Unit 26: Manage Heritage Gardens and Arboreta

Unit code: M/600/9841

QCF Level 3: BTEC National

Credit value: 10

Guided learning hours: 60

● Aim and purpose

This unit aims to enable learners to develop the skills and knowledge involved in the management of arboreta or heritage gardens. Learners will be able to explore their development and public access and cover day-to-day management and future development and promotion.

● Unit introduction

The importance of heritage gardens as a resource is shown through the increasing number of the public who visit and enjoy them. People employed by heritage gardens must know about historic garden design styles and have the skills to work within the commercial environment of heritage gardens.

This unit provides the knowledge and understanding required to identify and appreciate various historic garden styles. Learners will examine the practical considerations involved in opening a garden to the public.

Learners will learn to identify key features of historic garden styles, and their influence on British garden landscapes, as well as how heritage gardens are used by the public and the practical implications of dealing with increasing visitor numbers. Health and safety issues, and maintenance and management strategies which prevent or control overuse of heritage gardens, are also covered.

Learners will investigate commercial aspects of heritage gardens such as funding, other sources of income, how heritage gardens interact with the visiting public, the facilities they offer and how they market themselves.

● Learning outcomes

On completion of this unit a learner should:

1   Understand the development of arboreta or heritage gardens

2   Be able to collect and collate data relating to an arboretum or heritage garden

3   Be able to promote arboreta or heritage gardens

4   Be able to plan the management of an arboretum or heritage garden.

Unit content

1 Understand the development of arboreta or heritage gardens

Reasons for heritage gardens and arboreta: eg plants, history, classic designs of a specific period, influence of the historical context in which gardens were built, plant collections, preservation of genetic material

Garden facilities: range of gardens available; seasonal interest and ability to attract visitors throughout the season; ancillary facilities eg toilets, parking, cafes and restaurants, educational facilities eg site classroom

Sustainable development: heritage gardens and arboreta eg economic, social, environmental

2 Be able to collect and collate data relating to an arboretum or heritage garden

Types of data: eg plants or trees, including species, number, height, spread, form, management plans, weather records, visitor numbers, staffing levels and costs, figures for monthly/yearly income

Sources of data: eg maps, websites, government departments, local weather stations, previous management plans and records, customer surveys

3 Be able to promote arboreta or heritage gardens

Income: private finance; sponsorship; matching grant finance; fund-raising; outdoor events eg firework displays, summer concerts, plant sales, hiring out locations for film sets; charging users for visiting the gardens; economic viability; calculating the charge; process of grant application

Grant organisations: Heritage Lottery Fund; English Heritage; local authorities, charities; grant organisation aims

Promotion: effectiveness of marketing strategies eg publications and flyers; interpretation (meaning) eg guides, maps, noticeboards, guided walks

4 Be able to plan the management of an arboretum or heritage garden

Public use: origins; emergence of the public use of heritage gardens through organisations eg National Trust; trends in public usage in the last 20 years; health and safety eg visitor safety, insurance

Overuse: implications of overuse on the future of heritage gardens including problems for staff; design management and maintenance solutions to prevent visitor damage

Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria for a pass grade describe the level of achievement required to pass this unit.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P1 summarise the development of arboreta or heritage gardens, including origins and organisations	**M1** explain trends in the public use of selected arboreta or heritage gardens	**D1** evaluate long-term strategies to ensure the economic viability of a selected arboretum or heritage garden
P2 review and discuss the trends in public usage		
P3 evaluate the benefits and liabilities of public access to arboreta or heritage gardens [IE, CT, RL]		
P4 describe the salient features of an arboretum or heritage garden with public access, including plant collections, internal sources of income, access and transport and visitor facilities		
P5 collect and collate data for a given area of an arboretum or garden, including access, perimeter, biological factors, soil type, aspect, and current sources of income	**M2** identify and evaluate facilities offered by a selected arboretum or heritage garden, suggesting improvements	
P6 collect and collate data for specific plants or trees, including species, number, height, spread, and form		
P7 access relevant data from maps, websites, government departments, local weather data, and previous management plans		
P8 explain how data collected can be used to develop the arboretum or garden		
P9 obtain current information from customers		

