

# Humane Dispatch and Disposal of Infant Calves

## SUMMARY

As unpalatable as it may be, the on-farm killing of healthy calves became a reality with the ending of the Calf Processing Aid Scheme (CPAS). Despite some calves being financially worthless, their welfare is of utmost importance and they must be properly cared for.

Killing livestock on-farm can be distressing and is often aesthetically unpleasant. However, at times it is necessary to take special measures to prevent avoidable, if unintentional, suffering. For example, unwanted infant calves should be killed **immediately**, 'without avoidable excitement, pain or suffering', rather than left without nourishment for any appreciable length of time. All owners, managers and stockmen must be aware of their legal and ethical responsibilities to these animals.

**Every farm should have an effective procedure to deal with unwanted calves as quickly and humanely as possible.**

## Regulations

Legislation requires that neither 'unnecessary suffering' (*Animal Welfare Act 2006*), nor 'unnecessary pain or unnecessary distress' (*The Agriculture (Miscellaneous Provisions) Act 1968*) is caused or allowed.

Calves killed on-farm within 36 hours of birth (dairy herd), or 20 days of birth (non-dairy herd), do not need eartags or a passport. If they are moved off the farm alive, even to a knackery or hunt kennel for killing, then they must have two official eartags with matching numbers, and a temporary passport which matches the numbers on the eartags.

## Options available

There are three options open to owners when faced with unwanted or surplus calves. They may be sold-on for rearing, be killed, or be reared on their farm of origin for meat. Before coming to a decision producers will have to take into account, in order of priority, the welfare, practical and financial implications of each option. This leaflet concentrates on the practicalities of the humane dispatch and disposal of the animals.

## Suitable methods

An appropriate firearm is the most effective and humane means of killing calves. External trauma (a heavy blow to the head with a blunt instrument) is not an option when dealing with calves, and anyone using this method may be subject to prosecution.

Alternatively, chemical euthanasia may be undertaken, but this can only be carried out by a veterinary surgeon and will incur charges which may be prohibitive.





## Firearms

Firearms suitable for the on-farm killing of calves are as follows:

- shotguns (.410, 28, 20, 16 & 12 Bore - use number 4, 5 or 6 birdshot)
- captive-bolt equipment
- rifles (.22 rim-fire)
- humane killers (Greener 'Bell' Guns and 'Safti-Killers', general-purpose handguns and purpose-built pistols)

## Shotguns

In the hands of a competent operator, a shotgun is probably the best weapon for the humane destruction of calves. The correct use of a shotgun obviates the need to bleed or pith and it is much safer than a rifle or pistol, as the shot disperses within the cranium, largely reducing the risk of operator injury. However, in the interest of operator safety, shotguns should not be used in enclosed spaces and/or on hard surfaces. Also, the physical appearance of the calf after being shot can be very distressing.

## Captive-bolt pistols

Captive-bolt pistols are effective and safe, but it must be remembered that they are humane stunners, not humane killers. For on-farm killing of calves, it is recommended that the heaviest charge available for the captive-bolt is used. The animal should be then pithed or bled to ensure rapid death. A deep cut from ear to ear with a sharp knife will ensure all major vessels are severed; however, with calves it is better to use a chest stick where possible. Captive-bolt equipment must always be cleaned after use in order to prevent corrosion and pitting of the bolt. A build-up of carbon deposits in the breech can greatly reduce the velocity of the bolt; regular cleaning and maintenance will prevent this.

Captive-bolt equipment is no longer subject to firearms legislation (since February 1998), consequently it is now easier to obtain. However, when using captive-bolt equipment for the routine culling of livestock, 'in the course or furtherance of a business', it is necessary for the operator to hold a current slaughter licence (***The Welfare of Animals (Slaughter or Killing) Regulations 1995***).

To obtain a slaughter licence you must contact the Meat Hygiene Service (MHS)(Tel: 01904 455501). A provisional licence will first be issued: you must then practise under the supervision of a licensed slaughterman. After sufficient training you will need an Official Veterinary Surgeon (OVS) to certify that you are competent at slaughtering these animals. The certificate of competence will then have to be sent to the MHS, with a fee (£20), to convert it into a full licence.

## Rifles

A .22 rim-fire rifle can be used, preferably with a hollow-point bullet; but this should only be as a last resort, due to safety problems associated with the possible exiting of the bullet from the carcass.



## Humane killers

Humane killers are extremely dangerous and must only be used by experienced operators: usually veterinary surgeons, knackermen and hunt servants. These weapons discharge a round-nose, lead bullet which can over-penetrate (especially in smaller animals, such as calves), exit the carcass and ricochet up to a mile. Therefore, humane killers should not be used in enclosed spaces or on hardstandings.

When using a rifle or humane killer, it is imperative that the correct ammunition is used: failure to do so can result in unnecessary suffering for the animal and potential danger for the operator.

