

Garry Oak (*Quercus garryana*) and its Form in the Environment and Cultural Landscape of Southwestern British Columbia, Canada

D. Cameron Campbell¹ and Wayne R. Erickson²

¹ Landscape Architect, Research Assistant,
Collaborative for Advanced Landscape Planning,
Faculty of Forestry, University of British Columbia.
email: dccampbe@telus.net

² Wildlife Conservation Ecologist,
c/o B.C. Ministry of Forests, Forest Practices Branch,
PO Box 9513, STN PROV GOVT
Victoria, B.C. Canada.
email: wayne.erickson@gems3.gov.bc.ca
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Abstract

In southwestern British Columbia, Garry oak (*Quercus garryana*) has a varied and interesting form which evokes a strong aesthetic response in many people. Research suggests that Garry oak has been a highly valued aesthetic resource in British Columbia from the early colonial period to the present. The special appeal for the Garry oak environment can be found in the accounts of explorers and early settlers. The imagery employed in these accounts draw parallels with idealized landscapes in the picturesque tradition, or to the parks and pleasure grounds of Europe. The strength of Garry oak's aesthetic appeal is evidenced in the manner it is employed in the cultural landscape of southeastern Vancouver Island where it is used as a landscape feature in more affluent and / or established residential neighbourhoods and as a setting for memorials.

This paper explores the source of this oak's aesthetic appeal as related to forms described in an ecological survey and represented in the Bolsinger hardwood classification system from California. The almost-universal appeal of this tree may be partially explained by landscape preference research. Specifically, the savannah-like setting and ethereal qualities associated with the complex oak form result in a preference for the tree and its landscape. We suggest here that a relationship may exist between the strength of preference for this tree and complexity of form in the classification.

Introduction

Garry oak (*Quercus garryana* Dougl.) is a Pacific coastal, deciduous white oak (Figure 1), which extends north only to southwestern British Columbia (B.C.) from its southern range in California (Erickson 1993). Therefore, the occurrence of Garry oak on the southern Gulf Islands and adjacent Vancouver Island (Figure 2) is unique within Canada. These oak savannahs and woodlands exhibit a variety of interesting vegetation types, expressed in attractive forms, textures, patterns and shapes, which evoke mystery and complexity.



Figure 1. The form of Garry oak. ©Briony Penn.

Garry oak ecosystems have been recognized among the rarest and most threatened in Canada (Erickson 2000), there being lost at an alarming rate to continuing urban development (Erickson 1996). Garry oak fascinates many residents, and there is considerable interest in its form (Erickson and Campbell 2001). Research (Lutz 1995, Penn 1992) suggests that Garry oak has been a highly valued aesthetic resource in B.C. from the early colonial period to the present.

The aesthetic value of Garry oak finds expression in the way it is employed in the cultural landscape of southeastern Vancouver Island. Garry oak was intentionally retained as a landscape feature in projects such as the Uplands Park (designed by the prestigious Olmstead Brothers of New York), the Village of Oak Bay and the neighbourhood of Fairfield. As a result this tree has come to signify affluence and elevated social status on southeastern Vancouver Island. The aesthetic qualities of Garry oak and its environment, and the park-like image they convey, have also been employed as a setting or backdrop for memorial and commemorative features.

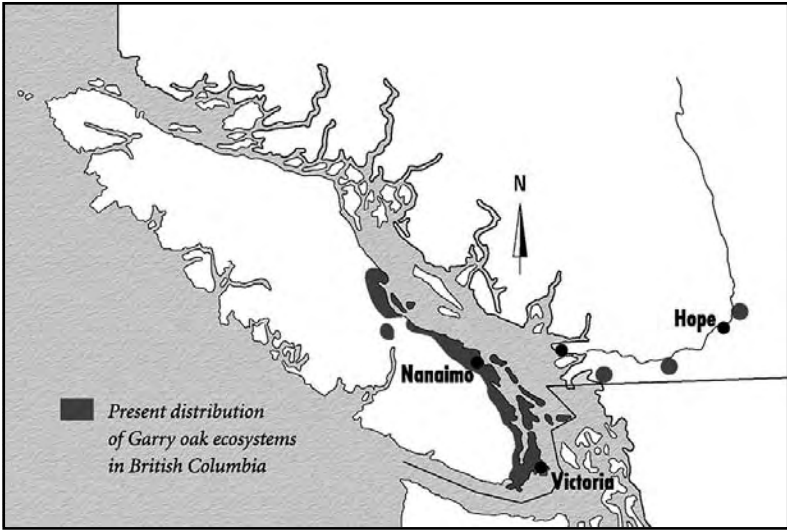


Figure 2. Range of Garry oak in British Columbia, Canada.

