

Wednesday October 13th, 2010

Report on Twin Peaks Wild Horse Herd Management Area: Overflight completed on Friday September 24, 2010.

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Pilot of two-seater plane arranged through Lighthawk organization.

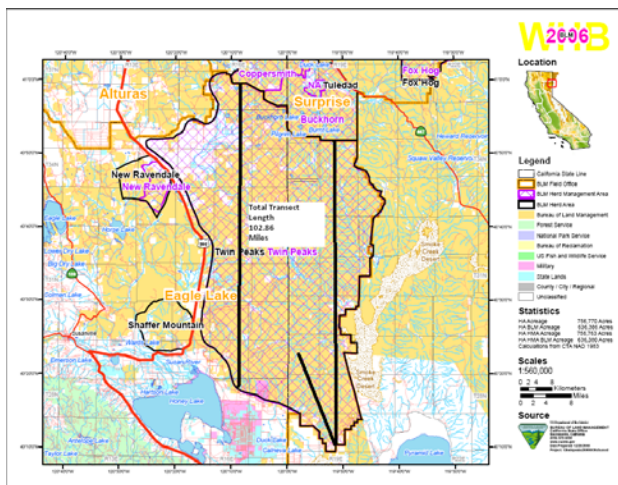
Leave Truckee Airport, California, ca. 10 AM. Return ca. 2 PM. Temperature 40's to 80's F. Clear no clouds. Little wind.

Method: Straight Line Transect for estimating density of wild horses. Photography with digital Nikon D8 camera. Digital recording of observations (Folder D, file 1). Average height of plane above ground: 550 feet. Bands of observation employed in transects: A: 0-50 meters, B: 50-100 m; C: 100-200 m; D: 200-400 m; estimated perpendicular transect distances.

Results: Total of 133.3 miles flown over or very near Twin Peaks wild horse herd management area between 10:54 AM and 12:23 PM (1 hour and 29 minutes duration). The observation area included 400 meters to the West and to the East perpendicularly to the line of flight. As measured from plotted GPS points on map, west side transect was 42.29 miles long, and east side transect was 46.86 miles long, and a north west transect of 13.71 miles: totaling 102.86 transect miles.

Only seven (7) wild horses and zero (0) burros were observed along all transects. I constantly observed while recording my observations on a digital recorder. The pilot was also observing for wild horses and other germane details of the investigation such as springs, livestock, other wildlife.

Transect Map



Calculation and analysis of wild horse density and population in Twin Peaks completed by Jessica Johnston, Environmental Scientist. The calculation of wild horse density includes Band (A) of the aerial survey of the Twin Peaks Aerial Population Estimate completed 9/24/2010.

Twin Peaks Post Roundup Census: Aerial Line Transect Population Estimate Completed

Data

Length of Transects:	L=102.86 mi
Width Band A:	$w_a = 183.3$ m (adjusted for offset)
Height AGL:	550 ft (height above ground level)
HTa=	550 ft (height actual)
HTn =	550 ft (height nominal)
n =	5 horses detected in Band A

Area of the Strip = a_s

$a_s = L * w_a * (HTa/HTn) * 2$ (both sides of transect line)

$a_s = L * (183.3m * 1mi/1609m) * (550/550) * 2$

$a_s = (102.86 \text{ mi}) * (0.113 \text{ mi}) * (1) * (2)$

$a_s = 23.25 \text{ mi}^2$

Density: d

$d = n / a_s$

$n = 5$ horses in Band A

$5 / 23.25 \text{ mi}^2$

$d = .215$ horses / mi^2

Population:

$N = A * d$

$A =$ herd area

$A = 789,852$ acres or $1,234.14 \text{ mi}^2$

$1,234.14 \text{ mi}^2 * 0.215 \text{ horses}/\text{mi}^2$

$N = 265.34$ horses or ~265 horses remaining in the Twin Peaks HMA

Conclusion: The line transects population survey estimates only 265 wild horses remain in the Twin Peaks HMA. The population of wild horses should be restored to the low Appropriate Management Level (AML) of 448 wild horses. In addition, no burros were detected in the survey the population could be dangerously low. BLM plans to maintain 72 burros at low AML leading to inbreeding and mal-adaptation.

Recommendation: Return 187 horses and 159 burros to the Twin Peaks HMA. All burros should be returned to ensure a minimal genetically viable population.

Supporting Population DATA:

The table below estimates the remaining wild horse population in the Twin Peaks HMA.

