



# Standards and Guidelines for the Conservation of Archaeological Sites

*Proposed update to the Standards and Guidelines  
for the Conservation of Historic Places in Canada*



Comments? Suggestions? Please contact your provincial or federal contact, as listed on page 44.

Questions about the document? Please contact Virginia Sheehan at [virginia.sheehan@pc.gc.ca](mailto:virginia.sheehan@pc.gc.ca)

Cette publication est également disponible en français.

**Cover page**

- 1** Writing-on-Stone Provincial Park, AB  
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## FOREWORD

The first edition of the Standards and Guidelines for the Conservation of Historic Places in Canada (Standards and Guidelines) was officially launched in 2003. Its purpose is to offer sound, practical advice for the conservation of archaeological sites, landscapes, buildings and engineering works. The document is considered a landmark as the first pan-Canadian reference tool for the conservation of historic places.

The Standards and Guidelines also fulfill another important goal: to stimulate the debate as to what constitutes good conservation practice. One of the first areas where debate quickly arose was the conservation of archaeological sites. The first edition of the Standards and Guidelines offered guidance for archaeological site conservation, but many archaeologists felt that more could be said about Canadian experiences and expertise in site conservation.

These draft Standards and Guidelines for the Conservation of Archaeological Sites are the result of an ongoing collaborative effort between professionals from government, academic, and consulting organisations to nurture a culture of conservation in Canada. To further strengthen the pan-Canadian approach, the document was discussed and reviewed by the Standards and Guidelines Standing Committee at its first meeting.

This draft document is circulated within jurisdictions for use and comment. It will be tested through pilot projects and a formal information gathering process will be put in place to collect feedback. The final version will be integrated into the next edition of the Standards and Guidelines.

You are encouraged to use these draft Standards and Guidelines for the Conservation of Archaeological Sites in designing your project or in your on-going operations. You are also invited to share your experiences and send your comments to the project leader Virginia Sheehan at [virginia.sheehan@pc.gc.ca](mailto:virginia.sheehan@pc.gc.ca)

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## **PREFACE AND ACKNOWLEDGEMENTS**

The review of the guidelines for the conservation of archaeological sites was initiated as a result of the feedback provided by the archaeological community on the first edition, published in 2003. The intent of the review was to first develop an in-depth understanding of the practice of archaeological site conservation in Canada and second, to assess whether the Standards and Guidelines for the Conservation of Historic Places in Canada provided that necessary guidance to reflect that experience.

The review was the result of a joint effort by representatives of the federal, provincial and territorial governments. Parks Canada coordinated the exercise with the support of a working group. This working group was composed of fifteen members from across the country and reflected the different groups and perspectives in archaeology in Canada. It included experts from universities, archaeological consulting firms, federal, provincial, and municipal governments, public works departments, and Aboriginal communities. The members of this group met once in person but otherwise carried out their work through teleconferences and emails. Their work led to the establishment of the framework for the guidelines, the key definitions, the main principles, the treatments, and the settings. The two first drafts of the guidelines were the result of this working group's efforts.

The second draft was studied and discussed in three focus groups held in Montréal, Calgary and Victoria. The members of the focus groups reflected the same diversity as those of the working group. Guided in their discussions by a facilitator, they were asked to react to the proposed content, structure and format. This feedback was used to produce the third draft which clarified the settings and the intent of the document, elaborated further on the treatments, and simplified the overall approach.

The third draft was tested in the field through pilot projects. Jurisdictions were asked to assist in finding suitable projects to test the guidelines through either a project review or the development of a project. Projects were discussed in Newfoundland and Labrador (Cupids), Nova Scotia (Bedford Barrens Petroglyph National Historic Site of Canada), New Brunswick (Boishébert National Historic Site of Canada / Wilson's Point Provincial Historic Site), Québec (Auberge Saint-Antoine in the Old Québec provincial historic district of Old Québec / Fortifications of Québec National Historic Site of Canada / Historic District of Old Québec World Heritage Site), Ontario (Lawson Site Provincial Historic Site), British Columbia (Upper Similkameen petroglyphs and Mascot Mine), and the Northwest Territories (Nagwichoonjik National Historic Site of Canada). These pilot projects were carried out in different formats. However, with the exception of the Northwest Territories, all projects included a discussion with stakeholders and community members in the various locations. The results of that phase, compiled in the fourth draft, provided an opportunity to clarify the process of applying the guidelines, treatments and specific actions, and to test the document as a consensus building tool.

The fourth draft was later shared with members of the international professional community who had previous experience with developing similar tools in their country, particularly in Australia and the Netherlands. The comments collected during that phase ensured compliance with international standards and provided feedback based on previous experiences in developing conservation guidelines.

