

FOREST SERVICE
1/19/76

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
HUMBOLDT NATIONAL FOREST
P. O. Box 539
Ely, Nevada 89301

REPLY TO: 2260 Wild and Free Roaming Horses

January 19, 1976

SUBJECT: Population Dynamics - White Pine Division



TO: Bureau of Land Management
ATTN: Milt Frei
Division of Standards & Technology
Bldg. 50, Denver Service Center
Denver, Colorado 80225

Dear Milt:

Enclosed is the information you requested. I did not make a population count last summer or fall, but I hope to be out there this spring (1976). If I get some young/adult and yearling/adult ratios, I'll send the information to you.

Sincerely,

A handwritten signature in cursive script that reads 'Kenneth Timothy'.

KENNETH TIMOTHY
Wildlife Biologist

APPENDIX 2

~~MORTALITY~~ CLASSIFICATION OF HORSES

Actual Count -- Helicopter

<u>Date</u>	<u>Adults</u>	<u>Yearlings</u>	<u>Colts</u>
Jan 1975	161	No Count	34 (6 mo. old)
Aug 1975	170	17	33
Jan 1976	152	14	30

Count by Area -- Helicopter

January 1975:

<u>Location</u>	<u>Adults</u>	<u>Yearlings</u>	<u>Foals</u>	<u>Foals/ 100 A.</u>	<u>YEARLINGS/ 100 A</u>	<u>Percent Mortality</u>
Granite Mountain	29	No Count	5	17.2		
Wildcat Mountain	8	" "	3	37.5		
Rydalch	10	" "	4	40.		
English Village area	44	" "	9	20.5		
Wig Mountain area	<u>70</u>	" "	<u>13</u>	<u>18.6</u>		
TOTAL	161		34	21.1		

August 1975:

Granite	38	4	13	34.2	10.5	39
Wildcat Mountain	0	0	0			
Rydalch	28	3	3	10.7	10.7	73

				Foals/100A	YEAR/100A	% mortality
English Village area	37	5	10	27.2	13.5	34
Wig Mountain area	<u>67</u>	<u>5</u>	<u>7</u>	<u>10.5</u>	<u>7.5</u>	<u>60</u>
TOTAL	170	17	33	19.4	10.0	53%

January 1976:

Granite	39	4	14	35.9	10.3	40
Wildcat Mountain	7	1	3	42.3	14.3	62
Rydalch	13		1	7.7	.0	100
English Village area	24	4	4	16.7	16.7	3.8
Wig Mountain area	<u>69</u>	<u>5</u>	<u>8</u>	<u>11.6</u>	<u>7.3</u>	<u>61.0</u>
TOTAL	152	14	30	19.7	9.2	56%

Additional Data:

Average Band Size -- 4.8

Sex Ratio -- 50/50

In October of 1975, 10 adults, 4 colts and 4 yearlings were removed from Dugway Proving Ground. These horses were creating a problem in the housing area of Dugway. In analyzing these data this removal did not affect the mortality figures in age class 0-1. This is significant because it indicates that comparable samples will produce accurate mortality data even though exactly the same animals were not counted on subsequent flights. The removal did affect total numbers. The January 1976 count may be adjusted to 162 adults, 18 yearlings and 34 colts.

The data also indicates that the 50+ percent mortality in age class 0-1 is occurring during the period January-August. Probable reasons for this are foals being weaned in the early spring, tough spring storms and the natural die-off of animals that typically occurs during this period of time. In most wild populations, die-offs will occur in the spring after it appears that animals should survive. (Refer to any standard wildlife populations study.)