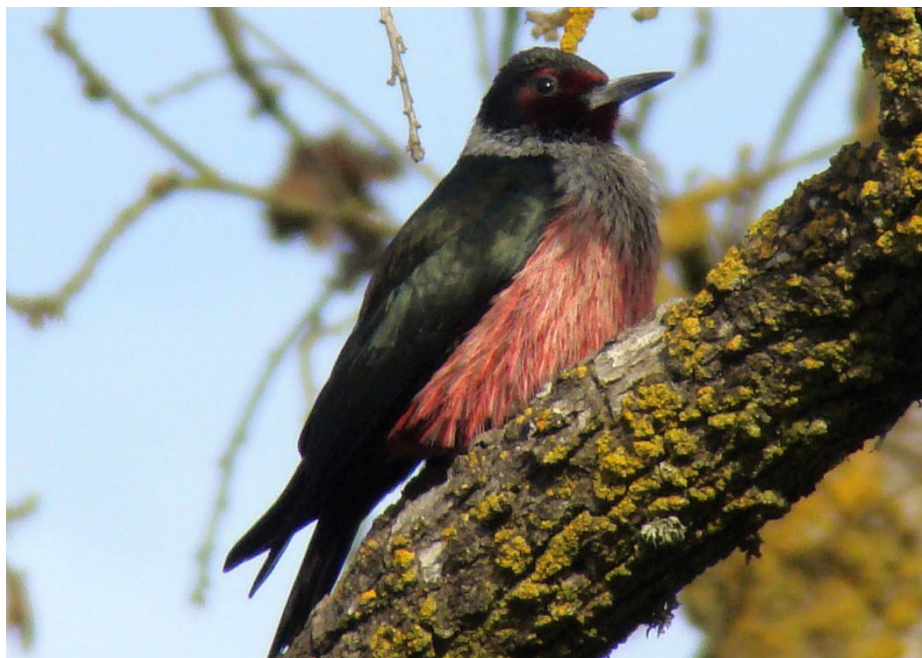


Lewis's Woodpecker



ASSESSING HABITAT QUALITY FOR PRIORITY WILDLIFE SPECIES IN COLORADO WETLANDS



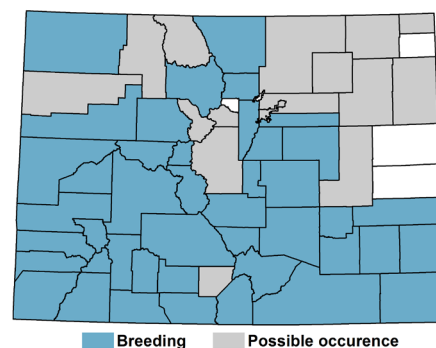
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Lewis's woodpeckers (*Melanerpes lewis*, Family Picidae) nest in open cottonwood or ponderosa pine stands and hunt insect in flight.

Species 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 Cornell Lab of Ornithology's Birds of North America Online (<http://bna.birds.cornell.edu/bna>). Colorado map based on Andrews and Righter (1992), Kingery (1998), COBBAI (2015), and CFO (2015).

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.

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) and 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).

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. A number of practical steps can be taken to improve habitat for Lewis's woodpeckers.

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

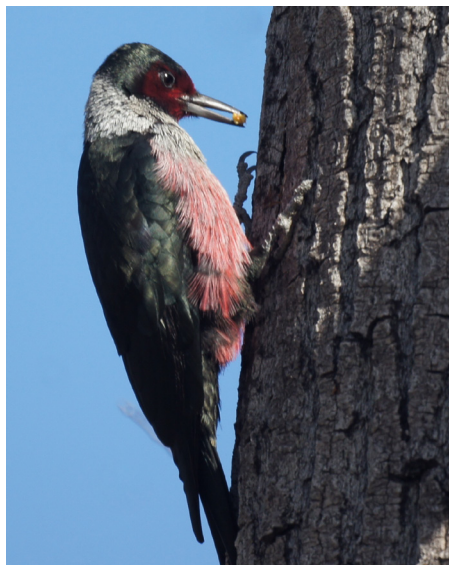
- Limit browsing by livestock.

Silviculture

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



NEST CAVITY © CNHP



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Acknowledgements

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. Jan 2016)

Assessment of habitat before and after restoration or management actions

Project Name: _____ Date(s) of Assessment: _____

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.

Key habitat variable and conditions	Value	Before	After
Dominant vegetation			
Open canopy with snags	15.9		
Tree height			
>50 feet	15.9		
>35 – 50 feet	10.6		
15 – 35 feet	5.3		
Percent cover of dominant canopy trees			
>15 – 30%	14.4		
>30 – 50%	9.6		
5 – 15% OR >50 – 80%	4.8		
Percent shrub or brush layer			
10 – 33%	12.6		
>33 – 50%	8.4		
>50%	4.2		
Percent bare ground			
0 – 5%	12.6		
>5 – 15%	8.4		
>15 – 35%	4.2		
Number of mature tree clusters			
5 – 15 clusters	11.2		
3 – 4 clusters	7.4		
1 – 2 clusters	3.7		
Size of habitat			
>15 acres (>6 ha)	6.2		
>2 – 15 acres (>2 – 6 ha)	4.1		
1.2 – 5 acres (0.5 – 2 ha)	2.1		
Percent mowed or fallow fields within 100 yards			
>40 – 100%	6.2		
20 – 40%	4.1		
<20%	2.1		
Percent mast fruits (e.g., acorns) or grain (e.g., corn) within 100 yards			
>35 – 100%	5.6		
20 – 35%	3.7		
<20%	1.9		
Total (of 100 possible): add all numbers in before or after columns			