

Lewis's Woodpecker

Melanerpes lewis

REGULATORY STATUS

USFWS: Migratory Bird
USFS R2: Sensitive
USFS R4: No special status
Wyoming BLM: No special status
State of Wyoming: Protected Bird

CONSERVATION RANKS

USFWS: Species of Conservation Concern
WGFD: NSSU (U), Tier II
WYNDD: G4, S3
Wyoming Contribution: LOW
IUCN: Least Concern
PIF Continental Concern Score: 13

STATUS AND RANK COMMENTS

Lewis's Woodpecker (*Melanerpes lewis*) has no additional regulatory status or conservation rank considerations beyond those listed above.

NATURAL HISTORY

Taxonomy:

There are currently no recognized subspecies of Lewis's Woodpecker^{1,2}.

Description:

Identification of Lewis's Woodpecker is possible in the field. Males and females are identical in size and plumage. It is a large woodpecker, 26–28 cm long. The crown, back, wings, and tail are dark green. It has a large red face patch, a broad gray collar, and the belly is extensively pinkish-red^{1,3}. Juvenile birds are darker than adults overall, more brown on the dorsal side, and the face and belly are not as extensively red¹. In Wyoming, this is the only extensively green and red woodpecker.

Distribution & Range:

Lewis's Woodpecker is patchily distributed across western North America¹. It is found as far north as British Columbia; west to California; east to Colorado, Wyoming, and western South Dakota; and south to New Mexico and Arizona¹. It is locally distributed across its range, and is not always found in viable habitat¹. Populations in Wyoming are migratory, and the species is generally not found in the state in the winter¹. There have been range contractions along the periphery of the species' range¹.

Habitat:

Lewis's Woodpecker is commonly found in forests dominated by Ponderosa Pine (*Pinus ponderosa*), open riparian woodland dominated by cottonwood (*Populus spp.*), and recently

logged or burned pine forests^{1, 4-8}. The species nests in cavities excavated in dead trees. Additionally, the species is associated with habitats that have a brushy understory and a relatively open canopy^{1, 5, 9}. Outside of Wyoming, the woodpecker has been found in oak (*Quercus* spp.) woodlands, nut and fruit orchards, Piñon Pine-Juniper (*Pinus cembroides-Juniperus* spp.) woodlands, fir (*Abies* spp.) forests, and agricultural areas such as farms or ranchlands¹. Ideal habitat in Wyoming can be found in the Bear Lodge Mountains in the Black Hills¹⁰. The species winters out of Wyoming and is often associated with oak woodlands and commercial orchards¹.

Phenology:

Lewis's Woodpecker is migratory in Wyoming, arriving in early May, and departing after the breeding season from August to October. Initiation of breeding varies with elevation, latitude, and insect abundance. Incubation has been observed from May to June, and lasts for 12–16 days. Fledging occurs at 28–34 days of age, and in Colorado occurred from mid-June to mid-July^{1, 8, 11}.

Diet:

Lewis's Woodpecker primarily feeds upon insects, acorns, nuts, and fruit¹.

CONSERVATION CONCERNS

Abundance:

Continental: WIDESPREAD

Wyoming: RARE

Lewis's Woodpecker has a statewide abundance rank of RARE and appears to be uncommon within suitable environments in the occupied area¹². In 2013, Partners in Flight estimated the Wyoming population to be around 1,900 individuals¹³; however, this abundance estimate is based primarily on Breeding Bird Survey (BBS) data and should be viewed with caution due to the low detection rate of this species in the state. From 1968–2015, annual Wyoming BBS detections of Lewis's Woodpecker ranged from 0 to 13 (average = 1), with none recorded in 2015¹⁴. A total of 13 Lewis's Woodpeckers were detected during surveys for the Integrated Monitoring in Bird Conservation Regions program between 2009–2015¹⁵.

