

## FURTHER READING

<i>Basic chainsaw felling and manual takedown</i>	FISA302
<i>Chainsaw snedding</i>	FISA303
<i>Chainsaw cross-cutting and manual stacking</i>	FISA304
<i>Tractor units in tree work</i>	FISA501
<i>Extraction by skidder</i>	FISA502
<i>Extraction by forwarder</i>	FISA503
<i>Emergency planning</i>	FISA802
<i>Electricity at work: Forestry and arboriculture</i>	FISA804
<i>Training and certification</i>	FISA805
<i>First aid at work: Your questions answered</i>	INDG214
<i>Chainsaws at work</i>	INDG317
<i>Don't lose your hearing</i>	INDG363

These publications are available from the FISA and HSE websites.

Name: .....

Checklist verified by: .....

Date: .....

## Further information

This guide is produced by the Forest Industry Safety Accord (FISA)  
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Copies of this guide and all other FISA priced and free publications are available by mail order from the FISA office or through the FISA website [www.ukfisa.com](http://www.ukfisa.com). From here you will also be able to access a wide range of additional forestry safety information including frequently updated safety alerts.

This guide sets out evidence of good practice for a specific forestry task. Deviation from the guide should only be considered after a full risk assessment has been undertaken by competent persons. Health and safety obligations **MUST** be met at all times.

**THINK SAFE / STAY SAFE**

This publication is based on guidance previously published by HSE in AFAG506 Extraction by horse, which was withdrawn in 2013.

For more general information about health and safety, please visit the Health and Safety Executive website [www.hse.gov.uk](http://www.hse.gov.uk)



# Extraction by horse



Image courtesy of JPM Tillitt

FISA Safety Guide 506

## INTRODUCTION

This leaflet covers the extraction of timber using horse and chains (snigging), or horse and simple skidding units and forwarders in forestry and other tree work.

You can use this leaflet as part of the risk assessment process to help identify the controls to put in place when using horses in a woodland environment.

You must also assess the effect of the site and the weather as well as following this guidance.

All operators, horses and handlers must have had appropriate training in how to carry out the tasks required (see FISA leaflet 805 *Training and certification*).

The guidance should be understood and applied in conjunction with FISA leaflets 501 *Tractor units in tree work*, 502 *Extraction by skidder* and 503 *Extraction by forwarder*.

## PERSONAL PROTECTIVE EQUIPMENT (PPE) AND OTHER EQUIPMENT REQUIRED FOR THE HANDLER

- 1 Use the following personal protective equipment:
  - A safety helmet (complying with EN 397).
  - Eye protection - mesh visor complying with EN 1731 or safety glasses to EN 166 (to be worn when the risk assessment identifies it is needed).
  - Hearing protection (complying with EN 352) where the noise level exceeds 85 dB(A) (see HSE pocket card INDG363 *Don't lose your hearing*).
  - Suitable protective gloves when handling chains, timber, reins and aid tools.
  - Safety boots with good grip and ankle support (complying with EN 345).
  - Non-snap outer clothing appropriate to the prevailing weather conditions. Use high-visibility clothing (complying with EN 471) when the risk assessment identifies it is needed.
- 2 First-aid kits - for both handler and horse (see HSE leaflet INDG214 *First aid at work: Your questions answered*).
- 3 A knife - the horse may need to be cut free from a harness or equipment.
- 4 Lifting aids - keep in holsters and wear on belts at all times.
- 5 An emergency whistle.

## GENERAL ADVICE

- 6 All risk zones specified by the machine manufacturers (if applicable) must be clearly and prominently marked on all machines.

- 7 On all reasonably foreseeable approaches to the worksite, erect warning and prohibition signs conforming to the Health and Safety (Safety Signs and Signals) Regulations 1996, indicating a hazardous worksite and that unauthorised access is prohibited. In areas where the public has access, the risk assessment may indicate that additional controls (eg barrier tape, barriers, extra manning) are required.
- 8 All site workers must be made aware of the horse's requirements. Be aware that, as a living animal, a horse can be influenced by circumstances beyond the handler's control. In areas where the public has access, specific information must be given to other site users about the need to control dogs.
- 9 In the presence of overhead electric lines, signs warning against working in the vicinity must be prominently displayed (see FISA leaflet 804 *Electricity at work*). This is only relevant when forwarder units/skidders are being used.

## EMERGENCY PROCEDURES

- 10 Make sure a designated and responsible person knows the daily work programme and agree with them a suitable emergency procedure. Where reasonably practicable, use a two-way radio or mobile phone, and a pre-arranged call-in system.
- 11 Make sure the handler can provide the emergency services, or veterinary surgeon, with enough detail to enable them to be found in the event of an accident, eg the grid reference, distance from the main road, type of access - suitable for car/four-wheel drive/emergency service vehicles. Know the location details before they are needed in emergency. (Also see FISA leaflet 802 *Emergency planning*.)
- 12 Make sure the handler and other site workers know how to act with a horse in emergency situations. It is essential to maintain a calm, methodical approach to avoid any additional distress to the animal.
- 13 In the event of a horse and a load overturning, calm the horse and keep it still while attempting to release it. Release the load if it is safe to do so. Undo the harness, if necessary cutting the hame strap and, on freeing the horse, walk it round (if possible without causing further harm) to reassure and calm it. Consult a veterinary surgeon for treatment of any resulting injuries.

