3/19/08



# United States Department of the Interior

#### **BUREAU OF LAND MANAGEMENT**

Battle Mountain Field Office 50 Bastian Road Battle Mountain, Nevada 89820 http://www.nv.blm.gov



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 Bald Mountain HMA.

DATE:

March 19, 2008

March 7, 2008, a census flight was completed of the Bald Mountain HMA, in conjunction with a flight of the Callaghan Complex. In addition to the Bald Mountain HMA, the east portion of the South Shoshone HMA in Carico Lake and Austin Allotments was completed.

Company:

El Aero

Pilot:

Ted McBride

Participants:

Shawna Richardson Tom Darrington

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 the number of adults and foals observed and recorded by one of the observers. 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 ½-1 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.

A total of 6.1 flight hours were required to complete the Bald Mountain and South Shoshone flight which included 0.7 hours ferry time from Elko, and ferry time from the Battle Mountain Airport. The flight of the Complex was scheduled over a weekend to minimize conflicts with the MOAs.

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.

			Callagh	an Comple	x Census	- March	2008				
HMA	Allotment	Inside HMA			Outside HMA			Total			- 10
		Adult	Foal	Total	Adult	Foal	Total	Adult	Foal	Total	Foal %
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%
	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%
Callaghan	Simpson Park	15	1	16	See B	elow	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**

Throughout the HMA, horses were noted to be moderately thin, but in acceptable condition given the population size, severity of the past winter and time of year. Last years foals appeared to be good size and condition. Some groups of horses were noted to be in good condition, and did not display signs of being thin. The number of newborn foals observed was what was expected for the time of year. No dead horses were observed.

Winter 2007/2008 was marked by heavy snowfall, which accumulated deeper in the higher elevations and farther into the lower elevations than past years. During the January 2008 gather of the Roberts Mountain HMA, deep, crusty snow resulted in the majority of the population unable to maintain acceptable body condition, and many horses were thin to very thin. Despite concerns for the health of the horses in other HMAs, body condition and health of the Bald Mountain horses is surprisingly good at this time.

# **Horse Color and Characteristics**

As previously documented, many paint and grey horses were observed. A mule was observed with one of the groups of horses on the west side of the HMA. All foals documented during the census were newborn foals. No foals born in 2007 were documented separately.

# Weather

The weather was very good for the flight, with clear skies and sunshine. The sun created some glare due to the snow.

# **Flight Completion**

The flight began on the west side of the HMA, on the west flank of Red Mountain. The flight continued northward to cover the Red Mountain area, and the central portion of the HMA. The flight continued south through the remaining central portions of the HMA to the southern boundary with the Callaghan HMA, then north to cover the large concentrations of wild horses in the Hot Springs Point, and Bald Mountain areas.

The flight went really well, and it is felt that a high degree of accuracy was maintained due to the skill and experience of the pilot, and the abilities of the observers. Although the accuracy of the flight was good, the terrain, and sheer numbers of groups of horses observed could have resulted in horses being missed. For estimation purposes, approximately 10% could be added to the count.

### Distribution

Bald Mountain HMA Distribution				
Area	Number of horses			
Red Mountain, southern slopes (including 1 mule)	112/11			
Hot Springs Point	89/2			
East of Bald Mountain	135/3			
Outside HMA, north of Wenban Springs	22/0			
Northeast corner, north of main road/House Spring	84/3			
Scattered throughout central portions	75/1			

During finalization of the census data, some points were moved to prevent overlap on the printed maps, and to ensure legibility of the numbers. Despite concentrations of wild horses in expected areas, the population is spread out more than what was observed during the May 2007 Census. This would likely be due to the reduced needs of water in March (May 2007 was fairly dry). The May 2007 observations totaled 519 adults and foals (17% foals), so March the 2008 count of 517 adults is consistent with the 2007 results. The population after foaling with 17.5% increase will be approximately 607 wild horses. 18% increase would produce a total of 610 wild horses. Should 10% be added to the total observed, the estimated current population of adult horses would be 569, with 2008 post foaling populations of 668-671 wild horses.

Snow was still present in the upper elevations, but had cleared from most south and west facing slopes. Horses were observed as high as 7800 feet in elevation, and favored south slopes that had likely been clear of snow for the longest period.

#### Wildlife

Many groups of mule deer were observed during the flight. Most were located in the central and northern portion of the HMA. A total of 9 groups totaling 80 animals were observed and noted on the census map. West of Wood Springs, a dead cow was observed, and a Bald Eagle feeding on it.