Population Trends:

Historic: LARGE DECLINE

Recent: UNKNOWN

Robust population trends are not available for Lewis's Woodpecker in Wyoming because the species is infrequently detected during monitoring efforts. Wyoming trend data from the North American BBS suggest that Lewis's Woodpecker experienced annual increases from 1968–2013 and from 2003–2013, but these state estimates have low credibility and are not statistically significant¹⁶. Survey-wide BBS trend data indicate that Lewis's Woodpecker numbers experienced a statistically significant annual decline of 3.29% from 1966–2013, and a non-significant annual increase of 0.01% from 2003–2013¹⁶.

Intrinsic Vulnerability:

MODERATE VULNERABILITY

Lewis's Woodpecker is a primary cavity nester and requires standing dead or partly dead trees for nesting. Additionally, snags must be in advanced stages of decay for the species to be able to

excavate a nest cavity¹. Suitable nesting habitat is becoming increasingly scarce. Competition from European Starlings (*Sturnus vulgaris*) for nest cavities may threaten the species^{1, 8}.

Extrinsic Stressors:

MODERATELY STRESSED

Habitat loss and degradation represent major extrinsic threats to Lewis's Woodpecker. Habitat degradation has primarily occurred from fire suppression and intensive livestock grazing. Habitat loss has occurred throughout the species range, primarily from human development encroaching into breeding habitat on open valley floors and foothills. Strip-mining may cause habitat degradation and loss. Mountain Pine Beetle (*Dendroctonus ponderosae*) affects Ponderosa Pine trees, and it is unknown what effects this will have on the woodpecker. On the wintering grounds, the species is exposed to pesticides and herbicides in agricultural areas. The species forages in commercial nut and fruit orchards, which places it at risk from shooting and trapping¹.

KEY ACTIVITIES IN WYOMING

Lewis's Woodpecker is classified as a Species of Greatest Conservation Need (SGCN) by the Wyoming Game and Fish Department, and as a Level II Priority Bird Species requiring monitoring in the Wyoming Bird Conservation Plan¹⁷. Current statewide bird monitoring programs are designed for monitoring breeding songbird populations and do not adequately detect Lewis's Woodpecker. These monitoring programs include the BBS program conducted on 108 established routes since 1968¹⁶, and the multi-agency IMBCR program initiated in 2009¹⁵. There are currently no research projects designed specifically for Lewis's Woodpecker in Wyoming.

ECOLOGICAL INFORMATION NEEDS

Specific habitat requirements of Lewis's Woodpecker in Wyoming are poorly understood. Current estimates of abundance and population trends of the species in Wyoming and range wide may not be accurate, and more accurate data are needed¹. Many aspects of migration are poorly understood including migratory patterns and survival rates during migration⁸.

MANAGEMENT IN WYOMING

This section authored solely by WGFD; Zachary J. Walker. Lewis's Woodpecker is classified as a SGCN in Wyoming due to habitat degradation from fire suppression and loss of riparian woodlands. Management activities in the short term should focus on addressing data deficiencies. Research should be developed to examine current population status and population trends within the state. Research should additionally focus on habitat associations and the impact of current management practices. Best management practices for this species include maintenance of cottonwood galleries and other riparian forests, ensuring that large snags are available. Salvage logging should be avoided in mature forests where Lewis's Woodpecker is known to occur. Understory where Lewis's Woodpecker occurs should be managed to ensure insect prey are abundant and available.

CONTRIBUTORS

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Figure 1: Adult Lewis's Woodpecker in Flagstaff, Arizona. (Photo courtesy of Pam Koch)

