VETCERT

Veteran Tree Management Standards

Consulting Level

Version May 2018

Unit number: 1

Unit title: Veteran trees; recognition and values

Unit summary: Consultants have knowledge of a variety of veteran trees, their history, and values.

Main areas of necessary skill and knowledge *The consultant is able to*	Specific aspects of skill and knowledge *The consultant will, in particular, be able to*
1. Recognise veteran trees in their various forms and their context.	a) Provide a technical definition for a veteran tree. b) Show an awareness that the definition of a veteran tree might differ in legislation, in official guidance and in different countries. c) Identify veteran trees in the various forms in which they have developed in response to past management and/or environmental conditions.
2. Explain the wide range of values veteran trees provide.	a) Describe the ecological, cultural heritage, social and aesthetic values these trees may provide. b) Converse with a wide range of audiences about the values of veteran trees, and their special management requirements.

Unit number: 2

Unit title: The development and aging of trees: the role of physiological function and dysfunction

Unit summary: Consultants will have a detailed understanding of how trees grow, age and decay and why this is relevant to veteran tree management.

Main areas of necessary skill and knowledge *The consultant is able to*	Specific aspects of skill and knowledge *The consultant will, in particular, be able to*
1. Describe how trees grow.	a) Describe the structural and functional characteristics of trees that allow them to grow indefinitely. b) Describe the wide range of factors which affect how trees grow, with specific reference to veteran trees.
2. Describe the ageing process in trees and why they can live so long.	a) Describe the development of trees as they grow older. b) Describe the resilience and survival strategies by which veteran trees can reach great age. c) Describe the natural hollowing process of trees over time and the impact of hollowing on the tree (biomechanical and ecological) and other organisms. d) Describe semi-autonomous 'functional units' and how these affect how veteran trees should be managed.
3. Describe the impacts that damage has on a tree.	a) Describe types of stress and dysfunction in a tree. b) Describe the impact damage (including cutting) has on a tree. c) Describe the main defence mechanisms of the tree following stress or injury, taking account of key differences between tree species. d) Describe the different characteristics of tree species relating to damage and decay.

Unit number: 3

Unit title: Roots of veteran trees and the soil environment

Unit summary: Consultants will have an understanding of a healthy soil environment, and how a degraded soil environment has a negative impact upon the health of veteran trees.

Main areas of necessary skill and knowledge *The consultant is able to*	Specific aspects of skill and knowledge *The consultant will, in particular, be able to*
1. Describe the natural soil environment and how this affects tree health.	a) Explain the importance of a healthy soil environment, and why veteran trees are susceptible to changes in this environment. b) Provide an overview of the range of organisms present within the soil and how these contribute to the function of a soil and the tree through nutrient recycling. c) Describe a variety of soil types and their influence on the rooting environment.
2. Describe factors which can have a detrimental impact upon the soil environment around veteran trees and recognise these *in situ.*	a) Identify the effects of deficient or excessive nutrients, pollutants and contaminants on veteran trees. b) Identify different types of soil damage and provide options for avoiding or reducing impact.
3. Be able to identify remediation options for degraded growing conditions around veteran trees.	a) Identify and evaluate options for soil management around veteran trees.

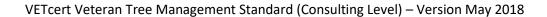| 4. Identify where roots and mycorrhizal fungi grow.	a) Describe common root architecture patterns and how root development is influenced by the rooting environment.
	b) Explain the relationship between roots and shoots.
	c) Describe types of symbiotic relationships between tree roots and other organisms and explain their benefits.
	d) Show an awareness of the problems associated with identifying actual root location.
	e) Identify and evaluate methods of root detection.

Unit number: 4

Unit title: Veteran trees as ecosystems

Unit summary: Consultants have an understanding of the ecological importance of veteran trees, both individually and in the wider landscape, taking account of the requirements of the range of dependent organisms.

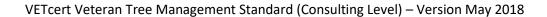| Main areas of necessary skill and knowledge *The consultant is able to*	Specific aspects of skill and knowledge *The consultant will, in particular, be able to*
1. Describe the wide range of ecological values of veteran trees, and how they fit into the wider ecosystem.	a) Explain the importance for biodiversity of abundant, good quality veteran tree habitat, continuously present for centuries. b) Explain the importance of the distribution of veteran trees in the landscape and the mobility of associated organisms. c) Describe how an individual veteran tree sits in a wider ecosystem and recognise that ecological processes are linked. d) Demonstrate an understanding of the complexity and diversity of habitats veteran trees can provide. Explain: • How these vary between tree species. • How these vary as a result of the history of the tree. • How these change over time. • That the habitat requirements vary between organisms and even the same organisms at different life stages. e) Identify the issues that impact on the sustainability of veteran tree populations.
2) Identify veteran tree habitats *in situ*	a) Identify a range of potential microhabitats associated with veteran trees. b) Demonstrate an understanding of how management may affect key species associated with veteran trees c) Identify decaying wood of different types and stages of decay.

