



Farm layout and yard design have an important bearing on the workability of a deer farm and the ease of stock management. The basic principles outlined below are a general guide.

Some details may be modified as the legislation dealing with deer farming in New Zealand is currently under review

Location

Proximity to house: It is desirable that the manager of a deer farm lives on the property. This makes supervision easier and may deter poachers. If stock are familiar with people, particularly the manager and his vehicle, they are much quieter and easier to handle.

Access: Vehicle access needs to be considered, particularly on hilly country, because at times it may be necessary to bring in large trucks to move stock onto or off the property.

Topography and land quality: Deer adapt readily to a wide variety of topography and land classes or feed quality, but they respond well to improved nutrition. The capital costs of establishing a deer farm, in terms of stock and fencing, are high so (when there is a choice) it is advisable to run deer on better class land to obtain maximum returns.

However, some feed restrictions may have to be exercised with adult hinds on high-yield, high-quality pasture if calving difficulties are to be avoided.

Fencing costs are lower on easier country and farm planning is more straightforward.

Shelter: Bearing in mind the general availability of shelter and shade in the feral environment of deer, it is logical to provide cover in at least some paddocks on a deer farm.

Wild-capture deer should initially be put into darkened pens for 1–3 days and then let out into paddocks with other domesticated deer. If suitable pens are not available, the paddock should contain adequate cover in which wild-capture deer can hide until they become settled. However, too much bush and tree cover can create difficulties at mustering, and the animals are slower to become quiet and tame. Deer will also seek shade on hot summer days

Calves (or fawns) automatically seek cover during their first few weeks of life so some provision for this must be made. It can be in the form of natural vegetation, cut pine branches or just areas of long grass.

Water: Deer must have a good supply of clean, fresh drinking water, but their exact requirements are unknown. Red deer (but not fallow) like to wallow and facilities for this should be provided if possible. Drinking water troughs may need protection as deer have been known to take a swim.

Paddock layout

Design: To move stock easily paddocks must be connected to a raceway leading to the yards. This is the only way of yarding stock successfully.

The race should be long enough to channel deer from the holding or collecting area, towards the yards, and should taper to a width of 2–3 m at the yard entrance. It may help to have a bend in the race just before it enters the yards to reduce the risk of animals breaking back at the last minute.

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Deer Farm Location, Design, Fences and Yards Requirements

If it is not possible to arrange a central raceway with all paddocks having direct access to it, the race should lead from a collecting paddock and follow the natural contour of the land to the yards.

Gate siting: To make movement of stock around the farm as easy as possible, the siting of gates must be carefully planned. Deer, like other animals, prefer to run up hill rather than down. Gates at the bottom of a slope should be avoided as deer can leap over very high barriers if given a downhill run.

There is some controversy over whether the best location for a gate is in a corner or in the middle of a fence line. Some deer farmers maintain that gates should be in the centre of a fence line so that deer can move away from them as quickly as possible. Others claim corner gates are just as satisfactory. Whichever site is chosen, it seems that familiarity of the stock with the position of gates is the key to successful movement through them.

Paddock size is of some significance during mating and calving (see FPP247). In small paddocks (less than 10 ha) dominant stags can hold more hinds in harems than they can mate. Where multi-sire mating is practised, paddocks should not be smaller than 1.5 ha. Large paddocks can be temporarily subdivided into smaller areas for break feeding. Subdivision enables grazing management and pasture control.

Deer fit well into a rotational grazing system and this is the best way of allocating feed to stock. Enough paddocks should be provided for both the breeding herd and young stock. It is an advantage to have some small paddocks near the yards in which to graze stags for velveting.

Paddock shape is possibly not very important, but long narrow ones could have an advantage for stock movement into a central race system. Ease of stock movement is a major consideration with fallow deer, and the provision of wing fences is perhaps more important than the shape of the paddock.

Yard siting and design

Siting: Yards should be as central as possible for stock movement to and from the various parts of the farm, but they are quite often located on the outer edge of the farms

and connected to paddocks by a race system.

Manoeuvring stock into yards will be easier if they are located near to or within a grove of trees or bush. A sheltered spot also offers greater comfort and convenience for stock and workers. Vehicle access must be considered.

Opinions differ as to whether access to yards should be uphill or down. As already mentioned, deer run uphill more readily, but at Invermay Research Centre the yards are located downhill and experience suggests deer are less likely to break back when moving downhill. If they break back when going uphill the outcome is potentially disastrous for fences and stock alike.

Design: Ideas about the best techniques for yarding stock are changing rapidly with the evolution of deer farming. The current trend is for yards for red deer to contain the following features:

- Close-boarded, 2.1–2.4 m high.
- Main working area covered and quite dark. This is especially important for harvesting velvet and when a lot of close contact with the deer is necessary.
- Pens should be round, eliminating corners where stock will often climb on top of each other.
- A circular crush, usually centrally located, from which deer can be manoeuvred into outside pens. The crush generally consists of two free-swinging gates which can revolve independently on a central pivot.
- Sand or sawdust floor.
- Corrugated iron is avoided as it is noisy and can generate excessive heat.
- Drafting is best done by hand sorting rather than sheep-type drafting gates.

Fallow deer are generally more difficult to yard and handle than red deer. They are nervous and excitable. Bucks will use their antlers to injure other animals when closely confined. However, successful handling and yarding methods have been developed on some fallow deer farms in the North Island.

Yard walls must be at least 2.6 m high to stop animals from jumping over and sliding gates may be preferable to swinging gates for faster operation. Swinging gates work well only if the handler keeps between the gate and the animals.

In spite of these difficulties, simple yards have been built and operated successfully at Invermay and on some commercial properties.

A number of yard designs, including basic floor plans and explanatory notes, are available in AgLinks FPP251, FPP252 and FPP253.

Fences

Boundary fence: Certain minimum requirements for perimeter fences are laid down by law in the Third Schedule to the Noxious Animals in Captivity Regulations (1969).

Fences must have a minimum height of 2 m and must consist of netting or wire and battens. Where netting is used, the 15cm knotted staywire is recommended as calves and fawns can slip through the 30cm spacings.

For red deer, sambar or wapiti a wire fence must have a minimum of 9 line wires and vertical stay wires at no more than 230 mm intervals or 50 x 50 mm wooden battens at 610 mm centres. In practice, 9 wires are not adequate and 13 is the recommended number. Perimeter fences for all other species of deer must have at least 13 line wires (if not netting) and stay wires or wooden battens at 300 mm centres. Although properly-constructed line wire and batten fences are probably adequate in most cases, a well-constructed netting fence is recommended for greater security with very wild or young stock.

Battens are often used on netting as they provide a visual barrier for the deer and so help to prevent the animals damaging the fence or themselves.

Existing sheep fences can be modified quite easily into deer fencing, thus reducing costs, but fencing should be of the highest standard at all times.

When setting out a fence line the possibility of wash-outs under a fence should be minimised and care taken to avoid the risk of trees falling across a fence.

Internal subdivision fences are not subject to any legal requirements, so aim for the cheapest and simplest fence necessary to control stock safely and adequately. Ordinary sheep fences, with or without an additional electric wire on top, have proved successful for grazing and stock control so long as animals are not under pressure.

Electric fences work very well for internal subdivision once the deer have been trained to them. At Invermay a 4-wire electric fence with 30 cm spacing between wires has been used successfully for break feeding on flat land.



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