We suggest here that its aesthetic appeal arises from the emotions and feelings evoked by the physical attributes of this tree. Although no research exists that specifically examines preferences for Garry oak over other trees, inferences can be drawn from other, broader scale research (Hamilton 1995, Gobster 1994, Dearden 1984). Additional discussion explores the basis for the aesthetic appeal, of the form and setting of Garry oak, both in the context of contemporary landscape preference research, and as related to the California hardwood form classification (Bolsinger 1988, Erickson and Campbell 2001).

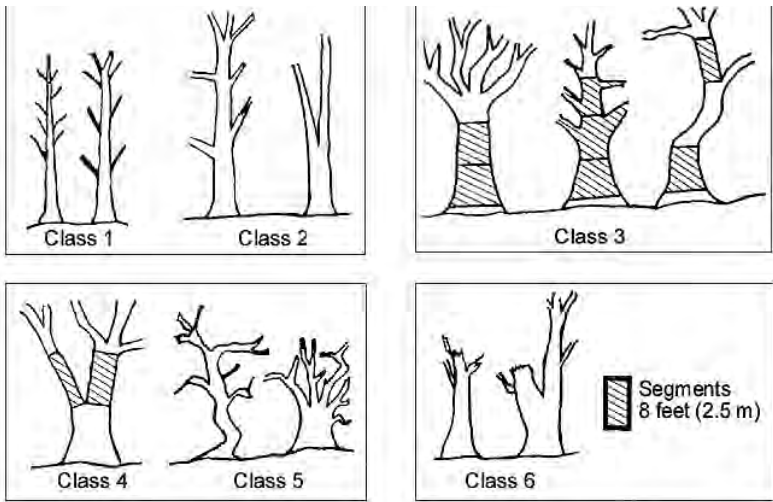


Figure 3. Oak form classes, from Bolsinger (1988).

Approach

The California hardwood classification of Bolsinger (1988) (Figure 3) was applied to tree form descriptions on approximately 250 representative ecological plots across the range of Garry oak in B.C. The current paper follows from this survey and analysis which encompassed biotic and ecological characteristics, management strategies, the applicability of the hardwood classification, wildlife habitat features, classification and their relationships (Erickson 1996, 2000, Erickson and Campbell 2001).

Depictions of Garry oak were explored in the literature from colonial times to the present. The accounts were consulted to determine the extent to which Garry oak environments have been employed as an aesthetic and spiritual resource in B.C. Findings are summarized and illustrated in discussions of landscape preference theory and possible explanations of the appeal of Garry oak. These include innate preferences for savannah-type landscapes, and the factors of visual complexity / diversity, mystery, and familiarity. Aesthetics and landscape preference for Garry oak are discussed relative to the Bolsinger form classification.

A Historical Overview of Representations of Garry oak in B.C.

Research (Lutz 1995, Penn 1992) suggests that the aesthetic appeal of Garry oak has been highly valued from the early Colonial period to the present in B.C. Observations regarding this landscape made by explorers, settlers, poets and others are many, suggesting a timeless appeal and expressing delight and fascination for this unique landscape.

An example is Captain George Vancouver's poetic description of the Garry oak landscape of southern Vancouver Island in May of 1792: *'almost as enchantingly beautiful as the most elegantly furnished pleasure grounds in Europe. To the northwest was a coppice of shrubs of various sorts that seemed as if it had been planted for the sole purpose of protecting this delightful meadow over which were promiscuously scattered a few clumps of trees that would have puzzled the most ingenious designer of pleasure grounds to have arranged more agreeably. I could not possible believe that any uncultivated country had ever been discovered exhibiting so rich a picture, a picture so pleasing could not fail to call our remembrance to certain delightful and beloved situations in Old England'* (Penn 1992).

