City & Guilds Level 3 Certificate of Competence in Utility Arboriculture Tree Species Recognition, Growth Characteristics and Associated Hazards (0038-31)

March 2022 Version 1.1

Assessment Pack – Centre and Candidate Version

Version and date	Change detail	Section
1.0 December 2021	First version	
1.1 March 2022	Corrected formatting and typographical errors	Throughout
	Added 'This is not an open book assessment, however tree and fungi identification books may be used for reference In areas where different voltages are used to the ones listed within this guidance, regional variation may be applied.'	Page 4
	Added pre-requisites	
	Activity 8 Removed 'Birch' from list	Practical observation descriptor table
	Activity 11 Changed 'very thin' to 'sparse,' and added 'stem bleeds'	
	Activity 12 Changed 'very thin' to 'sparse'	
	Activity 13 Added 'Scientific or common names are acceptable' Added Giant Polypore to list, and amended scientific name of Artist's fungus in list	

Contents

Pre-requisites

Candidates must have achieved:
Level 3 Certificate of Competence in Utility Arboriculture Basic Electrical Knowledge (0038-30)
or equivalent qualification.

Centres must ensure that any pre-requisites stated are met.

Introduction

This assessment relates to the units in the Qualification Handbook. The assessment(s) can be achieved at pass grade only. If any task is not achieved the candidate is unsuccessful.

This assessment is for unit 302 Utility Arboriculture Tree Species Recognition, Growth Characteristics and Associated Hazards covering the following learning outcome:
1. Understand tree species recognition, growth characteristics and associated hazards for utility arboriculture

General guidance on the requirements for assessment can be found in the Assessor Guidance document available on the City & Guilds web site **www.nptc.org.uk**

The assessor must complete the Practical Table mark sheet for each candidate which should be kept by the assessor for a minimum period of twelve months.

Record of assessment (ROA)
A prepopulated record of assessment must be completed by the assessor following an assessment. The number of learning outcomes is listed above, these must be ticked in the relevant 'met' or 'not met' sections of the ROA.

ARAS Forms
An Assessment Result Advice Slip (ARAS form) must be completed by the assessor following an assessment. The ARAS is not a certificate but, based on the evidence of the candidate's performance, is a recommendation to City & Guilds that the candidate has either met or not met the assessment criteria. All feedback is to be recorded by the assessor on the feedback section of the ARAS form.

Assessment Time
The expected assessment time for this qualification is 30 minutes - 1 hour.

Site/workshop requirements:
n/a

Equipment/Machinery:
n/a

Consumables:
n/a

This is not an open book assessment, however tree and fungi identification books may be used for reference.

In areas where different voltages are used to the ones listed within this guidance, regional variation may be applied.

Practical observation descriptor table

Unit 302 Utility Arboriculture Tree Species Recognition, Growth Characteristics and Associated Hazards

Activity number and description from check list		Assessment criteria
1	Identify common species of broadleaved trees	Common species of broadleaved trees may include: • Oak • Ash • Beech • Birch • Sycamore • Willow • Lime • Hawthorn • Blackthorn • Cherry • Apple • Alder • Horse Chestnut • Sweet Chestnut • Hazel • Rowan • Holly • Elm • Poplar • other
2	Identify common species of coniferous trees	Identify common species of coniferous trees may include: • Cypress • Pine • Larch • Fir • Spruce • Cedar • Hemlock • Yew • other
3	State typically slow-growing tree species	Typically, slow growing tree species may include: • Oak • Beech • Laburnum • Box • Yew • Holly • Hornbeam • other