Unit number: 5

Unit title: Veteran trees: their value for people

Unit summary: Consultants have an understanding of the social importance of veteran trees.

Main areas of necessary skill and knowledge *The consultant is able to*	Specific aspects of skill and knowledge *The consultant will, in particular, be able to*
1. Describe the social value of veteran trees.	a) Describe the social value of veteran trees and the implications for their management. b) Describe the importance of public support for protecting and managing veteran trees.

Unit number: 6

Unit title: Veteran trees; their cultural history values

Unit summary: Consultants have knowledge of the importance of the cultural and aesthetic values associated with veteran trees**.**
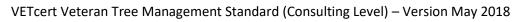
Main areas of necessary skill and knowledge *The consultant is able to*	Specific aspects of skill and knowledge *The consultant will, in particular, be able to*
1. Recognise the historical, aesthetic and cultural context in which veteran trees sit.	a) Identify the past and/or present aesthetic context that these trees sit within and how intact this is. b) Describe the cultural heritage and aesthetic values these trees may provide and the relationship with the landscape over time.
2. Describe how the location of veteran trees in cultural landscapes may introduce management challenges.	a) Demonstrate an understanding of the unique history of each veteran tree in a variety of cultural, historic and aesthetic landscapes and the management challenges this may present. b) Identify the opportunities and challenges faced by managers of 'famous trees' and of sites with high visitor pressure.

Unit number: 7

Unit title: Surveying of veteran trees and veteran tree sites

Unit summary: Consultants will be able to undertake surveys in order to inform management of veteran trees.

Main areas of necessary skill and knowledge *The consultant is able to*	Specific aspects of skill and knowledge *The consultant will, in particular, be able to*
1. Conduct a tree survey, where veteran trees make up part or all of the tree population.	a) Collect and record accurate information on veteran trees, in accordance with existing guidance. Use this information to inform veteran tree management. b) Assess the physiological condition of a tree. c) Identify a range of biomechanical defects that may affect the stability of a tree and make assessment of their severity with respect to failure. d) Collect information relating to the context the tree sits within. e) In the course of a tree survey, identify and record veteran trees according to recognised criteria, taking account of any such trees that may occur on land outside the defined survey site. f) Identify a range of key species associated with veteran trees. g) Show an understanding of the complexity of fungal life strategies and how they might change over time. h) Interpret information and identify management options to inform a veteran tree management plan. i) Describe the various methods and theories available in relation to tree surveying and assessment, and evaluate their limitations for assessing veteran trees. j) Demonstrate an understanding of the difference between surveying individual veteran trees and veteran tree landscapes. k) Collect sufficient information to allow veteran trees to be located by others and identified (e.g. record co-ordinates and draw

	simple plans).
	l) Undertake a financial valuation of veteran trees, and show awareness of the potential limitations of valuation systems.
2. Describe diagnostic tools which can be used as part of a veteran tree inspection.	a) Describe a range of diagnostic tools and be able to interpret results produced by these tools specific to veteran trees. Provide a list of benefits and limitations for each option and give examples of when they could be used to inform veteran tree management.

Unit number: 8

Unit title: Legislation and official guidance in relation to veteran trees

Unit summary: Consultants will have an understanding of relevant legislation and official guidance within the country of examination, what the legislation covers, prohibits, and knowledge of how to achieve consent to undertake works.

Main areas of necessary skill and knowledge *The consultant is able to*	Specific aspects of skill and knowledge *The consultant will, in particular, be able to*
1. Demonstrate an understanding of the legislation affecting veteran tree management within the country of examination.	a) Detail the legislation affecting veteran tree management within the country of examination and how to comply: • Protected sites and species • Biodiversity • Protected trees • Felling restrictions • Heritage • Liability • Health and Safety • Urban planning • Biosecurity • Forestry legislation • Historic or ancient monuments • … b) Demonstrate an awareness that if he /she works in another region/country, legislation in relation to veteran trees may differ.

Unit number: 9

Unit title: Veteran tree risk management

Unit summary: Consultants will have to demonstrate an understanding of the way risk might be assessed, in accordance with legislation and guidance within the country of examination.

Main areas of necessary skill and knowledge *The consultant is able to*	Specific aspects of skill and knowledge *The consultant will, in particular, be able to*
1. Undertake tree risk assessments according to relevant guidance and taking account of any special requirements for veteran trees.	a) Identify the difference between the potential to cause harm (hazard) and the likelihood of a given severity of harm occurring (risk). b) Undertake a risk assessment of a veteran tree following a suitable methodology. c) Undertake a risk vs benefit analysis, in order to inform veteran tree management. d) Demonstrate an appreciation that it is not possible to remove risk entirely. Risk needs to be managed to tolerable levels. e) Identify options other than felling or cutting the tree in order to manage the risk. Provide a list of 'pros and cons' for each option.