In 1843, James Douglas, later to become Governor of the Colony of Vancouver Island, spoke of this landscape in a more restrained tone, as *'the most picturesque and decidedly the most valuable part of the island that we had the good fortune to discover'* (Penn 1992). A similar response was elicited in 1846 from Berthold Seemann, naturalist aboard the HMS Herald, who observed *'we thought we had never seen a more beautiful country; it quite exceeded our expectation; and yet Vancouver's descriptions made us look for something beyond common scenery. It is a natural park; noble oaks and ferns are to be seen in the greatest luxuriance; thickets of the hazel and the willow, shrubberies of the poplar and alder are dotted about. One could hardly believe this was not a work of art'* (Lutz 1995).

Donald Fraser, a London Times correspondent visiting Victoria in 1858, describes the Garry oak landscape encountered as *'clumps, open glades, rows of single trees of umbrageous form, presenting an exact copy of English park scenery'* (Penn 1992).

A final view offered by geographer Charles Forbes, while similar, also employs imagery suggesting a landscape steeped in the mysterious and the sublime: *'The whole district is very beautiful and salubrious...with Druid-like groves of oak and solemn-looking clumps of pine intermingled with the varied foliage of a thick shrubby undergrowth'* (Forward 1976).

Garry oak as an Icon in the Cultural Landscape of Vancouver Island

The preceding passages illustrate the significant historic aesthetic value and general appeal of the Garry oak environment. Further evidence is found in the rich and varied manifestations of this tree and environment in the cultural landscape. Here Garry oak transcends being a mere landscape feature or curiosity and assumes a deeper, symbolic meaning, which becomes more readily apparent when examining its varied roles in Victoria's urban landscape.

Garry oak in the Public and Private Realm of the Urban Landscape: The Uplands and Fairfield Neighbourhoods of Victoria

The symbolic and spiritual value of Garry oak finds expression in the public- and private-realm landscapes of Victoria. The tree and its environment have been incorporated as street trees and/or landscape features in the streetscapes in two notable southern Vancouver Island neighbourhoods: the Uplands and Fairfield (**Figure 4**).

The Uplands subdivision, designed in 1907 by the Olmstead Brothers, landscape architects, makes extensive use of the aesthetic characteristics of Garry oak. From inception, this has been known as an affluent, fashionable neighbourhood (Forward 1973) and envied for its pastoral qualities. The Uplands design was innovative for the time, in that it intentionally planned retention for extensive areas of Garry oak meadow, in order to reinforce the park-like character of the landscape (op.cit.). This design created a pleasing public-realm, with small parks throughout the development which



Figure 4. The Garry oak is often a central feature in the residential landscapes of the Uplands.

incorporate Garry oak meadow, individual oaks and rock outcrops as streetscape features. In the private realm, many Uplands homeowners saved large Garry oaks with their meadows and rock-outcrops for landscape amenity. Many homes are situated to avoid removing oaks and to make best use of rock-outcrops in the overall landscape design.

Incorporating these features into the landscapes makes the transition between the public/private-realms ambiguous and reinforces the leafy, park-like image of one of the most desired, and well-known, neighbourhoods in the region. The

extensive remnants of native vegetation found in both realms, combine with the curvilinear streets and irregular lot layouts, to create the pastoral, park-like image characterising this development.

In Fairfield neighbourhood, the presence of Garry oak still significantly influences the landscape character and image of both the public and private realms, but less dramatically so. As in the Uplands, oaks remain scattered along small street-end parks, street boulevards, and the private landscapes of homeowners.

Garry oak is less extensively employed in the landscape in less affluent neighbourhoods. The association of the oak with park-like neighbourhoods, such as the Uplands, has led some to equate park-like neighbourhoods, with the public/private-realms integrated, as symbols of power and affluence. Therefore, Garry oak has come to be associated with social status because of its inclusion in cultural landscapes such as Uplands and Fairfield (**Figure 5**).



Figure 5. Garry oak retained as a feature of street-end parks and boulevards in Fairfield.



Figure 6. Garry oak as a commemorative feature for Chief Justice Gordon Sloan in Oak Bay.

