

The sacred groves of ancient Greece

PATRICK BOWE

In ancient Greece, a sacred grove was a grove of trees dedicated to a god or gods, its use, or the use of its trees, being restricted to humans in one way or another.¹ A sacred grove was a space comprised mainly of trees though it may have contained some man-made structures. It is distinguished from a sanctuary, which was a sacred space comprised primarily of buildings though it may have contained some trees.

No detailed description of a sacred grove survives from ancient Greek literature. However, a compilation of the many passing and diverse references in the literature, dating from the eighth century BC to the second century AD, may provide us with a composite picture.² The compilation of references assembled here is arranged in chronological order to indicate the changing concerns of the writers on sacred groves during this nearly one thousand year period. Not all Greek authors have been consulted but a representative collection is presented. The references available are inevitably limited and are unevenly distributed throughout the period, a preponderance of references occurring in the writings of the second century AD traveller, Pausanias. Consideration is given in the compilation to the differing purposes of the writers. Earlier writers like Homer, Aristophanes or Plato tended to refer to sacred groves in poetical, dramatic or philosophical contexts. They did not refer to actual groves but evoked a generalized view in their poetic evocations, their dramatic presentations or their philosophical treatises. However, later writers such as Strabo or Pausanias referred to actual groves giving relevant detail about their location and their significant features.

Literary evidence can be supplemented by the visual representations of groves that occur on some coins and vases, though the representations in these media are often conventional rather than realistic. A city was often represented

on its coinage by a conventional representation of its sacred grove. Archaeological evidence is sparse. That which exists tends to refer not to sacred groves but to sites that are related in character such as sanctuaries or the planting around temples or city squares.

This article proposes to focus on the physical aspects of sacred groves, their location and size, the different kinds of trees of which they were composed, the architectural and sculptural elements that were installed in them and the adaptation for use of some of the natural features located in them.³ It will also consider the uses, mainly religious, to which the sacred groves were put but only in so far as they have implications for the groves' physical aspect. It is not proposed to treat of their purely religious, political or social aspects.⁴

Early writers

Early references to sacred groves can be found in Homer's poems *The Iliad* and *The Odyssey* dating from the eighth century BC⁵. He noted that the groves he described consisted of one dominant tree species — the poplar — and were watered by springs,⁶ one of which is distinguished by the fact that its water emanated from a cleft in a rock.⁷ The religious function of these groves is underlined by the fact they contain altars and that they are dedicated to a deity, in one instance to Poseidon,⁸ in another to Apollo,⁹ in another to Aphrodite,¹⁰ in another to Zeus,¹¹ and in yet another to Athena.¹² In the latter, Odysseus prayed. The grove with the rock-spring mentioned above is dedicated not to a deity but to a nymph.

The seventh century reveals further poetic references to sacred groves in the work known as *The Homeric Hymns* and in the poems of Sappho. In the *Hymns*

we read of a grove dedicated to a nymph, in this instance, a dryad or tree-nymph¹³ and we learn of the writer's concern that horses and mules coming to water at a spring in a holy grove might spoil its sacred atmosphere.¹⁴ The implication is that the grove is not protected by a boundary wall. This kind of hazard does not concern Sappho when she conjures an image of 'cool streams' flowing through a sacred grove in one of her poems.¹⁵ Like the groves of Homer, her grove consists of one tree species only. Significance should be attached to the fact that the tree species is the apple, because it makes Sappho the earliest writer to describe a sacred grove consisting of cultivated trees rather than wild trees. (It is often mistakenly assumed that the sacred groves of ancient Greece consisted of wild trees and never of planted trees.) The poetess refers further to her grove as 'shadowed with roses' by which she must mean that the orchard trees were under-planted with roses. The image of the sacred grove conjured by Sappho, with its fruit blossom in spring followed by the rose blossom in summer and the fruit hanging on the boughs in autumn, is one of the most evocative in ancient Greek literature.

References to sacred groves increase in number in the fifth century. In the early part of the century, the poet, Pindar, drew attention to the use of a sacred grove dedicated to Zeus at Nemea as a setting for contests and games.¹⁶ This is the first reference in this compilation to this kind of activity in a sacred grove. Earlier references only note the limited activities of praying and, indirectly, of sacrificing.¹⁷ It does not imply that there was a formal stadium constructed within the grove since games in early Greek history were held in informal surroundings. Pindar also alerts us to the existence of a sacred grove in the Greek city of Camarina in Sicily that was dedicated to the city's protector, the war-god, Pallas.¹⁸ This is an early reference to a sacred grove in a Greek city abroad.

