

Managing Wolves and Humans in Lamar Valley: A Final Report on the Druid Road Project 2000

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Summary:

Introduction

Since wolf reintroduction in 1995 and 1996 Yellowstone National Park's (YNP) Lamar Valley has become the premier location worldwide to observe free-ranging wolves. The main pack of interest is the Druid Peak pack, which has denned in the valley since 1997. Each year visitor numbers have grown and in 2000 the Resource (YCR), Ranger, and Interpretive Divisions cooperated to better deal with the opportunities and problems that accompany mushrooming visitor numbers (Memorandum dated 9 May 2000).

The objectives established for this program were as follows:

- 1) **Human Safety:** protect visitors that are viewing wolves alongside the road, and control both traffic along the road and parking to prevent an accident.
- 2) **Wolf Safety:** protect wolves from vehicle strikes and permit wolves to cross roadway without harassment from visitors. Also, protect the closed area around the den from visitor intrusion.
- 3) **Visitor Enjoyment:** through protection of natural wolf behavior, preserve visitor opportunity to view wolves at road crossings and observation of wolves in Lamar Valley. Interpret wolves and other wildlife ecology to visitors.
- 4) **Wolf Monitoring and Research:** continue to monitor and study the denning behavior, predation, activity, and interactions of wolves with other wildlife.

Another evaluation criteria was to determine if active road management of people and wolves is necessary to avoid wolf/human conflict, or would a do nothing strategy have been acceptable, for instance, would most of the conflicts have resolved themselves without our intervention. Stated another way, will this be something that YNP must engage in every time a wolf pack dens near a road? Will this be our policy when wolves are no longer an endangered species?

This report summarizes the success or failure of the above stated objectives and suggests improvements for the summer of 2001. Toward this end, in the 9 May 2000 Memorandum, we established criteria to evaluate achievement of the objectives. Evaluations of those criteria are stated below, or for criteria definition see our 2000 Memorandum.

Methods

Two project personnel were hired and given authority to direct and otherwise control traffic and educate the public about wildlife, wolves, and the Yellowstone experience. The workers were instructed to be on the road or locations around the road every day during wolf activity hours (early morning and late evening) through most of the wolf pup-rearing period (April – early August). Wolves were located daily with telemetry to learn their location and anticipate problems. When wolf locations became known, four possible strategies to prevent human-wolf conflict were employed: 1) work at different locations with one person observing from an observation point communicating to a person on the road who would then direct traffic, 2) both work the parking lot, 3) split up along the road, and 4) work alone along the road. Days off were staggered to allow complete coverage during peak visitor periods.

In addition to providing education and safe viewing for visitors, project personnel also gathered scientific data germane to ongoing work with the Yellowstone Wolf Project that has been collected since 1995 (see Yellowstone Wolf Monitoring Plan 1995).

Results

Rick McIntyre and Thomas Zieber were hired to work on the project. Their costs were covered by two grants to the Yellowstone Park Foundation: one from the Wolf Education and Research Center (WERC) and another from the Twin Spruce Foundation. Rick and Tom worked from 21 May to 10 August 2000; they were present on the road 80 of 82 days during that period.

Human Safety

There were no accidents or people injured, but there were 4 near misses (Table 1). Other traffic related problems did occur that were mitigated by project personnel (Table 1). Since this was the first year statistics were recorded, no benchmark figure is available for comparison.

Parking was inadequate for all of the people who wanted to watch wolves. The main pullout across from the Druid den (named the Footbridge Lot) was the main wolf viewing area and did not have enough parking spaces since reconstruction. There are 23 spaces in the lot and up to 42 vehicles (with 92 people) were sometimes present. Double-parked cars were common and frequent searches for drivers were necessary to free blocked vehicles. Most evenings a large AmFac tour bus parked in this lot adding further

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congestion. Improperly parked cars often obstructed views of oncoming traffic so leaving the parking area was at times hazardous. Exit from the parking area often required assistance because overflow parking reduced visibility. On one occasion Superintendent Finley was observing wolves and asked for a recommendation for additional parking spaces. Compliance when asked to move an illegally parked vehicle was excellent. Visitors wanted to park correctly but simply could not.

At peak wolf watching times two people were not enough to control all traffic situations. Mid-summer, additional volunteer help was recruited in cooperation with the rangers in the Lamar area. Four volunteers Ray Rathmell (Pebble Creek CG host), Tony Holbrook (Mammoth CG host), Bill Wengeler (seasonal naturalist on days off), and John Good (retired NPS employee) assisted with road management and were found to be extremely helpful.

