California Wildlife Habitat Relationships System California Department of Fish and Wildlife California Interagency Wildlife Task Group

NORTHERN RIVER OTTER Family: MUSTELIDAE M163

Lontra Canadensis Order: CARNIVORA

Class: MAMMALIA

Written by: C. Polite Reviewed by: M. White Edited by: M. White Updated by CWHR Staff 2018

DISTRIBUTION, ABUNDANCE, AND SEASONALITY

Uncommon, year-round resident of rivers, large streams, lakes, wetlands, estuaries, and coastal areas. Occurs along river drainages in the North Coast, and in low and high elevation aquatic habitats in the Klamath, Cascade and Sierra Nevada Ranges (Grinnell et al. 1937, Garwood et al. 2013). The eastern drainages in Alpine, Mono, and Inyo Counties, and the Sacramento-San Joaquin drainages and delta also support river otters (Kirk 1975). Numbers greatly reduced by trapping in the past, but increased after trapping was banned in 1961 (Schempf and White 1977). In the San Francisco Bay Area, populations are recovering and range appears to be expanding southward (Bouley et al. 2015).

SPECIFIC HABITAT REQUIREMENTS

<u>Feeding</u>: River otters are carnivorous. Primarily feed on fish, crayfish, and other crustaceans. Also eat birds, and to a lesser extent amphibians, insects, and occasionally small mammals (Melquist et al. 2003). Generally catch prey underwater by diving or lunging, or in the case of aquatic birds by snatching them from below. Individuals may hunt alone, or with others (Sheldon and Toll 1964). In Suisun Marsh, crayfish occurred in 98% of 118 scats in 1972-73 (Grenfell 1978). In coastal Humboldt County, fish occurred in 60%, and crustaceans in 35%, of 440 scats in 2005 – 2006 (Penland and Black 2009).

<u>Cover</u>: Cover provided by thickets, tall wetland plants, hollow logs, stumps, snags, and burrows and other cavities, including abandoned beaver dens and lodges, riprap, and boat houses and docks.

<u>Reproduction</u>: Nest in burrows and cavities in banks, rocks, trees, stumps, in hollow logs, in deserted burrows of beavers or other animals, or in thickets. Natal dens generally on a high bank and some distance from water, but may be directly accessible from water (Melquist et al. 2003). Nestlike structures in aquatic vegetation have been reported (Grinnell et al. 1937, Liers 1951).

Water: River otters need fresh water to drink, but can forage and travel in fresh, brackish, or salt water.

Pattern: Suitable habitat consists of coastal, riparian, or other wetland areas associated with a large, permanent fresh water source.

SPECIES LIFE HISTORY

Activity Patterns: Active year-round. Mostly nocturnal, but frequent diurnal activity.

<u>Seasonal Movements/Migration</u>: Non-migratory, but may travel long distances along watercourses or over land in search of a mate, or a new living area.

<u>Home Range</u>: Home ranges may extend an average of 24 km (15 mi), or more, along rivers and streams (Haley 1975). Travel distance is highly variable, and related to food supply, suitable habitat, and inherent wandering. May travel 80-96 km (50-60 mi) along rivers and streams during a year (Liers 1951).

<u>Territory</u>: Tend to exhibit mutual avoidance even though home ranges may overlap. Individuals establish scent posts using their urine, feces, and musk.

Reproduction: Most young probably born in March and April in California. Females have postpartum estrus. Gestation period 288-380

days, including delayed implantation (Liers 1951). The single litter per year averages 2.6 young (range = 1-6). Young weaned in about 4 months. Female and young remain together 8 months, or more. Females mature sexually in second year, but males reported not to breed successfully until 5-7 years (Mase et al. 1981).

<u>Niche</u>: Few predators other than humans. Generally do not affect population numbers of game fish; may improve sport fishing because they eat mostly slower, nongame fish.

REFERENCES

- Bouley, P., M. Isadore, & T. Carroll. 2015. Return of North American River Otters, Lontra canadensis, to Coastal Habitats of the San Francisco Bay Area, California . Northwestern Naturalist, 96(1), 1–12.
- Garwood, J.M., R.A. Knapp, K.L. Pope, R.L. Grasso, M.L. Magnuson, and J.R. Maurer. 2013. Use of historically fishless high mountain lakes and streams by nearctic River Otters (Lontra Canadensis) in California. Northwestern Naturalist 94:51-66.
- Grenfell, W. E. Jr. 1978. Food habits of the river otter in Suisun Marsh, central California. Cal-Neva Wildl. 1978:65-73.
- Grinnell, J., J. S. Dixon, and J. M. Linsdale. 1937. Fur-bearing mammals of California. 2 Vols. Univ. California Press, Berkeley. 777 pp.
- Haley, D. 1975. Sleek and savage: North America's weasel family. Pacific Search Books, Seattle, WA. 128 pp.
- Kirk, D. 1975. River otter survey progress report. Calif. Dep. Fish and Game, Sacramento. Nongame Wildl. Invest. Job II-1. 10 pp. Liers, E. 1951. Notes on the river otter. J. Mammal. 32:1-9.
- Maser, C., B. R. Mate, J. F. Franklin, and C. T. Dyrness. 1981. Natural history of Oregon coast mammals. Pac. Northwest For. And Range Exp. Sta., USDA, For. Serv., Gen. Tech. Rep., PNW-133. 496 pp.
- Melquist, W. E., P. J. Polechla, Jr. and D. Toweill. 2003. River otter, p. 708–734. In: G. A. Feldhamer, B. C. Thompson and J. A. Chapman (eds.). Wild Mammals of North America Biology, Management, and Conservation. 2nd ed. The John Hopkins University Press, Baltimore, Maryland.
- Newberry, D. W. 1973a. A contribution towards a bibliography of California furbearers. Calif. Dept. Fish and Game, Spec. Wildl. Invest., Sacramento. 148 pp.
- Penland, T. F., & J. M. Black. (2009). Seasonal Variation in River Otter Diet in Coastal Northern California. *Northwestern Naturalist*, 90(3), 233–237.
- Schempf, P. F., and M. White. 1977. Status of six furbearer populations in the mountains of northern California. U.S. Dep. Agric., For. Serv., San Francisco, Calif. 51 pp.
- Sheldon, W. G., and W. G. Toll. 1964. Feeding habits of the river otter in a reservoir in central Massachusetts. J. Mammal. 45:449-455.

Life history accounts for species in the California Wildlife Habitat Relationships (CWHR) System were originally published in: Zeiner, D.C., W.F.Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. California's Wildlife. Vol. I-III. California Depart. of Fish and Game, Sacramento, California. Updates are noted in accounts that have been added or edited since original publication.