In the latter half of the century, a character in one of Sophocles' plays, *Trachiniae*, mentions a grove with altars sacred to Zeus at Cape Ceneae in Euboea.¹⁹ In two further plays, unacceptable behaviour in a sacred grove forms part of the drama's plot. In *Electra*, the father of the heroine is punished for shooting a stag in a grove dedicated to Artemis.²⁰ In *Oedipus at Colonus*, a stranger unwittingly wanders into a grove dedicated to the 'Maidens', entry into which was strictly prohibited.²¹ During the same period, Herodotus described a historical instance of unacceptable behaviour in a sacred grove. In this the Spartan king, Kleomenes, set fire to a sacred grove belonging to his enemy the Argives and was punished for his transgression.²² These are the

earliest literary references to regulations restricting human behaviour in sacred groves and to the punishments that were inflicted on those who transgressed.

Writing towards the end of the century, the playwright, Aristophanes focused his attention on the expectations of those taking part in rituals in a sacred grove. In his play, *Women at the Thesmophoria*, the chorus asks the goddesses to whom a grove is dedicated (and into which men are not admitted) to reveal themselves to the women during the course of their rituals.²³ The form that these rituals might have taken is suggested in a later play, *The Frogs*. In it, the chorus join the women and girls in a sacred grove in order to dance in a circle all night by torchlight.²⁴ This allows us to picture the clearing or ritual zone within a grove that might be required to accommodate such a dance. Level ground of a round-ish shape cleared of vegetation is suggested. The chorus describes the grove as 'flower-bearing', suggesting that the ritual described is taking place in spring, the season when the Greek *flora* is in full bloom.

Two works by the philosopher, Plato, from the first half of the fourth century, amplify our understanding of the practical ways in which a grove might be irrigated. In the dialogue, *Critias*, Plato conjures an image of a mythical island called Atlantis where a sacred grove of Poseidon is irrigated by the overflow of water from the island's public baths.²⁵ In another dialogue, *Laus*, he prescribes irrigating a sacred grove by piped water from nearby springs.²⁶ Both these references imply the existence of a system of man-made canals or channels in at least some sacred groves.

Sappho described an imaginary grove that consisted of planted rather than natural woodland. The writer, Xenophon, provides evidence of an actual grove of this kind. He records that cultivated fruit trees comprised the sacred grove surrounding the temple that he built to Artemis on his estate.²⁷ Further evidence that a sacred grove might consist of planted trees is implied in the offer of Philip of Macedon to provide 'plants and gardeners' to restore a sacred grove at Nicephorium.²⁸

At the turn of the millennium, Strabo, the geographer, made a number of references to sacred groves in the Greek countryside. He noted two sacred groves that contained stadiums within them: the grove of wild olive trees in front of the temple at Olympia²⁹ and a grove in the suburbs of Nicopolis in northern Greece.³⁰ These are the earliest references to a formal stadium within a grove and, indeed, to any built element within a grove apart from altars and irrigation channels. Strabo described a number of groves consisting of one tree

species only. The grove around the temple of Samian Poseidon at Samicum was composed of wild olive trees,³¹ the Isthmian grove near Corinth was composed of pine trees³² and the grove associated with the temple of Apollo on the island of Chios was composed of palm trees.³³ (In one section of his book, *Geography*, Strabo turns aside unexpectedly from his main theme to warn the reader of writers who describe sacred precincts as 'sacred groves' even though they are bare of trees.³⁴)

Pausanias

Our most extensive knowledge of the sacred groves of ancient Greece derives from the *Guide to Greece* written by Pausanias in the second century AD.³⁵ Although he was writing long after the Romans had overtaken Greece, he was concerned to record from first-hand observation the traditional sites and customs of his country.³⁶ The accuracy and authenticity of his observations is generally accepted.³⁷ (When he has on occasion not personally visited a site and relies on hearsay evidence, he usually says so.) Unlike the previous authors quoted, Pausanias had a wide range of interests. In addition to his interests in religion, history, art and architecture, he was interested in the natural world. He was therefore in a unique position to record the various elements of a sacred grove, its history, rituals, buildings, sculpture and its vegetation.

Pausanias recorded the varying locations of sacred groves. The sacred grove of Pontinos, stretching from Mount Pontinos to the sea and bounded on either side by rivers, was located deep in the countryside.³⁸ By contrast, the grove containing the sanctuary of the Kaberoi at Anthedon was located in the middle of the city.³⁹ This illustrates the varying sizes of groves, those in the country like that of Pontinos, because of the availability of space, sometimes stretching over large tracts of land, whereas groves located within the walls of a city, because of the shortage of space, were necessarily small. The location of a grove must have determined its form and layout. The sacred wood of the Muses was located high on Mount Helikon⁴⁰ and so probably needed some modifications of the ground levels to create appropriate ritual zones. The sacred wood of Love at Leuktra was, by contrast, located in such low-lying ground that it flooded in winter and so probably needed drainage to ensure access.⁴¹ Some sacred groves were closely associated with a sanctuary. The grove of Megalopolis was located within a great sanctuary.⁴² By contrast, a sacred wood at Trikolonoi was so large that it surrounded a sanctuary of

Poseidon⁴³ and the grove of Aphrodite at Patrai directly adjoined a sanctuary of the goddess.⁴⁴

