



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
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*Battle Mtn. Dist.
Rocky Hills HMA*

3/18/08 m

TO: Battle Mountain Field Office, Wild Horse and Burro Census Files
FROM: Shawna Richardson, Wild Horse and Burro Specialist
SUBJECT: March 2008 Census of the Rocky Hills HMA.
DATE: March 18, 2008

March 10, 2008, a census flight was completed of the Rocky Hills HMA, in conjunction with a flight of the Callaghan Complex.

Company: El Aero
Pilot: Ted McBride
Participants:

Shawna Richardson
Jason Theodozio

Wild horse locations were identified on 1:100,000 maps and entered into the on-board "Ag-Nav" GIS system operated by the pilot. For each wild horse location observed, a waypoint was entered by the pilot which corresponded to information recorded by one of the observers which consisted of number of adults and foals observed. The Ag Nav data was downloaded by Battle Mountain FO staff and utilized to compile final census data and maps.

A grid pattern was used for the majority of the census. The pattern was adjusted as necessary to account for topography, wild horse locations, and environmental conditions. In most cases, the grid was 1/2-1 mile wide. Observations pertaining to band size, ages, and colors were recorded, and this information utilized to ensure that double counting of bands did not occur. The helicopter maintained an altitude of 25-75' above ground level for most of the census. Maneuverability of the helicopter allowed numerous or large groups to be re-counted if necessary for accuracy.

Approximately 3 hours were required to complete the flight of Rocky Hills HMA. Much of the higher elevations were snow covered, and wild horses were not widely distributed. Future flights should allow no less than 5 hours for this HMA.

The following table displays the dates, areas flown and flight time for each day.

Date	Flight Hours	Areas Covered
March 7	6.1	Ferry from Elko, completion of Bald Mountain HMA and east portion of the South Shoshone HMA
March 8	2.6	Begin Callaghan HMA. Weather delayed completion.
March 9	6.7	Complete Callaghan HMA
March 10	6.2	Complete Rocky Hills and Simpson Park Mountains. Return ferry to Elko.

Census Totals – Callaghan Complex

Callaghan Complex Census - March 2008											
HMA	Allotment	Inside HMA			Outside HMA			Total			Foal %
		Adult	Foal	Total	Adult	Foal	Total	Adult	Foal	Total	
Bald Mountain	Carico Lake	480	20	500	37	0	37	517	20	537	3.7%
South Shoshone	Carico Lake	41	1	42	0	0	0	41	0	41	0.0%
	Austin	12	2	14	3	0	3	15	2	17	11.8%
	Total	53	2	55	3	0	3	56	3	59	3.4%
Callaghan	Austin	296	6	302	202	7	209	498	13	511	2.5%
	Grass Valley	287	10	297	36	1	37	323	11	334	3.3%
	Simpson Park	15	1	16	See Below		0	15	1	16	6.3%
	USFS			0	11	0	11	11	0	11	0.0%
	Total	598	17	615	249	8	257	847	25	872	2.9%
Rocky Hills	JD	120	4	124	21	1	22	141	5	146	3.4%
	Grass Valley	0	0	0	0	0	0	0	0	0	
	Total	120	4	124	21	1	22	141	5	146	3.4%
Simpson Park Mountains	Grass Valley	0	0	0	9	0	9	9	0	9	0.0%
	Simpson Park	See Above		0	3	0	3	3	0	3	0.0%
	Santa Fe Ferguson	0	0	0	1	0	1	1	0	1	0.0%
	Total	0	0	0	13	0	13	13	0	13	0.0%
Grand Total, Callaghan Complex		1251	43	1294	323	9	332	1574	52	1626	3.2%

Animal Condition

Most of the horses observed in the HMA were in acceptable condition. Only a few were noted as thin. Moderate to high grass availability was noted in the central portion of the HMA. Water is scarce, and heavy trailing was noted in the Denay Valley area to a ponded site outside of private property. Water and forage were also available in other portions of the HMA such as Indian Creek and within the Grass Valley Allotment, but no horses were using the area.

Horse Color and Characteristics

Many pinto horses were observed, and several were vividly colored. All foals documented during the census were newborn foals. No foals born in 2007 were documented separately. The sorrel curly released in 2002 was located outside of the HMA boundaries east of Denay Creek. He was with one other horse and appeared to be very healthy. The horse was originally captured from the Fish Creek HMA in 2000 and would be nearing 8 years of age.

Weather

Weather was clear and cool, with excellent visibility.

Flight Completion

Because of time limitations within the MOA, the flight began on the east side of the Rocky Hills HMA at the northern end, and was completed southward. The flight continued south on the Simpson Park Mountains to cover areas outside of HMA boundaries in the Grass Valley, Underwood and Simpson Park Allotments to U.S. Highway 50. The east flank of the Simpson Park Mountains was completed northward to McClusky Creek at which time the census of the Rocky Hills HMA continued northward.

Distribution

All horses were congregated in the northeast portion of the HMA in the vicinity of Geyser Creek and the Red Hills. No horses were observed within the Grass Valley portion of the HMA, or south of the Geyser Creek area. Snow cover remained within some portions of the HMA including the west side and the southern end in the mid to higher elevations. Patchy snow was noted near Pat Canyon, the north end of the Simpson Park Mountains, the flats below Cadet Trough Spring, and mid elevations. Lower elevations, particularly near Red Hills, and west of Denay Valley were clear of snow.

Few horses were located near Cadet Trough Spring. It is estimated that many of the horses are accessing water at Denay Creek, where a ponded area spills out beyond the private land. Many trails were located in this area. The distribution and congregation of horses observed is very similar to those observed in March 2005 during the most recent census of this area.

