

BLM's Fertility Control Program

The Bureau of Land Management has promoted and supported the development of an effective contraceptive agent for wild horses since 1978. The most promising agent is a Porcine Zona Pellucida (PZP) vaccine that was developed in the 1990s, but is not commercially available. PZP is used by the BLM under an investigational new animal drug exemption issued by the Food and Drug Administration (FDA) that is held by the Humane Society of the United States.

The most effective formulation is a one-year vaccine that must be re-administered annually. However, it is not feasible to gather wild horse herds every year to administer the vaccine, and darting is generally not feasible because it is difficult to approach most wild horses on Western rangelands. So the BLM uses a 22-month pelleted PZP agent that must be administered to mares after they have been captured. This means that more mares need to be captured (for treatment and release) than will actually be removed from the range. Maximum effectiveness is achieved when the mares are treated during a three-to-four month window prior to foaling.

Since 2004, the BLM has administered the pelleted vaccine to 2,746 mares (see the table below) on 76 of its 179 herd management areas (as of the Paisley gather), but significant reductions in the rate of population increase have not yet been apparent. Preliminary analysis of the data from the McCullough Peaks herd, which was treated in 2004, indicates that treated mares had a 30 to 40 percent foaling rate.

The BLM believes that there is potential for savings in reduced removal and holding costs through the use of fertility control in wild horses. When a herd is treated, these savings will not be realized or apparent until the next time the herd is gathered, which would normally be three to five years later.

In areas with large horse populations that are three to four times the appropriate management level (AML), it is difficult to capture enough additional mares to treat a significant number and release them back to the range. Once enough horses have been captured to bring the population down to AML, catching the small number of remaining horses becomes challenging because they are scattered over large areas and many have learned to avoid the helicopter. Greater numbers of mares could be treated if herds at AML were gathered for the primary purpose of fertility-control treatment with no or limited removal.

In 2008, the BLM approved a research proposal from the Humane Society of the United States to study the efficacy of the 22-month vaccine, the means of applying it, and behavior of the treated mares on two herd management areas in Utah and Colorado. This work is supported under a research grant from the Annenberg Foundation.

The BLM is also continuing research to determine the effects of fertility control on the rates of population growth and to develop a longer-acting agent. The Bureau will continue to treat herds where practical, but cost savings from reduced reproduction rates will not be realized in the immediate future.

Table 1: Population Level Fertility Control Treatments (2004-2010)

(Report date – January 20, 2010)

| FY | | | # of Mares Treated |
|-------------|---|----------------|---------------------------|
| 2004 | 15 Herd Management Areas (HMAs) | | 763 |
| 2005 | 10 HMAs | | 425 |
| 2006 | 12 HMAs | | 333 |
| 2007 | 7 HMAs | | 133 |
| 2008 | 3 HMAs | | 154 |
| 2009 | 16 HMAs | | 588 |
| | | | |
| | FY 2004-2009 Totals | 63 HMAs | 2,396 |
| | | | |
| 2010 | Completed treatments FY 2010 | | |
| | McCullough Peaks HMA | WY | 17 |
| | Red Desert Complex (5 HMAs) | WY | 192 |
| | Garfield Flat | NV | 21 |
| | Onaqui | UT | 19 |
| | Four Mile | ID | 4 |
| | Sands Basin | ID | 3 |
| | South Steens | OR | 59 |
| | Buckhorn | CA | 20 |
| | Paisley | OR | 15 |
| | Completed treatments through Paisley HMA | 13 HMAs | 350 |
| | Projected total from gathers after Paisley to end of FY 2010 | 9 HMAs | 400 |
| | | | |
| | FY 2004-2010 totals (estimated to end of year FY 2010) | 85 HMAs | 3,146 |
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