The primary use of a sacred grove was a religious one (figure 1). Pausanias recorded some of the religious rituals that took place in groves. They included ceremonial dancing, feasting and the offering of sacrifices for which appropriate zones would have been provided. In the grove of Artemis Karyatis, girls performed a traditional dance around the figure of the goddess.⁴⁵ In the grove of Pyraia, men feasted.⁴⁶ At an altar in the grove of Myonia near Phokis sacrifices to the gods were made at night.⁴⁷ Since many rituals took place at night by torchlight, it must have been important that they took place in substantial clearings to avoid the danger of setting the vegetation of the grove on fire, especially if the remains of sacrificial victims were burned on the altars. Some rituals like those performed in the grove of Kabeiran Demeter near Thebes were secret.⁴⁸

During a seven-day festival of Demeter in the sacred grove at Mysaion, religious and recreational activities were combined. The *Guide to Greece* records that the men were obliged to withdraw from the grove on the third day of the festival, leaving the women to perform designated rituals overnight. On the following day, a reunification with much jollity was affected.⁴⁹ Although many such ceremonies contained an element of enjoyment and recreation, it would seem that a few groves described by Pausanias were

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available for purely recreational activities. His *Guide to Greece* describes the sacred grove at Patrai as 'a delightful place for idling in the summer' and as traversed by 'very good rides'.⁵⁰ The sacred wood at Pharai was also enjoyed recreationally. The trunks of its plane trees were so large and hollow from age, that 'parties were given inside the trunks and as many as feel like it sleep there afterwards'.⁵¹

Access to the various built elements and their associated clearings within a grove must have involved a path system leading from the grove's entrance as well as leading from one built element to another (figure 2). The character of the paths, presumably, depended on the amount and frequency of access required. In some groves, great public festivals were held. They must have required the provision of wide, easy pathways along which a large group of celebrants might process. These pathways may have been akin to those

Pausanias describes as 'rides' in his description of the sacred grove at Patrai. Regular maintenance must have been required to keep these open. In those groves that were accessed by smaller groups only, narrower paths could have been provided. Such was probably the case in the grove of Demeter in the Marsh in Arkadia,⁵² as entry was only allowed to women, or in the case of the sacred wood of Geronthrai, which was out of bounds to women during the annual festival of Ares.⁵³ Yet narrower paths would have sufficed in the case of groves entry to which was restricted to the priesthood such as the grove of Artemis the Saviour at Pellene that was reserved only for priests⁵⁴ and the grove of Hera at Aigion as priestesses only were allowed to set eyes on her statue in the grove.⁵⁵ A continuing adaptation of the path system must have been required in the grove of Hymethe near Epidauros since the human use of its trees, not even of naturally fallen boughs, was absolutely forbidden.⁵⁶ As they had to be allowed to remain where they fell⁵⁷ new lines of access paths must have been devised around them. In the case of a sacred grove at Megalopolis grove, no paths at all can have been visible since entry was forbidden to all human beings — it must have been a true wilderness.⁵⁸

A similar analysis can be made with respect to the size and shape of the clearings or ritual zones required for rituals around the altars, temples, shrines and sculpture in a grove. In some instances rituals were informal so that it must have been difficult to assess the requirements but in other cases, as in the grove of Demeter in Mysaion, the ritual was codified and formalized and so a more precise determination of the size and shape of the ritual zone could be determined.

Pausanias was careful to record the tree composition of some sacred groves.⁵⁹ He recorded some groves consisting of one tree species only, others with two species, yet others with many species and also some consisting only of fruit trees. Cypress trees⁶⁰ characterized the Kraneion grove before Corinth⁶¹ as well as the grove on the acropolis of Phlious.⁶² The cypress tree is appropriate in the dry shallow soils of an acropolis (figure 3). The *Guide to Greece* also records that the grove of Black Demeter on Mount Elaion,⁶³ the wood of Demeter of the Korythians⁶⁴ and the grove in Messenia that was used for initiations into the Eleusinian mysteries⁶⁵ were all of oak trees.⁶⁶ Oak trees need a location with a fertile soil and a deep root run in order to thrive. Pausanias noted one grove, at Korseia, that was mostly of evergreen oak.⁶⁷ Another grove, that of Pontinus was mostly of plane trees.⁶⁸ Yet another, the holy grove of Apollo at Klaros consisted of ash trees.⁶⁹

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Pausanias, unlike earlier writers, described some sacred groves that contained a mixture of trees. A mixture of two tree species, cypress and pine, characterized the sacred grove he saw at Naupaktos.⁷⁰ Fruit trees and other trees were mixed in the grove around the sanctuary of Artemis Kalliste at Wells in Arkadia.⁷¹ More diverse still was the planting in the grove of Mysaion in Aschaia. It was comprised of 'all kinds of trees'.⁷² In a phrase that is probably an exaggeration, the grove of Apollo at Gryneion was described as containing 'every wild tree that can give pleasure by its sight or scent'.⁷³

