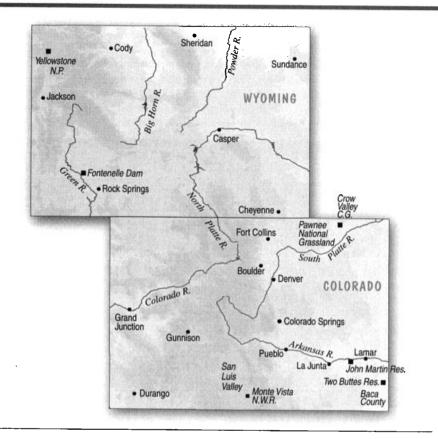
# Colorado & Wyoming



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By almost any measure, the summer of 2004 was sensational. There were mega-rarities, some bizarre lingering birds, and several other noteworthy breeding records. Temperatures were several degrees cooler than average over most of the Region, while precipitation varied considerably by locale. Many of the reservoirs are still well below capacity.

Abbreviations: E.K.W. (Edness Kimball Wilkins S.P., *Natrona*, WY); Seedskadee (Seedskadee N.W.R., *Sweetwater*, WY); Yellowstone (Yellowstone N.P., *Park & Teton*, WY). Due to reporting biases, all locations can be assumed to be in Colorado except that each Wyoming location is noted as such the *first time* it appears in the text.

#### LOONS THROUGH TERNS

Casual in summer, 2 Pacific Loons were reported, one at Saratoga L., *Carbon*, WY 15 Jun (FB) and one at Jumbo Res., *Sedgwick* 17 Jun (HA). Six Common Loons were found in e. Colorado, furnishing one of the highest summer totals for that portion of the Region. Very rare in summer, a Horned Grebe was at Big Johnson Res., El Paso 1 Jul (TL, MP). American Bitterns summered at Fruit Growers Res., *Delta* (m.ob.); this species is only occasionally noted in summer on the West Slope away from Browns Park N.W.R., Mof-

fat. The only Least Bittern was found at the now-traditional location near Ft. Lyon, Bent 29 Jun (MP). A Great Egret at Trout Creek 8 Jun (P. Gould) established a first record for Teller and a very rare mountain record. Other unexpected Great Egrets were seen well to the nw. at Hayden, Routt 19 Jun (FL) and a pond along Harmony Lane, Albany WY 17 Jun (DF). Green Herons apparently bred at Connected Lakes, Mesa where ads. were observed feeding fledged birds (LA). There are fewer than 10 documented breeding records of Green Heron in the Region, and this established only the 2nd for the West Slope. Equally surprising was a Green Heron at Seedskadee 1 Jun (LG). The only Glossy Ibis reported was at Metro L., Colorado City, Pueblo 24-25 Jul (DS, DJ). Two White-faced Ibis in Pitkin 3 Jul (T. Patrick), were the first ever noted in this dry county.

Lingering and summering waterfowl were many this summer. A Greater White-fronted Goose at Denver City Park was the first to successfully summer in the Region (NL). Other unusual lingerers at Denver City Park included a Redhead and Common Merganser, both 4 Jun (NL). Also very rare, an injured Snow Goose summered at Pueblo City Park (m.ob.). A male and female Greater Scaup near Pinedale, Sublette WY 22 Jun (ph. TA) furnished only the 2nd summer report for Wyoming. A White-winged Scoter at the Jackson Treatment Plant, Teton, WY "sometime around 22 Jun" (BJ) furnished the first mid-summer record for the Region. Small numbers of summering Hooded Mergansers have become predictable in e. Colorado, with reports this season from Weld and El Paso counties. A female at L. DeWeese, Custer 9 Jul (MP, BKP) was surprising.

Mississippi Kites continued their expansion. Up to 5 were found in Sterling 11 Jul (GW). One at Barr Lake S.P., Adams 25 Jul (J&KS) was the first reported in that county. Most outstanding was a Mississippi Kite at Norwood, San Miguel 19 Jun–3 Jul (GS, KG, CD, ph. BW). Sizeable flocks of molting imm. Swainson's Hawks are regularly seen in summer, but at least 120 s. of Tri-county Airport, Broomfield 9 Jun (BIS, PP) was one of the highest summer counts to date. A pair of

SA It seems that almost every year during late Jul and Aug, there is at least one report of a juv. Little Blue Heron following the fledging of Snowy Egrets. This year was no different, with 2 juv. Little Blue Herons reported at Timnath Res., *Larimer* 28–29 Jul (RHa, CW). While many of these reports are likely correct, the majority are clouded with controversy due to the difficulty and subjective nature of separating pale-billed and pale-legged juv. Snowy Egrets (seen most frequently in younger birds) from Little Blue Herons. It is relatively easy to clarify this matter by documenting these birds photographically, something we should make a more concerted effort to do. Sandhill Cranes remained to the s. at Nucla all summer, but no young were ever seen (CD, BW).

