Estimates of the Annual Increase in Unwanted Horses and the Horse Rescue Capacity in the State of Colorado

Colorado Unwanted Horse Alliance
December 2009

Introduction
As defined by the American Association of Equine Practitioners in 2005, unwanted horses are defined as those “which are no longer wanted by their current owner because they are old, injured, sick, unmanageable, fail to meet their owner’s expectations, or their owner can no longer afford them.”\(^a\) It is estimated that 170,000 horses became unwanted in the United States in 2007.\(^a\) This estimate is based on the numbers of horses processed in the United States, exported to Canada and Mexico for slaughter, maintained in Bureau of Land Management sanctuary and adoption programs, or that that suffer reported abuse and neglect.

A series of calculations based on published figures was performed to estimate the magnitude of the unwanted horse issue in the State of Colorado in 2009. These estimates include the number of horses that became unwanted in the state, the annual capacity of Colorado horse rescues and sanctuaries and the annual number of unwanted horses that cannot be accommodated by the state’s rescue system. It is important to note that the annual number of unwanted horses is in addition to those that exist from previous years, and that the dynamics of the increasing number coupled with their disposition by various means makes it impossible to accurately estimate the total population of unwanted horses at any given time.

Key Findings
- It is estimated that approximately 6,000 horses became unwanted in Colorado in 2009.
- It is estimated that Colorado horse rescues and sanctuaries have an annual capacity for approximately 1,600 horses.
- It is estimated that 74% of the annual increase in unwanted horses cannot be accommodated by Colorado horse rescues and sanctuaries in 2009.

Methods and Results
First, based on estimates of the total number of horses in the United States and Colorado and the national annual increase in unwanted horses, the number of horses that became unwanted in Colorado in 2009 was estimated:

1) Calculation of the annual percentage of horses in the United States that are unwanted:

\[
\text{(Annual number of horses that become unwanted in U.S. / Total number of horses in U.S.) } \times 100
\]

\[= \text{Annual percentage of unwanted horses in U.S.}\]
(170,000 horses\(^a\) / 9,200,000 horses\(^b\)) \times 100 = 1.8\%

2) Calculation of the total number of horses in Colorado in 2009:

   a) (Total number horses in Colorado in 2005 – Total number horses in Colorado in 2000) / 5 years = Change in total number of horses in Colorado per year

   \(\frac{255,500 \text{ horses}^c – 145,000 \text{ horses}^c}{5 \text{ years}} = 22,100 \text{ horses/year}\)

   b) (Total number of horses in Colorado in 2005) + (4 years \times \text{Change in total horses in Colorado per year}) = \text{Total number of horses in Colorado in 2009}

   \(255,500 \text{ horses}^c \times (4 \text{ years} \times 22,100 \text{ horses/year}) = 343,900 \text{ horses}\)

3) Calculation of the number of horses that became unwanted in Colorado in 2009:

   \text{Total number horses in Colorado in 2009} \times \text{Annual percentage of unwanted horses in U.S.}

   = \text{Number of horses that became unwanted in Colorado in 2009}

   \(343,900 \text{ horses} \times 1.8\% = 6,190 \text{ horses}\)

Assumptions:
- The national and state horse censuses are accurate.
- The growth in the Colorado horse population has been linear from 2000 to 2009.
- The percentage of unwanted horses in Colorado is equal to the national average.

Second, the annual horse rescue and sanctuary capacity in Colorado was estimated:

1) Calculation of the Colorado horse rescue and sanctuary capacity:

   a) 61% of Colorado horse rescues have a combined capacity of 611 horses\(^c\)

   b) Colorado horse rescue capacity = (611 horses \times 100\%) / 61\% = 1,002 horses

2) Calculation of the annual horse rescue capacity in Colorado including turnover rate:

   a) Colorado horse rescue capacity + (Colorado horse rescue capacity \times \text{Annual turnover rate}) = \text{Annual Colorado horse rescue capacity}

   \(1,002 \text{ horses} + (1,002 \text{ horses} \times 60\% \text{ per year}^c) = 1,603 \text{ horses per year}\)

Assumptions
- The horse capacity per rescue is linear.
• All horse rescues in Colorado have equal turnover rates.

Third, the number and percentage of the annual increase in unwanted horses that cannot be accommodated by rescues or sanctuaries was calculated:

1) Calculation of the annual increase in unwanted horses that cannot be accommodated at Colorado horse rescues:

   a) Annual increase in unwanted horses in Colorado – Annual Colorado horse rescue capacity = Annual increase in unwanted horse that cannot be accommodated

       6,190 horses – 1,603 horses = 4,587 horses

2) Calculation of the percentage of the annual increase in unwanted horses in Colorado that cannot be accommodated by horse rescues or sanctuaries:

   a) (Annual increase in unwanted horses that cannot be accommodated by Colorado horse rescues / Annual increase in unwanted horses in Colorado) x 100 = Percentage of the annual increase in unwanted horses in Colorado that cannot be accommodated by horse rescues and sanctuaries

       (4,587 horses / 6,190 horses) x 100 = 74%

Assumptions:
• The estimates used in the calculations are accurate.

References