Most of the above-mentioned trees may be designated as 'forest trees' that grow to a considerable stature. Early writers such as Sappho, Pindar, Xenophon and Strabo described groves of fruit trees that are smaller in stature. Pausanias confirms the use of fruit trees in groves in his time also. The grove of Apollo at Kyrtones consisted entirely of fruit trees.⁷⁴ Olive trees, of the wild rather than the cultivated variety, distinguish the grove sacred to

Hyrnethe near Epidauros⁷⁵ and bay trees, also relatively small of stature, comprised a sacred wood near Pharai in Achaia.⁷⁶

This compilation of references indicates that the majority of sacred groves consisted of a dominant tree species, of evergreen trees like cypress, pine or evergreen oak or of deciduous species like oak, plane or ash. Later writers do not echo Homer's references to sacred groves of poplar trees. References in the *Guide to Greece* to sacred groves that consisted of a mixture of trees rather than a single trees species are more rare. Some groves consisted entirely of smaller trees such as fruit trees.

Pausanias was the first writer to record built elements, other than stadiums and altars, within a sacred grove. Of the built elements the first to strike a visitor must have been the boundary walls and entrances. The *Guide to Greece* records a boundary wall protecting the grove of Artemis the Saviour at Pellene.⁷⁷ What is described as a stone 'barrier' demarcated the grove in the sanctuary of the Great Goddesses at Megalopolis,⁷⁸ as did another 'barrier' at the grove of the Mistresses at Akakesion.⁷⁹ The evidence of contemporary coins suggests that, in some instances, boundary walls were lined on the interior with open colonnades (figure 4). Pausanias noted that the boundary of the grove of Asklepios in Epidauros was delineated not by a wall but by a series of free-standing stones at intervals along its length.⁸⁰

The line of a boundary wall must have been broken in order to provide an entrance to a grove. Pausanias noted that the entrance to the Altis grove at Olympia was wide enough to accommodate processions.⁸¹ Multiple grove entrances were also recorded. Pausanias described the two distinct entrances to the grove of Artemis of the Lake at Patrai. One led directly from the city's marketplace, the other, from the city's stoa or colonnades, was designed to give access to two sanctuaries located within the grove.⁸² The approach to the grove entrances was also given consideration. Pausanias recorded that the approach to the entrance of the Grove of the Muses on Mount Helikon was along a straight road.⁸³ A straight line of pine trees marked the entrance to the grove in which the Isthmian Games were held.⁸⁴

Pausanias is the first writer in this compilation to record temples and shrines within a sacred grove. As might be expected, the principle temple in a grove honoured the grove's dedicatee. Zeus was celebrated with a temple of Zeus in the Altis grove at Olympia⁸⁵ and Artemis with a temple of Artemis in the grove of Artemis near Kaphyai.⁸⁶ A subsidiary shrine might be devoted to a secondary deity. The distinction between a temple and shrine is often made on

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the basis of size, the former being the greater, but it is also made on the basis of the location of the votive statue, that of a temple being inside, that of a shrine may be on the exterior as was the case in the shrine of the sea god, Palaimon, in a grove on the isthmus of Corinth (figure 5). A subsidiary shrine honoured Artemis in Asklepios' grove at Epidauros⁸⁷ and a subsidiary shrine honoured Herkyna in the Trophonios' grove at Lebadeia (figure 6).⁸⁸

Pausanias described other assorted structures that featured in sacred groves. Most impressive of all those noted by him were the stadium and fountain house within the grove of Asklepios at Epidauros.⁸⁹ Tripods, ornamental vessels raised high on supports, were a notable addition to the grove of the Muses on Mount Helicon.⁹⁰ An altar of 'natural stones', rather than, presumably, dressed stones, stood in a wood of the Dioskouroi at Pharai.⁹¹ Pausanias described a variety of structures within the cypress grove before the city of Corinth: in addition to an enclosure dedicated to the mythological hero Bellerophon, there was a shrine to Black Aphrodite as well as the burial place

of the legendary Corinthian beauty, Lais.⁹² Such an array of built elements in a grove must have been reflected in a variety and complexity of ritual.

Although Pausanias noted that the grove sacred to the Dioskouroi near Pharai contained no temples or statues, many groves did.⁹³ Pausanias described a figure of Hermes as standing 'in the open air in a grove at Korseia'.⁹⁴ The *Guide to Greece* is the earliest text in this compilation to describe sculpture in a sacred grove.

Grove sculpture usually bore a religious, mythological or cultural message. The most noteworthy sculpture in a grove usually represented the dedicatee. In the grove of Asklepios at Epidauros, Pausanias noted a statue of Epione Asklepios.⁹⁵ In the Karnasion grove in Messenia, he noted a statue of Karnasion Apollo. Subsidiary statues honoured deities other than the dedicatee. The *Guide to Greece* records that the sacred wood of Apollo at Kyrtone had a figure of Artemis in addition to that of Apollo.⁹⁶ The Karnasion

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grove had statues of Demeter's daughter and of Hermes carrying a ram in addition to the statue of Karnasion Apollo.⁹⁷ Pausanias described the figure of Demeter in the Pontinos grove as 'seated' that may imply that most grove statuary was of a standing figure.⁹⁸ Not all grove statuary represented a deity. It might represent a legendary or epic figure. For example, the sacred wood before Corinth boasted a sculpture of a lioness holding a ram in its front paws. As the sculpture stood over the grave of the legendary beauty, Lais, the subject may have been chosen to represent her compelling power over men (figure 7).⁹⁹

Although most grove statuary was carved in weather-resistant stone, one piece, the figure of Aphrodite in her grove at Patrai, was in wood, only the face, hands and feet being carved in stone.¹⁰⁰ The figure of the tutelary goddess in the grove of Artemis of the Lake was entirely in wood but it was not kept

permanently in the grove only being carried in during the goddess's annual festival.¹⁰¹

Of the arrangement of the sculpture in a sacred wood, Pausanias gave a detailed account in his description of the grove of the Muses on Mount Helikon. Stone portraits of Eupheme, the nurse of the Muses, and of Herakles' music teacher, Linos, were positioned on the approach to the grove.¹⁰² Immediately inside the grove were statues of all nine Muses. Deeper in the grove's interior were located further statues of the Muses, this time arranged in three groups of three. Elsewhere in the grove were subsidiary figures of those gods that people associated with the Muses as well as portrait statues of distinguished poets and musicians.

consisted of a cultivated olive and a wild olive growing from the same rootstock, a phenomenon that was especially remarkable as it had occurred naturally and was not the result of ingenious human grafting.¹⁰⁹

Pausanias also mentioned individual trees that were considered sacred. Certain designated olive trees located on farms in the Athenian countryside were considered sacred — their olives supplied the oil for the prizes given during the great Athenian festival, the Panathenaic Festival. Anyone who dug up or cut down one of these trees was punished by death.¹¹⁰ Some trees were sacred by reason of their association with a sanctuary or an altar (figure 9). An oak tree growing next to the sanctuary of the god, Pan, in Tegea was itself considered sacred to the god.¹¹¹ A giant cedar tree in Arkadia was thought of as sacred simply because a wooden figure of Artemis had been placed in it.¹¹² Two venerable trees, a willow and a chaste tree, the latter considered the oldest tree of its time, were notable in the sanctuary of Hera on Samos.¹¹³

Pausanias noted how a prominent natural feature of a grove such as a cave, a rock, a stream or a tree might be identified and elaborated as a location for worship and ritual (figure 8). A cave in a sacred oak wood at Elaion had an altar erected within it.¹⁰³ A cave in the sacred wood of Trophonius at the source of the river Herkyna had statues positioned in it.¹⁰⁴ A natural spring might also be highlighted as in the case of a spring that issued from a rock in the grove of Apollo at Kyrtone¹⁰⁵ or as in the case of that over which a statue of Demeter stood in the grove of Karnesion Apollo near Pharai.¹⁰⁶

Multiple springs characterized the sacred grove of Mysaion¹⁰⁷ as they did the sacred wood at Marios.¹⁰⁸ It is reasonable to assume that a grove with a spring or springs had an outlet or outlets for the water traversing through the grove. This might be in the form of a natural stream or streams or in the form of a man-made channel or channels, as suggested by Plato.

Another natural focus in a grove might be an unusual tree. The *Guide to Greece* notes a remarkable tree in the grove of the Mistress at Akakesion. It

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After a venerated tree died, its remains might be conserved in a temple or sanctuary. Pausanias remarked that the remains of a plane tree, thought to be that mentioned by Homer in *The Iliad*, was treasured in the temple of Artemis at Aulis¹¹⁴ and that what remained of the arbutus tree under which, it is believed, Hermes was raised, was kept in the Champion's Sanctuary at Tanagra.¹¹⁵

Conclusion

The composite picture that is derived from this compilation of literary references to sacred groves is necessarily incomplete. However, it is sufficient

for us to see that sacred groves held a significant place in ancient Greek life over ten centuries. They formed significant landmarks in the landscape, both urban and rural. Geographers described them. Poets evoked them. Philosophers discussed them. In them, natural woodland was conserved and new wood planted, primarily for religious, but also for recreational, purposes. Architectural and sculptural elements were disposed. Prominent natural features were highlighted. Some individual trees, being considered sacred, were also conserved. In these various activities, the beginnings of the Western tradition of designed landscapes can be found.

