

Population dynamics of Australian feral horses in a semi-arid environment

Kampmann, S.▪▪, Hampson, BA.♦♦, A, Pollitt, CC. ♦♦

- The Australian Brumby Research Unit
- Christian-Albrechts-University of Kiel
- ♦The School of Veterinary Science, The University of Queensland

Introduction: The feral horse population of Australia is the largest in the world and, in average seasons, increases at a rate of approximately 20% per annum. Recent record rainfall in much of semi-arid Central Australia has led to a population increase in excess of normal rates and this project aimed to document the increase. Uncontrolled feral horse numbers have habitat degradation and horse welfare implications and were the reasons for performing the study.

Materials and Methods: The study area was an unmanaged 4,000km² semi-arid area in Central Australia (Lat 24.50, Long 132.10). The population of feral horses within the study area is estimated to be in excess of 10,000. During an 8 week period at the end of the winter season of 2011, horses were identified by ground searches, movement sensor cameras and from hides positioned at key water holes. The area surveyed represented only a small percentage of the overall habitat. Horses were identified by descriptive features and markings. Where possible, sex and age category were documented. Population growth rate was estimated from the observed sample and was expressed as the number of foals born in the current year, divided by the number of horses older than one year.

Results: A total of 1,486 horses were identified and categorised, of which 335 were foals born within the current foaling season. Only 129 juveniles, presumably born in the preceding year, were identified. Of the adult horses, 54% were male and 46% were female. Seventy-four percent of mares (n=452) had a foal at foot and the population growth rate was 29%.

Conclusion: With a sustained population growth rate of 29%, this population of feral horses will more than double within 3 years. The high rate of increase is concerning because it will negatively impact on the native fauna and flora and fragile semi-arid ecosystems of Central Australia. In addition the feral horses of the study area have experienced an unusual period of high rainfall and plentiful grazing but a return to normal

drought conditions is imminent. Starvation, thirst and death from diminished resources will then be a serious welfare concern for horses.

Corresponding author:
Svende Kampmann

Tel.:
Fax.:
E-mail: