



# United States Department of the Interior

## NATIONAL PARK SERVICE

Theodore Roosevelt National Park

P.O. Box 7

315 Second Avenue

Medora, ND 58645

IN REPLY REFER TO:

N1615 – Horses (THRO-M)

September 4, 1998

Memorandum

To: The Files

From: Superintendent, Theodore Roosevelt National Park

Subject: Feral Horse Management

During 1997, the park staff made the following decisions for the management of the feral horse herd. The last two years we have sought funding for developing an ungulate management plan that encompasses the three major wildlife species; bison, elk and horses. To date our efforts have not been successful. We will continue to pursue private and public funding sources.

1. Population Numbers: For several years the park has been managing the feral horses so that their total population ranged from 50 to 90 horses. During the 1991 and 1994 roundups, the park took blood samples from all captured horses and sent it to the University of Kentucky for genetic analysis. In Dr. Cothran's reports he recommends that if range conditions permit, the horse population be allowed to increase to maintain an effective population size ( $N_e$ ) of more than 50 animals.<sup>1</sup> Dr. Cothran states that if there are more than 50 animals of breeding age the chance of inbreeding and loss of genetic diversity is less likely.

After reviewing Dr. Cothran's reports and the current Ungulate Carrying Capacity Model, park management made a decision in 1997 to increase the population range of feral horses to vary from approximately 70 to 140 animals. In conformance with the new decision, during the October 1997 roundup the park removed only 36 feral horses from the herd, leaving 72 horses in the park.<sup>2</sup>

The ungulate carrying capacity model that was developed by Montana State University recommends that if the bison and elk numbers are high, the horse population should not exceed 100 for more than two consecutive years. If the horse population continues to increase

<sup>1</sup> UofKy reports dated July 10, 1992 pages 5 & 9 and March 30, 1995 pages 5, 6 & 7.  $N_e$  after 1994 roundup was 25.2.

<sup>2</sup> Linbo's pinto mare and foal were also removed for a total of 38 horses.

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(my photo's)