4	State typically fast-growing tree species	Typically, fast growing tree species may include: • Ash • Sycamore • Sweet Chestnut • Willow • Birch • Alder • Leyland Cypress • other
5	Explain the significance in relation to slow and fast growth rates of trees in proximity to overhead lines	The significance in relation to slow and fast growth rates of trees in proximity to overhead lines is: Slow growth trees: • growth rates are slower per annum • will not require cutting so often • smaller clearances required Fast growth trees: • growth rates are faster • more frequent cutting is required • larger clearances required • removal of species from the proximity of the lines altogether
6	State factors that influence the growth rate of trees	Factors that influence the growth rate of trees may include: • species • tree age • soil type • site conditions • climate factors • other
7	State tree species that produce rapid sprout growth when pruned	Tree species that produce rapid sprout growth when pruned may include: • Ash • Sycamore • Sweet Chestnut • Willow • Poplar • Lime • Oak • other

8	State tree species with brittle stems and branches	Tree species with brittle stems and branches may include: • Horse Chestnut • Douglas Fir • Sycamore • Larch • Willow • Poplar • Cedar • other
9	Explain the significance of brittle species in relation to growth in proximity to overhead lines	The significance in relation to growth in proximity to overhead lines is: • weight of branches from growth, wind, snow can cause them to snap easily • they can also break off early when cutting, especially if too large a piece is removed
10	State hazards associated with climbing plants	Hazards associated with climbing plants may include: • vegetation obscuring electrical equipment • vegetation could be live • vegetation obscuring tree/network defects • vegetation causing damage to electrical equipment • Climbing plants may be difficult to remove safely
11	State signs of ill-health in trees	Signs of ill-health in trees may include: • leaf discoloration • crown die back • peeling and dead bark • sparse crown • fungal fruiting bodies • stem bleeds

12	Identify and explain potential hazards and defects, and their significance in relation to overhead conductors	Potential hazards and defects, and their significance in relation to overhead conductors may include: • fungal fruiting bodies • cankers • dead wood • included bark • sparse crown • peeling and dead bark • tight or weak forks • decay cavities - basal and crown • old pollards/topped and lopped trees • damaged roots and/or ground heave • cracks in branches • hanging branches • grey squirrel damage • other
13	Identify decay fungi Scientific or common names are acceptable	Identification of decay fungi may include: • *Ganoderma* spp (Artist's fungus) • *Armillaria mellea* (Honey fungus) • *Inonotus hispidus* (Velvet fungus) • *Kretzschmaria deusta* (Brittle cinder) • *Laetiporus sulphureus* (Chicken of the woods) • *Fomitopsis betulina* (birch polypore) • *Meripilus giganteus* (Giant Polypore) • other
14	State the significance of how the presence of fungi may impact the tree, work, and the electrical network	The significance of how the presence of fungi may impact the tree, work and the electrical network may include: • structural integrity of the tree • biosecurity • climbing safety • security of network
15	State why topping and lopping trees is considered bad practice	Topping and lopping trees is considered bad practice because: • does not conform to BS3998 • rapid sprout growth occurs, back into the lines • it leaves the tree unsightly • unstable branch unions result • rot can set into stem causing tree to become a hazard • other

16	State the reasons for the correct sequence of cuts when undertaking pruning operations	The reasons for the correct sequence of cuts when undertaking pruning operations may include: • control of the cut section • prevent tearing or ripping of the bark • ensure the final pruning cut can be carried out precisely
17	Explain different recognized pruning methods near electrical lines and their applications	Different recognized pruning methods near lines and their applications include: Through Pruning: • low voltage overhead lines in residential areas (ABC) • allows conductors to pass through the canopy allowing sufficient clearance between the tree and conductor Under/Amenity Pruning: • amenity considerations in residential areas • removal of some branches, but retaining the general shape of the tree Selective Branch Removal: • veteran/ancient tees • amenity considerations • mature slow growing species Side Pruning: • woodland or forest locations • all branches on the line side of the tree removed by a pruning cut at the trunk or back to a specified clearance Crown Reduction: • trees directly under the line • growth directed away from conductors • alternative to removal where tree must be retained Fell to Ground: • complete removal of the tree

Practical tables

Unit 302 Utility Arboriculture Tree Species Recognition, Growth Characteristics and Associated Hazards

Candidate name:
Date:
Start time:
Finish time:

All criteria must be achieved.