During finalization of the census data, some points were moved to prevent overlap on the printed maps, and to ensure legibility of the numbers. The population after foaling with 17.5-18% increase will be approximately 166 wild horses. Should 10% be added to the total observed, the estimated current population of adult horses would be 155, with 2008 post foaling populations of 182 wild horses.

Comparison to estimate

The 2007 estimated wild horse population of the Rocky Hills HMA prior to this flight was 151 total animals, which is only 10 higher than the adults observed within the HMA. It is possible that 10-20% could have been missed during the flight.

Wildlife

Several groups of Pronghorn were observed during the flight. Approximately 25 pronghorn were seen west of Pat Canyon in the Grass Valley Allotment. Groups of 10, 25 and 20 Pronghorn were observed in the JD Allotment in the vicinity of the Red Hills.

Wildlife Sightings, March 2008			
Allotment	HMA	Pronghorn	Mule Deer
Grass Valley	Outside HMA/Steiner Creek Area	20	12
	Rocky Hills	25	
	Callaghan	20	15
Austin	Outside Callaghan	0	30
Carico Lake	South Shoshone	0	1 group
	Bald Mountain	0	80
Simpson Park	Outside HMA	5	3
Underwood	Outside HMA	2	0
Total		72	140

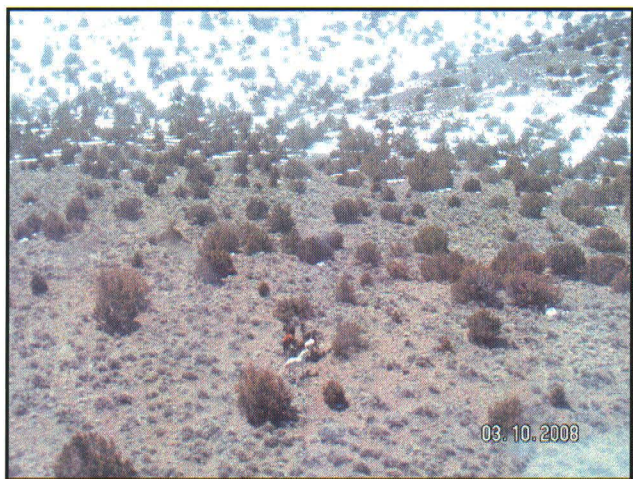
2008 March, Census Costs							
Actual Flight Costs	7-Mar	8-Mar	9-Mar	10-Mar	Unit Total	Unit Cost	Total Cost
Flight Time	6.1	2.6	6.7	6.2	21.6	\$815/hour	\$17,604
Service Miles	173	170	193	233	769	\$1.40/mile	\$1,077
AgNav	225	225	225	225	\$900	\$225/day	\$900
Extended Pilot						\$42/hour	
Extended Truck						\$22/hour	
Per Diem	\$218	\$218	\$218		\$654	\$109/p/day	\$654
Total							\$20,235
Cost per flight hour	\$936.81						
HMAs Completed	3						
Cost per HMA	\$6745						
Cost per horse	\$12.44						
Acres flown (estimate)	986,252	45,660/hour					
Cost per acre flown	\$0.21						
Miles Flown	1437						
Cost per flight mile	\$14.08						

The March 2008 census costs were higher than would have otherwise been due to the weather problems which required a short day on March 8, and the fact that flight costs have increased again. The cost per hour is approximately 116% of what it was in March 2005.

Rocky Hills HMA
Census March 10, 2008



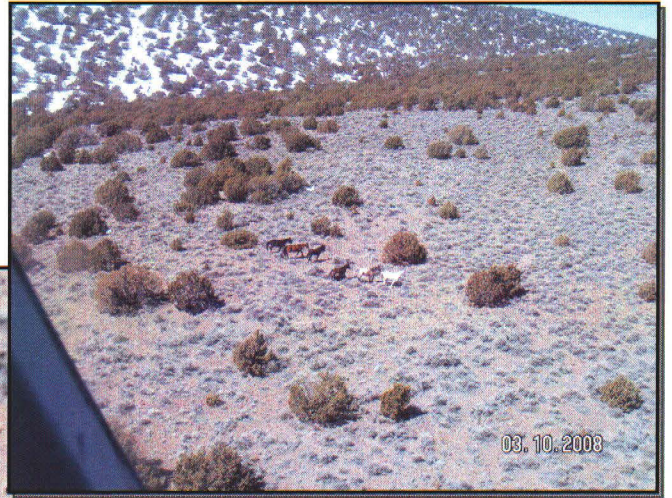
Northwest of McClusky, southern tip of Rocky Hills HMA



Rocky Hills horses, near Red Hills



Rocky Hills horses, near Red Hills



Rocky Hills horses, near Red Hills



Central Rocky Hills, east side – old 1999 Trail Canyon burned area.



Rocky hills HMA, Rocky Hills area.



Rocky hills HMA, Rocky Hills area.



Western side of HMA looking west into Grass Valley.



Spring area north west of the HMA boundary.



Rocky Hills HMA, Indian Creek Area, looking north to Rocky Hills and Red Hills.



Sorrel curly released in 2002 (and originally captured from Fish Creek HMA in 2000). Outside of HMA boundary, east of Denay Creek.



Sorrel curly released in 2002 (and originally captured from Fish Creek HMA in 2000). Outside of HMA boundary, east of Denay Creek.



1999 Trail Canyon Fire Rehab, west side of HMA Pat Canyon/Fye Canyon areas



1999 Trail Canyon Fire Rehab, west side of HMA Pat Canyon/Fye Canyon areas



Northwest portion of the Rocky Hills HMA, looking south from Garden Pass area.



Northeast portion of the Rocky Hills HMA, looking south from Garden Pass area.