	Wildlife Sightings, March	2006		
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	
0 1 1 1	South Shoshone	0	1 group	
Carico Lake	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				3 4 Defe	* 7 7	\$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					S. S. Marcine		
Cost per horse	\$12.44							
Acres flown (estimate)	986,252	45,660/hour				THE June 1		
Cost per acre flown	\$0.21		19					
Miles Flown	1,437							
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.

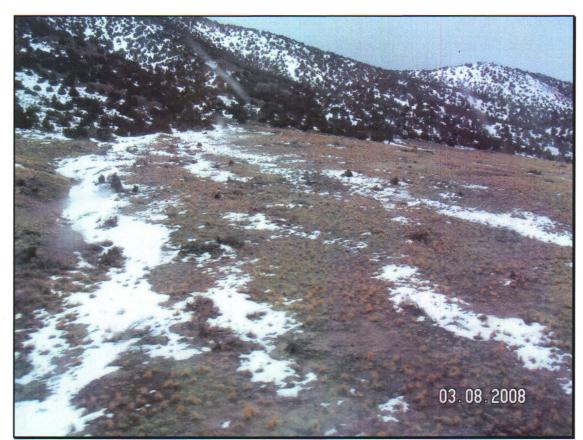
# South Shoshone and Bald Mountain HMA Census March 7-10, 2008



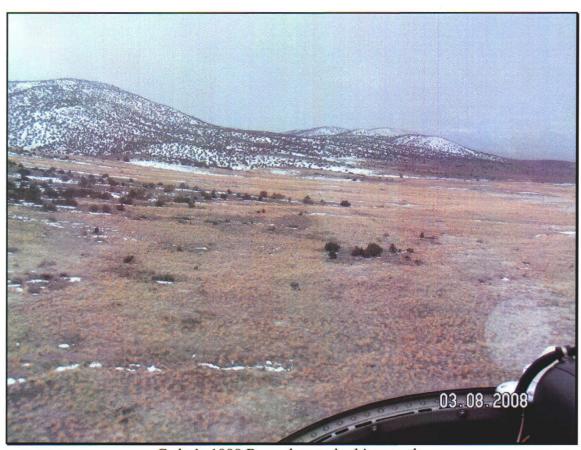
Carico Lake - looking east, Bald Mountain in the background



Cedar's 1999 Burned areas looking south.



Cedar's 1999 Burned areas looking south.



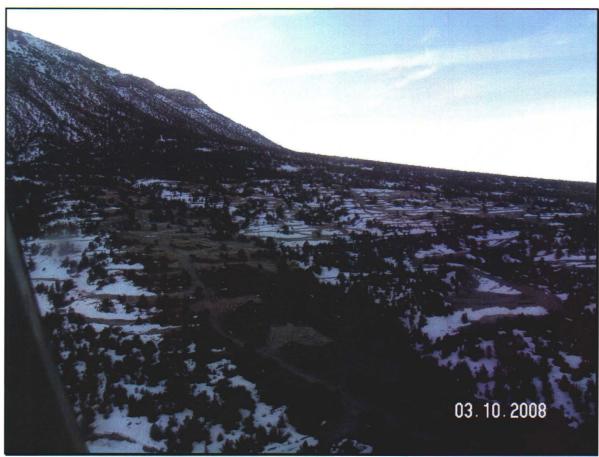
Cedar's 1999 Burned areas looking south.



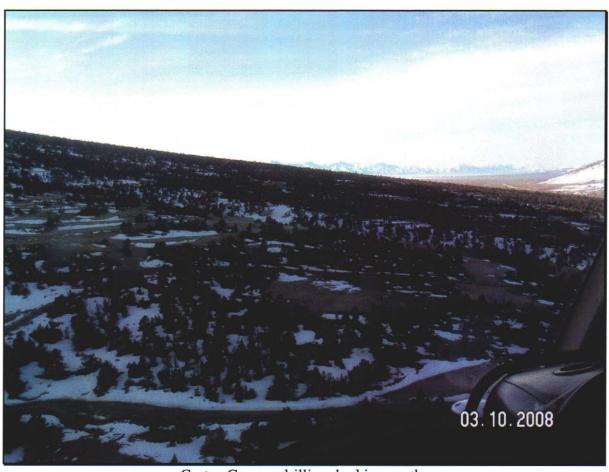
General view of South Shoshone HMA, looking south, north end near Moss Creek.