Activity number and description	Achieved
1. Identify common species of broadleaved trees	
2. Identify common species of coniferous trees	
3. State typically slow-growing tree species	
4. State typically fast-growing tree species	
5. Explain the significance in relation to slow and fast growth rates of trees in proximity to overhead lines	
6. State factors that influence the growth of trees	
7. State tree species that produce rapid sprout growth when pruned	
8. State tree species with brittle stems and branches	
9. Explain the significance of brittle species in relation to growth in proximity to overhead lines	
10. State hazards associated with climbing plants	
11. State signs of ill-health in trees	
12. Identify hazards and defects, and their significance in relation to overhead lines	
13. Identify decay fungi	
14. State how the presence of decay fungi may impact the tree and the work	
15. State why topping and lopping trees is considered bad practice	
16. State the reasons for the correct sequence of cuts when undertaking pruning operations	
17. Explain different recognized pruning methods near lines and their applications	
Grade (P/X)	

Assessor feedback:
Candidate feedback:

Assessor signature and date	
Candidate signature and date	

Appendix 1 Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. They should be referred to in conjunction with this handbook. To download the documents and to find other useful documents, go to the **Centres and Training Providers homepage** on **www.nptc.org.uk** .

City & Guilds Centre Manual

This document provides guidance for organisations wishing to become City & Guilds approved centres, as well as information for approved centres delivering City & Guilds qualifications. It covers the centre and qualification approval process as well as providing guidance on delivery, assessment and quality assurance for approved centres.

It also details the City & Guilds requirements for ongoing centre and qualification approval, and provides examples of best practice for centres. Specifically, the document includes sections on:

- the centre and qualification approval process
- assessment, internal quality assurance and examination roles at the centre
- registration and certification of candidates
- non-compliance and malpractice
- complaints and appeals
- equal opportunities
- data protection
- management systems
- maintaining records
- internal quality assurance
- external quality assurance.

Our Quality Assurance Requirements

This document explains the requirements for the delivery, assessment and awarding of our qualifications. All centres working with City & Guilds must adopt and implement these requirements across all of their qualification provision. Specifically, this document:

- specifies the quality assurance and control requirements that apply to all centres
- sets out the basis for securing high standards, for all our qualifications and/or assessments
- details the impact on centres of non-compliance

Our Quality Assurance Requirements document encompasses the relevant regulatory requirements of the following documents, which apply to all UK centres working with City & Guilds:

- Ofqual's General Conditions of Recognition

The **centre homepage** section of the City & Guilds website also contains useful information on

- **Walled Garden**: how to register and certificate candidates online
- **Events**: dates and information on the latest Centre events
- **Online assessment**: how to register for e-assessments.

Useful contacts

UK learners General qualification information	**E: learnersupport@cityandguilds.com**
International learners General qualification information	**E: intcg@cityandguilds.com**
Centres Exam entries, Certificates, Registrations/enrolment, Invoices, Missing or late exam materials, Nominal roll reports, Results	**E: information@cityandguilds.com**
Single subject qualifications Exam entries, Results, Certification, Missing or late exam materials, Incorrect exam papers, Forms request (BB, results entry), Exam date and time change	**E: singlesubjects@cityandguilds.com**
International awards Results, Entries, Enrolments, Invoices, Missing or late exam materials, Nominal roll reports	**E: intops@cityandguilds.com**
Walled Garden Re-issue of password or username, Technical problems, Entries, Results, e-assessment, Navigation, User/menu option, Problems	**E: walledgarden@cityandguilds.com**
Employer Employer solutions, Mapping, Accreditation, Development Skills, Consultancy	T: +44 (0)121 503 8993 **E: business@cityandguilds.com**

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As the UK's leading vocational education organisation, City & Guilds is leading the talent revolution by inspiring people to unlock their potential and develop their skills. City & Guilds is recognised and respected by employers across the world as a sign of quality and exceptional training.

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