An alternate-plumaged American Golden-Plover at Thurston Res. 29–31 Aug (DN) was exceptionally early. Up to 4 Snowy and

2 Piping Plovers were seen at Prewitt 10-25 Jul (MP, NK et al.), this including at least one Piping chick on 10 Jul (NK). Colorado's first Piping Plover nest was found here 26 Jun 1949, a nest that was destroyed a few days later, and no subsequent breeding attempts were known in the state away from the Arkansas R. Valley until this summer. Suspected breeders were 2 Willets at Fruit Growers Res. all summer (LA, CD) and 2 at Juniper Hot Springs, Moffat 12 Jun (FL). The only Ruddy Turnstone was found at "The Puddle" in Casper, WY 24-25 Jul (CM, SB, BR). An ad. Short-billed Dowitcher was well documented at Prewitt 25 Jul (ph. BS, TF). There were few large counts of shorebirds anywhere in

the Region, and none away from Prewitt. An estimate of 5000 Baird's Sandpipers at Prewitt 25 Jun (TF, BS) was slightly above average, while 200 Semipalmated Sandpipers there the same day was exceptional (TF, BS).

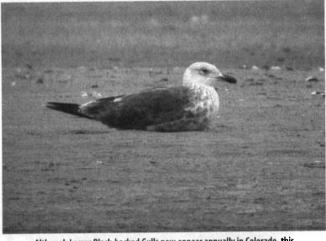
Many unusual gulls and terns were found this season. A second-summer **Thayer's Gull** remained at Cherry Creek Res., *Arapahoe* until 3 Jun (ph. JO), furnishing the first

summer-season report for the Region. Establishing another first summer record for the Region was a worn and tattered second-cycle Lesser Black-backed Gull at Prewitt Res. 10 Jul (ph. CLW, TL et al.). A Royal Tern was documented at Big Johnson Res., El Paso 16-17 Jun (ph. MP, JP, AB, m.ob); the only previous Regional record was in Kiowa 15-16 Jul 1997. One to 3 Common Terns were at Big Johnson Res. on the unusual dates of 17-20 Jun. More typical were single ads. at Pueblo Res. 23 Jul (BKP) and at Prewitt 25 Jul (TE BS). Two ad. Arctic Terns were found this summer: one at Big

Johnson (MP) 25 Jun and one at L. Cheraw 30 Jun–1 Jul (MP, TL). Approximately half of Colorado's records of Arctic Tern fall between 30 May and 1 Jul.

#### **DOVES THROUGH THRASHERS**

At least 16 White-winged Doves were found in Colorado, highlighted by the first known nesting of White-winged Doves away from the Arkansas R. Valley. In Littleton, a pair nesting in a birch tree fledged 2 young in Jun and 2 more in early Aug (D&CL); 2 ads. in Colorado Springs produced at least one juv. that came to a feeder 29 Jun (MP). Blackbilled Cuckoos were found at three widely separated Wyoming locales: 2 were along Brunner Rd., *Converse*, WY 22 Jun (D&D



Although Lesser Black-backed Gulls now appear annually in Colorado, this second-summer bird at Prewitt Reservoir on 12 July 2004 was the first to be documented in the summer. Photograph by Christopher L. Wood.

VonHoldt, SB), and one was along Upper Clear Creek Rd., Johnson, WY 19 Jun (PH, K. Behrens). Most unexpected was a Blackbilled Cuckoo at Tower High Bridge, Yellowstone 12 Jun (ph. E. Hendrickson), which could have been a migrant. The only Yellowbilled Cuckoos on the West Slope were "present most of the summer" in Grand Junction (LA) and Hotchkiss (AR).



Furnishing only the second record for Colorado, this adult Royal Tern delighted observers at Big Johnson Reservoir, El Paso County, Colorado from 16 June 2004 (here) through 20 June 2004. Photograph by Mark Peterson.

