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ECOLOGICAL STUDY OF RIVER OTTERS IN GRAND TETON NATIONAL PARK

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Objectives

Accumulation of data on the distribution, density, movements, activity patterns, and behavior of river otters, primarily on the Snake River, is the goal of this study. Such information has intrinsic value and also should be useful to the National Park Service in enhancing the welfare of this interesting member of the park's fauna.

Methods

Direct observation on foot and by canoe was the primary means of gathering data, as it has been in previous seasons. My own field observations from Jackson Lake Dam downriver for 9 miles to the RKO Road were supplemented significantly by the cooperation of boatmen of the Jackson Lake Lodge, National Park Service, Barker-Ewing Float Trips, and Triangle-X Float Trips who documented otter sightings on the lower section of the river. I am grateful for these contributions.

Indirect tallies of otter movements were attempted, using a tracking-board technique similar to that described by Humphrey and Zinn (1982).

Results

In general, the results of field work in 1983 were discouraging. In contrast to the 1982 season when otters were observed for a total of 28 hours at a cost of approximately 3 field-hours per observation-hour, we were able to observe them for only 3.5 hours at a cost of 17 field-hours per observation-hour in 1983. Because of the knowledge of otter habits gained in 1982, field efficiency should have increased. In fact, it dropped to 20% of the efficiency in 1982. The most reasonable conclusion is that the density of otters, at least on the 9-mile intensively-studied area, was significantly lower than in the previous year. Because of the unknown variable of field-hours, a similar objective comparison of efficiencies for float-trip sightings is not possible. They did reveal interesting trends in grouping of otters and sites favored by them, however. Of the 21 sightings, 9 were of groups-of-three and 8 were of single individuals. Groups-of-four were seen twice, pairs and groups-of-five were seen only once. This suggests that family groups and lone otters (possibly adult males) are the commonest social units in late summer.
The localities favored were: the stretch of river between Buffalo Fork River and Disney Channel, the stretch in the vicinity of Swallow Bank, Eagle's Perch Channel, and Dead End Left. Slightly more otters were sighted above Deadman Bar access road than below it.

One potentially advantageous circumstance was occurrence of a naturally-marked otter in the Oxbow area. The tip of its tail was deformed and this unusual mark would have proved quite valuable in documenting movements of this otter. Unfortunately, it was only seen on two occasions.

Fifteen tracking-boards, 2 ft by 2 ft sheets of masonite, were placed at sites known to be frequented by otters on an 8-mile stretch of river between RKO Road and Jackson Lake Dam. Each was dusted with a thin layer of sawdust, supplied with a few drops of otter scent applied to a center stake, and checked four times during the 2-week trial period. These boards yielded no information, probably owing to a combination of low density of otters and wind blowing away the sawdust layer.

Conclusions

The 1983 season was relatively unproductive so far as efforts on the intensive study area were concerned. Increased participation of boatmen in documenting otter occurrence along the lower stretch of the Snake River resulted in valuable information on site preferences and grouping patterns. Attempts to get indirect evidence of otter occurrence by means of tracking-boards were unsuccessful. This problem could probably be solved by use of automatic electrical recorders, as is proposed for the 1984 study.

Literature Cited