

# Lewis's Woodpecker



ASSESSING HABITAT QUALITY FOR PRIORITY WILDLIFE SPECIES IN COLORADO WETLANDS



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Lewis's woodpeckers (*Melanerpes lewis*, Family Picidae) nest in open cottonwood or ponderosa pine stands and hunt insect in flight.

## Species Description

### Identification

Named after the explorer Meriwether Lewis, Lewis's woodpeckers differ from most other woodpeckers in their foraging habits, including catching insects in flight. They are approximately 11 inches long with hefty bodies. Their backs and wings are a greenish black and bellies a pinkish to salmon rose. Their green color is due to reflection from feather structure rather than from green pigment; therefore, the intensity of green varies with lighting, and they can appear almost black in poor lighting.

### Preferred Habitats

Cottonwood gallery forest is the most important wetland type used by Lewis's woodpeckers. However, they also use riparian shrub wetlands and wet meadows, and they forage over stream channels. They are also found

in uplands, including urban, suburban and rural areas.

### Diet

Lewis's woodpeckers forage opportunistically on locally abundant insects, including outbreaks in burned forests and hatches over water and wet meadows. During summer months, they feed primarily on insects; in fall and winter, they switch to feeding heavily on mast fruits (especially acorns), agricultural grains or waste.

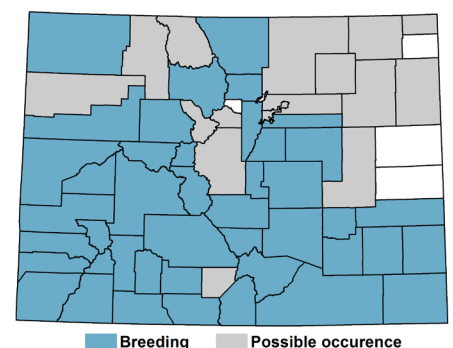
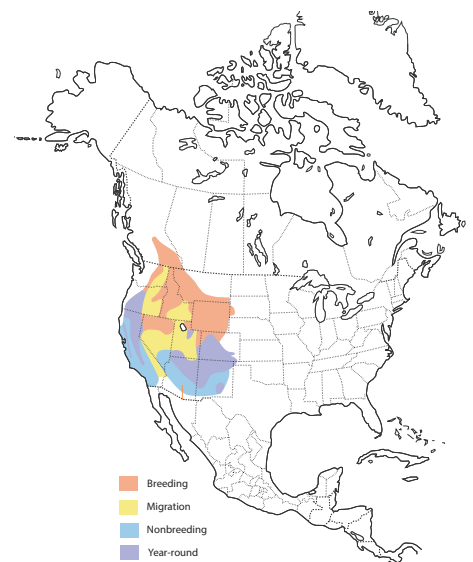
### Conservation Status

Almost all populations of Lewis's woodpeckers have declined. The most recent Colorado Breeding Bird Atlas (COBBA 2007–2011) indicates that they were observed in 36% fewer blocks than during the first COBBA (1987–1994). In Colorado, Lewis's woodpeckers are listed as a Tier 2 Species of Greatest Conservation Need (CPW 2015).

## Species Distribution

### Range

The patchy distribution of Lewis's woodpecker is restricted to western North America, from southern New Mexico to mid British Columbia and from California to eastern Colorado. In Colorado, they can occur almost anywhere and have been known to breed in well over half of Colorado's counties.



North America map used by permission from Birds of the World, published by Cornell Lab of Ornithology. Colorado map based on Andrews and Righter (1992), Kuenning (1998), Ortega (2016), and CFO (2020).

Version Date: November 2020

# Preferred Habitat Conditions

Clusters of large-diameter trees	5-15 tree clusters
Dominant vegetation	open canopy with snags (standing dead trees) and some shrub or brushy layer
Height of trees	>50 feet
Percent bare ground	very little (<5%)
Percent cover of canopy trees	prefer open canopy >15-30%
Percent mowed or fallow fields within 100 yards	>40%
Percent of mast fruits (e.g., acorns) or grain (e.g., corn) within 100 yards	>35%
Percent shrub and/or brushy layer	prefer some shrub/brush 10-33%
Size of habitat	>15 acres

## Management Recommendations

This fact sheet contains easy-to-use guidelines for understanding habitat needs of Colorado Parks and Wildlife priority wetland-dependent wildlife. Biologists with expertise in Lewis's woodpeckers have suggested numerous practical steps that can be taken to improve habitat quality for this species.

### Hydrology

- Manage stream flow to encourage cottonwood regeneration.

### Vegetation

- Retain at least 50% of snags >9 inches in diameter during post-fire salvage logging.
- Retain large snags.
- Protect clumps of large trees and snags.
- Encourage regeneration of cottonwoods/snags in riparian zones.
- Maintain open forests.
- Maintain understory shrub community.

### Pesticides

- Reduce pesticide exposure.