Wolf Safety

Wolves frequently crossed the road, usually several times/day. One yearling male wolf was fatally hit by a car in the den area on 24 May. This incident occurred before 4:45 AM, so was not preventable by our team. Five wolves were almost struck by vehicles (Table 2). Disturbance to wolves trying to cross the road was significant (Table 2). Traffic was stopped 59 times to allow a wolf to cross the road, but wolves were still prevented from crossing 30 times, and there were 17 other times when a wolf changed its behavior because of road traffic. Average amount of time traffic was stopped to allow a wolf crossing was 3 minutes. The extreme was 38 minutes when 7 wolf pups moved onto the road surface and played and then bedded. After this incident (and the ensuing complaints from a visitor), we non-injuringly, aversively conditioned the pups not to behave this way. This aversive conditioning was successful.

In addition to traffic related problems there were 111 closure violations (Table 2). Often it was inadvertent, but some visitors knowingly violated the closure hoping to better their odds of seeing a wolf.

The Druid wolves left the den area on 15 July moving their pups to the Chalcedony rendezvous site. Visitor viewing of wolves at this site was more dispersed, harder to manage, and less intrusive to wolf behavior.

Visitor Enjoyment

Wolves were visible to visitors for 283.2 hours (Table 3). Daily and numerous visitor contacts were made involving one-on-one conversations and informal and formal talks (Table 3). A total of 12,293 visitors were contacted or spoken to about wolves and our other YNP issues. An estimated 8,145 people observed wolves.

Project personnel were asked a lot of questions and were frequently besieged by visitors hungry to see or learn about wolves. Rick and Tom used these opportunities to express a

larger view about wildlife and YNP issues making more from the encounter than just where do I go to see a wolf.

Wolf Monitoring and Research

Daily wolf locations, pup counts, arrivals and departures, and interactions with other wildlife were all recorded as they had been in past years when the only duties of project personnel were to gather data on wolves. We were also able to install and maintain our automatic telemetry system that monitors wolf activity 24 hrs/day.

Discussion

Monitoring wolves and educating people about wolves in the Druid Peak pack's den area was valuable and helped wolves and visitors. Tremendous interest in viewing wolves, limited parking, and easy visitor access to wolf observations around a den site required additional personnel to reduce accident likelihood and protect wolves. It was often observed that people were more focused on wolves than their driving so having an NPS person on site helped refocus visitor attention on driving. Benefits to wolves were also significant because visitors could be aided in their desire to see a wolf, yet not affect other visitors or injure wolves. Perhaps most importantly, staff on site allowed wolves easier and safe access to road crossings, probably the number one problem the last few years.

Management Recommendations

Left alone, this situation holds great potential to become chaotic, increasing the likelihood of injury to visitors and wolves significantly. Visitor attraction to this site has increased each year so more problems in the future are predicted. Whenever wolves den near a road problems of this nature should be expected. In 1997 another wolf denned within clear view of the road and resulting visitor attention likely contributed to mortality of all 7 pups (see Wolf Project Annual Report 1997). Continued efforts with NPS staff to manage these situations are recommended as long as resources are available. It should be noted that funds for this project come from grants to the Yellowstone Park Foundation and are not guaranteed in the future.

During peak visitation more than two people may be necessary. Recruitment of additional volunteers from campgrounds or the Mammoth area is again recommended as these people helped on site without adding extra managerial or supervisory problems. Prior approval for any new volunteers must be acquired both from the Ranger Division and the Wolf Project. These extra people will assist with traffic management only and not do wolf interpretation. Developments with the new volunteers should be communicated regularly.

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Table 1. Human Safety

Accidents	Near Misses	Blocked Traffic	Parked Both Sides Road	Parked with Poor Visibility
0	4	10	15	15

Table 2. Wolf Safety

Den Closure Violations	Wolf Crossings	Traffic Stopped for Wolves Crossing	Near Misses with Vehicles & Wolves	Fatal Wolf Strikes	Wolves Prevented from Crossing Road	Wolf Behaviora Change
111	162	59	5	1	30	17

Table 3. Visitor Contacts

Visitor Contacts	Informal Talks	# of People at Formal/Informal Talks	Total Contacts	# of People Seeing Wolves	Time Wolves Visible	Days Wolves Visible
6,760	83	1,833	8,593	8,145	283.2 hrs	77/82 (94%)