Throughout the review, numerous presentations, workshops, site visits, and discussions were held with individual experts and with professional associations. This provided a constant flow of information between the professional community and the working group responsible for the review, and many opportunities to debate key concepts. The review also benefited extensively from the specialized literature on many aspects of archaeological site conservation. The working group was able to rely on the excellent work produced by cultural resource management agencies in Canada and beyond. In particular, it acknowledges New Brunswick's Guide to Heritage Impact Assessment; Québec's *L'archéologue et la conservation: vade mecum québécois*; Saskatchewan's Guide to the Saskatchewan Archaeological Resource Record; British Columbia's Archaeological Resource Management Handbook; Yukon's Guidelines for the Management and Protection of Historic Resources for Geoscience Exploration; the Northwest Territories' Conservation Manual for Northern Archaeologists (Prince of Wales Northern Heritage Centre and Canadian Conservation Institute); Parks Canada's Guidelines for the Management of Archaeological Resources; the United States' Secretary of the Interior's Standards and Guidelines for Archaeological Documentation and Technical briefs 1, 5, 8, 12, 13, and 18; Australia's Australian Historic Themes: a framework for use in heritage assessment and management, Ask First: a guide to respecting Indigenous heritage places and values, and the Australian Natural Heritage Charter: for the Conservation of Places of Natural Heritage Significance; New Zealand's Caring for Archaeological Sites: New Zealand Guidelines; Finland's Archaeological Heritage Management Guide; Ireland's Good Farming Practice and Archaeology; English Heritage's Management of Archaeological Projects; the Netherlands' Dutch Archaeology Quality Standard, and the European Commission's standards and guidelines on archaeological site integration (APPEAR Project). Finally, it acknowledges the work from societies and organizations concerned with the protection of heritage, particularly the Nautical Archaeology Society's Archaeology Underwater: The NAS Guide to Principles and Practice; the charters of the International Council on Monuments and Sites (ICOMOS); the charters of the International Committee for the Conservation of Industrial Heritage (TICCIH); the Getty Conservation Institute's Principles for the Conservation of Heritage Sites in China, as well as the Canadian Archaeological Association's and the Society for American Archaeology's principles and codes of ethic.

The fifth draft was reviewed and presented to the Standards and Guidelines Standing Committee in February 2007. The result of their review, added to the numerous discussions held formally and informally, the extensive knowledge of professionals, and the many decades of Canadian expertise in archaeological site conservation form the basis of this sixth draft. It serves both as a compendium of the practice in Canada and a state of the art document on archaeological site conservation. The most recent draft meets the objectives of the Standards and Guidelines that seek to offer a common understanding of site conservation

and stimulate discussion about the meaning of good practice. This draft will be in circulation for use by professionals and jurisdictions until the next review of the Standards and Guidelines. In order to continue improving this document, suggestions and information concerning further experiences are welcome.

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This review was made possible thanks to the dedication and active involvement of professionals who so generously gave of their time and shared their knowledge so that a common approach could be developed. This daunting task was handled with enthusiasm and passion by the participants.

Working Group members and their affiliation at the time of their involvement are as follows:

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These guidelines are dedicated to the memory of **Claire Mousseau** who provided the impetus and the expertise to further explore the Canadian experience in archaeological site conservation.

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## USING THE STANDARDS AND GUIDELINES

The following standards and guidelines provide guidance on how to safeguard the character-defining elements (CDEs) of an archaeological site and of a historic place that includes archaeological sites so as to retain their heritage value (HV) and extend their physical life. The guidelines are of particular interest to archaeologists, cultural resource managers, project managers and any other professional involved with the protection and conservation of a *historic place* and concerned with the preservation of its *heritage value*.

This document is to be used in the context of the *Standards and Guidelines for the Conservation of Historic Places in Canada*. All nine *Standards of preservation* apply. *Restoration* and *rehabilitation* as defined in the *Standards* and *Guidelines* do not apply to archaeological sites. Consequently, the standards that apply to these treatments are inapplicable to the conservation of archaeological sites and new standards are proposed for two new treatments.

When applying the guidelines to a specific project, it is important to consider the historic place as a whole in order to avoid compromising one type of resource while conducting a conservation intervention on another. For example, if the main project relates to the restoration of the exterior of a historic building, it is appropriate to also refer to the guidelines on archaeological sites so that appropriate actions are considered and existing or potential archaeological sites are not compromised. In doing so, the conservation of a historic place is ensured and its heritage value are retained.

All four principles of conservation – *understanding, planning, using, and intervening* – apply to archaeological sites. Although the main focus of the guidelines is on providing guidance for interventions, all four principles are part of the recommended actions. The information provided in the sections on ‘The Principles Behind the Standards and Guidelines’ and on ‘How to Use the Standards and Guidelines’ in the introduction to the *Standards and Guidelines for the Conservation of Historic Places* are relevant to the conservation of archaeological sites. Additional information is provided in the section on ‘Before Intervening: The Principles of Understanding, Planning,

and Using for Archaeological Sites’ in the guidelines for the conservation of archaeological sites.

As most of the archaeological investigation in Canada is performed in the context of impact assessments, these guidelines are useful to guide the evaluation, the planning and the mitigation measures required particularly at historic places. As for other types of resources, the principle of minimal intervention should guide actions affecting archaeological sites.

The guidelines are organized in three treatments and seven settings. The three treatments are *preservation*, which applies to all archaeological sites, *exhibition*, which covers interventions to sites that will be made accessible and visible, and *integration*, which covers interventions to sites that will be incorporated into a contemporary or historic place project. Any given intervention will focus on preservation first but may also include another treatment. The first section of the guidelines offers general guidelines for each treatment that is applicable to all archaeological sites.