Twin Peaks: BLM Wild Horse Population DATA					
Year	2006¹	2007	2008	2009^{2/4}	2010²⁵
Inventory	1706 ¹	836	1003	(1599 ²⁴) 1204	(2303 ¹⁵) 1445
20% increase	included	167	(596 ⁴) 201	(704 ⁵) 241	289
Subtotal	1706	1003	1204	1445	1734
Removed	870 ¹	0	0	0	-1639
Returned/Deaths	0	0	0	0	+58/-14
Remaining	836	1003	(1599 ²⁴) 1204	(2303 ¹⁵) 1445	139

Note: BLM reports 793³ wild horses remain in the Twin Peaks HMA. This is contradictory to the historic population data and viable reproductive rates.

References:

1. Twin Peaks EA 2010: Environmental Assessment DOI-BLM-CA-N050-2010-05-EA (pg. 4, 36 and 38)
http://www.blm.gov/pgdata/etc/medialib/blm/ca/pdf/eaglelake/whb.Par.77852.File.dat/TwinPeaksGather_EA_5-17-10.pdf
2. BLM Herd Area Statistics
http://www.blm.gov/pgdata/etc/medialib/blm/wo/Planning_and_Renewable_Resources/wild_horses_ha_hma_final.Par.6745.File.dat/2009HAHMA2009statsnoAMFinalLaphalist.pdf
3. BLM Post Roundup Survey **News Release No.** NC-11-03
http://www.blm.gov/ca/st/en/info/newsroom/2010/october/NC_1103_tpsurvey.html
4. BLM assumed population increase of 37%.
5. BLM assumed population increase of 31%

Number of Cattle Observed in Twin Peaks HMA: All totaled, 186 cattle were observed within the transect bands, mainly around water sources in the HMA during the flight. If 7 horses represent a density of 0.068 individuals per square mile, then by extrapolation 186 cattle represent a density that is $186/7$, or ca. 27 times that of the wild horse. Since the cattle were largely pulled in around the in-holdings around the springs and streams and their meadows during the time of the flight, during their seasons of permitted grazing in other wetter seasons of the year, this number would be much higher. Indeed, 82% of the forage allocation within the Twin Peaks HMA is assigned to livestock by the BLM officials of the Eagle Lake Field Office out of the Susanville BLM District in NE California. This is in spite of the fact that the wild horses are accorded by law "principal" status within their legal herd areas. It is unjust that these officials often ignore many thousands of protests and requests from the general public to grant higher, fairer wild horse numbers and greater forage allocations within their legal HMA's, and this has certainly been the case here in the Twin Peaks HMA.

Wild Horse Description and Ecological Conditions Encountered during Twin Peaks Fly-over: The California side of the HMA was less dry than the Nevada side, though still quite dry. In general, on both the west and the east sides, I could see that the water sources were being appropriated by the ranchers operating in and around the HMA and that their piping off of these sources was having a very serious drying effect upon the soils and the vegetation growing upon them. The cutting of large ditches in some areas and the excavation of large reservoirs have the effect of draining surface water and greatly impoverishing the vegetation. In some areas, alkali crystals covered significant portions of the land. On the east side of the HMA, I observed two bands of wild horses, one male-female pair and another group of five composed of a stallion, 3 mares, and a colt. They were located near rocky cliffs and had been grazing on grassy mesas in the higher reaches of the HMA. They seemed to cling to these remote, rugged redoubts, which perhaps had permitted them to escape the helicopters that had so decimated their numbers.

It should be noted that many of the golden, grassy swards we overflowed and for which wild horses and burros, as post-gastric digesters, are pre-adapted to graze without over-expending metabolic energy, would now be more prone to fire. Many such fires are caused by lightning strikes that accompany thunder storms, especially prevalent during summer months in the Great Basin.

Recommendation: A much better wild horse habitat could be allowed in this vast HMA if the water tables were to be restored and a much fairer allocation of forage were to go for the wild horses. I would recommend at least 50% for the wild horses in the area and a restoration of at least 1,000 horses at least 200 burros here. Many of those just gathered should be set back reproductively intact.

A Further Observation: This concerns the location of the Twin Peaks HMA itself. To have been located in such dry and barren areas indicates an initial unfairness toward the wild horses, and I wonder whether “where found in 1971” used to establish the herd areas was initially honestly applied. That these resourceful animals still manage to survive here in spite of this is a testimony to their ingenuity, their suitability to desert habitat, and their tenacity. This is something to be admired rather than despised. Indeed, the wild horses and the burros of Twin Peaks HMA are a great asset to the region. They enhance the diversity of species by contributing to soils and seeding many plants, by serving as a prey and a scavenged species, plus they are remarkably beautiful and spirited presences, inspiring to artists, writers, photographers, naturalists and even musicians, both locally and nationally, even world-wide. But whether we capture their images or sounds, just to witness them, some would say just to know they're there safe and sound in some of the vast and scenic regions of the West gives a sense that “God is in Heaven and all is well with the world.” In other words, it is essential there remain places where such magnificent creatures are still free to roam, to pursue their age-old course and to perfect themselves over time, according to the Higher Plan, that includes us all.