Along the Front Range, Black-chinned Hummingbirds now appear to be regular breeders in small numbers as far n. as the s. Denver–Metro suburbs, with reports this summer from Waterton Canyon, Jefferson and Cherry Creek Res., Arapahoe. In general, hummingbird numbers were down at most feeding stations, and very few were seen on the plains. This is probably attributable to the return to average and even aboveaverage wildflower displays in much of the Region. Furnishing a first for *Lake*, a Redheaded Woodpecker was found at 2760 m on 10 Jun (RLi). A male Acorn Woodpecker w. of Gulnare, *Las Animas* 29–30 Jun (TL, MP) was about 13 km from where an Acorn Woodpecker was found this spring. Perhaps

this species is again breeding somewhere in the remote pine-oak woodlands of Las Animas. A report of a male Yellow-bellied Sapsucker from Coller State Wildlife Area. Mineral (JB) was unprecedented for the summer season and its West Slope location. A male Ladder-backed Woodpecker at Flagler State Wildlife Area, Kit Carson 11 Jun (MP, LE) was completely unexpected and only the 2nd found outside of se. Colorado. An impressive concentration of at least 23 American Three-toed Woodpeckers was near Seven Lakes in the Mount Zirkel Wilderness Area, Jackson 3-4 Jul (CLW). A blowdown in Oct 1997 triggered a spruce beetle epidemic that has now spread throughout much of

the Mount Zirkel Wilderness Area and Park Range, Jackson/Routt.

There are now 40 known nesting locations of Black Phoebe on Colorado's West Slope, with two nests along the Colorado R. in *Mesa* providing first nesting records for that county (CD, RL, BW, D. Wright). On the e. side, there were at least two successful nesting pairs of Black Phoebes in *Fremont* 

(SM, RM), plus one Black Phoebe along Burnt Mill Rd., Pueblo 30 Jun (MP, TL). It was also a good year for Eastern Phoebes. Most remarkable was a straggler to Upper Beaver Meadows, Rocky Mountain N.P. 25 Jun (BoS) and a probable nesting pair e. of Kersey, Weld 10-15 Jun (CLW, TL). Single Ashthroated Flycatchers at Doudy Draw 23 Jun (JT) and Walden Ponds 29 Jul (EZ) add to the growing number of reports from Boulder. The surprise of the season was a Brown-crested Flycatcher reported from private property in Kiowa 26 Jul (DN); there are no previous records anywhere in the

Region. Equally unanticipated was a Thickbilled Kingbird at a ranch outside Parker, *Douglas* 3 Jul (ph. PJ&rGM). Scissor-tailed Flycatchers remained s. of Lamar until at least 1 Jul (DAL), and one was again seen at the junction of Woodmen and Black Forest Rds., El Paso 17 Jun (DAL). Other Scissortaileds were n. of Las Animas, *Bent* 8 Jul (DN), and between Timpas and Rocky Ford, *Otero* 5 Jul (SO). A Scissor-tailed s. of Alamosa 28 Jul (JS) furnished one of about half a

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dozen reports for the San Luis Valley.

A White-eyed Vireo sang along the Canon City Riverwalk, Fremont (RM) on the odd dates of 11-20 Jul. A singing Yellow-throated Vireo at Two Buttes Res., Baca 10-11 Jun (MA) was a bit late for a spring migrant. What were presumably very early fall migrant Cassin's Vireos were noted at Teton Science School, Teton WY 12 Jul (CMe) and E.K.W. 17-18 Jul (AH). Red-eyed Vireos were widely noted along the Front Range, where they are uncommon breeders, but a singing male in Grand Junction 20 Jun-early Aug (LA) was surprising. A Blue Jay wandered w. to Grand Junction 19 Jul (LA) and another to Glenwood Springs 18-19 Jul (AD). Two male and 2 female Purple Martins attended active nests in the Sierra

Madre Mts., *Carbon* (ph DF, RL), establishing the first Wyoming nesting record since the 1930s.

A Pygmy Nuthatch outside its pine habitat in Grand Junction throughout the summer was unusual (LA). Bushtits once again bred in the e. Denver Metro Area, with ads. feeding young at the Denver Tech Center, *Arapahoe* 19 Jul (CB). While possible at any season, Carolina Wrens are least expected in summer; one enlivened L. Beckwith, *Pueblo* 16 Jul (DS, DJ). A singing Winter Wren in the Bighorn Mts. 14 Jun (PH) was away from the known Wyoming nesting locales in the Tetons. A **Curve-billed Thrasher** at Grand Junction 9 Jun (P&FD) was only the 2nd to be found on the West Slope.