The seven settings that follow are meant to address interventions in specific environments. These are: the urban environment, industrial sites, sites in landscapes, sites in protected natural areas, sites underwater, sites above ground, and sacred places. Under each setting, and as appropriate, additional guidelines for preservation, exhibition and integration are provided to reflect specific realities. These guidelines are to be applied in addition to the general guidelines applicable for all archaeological sites. Any given archaeological site or historic place may have multiple settings. The guidelines for each appropriate setting should be consulted and applied together.

**The concept of minimal intervention to an archaeological site aims to preserve the site’s heritage value. In principle, it is recommended to preserve *in situ* by limiting negative impacts to its physical integrity.**

**However, when the site is:**

- **under threat from natural impacts; or**
- **when it is demonstrated, after assessment, that there are unavoidable conflicts with a proposed project such as**

**unreasonable costs and uses that would jeopardize the site’s heritage value,**

**it is recommended to proceed with a controlled archaeological investigation applying the highest recording standards.**

## CONSERVING ARCHAEOLOGICAL SITES: SETTING THE CONTEXT

### Archaeological Sites as Historic Places

An archaeological site means a place or area where the evidence of past human activity can be recovered and understood using archaeological methods to contribute to a meaningful narrative. The evidence can be or may have been located *in situ* on, below, or above the ground, or may be lands under water.

*Archaeological sites fall under two categories:*

1. Archaeological sites that *are* historic places because they have a unique heritage value;
2. Archaeological sites that *are part of* a historic place such as a building, landscape or district, that contribute as character-defining elements to that historic place's heritage value.

The guidelines apply to both categories.

The scientific importance of archaeological sites plays a key role in their heritage value. It can allow a site to contribute to the body of knowledge about past human lifeways, the field of archaeology or other disciplines. In many cases, the scientific importance, together with other elements of significance such as cultural, social and spiritual elements, are inseparable in composing the archaeological site's heritage value. Archaeological sites are places of knowledge, where information about past human activities can be collected, understood and interpreted. Their *heritage value* lies as much in the data that they contain as in their evocative force.

An archaeological site is characterized by its natural context, including stratified deposit that allow the archaeologist to understand the evolution of the site and determine its age and complexity, as well as one or a combination of the following:

- *Features* such as postholes, hearths, stone tool manufacture areas, industrial waste areas, and cairns. Features can also include natural features that have a cultural significance;
- *Structures* such as remains of stone walls, fish weirs, tent rings, and wharves;
- *Objects* such as artefacts, soil, botanical samples, animal remains, pollen, or any specimen associated with the site that will provide information on its characteristics, function and significance;

- *Physical remains of places* of human activity identified through local knowledge or oral tradition.

These are all potential character-defining elements of an archaeological site that are meant to give a concrete, discernible character to the heritage value identified for the historic place. They can refer to its tangible and intangible features, the environment and its components, and the scientific information provided by them.

Fossilized animals and plants are the physical evidence of a *palaeontological* site and do not necessarily require the same approach relative to their protection, preservation and management as archaeological sites. However, both types of sites may be associated with the same location.

Provincial, territorial and federal authorities maintain extensive inventories that often include information about location, type of resources, state of conservation, and period. However, only a fraction of all known archaeological sites are designated in Canada. Although designation allows for a clearly expressed heritage value, many sites that are included in inventories are not designated though they may have undergone a similar evaluation that allows for the identification of heritage value and character-defining elements. Similarly, archaeological sites that are in inventories and are part of a historic place may have already been evaluated. That information should be taken into consideration prior to intervening.

**Any archaeological site may have heritage value or contribute as a character-defining element to a larger historic place. It is best to assume that the archaeological site is significant until it has been proven, after appropriate evaluation, not to be significant.**

### The Purpose of Conservation

Archaeologists are concerned with using the analysis of past material remains, in conjunction with other bodies of information, to either reconstruct or interpret the behaviours and events that resulted in the deposition of those remains.

Archaeological methods include research methods, field methods, analytical methods and quantitative methods that guide practice and enable an understanding of archaeological sites. Although some methods borrow techniques from other disciplines such as biology or geology, archaeology applies these techniques to assess the significance of archaeological sites and define their heritage value.

The conservation of archaeological sites, through interventions and maintenance, aims to safeguard the evidence of past human activity *in situ* (i.e. in place) so as to retain its *heritage value*. It also aims to safeguard both the data provided by the site in its stratigraphy, its features, structures and objects AND the features, structures and objects themselves. It should involve such professionals as archaeologists and, where appropriate, conservators, architects and engineers. In some instances, Elders should also be involved.

An intervention on archaeological sites encompasses actions that may result in a physical change in order to *preserve* their *heritage value*. Preserving a site that is not intact does not negate the site's *heritage value* as it may still have some scientific importance, and may still have cultural, social and spiritual significance.

The maintenance of archaeological sites relies on periodic evaluations and focuses on the archaeological site as well as on its natural environment. Monitoring of the environmental conditions helps to preserve the archaeological sites in a controlled environment and helps to maintain the balance to avoid damage to archaeological sites. The heritage value of archaeological sites guides maintenance practices.