Dublin

NOTES

1. The published literature on the sacred groves of ancient Greece is sparse. Only an unpublished thesis treats of the subject specifically. See D. E. Birge, *Sacred Groves in the Ancient Greek World*, PhD diss., Department of Ancient History and Archaeology, University of California, Berkeley, 1982. For a shorter but published treatment see D. Birge, 'Trees in the Landscape of Pausanias' Periegesis', in Susan Alcock and Robin Osborne, *Placing the Gods: Sanctuaries and Sacred Space in Ancient Greece* (Oxford: Clarendon Press, 1992). Birge focuses on the religious, social and political background of sacred groves rather than on their more physical aspects. Some references to sacred groves can be found in articles on the ancient Greek garden. See Massimo Venturi Ferriolo, 'Homer's Garden', *Journal of Garden History*, ix/2, 1989, pp. 86–94, and Maureen Carroll-Spillecke, 'The gardens of Greece from Homeric to Roman times', *Journal of Garden History*, xii/2, 1992, pp. 84–101.
2. Archaeological evidence for sacred groves is also sparse. Some is only indirectly related. The discovery of planting pits around the Hephaiston in Athens and at the temple of Zeus in Nemea provides evidence only of the planting of trees in the vicinity of temples and not of independent sacred groves.
3. The religious aspects of sacred groves, especially in connection with the ritual of sacrifice, are treated in Rod Barnett, 'Sacred Groves: Sacrifice and the Order of Nature in Ancient Greek Landscapes', *Landscape Journal*, 26/2, 2007, pp. 252–269.
4. D. Birge as in Alcock and Osborne above.
5. *Alsos* is an ancient Greek word which Homer used to refer to a sacred grove.
6. Homer, *The Iliad* ed. Samuel Butler (Project Gutenberg edition, 1898), book 23, line 138.
7. Homer, *The Odyssey* ed. Samuel Butler (Project Gutenberg, 1898), book 17, line 2004.
8. Homer, *The Iliad*, as above, book 2, line 505
9. Homer, *The Odyssey*, as above, book 20, line 275.
10. *Ibid.*, book 8, line 359.
11. Homer, *The Iliad*, as above, book 8, line 41 and *The Odyssey*, as above, book 6, line 289.
12. Homer, *The Odyssey*, as above, book 6, line 316.
13. Anonymous, 'Hymn 5, To Aphrodite', *The Homeric Hymns* (eds) Thomas Allen and E. E. Sikes (London: Macmillan, 1904), card 174.
14. Anonymous, *The Homeric Hymns and Homeric* trans. Hugh. G. Evelyn-White (Cambridge, MA: Harvard University Press; London: William Heinemann, 1914), card 225.
15. Sappho, *Poems and Fragments* trans. Stanley Lombardo (Indianapolis/Cambridge: Hackett Publishing, 2000) fragment 6.
16. Pindar, 'Nemean 2, For Timodemus of Achranae Pancratium', *Odes*, 1990.
17. See above for Homer's references to altars, presumably sacrificial altars, in a grove.
18. Pindar, 'Olympia 5, For Psaumis of Camarina, Mule Car Race', *Odes*, 1990.
19. Sophocles, *Trachiniae*, ed. Sir Richard Jebb (Cambridge: Cambridge University Press, 1892), line 750. For a detailed treatment of a sacred grove in one of Sophocles' plays, see D. Birge, 'The Grove of the Eumenides: Refuge and Hero Shrine in *Oedipus at Colonus*', *The Classical Journal*, 80 (1984), pp. 1–17. For a wider treatment of the landscape in Greek drama, see Jim Roy, 'The Landscape in Classical Greek Drama and Isolated Farms in Dramatic Landscapes' (eds) Graham Shipley and J. B. Salmon, *Human Landscapes in Classical Antiquity* (London: Routledge, 1996), pp. 98–118.
20. Sophocles, *The Electra of Sophocles*, ed. Sir Richard Jebb (Cambridge: Cambridge University Press, 1894), line 565.
21. Sophocles, *The Oedipus at Colonus of Sophocles*, ed. Sir Richard Jebb (Cambridge: Cambridge University Press, 1889), line 120.