#### WARBLERS THROUGH FINCHES

The parentage of a bird that appeared to be a male Blue-winged Warbler at Gregory Canyon, Boulder 5-20 Jun (JT) was hotly debated. A singing Nashville Warbler near the Laramie R., Larimer 5-9 Jul (NK, CW) was one of very lew summer reports from Colorado. Equally surprising was a Virginia's Warbler far to the nw. at the Teton Science School 14 Jul (CMe). Northern Parulas put on appearances along Sand Creek, Crook, WY 9 Jun (SJ) and Mineral Palace Park, Pueblo 10-23 Jun (VT). Female Chestnut-sided Warblers were found along the S. Mesa Trail, Boulder 23 Jun (TF) and Lands End, Grand Mesa, Mesa 15 Jun (DW). A migrant Magnolia Warbler hung on at Crow Valley Campground, Weld 2 Jun (JPB). A singing male Black-throated Blue Warbler in Gregory Canyon 14 Jun (JT) was particularly odd. A male Pine Warbler at Fairmount Cemetery in Lamar 24 Jul (DAL) was about the 5th found in late summer or early fall. The Kentucky Warbler in Rock Canyon, Pueblo remained until 12 Jun (BKP). Hooded Warblers summering in the foothills outside Boulder are now nearly annual, with at least one male and female this summer

11–20 Jun and later (CLW). Far less expected was one along the Big Sand River, *Sweetwater*, WY 2 Jun (K&DP) and a female in Hooper, *Alamosa* 17–18 Jun (JM, MM). Most astonishing was a female Hooded Warbler feeding a fledgling 27 Jul–3 Aug (RA) at the Lower Piedra Campground, *Archuleta*. At least one Hepatic Tanager returned to Pryor, *Huerfano*. 6 Jun (LE), where first found last summer. Scarlet Tanager is exceptionally rare in summer, so one wonders how many birds were responsible for three different reports of a male **Scarlet Tanager** in *s. Boulder* 2–26 Jun (PHa; LK, EZ; M&SP).

It was a good sparrow season throughout much of the Region, with several species w.



Discovering a Brown-capped Rosy-Finch nest anywhere is sure to be memorable, but this nest above South Gap Lake in Wyoming's Snowy Range, found 10 July 2004, was apparently the first ever found in Wyoming. The nestlings were banded 15 July, when this photograph was taken. *Photograph by David McDonald*.

of usual. Up to 15 Cassin's Sparrows were near Florence, Fremont 10 Jun-9 Jul (MP). Equally unexpected was one s. of Niwot, Boulder 10 Jun (TL). Scattered Lark Buntings were widely noted, with reports as far nw. as Jackson, WY and Grand Teton N.P. throughout Jun. It was also a great year for Grasshopper Sparrows, with several in Boulder, Elbert, and even to Custer, where 3 were found singing outside Westcliffe 27 Jun-7 Jul (MP). A Slate-colored Junco at Flagler State Wildlife Area 11 Jun (MP, LE) was perhaps the first ever found in Colorado during the summer. At least 14 Rose-breasted Grosbeaks were seen this summer, highlighted by 2 ads. feeding fledged young at the Canon City Riverwalk (DP), which established the first breeding record for se. Colorado. A singing male Painted Bunting was once again present at Cottonwood Canyon,

Baca/Las Animas 8–9 Jun (MA). Dickcissel made it as far w. as Canon City (m.ob.).

White-winged Crossbills were again widespread, but numbers in Colorado appear to have dropped from last year, while numbers around Yellowstone were excellent. There is a handful of recent reports of migrant Lesser Goldfinches from Lamar, but one 30 Jun was still unexpected (DAL). A European Goldfinch, certainly an escapee, visited an e. Denver residence 20 Jun–13 Jul (EJ). While there are several reports of probable breeding, Wyoming's first **Brown-capped Rosy-**Finch nest was found 10 Jul above South Gap L. in the Snowy Range, *Albany* (DM et al.). Four days later, observers were able to

climb to the nest and band the nestlings.

Undocumented: The following review species were reported without documentation: Bar-tailed Godwit at L. Henry, *Crowley* 16 Jul; Little Gull at "The Puddle" 24 Jul.

Cited observers (subregional compilers in boldface): Mymm Ackley, Robert Andrews, Henry Armknecht, Larry Arnold, Tim Avery, Jim Beatty (sw. Colorado), Francis Bergquist, Chris Blakeslee, Sophia Bogart, Allan Burns, Coen Dexter (w.-cen. Colorado), Paul and Fran Didier, Lisa Edwards, Doug Faulkner, Ted Floyd, Lamont Glass, Kathy Graff, Roy Halpin (RHa), Ann Hines, Rachel Hopper, Paula Hansley (PHa), Pete Hosner, Dave Johnson, Brian Jones, Ellie Jones, Loch Kilpatrick, Hugh Kingery (Denver Audubon), Nick Komar, Jim & Gloria Lawrence (statewide R.B.A., Wyoming), David A. Leatherman, Norm Lewis, Tony Leukering (R.M.B.O), Rich Levad, Roger Linfield, Forrest Luke (nw. Colorado), Dolores and Chuck Lopushansky, Josiah Malueg, Micah Malueg, David McDonald, Terry McEneaney (Yellowstone), P.J. and Gerry Mestas, Chance

Mendenhall (CMe), Chris Michelson (Casper, WY), Rich Miller, SeEtta Moss, Duane Nelson, Jerry Oldenettel, Stan Oswald, David Pantle, Susan Patla (Jackson, WY), Brandon K. Percival (se. Colorado), Mark Peterson (e.-cen. Colorado), Kit & Drew Phlughoft, Pete Plage, Myron and Suzi Plooster, Bert Raynes (Jackson, WY), Betty Rickman, Andrea Robinsong, Blake Schmidt (BlS), Bill Schmoker (Colorado Front Range), Jim and Karen Schmoker, Bob Schutsky (BoS), Larry Semo (ne. Colorado), Dave Silverman, George Steele, John Stump, Joyce Takamine, Van Truan, Glenn Walbek (n.-cen. Colorado), Cole Wild, Christopher L. Wood, Brenda Wright, Dave Wright, Eric Zorawowicz. Some 30 other observers contributed information to this report but could not be personally acknowledged here; they all have our thanks and appreciation. 😒

# State of the Region

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Colorado and Wyoming have exceptional diversity, from rolling sage flats to 14,000-foot peaks, from vast expanses of short-grass prairie to dark spruce—fir forests, from playa lakes to open park-like Ponderosa Pine forests. The threats to these natural communities are as diverse as the communities themselves.

#### Grasslands

As is the case in so many habitats, the central conservation issues in the short-grass prairie (BCR 18) of eastern Colorado and southeastern Wyoming and prairies and badlands of northeastern Wyoming (BCR 17) are habitat loss and habitat alteration. In Colorado, much of the habitat conversion and degradation is a result of rapid population growth and accompanying



Partners in Flight has identified grassland and western shrubland habitats as being of highest conservation priority in the United States, as populations of a number of bird species in these habitats have experienced declines. In short-grass prairies of Wyoming, Montana, and Colorado, Mountain Plover is one of a suite of species that is of conservation concern. State and federal agencies and conservation organizations are working together with private landowners for the conservation of Mountain Plover and other bird species. *Photograph by Stephen J. Dinsmore*.

land development. Much of that development is concentrated in Denver and its surrounding counties, where population densities are as high as 1180 people/km<sup>2</sup> (3050/mi<sup>2</sup>). For comparison, the human population density in Kiowa County, in the short-grass prairie of the eastern plains, is just 0.4 people/km<sup>2</sup> (1/mi<sup>2</sup>) (USDC 1991).

Although Wyoming does not have the same human population density as Colorado, short-grass prairie conversion is still of primary concern. Aside from a small number of BBS routes, little is known of prairie bird populations in Wyoming, where even basic distributional information is lacking. The only current long-term population study began in 2002 (Faulkner and Giroir 2004).

Situated in the rain shadow of the Rockies, much of the short-grass prairie is too dry to farm without irrigation. As a result, the proportion of plowed land is low compared to midgrass and tall-grass regions, and much of the short-grass region is still grassland (Weaver et al. 1996). In Colorado, an estimated 67% of the historical short-grass prairie still exists (Knopf 1994), although some sources suggest that only 20% of the original short-grass prairie exists in an unaltered state, the rest having been degraded by introduction of exotic plant species or by overgrazing. Managing short-grass habitat for grazing by domestic live-stock, while preserving an area as grassland, nevertheless can alter the habitat by changing plant height, vigor, and community composition.