**Operators of the aforementioned weapons must be in possession of a current Firearm Certificate (rifles and humane killers), or Shotgun Certificate (shotguns).**

## Correct shooting position

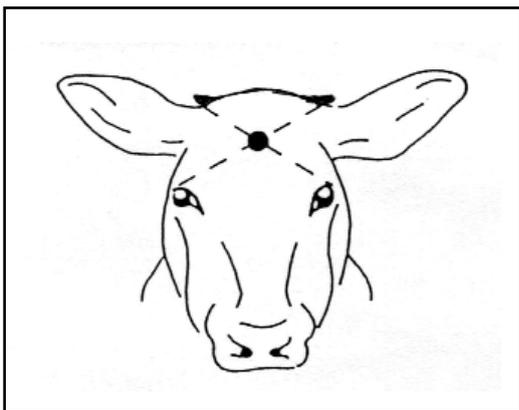
For safety's sake, prior to shooting, calves should ideally be situated on soft ground, preferably with a hay/straw stack or manure heap behind them. Whichever of the above weapons is chosen to kill the calf, the target area is the same:

### Step 1

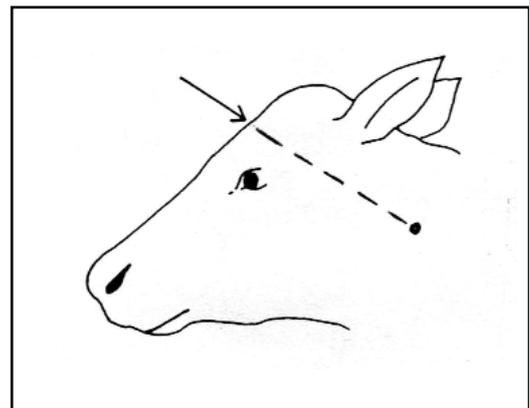
The target area is in the middle of the forehead, at the crossing point of two imaginary lines drawn from the middle of each eye to the opposite horn bud.

### Step 2

The aim should be initially at right angles to the skull and then tilted slightly to direct the shot through the lower brain and into the higher reaches of the neck.



Step 1



Step 2

**Except for the captive-bolt and some humane killers, firearms must NEVER be used in full contact with the target, but discharged between two and ten inches away**



## Carcase disposal

Carcases should be sent for incineration or rendering – either directly, or via a knackery or hunt kennels. Carcasses can only be rendered at plants approved to render Specified Risk Material (SRM). If the animal has a passport, then the person who last has possession of the live animal must return it. Depending on the circumstances, the options for carcase disposal vary:

- collection by, or delivery to, a knackery, hunt kennels or licensed incinerator, for safe disposal
- disposal on-farm (*The Animal By-Products Regulations 2003* and *The Specified Risk Material Regulations 2000*, and subsequent amendments will apply)

The only legal option now available for carcase disposal on-farm is incineration. Before installing an on-farm incinerator, checks will have to be made with Local Authorities, the Environment Agency and the Department for Environment, Food and Rural Affairs. Under *The Animal By-Products Regulations 2003* the burial and open burning of carcasses such as fallen stock can only be permitted:

- in remote areas or
- during an outbreak of notifiable disease if there is a lack of capacity at rendering plants and incinerators, or because transport would spread the disease

'Remote' areas are interpreted as being parts of the Highlands and Islands of Scotland, the Scilly Isles and Lundy Island. The basic principle is that burial and burning should only be permitted where the carcase is more than 100 km away from the collection centre and the stocking density is very low. Before burying carcasses, first check with your Divisional Veterinary Office that you are in an official remote area.

**FAILURE TO COMPLY WITH CURRENT LEGISLATION COULD RESULT IN PROSECUTION**  
**DO NOT BURY CARCASES IN MANURE HEAPS!**

## Further reading

<i>Humane Killing of Livestock Using Firearms (2<sup>nd</sup> Edition)</i>	HSA 2005
<i>Captive-Bolt Stunning of Livestock (3<sup>rd</sup> Edition)</i>	HSA 2001
<i>Casualty Slaughter</i>	BCVA 1996
<i>The Welfare of Animals (Slaughter and Killing) Regulations 1995</i>	MAFF 1995

Full details of all legislation can be found on the following website, [www.tso.co.uk](http://www.tso.co.uk)

For enquires about practical training in the correct use and maintenance of firearms and captive-bolt equipment, please contact the HSA at the address below.

### WARNING: DISCLAIMER OF LIABILITY

In no circumstances can the HSA accept liability for the way in which the equipment in this leaflet is used: or for any loss, damage, death or injury caused thereby, since this depends on circumstances wholly outside the HSA's control.

The only charity committed exclusively to the welfare of animals in markets, during transport and to the point of slaughter



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The Old School . Brewhouse Hill . Wheathampstead . Herts AL4 8AN . UK  
 Tel:+44 (0)1582 831919 Fax: +44 (0)1582 831414 Email: [info@hsa.org.uk](mailto:info@hsa.org.uk) Website: [www.hsa.org.uk](http://www.hsa.org.uk)  
 Registered Charity No.209563