22. Herodotus, *The Histories*, trans. A. G. Godley (Cambridge, MA: Harvard University Press, 1920), book 6, chapter 75, section 3.
23. Aristophanes, *Women at the Thesmophoria*, *The Complete Greek Drama*, Vol. 2, ed. Eugene O'Neill Jr. (New York: Random House, 1938), line 1148.
24. Aristophanes, *Frogs*, ed. Matthew Dillon (Perseus Digital Library, Tufts University), www.perseus.tufts.edu, line 438.
25. Plato, *Plato in Twelve Volumes*, 9, trans. W. R. M. Lamb (Cambridge, MA: Harvard University Press; London: William Heinemann, 1925), page 111.
26. Plato, *Plato in Twelve Volumes*, 10 and 11, trans. R. G. Bury (Cambridge, MA: Harvard University Press; London: William Heinemann, 1967 and 1968), page 761.
27. Xenophon, *Xenophon in Seven Volumes*, 3 (Cambridge, MA: Harvard University Press; London: William Heinemann, 1980), book 5, chapter 3, section 12.
28. Polybius, *Histories*, trans. Evelyn S. Shuckburgh (New York: Macmillan, 1889), 18.6.
29. Ibid. In the same section is a reference to a grove near Pylus dedicated to Demeter.
30. Strabo, *The Geography of Strabo*, ed. H. L. Jones (Cambridge, MA: Harvard University Press; London: William Heinemann, 1924), book 7, chapter 7, section 6.
31. Strabo, op. cit., book 8, chapter 3, section 14.
32. Strabo, op. cit., book 8, chapter 6, section 22.
33. Strabo, op. cit., book 14, chapter 1, section 20. These were probably Greek date palms, *Phoenix theophrastus*. A small relict population is still found on Crete and on the Turkish coast at Patara.
34. Strabo, op. cit., book 9, chapter 2, section 23.
35. The sacred grove is also referred to in myth and drama. In the myth of the Golden Fleece, the fleece is hung on an oak tree in a grove dedicated to Ares, the god of war. See Apollodorus, *Apollodorus, The Library*, 2, ed. Sir George James Fraser (Cambridge, MA: Harvard University Press; London: William Heinemann, 1921), book 1, chapter 9, section 1. In Euripides' drama, *Iphigenia in Aulis*, a grove of Artemis is referred to as a location of sacrifices. See Euripides, *The Plays of Euripides*, 2, trans. E. P. Coleridge (London: George Bell & Sons, 1891), lines 185 and 1540.
36. Pausanias, *Guide to Greece*, trans. Peter Levi (London: Penguin, 1971).
37. Susan Alcock, 'Minding the Gap', eds Susan Alcock and Robin Osborne, op. cit., p. 258.
38. Pausanias, op. cit., 1/II, p. 220.
39. Pausanias, op. cit., 1/IX, p. 355.
40. Pausanias, op. cit., 1/IX, p. 369.
41. Pausanias, op. cit., 2/III, p. 98.
42. Pausanias, op. cit., 2/VIII, p. 451.
43. Pausanias, op. cit., 2/VIII, p. 458. Although a sacred wood usually belonged to one city, a grove near Patrai was held in common by the Ionians of the cities of Aroe, Anteia and Mesatis. See Pausanias, op. cit., 1/VII, Achaia, p. 276.
44. Pausanias, op. cit., 1/VII, p. 283.
45. Pausanias, op. cit., 2/III, p. 35.
46. Pausanias, op. cit., 1/II, p. 156.
47. Pausanias, op. cit., 1/X, p. 511.
48. Pausanias, op. cit., 1/IX, p. 361.
49. Pausanias, op. cit., 1/VII, p. 305.
50. Pausanias, op. cit., 1/VII, p. 283.
51. Pausanias, op. cit., 1/VII, p. 285.
52. Pausanias, op. cit., 2/VIII, p. 461.
53. Pausanias, op. cit., 2/I/II, p. 82.
54. Pausanias, op. cit., 1/VII, p. 304.
55. Pausanias, op. cit., 1/VII, p. 290.
56. A more detailed treatment of acts of violation of sacred trees and groves and their consequences can be found in Aslak Rostad, *Human Transgression – Divine Retribution*, Dr. Art thesis, University of Bergen, Norway, 2000, pp. 118–122.
57. Pausanias, op. cit., 1/II, p. 197.
58. Pausanias, op. cit., 2/VIII, p. 451.
59. For a treatment of trees in everyday practical use in ancient Greece, see Russell Meiggs, *Trees and Timber in the Ancient Mediterranean World* (Oxford: Oxford University Press, 1982).
60. These were probably *Cupressus sempervirens*, natural forests of which still survived in Greece at that time.
61. Pausanias, op. cit., 1/II, p. 134.
62. Pausanias, op. cit., 1/II, p. 160.
63. Pausanias, op. cit., 2/VIII, p. 478.
64. Pausanias, op. cit., 2/VIII, p. 500.
65. Pausanias, op. cit., 2/IV, p. 105.
66. These were probably *Quercus robur*, of which there were extensive natural forests in ancient Greece.
67. Pausanias, op. cit., 1/IX, p. 360. These were probably the native Mediterranean evergreen oak, *Quercus ilex*.
68. Pausanias, op. cit., 1/II, p. 220. These were probably the oriental plane, *Platanus orientalis*, a native of Greece.
69. Pausanias, op. cit., 1/VII, p. 243.
70. Pausanias, op. cit., 1/X, p. 511.
71. Pausanias, op. cit., 2/VIII, p. 459.
72. Pausanias, op. cit., 1/VII, p. 305.
73. Pausanias, op. cit., 1/I, p. 61.
74. Pausanias, op. cit., 1/IX, p. 359.
75. Pausanias, op. cit., 1/II, p. 196.
76. Pausanias, op. cit., 1/VII, p. 285.
77. Pausanias, op. cit., 1/VII, p. 304.
78. Pausanias, op. cit., 2/VII, p. 451.
79. Pausanias, op. cit., 2/VII, p. 465.
80. Pausanias, op. cit., 1/II, p. 193.
81. Pausanias, op. cit., 2/V, p. 241.
82. Pausanias, op. cit., 1/II, p. 160. It was not uncommon to have small sanctuaries within the boundaries of a grove. See the enclosure dedicated to Bellerophon in the cypress grove before Corinth. Pausanias, op. cit., 1/II, p. 134.
83. Pausanias, op. cit., 1/IX, p. 369.
84. Pausanias, op. cit., 1/II, p. 131.
85. Pausanias, op. cit., 2/V, p. 222.
86. Pausanias, op. cit., 2/VIII, p. 426.
87. Pausanias, op. cit., 1/I, p. 19.
88. Pausanias, op. cit., 1/IX, p. 392.
89. Pausanias, op. cit., 1/II, p. 195.
90. Pausanias, op. cit., 1/IX, p. 375.
91. Pausanias, op. cit., 1/VII, p. 285.
92. Pausanias, op. cit., 1/II, p. 135.