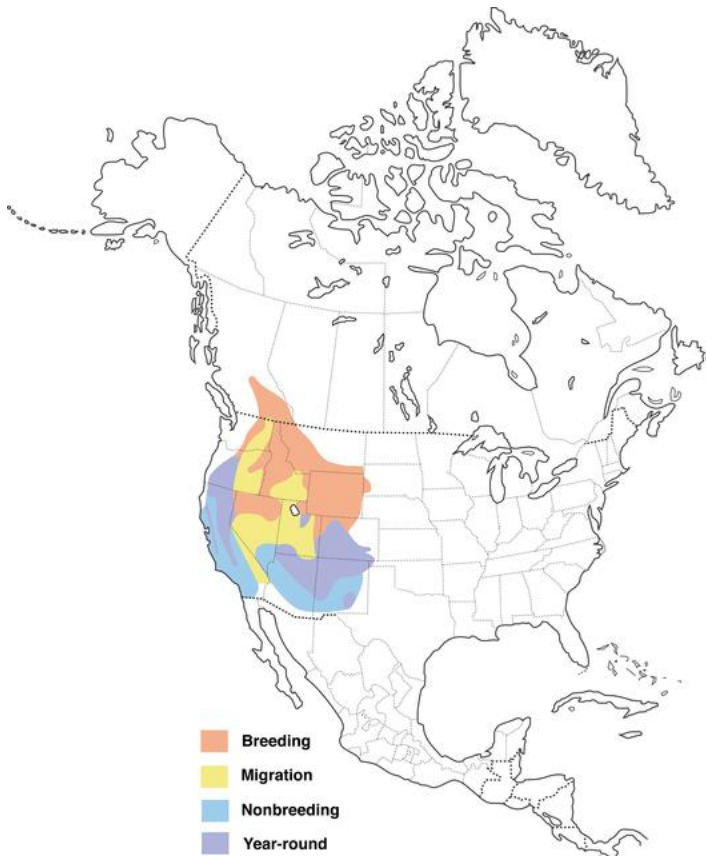


Figure 2: North American range of *Melanerpes lewis*. (Map courtesy of Birds of North America, <http://bna.birds.cornell.edu/bna>, maintained by the Cornell Lab of Ornithology)



Figure 3: Lewis’s Woodpecker habitat in Coconino National Forest, Arizona, 9 years post-burn. (Photo courtesy of Terri Pope)

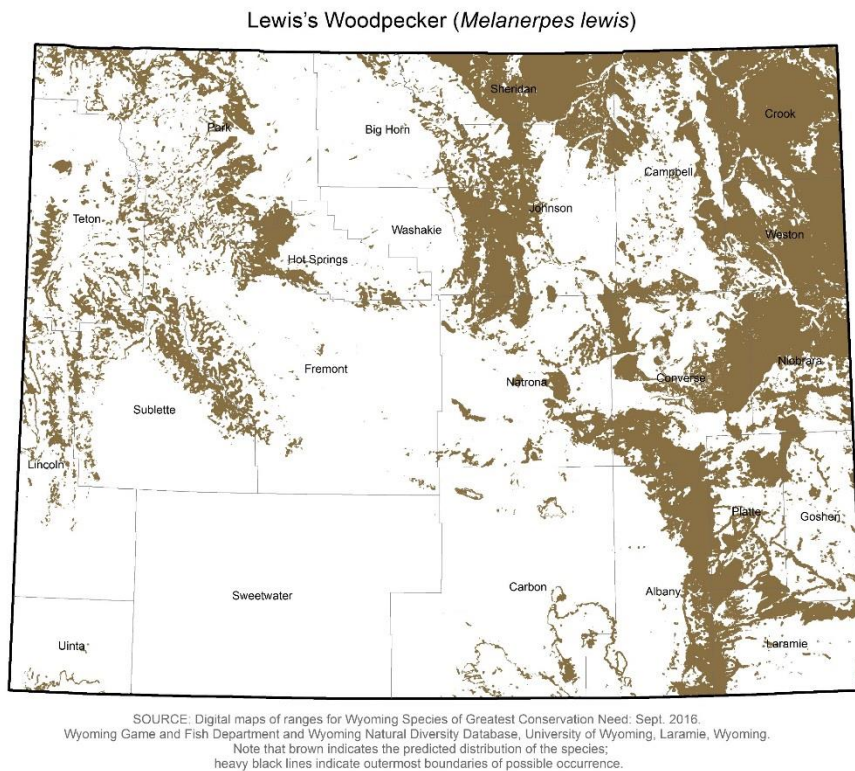


Figure 4: Range and predicted distribution of *Melanerpes lewis* in Wyoming.