



National unit specification

General information

Unit title: Fell Small Trees (SCQF level 6)

Unit code: HH4R 46

Superclass: SG

Publication date: December 2016

Source: Scottish Qualifications Authority

Version: 02

Unit purpose

This unit is designed to develop the chainsaw user's ability to safely fell small trees. For the purposes of this unit small trees are those with a diameter of less than 380mm. The unit is designed to meet the requirements of the relevant Chainsaw Operators Regulation Scheme (CORS) criteria. Learners must be appropriately trained and qualified in the use and maintenance of a chainsaw prior to attempting this unit.

Outcomes

On successful completion of the unit the learner will be able to:

- 1 Plan tree felling operations.
- 2 Prepare to fell trees.
- 3 Fell trees.
- 4 Complete tree felling operations.

Credit points and level

0.5 National unit credits at SCQF level 6: (3 SCQF credit points at SCQF level 6)

Recommended entry to the unit

Entry to this unit is at the discretion of the delivering centre. No prior experience is required to undertake this unit; however centres must ensure that they comply with all legal restrictions on who can operate a chainsaw. This could be demonstrated by achievement of units "*Maintain a Chainsaw*" HH4N 46 and "*Clear Lying Timber*" HH4P 46 or equivalent.

National unit specification: General information (cont)

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Core Skills

Achievement of this Unit gives automatic certification of the following Core Skills component:

Complete Core Skill	None
Core Skill component	Critical Thinking at SCQF level 5 Planning and Organising at SCQF level 5

There are also opportunities to develop aspects of Core Skills which are highlighted in the Support Notes of this Unit specification.

Context for delivery

If this unit is delivered as part of a Group Award, it is recommended that it should be taught and assessed within the subject area of the Group Award to which it contributes.

This unit is intended for use by chainsaw users such as term maintenance contractors, local authority grounds maintenance staff and those carrying out emergency works on highways. It has not been designed for the traditional forestry and arboriculture sectors, which has a much greater focus on the end use of the timber.

For the purposes of this unit the term “Small Trees” is used to refer to trees with a diameter of less than 380mm. The equivalent unit “*Fell Large Trees*” is available for those who may require to fell larger trees of between 380mm and 760mm in diameter.

Equality and inclusion

This unit specification has been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners should be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence.

Further advice can be found on our website www.sqa.org.uk/assessmentarrangements.

National unit specification: Statement of standards

Unit title: Fell Small Trees (SCQF level 6)

Acceptable performance in this unit will be the satisfactory achievement of the standards set out in this part of the unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

Outcome 1

Plan tree felling operations.

Performance Criteria

- (a) Describe the legal requirements and constraints for felling trees in different circumstances.
- (b) Ensure all safety clothing, safety and ancillary equipment is available.
- (c) Identify tools and equipment used to assist in felling.
- (d) Conduct a risk assessment of the site, trees and conditions and adapt working methods accordingly.
- (e) Determine the felling direction.
- (f) Discuss planned tree felling operation with appropriate person/s.
- (g) Establish own competence to undertake tree felling operations.

Outcome 2

Prepare to fell trees.

Performance Criteria

- (a) Ensure felling area is clear of obstructions.
- (b) Determine escape route.
- (c) Ensure all ancillary equipment is available.
- (d) Implement additional safeguards in relation to paths, roads and areas with public access.
- (e) Clear the base of the tree of all tripping obstructions.
- (f) Recognise signs of disease and decay and modify operations accordingly.
- (g) Remove all lower branches.
- (h) De-buttress as required.
- (i) Cut sink using appropriate techniques.
- (j) Comply with all relevant Health and Safety requirements and environmental good practice.

National unit specification: Statement of standards

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Outcome 3

Fell trees.

Performance Criteria

- (a) Confirm felling area is clear of personal.
- (b) Ensure area safe to commence fell.
- (c) Complete felling cut.
- (d) Utilise felling aids as necessary.
- (e) Determine if tree is safe to begin de-limbing procedures.
- (f) Take down a hung up tree.
- (g) Comply with all relevant Health and Safety requirements and environmental good practice.