Garry oak as a Feature of Commemoration

The ethereal, pastoral character of the Garry oak environment is employed in settings for commemoration and memorial. The Uplands Park War Memorial and the Hon. Gordon McGregor Sloan memorial tree in Oak Bay are illustrative of how this environment has been employed to enhance reflective intent (**Figure 6, 7**).

A large, very distinctively shaped Garry oak is used to commemorate the life and works of the eminent Chief Justice Gordon McGregor Sloan, who played a distinguished part in provincial legal, political, and economic life of the early 20th century. A



Figure 7. The otherworldliness of the Garry oak landscape encourages visitor reflection at the Uplands War Memorial.

simple, unobtrusive plaque identifies the site, while the Garry oak itself, situated in a prominent location in the village of Oak Bay, serves a fitting memorial to one who pioneered the sustained yield concept which so influenced the trees and forests of the Province.

The War Memorial, situated in Uplands park, engages the “other-worldly” qualities of the Garry oak landscape to encourage visitors to pause and reflect on those fallen in the two world wars. Set in the midst of an oak grove, the gnarled forms of the trees provide the backdrop, and the meadows and rock outcrops furnish the base for this memorial to the dead.

Preferences for the oak landscape

Research suggests that the most preferred landscape types include savannah, oak woodlands (Balling and Falk 1982, Appleton 1984), landscapes with mystery and complexity (Kaplan 1984, 1987) and/or a variety of interesting vegetation types expressed in attractive forms, textures, patterns and shapes (Hamilton 1995). The physical characteristics of the Garry oak environment in general, and its form specifically, possess this character, suggesting the source of the almost-universal appeal for this tree. Given this, it may be inferred that individual preferences for oaks will increase where forms are of higher Bolsinger class.

Discussion

The higher Bolsinger classes generally encompass tree forms that are much more diverse in terms of trunk habit, number of stems and branching patterns. Complex forms were prevalent in the survey (Erickson and Campbell 2001). Many of these trees had curvy oak limbs, large-limbed with branches sweeping outward, or leaning with multiple stems. The sculptural, multi-stemmed form of Garry oak and its rich, visually diverse environment are valued not only for wildlife habitat and ecological function, but also for their aesthetic traits. Gnarly and twisted, with an ethereal setting, these combine to create a unique beauty of almost-universal appeal capable of evoking a significant aesthetic response. As a result, the Garry oak environment of southern Vancouver Island is beloved, and has come to be cherished by many.

Depictions of the Garry oak landscape by colonists are remarkably consistent in expressing delight and fascination with these environments and in drawing favourable parallels with oak landscapes of the British Isles. The accounts tend to focus on the spatial organisation and features within these landscapes, the ‘clumps of trees’, the ‘Druid-like groves’, the noble oaks and ferns seen in the greatest luxuriance’ and the ‘delightful meadows’ rather than the form of Garry oak. The few references specific to form tend to be more figurative than literal, depictions including the ‘umbrageous form’ of the tree. Common to these texts are descriptive accounts with strong allusions to the ‘picturesque’.

While enthusiastically portrayed in textual accounts, historical paintings and photographs of the Garry oak are rarely found. Given its widespread appeal, the absence of this tree in the visual arts in the earlier part of the last century is puzzling and may merit further attention as a topic for future research.

The Almost-Universal Appeal of Garry Oak and its Environment: A Preliminary Exploration

From the preceding it may be postulated that, for residents and visitors alike, the form and environment of Garry oak elicit considerable visual appeal and the capacity to evoke a significant aesthetic response. Why does this tree have such strong appeal? What elements in these landscapes evoke such powerful responses? Possible insights into these questions may be gained through reference to the considerable body of landscape preference theory and research available.

An Innate Preference for Savannah Landscape Types

Recent preference research indicates that certain landscape types are consistently preferred over others. Research by Appleton (1996) and Balling and Falk (1982) suggests a preference for landscape types exhibiting the characteristics of savannah habitat (i.e. sparsely-wooded areas of grassland or meadow landscapes), similar to the Garry oak landscape. Such preference may be attributed to the long period of human prehistory, to selection pressures related to the presence of specific structural elements in a landscape that will assist or ensure survival (op.cit).

