Southwestern river otter, Lutra canadensis Sonora Thomas E. Kucera

Description: The river otter is 900-1,300 mm in TL, with a tapering tail one-third the length of the body (Toweill and Tabor 1982). Weight is from 5 to 13 kg. The short, dense fur is dark brown to nearly black above and lighter silver or gray on the underside. The feet are webbed with strong claws. Males are larger than females (van Zyll de Jong 1972).

Taxonomic Remarks: The North American river otter, *Lutra canadensis*, is one of eight species of *Lutra*, a genus of the family Mustelidae that occurs in Europe, Asia, Africa, and North and South America (Mason 1990). Van Zyll de Jong (1972) recognized seven subspecies of *L. canadensis*. The Sonora river otter (*L. c. sonora*), one subspecies of river otter in California, was named based on the type specimen taken in Yavapai County, Arizona (Allen 1898). One specimen from California exists, taken 12 km north of Needles (Hall 1981).

Distribution: The river otter historically had one of the greatest ranges of any North American mammal, occurring in "all the major waterways of the United States and Canada until at least the eighteenth century" (Toweill and Tabor 1982:688). Hall (1981) described the distribution of *L. c. sonora* as including extreme southeast California and southern Nevada along the Colorado River, extending eastward through southern Utah and southwestern Colorado south through most of Arizona and New Mexico. No sightings of this subspecies have been reported in California since 1933 (Gould 1977a). Gould (1977a) stated that "[t]his subspecies was never common along the Colorado River and it now must be considered extirpated from this part of its range."

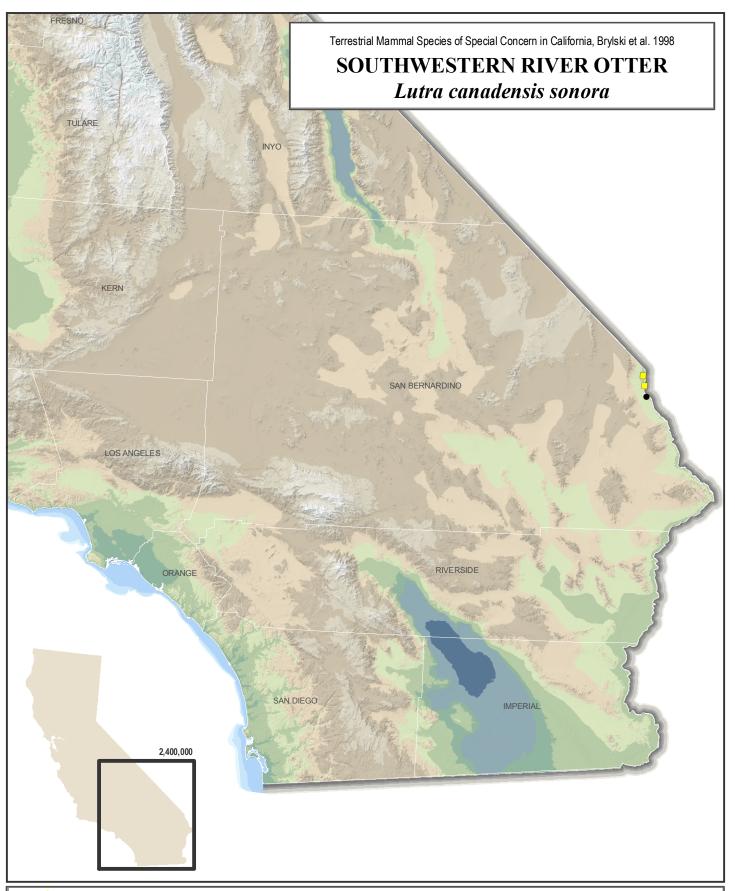
Life history: Little is known specifically about the life history of *L. c. sonora*. River otters usually reach sexual maturity at two years of age (Toweill and Tabor 1982). Breeding occurs in spring. River otters exhibit delayed implantation of the blastocyst, and young are born the following spring after a gestation of 240-285 days and an active pregnancy period of about 50 days (Toweill and Tabor 1982). Litter sizes range from one to six, with a mean litter size of about three. Diet consists mainly of fishes and crustaceans, with insects, amphibians, birds and mammals also reported (Mason and Macdonald 1986, Melquist and Dronkert 1987). Home ranges vary from 4 to 78 km in length, and often overlap among individuals, especially in exploited populations. Territoriality may exist in stable, unexploited populations (Melquist and Dronkert 1987).

Habitat: Throughout their vast range, river otters are found in a variety of aquatic habitats. Although most common in food-rich estuarine areas, they are also found in riverine systems that are relatively unpolluted and unaltered by humans (Toweill and Tabor 1982). Riparian vegetation also is essential for river otters (Melquist and Hornocker 1983, Polechla 1990). River otters benefit from the presence of beavers (*Castor canadensis*), which increase wetland areas and provide den sites in their lodges (Melquist and Hornocker 1983, Polechla 1990).

Status: Class II. Hunting or trapping of river otters in California has been prohibited since 1961. Otters rarely cause depredation problems; live-trapping and relocation is employed when necessary (Gould 1977a). The Colorado River and adjacent riparian vegetation have been greatly modified as a result of altered flow regimes, agriculture, and human development. These habitat changes were likely the cause of declines in southwestern river otter populations. The species is highly secretive and therefore difficult to census, *sonora* is thought to have been historically uncommon to rare along the Colorado River. The Sonora river otter is thought to be extirpated on the California and Nevada sides of the Colorado River, based on the absence of observational and trapping records since 1975 (Spicer 1987).

Management Recommendations: Surveys should be undertaken to determine if the southwestern river otter is still extant. If so, current, empirical data on distribution and population size of *L. c. sonora* should then be obtained by additional studies (Macdonald and Mason 1990, Polechla 1990). Any measures that favor riparian vegetation and decrease pollution are likely to benefit any remaining otters (Mason and Macdonald 1990).







• Locations verified by authors (captures, observations, museum records)

CNDDB 1978 and before