Assessment and grading criteria

To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P10 produce a calendar of activities to suit all age ranges, levels of interest and physical ability [TW, SM, EP]	**M3** discuss sources of funding and investment available to arboreta and heritage gardens	**D2** evaluate the marketing practices used by a selected arboretum or heritage garden.
P11 plan an activity in detail, including risk assessment, costs, publicity and resources		
P12 discuss considerations when planning activities, including commercial viability, child protection issues, visitor impact, access and safety		
P13 plan a five-year management plan for a specific venue, taking into account the impact of public and financial pressures	**M4** discuss the sustainable use of arboreta or public gardens and appropriate maintenance or management solutions	
P14 analyse the management objectives of a specific venue and make recommendations for improvement		
P15 produce interpretation material for public education about the venue		

PLTS: This summary references where applicable, in the square brackets, the elements of the personal, learning and thinking skills applicable in the pass criteria. It identifies opportunities for learners to demonstrate effective application of the referenced elements of the skills.

Key	IE – independent enquirers	RL – reflective learners	SM – self-managers
	CT – creative thinkers	TW – team workers	EP – effective participators

Essential guidance for tutors

Delivery

Delivery of this unit will involve practical and written assessments, visits to suitable collections and will link to work experience placements.

Tutors delivering this unit have opportunities to use a wide range of techniques, including lectures, discussions, seminar presentations, visits to heritage gardens, internet and/or library-based research, personal and/or industrial experience. Delivery should stimulate, motivate and educate learners.

Work placements should be monitored regularly to ensure the quality of the learning experience. It would be beneficial if learners and supervisors were made aware of the requirements of this unit before any work-related activities are undertaken, so that naturally occurring evidence can be collected at the time. For example, learners may have the opportunity to discuss overuse of public gardens and they should ask for observation records and/or witness statements to be provided as evidence of this. Guidance on the use of observation records and witness statements is provided on the Edexcel website.

Whichever delivery methods are used, it is essential that tutors stress the importance of sound environmental management and the need to manage the resource using approved methods.

Health and safety issues relating to working in heritage gardens must be stressed and reinforced regularly, and risk assessments must be undertaken before any practical activities.

Tutors should consider integrating the delivery, private study and assessment for this unit with other relevant units and assessment instruments learners are taking as part of their programme of study.

Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan gives **an indication of the volume of learning it would take the average learner** to achieve the learning outcomes. It is **indicative and is one way of achieving the credit value**.

Learning time should address all learning (including assessment) relevant to the learning outcomes, regardless of where, when and how the learning has taken place.

Topic and suggested assignments/activities and/assessment
Introduction and overview to the unit and relevance to the industry.
Assignment 1: Garden Origins and Uses (P1, P2, P3, P4, M1)
Tutor introduces the assignment.
Discussion of the factors that influence the use of the garden.
Tutor introduces different types of heritage garden, their purpose and identifies how this relates to the choice of plants on the site.
Practical session using local gardens to identify relevant features, including plant collections, internal sources of income, access and transport and visitor facilities.
Discussion of how this garden is used and trends in public usage.
Learners evaluate the garden and suggest ways of minimising damage in relation to public access.
Supervised site visits.

Topic and suggested assignments/activities and/assessment
Assignment 2: Data Collection (P5, P6, P7, P8, P9, M2, D1)
Tutor introduces the assignment.
Discuss the types of data and how they can be used.
Learners collate specified data for a particular site using practical methods, eg plant survey/measurements or electronically, and carry out a customer survey.
Learners explain how the collected data can be used to help the future development of the arboretum or heritage garden.
Supervised site visits.
Assignment 3: Facilities and Activities (P10, P11, P12, M3)
Tutor introduces the assignment.
Discussion of facilities required and sources of funding available for heritage gardens/arboreta.
Learners identify ways of promoting a specified site and produce a plan of potential activities for the site.
Learners identify relevant health and safety issues as they apply to this assignment.
Assignment 4: Maintenance and Management (P13, P14, P15, M4, D2)
Tutor introduces the assignment.
Learners should assess the methods commonly used to protect and maintain planted sites and produce a five-year management plan for a specific site.
Discuss the marketing practices used by a selected site and learners produce interpretation material about the site for public education.
Unit review.