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93. Pausanias, op. cit., 1/VII, p. 285.
 94. Pausanias, op. cit., 1/IX, p. 360.
 95. Pausanias, op. cit., 1/II, p. 195.
 96. Pausanias, op. cit., 1/IX, p. 359.
 97. Pausanias, op. cit., 2/IV, p. 182.
 98. Pausanias, op. cit., 1/II, p. 220.
 99. Pausanias, op. cit., 1/II, p. 135.
 100. Pausanias, op. cit., 1/VII, p. 283.
 101. Pausanias, op. cit., 6/I, p. 280. It was probably an archaic figure that was preferred to a more durable stone figure because of the weight of tradition behind it.
 102. Pausanias, op. cit., 1/IX, p. 369. Another example of statuary placed before the entrance to a sacred grove rather than within the grove is that of the grove of the Great Goddesses at Megalopolis before which statues of Demeter and her daughter were erected. The reason for this placement in front of the grove was that access into this particular grove by anyone was forbidden.
103. Pausanias, op. cit., 2/VIII, p. 478.
 104. Pausanias, op. cit., 1/IX, p. 392.
 105. Pausanias, op. cit., 1/IX, p. 359.
 106. Pausanias, op. cit., 2/IV, p. 173.
 107. Pausanias, op. cit., 1/VII, p. 305.
108. Pausanias, op. cit., 2/III, p. 82.
 109. Pausanias, op. cit., 2/VIII, p. 466.
 110. Aristotle, 'Athenian Constitution', *Aristotle in 23 Volumes*, 20, ed. H. R. Rackham (Cambridge, MA: Harvard University Press; London: William Heinemann, 1952), chapter 60, section 2.
 111. Pausanias, op. cit., 2/VIII, p. 500.
 112. Pausanias, op. cit., 2/VIII, p. 404.
 113. Pausanias, op. cit., 2/VIII, p. 425. The chaste tree is probably *Vitex agnus-castus*.
 114. Pausanias, op. cit., 1/IX, p. 348.
 115. Pausanias, op. cit., 1/X, p. 353.

(Front cover of this issue)

LIMELIGHT

Project Description

The intent of the garden is to draw attention to and honor one of the 'Champion' trees at the National Arboretum. The gesture recognizes the rare opportunity to do an installation within an arboretum. A large, hollowed earthen mound defines the space around the chosen tree. The sod-covered form ramps up to create a miniature amphitheater. Seen from the outside, the earthwork is a sculpted object that frames the tree and distinguishes it from the surrounding grove. Inside the concave space, the form falls gently to an opening marked by the centerpiece tree. Constructed by Minchinhampton Architectural Salvage Company, the installation is approximately 20 meters wide and 2.5 meters tall. It is sculpted earth topped with sod. The inner ring is green gravel, used to help prevent compaction at the base of the tree.

The idea for Limelight was simple. Our form was simple, our material palette was simple, even the budget seemed straightforward. Yet we knew that its execution would be anything but simple. After being invited to participate in the festival, the first thing we did was fly to England to select a tree for our garden. When touring the grounds, it became clear that only one tree would work — a large *Acer pseudoplatanus*. It was majestic, it was perfect and it was four times bigger than the tree we had originally envisioned. With the execution of any design, we constantly craft and problem solve. The simpler the idea, the more important the execution. The Westonbirt festival was no exception. Our landform had to grow significantly to accommodate the larger tree, and we had to consider such unforeseen issues as mole abatement in the detailing of the earthwork. We worked with the arboretum's arborist to insure that the installation didn't harm the tree (for this certainly wouldn't be the best way to honor it.) Many of the details of the design will never be noticed (such as the hand-forged steel header or the shift in texture between the earthwork turf and the surrounding meadow.) They disappear, allowing the landform to rest gracefully in the landscape — as a simple idea.