### Archaeology and the Law

All provinces and territories have legislation that protects, to varying degrees, archaeological sites. These laws apply to physical evidence *in* the ground and underwater, as well as *on* the ground, and sometimes *above* the ground, e.g., rock paintings, culturally modified trees, or above ground burial sites.

Provincial and territorial legislation is designed to protect them from undue impacts, in case of discovery or disturbance during a project, and to regulate their investigation. A permit is necessary for most types of investigations, from visual scanning to actual excavation. As required by legislation, if the public or private sector undertakes activities that will impact on the land, it must develop strategies to mitigate impacts on archaeological sites.

In general, provincial and territorial legislation across the country expresses the need to:

- Protect archaeological sites from damage and destruction;
- Allow for an expert (i.e. a qualified archaeologist) to investigate the significance of the archaeological site.

In addition, in general, provincial and territorial legislation across the country requires that:

- Permits be issued for any archaeological investigation;
- Impact assessments be made prior to a project development;
- Repositories be identified for the archaeological objects collected;
- Discussions with affected groups be scheduled;
- In the case of accidental discoveries and/or the discovery of human remains, all activities must be halted and the proper authorities must be contacted (see section on Cemeteries, Burial Grounds and Sacred Places for more information).

**For more information on legislation concerning the protection of archaeological sites, consult the appropriate federal, provincial or territorial authority.**

In some parts of Canada, Aboriginal land claim agreements address archaeological site protection, ownership and access rights, consultation, permit, and reporting requirements, and conservation planning.

The Canadian Environmental Assessment Act is the main federal legislation that is relevant to archaeological site protection. Although its primary intent is to mitigate impacts to the environment, it covers impacts to cultural and archaeological resources. The federal government also has various policies and departmental directives that support archaeological evaluation and interventions when projects could potentially disturb the land.

**Accidental Discoveries**

In the event of the accidental discovery of human remains, the laws specify that all activities must be halted, the area secured and the police called. The police will determine whether the site should be subject to a police or coroner's investigation or whether it is "archaeological," and then contact the

relevant authorities. It is highly recommended to seek expert advice from an archaeologist.

Where archaeological resources are inadvertently discovered or where the accidental discovery of human remains is deemed archaeological in nature, an archaeologist should evaluate the site. A clear understanding of the value of the archaeological site is crucial to determining the appropriate course of action.

**Cemeteries, Burial Grounds and Sacred Places**

Historic places that are or include abandoned cemeteries, burial grounds and sacred sites are particularly sensitive because of their cultural or spiritual significance. Archaeological methods can be applied to these places. Some sites may not be accessible, even to qualified professionals, so as to not disturb them.

**When human remains are discovered...**

- **First, contact the police authorities;**
- **If the police authorities determine that the remains are not the subject of a police or coroner's investigation, then contact the appropriate archaeological authorities in the jurisdiction.**

**Before intervening on a sacred site...**

- **It is best practice to inform, and in some cases mandatory to consult, the local and/or culturally-affiliated Aboriginal and non-Aboriginal communities prior to visiting or intervening on sacred sites, or prior to the removal of human remains and funerary objects.**

## CONSERVING ARCHAEOLOGICAL SITES: APPLYING THE FOUR PRINCIPLES

As for other types of historic places, the four principles of conservation – understanding, planning, using, and intervening – apply to archaeological sites. These principles are steps leading to a successful conservation approach.

Any intervention or maintenance activity on other types of historic places, whether landscapes, buildings or engineering works, should endeavour to safeguard the archaeological sites based on their contribution to the historic place's *heritage value*.

### **Before Intervening: the principles of understanding, planning and using for archaeological sites**

Before a conservation intervention takes place, the understanding of the historic place's heritage value and character-defining elements, the thorough planning of the proposed intervention and subsequent maintenance, as well as the identification of an appropriate use of the place, are essential first steps to implementing an appropriate conservation strategy.

**Understanding** an archaeological site through evaluation means determining: (a) whether it is important or not; (b) the reasons why it is important; and (c) its existing condition. In the case of an archaeological site that is evaluated in the context of a larger historic place, e.g. an historic district or a cultural landscape, the evaluation will determine the site's contribution as a component of the historic place.

**This step can be challenging as it often takes time to complete an evaluation of the archaeological site. It is recommended that appropriate steps be taken to protect the site until the evaluation has been completed.**

**Planning** implies that before any intervention takes place, there is a plan that addresses the factors, pressures and opportunities relating to the historic place. Planning is guided by the goal of preserving the place's heritage value. The appropriate use of the place the impact of maintenance and everyday use of the site are determined at that step.

**Using** archaeological sites as places to acquire and convey knowledge is recommended as the prime objective. The use should be determined when planning, and once there is a clear understanding of the site's heritage value. If the use of a historic place is part of its heritage value, then that use should be retained. This is of particular relevance for

sacred places and places of memory with a strong archaeological dimension.