Appleton's 'prospect – refuge theory' (1996) indicates that people favour landscapes offering unimpeded visual prospect and options for either concealment or a quick withdrawal to a safe refuge. This theory would predict higher levels of preference for landscapes of Garry oak, with alternating meadow and copse, compared with other, more densely forested or open landscapes.

Other Aspects of Form and Structure Contributing to the Aesthetic Appeal of Garry Oak

Gobster (1994) proposes that, while the foregoing arguments may explain general preference for savannahs, they do little to explain or describe which specific aspects of the structure of the oak landscape contribute to its powerful aesthetic appeal. Other elements of landscape preference research and theory may provide more specific insight into this question, as follows.

Preference for a landscape is a combination of two broad factors: the physical attributes viewed and the resulting viewing experience of the individual. The patterns of physical elements within a landscape and way they are organised contribute to the emotions, feelings and perceptions evoked (Hamilton 1994). The number, variety and diversity of features in a landscape; the complexity of their organization; the level of meaning; the level of familiarity with the landscape; and the sense of mystery imparted: all contribute to perceptions and the nature of the viewing experience.

Visual Complexity and Diversity

It has been found that the following: a variety of interesting vegetation types, expressed in attractive forms, textures and patterns; vegetation with a high degree of uniqueness; or that is memorable or rare within a region; are several factors among the most preferred elements within a landscape (Hamilton 1994).

Research indicates that complex natural landscapes are generally preferred over less complex ones. Typically, the visual structure of the Garry oak landscape is extraordinarily complex and diverse. This complexity results largely from the combination of its rich form and an equally rich setting. The gnarly, twisted forms of the tree

can assume an endless range of configurations. These forms produce diverse patterns in light and shadow, creating the ethereal ambience for which these landscapes are so well known. This, combined with rich wildflower meadows producing vivid displays of colour, results in a scene that is imbued in mystery; is structurally and visually complex; and is very diverse in terms of colours, lighting effects, textures and forms. These elements of complexity, diversity and mystery may be important contributors to the high level of appeal expressed for the oak environment (Figure 8).



Figure 8. The form of Garry oak produces diverse patterns of light and shadow.

Mystery

People prefer landscapes which are unique, that give them a sense of being in a distinct ‘place’ and which provide them with an opportunity to see things they would not see elsewhere (Hamilton 1994). Mystery encourages exploration and invites entry into a landscape, in order to discover and experience more. Mystery in a landscape can be created by unusual forms, special lighting, and the ability to move into and through the landscape. The form of Garry oak; with its twisted multi-stemmed trunks, gnarled branches, patches of shadow and light, and its environment of alternating copses and meadow; by nature invokes a sense of mystery and fantasy that challenges the imagination and invites entry and exploration.

Familiarity

Familiarity is one of the significant factors influencing landscape preference (Dearden 1989, Balling and Falk 1982): ‘*Previous experience of landscape gained through life, travel and work all fostering this sense*’. The previous references to Garry oak, drawn from early colonial times, are rife with fond comparisons between

the oak landscapes of Vancouver Island and the parks and pleasure grounds, or countryside, of the British Isles, homeland for these early settlers. The parallels with the idealized landscapes of England inescapably fostered a sense of familiarity; with the meadow clearings, defined by groves of Garry oak, so reminiscent of those in the well-known, picturesque tradition.

An additional factor is the contrast with the seemingly-endless coniferous forest. This affects familiarity, aesthetic appeal, and even the sense of well-being. Confronted by a wilderness that was dark, foreboding and visually-monotonous; an encounter with a landscape that is light, visually-diverse, and similar to the pastoral landscapes of the British Isles, so beloved and familiar, could only be received with joy.

Just as the high degree of association of Garry oak landscapes with other, similar / familiar settings, such as parks and pleasure grounds, may contribute to the general appeal of the oak; so also the scarcity of these environments in B.C. (and the resulting unfamiliarity for many), may tend to enhance their allure. While familiarity may be a key factor influencing the level of preference for a landscape, as Dearden fittingly suggests (1989): *'the relationship between familiarity and preference is not a simple one'*.

