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STATUS OF THE RIVER OTTER IN CALIFORNIA

bу

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INTRODUCTION

Taxonomy. Grinnell et al. (1937) describe two subspecies of river otter occurring in California. The Sonora river otter (<u>Lutra canadensis sonora</u>) occurs along the Colorado River and the California river otter (<u>L. c. brevipilosus</u>) in the streams and marshes in the northern portion of the state.

<u>Legal Status</u>. Prior to 1961 the river otter was classified as a furbearer. It could be taken in season with no bag limit. In 1961 the Fish and Game Commission halted the take of river otter, protecting it from take in any season except when such animal is a depredation problem.

NATURAL HISTORY

Habitat. River otters are closely tied with fresh water, usually in a stream or lake situation though they are occasionally known from slightly brackish water marshes. Since the otter is so dependent on water it occurs relatively independently of the vegetation type (Schempf and White, 1975). Otters appear to occur wherever there is an abundant food source and sufficient water for shelter and foraging areas.

Food Habits. River otters are known to depredate game fish populations (Lagler and Ostenson, 1942). But, in California fish are only seasonally important in the diet. In the Suisun Marsh, Grenfell (1974) found crayfish (Pacifasticus leniusculus) were the mainstay of the otter's diet constituting 58 to 84 percent. Fish and birds comprised their largest portion of the diet in the autumn, winter and spring seasons when these food items were most abundant in the study area.

Reproduction. Hamilton and Eadie (1964) reported that the North American river otter has delayed implantation of the fertilized egg. The female mates soon after giving birth but the fertilized egg does not begin full development until early in the following calendar year. Usually two to three young are born in early April. The first breeding effort by both males and females occurs as two year olds.

DISTRIBUTION AND DENSITY

There have been no reported sightings of the Sonora river otter in recent studies on the river otter's distribution in California. The last reported sighting was in 1933 (Grinnell et al. 1937). This subspecies never was common along the Colorado River and it now must be considered extirpated from this part of its range.

The California river otter is found throughout the major river systems of northern California. Grinnell et al. (1937) and the annual reports from licensed fur trappers indicate that the Sacramento River Delta was the major population center. But the river otter was widespread and trapped in 31 of California's 58 counties during the 23 seasons prior to the cessation of trapping this species in 1961 (Table 1). Recent distributional studies (Schempf and White 1974, 1975, and Kirk 1975) directed their attention away from the Sacramento River Delta which probably remains the population center in California. However, the Klamath, Trinity, Eel and Pit River systems in northern California are densely inhabited. A number of sightings have been made along the Sacramento River (upstream from the Delta) and Feather River. The Tuolumne River drainage is the only other area in the state where river otter sightings are common.

HARVEST

Fur Trapping. Because of their protected status river otter can not be hunted or trapped. Prior to 1961, however, river otter were regularly taken, but never in great numbers. A high of 163 was taken in the 1927-28 season and a low of 14 was taken in the 1934-35 season (Table 2). Take varied with fur demand and did not appear to have been excessive even at levels of 80 to 140 individuals taken annually as occurred during the late 1950's.

Animal Control. River otter rarely are a depredation problem. The only instance of their being a nuisance would be in a fish hatchery. Present control would be to live trap and relocate the problem animals.

LITERATURE CITED

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TABLE 1. Distribution of River Otter and Their Take in California.

| County | Recent Sightings | | | Licensed Trapper Take 1938 - 1961 | | |
|--------------|---------------------------|-----|----------------|--------------------------------------|------------------|----------------------------------|
| | Scher & Wh: (1974 - | ite | Kirk (1975) | Avg. Annual 1/ Take per County— | Range of Take | No. Seasons River Otter Taken |
| Alpine | | X | | 0.04 | 1 | 1 |
| Butte | | X | X | 3.2 | 1-14 | 18 |
| Colusa | | X | X | 0.3 | 1-2 | 6 |
| Contra Costa | | | X | 5.3 | 1-22 | 19 |
| Del Norte | X | X | X | 4.2 | 1-18 | 18 |
| Fresno | X | X | X | 0.2 | 5 | 1 |
| G1enn | | X | | 1.3 | 1-16 | 8 |
| Humboldt | | X | X | 11.2 | 2-35 | 23 |
| Inyo | | X | X | | | |
| Lake | | X | | 0.2 | 1-4 | 2 |
| Lassen | X | X | X | 0.04 | 1 | 1 |
| Madera | | | | 0.04 | 1 | 1 |
| Mariposa | X | X | X | | | |
| Mendocino | | X | X | 6.6 | 1-23 | 22 |
| Merced | | | | 0.1 | 3 | 1 |
| Modoc | | | | 0.1 | 2 | 1 |
| Mono | X | X | | 0.3 | 1-3 | 3 |
| Monterey | | | | 0.04 | 1 | 1 |
| Placer | | | | 0.04 | 1 | 1 |
| Plumas | | X | X | 0.2 | 1 | 4 |
| Sacramento | | | X | 4.0 | 1-14 | 20 |
| San Joaquin | | | X | 8.8 | 3-23 | 22 |
| Santa Clara | | | X | | | |
| Shasta | Х | X | X | 4.0 | 1-14 | 22 |
| Sierra | | | X | | | |
| Siskiyou | | X | X | 4.9 | 1-17 | 20 |
| Solano | | | X | 14.1 | 2-35 | 22 |
| Sonoma | | | X | 0.7 | 1-6 | 5 |
| Stanislaus | | | | 0.5 | 1-11 | 2 |
| Sutter | | | X | 0.8 | 1-9 | 8 |
| Tehama | | | X | 2.4 | 1-14 | 10 |
| Trinity | | X | | 2.2 | 1-10 | 18 |
| Tulare | X | | X | | | |
| Tuolumne | X | X | X | 0.4 | 1-3 | 5 |
| Yolo | | | X | 0.2 | 1 | 4 |
| Yuba | | X | X | 0.2 | 1-2 | 3 |

 $[\]overline{\underline{1/}}$ Reported take divided by 23 seasons of trapping records.

TABLE 2. Historical Harvest of River Otter in California $\frac{1}{}$

| Season | Annual Take | Season | <u>Annual Take</u> |
|---------|-------------|---------|--------------------|
| 1960-61 | 90 | 1942-43 | 33 |
| 1959-60 | 101 | 1941-42 | 41 |
| 1958-59 | 83 | 1940-41 | 26 |
| 1957-58 | 126 | 1939-40 | 52 |
| 1956-57 | 142 | 1938-39 | 42 |
| 1955-56 | 81 | 1937-38 | 40 |
| 1954-55 | 107 | 1936-37 | 24 |
| 1953-54 | 75 | 1935-36 | 31 |
| 1952-53 | 42 | 1934-35 | 14 |
| 1951-52 | 75 | 1933-34 | 18 |
| 1950-51 | 49 | 1932-33 | 16 |
| 1949-50 | 78 | 1931-32 | 33 |
| 1948-49 | 85 | 1930-31 | 66 |
| 1947-48 | 1 16 | 1927-28 | 163 |
| 1946-47 | 122 | 1926-27 | 158 |
| 1945-46 | 79 | 1925-26 | 1 41 |
| 1944-45 | 55 | 1924-25 | 142 |
| 1943-44 | 56 | 1921-22 | 36 |

River otter given Protected Furbearer status by California Fish and Game Commission in 1961.