Unit number: 10

Unit title: Veteran trees: planning for urban development and infrastructure

Unit summary: Consultants have an understanding of how veteran trees should be treated during the planning and urban development process and the threats or benefits this may bring.

Main areas of necessary skill and knowledge *The consultant is able to*	Specific aspects of skill and knowledge *The consultant will, in particular, be able to*
1. Demonstrate an understanding of how veteran trees should be considered during the planning and construction process in the country of examination.	a) Demonstrate an understanding of the legal framework guiding the construction of urban development and infrastructure and how these relate to veteran trees. b) Demonstrate an understanding of good practice for protecting veteran trees in relation to construction, infrastructure or events. c) Undertake an assessment of the impact of proposals on veteran trees and their successors, allowing reasoned decisions to be made in the planning process. d) Prepare a management plan to enable the protection of veteran trees before, during and after the construction process and temporary events. e) Deliver effective site supervision.

Unit number: 11

Unit title: Veteran tree management in all its aspects

Unit summary: Consultants will have to demonstrate a detailed knowledge of the veteran tree management process and apply their knowledge and skills to achieve high quality results.

Main areas of necessary skill and knowledge *The consultant is able to*	Specific aspects of skill and knowledge *The consultant will, in particular, be able to*
1. Detail the basic principles behind veteran tree management.	a) Detail the overall aim of all veteran tree management and explain why it might be necessary to manage veteran trees. b) Describe the decision making process before carrying out any veteran tree management. c) Explain how the various characteristics of veteran trees guide management.
2. Identify and specify suitable management options.	a) Identify threats to particular veteran trees or groups of trees, and provide options for improvement. b) Evaluate a specific veteran tree's reactions to past management and/or natural events, and how this should affect its future management. c) Use their knowledge of tree species to inform management decisions. d) Evaluate any gaps in knowledge and identify appropriate courses of action e) Understand and acknowledge the limits of current scientific and professional knowledge on veteran tree management. f) Ensure that any pest and diseases prevalent at the site are taken into account when considering management options. g) Provide a set of potential objectives for a specific veteran tree, or site, and identify appropriate and realistic management options, including timescales.

	h) Demonstrate an understanding of undertaking veteran tree work in practice.
	i) Identify and provide a list of 'pros and cons' for a range of management options and techniques. Make recommendations for most suitable option.
	j) Identify and specify when the use of suitable artificial support systems may be appropriate.
	k) Identify and specify appropriate soil management to meet the needs of the tree/site.
	l) Describe why techniques for veteran tree management might differ from standard management guidance.
3. Identify options for improving habitats in the vicinity of veteran trees, where appropriate	a) Specify improvements in the management of vegetation and fallen or cut wood in order to enhance habitats.
4. Prepare a clear and accurate veteran tree management plan and specifications of work.	a) Provide clear guidance on what/where/when/how/why/who? This is to be set out in a method statement and includes overarching management principles, compliance with any legal requirements in the country concerned and specifications for work, including the management of arisings.
5. Undertake veteran tree management, in accordance with management plan.	a) Implement good practice biosecurity measures in accordance with guidance in the country of examination.
	b) Use his / her knowledge, experience and existing guidelines to identify the extent of a suitable root protection area for a veteran tree and choose an appropriate method for setting one up.
	c) Inspect completed works or supervise work to ensure compliance with management plan.

6. Identify the need for, and undertake monitoring.	a) Explain the importance of monitoring in veteran tree management. b) Collect information to guide ongoing veteran tree management.
7. State strategies for providing veteran trees for the future.	a) Describe some of the methods that may be applicable to promote development of abundant, good quality veteran tree habitat over long periods of time, for biodiversity. b) Have an awareness of the importance of providing veteran trees for future generations of people. c) Discuss the benefits and drawbacks of planting non-native tree species when planting to provide future generations of veteran trees.

Unit number: 12

Unit title: Personal skills

Unit summary: Consultants will have a strong set of transferable skills, which complement their veteran tree knowledge, to promote veteran tree management and conservation.

Main areas of necessary skill and knowledge *The consultant is able to*	Specific aspects of skill and knowledge *The consultant will, in particular, be able to*
1. Demonstrate excellent communication skills to promote the protection of veteran trees.	a) Work with professionals within the industry, and with professionals from other disciplines. b) Promote two-way communication with all stakeholders, including practitioners. Take into account all relevant information provided by others in his/her work and work complementary to other professionals. c) Produce high quality written material in the form of clearly written, accurate and concise reports.
2. Demonstrate excellent negotiation and motivation skills.	a) Demonstrate ability to take account of differing interests and opinions in veteran tree management.
3. Demonstrate excellent organisation skills.	a) Keep clear and accurate records regarding veteran tree management.
4. Recognise the limits of his / her professional abilities.	a) Understand and acknowledge the limit of his /her professional knowledge and skills, and seek additional assistance where necessary.