

# CHAPTER 1

## LARGE FERAL ANIMALS IN THE NORTHERN TERRITORY

### Introduction

1.1 The Northern Territory, which covers over one-sixth of the Australian continent, contains a variety of habitats in which numerous species of wildlife live. These habitats range from the tropical north or Top End to the arid desert regions in the south. Several feral animals, including large mammals, inhabit these regions. Maps showing national distribution of large feral animals appear at Appendix 4.

1.2 Feral animals in the Northern Territory include introduced wild animals such as rabbits, foxes and deer. They also include livestock which have reverted to the wild after being kept domestically. Feral livestock include buffalo, cattle, horses, donkeys, camels and pigs. Table 1.1, on the following page, shows population estimates of large feral animals in the Northern Territory. As is the case with other parts of Australia, the climate and topography of the Territory are harsh and often unforgiving. Droughts can devastate feral animal populations. In the process of struggling for survival in these conditions, feral animals can cause substantial damage to the environment and economic loss to primary producers and to the nation.

1.3 In its evidence to the Committee, the Northern Territory Government recognised that the abundance and variety of feral animals in the Territory are unparalleled anywhere in the world and that it has a major feral animal problem.<sup>1</sup> Mr Graeme Davis, Principal Wildlife Management Officer, Conservation Commission of the Northern Territory, explained the extent of the problem in the following terms:

We have far and away the largest feral animal problem in Australia. It ranks amongst the worst in the world in terms of the numbers and the range of species of feral animals.<sup>2</sup>

1.4 In the following section of the report, the Committee reviews evidence on the origins, distribution and abundance of several large feral animals that are found in the Northern Territory.

### Water Buffalo

1.5 Water buffalo (*bubalus bubalis*) are large animals, standing on average 180 cm high at the shoulder at maturity and weighing between 450 and 1180 kg.<sup>3</sup> They organise into small, tightly knit matriarchal family groups. For most of the year, cows and calves are segregated from bulls, that live in bachelor herds or singly.

**Table 1.1: Population Estimates of Large Feral Animals  
in the Northern Territory (1990)**

<b>SPECIES</b>	<b>REGION</b>	<b>POPULATION ESTIMATE</b>
Buffalo	Arnhem Land	65803 ± 6251
	Darwin	48669 ± 9662
	Katherine/Tennant Creek	8130 ± 2260
Camels	Tennant Creek	157 ± 242
	Alice Springs	4664 ± 1462
	Simpson Desert	10723 ± 5592
Donkeys	Victoria River District	64162 ± 11228
	Gulf Region	5860 ± 3207
	Tennant Creek	5118 ± 3079
	Alice Springs	6156 ± 3151
Horses	Darwin	13432 ± 5234
	Victoria River District	25960 ± 5478
	Gulf Region	30100 ± 5750
	Tennant Creek	27260 ± 3712
	Alice Springs	54772 ± 8961

**Note:** Information supplied to the Committee by the Northern Territory Government is based on several published reports on aerial surveys of feral animals conducted between 1986 and 1989.

**Source:** *Evidence*, Northern Territory Government, p. 52.

1.6 Buffalo are wallowing herbivores, grazing in areas close to water on plants such as water couch and phragmites. During wet seasons, buffalo use regular routes to swim and walk between high grounds where they graze.<sup>4</sup>

1.7 Water buffalo were introduced into the Territory's Top End in 1825 as beasts of burden and a source of food. Soon after, buffalo went wild and their numbers increased. Buffalo numbers, however, were contained through hunting for buffalo hides. Following the collapse of this market in the mid-1950s, the buffalo population increased rapidly. In 1985, the number of buffalo in the Northern Territory was estimated at 340,000. The Northern Territory Government advised the Committee that buffalo numbers, based on aerial surveys conducted in 1989, have been reduced to between 105,000 and 140,000.<sup>5</sup>



*"Large feral animals, particularly water buffalo present an unacceptable environmental and health threat in Kakadu National Park". Evidence, ANPWS, p. 526.*

## **Horses**

1.8 Horses (*equus caballus*) arrived in Australia just over two hundred years ago with the first European settlers on the east coast of the continent. Domestic horses that escaped or were released became established in the wild and by the 1830s "bush horses" were plentiful in the hills around Sydney. The number of uncontrolled horses increased as pastoral development spread. It has been suggested that feral horses, or brumbies, had reached the Northern Territory by the 1870s.

1.9 Areas within the Northern Territory are well suited for breeding horses. In the late nineteenth century, stations, particularly in central Australia, were established to supply army remounts. However, with the demise of mounted cavalry after the First World War, many of these horses “were simply left to roam free”.<sup>6</sup>

1.10 Feral horses form either harems or bachelor groups. Generally, a harem consists of an adult male, one or more adult females and their offspring. The Committee was advised that a stallion may control as many as 14 mares. Bachelor groups consist of two-to-four-year-old males which have been forced out of family groups.

1.11 Feral horses are highly adapted for fast, free movement across open grassy areas. This mobility allows horses to graze further from water than cattle. The Committee was told that feral horses can walk up to 50 km from water to feed. Horses feed predominantly on grasses and their incisor teeth allow them to graze close to the ground. Unlike cattle, horses do not ruminate and therefore have more time to be selective during grazing. In central Australia, feral horses predominate in rugged terrain with permanent water but prefer grassy flats when food is available. They are opportunistic feeders, eating emergent and submergent plants, roots, bark, buds and fruit.