Outcome 4

Complete tree felling operations

Performance Criteria

- (a) Clear small branches by hand.
- (b) Clear large branches with saw.
- (c) Identify and safely deal with branches under tension.
- (d) Operate saw using pulling chain.
- (e) Operate saw using pushing chain.
- (f) Refuel and maintain saw, guide bar and chain
- (g) Ensure saw, guide bar and chain are left in a well maintained condition following completion of felling.
- (h) Ensure site is left in a clean and safe condition.
- (i) Comply with all relevant Health and Safety requirements and environmental good practice.
- (j) Ensure all relevant records are accurate and up to date.

National unit specification: Statement of standards (cont)

Unit title: Fell Small Trees (SCQF level 6)

Evidence Requirements for this unit

Evidence is required to demonstrate that learners have achieved all Outcomes and Performance Criteria.

Evidence is required of the learner's ability to **Plan, Prepare, Carry Out** and **Complete** the **felling** of a **minimum** of **three small** (diameter less than 380mm) **trees**.

Evidence should be generated under realistic working conditions with the trees being felled in situ. An element of simulation may be acceptable, for example a tree or trees may need to be deliberately hung up to allow learners to generate sufficient evidence; this should be done on site and in a realistic manner.

Given the obvious risks to the learners and others it is imperative that all relevant Health and Safety policies and procedures are fully complied with throughout this unit.

Evidence could consist of:

- ◆ Observation checklist of practical activities
- ◆ Completed Risk Assessment
- ◆ Written and/or recorded oral responses to questions
- ◆ Photographic/video evidence of practical activities



National unit Support Notes

Unit title: Fell Small Trees (SCQF level 6)

Unit Support Notes are offered as guidance and are not mandatory.

While the exact time allocated to this unit is at the discretion of the centre, the notional design length is 20 hours.

Guidance on the content and context for this unit

This unit has been designed to meet the requirements of the Highways and Construction Training Association's (HCTA) Chainsaw Operators Registration Scheme (CORS). Achievement of this unit in addition to other relevant units demonstrates the learner's ability to safely use a chainsaw to fell trees up to the guide bar length. For felling larger trees unit "Fell Large Trees" is available.

The key vocational knowledge and skills developed in this unit are as follows:

- ◆ Appropriate personal protective equipment (PPE)
- ◆ Appropriate ancillary equipment
- ◆ Direction of fall for tree to be felled
- ◆ Safety of felling area
- ◆ Reducing trees to manageable sections
- ◆ Correct cuts to eliminate tension and compression
- ◆ Use of handling aids to reduce the need for manual handling
- ◆ Safe manual handling techniques
- ◆ Following site instructions when dealing with tree stumps
- ◆ Cleaning and maintaining the saw

The first Outcome is largely focused on conducting a risk assessment and ensuring a working knowledge of the equipment and tools required in the subsequent Outcomes. Measures should be put in place to mitigate any unacceptable risks identified in the risk assessment before progressing to the subsequent Outcomes.

Outcome 2 is concerned with the immediate preparation required prior to felling the trees, addressing any concerns highlighted in the risk assessment and ensuring a safe working environment.

Outcome 3 is the main Outcome of this unit concerned with the actual felling of trees. It also covers the procedures for dealing with hung up tree.

Finally, Outcome 4 is concerned with safely concluding the operation and returning the site to a clean and tidy condition.

National unit Support Notes (cont)

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Guidance on approaches to delivery of this unit

The unit is designed to be sequential, progressing from preparation and planning through to operation and finally completion of the task and maintenance. It is recommended that the unit is delivered in this sequence; however there may be opportunities to develop evidence during naturally occurring circumstances where this is safe to do so.

Delivering centres will require access to chainsaws and Personal Protective Equipment (PPE) and to a site containing suitable trees to work on in order to allow learners to generate the required evidence. The centre should ensure that all relevant equipment has a recent valid certificate of inspection/examination.

The learner should be given ample opportunities to develop their knowledge and skills in a safe environment prior to assessment.

