

Use of Llamas as livestock guarding animals to limit the incidence of sheep predation by wild dogs (*Canis lupus dingo*) and foxes (*Vulpes vulpes*).

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ABSTRACT

Livestock guarding animals (LGA's) are used across the United States and Europe to limit the incidence of predation by native and introduced predators on domestic livestock. Within Australia dog breeds such as Maremma, Anatolian mastiff (Karabash) and Great Pyrenees are currently in use along with Alpacas, Llamas and in some cases donkeys. The use of Llamas as LGA's for the protection of sheep from wild dog attack has gained popularity within S/E New South Wales over the last 5 years. A number of innovative trials have been undertaken by wild dog management groups which identify a consistent decrease in the incidence of wild dog attacks within paddocks where sheep are guarded by Llamas.

A Llama trial funded by NSW National Parks and Wildlife Service (NSW DECC) has been in place within the Hume Rural Lands Protection Board area since 2004 with a similar trial, also funded by NSW NPWS, being implemented in 2006 under the Brindabella Wee Jasper and Adaminaby Yaouk wild dog working groups. The provision of funding allowed the purchase or lease of 21 Llamas for a two year trial period across 13 properties. Landholders were provided with support and advice over the term of the trial period and given the option of purchasing or returning Llamas at the completion of the trial. To date all Llamas have remained on properties upon completion of each trial with a number of landholders experiencing significant reductions in stock loss from wild dog attack along with a marked increase in lambing rates.

A number of Llama and sheep husbandry practices have been identified which allow Llamas to operate more effectively as livestock guarding animals. In order for Llamas to protect sheep from wild dog or fox attack they must be sufficiently bonded to the sheep they are tasked to protect. Bonding should be undertaken with a small mob of approximately 10 to 20 sheep in a small paddock for at least 1 week. Llamas and sheep are likely to avoid each other if this bonding process is not undertaken. Single Llamas as livestock guards appear to be most successful however cases exist where multiple Llamas have provided protection. Increasing the number of livestock guards is unlikely to result in more effective guarding as multiple Llamas will often form their own group for protection rather than bonding with sheep. This is also the case where single Llamas adjoin along a common fence line. Only female or gelded male Llamas should be used as livestock guards as entire males have been known to cause crush injuries and even death in ewes by mounting them. Llamas younger than two years of age have been found to be less effective than older animals. On average a ratio of 300 sheep to each Llama within a 20 to 30 hectare paddock with good lines of sight appear to be most successful.

The reduction in purchase price of Llamas over the last five years provides an opportunity for landholders within wild dog affected areas to add livestock guarding animals to their stock management system. Although a thorough research project identifying the benefits of livestock guarding animals is required within Australia anecdotal advice from landholders across a number of areas consistently highlight the benefit of Llamas as a valuable addition to existing wild dog control methods.

References.

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