Habitat loss and alteration have contributed to population declines among short-grass bird species to the extent that grassland habitat is now arguably the highest conservation priority in the United States. As a group, grassland species have shown steeper, more consistent, and more geographically widespread declines than any other behavioral or ecological grouping

of North American species—including Neotropical migrants (Knopf 1996). Species of greatest concern include Greater and Lesser Prairie-Chickens, Mountain Plover, Long-billed Curlew, and McCown's and Chestnut-collared Longspurs.

#### Forests

Over the past 100 years, humans have altered western coniferous forests in six basic ways: fire exclusion, timber harvesting, grazing, residential development, chemical applications, and introduction of exotic diseases, plants, and animals (Hejl 1994). The effects of these actions on bird populations are understudied and poorly understood, although more is known about the first two than the others. Fire exclusion has resulted in some forest land-scapes overstocked with small trees or heavy fuel loads of dead and down trees. This is especially true in Ponderosa Pine habitats, which in many areas had a long history of frequent, low-intensity fires that regularly removed small trees and woody fuels. Fire exclusion has resulted in less frequent fires, but the overstocked stands and heavy fuel loads have caused fires to be larger and hotter.

For many years, timber harvesting was driven by economics and expedience, with little thought given to ecological consequences. Even in this more enlightened age, timber harvesting still has significant ecological impacts. For example, at a local scale, harvesting reduces the density of large snags, to the detriment of cavity-nesting species. At a land-scape scale, even-aged timber harvest techniques such as clear-cutting move forested habitats toward homogeneity, rather than the more natural landscape mosaic of unevenaged stands. Compared to regions in North America that serve as strongholds for industrial forestry, Southern Rocky Mountain forests (BCR 16) in western Colorado, as well as the Northern Rocky Mountain forests (BCR 10) in western Wyoming, are drier and experience shorter growing seasons. As a result, forests here do not regenerate quickly after harvesting. Both aggressive fire suppression and timber harvesting require a network of back-country roads. Increases in road density have resulted in fragmented forest habitats, with unknown impacts on bird populations. Species of conservation concern in this ecoregion include Flammulated Owl, Lewis's Woodpecker, Pygmy Nuthatch, and Grace's Warbler.

#### Plateau

Extensive tracts of land in western Colorado (BCR 16) and portions of Wyoming (BCR 17) are managed for livestock grazing, and the timing, duration, and location of grazing regimes are all significant bird conservation issues. The degradation of riparian and other habitats by grazing and the removal of sagebrush and pinyon–juniper woodlands for improved livestock and big game forage have significant impacts on birds.

The manipulation of water in this semi-arid region, including irrigation and dam building, and the resultant land uses (orchards, farms, industrial, residential) have created major threats to bird habitats. This is especially true in lowland riparian areas, where water storage has flooded critical stream-side habitats and significantly altered natural streamflow patterns, thereby reducing Cottonwood regeneration and encouraging invasion by exotic plants such as salt cedar and Russian Olive. On the other hand, irrigation has expanded waterbird habitat in places. More recently, a prolonged drought has left Pinyon Pines throughout the Region vulnerable to pine beetle infestation. In many areas, mortality is approaching 100%. The long-term effect on pinyon-dependent bird species remains to be seen.

The widespread recreational use of lands in this region also creates several conservation issues, including disturbance to wildlife from off-highway vehicles and habitat destruction from trail proliferation. The species most in need of conservation actions in this region include Gunnison Sage-Grouse, Pinyon Jay, Juniper Titmouse, and Gray Vireo.

#### Literature cited

- Faulkner, D., and G. Giroir. 2004. Monitoring Wyoming's birds. Rocky Mountain Bird Observatory, Brighton, Colorado.
- Hejl, S. J. 1994. Human-induced changes in bird populations in coniferous forests in western North America during the past 100 years. Studies in Avian Biology 15: 232–246.
- Knopf, F. L. 1994. Avian assemblages on altered grasslands. Studies in Avian Biology 15: 247–257.
- ——, 1996. Prairie legacies—birds. Pp. 135–148 in: Prairie Conservation (F. B. Samson and F. L. Knopf, editors). Island Press, Washington, D.C.
- U. S. Department of Commerce [USDC]. 1991. 1990 census of population and housing—summary population and housing characteristics—Colorado. U.S. Government Printing Office, Washington, D.C., 1990 CPH-1-7.
- Weaver, T., E. M. Payson, and D. L. Gustafson. 1996. Prairie ecology—the shortgrass prairie. Pp. 67–75 in: Prairie Conservation (F. B. Samson and F. L. Knopf, editors). Island Press, Washington, D.C.