Bird Conservancy of the Rockies

Connecting People, Birds and Land

Restoring Bald Eagle Habitat and Improving Knowledge of Bald Eagles in Colorado

Final Report - 2017

Photo by Lori Bollendonk

Matt Smith, Outreach Biologist
Bird Conservancy of the Rockies
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matt.smith@birdconservancy.org

Citizen Science and Stewardship

Starting in 2016, Bird Conservancy of the Rockies has applied funds from the mitigation of a Bald Eagle nest removal permit in Erie, Colorado toward a number of programs that benefit Bald Eagles. The application of these funds have both a land stewardship and citizen science component. The goals of the citizen science programs are to enhance knowledge of Bald Eagles in Colorado, and to work with Colorado Parks and Wildlife and United States Fish and Wildlife Service to help improve eagle management within the state. The land stewardship component focuses on working alongside partners and private landowners to protect, restore, and enhance wetland systems along the South Platte River from which Bald Eagles and many other species benefit.

Bald Eagle carrying nesting material near a nest in Denver, CO (Photo by Lori Bollendonk)

In 2016, 25 volunteers collected data on 52 nests, which successfully fledged 50 eaglets. Volunteers donated more than 800 hours to eagle monitoring in 2016. During the 2017 Bald Eagle nesting season, 37 volunteers collected data on 80 nests, which produced 92 successful fledglings. Volunteers donated more than 2,200 hours to Bald Eagle monitoring in 2017. Bald Eagle Watch has experienced significant growth over the past year, with 12 new volunteers, more than 1400 more hours donated, and 25 more nests monitored from the previous season. The ability to dedicate additional staff time to this project has greatly contributed to this success.

While not supported by mitigation funds in 2017, Bird Conservancy also managed the Dinosaur Ridge HawkWatch, a raptor migration-counting program held annually in the spring at Dinosaur Ridge. Volunteers attended the counting station from March 1 to May 7, and counted migrating raptors, including Bald Eagles. During spring migration, 32 volunteers donated more than 650 hours, with a count total of 692 raptors from 14 species (Appendix A). Some especially noteworthy species showed up in the count, including Golden Eagles, Ferruginous Hawks, and 15 migrating Bald Eagles. This information is entered into the Hawk Migration Association's (HMANA) online database, and daily count totals are forwarded to the Dinosaur Ridge HawkWatch and the Colorado Birds listserv. Dissemination of the data in this way encourages participation in the program and raises awareness of it among the birding public, which is a valuable pool for potential volunteers. The data sent to HMANA is made available for research that betters our understanding of raptor movements, and in turn can help inform future land management planning efforts. Data from the Dinosaur Ridge HawkWatch site were included in the 2016 Raptor Population Index (RPI) Analysis. This is the first time data from this site have been included in the RPI Analysis.

Lastly, funds helped support a Wetland Specialist out of Greeley Colorado. The Wetland Specialist started in April 2016 and has been working with landowners and partners to enhance lands enrolled in conservation easement programs. Her work will help protect and restore Bald Eagle habitat in sensitive riparian areas.

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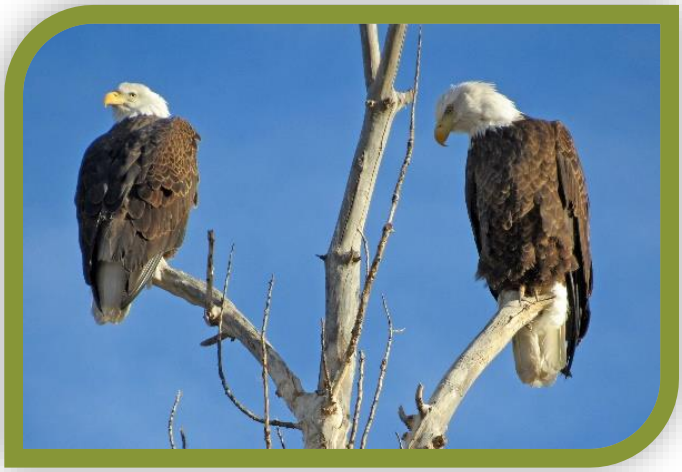
Bald Eagle Nest Monitoring