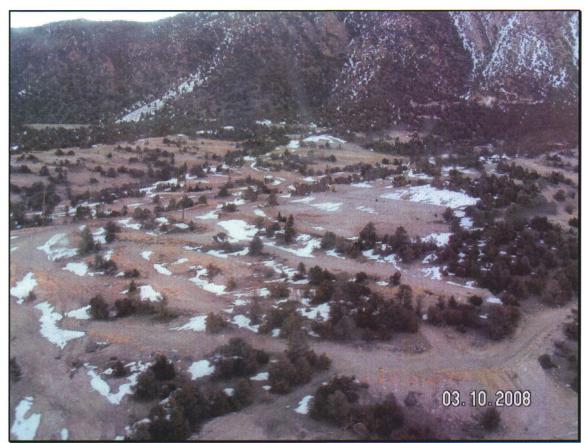
Cortez Mine, looking north.



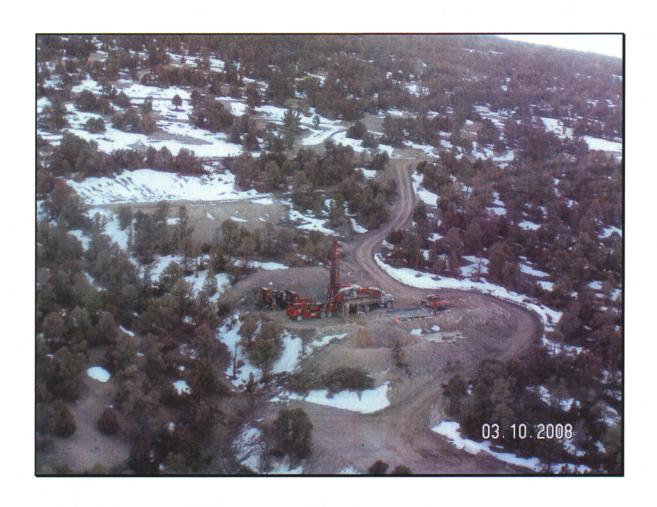
Cortez Canyon drilling, looking south.



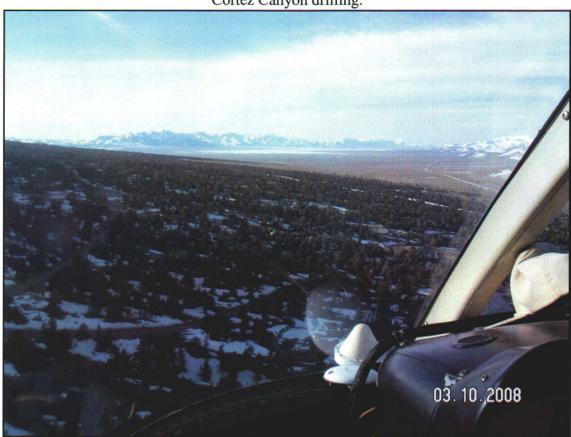
Cortez Canyon drilling, looking south.



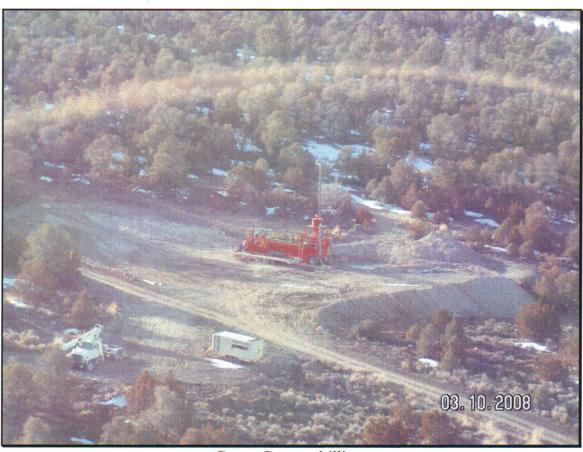
Cortez Canyon drilling, looking south.



Cortez Canyon drilling.



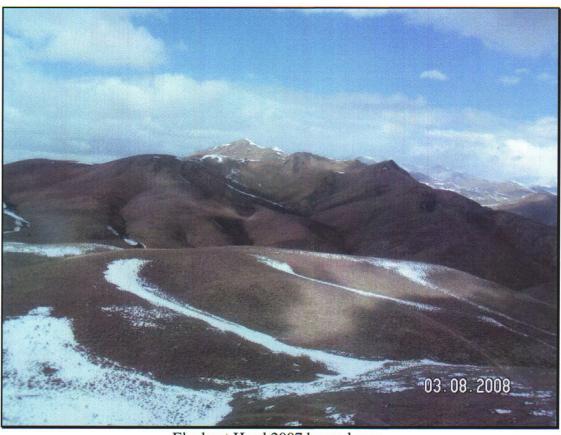
Cortez Canyon drilling.



Cortez Canyon drilling.



Elephant Head 2007 burned area.



Elephant Head 2007 burned area.



Elephant Head 2007 burned area.



Elephant Head 2007 burned area.