County where we encountered Eared, Horned and Western grebes, and about a dozen male Red-breasted Mergansers. We also found Lapland Longspurs nearby with Horned Larks.

Next, we drove through the Pawnee Grassland and Grover to New Raymer, where we lunched at the Pawnee Station diner. Along the way we turned-up a few raptors including a wing-tagged Golden Eagle. We are in the process of finding the banders who tagged it to learn of its origins.

After lunch, a search for day-roosting owls near Sterling and again further east in Logan County, yielded a Great Horned Owl and some Barn Owl pellets. As we headed east, we began to see large skeins of Snow Geese flying overhead as the sun settled on the horizon and a "prairie" Merlin posed briefly for us along Hwy 138.

Friday evening and Saturday morning were dedicated to the CFO-NOU Gull Identification Workshop held at Lake McConaughey. We drove the scenic route back to Julesburg (through Big Spring, NE), and ate lunch at a diner in Julesburg, CO. The winter days are short, and after lunch we only had time for four birding stops. First, we looked again for day-roosting owls in Logan County and were rewarded with decent views of Barn Owls. Jumbo Reservoir and Little

TRIP REPORT

Jumbo Reservoir had a decent variety of waterfowl, including >100 Greater White-fronted Geese and about 2000 Snow Geese. A big surprise was finding a Trumpeter Swan pair at Red Lion SWA. At Tamarack Ranch SWA in the final hour of daylight, we flushed a covey of >20 Northern Bobwhite from under our feet. That evening, while trying to whistle up Eastern Screech-Owls, a Northern Cardinal responded. We enjoyed the contented hoots of several Great Horned Owls from the cottonwoods along the river. Around sunset, six Short-eared Owls made an appearance, including a flock of 4 flying like moths above the treeline of the shelterbelt at parking lot 11. As we watched the owls, an Eastern Screech Owl piped in and another Northern Cardinal spoke up in protest.

Birding resumed Sunday morning in the sandhills of Washington County before sunrise, where we found a pair of strutting male Greater Prairie-Chickens practicing for the spring lekking season. From there we drove north on Hwy 71 to just shy of the Nebraska border, and then west again for a slow march through the Pawnee Grasslands. First stop was at "God's Woods" where a pair of resident Curve-billed Thrashers had been reported on private property. We found lots of cholla cactus on the property, and heard a thrasher singing. Then we spotted both thrashers perched in a large cholla by the owner's house. We viewed from the county road, but our presence roused the homeowners, who came out to investigate. They explained to us that the Curve-billed Thrashers have been nesting there for 20 years! Continuing west to near the Wyoming border, we found one of our target birds: Sharp-tailed Grouse. A flock of 14 were feeding in tall grass on both sides of CR111, only appearing when in flight. While we studied the grouse, a lone calling Snow Bunting flew over heading north, a frustratingly brief encounter with this rare winter visitor. Continuing through the grasslands further turned-up a pair of Prairie Falcons and several Rough-legged Hawks. We enjoyed our final lunch in Ault, CO. Back in Larimer County, we tried again for the Gyrfalcon, strike 2. At Warren Lake, however, we practiced our newly-acquired gull identification skills on some large immature gulls and were pleased to find two Thayer's Gulls, two Herring Gulls, and a Herring x Glaucous Gull hybrid. We ended the three-day trip back at the Gyrfalcon stakeout for -you guessed it-strike 3!

- Nick Komar

CFO MEMBERSHIP STRUCTURE

The new membership structure for those joining or renewing their membership in CFO starting January 1, 2019, is the following:

Household membership (digital/web) - \$25 (same price as previous household memberships
Household membership (printed and mailed) - \$35
Youth/student (digital/web) - \$12
Institution (print) \$40
Foreign (digital) - \$25

Those who have paid for membership extending past January 1 will continue to receive printed journals through the term of their memberships. But anyone wanting to convert to digital/web-only access before the end of their membership can easily do so, by one of two ways:

For those who have accounts on our website (free), log on to the website, which takes you to your membership profile. There you will see a blue button at the top of your profile labeled "Change Membership to Digital Journal." Click on that button, and you will no longer receive printed editions by mail. (And while you are there, feel free to edit your profile with updated phone, address, etc.) OR,

Go to the bottom of any page of our website, and on the left side you will see a place to "Contact CFO." Click on that, then choose the subject "Membership Status or Question" from the drop-down menu, give your name, and tell us you want to convert to digital/web access only.

Need help navigating the change? See the paragraph immediately above for instructions for contacting CFO regarding membership matters.

CFO will alert members when new editions are posted on the website, using email, posts on CoBirds and the CFO Facebook page, and on the home page of the website. Please note that the emails are sent via Mail Chimp, so you may want to make sure your spam filter is allowing those emails into your inbox.

A NOTE REGARDING THOSE WHO USE PayPal FOR AUTO PAY OF THEIR DUES: Members who use auto pay through PayPal will NOT need to change the amount of their payment if switching to web/digital memberships, because they are the same price as the former household membership (\$25). But those with existing household memberships who wish to continue to receive printed and mailed editions of the journal will need to increase their payments to \$35.

Colorado Birds The Colorado Field Ornithologísts' Quarterly

Instructions for contributors to Colorado Birds

Colorado Birds is devoted to the field study of birds in Colorado. We invite you to submit articles of general or scientific interest for publication. Authors are encouraged to submit materials that contribute to the enjoyment and understanding of birds in Colorado. The preferred submission method is via email attachment to the *Colorado Birds* editor, editor@cobirds.org. Submissions may be edited for length and content.

Photos or other art may be submitted in black and white or color. Files should be saved as high-resolution jpeg or similar format and must be a minimum of 900×750 pixels. Potential cover images must be at least 2625 (vertically) $\times 1725$ (horizontally) pixels. For cover photos, it is also important to remember that there needs to be space at the top of the image for the journal title, etc. Please DO NOT save photos in MS Word or otherwise embed within a document. Include photo captions along with the photographer's name, where and when taken, and other relevant information. All photos should be sent to the *Colorado Birds* editor, editor@cobirds.org.

Contributors who are not members of CFO will, upon request, receive a complimentary copy of the issue of *Colorado Birds* in which their articles appear. The articles in this journal reflect the research and opinions of the individual authors. As such, the articles do not necessarily reflect the opinions or positions of the Officers, Directors, or other representatives of CFO.







FIGURES 5,6,7

IN THE SCOPE Page 63