River Otter

ASSESSING HABITAT QUALITY FOR PRIORITY WILDLIFE SPECIES IN COLORADO WETLANDS



Northern river otters (Lontra canadensis, Family Mustelidae) occupy streams and beaver ponds across Colorado's western slope.

Species Description

Identification

Northern river otters vary in length from 26–42 inches, with males larger than females. Males weigh on average 25 pounds; females weigh about 18 pounds. Their long tapered tails make up about one third their length.

Preferred Habitats

River otters may inhabit nearly every aquatic habitat; however, they are most likely to occupy beaver ponds, stream channels, and warm water sloughs.

Diet

Otters favor fish but also consume crayfish, mollusks, frogs, snakes, turtles, salamanders, birds, mammals, and fruit.

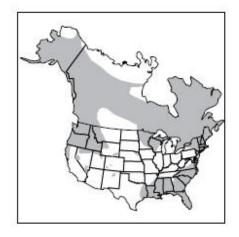
Conservation Status

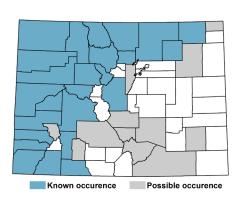
Northern river otters are listed as least concern by the International Union for the Conservation of Nature. In Colorado, they are listed as a threatened, Tier 2, Species of Greatest Conservation Need (CPW 2015).

Species Distribution

Range

Northern river otters historically ranged throughout most of the United States and Canada but were extirpated from much of their range in the west. Reintroductions of otter to Colorado began in 1976, and they are now found in small numbers throughout most of western Colorado with a more scattered distribution in eastern Colorado.





North America map used from Internet Center for Wildlife Damage Management (http://icwdm.org/handbook/carnivor/RiverOtters.asp). Colorado map based on Boyle (2006) and NDIS (2014).

Preferred Habitat Conditions

Beaver	often associated with beaver activity or old beaver structures
Dominant vegetation	healthy riparian vegetation
Habitat size	longer reaches usually better
Shore complexity	undercut banks and other complex features
Structures and debris	habitat complexity, including woody debris and log jams
Stream order	>4th order

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 northern river otters.

Hydrology

- Maintain natural regime to extent possible.
- Protect instream and seasonal flow regimes.
- Enhance and/or protect stream and habitat connectivity.

Vegetation

- Maintain or recreate conditions favoring healthy riparian vegetation.
- Encourage new recruitment of trees.
- Manage for age diversity.

Land Use / Other

- Enhance and/or protect bank structure.
- Enhance and/or protect flood plain.
- Enhance and/or protect good water quality.
- Protect potential upland denning sites from flooding.
- Manage for prey base (e.g., fish).

Conservation

- Monitor and control commercial harvest to maintain desirable population numbers.
- Form and maintain partnerships across jurisdictional boundaries to protect connectivity and long stream reaches.



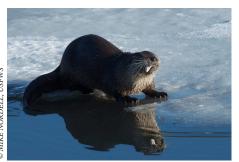
Acknowledgements

Eric Odell and Scott Wait (Colorado Parks and Wildlife) reviewed an earlier version and provided input on preferred habitat conditions.

Suggested Reading and Citations

- Boyle, S. 2006. North American river otter (*Lontra canadensis*): a technical conservation assessment. USDA Forest Service, Rocky Mountain Region.
- CPW (Colorado Parks and Wildlife). 2015. State Wildlife Action Plan: A Strategy for Conserving Wildlife in Colorado. Denver, Colorado.
- Crowley, S., C. J. Johnson, and D. Hodder. 2012. Spatial and behavioral scales of habitat selection and activity by river otters at latrine sites. *Journal of Mammalogy* 93: 170-182.
- Dubuc, L. J., W. B. Krohn, and R. B. Owen, Jr. 1990. Predicting occurrence of river otters by habitat on Mount Desert Island, Maine. *Journal of Wildlife Management* 54: 594-599.
- Gorman, T. A., J. D. Erb, B. R. McMillan, and D. J. Martin. 2006. Space use and sociality of river otters (*Lontra canadensis*) in Minnesota. *Journal of Mammalogy* 87: 740-747.
- Melquist, W. E., and M. G. Hornocker. 1983. Ecology of river otters in west central Idaho. Wildlife Monographs 83: 3-60.







Habitat Scorecard for River Otters (v. Jan 2016)

Assessment of habitat before and after restoration or management actions

Project Name:	Date(s) of Assessment:
,	

<u>Instructions</u>: Enter <u>one</u> 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
Woody objects, e.g., logs, log jams			
>5 large logs	17.8		
1 – 4 large logs	11.9		
Beaver activity (current or remains)			
Current activity or recent remnants	17.8		
Historic remnants	11.9		
Percent canopy cover >6.6 feet			
>50%	17.0		
>30 - 50%	11.3		
20 – 30%	5.7		
Height of canopy cover			
>50 feet	17.0		
>16 - 50 feet	11.3		
8 inches – 16 feet	5.7		
Number of complex shore features (e.g., undercut banks)			
>5	17.0		
1 – 4	11.3		
Percent of water > 8 inches deep			
>90%	13.4		
>80 - 90%	8.9		
40 – 80%	4.5		