Bald Eagle Watch is a citizen science program focused on the conservation of Bald Eagles in Colorado. Training for volunteers occurred on January 21, 2017 at Barr Lake State Park with 34 volunteers in attendance. Bird Conservancy staff trained volunteers in Bald Eagle natural history, nesting behavior, and field data collection. Previously, volunteers submitted data to Bird Conservancy's Citizen Science Coordinator, who entered the data in a Microsoft Access database. For the 2017 season, Bald Eagle Watch volunteers began entering their data into an online data entry system called CitSci.org, hosted by the Natural Resources Ecology Lab at Colorado State University. This has streamlined the data entry process and reduced paid staff time spent on data entry. Bald Eagle Watch also maintains maps of known Bald Eagle nests, and coordinates with CPW to record new nests located by volunteers.

Data collected during the 2017 nesting season has been entered, proofed, and transmitted to CPW on October 23, 2017. CPW will then share these data with USFWS and the Colorado Oil and Gas Conservation Commission.



A pair of Bald Eagles near Longmont, CO (Photo by Anne Whitehurst)

Final productivity numbers have been determined for the 80 Bald Eagle nests monitored during the 2017 nesting season. Most of these nests were located along the Front Range, but several West Slope nests were also monitored, along with nests further east on the plains (Appendix B). Nests were assessed for success based on two criteria: eaglets' survival to eight weeks, or eaglets capable of flight observed outside the nest. Of the 80 nests Bald Eagle Watch volunteers monitored, 62 were determined to be active, and produced a total of 92 successfully fledged eaglets.

Eagle Management

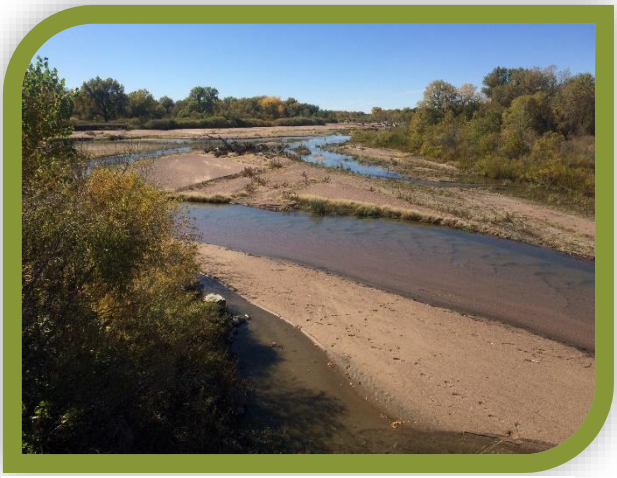
In 1988, there were fewer than 10 Bald Eagle nests in the state of Colorado. That number has now grown to more than 125, with much of the growth along the Front Range urban corridor. In 2010, the Regional Plan Association predicted the Front Range to see an 87% increase in human population by 2050. Bird Conservancy of the Rockies is working with Colorado Parks and Wildlife to develop a management plan for Bald Eagles. Many of the current management mechanisms are already in place in some form or another such as recommendations in the State Wildlife Action Plan, and other documents such as buffer guidelines, but talks with District Wildlife Managers and biologists indicate that a single coherent document would be very helpful. Development of this document will also provide an opportunity to address management issues that are not included in existing documents. Bird Conservancy expects to have a working draft of this document early in 2018.

Stewardship

Since the beginning of 2017 Bird Conservancy's Private Lands Wildlife Biologist (PLWB), Wetland Specialist, Kelsea Holloway has been working to assess habitat conditions and identify opportunities for improvement on the South Platte River's privately owned conservation easements. The easements are held by the Natural Resource Conservation Service (NRCS) and implemented through the Wetland Reserve Program (WRP). The program is geared towards protecting and