*“After rain, when there is grass everywhere, horses will be found on the flats close to water eating the most palatable species of grass”. Evidence, Conservation Commission of the Northern Territory, p. 122.*

1.12 It has been estimated that there could be 300,000 to 600,000 feral horses in Australia.<sup>7</sup> Australia's feral horse population is significantly greater than that of any other continent, the next largest population existing in North America, where there are 40,000 to 80,000. In the Northern Territory alone, there are approximately four times as many wild horses as there are in the United States of America.<sup>8</sup>

1.13 In the early 1980s, there were about 200,000 feral horses in the Territory, 80,000 of which were located in central Australia around Alice Springs. The Northern Territory Government advised the Committee that feral horse numbers in the region of Alice Springs are now approximately 54,000.<sup>9</sup>

## **Cattle**

1.14 European cattle breeds (*bos taurus*) and humped zebu breeds (*bos indicus*) were introduced into Australia for beef production. Some of these cattle have become feral while others are unmanaged because of economic constraints on mustering. The number of feral cattle in the Northern Territory has been reduced significantly as a result of recent stock disease measures and modern mustering techniques. It is thought that there are still approximately 100,000 feral cattle in the Territory.

1.15 Banteng cattle (*bos javanicus*) were imported from Java over 150 years ago to the Cobourg Peninsula of the Northern Territory. Unlike other feral animals in the Territory, banteng cattle have not spread into other regions. There are now about 3,000 banteng cattle on the Cobourg Peninsula.<sup>10</sup>

## **Camels**

1.16 Camels (*camelus dromedarius*) were imported into Australia in the middle of the nineteenth century and used extensively in the exploration and development of the arid interior. Following the mechanisation of transport in the 1920s, the use of camels declined. Camels which were abandoned or escaped from stations adapted readily to arid areas of the Simpson Desert and west of Alice Springs into the Gibson and Great Sandy Deserts of Western Australia.

1.17 The camel stores fat reserves in its hump for use during times of stress and its broad-padded feet allow it to travel in sand. The camel has other anatomical and physiological features that allow it to occupy successfully the drier regions of the Australian interior. These features include body temperature control, minimal water loss through excretion and rapid rehydration.<sup>11</sup>

1.18 Australia is now the only country in the world that has wild camels. Current population estimates, based on aerial surveys, indicate that there are over 25,000 camels in the Northern Territory.<sup>12</sup>

## **Donkeys**

1.19 In the 1860s, donkeys (*equus asinus*) were imported into the Northern Territory for use in teams for freight haulage and as pack animals. They were used in central Australia and also in areas such as the Victoria River District where poisonous plants restricted the use of horses. Improved roads and mechanised transport resulted in fewer uses for donkeys. Abandoned or released donkeys multiplied and by the late 1960s there were feral donkeys in most districts of the Northern Territory, the Kimberley and Pilbara regions of Western Australia as well as parts of South Australia and Queensland.<sup>13</sup>

1.20 Donkeys thrive in areas unsuitable for horses and cattle. They eat a wider range of vegetation and graze further away from water. The Northern Territory Government has estimated that the population of feral donkeys in the Northern Territory may be as many as 90,000 head.<sup>14</sup>

## **Pigs**

1.21 Australia is the only continent without a native pig population. However, following their introduction as a source of food by the early European settlers, feral pig (*sus scrofa*) populations became established in most climatic regions of Australia. Significant numbers of feral pigs are now found in western Victoria, through New South Wales and Queensland and across northern Australia, from Cape York to the Kimberleys.

1.22 Feral pigs eat a wide range of food, including crops and pastures, and prey on lambs and small native animals. They wallow and root around the margins of waterholes and swamps, destroying vegetation and damaging the root systems of trees.

1.23 The number of feral pigs in Australia has not been determined but it is thought that it is in the millions. The Northern Territory's pig population, concentrated in the tropical north, is probably in the hundreds of thousands.<sup>15</sup>

## **Other Feral Animals**

1.24 Although evidence to the Committee concentrated on the feral animals referred to in previous paragraphs, several other feral animals inhabit areas of the Northern Territory. These feral animals include rabbits, foxes, goats and cats.

## ENDNOTES

1. *Evidence*, Northern Territory Government, p. 51.
2. *ibid.*, p. 4.
3. *Evidence*, Australian National Parks and Wildlife Service, p. 516.
4. Australian National Parks and Wildlife Service and Bureau of Rural Resources, *Feral Animals in Australia*, AGPS, Canberra, 1990, p. 8.
5. *Evidence*, Northern Territory Government, p. 52.
6. Australian National Parks and Wildlife Service and Bureau of Rural Resources, *op.cit.*, p. 2.
7. *ibid.*
8. Conservation Commission of the Northern Territory, *Environment 90 — Feral Horses in the Northern Territory*, Palmerston, 1990, pp. 1-2.
9. *Evidence*, Northern Territory Government, p. 52.
10. *ibid.*, p. 6.
11. *ibid.*, p. 4.
12. *ibid.*, p. 52.
13. Australian National Parks and Wildlife Service and Bureau Rural Resources, *op.cit.*, p. 3.
14. *Evidence*, Northern Territory Government, p. 52.
15. Australian National Parks and Wildlife Service and Bureau of Rural Resources, *op.cit.*, p. 7.  
Conservation Commission of the Northern Territory, *Environment 90 — Feral Pigs in the Northern Territory*, Palmerston, 1990, pp. 1-2.