



Landbirds Monitoring

*in the Northern Colorado
Plateau Network*



Above: Yellow-headed blackbird.
Below: Lewis's woodpecker.

PHOTOS BY ROBERT SHANTZ



BANNER PHOTO: MOUNTAIN CHICKADEE (NPS/J. PEACO)

Why Monitor Landbirds?

Birds occupy various levels in the food web and play an important role in the flow of energy through ecosystems. Because they can be sensitive to habitat change, birds are good indicators of ecosystem integrity. They also have strong public appeal—unlike many other animals on the Colorado Plateau, birds are commonly visible to park visitors. Data from the relatively natural habitats of Northern Colorado Plateau Network (NCPN) parks will provide status and trend information useful in comparisons with more-impacted areas.

What's the Most Recent News?

In 2015, the eleventh year of NCPN landbirds monitoring, a total of 4,298 birds of 113 species were recorded in three habitats across 11 parks: 1,340 birds of 77 species in low-elevation riparian, 1,076 birds of 64 species in pinyon-juniper, and 1,882 birds of 81 species in sagebrush shrubland. (For the second year, each location was surveyed once instead of twice, as in all years before 2014.) Two species not previously detected as part of this monitoring program were found: common grackle at Curecanti National Recreation Area (NRA) and Lewis's woodpecker at Capitol Reef National Park (NP).

At Pipe Spring National Monument (NM), a total of 231 birds of 35 species were detected, including two species new to the park list: orange-crowned warbler and yellow-headed blackbird.

Density estimates were calculated for 63 species in at least one habitat. Those calculations yielded robust density estimates for 38 species in at least one habitat. Forty-five bird species of conservation or management concern were recorded. Densities

were estimated for 28 of those species. Species of concern found to be more dense in one habitat than in the others are shown on page 2. Analysis of population trends was not conducted this year.

How is the Information Used?

In order to know which species to manage for, park managers need to know which species are present. Data from this monitoring is also useful for park planning documents, such as Natural Resource Condition Assessments and State of the Park reports, and demonstrates the value of unimpaired national-park landscapes and their value to bird communities.

Where are Landbirds Monitored?

NCPN landbirds monitoring occurs at 12 network parks: Arches, Black Canyon of the Gunnison, Bryce Canyon, Canyonlands, Capitol Reef, and Zion national parks; Colorado, Dinosaur, Fossil Butte, Natural Bridges, and Pipe Spring national monuments; and Curecanti National Recreation Area.

How is the Monitoring Done?

NCPN landbirds monitoring assesses trends in breeding-bird species by habitat, rather than by park. During each breeding season, a partner organization surveys 15 transects in each of the three habitats of interest (low-elevation riparian, pinyon-juniper, and sagebrush shrubland) across 11 NCPN parks. Point counts and area searches are also conducted as part of a modified monitoring design at Pipe Spring NM.

How Can I Learn More?

Visit <http://go.nps.gov/NCPNLB> or contact dustin_w_perkins@nps.gov.

Species of Concern by Habitat

Where They Were Estimated to be Most Dense, 2015

Pinyon-Juniper

Bewick's wren
Black-throated gray warbler
Chipping sparrow
Clark's nutcracker
Grace's warbler
Gray vireo
Juniper titmouse
Mountain chickadee
Pinyon jay

Low-elevation Riparian

Broad-tailed hummingbird
Lazuli bunting
Northern flicker
Plumbeous vireo
Say's phoebe
Violet-green swallow
Virginia's warbler
Warbling vireo

Sagebrush Shrubland

Black-billed magpie
Brewer's sparrow
Dusky flycatcher
Green-tailed towhee
Horned lark
Mountain bluebird
Sage sparrow
Sage thrasher
Vesper sparrow



1-Chipping sparrow (RS) 2-Juniper titmouse (GL)
3-Black-throated gray warbler (GL) 4-Gray vireo (GL)
5-Pinyon jay (GL) 6-Bewick's wren (RS) 7-Grace's warbler (RS)

8-Lazuli bunting (RS) 9-Virginia's warbler (GL)
10-Say's phoebe (RS) 11-Northern flicker (GL)
12-Plumbeous vireo (RS) 13-Broad-tailed hummingbird (RS)

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14-Brewer's sparrow (RS) 15-Green-tailed towhee (RS)
16-Mountain bluebird (RS) 17-Sage thrasher (RS)
18-Dusky flycatcher (GL) 19-Sage sparrow (RS)
20-Black-billed magpie (GL) 21-Horned lark (RS)