## REQUIREMENTS FOR THE HORSE

- 14 The welfare of the horse remains paramount at all times.
- 15 Before starting work, make sure both the horse and equipment match the needs and characteristics of the work to be done. The horse, as prime mover, must be suitable for the job in terms of fitness, temperament, experience, size and weight.

- ❑ **16** Make sure horses are suitably trained and fit for the work to be carried out. Fit, experienced horses can cope with long days, variable gradients, obstructions, poor ground conditions and heavy loads. Inexperienced horses, or those that have not worked for a lengthy period, should be introduced to the work gradually and with care.
- ❑ **17** Suitable feed and rest periods must be built into the day's work schedule, with the horse being fed to maintain fitness and sound body condition. Following feeding, a minimum of 45 minutes should elapse before starting or restarting work. Fresh water must always be available at rest periods.
- ❑ **18** When the horse is not at work, the handler is responsible for maintaining welfare standards including the security of the horse.

## HARNESS AND EQUIPMENT

- ❑ **19** Make sure transport to and from worksites (unless on foot) is by lorries and trailers which conform to Ministry of Transport and Animal Welfare Regulations and which are appropriate to the size and weight of the horse(s) being moved.
- ❑ **20** Make sure all harnesses are in good repair and fit the horse properly - an experienced person should adjust them appropriately. Any repairs must be made with materials of the right strength and characteristics.
- ❑ **21** Make sure all attachments are fit for the purpose, match the needs of the site, task and horse and are well maintained.

## WORK SYSTEMS

- ❑ **22** A full assessment of the work being undertaken must be carried out, identifying hazards and limiting factors that may affect both the horse and the handler before work starting.

- ❑ **23** Make sure the work systems selected address site and crop factors, extraction routes and stacking areas and allow safe and productive working for both the horse and the handler.
- ❑ **24** Work systems that reduce drag and friction and allow control of the load by braking must be considered where site conditions allow.
- ❑ **25** The most appropriate method of controlling the horse(s) must be adopted. On very steep banks and if the horse is experienced enough, this may be by voice command only. Normally, driving with long reins and voice command is recommended.
- ❑ **26** Excessive side slopes, soft ground and other major obstacles must be avoided.

## BEFORE STARTING

- ❑ **27** The horse handler should ensure they have been informed of all hazards identified in the worksite risk assessment, and can state the control measures to be followed.
- ❑ **28** Check the harness and attachments for damage or wear.

## DRIVING

- ❑ **29** Where possible the horse should be driven rather than led.
- ❑ **30** Make sure extraction routes selected are within the horse and the handler's capability, and that the handler is fully aware of the route, and always maintains a clear view.
- ❑ **31** The handler should maintain correct positioning at all times:
  - avoid being caught between a tree/obstacle and the load on tight turns or in confined spaces (see *Figure 1*);
  - walk on the top side of a load if side slopes cannot be avoided.

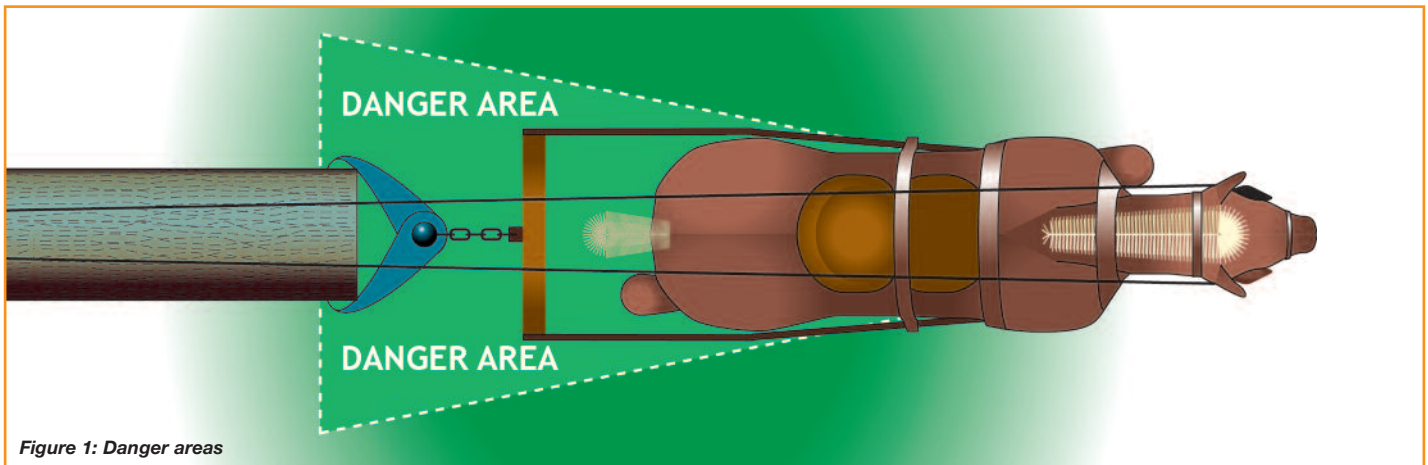


Figure 1: Danger areas