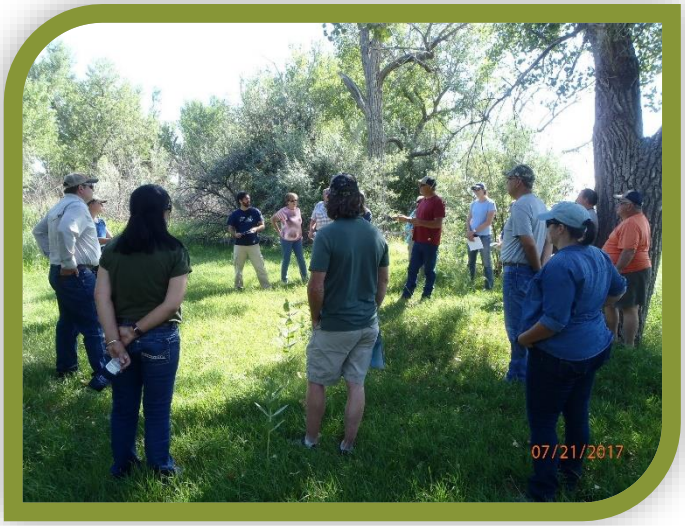
restoring wetland habitat for wildlife in focal areas throughout the country. Kelsea is the main point of contact for assisting landowners in restoring, managing, and enhancing wetland habitats on these easements.

As of December 1, 2017, the six projects mentioned in previous reports influencing 191 wetland acres are still being actively pursued. The request for Wetlands Reserve Enhancement Partnership (WREP) funds was not granted but preliminary work including designs and permitting continues. NRCS has recently announced the availability of funds for repairs and restorations on existing easements. Kelsea will submit each project individually for these funds. One of the projects in Washington County that will help manage water levels for the control of cattail encroachment is being supported by multiple partners through technical assistance or funding; Partners for Fish and Wildlife Service, Ducks Unlimited, Colorado Open Lands, NRCS, and Bird Conservancy of the Rockies. This project will affect 8.4 wetland acres creating open water near one known active bald eagle nest.



South Platte River Fall 2017

Vegetation clippings and land health assessments have been conducted on 10 easements. These assessments will provide information on habitat conditions and how we can use grazing to improve them. Reintroducing grazing to mimic historical patterns of plant succession will allow native plants and animals to thrive, including Bald Eagles. When the grazing plans are implemented, we expect 1,097.6 acres of improved riparian and grassland habitat.



Landowner speaking at the WRP Landowner Workshop, July 2017

In July 2017, a WRP Landowner Tour was held with 18 attendees. Attendees included landowners and partner agencies interested in land management on WRPs. Three easements were visited, all with differing management strategies. Landowners were educated on how to conduct management activities to increase the quality of wildlife habitat and the benefits of doing so. The workshop resulted in at least one landowner changing the management of the water levels in their wetlands to increase food production for migratory birds and wildlife. Three other landowners are interested in managing their riparian vegetation through grazing, one of whom was adamantly against it beforehand. There is also an interest from one landowner to create a new wetland on their property to increase foraging areas for migratory bird species. Due to the success of the WRP Landowner Tour, another tour may be scheduled for the spring of 2018.

Future plans include finalizing grazing plans for the easements that have had clippings, continuing to work on management plans with landowners, and creating detailed water management schedules for easements with ponds.

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The primary goal in early 2018 is to get funding for all the WRP repair projects, finalize the new WRP easement, and create grazing plans to benefit wildlife on 14 easements, which will include approximately 1600 acres of riparian lands. Long-term goals remain the same: continue helping landowners improve their conservation easements for the benefits of wetland wildlife, including Bald Eagles.

Appendix A: Summary of 2017 Dinosaur Ridge HawkWatch Data

Species	Number Counted
Turkey Vulture	72
Osprey	13
Bald Eagle	15
Northern Harrier	2
Sharp-shinned Hawk	64
Cooper's Hawk	69
Broad-winged Hawk	23
Red-tailed Hawk	264
Swainson's Hawk	15
Ferruginous Hawk	8
Golden Eagle	4
American Kestrel	46
Peregrine Falcon	11
Prairie Falcon	6
Unknown Accipiter	17
Unknown Buteo	28
Unknown Falcon	8
Unknown Raptor	27
TOTAL	692

Appendix B: Bald Eagle Watch Nests 2017