



MECHANICAL & MANUAL EXTRACTION (2)

continued from Mechanical & Manual
Extraction (1)



All Terrain Vehicles (ATVs)

Sit-in extraction equipment

(Argocat and Glencoe types of machine).

- ◆ Primarily constructed or used for work off the public highway;
- ◆ Good for increased stability and carrying capacity.

1 Employers who provide their employees with sit-in vehicles are required to minimise the risk of injury to operatives from the rolling over of such vehicles under the Provision and Use of Work Equipment Regulations 1998.¹ Do so by either of the following:

1. Fit vehicles with a roll-over protections structure (ROPS): either a cab, rollover frame, or roll-bar to protect the occupants. Such a structure could either be provided as part of the original machine or, if added afterwards, should be purchased with a CE² mark and approved by a recognised test body. Occupants should wear seat belts.

2. Risk assessment may indicate the use of designated routes and designated trained drivers as an alternative to having to fitting a ROPS system.

2 Follow HSE guidance AIS 33 'Safe use of all-terrain vehicles (ATVs) in agriculture and forestry'.³

All Terrain Cycles (ATCs)

Sit-astride extraction equipment (mainly quad motorcycles). (Potentially the most dangerous items of extraction equipment).

- ◆ Good for use where manoeuvrability is important and where small numbers of carcasses are likely to be recovered each trip.

- ◆ Small carcasses can be carried on the machine, or larger carcasses in a trailer attached to the back of the ATC, or pulled behind on a drag bag.

2 Never drag down steep slopes, unless in a rigid sled, as the load may overtake the ATC, causing an accident.

2 Fit hill trailers with a ball hitch that rotates through 360 degrees, as this will allow the trailer to run smoothly at a different angle to the ATC.

3 Fit a sheet or cover over carcasses when using the wire basket type of hill trailer to reduce dirt thrown up by the ATC wheels landing on the carcass.

3 If dismounting an ATC whilst crossing a burn, always dismount upstream to avoid the danger of pinning.

Winches & snatch blocks

Good for extracting animals from very steep gullies or slopes, winching deer out of forestry clear-fell areas, and lifting heavy carcasses into vehicles or larder.

These can either be hand-held, vehicle-mounted or fixed in a larder, and can help with carcass handling and extraction.

The capstan winch is a useful type and can either be mounted on a vehicle or be portable.

When extracting deer with a long rope, especially in forestry areas, a snatch block and strop can be especially useful if operating along a roadside. The strop is looped high around a tree, and the snatch block, or pulley wheel, is attached by a Bow shackle.

The rope is passed through this, and one end attached to the carcass, the other end to a vehicle or a capstan winch.

A winch fitted to ATVs may also help in self-recovery if you get stuck.

- 3** When laying out a rope for the extraction of a carcass, especially in forests and woods, take as short and as direct a route as possible, avoiding bends and major obstacles.
- 3** Use a polypropylene rope with an appropriate breaking strain approximately 200m long, wound onto a drum that can be easily transported. The strength or 'breaking strain' of the rope should always comfortably exceed the maximum stall rating of the winch.
- 2** Winches should be used for lifting heavy carcasses into recovery vehicles, where the cargo deck is more than 75cm above the ground and assistance is not available.
- 2** Do not wear loose fitting clothing as this could become trapped in a winch.
- 2** Wear ear defenders when using a motor-driven winch.
- 2** Use gloves when operating winches, particularly for wire ropes.
- 2** Check that all drums are correctly lubricated.
- 2** Do not use excessive pressure if a load becomes stuck.
- 2** Do not attempt to fix or work on a winch under load pressure.
- 2** Be aware of the danger of electrocution when using electric winches in wet conditions or in proximity to overhead power lines particularly in ravines etc., where there is a risk of the winch cable springing into the air and making contact.

Manual extraction

This is often the only available method of extraction from areas too steep or boggy for vehicle access. When extracting carcasses manually the safety of the operator is paramount.

Health & Safety

- 2** Minimise the risk of injury and physical effort – plan and modify the route, e.g. brash routes through trees, mark pony paths.

The Manual Handling Operations Regulations 1992 (as amended)¹ establish clear steps for dealing with risks from manual handling. These are:

- 1** Avoid hazardous manual handling operations so far as reasonably practicable;
- 2** Assess any hazardous manual handling operations that cannot be avoided;
- 2** Reduce the risk of injury so far as reasonably practicable, particularly when dragging or carrying carcasses with antlers.

Techniques

- 3** Light deer may be recovered from the culling area to vehicle or larder by carrying. Several specifically designed 'Roe Sacks' are available from a range of manufacturers, which allow small deer to be comfortably carried on the back.
- 2** Take care when carrying unspecified loads, especially on uneven ground, so as to reduce the risk of injury to the user.
- 2** Care must always be taken to avoid unnecessary contamination when dragging.
- 3** When dragging ensure an appropriate length of rope. A toggle handle or wrapping the rope around a length of stick, may prevent rope burns.
- 3** Attach the drag rope by looping around the antlers, or neck for females, and put a half hitch around the nose. This will prevent the nose digging into the ground, and will raise the shoulders off the ground.
- 3** If dragging from the front, keep the rope very short, and stand in front of the deer and pull slowly. Do not allow the carcass to build up momentum.
- 2** Do not wrap the rope around any part of the body.
- 2** When dragging, maintain constant pressure, don't jerk and snatch at a load.
- 3** For very steep ground lower the carcass by the back legs first (the deer hair going 'against the grain' and therefore acting as a friction brake) with the rope around the head. Wherever possible use two people. One person in front to pull and one at the back to keep the carcass from rolling onto the front man and keep the carcass stretched out.

¹ Legislation available online at www.opsi.gov.uk or can be obtained from the Stationery Office. For addresses and contact details see BPG Useful Contacts. ² The CE mark indicates that the manufacturer states that they have complied with their legal requirements under the Supply of Machinery (Safety) Regulations 1992. ³ Publications and useful information are available online at www.hse.gov.uk. Information can also be obtained from HSE Books. For addresses and contact details see BP Contacts.