**Before any project prompts specific interventions, planning should take place in order to mitigate impact.**

**When discovering archaeological resources, it is recommended to determine whether they:**

- **Are character-defining elements;**
- **Have heritage value of their own.**

The use assigned to an archaeological site that is a historic place will be determined by its heritage value, its potential for scientific research and for interpretation, its condition, the stressors, the local needs and the sustainability of the proposed intervention. The other considerations, as defined in the Standards and Guidelines, also influence the potential use and include considerations relating to health and safety, universal accessibility, and environmental issues.

Most jurisdictions require that archaeological impact assessments be performed before any project is undertaken. When carrying out activities at a historic place, there is a possibility that new archaeological resources will be discovered. These may be directly related to the historic place's heritage value. Impact assessments need to focus particularly on evaluating the significance of the newly discovered resource in relation to the historic place's heritage value.

### **Intervening on an Archaeological Site: preserving, exhibiting, integrating**

**Intervening** on archaeological sites requires actions that respect their *heritage value* as well as their *character-defining elements*, particularly because their material and form are often extremely fragile. The first conservation step is to create a stable environment for the tangible elements in order to extend their physical life, since these, in most cases, were once buried in soil and had different preservation conditions than after their exposure.

**Intervening** also implies taking action to sustain the archaeological site's use. The guidelines focus on maintaining the physical integrity by emphasizing *preservation*, through protection, documentation, maintenance, and retention of the site. *Restoration*, as an action or process that accurately reveals, recovers or represents the state of a *historic place* or of an individual component, as it appeared at a particular period in its history, is not a common approach used in archaeology, mainly because of the scientific significance of the archaeological site itself. In most cases, it would be difficult to repair or replace missing elements without impairing the *heritage value* of the site. *Rehabilitation* is not generally applied to archaeological sites because by definition, there is no continuing use to a type of *historic place* that exists primarily to contain and convey information.

Instead, preservation, exhibition and integration are the three primary treatments that reflect conservation practice as it applies to archaeological sites.

**Preservation** involves protecting, maintaining and stabilizing the existing form, material and integrity of a historic place while protecting its heritage value. This may involve documenting, sheltering, capping or reburying the site. *Preservation may be considered as the primary treatment when:* (a) the historic place's materials, features and spaces are essentially intact and thus convey the historic significance without extensive repair or replacement; or (b) when the historic place's materials, features and spaces can be disturbed by natural or human induced activities and may result in the disappearance of the heritage value. A plan for preservation should be developed before work begins.

**Exhibition** involves actions aimed at presenting and conveying the heritage value of an archaeological site. These may include reassembly, building structures such as interpretive constructs, and marking. Reassembly

means the reassembling of existing but dismembered parts based on research and performed as part of the site's exhibition. Structures should avoid disturbing surviving archaeological evidence.

In addition, interpretive constructs should take into account evidence from all sources in order to preserve the site's heritage value, should contribute to the site's heritage value, and should be clearly identifiable as such. Markings are often used to identify the presence of an archaeological site when it is not visible. Minimal repairs and replacement of deteriorated features may be considered when the original material cannot be retained and should be indicated as such. *Exhibition may be considered as the primary treatment when* the archaeological site's features, structures and objects have been stabilized, and there is an opportunity to allow access and convey its heritage value. A plan for exhibition should be developed before work is undertaken.

**Integration** involves, in the context of a contemporary building, structure, landscape or historic place, the inclusion of the archaeological site's heritage value and character-defining elements in a project. Keeping in mind that the Standards may also be applied to new constructions attached, adjacent, or related to the archaeological site, the project should be designed and created so that heritage value is not radically changed and its character-defining elements are not obscured, damaged or destroyed. *Integration may be considered as the primary treatment when:* (a) the archaeological site's heritage value has been taken into consideration in a project that protects it; or (b) the archaeological site is a character-defining element of a historic place that can contribute to the heritage value of that historic place; or (c) the archaeological site can acquire a contemporary function while retaining its heritage value. Before work begins, a plan for integration should be developed.

- **Before intervening, determine which treatment or combination of treatments would preserve the historic place's heritage value;**
- **One or more treatments can be determined during the planning phase and are influenced by such factors as the historic place's heritage value, condition, possible uses, stressors, local needs, scientific potential, and sustainability;**

- **It is important to balance other considerations such as health and safety, prior to making a decision;**
- **Exercising caution and seeking qualified advice are strongly recommended prior to any type of intervention to ensure that legal obligations are met.**