Given the obvious risks to the learner and others from operating a chainsaw due emphasis should be placed on the importance of conducting a thorough Risk Assessment and on complying with all relevant Health and Safety requirements and Standard Operating procedures.

Where the deliverer and/or assessor have any concerns over the safety of any activities being undertaken then all delivery and assessment should be ceased immediately until the safety concerns are satisfactorily resolved. The centre must also ensure that the work site environment and weather conditions do not create unnecessary risk.

The centre should not proceed with any delivery or assessment of this unit until they are satisfied that the learner is suitably trained in the safe use and maintenance of a chainsaw.

An assessor to learner ratio of 4:1 should not be exceeded for any practical aspects of delivery or assessment.

Guidance on approaches to assessment of this unit

Evidence can be generated using different types of assessment. The following are suggestions only. There may be other methods that would be more suitable to learners.

Centres are reminded that prior verification of centre-devised assessments would help to ensure that the national standard is being met. Where learners experience a range of assessment methods, this helps them to develop different skills that should be transferable to work or further and higher education.

Assessments should be carried out in situ and the environment should mirror a realistic working environment as closely as is practicable. The centres may have to deliberately hang up some trees to ensure learners have the opportunity to meet all Performance Criteria.

Learners must complete a suitable and sufficient assessment of the hazards and risks associated with the work activity (a Risk Assessment). This should be documented in an agreed format (in line with Standard Operating Procedures) and could form part of the learner's evidence.

National unit Support Notes (cont)

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Evidence for the unit as a whole could be generated using a single project where the learner is required to prepare for, carry out and complete (including maintenance) the clearing of lying timber. If it is not possible to produce evidence for the whole unit during a single assessment, evidence could be generated on an Outcome by Outcome basis; however the learner should still be required to demonstrate their ability to safely carry out all the tasks required in the required sequence.

A portfolio or e-portfolio could be used to store and organise a learner's evidence. If this unit is being delivered in conjunction with other related units a single portfolio could be used, cross referenced to show where evidence can be integrated across units.

Opportunities for e-assessment

E-assessment may be appropriate for some assessments in this unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or social software. Centres which wish to use e-assessment must ensure that the national standard is applied to all learner evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. The most up-to-date guidance on the use of e-assessment to support SQA's qualifications is available at www.sqa.org.uk/e-assessment.

Opportunities for developing Core and other essential skills

There is no automatic certification of Core Skills or Core Skills components in this unit, however there may be opportunities to develop the Core Skills of *Problem Solving* and *Working with Others* at SCQF level 5.

This Unit has the Critical Thinking and Planning and Organising components of Problem Solving embedded in it. This means that when learners achieve the Unit, their Core Skills profile will also be updated to show they have achieved Critical Thinking at SCQF level 5 and Problem Solving at SCQF level 5.

History of changes to unit

Version	Description of change	Date
02	Core Skills Components Critical Thinking and Planning and Organising at SCQF level 5 embedded.	22/02/17

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General information for learners

Unit title: Fell Small Trees (SCQF level 6)

This section will help you decide whether this is the unit for you by explaining what the unit is about, what you should know or be able to do before you start, what you will need to do during the unit and opportunities for further learning and employment.

This unit is suitable for you if you are required to fell trees up to 380mm in diameter as part of your work. Before starting this unit you will need to be suitably trained and qualified in the use and maintenance of a chainsaw.

The unit contains four Outcomes, the first two cover the preparation and planning required before starting to fell trees, including carrying out a risk assessment. The third Outcome covers the practical work required to fell trees safely. Finally, Outcome 4 covers completing the work and returning the site to a clean and tidy condition.

This unit has a practical focus and the assessments will reflect that, you will be observed carrying out the range of tasks required but you will also have to produce a risk assessment.

This Unit has the Critical Thinking and Planning and Organising components of Problem Solving embedded in it. This means that when you achieve the Unit, your Core Skills profile will also be updated to show you have achieved Critical Thinking at SCQF level 5 and Planning and Organising at SCQF level 5.