

## AWMS POSITION STATEMENT Grazing Domestic Livestock on Protected Areas

Australasia's climate is highly variable. Extreme weather and weather-related events such as prolonged drought, periodic floods, and widespread fire have exerted a profound influence on the evolution of native vegetation and wildlife, and continue to be an important factor affecting the condition of wildlife habitat at any particular time. In this context the amount and quality of both consumable and non-consumable resources available to wildlife vary greatly across time and space. Accordingly the density and range of wildlife also varies markedly as the habitat that supports the wildlife changes over time.

This ebb and flow climate-mediated resources is a natural phenomenon that has been a feature of the regional natural environment for many millennia. In response to this resource flux wildlife populations have no doubt expanded and contracted, often using ecological refugia as strongholds when resources were scarce. However, in the modern era the ability of wildlife to move across the landscape to escape resource shortages and to take advantage of ecological refugia has been compromised by a reduction in wildlife numbers, fragmentation of habitat and the placement of barriers to movement such as urban areas and infrastructure.

One management response to this disruption of the historical pattern of wildlife density and range fluctuations has been the declaration of national parks, nature reserves and other protected areas where human exploitation of resources is limited so that more resources are available for wildlife. This function of protected areas is especially critical during times of resource shortage, such as during a drought, where wildlife has been limited in their ability to move to follow resource availability and where resources in the wider landscape have been appropriated for human-related uses.

Hence protected areas fulfil many functions. They protect native flora and fauna from influences that may directly affect their numbers and range, e.g., hunting, disease, and invasive species, and also allow them greater access to resources such as food, water and shelter that are more likely to have been appropriated for other purposes, e.g. forage for cattle and sheep, on non-reserved lands. Protected areas are also more likely to provide wildlife with access to resources that have been removed or modified in unprotected landscapes so that they are no longer useful or adequate for wildlife, e.g. fewer tree nesting hollows or diminished vegetation structure and composition.

The above functions of protected areas are only possible where the offtake and modification of resources is limited by the land uses which are permitted on that protected area. Essential resources can be limited or rendered unavailable to wildlife if activities that affect the flow and condition of resources are permitted within protected areas. Offtake of resources occurs where domestic livestock are grazed in protected areas, thereby removing fodder and cover that would otherwise have been available to native wildlife. Disruption of the availability of resources can occur through activities associated with grazing domestic livestock, such as trampling and browsing undergrowth, removal of seed and seedlings, spread of invasive plant seeds, terracing, enhanced soil erosion, and fouling waterways.

Grazing domestic livestock on protected areas can also have unexpected effects that are not directly related to the supply of resources. Grazing can affect the interactions between native wildlife and vegetation that already exist on the protected area. Just one example is the evidence that grazing can trigger an increase in the numbers of the native passerine,

Noisy Miner *Manorina melanocephala*, which in turn causes disruption of the existing avifauna and potential deleterious cascading effects through the avifaunal community (Howes and Maron 2009)

One recent policy response to drought has been to allow domestic cattle to graze in protected areas in some Australian jurisdictions. Retaining feral horses in alpine protected areas has also been advocated by some sectors of society for some time.

**Based on the above, THE AUSTRALASIAN WILDLIFE MANAGEMENT SOCIETY:**

- **RECOGNISES** that protected areas of different types are a cornerstone of the wildlife conservation effort in Australasia.
- **RECOGNISES** that, although there is uncertainty about the exact habitat requirements of some species of wildlife, the extent to which protected areas can provide refuge for wildlife is compromised when resources are either taken from protected areas or where activities within protected areas modify the abundance and structure of non-consumable resources.
- **UNDERSTANDS** that grazing domestic livestock can bring weed seeds into protected areas and by degrading protecting areas they promote the potential for weed spread
- **ACKNOWLEDGES** that there are alternate land uses that could be applied to most areas of the earth's surface, but **RECOGNISES** that some competing land uses are incompatible with allowing ecosystems to function in a way that provides significant and lasting conservation benefit for native wildlife.
- **ACCEPTS** that agricultural enterprises are affected by weather events in a similar way to other ecosystems
- **RECOGNISES** that protected areas are a small proportion of the total Australasian landscape when compared to the area devoted to grazing domestic livestock and intensive agriculture.
- **ACCEPTS** that in some locations there is good evidence that where native grazers have been extirpated or reduced in numbers, grazing domestic livestock in protected areas is beneficial to the management of habitat for native endangered species (e.g. grazing sheep to manage for the persistence of Grassland Earless Dragons, *Tympanocryptis pinguicolla*).
- **NOTES** that the total number of domestic livestock that can be grazed on protected areas is a small proportion of the domestic herd and therefore the economic and social benefit gained from grazing domestic livestock on protected areas is limited and localised, **WHEREAS** the wildlife contained within a protected area may be totally and permanently dependent on the resources available within that reserve and may be a very large proportion of the total extant population of a species.
- **ACCEPTS** that grazing domestic stock on protected areas at times of extreme environmental stress, such as drought, may have permanent consequences for some wildlife populations by withdrawing resources when they are most critically short (Morton 1990).
- **CONTENDS** that, in addition to the above, there are hidden monetary costs involved in grazing domestic livestock on protected areas for private purposes such as fencing and provision of water. These costs cannot be fairly deemed a legitimate cost of managing a protected area and should not be charged to the conservation budget.

**Accordingly, THE AUSTRALASIAN WILDLIFE MANAGEMENT SOCIETY recommends that:**

- Grazing domestic livestock in protected areas compromises the ability of protected areas to provide important resources to wildlife, and should only be permitted where they are designed to provide a net benefit for wildlife or ecosystems, there are no other viable and less damaging alternatives and that benefit can be scientifically demonstrated.
- Management of all protected areas should strive to exclude all domestic and feral herbivorous animals to avoid or minimise the effects described above.
- Protected areas should be declared in areas that are known ecological refugia.
- Where livestock grazing has been permitted on protected areas contrary to the conditions in point 1, the cost of related infrastructure and remediation should not be borne by the conservation agency concerned with management of that reserve, and
- The entire non-urban landscape should be managed to maximise the opportunities for native wildlife to move in responses to changes in resource availability

### **References**

Howes, A. L., & Maron, M. 2009. Interspecific competition and conservation management of continuous subtropical woodlands. *Wildlife Research* 36: 617-626.

Morton 1990, *Proc. Ecol. Soc. Aust* 16:201-213

*This position statement reflects the content of cited papers and the opinions of the authors. While the views expressed in this position statement have been circulated for comment within the Society, they do not necessarily reflect the views of the AWMS committee or all AWMS members. AWMS makes no claim as to the accuracy of this document and any party using this information does so at their own risk.*