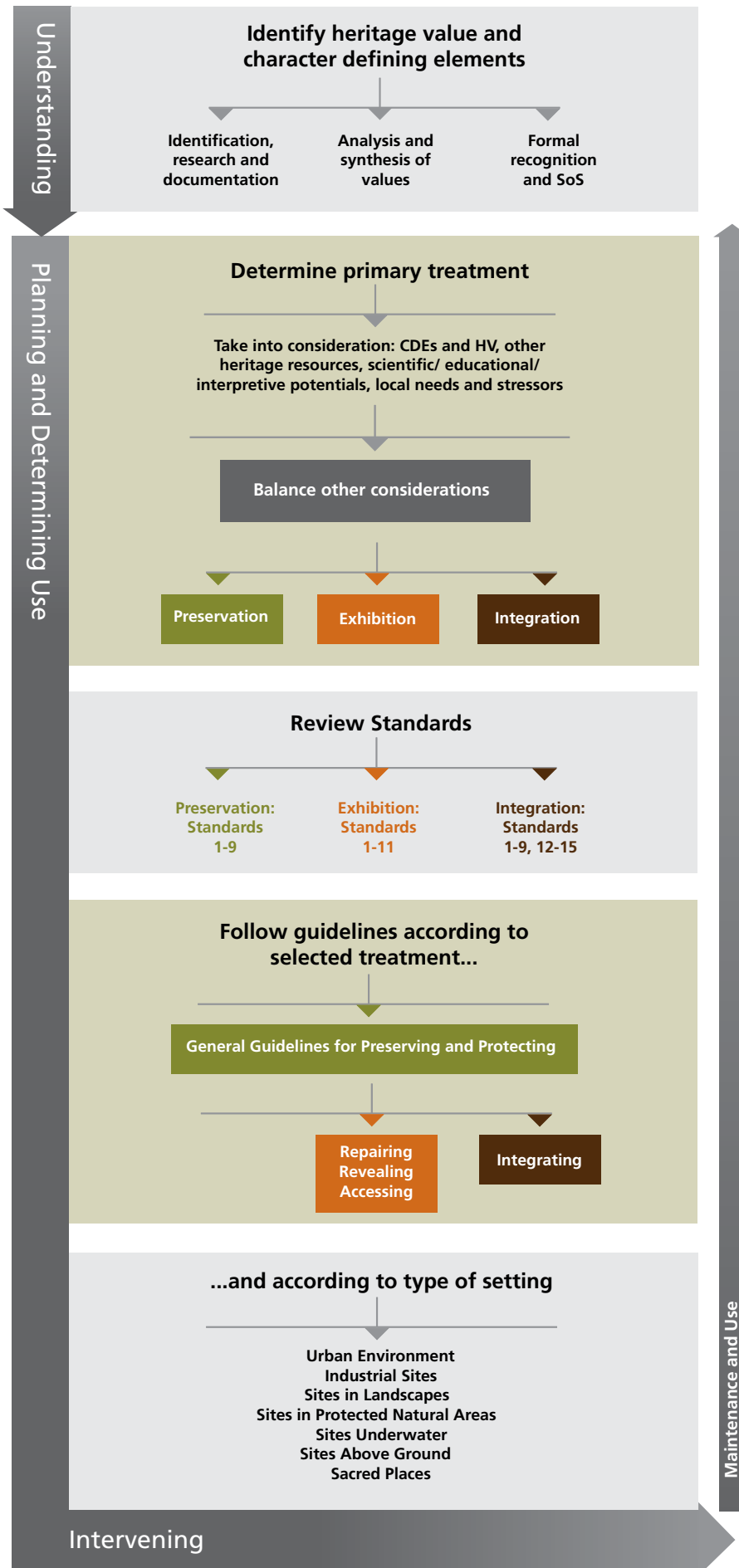


Fig.1: Process to conserve archaeological sites

## STANDARDS FOR THE CONSERVATION OF ARCHAEOLOGICAL SITES

The Standards are not presented in a sequential or hierarchical order, and as such, equal consideration should be given to each. All standards for any given type of treatment must therefore be applied simultaneously to a project.

### GENERAL STANDARDS (ALL PROJECTS)

1. Conserve the *heritage value* of a historic place. Do not remove, replace, or substantially alter its intact or repairable *character-defining elements*. Do not move a part of a historic place if its current location is a *character-defining element*.
2. Conserve changes to a *historic place* which, over time, have become *character-defining elements* in their own right.
3. Conserve *heritage value* by adopting an approach calling for *minimal intervention*.
4. Recognize each *historic place* as a physical record of its time, place and use. Do not create a false sense of historical development by adding elements from other *historic places* or other properties, or by combining features of the same property that never coexisted.
5. Find a use for a *historic place* that requires minimal or no change to its *character-defining elements*.
6. Protect and, if necessary, stabilize a *historic place* until any subsequent *intervention* is undertaken. Protect and preserve archaeological resources in place. Where there is potential for disturbance of archaeological resources, take mitigation measures to limit damage and loss of information.
7. Evaluate the existing condition of *character-defining elements* to determine the appropriate intervention needed. Use the gentlest means possible for any intervention. Respect *heritage value* when undertaking an intervention.
8. Maintain *character-defining elements* on an ongoing basis. Repair *character-defining elements* by reinforcing their materials using recognized conservation methods. Replace in kind any extensively deteriorated or missing parts of *character-defining elements*, where there are surviving prototypes.
9. Make any *intervention* needed to preserve *character-defining elements* physically and visually compatible with the *historic place*, and identifiable upon close inspection. Document any intervention for future reference.

**Standards for Rehabilitation and Restoration are not applicable to archaeological sites.**

**ADDITIONAL STANDARDS RELATING TO EXHIBITION**

10. Expose or represent the character-defining elements *in situ* that most effectively convey the historic place's heritage value.
11. Evaluate the setting of the historic place to determine the appropriate function for the place. Define a function that is compatible with the heritage value, character-defining elements, and the setting. Create means of accessing the character-defining elements.

