

# BEHAVIOR OF RIVER OTTERS IN THE OXBOW BEND VICINITY, GRAND TETON NATIONAL PARK 1997 SEASON

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## ♦ OBJECTIVES AND METHODS

1997 was the third and final season devoted to gaining information on the behavior of river otters with most emphasis on nocturnal and diurnal activity. As in the 1995 and 1996 seasons, six automatic camera monitors, activated by treadle switches, were put out at sites often frequented by these animals. In addition, canoes were frequently used for daytime patrols. Field work occurred from July 8 - August 6.

## ♦ RESULTS

My friend Peter Mui spearheaded a protocol for getting public input on otter sightings. He mounted an otter sighting "bulletin board" soliciting visitors at Cattlemen's Bridge to record their observations. See attached copy. The result of this innovative scheme was to effectively increase the number of observers. The total number of observations tallied, both by Park Service personnel and the general public, was 32. In addition, Mui arranged with Park Service Interpreter Katy Duffy for two seasonal NPS employees to accompany us in the field one morning. They became familiar with the methods we used in this study, particularly how monitor sites are selected, set up and maintained. They also assisted us in handling the canoe and scouting for otters and learned some fundamentals of natural history of these animals.

Using six activity monitors, we clocked 1700 camera hours and recorded 21 visits, an investment of 81 hours per visit. This is a notable contrast with the investment of 120 hours per visit in 1995 and especially with the value of 566 hours per visit in 1996. The year-to-year fluctuations in field efficiency underscore the importance of doing research for several consecutive years, even if the reasons for the differences are not well understood.

Of the 21 otter visits in 1997, 17 were by day and 4 by night. When combined with the 10 visits in 1995 and 3 visits in 1996, the grand total ratio is 24 by day to 10 by night, indicating that overall the otters were about two-and-a-half times as active by day as by night. (Neither the small 1995 or 1996 samples indicated this). The prime goal of this project was to determine how nocturnal activity compared with diurnal activity and the conclusion that otters are more diurnal than nocturnal is the opposite of what I expected to find. In a situation where there is a good deal of daytime human activity, I thought the otters would shift to mostly nocturnal activity to minimize disruption by fishermen, boaters and picnickers. In searching for some answer to this unexpected finding, the only hypothesis coming to mind is that the fish upon which otters feed heavily are easier to see and catch in daylight than in the dark. Feeding was one of the commonest activities noted by day but we had no way of comparing this with intensity of feeding at night.

Vandalism of equipment has been a source of concern from the outset. 1997 was the first season when it became common enough to interfere with obtaining data. The south spit of an island just upriver turned out to be visited most by the otters. However, the otters frequenting this site got into the habit of unearthing the treadle switch, carrying it off a few feet and on one occasion, dumping it in the shallow water near where they hauled it out. The monitor located on the north shore of the main Oxbow was "attacked" by otters. The camera and its rain protector were knocked off the tripod and the two battery boxes were completely gone. Eventually, I chanced to spot them under a half-foot of water close to shore. Precious time was lost in dismantling the monitor and taking it back to camp for repair.

Besides otters, other animals occasionally

accidentally step on a buried treadle and trigger the camera. In 1997, we obtained a shot of a coyote and one of a sandhill crane. The last record of the season shows a young lady, standing on the treadle of the monitor near the Old Research Station while waving a can of beer to celebrate her cleverness! It was a relief not to have more serious pranks or outright stealing of equipment by fishermen or other visitors.

Thanks are due to those people who assisted me from time to time in the field. My wife, Betty, was a devoted helper, as in the past. Peter Mui gave very generously of his time, not only in public relations (as mentioned earlier) but also in field work and in maintenance of cameras. Kathleen McGinley and Bob Richardson are especially to be appreciated for their sharp vision in spotting otters from our canoe, almost always before I could. Finally, my thanks to daughters Peggy Link and Connie Davis for their substantial help with all phases of the otter project.



Otter family at ease on traditional resting site near old Research Station

# SEEN AN OTTER?

## PLEASE TELL US.

At the University of Wyoming-National Park Service Research Center, biologists are studying otter behavior in Grand Teton National Park. If you have seen otters along the Snake River from the Jackson Lake Dam to the Oxbow Bend we would appreciate your help.

### On the space beneath this page, write down:

Date - Time - Location - Number of Otters in the group (adults and young)

What they were doing (traveling up or downstream, eating on bank, etc.)

Many Thanks!

For more information, please write: Joe Hall, UW-NPS Research Center, PO Box 170, Moran WY 83013

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## About Otters

Otters are aquatic mammals about 3 feet in total length, smooth and dark-brown in color, with webbed feet and furry soles, and a long, tapering tail. They can remain in the water for long periods and swim below its surface for up to a quarter of a mile. Although living near water and making their dens in holes in banks, they travel long distances overland, especially in winter, in search of open water for fish, their principal food. Two or three young are born in April or May and are taught to swim by their mother. Otters make a wide variety of noises: whistling, chuckling and sometimes growling like a dog.

### Otters compared to Muskrats and Beavers

Muskrats are much smaller than otters and have narrow tails flattened from side to side.

Beavers are about the same size as otters but have a stocky build and wide paddle-like tails flattened from top to bottom. Both muskrats and beavers tend to travel alone while otters are usually in family groups.