### Land Use

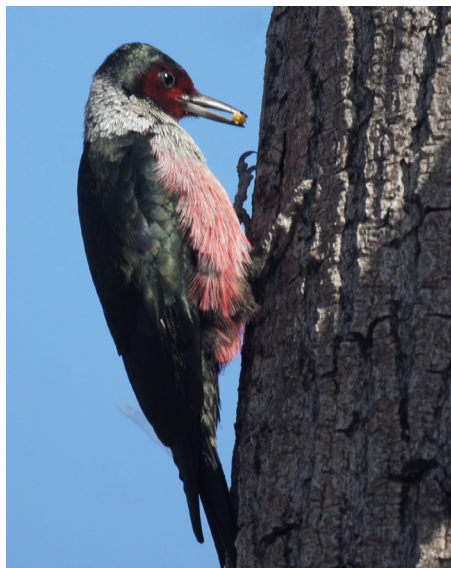
- Limit browsing by livestock.

### Silviculture

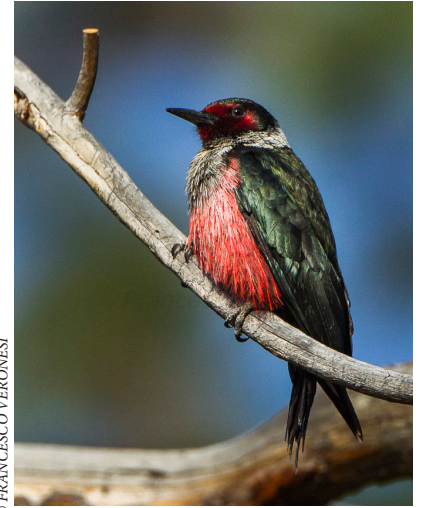
- Maintain six or more snags per acre.
- Where snags are unavailable, consider topping trees.
- Provide no-logging buffer zone to protect nesting habitat.



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### Acknowledgements

Dr. Joseph Ortega (Fort Lewis College) and Dr. Kerry Vierling (Department of Fish and Wildlife Science, University of Idaho) reviewed an earlier version and provided input on preferred habitat conditions.

### Suggested Reading and Citations

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# Habitat Scorecard for Lewis's Woodpeckers (v. Nov 2020)

*Assessment of habitat before and after restoration or management actions*

Project Name: \_\_\_\_\_ Project Area (acres): \_\_\_\_\_ Habitat Area (acres): \_\_\_\_\_

Size of Contiguous Habitat outside Project Area (acres): \_\_\_\_\_ Ownership (circle): Same / Different / Conservation Easement

**Scorecard Instructions:** Enter one value that best describes early to mid-summer conditions of each habitat variable, using the numbers in the value column. Habitat variables are in shaded boxes; ranges of condition are directly below each variable. **If condition is outside range or is not described, enter a zero.**

**Project Area and Habitat Area:** The project area includes the entire area affected by the project. The habitat is the area that will provide (in case of pre-project) or does provide (post-project) habitat for each potential target species within the project area. The habitat area may be the same size as the project area or it might be smaller and it may be defined differently for different target species. If there is contiguous habitat area outside the project area, note the size and whether the ownership of the contiguous areas is the same or different and whether it is under conservation easement or other habitat protection. If the habitat area within your project area is noncontiguous and/or if sections are in very different conditions, consider using multiple scorecards so that each scorecard represents the general conditions. If you use multiple scorecards, identify each habitat area on a map.

Key habitat variable and conditions	Value	Pre-Project	Expected Post-Project	Actual Post-Project
<b>Date of assessment</b>				
<b>Number of mature tree clusters (≥3 trees &gt;12 inches diameter per cluster) per acre</b>				
>5 clusters	13.8			
3 – 4 clusters	9.2			
1 – 2 clusters	4.6			
<b>Tree composition per acre</b>				
At least two prominent decaying snags (>20 inches diameter at breast height) and other similarly large mature trees	13.1			
At least one prominent decaying snag (>20 inches diameter at breast height) and other similarly large mature trees	8.7			
Trees (>12 inches diameter at breast height) with smaller snags or no snags	4.4			
<b>Height of tallest tree</b>				
>50 feet	12.4			
>35 – 50 feet	8.3			
15 – 35 feet	4.1			
<b>Percent cover of dominant canopy trees</b>				
>15 – 30%	11.7			
>30 – 50%	7.8			
5 – 15% OR >50 – 80%	3.9			
<b>Percent mast fruits (e.g., acorns) or grain (e.g., corn) within 100 yards</b>				
>35 – 100%	11.0			
20 – 35%	7.4			
<20%	3.7			
<b>Percent shrub or brush layer</b>				
10 – 33%	11.0			
>33 – 50%	7.4			
>50%	3.7			
<b>Percent bare ground</b>				
0 – 5%	9.7			
>5 – 15%	6.4			
>15 – 35%	3.2			

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# Habitat Scorecard for Lewis's Woodpeckers (v. Nov 2020)

*Assessment of habitat before and after restoration or management actions*

*Continued from previous page.*

Key habitat variable and conditions	Value	Pre-Project	Expected Post-Project	Actual Post-Project
<b>Size of habitat</b>				
>15 acres	9.0			
>2 – 15 acres	6.0			
1.2 – 5 acres	3.0			
<b>Percent mowed or fallow fields within 100 yards</b>				
>40 – 100%	8.3			
20 – 40%	5.5			
<20%	2.8			
<b>Total (of 100 possible): add all numbers in before or after columns</b>				