**ADDITIONAL STANDARDS RELATING TO INTEGRATION**

12. Conserve the heritage value and character-defining elements when building a new construction, and rehabilitating or restoring a historic place. Make the work physically and visually compatible with, subordinate to and distinguishable from the character-defining elements of the historic place.
13. Repair character-defining elements. Where character-defining elements are too severely deteriorated to repair, record the character-defining elements. If new elements need to be added, make the form, material and detailing of the new elements compatible with the site's heritage value.
14. Create any new additions or related new construction so that the archaeological site's heritage value is preserved if the new work is removed or modified in the future.
15. Respect the heritage value and the character-defining elements of the historic place and determine a function for their setting that is compatible.

## **GUIDELINES FOR ARCHAEOLOGICAL SITES**

An archaeological site means a place or area where the evidence of past human activity can be recovered and understood using archaeological methods to contribute to a meaningful narrative.

The evidence can be or may have been located *in situ* on, below, or above the ground or lands under water. Examples include evidence of past human activity, such as a stone tool flaking area or an industrial site; remains of human settlement, such as a temporary shelter or a settlement; and vestiges of means of communication or transportation, such as a ship or a dugout canoe; and the context in which these traces are found, including the stratigraphy and the spatial distribution of artefacts. These remnants of the past may be visible on the surface of the earth, or deeply buried, leaving no indication of their existence; or, partially or completely submerged in a lake, a river, or the sea like a shipwreck.

*Note: Protecting archaeological sites is required by provincial, territorial and federal law. Obtaining qualified advice on meeting the obligations spelled out in the various archaeological legislation, policies and directives is strongly recommended. Interventions will most likely require the services of a qualified archaeologist holding a valid permit or licence issued by the federal, provincial or territorial heritage authority with jurisdiction over the site.*

These Guidelines, which address archaeological sites, including their separate components, should not be used in isolation. There may be heritage value in the relationships between archaeological sites and landscapes, buildings or engineering works and therefore, those sections of the Guidelines should also be consulted when undertaking a project. The intention is to protect ALL heritage values associated with the historic place.

We invite you to send us a site photo that captures the intent of this section, such as pictures of new technology being used to record sites.

GENERAL GUIDELINES FOR PRESERVATION		
	RECOMMENDED	NOT RECOMMENDED
1	<b>Preserving</b> archaeological sites that are important in defining the overall heritage value of the historic place.	<i>Removing or damaging archaeological sites that are important in defining the overall heritage value of the historic place.</i>
2	<b>Documenting</b> and <b>surveying</b> the historic place and surroundings prior to beginning project work or in anticipation of future projects, in particular where the terrain will be altered, in order to determine the presence of archaeological sites and the potential impact of the project work on them.	<i>Proceed with an intervention without properly documenting and surveying the historic place and jeopardizing the heritage value of the historic place.</i>
3	<b>Documenting</b> and <b>surveying</b> the site, including determining the natural and human impacts that can and will affect it.	<i>Documenting and surveying the site without considering the potential natural and human impacts that could affect them.</i>
4	<b>Documenting, protecting</b> and <b>maintaining</b> the archaeological site's heritage value and character-defining elements by reaching a reasonable balance between the scientific objectives of archaeological research and their preservation <i>in situ</i> . As the investigation is carried out, periodically reassess choices.	<i>Carrying out archaeological investigations without periodically weighing the benefits of pursuing the excavations against the benefits of ceasing the intervention.</i>
5	<b>Protecting</b> archaeological sites by planning and carrying out any necessary investigation and salvage work. Such work should involve qualified personnel such as a trained archaeologist and would be undertaken only when there is potential for disturbance of archaeological sites, and then only after the required mitigation efforts have been taken.	<i>After the required mitigation efforts have been explored, allowing unqualified personnel to perform salvage work and data recovery on archaeological sites, creating a situation where improper methodology results in the loss of important archaeological data or material.</i>

GENERAL GUIDELINES FOR PRESERVATION		
	RECOMMENDED	NOT RECOMMENDED
6	<b>Protecting</b> and <b>maintaining</b> the physical integrity of archaeological sites, including the natural soil, the stratigraphy and the spatial distribution of artefacts, in order to retain their heritage value.	<i>Disturbing the context of archaeological sites, thus compromising the physical integrity of the sites and their associated scientific and research information</i>
7	<b>Protecting</b> and <b>maintaining</b> heritage value and character-defining elements from natural and human induced deterioration by identifying, evaluating and minimizing disturbance to the archaeological site and its setting.	<i>Introducing a use, activity, feature, or equipment (such as on site parking, or heavy machinery) into areas where it will disturb or damage archaeological sites.</i>
8	<b>Protecting</b> and <b>maintaining</b> the physical integrity of character-defining elements, including archaeological objects and records that relate to the site, from natural and human induced deterioration, during and after excavations. Such installations as fences, caps, shelters, or infill, should be used when appropriate and the interventions should be reversible. Provide proper long-term storage for objects and records.	<i>Selecting an intervention that is unsuitable for the site or that is irreversible. Failing to plan for long-term storage of objects and records and providing inadequate storage.</i>
9	When selecting the most suitable intervention for a site, recording the character-defining elements and their relationship to other components through mapping, photographing and sampling prior to proceeding with the intervention.	<i>Failing to proceed with the recording of the site based on the site's heritage value and character-defining elements.</i>
10	<b>Stabilizing</b> deteriorated, collapsed, or deformed features and structures through such methods as structural consolidation, shelters, capping, or infill.	<i>Failing to stabilize deteriorated, collapsed, or deformed features and structures using methods that inappropriate or irreversible.</i>
11	<b>Assessing</b> , prior to design, the factors that will affect protective and stabilization installations, such as shelters or caps. For capping, factors could include soil composition, level of humidity, terrain, growth or not of vegetation, compression strength, and permeability. For shelters, factors could include the geological structure that supports the site, the nature of the materials, and environmental and human induced stressors.	<i>Selecting stabilization installations without considering the factors that could affect them.</i>
12	Designing protective and stabilization structures, such as caps, shelters or fences, that will not directly disturb or be supported by the character-defining elements.	<i>Designing protective and stabilization structures that disturb or are supported by the character-defining elements.</i>