Assessment

For P1, P2, P3 and P4, learners should explain how heritage gardens and arboreta have developed, discuss the key features of an arboretum or heritage garden, trends in the public use of selected sites and the benefits and liabilities associated with these. Tutors should identify the sites or agree them through discussion with learners. Where possible, to ensure assessment is fair, the size and complexity of the tasks should be the same for all learners. Learner evidence should be broad ranging and could use examples from a known historic garden. Evidence could be a project or essay.

For P5, P6, P7, P8 and P9, learners must collect data from appropriate sources and discuss how it could be used to inform future development of the site. Data for a particular site could be collected by practical methods, for example plant survey/measurements or by accessing other databases electronically, and learners should carry out a customer survey for a specified site. Evidence could take the form of a pictorial presentation with notes or a PowerPoint presentation.

For P10, P11 and P12, learners must discuss facilities required for heritage gardens/arboreta, identify ways of promoting a specified site and produce a plan of potential activities for the site. Learners should take into account what needs to be considered when planning activities, including commercial viability, child protection issues, visitor impact, access and safety. Tutors should identify the sites or agree them through discussion with learners. Learners should identify relevant health and safety issues as they apply to the site. Evidence could be a project or essay.

For P13, P14 and P15, learners should assess the methods commonly used to protect and maintain planted sites and produce a five year management plan for a specific site. Learners must review the management objectives used by a selected site and make recommendations for improvement. They must also produce

interpretation material about the site for public education. Evidence could take the form of a pictorial presentation with notes or a PowerPoint presentation.

For M1, learners should explain trends in the public use of heritage gardens and arboreta and discuss the present use of a public garden/arboretum. Tutors should identify the sites or agree them through discussion with learners. Evidence could be in the form of a pictorial presentation with notes or a PowerPoint presentation.

For M2, learners must identify and evaluate facilities offered by a selected heritage garden and suggest improvements. Evidence could take the form of a written report.

For M3, learners must discuss sources of funding and investment available to heritage gardens and arboreta. Evidence could be in the form of a pictorial presentation with notes or a PowerPoint presentation and could be linked to assessments for P10, P11 and P12.

For M4, learners must discuss overuse of public gardens or arboreta and appropriate maintenance or management solutions. Learners should give examples of damage caused by overuse and possible actions to mitigate and/or prevent further damage. Evidence could be in the form of a project or essay and could be linked to assessments for P1, P2, P3 and P4.

For D1, learners must evaluate the long-term income-generating capabilities and economic viability of a selected heritage garden. Tutors should identify the heritage garden or agree it through discussion with learners. Where possible, to ensure assessment is fair, the size and complexity of the task should be the same for all learners. Evidence could be in the form of a summary report.

For D2, learners should evaluate the marketing practices used by a selected heritage garden or arboretum. Tutors should identify the heritage garden or agree it through discussion with learners and it could be the same one used in D1. Where possible, to ensure assessment is fair the size and complexity of the task should be the same for all learners. Evidence provided must be broad ranging and feasible and may be in the same format as for D1.

Programme of suggested assignments

The following table shows a programme of suggested assignments that cover the pass, merit and distinction criteria in the grading grid. This is for guidance and it is recommended that centres either write their own assignments or adapt any Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
P1, P2, P3, P4, M1	Garden Origins and Uses	Illustrate how heritage gardens and arboreta have developed, their key features, and discuss trends in public use of selected sites.	Project or essay.
P5, P6, P7, P8, P9, M2, D1	Data Collection	Collect data from appropriate sources and discuss how it could be used to inform future development of the site. Carry out a customer survey for a specified site.	Pictorial presentation with notes or PowerPoint presentation.
P10, P11, P12, M3	Facilities and Activities	Discuss facilities required and sources of funding available for heritage gardens/arboreta. Promote a specified site and produce a plan of potential activities for it.	Project or essay.

Criteria covered	Assignment title	Scenario	Assessment method
P13, P14, P15, M4, D2	Maintenance and management	Assess methods commonly used to protect and maintain planted sites. Produce a five year management plan for a specific site. Review the management objectives used by a selected site.	Pictorial presentation with notes or PowerPoint presentation.

Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications

This unit forms part of the BTEC Land-based sector suite. This unit has particular links with:

Level 2	Level 3
Introduction to Practical Forestry Skills	Understand and Plan Urban and Community Forestry Projects

Essential resources

Visits to historic and heritage gardens will help to develop learner understanding of historic garden styles and how heritage gardens and arboreta operate in a commercial setting. Access to a good horticultural/history library is essential.

Tutors delivering this unit should have a good knowledge of garden history.

Employer engagement and vocational contexts

This unit focuses on aspects of the skills and knowledge needed to manage arboreta and heritage gardens. Visits to historic and heritage gardens will help learners to understand historic garden styles and how heritage gardens operate in a commercial setting. Centres are encouraged to create and develop links with local head gardeners, landscape architects and organisations such as the Forestry Commission.

Indicative reading for learners

Textbooks

Hessayon D G – *The Tree and Shrub Expert* (Expert Books, 1999) ISBN 9780903505178

Hobhouse P – *The Story of Gardening* (Dorling Kindersley, 2004) ISBN 9781405307147

Mosser M and Teyssot G (eds) – *The History of Garden Design: The Western Tradition from the Renaissance to the Present Day* (Thames & Hudson, 2000) ISBN 9780500282069

Scott-James A – *The Pleasure Garden: An Illustrated History of British Gardening* (Francis Lincoln Publishers, 2004) ISBN 9780711223608

Starr C – *Woodland Management: A Practical Guide* (The Crowood Press, 2005) ISBN 9781861267894

Turner T – *Garden Design: Philosophy and Design 2000 BC-2000 AD* (Taylor & Francis, 2005) ISBN 9780415317498

Websites

www.bbc.co.uk/gardening	BBC Gardening
www.english-nature.org.uk	English Nature
www.field-studies-council.org	The Field Studies Council
www.gardenvisit.com	Garden Guide
www.rhs.org.uk	Royal Horticultural Society
www-saps.plantsci.cam.ac.uk	Science and Plants for Schools

Delivery of personal, learning and thinking skills (PLTS)

The following table identifies the PLTS opportunities that have been included within the assessment criteria of this unit:

Skill	When learners are ...
Independent enquirers	researching background information on techniques and applying them to their practical work
Creative thinkers	using a checklist to evaluate the facilities and identify improvements
Reflective learners	evaluating information and recommending improvements
Team workers	reviewing work with others
Self-managers	organising data collection from various sources
Effective participators	discussing options with their tutor when producing promotional material for a site.

Although PLTS opportunities are identified within this unit as an inherent part of the assessment criteria, there are further opportunities to develop a range of PLTS through various approaches to teaching and learning.

Skill	When learners are ...
Independent enquirers	researching the history and uses of heritage gardens using various sources of information
Reflective learners	analysing the economic performance of a selected site and suggesting improvements
Self-managers	carrying out a plant survey on a selected site
Effective participators	presenting information to the tutor or other learners.

● Functional Skills – Level 2

Skill	When learners are ...
ICT – Use ICT systems	
Select, interact with and use ICT systems independently for a complex task to meet a variety of needs	using the internet to research appropriate information on the history of heritage gardens and arboreta
ICT – Find and select information	
Select and use a variety of sources of information independently for a complex task	collecting data for a selected site
ICT – Develop, present and communicate information	
Enter, develop and format information independently to suit its meaning and purpose including: ● text and tables ● images ● numbers ● records	producing written assessments using ICT programs
Bring together information to suit content and purpose	collecting data for a selected site
Present information in ways that are fit for purpose and audience	producing PowerPoint presentations to illustrate findings
Mathematics	
Understand routine and non-routine problems in a wide range of familiar and unfamiliar contexts and situations	evaluating the financial viability of a site
Draw conclusions and provide mathematical justifications	evaluating the financial viability of a site
English	
Speaking and listening – make a range of contributions to discussions and make effective presentations in a wide range of contexts	presenting their report on the facilities provided at a particular site
Writing – write documents, including extended writing pieces, communicating information, ideas and opinions, effectively and persuasively	completing a written report on the income generating capability of a site.