Summary

Depictions in the historical accounts illustrate that the aesthetic value of Garry oak and its environment hold a special appeal and fascination for many. This appeal finds expression in the cultural landscape of Victoria in myriad patterns, particularly in the public and private realms of the city's streetscapes. The manner in which the tree and its environment are employed in the urban landscape suggests that the tree and its environment have, over time, assumed a deeper, symbolic meaning.

Studies of landscape preference indicate that the almost-universal appeal of this tree could be the result of several factors. The complex and varied form of this oak, combined with a visually diverse environment, present a visual composition of considerable depth. This notion conforms to several key aspects of landscape preference theory; in particular the concept that level of preference increases as landscape scenes become more visually complex, diverse and mysterious.

We suggest here that a relationship may exist between the level of aesthetic appeal of Garry oak and its placement in the Bolsinger classification. Landscape preference may parallel increasing complexity in Garry oak, moving up the class-scale of its form in the Bolsinger hardwood classification system. Therefore, the Bolsinger classification may provide a means for predicting the relative level of preference for a given landscape as it relates to diverse tree forms in terms of trunk habit, number of stems and branching patterns. The higher Bolsinger classes are visually rich and diverse and may, in reflection of the discussion above, result in higher levels of preference or appeal than stems ranked lower on the Bolsinger scale.

References

- Appleton, J. 1996. *The experience of landscape*. Wiley, New York.
- Balling, J.D. and J.H. Falk. 1982. Development of visual preference for natural environments. *Environment and Behavior* 14: 5-28.
- Bolsinger, C.L. 1988. *The hardwoods of California's timberlands, woodlands and savannas*. USDA Forest Service Pacific Northwest Forest and Range Research Station report PNW RB-148, Portland, Oregon.

- Dearden, P. 1989. Societal landscape preferences: A pyramid of influences. In: Landscape evaluation approaches and applications. P. Dearden and B. Sadler, editors. Western Geographical Series Vol. 25. University of Victoria.
- Erickson, W. R. 1993. Garry oak ecosystems at risk (brochure). Wildlife Branch, B.C. Ministry of Environment, Lands and Parks, Victoria. (also website posting: wlapwww.gov.bc.ca/wld/documents/garryoak.pdf (accessed August 20, 2004).
- Erickson, W.R. 1996. Classification and interpretation of Garry oak (*Quercus garryana*) plant communities and ecosystems in southwestern British Columbia. M.Sc. thesis, University of Victoria.
- Erickson, W. R. 2000. Garry oak communities in Canada: Classification, characterization and conservation. *International Oaks* 10: 40 – 54.
- Erickson, W.R. and D.C. Campbell 2001. Aspects of the form, ecological function and aesthetics of Garry oak and its environment in southwestern British Columbia, Canada. Proceedings, Third International Oak Conference, Asheville, North Carolina October, 2000. *International Oaks* 12:39-47.
- Forward C.N. 1973. The immortality of a fashionable residential district: The Uplands. in: Residential and neighbourhood studies. C.N. Forward, ed. Western Geographical Series. Volume 5. University of Victoria.
- Forward, C.F. 1976. The physical geography of Victoria, circa 1860, as perceived by colonists, map makers and visitors. pp.1-43 in: Foster, H.D. editor, 1976. Victoria: Physical environment and development. Western Geographical Series 12. University of Victoria.
- Gobster, P.H. 1994. The urban savannah: Reuniting ecological preference and function. *Restoration and Management Notes* 12:1.
- Hamilton, C.J. 1994. Landscape preferences. unpublished discussion paper, B.C. Ministry of Small Business, Tourism and Culture. Victoria.
- Kaplan, R. 1984. Dominant and variant values in environmental preference. pp.8-11 in: Environmental preference and landscape preference. Devlin, A.S. and S.L. Taylor, editors. New London Press. Connecticut.
- Kaplan, S. 1987. Aesthetics, affect and cognition: environmental preference from an evolutionary perspective. *Environment and Behaviour* 19:3-32.
- Lutz, J. 1995. Preparing Eden: Aboriginal land use and European settlement. unpublished manuscript, Department of History, University of Victoria. Victoria, B.C.
- Penn, B. 1992. Compilation of historic quotes supporting the Heritage Landscape designation (compiled from the B.C. Provincial Archives). Submitted by the Garry Oak Meadow Preservation Society to Victoria City Council.