Bull Pen



The CAFRE dairy unit has been designed to best meet the education and training needs of agriculture students and the dairy industry, to enable the delivery of knowledge and technology transfer and to comply with all relevant legislation and animal welfare recommendations.

This is one of a series of technical notes aimed at farmers and students. The notes are designed to provide the level of technical detail required to assist farmers in adopting technologies and practices demonstrated in the new Greenmount Campus dairy unit on their farm business.

Health and Safety

Familiarity with individual cattle can lead to complacency, especially when handling bulls. A number of accidents, some fatal, happen every year because farmers fail to treat bulls with respect. Bulls should be housed in purpose built pens designed for minimal operator contact.

The Health and Safety Executive for Northern Ireland (HSENI) recommends that a bull pen should:

- be sited where the bull will be in touch with normal farmyard activities, including other stock movements, both by sight and smell.
- be large enough and strong enough to contain the animal.
- allow the bull to be fed and watered from outside the pen.
- allow the bull to be cleaned out or bedded without the hazard of direct physical contact. (this means keeping a gate or wall between the bull and yourself at all times).
- have outer walls and fences at least
 1.5 metres high.
- have fences, walls and gates designed not to allow young children

- to pass through or over into the bull pen.
- have safety signs warning of the presence of a bull at the entrance to any building where the bull is kept.

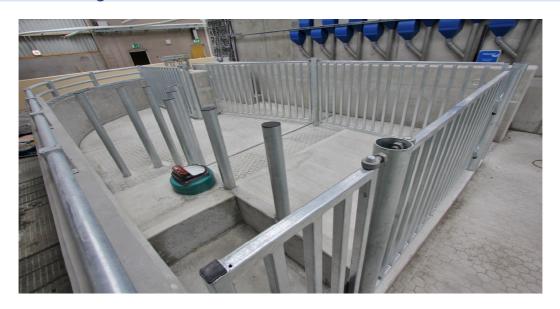
NEVER ENTER THE PEN WHEN THE BULL IS LOOSE.

The ideal housing layout is to have a well designed, secure pen adjacent to the cow accommodation, into which a cow on heat can be easily introduced and removed with minimal bull contact, aided by safe and easy cow/bull separation. The pen should be of sufficient size to allow exercise as large mature bulls are prone to arthritis. It should be easily and safely cleaned. Regular cleaning is necessary to prevent foot problems developing.

Design details of the Cafre bull pen are available in a separate technical note entitled: "Bull Pen Design Detail"

CAFRE DAIRY UNIT BULL PEN

In the new CAFRE Dairy Unit, the bull pen is located close to the parlour exit. The bull's presence and aroma help to stimulate reproductive activity and attract cows in heat, making heat detection easier. The service policy in the Future Herd is to allow cows two services to AI then an AI beef straw or natural service with an Aberdeen Angus or Limousin stock bull.



CAFRE recognise that bulls are always a potential danger and extreme care should be taken when working with any bull. The new pen has been designed to manage the bull without entering the pen. The main features include:

- a. A separate rectangular feeding area made up on 1 side with a robust feed trough and water bowl and the other 3 sides by heavy duty gates. These close the bull into the feed area or open to the service race allowing access to the entire pen / service race or force the bull from feeding area to exercise area. Keepers prevent over movement of gates to prevent crushing injuries.
- A separate circular walled exercise area with a heavy duty circular forcing gate on a ratchet mechanism

- with stops every 300mm. The forcing gate is hinged to allow the bull to be forced into the feeding area.
- c. Separate service race and cow access passage.
- d. Cow locking head yoke in service race.
- e. Raised man access passage, to allow observation of service and allow bull and cow to be safely separated after service.
- f. Personnel safety features include one escape gap and a retreat area with access from feeding area and exercise area.

Other design features of the bull pen include the raised lying area, the hexagonal grooved floor in the exercise area and the drain to facilitate cleaning.