



Deer

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Fallow Deer

Liberation and Behaviour

Until 1978 it was not generally considered that Fallow deer could adapt to an intensive farming situation.

The Fallow deer (*Dama dama*) was an inhabitant of the Mediterranean area and was introduced into England and Scotland in the pre-glacial times. Later Fallow deer were kept "to contribute to the pleasure purely of the great" and became feral in England and Scotland. At present, by virtue of their adaptability, Fallow deer are widely distributed throughout England and Scotland.

There are two sub-species of Fallow deer:

- Fallow deer (*Dama dama linnaeus*) of Europe and countries bordering the Mediterranean, and;
- Fallow deer (*Dama dama mesopotamica*) generally described as the Persian or Mesopotamian Fallow deer, which has an extremely limited distribution in Southern Iran (Persia). This species may now be extinct.

Table 1: Liberation of Fallow deer in New Zealand.

Year of liberation	Number liberated	Place of liberation	Person or authority responsible	Remarks
1864	3	Aniseed Valley, Nelson.	Nelson Acclimatisation Society.	Successful and herd still present.
1867	4	Blue Mountains.	Otago Acclimatisation Society.	Successful and thriving.
1869	12	Blue Mountains.	Otago Acclimatisation Society.	Successful and thriving.
1870	1	Blue Mountains.	Otago Acclimatisation Society.	Successful and thriving.
1870	(Not known)	Kawau Island.	Sir George Grey.	Successful still present.
Probably 1870		Motutapu Island.	Probably Sir George Grey.	Successful still present.
1887	18	Maungakama Ranges, Waikato.	Auckland Acclimatisation Society.	Still present small numbers.
1887	10	Wanganui.	Auckland Acclimatisation Society.	Well established.
1887	7	Totara Flat, Westland.	NZ Government.	Successful and well established.
1899	4	Cairn Bush.	Otago Acclimatisation Society.	Unsuccessful.
1900	2	Kapiti Island.	Wellington Acclimatisation Society.	Unsuccessful.
		Sth Kaipara Head.	2 Separate liberations.	Successful.
		Selwyn Island.		
		Tauranga.		
		Takakū Valley.	No information.	
		Lake Wakatipu.		

Liberation in New Zealand

It is believed that most imported stock came from England (Table 1) and were liberated for sport, but no attempt was made to confine them to parks as in England. The Aniseed Valley, near Nelson, was stocked with deer from Richmond Park, Surrey. Deer liberated in Otago and Southland were obtained from Australia.

Fallow deer were liberated in South Kaipara from two sources:

- Fallow deer were brought over from Sir George Grey's herd on Motutapu Island by the Buckland family and liberated early in the 1900s.
- Fallow deer originating from a zoo in Otahuhu were also liberated on to South Kaipara Head.

It was not until the winter of 1978 that Fallow deer farming got under way. The farming policy pre winter 1978, was to shoot out the male spikers (15 month old males),

in March for venison. Thus allowing the herd to build up in breeding doe numbers.

Physical characteristics of fallow deer

Male Fallow bucks stand about one metre tall and weigh around 65–70 kg. Fifteen month old spikers weigh approximately 40–45 kg. Mixed-aged Fallow does stand about 0.9 m tall and weigh 40–44 kg. Yearling does weigh 33–38 kg.

At birth a fawn weighs about 3.7–4.5 kg and the tips of its hooves have a waxy-looking soft cover which prevents injury to the mother during gestation and birth. Within a day or two this substance shrivels up to expose the sharp tips of the hooves.

A fawn has a proportionately shorter muzzle than an adult. As the animal grows the muzzle lengthens and by 30 months of age the muzzle has reached full adult proportions. As the animal ages, the muzzle appears to thicken and it is possible to get a rough idea of age through the thickness of its muzzle. At what age this process stops is not really known.

Unlike most other deer species, the Fallow deer shows a wide colour variation in both sexes.

Common: Various shades of chestnut with prominent spots on the flanks in summer. In winter the spots are lost and the deer becomes a shade darker. Rump patch is white.

Menil: As above, but spots are retained in winter. Rather more brightly coloured than common. Rump and underside of the tail white.

Black: Black to sooty black. Spots darker than coat, but only visible at close quarters. In winter it takes a greyer tone.

White: Really creamy coloured. May be associated with inbreeding.

Intermediate colour variations also occur. The fawn's coat colour at birth is retained throughout life.

Reproduction in fallow deer

- Sexual maturity – males and females – 16 months (body weight dependent).
- Gestation (pregnancy) – approximately 226 days.
- Oestrus period (cycle) – approximately 18 days.
- Breeding season – April–May.
- Duration of breeding season – 2–3 cycles.

A single fawn is the rule, near full-term twin foetuses have been recorded, but cases of a doe having two live fawns are hard to substantiate as a fawn may attempt to suckle from a doe other than its own mother.

As with any domesticated species, body weight at first mating has a large bearing on reproductive efficiency at mating. Body weight at mating for Fallow deer and its relationship to fawning rate is being investigated.

Fallow deer behaviour

Fallow deer are more timid than red deer. The flighty nature of the animal coupled with their extremely agile movement have to be considered when farming this species. During the rut, bucks spend a great deal of time marking out their territories and rutting stands.

From overseas information on behaviour, it appears that a dominant buck herds the harem and carries out the mating on his own territory (or stand), with no other buck taking an active part in mating. However from a small herd study in the New Zealand farming situation, it was found that the dominant buck herded the does and mated first. Then the subordinate buck was allowed to mate the oestrus doe without any sign of antagonistic behaviour between the two bucks. In this study the dominant buck was the only one heard to "groan" (roar) and the only male to hold the rutting stand. Both the dominant and subordinate buck ceased grazing for the duration of the rutting peak.

Bucks should not be placed in confined spaces from the beginning of the rut, right through until spring, as they may fight and kill each other. The flighty timid nature of Fallow deer make it advisable to give them plenty of time when yarding or putting them through gates until they make up their own minds. Never force stock.

For further details on Fallow deer see AgLink FPP 256.



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