GENERAL GUIDELINES FOR PRESERVATION		
	RECOMMENDED	NOT RECOMMENDED
13	<b>Protecting</b> the character-defining elements during the placement of the protective and stabilization structures. This includes activities associated with the setting up of these structures such as the placement of soil and mineral layers, and heavy machinery circulation. Take necessary measures so that the weight of the heavy machinery applying the fill does not adversely affect the site.	<i>Failing to protect the character-defining elements while the protective and stabilizing work is underway.</i>
14	Using materials that will provide a proper preservation environment for the site by balancing appropriate levels of humidity, soil acidity, compression, and protection from roots. Marking the location of the site, including the use of markers that differentiate the cultural layers associated with the site from the covering material.	<i>Using materials that can be confused with the cultural layers of the site.</i>
15	Infilling/backfilling the archaeological site, when appropriate, to stabilize the <i>in situ</i> remains and the stratigraphic profiles, using materials such as excess non-character-defining element sediments and materials from the excavation, that will show the difference between the features and the fill, as well as protect them. This installation should be reversible and should be sterile if in a closed environment such as a museum.	<i>Infilling/backfilling the archaeological site in ways that can have a negative impact on the character-defining elements.</i>
16	<b>Protecting</b> archaeological sites against unauthorized activities.	<i>Failing to protect archaeological sites against unauthorized activities.</i>
17	<b>Protecting</b> and <b>maintaining</b> archaeological sites by striking a balance with the objectives for the protection and maintenance of natural environments.	<i>Damaging archaeological sites as a consequence of efforts for the protection, restoration or rehabilitation of a natural environment.</i>
18	When archaeological objects, features or structures are in an environment that proves difficult to control such as permafrost or a wet environment, removing these elements with surrounding soil.	<i>Removing archaeological objects, features and structures from challenging environments such as permafrost without surrounding soil and potentially damaging the object, feature or structure.</i>
19	<b>Stabilizing</b> the archaeological object, feature or structure prior to its removal.	<i>Proceeding with the removal of an archaeological object, feature or structure without stabilizing it.</i>
20	<b>Documenting</b> the state of conservation of the archaeological object, feature or structure at the time of its removal.	<i>Removing an archaeological object, feature or structure without properly documenting its state of conservation.</i>

GENERAL GUIDELINES FOR PRESERVATION		
	RECOMMENDED	NOT RECOMMENDED
21	<b>Preserving</b> the archaeological object once it has been removed from its discovered location by qualified professionals.	<i>Excavating archaeological sites to such an extent that the preservation of archaeological resources in situ is compromised, thus significantly reducing the potential for future research and presentation.</i>
22	<b>Retaining</b> sound wooden and masonry elements, earthworks or deteriorated elements that can be repaired.	<i>Removing sound wooden and masonry elements, earthworks or deteriorated elements that can be repaired.</i>
23	<b>Protecting</b> and <b>maintaining</b> the environment of archaeological sites by, for example, preventing water penetration and maintaining proper drainage in dry environments, and preventing dehydration in wet environments.	<i>Failing to protect and maintain the environment of archaeological sites by, for example, preventing water penetration when water is essential to the preservation of waterlogged character-defining elements.</i>
24	Cleaning objects, features and structures using recognized preservation methods only when necessary to halt deterioration.	<i>Failing to clean objects, features and structures when it is necessary to halt deterioration, or cleaning with the use of inappropriate and/or unrecognized preservation methods.</i>
25	Carrying out surface cleaning tests after it has been determined that such cleaning is appropriate. If acceptable, carrying out cleaning tests which should be observed over a sufficient period of time so that both the immediate and the long-range effects are known. Selecting the gentlest method possible so that the appropriate level of cleanliness is achieved.	<i>Carrying out surface cleaning without considering the level of treatment needed and the immediate and long-range effects of the selected method.</i>
26	Allowing for appropriately selected vegetation to grow and monitoring its effects on the character-defining elements.	<i>Allowing for vegetation to grow without considering the potential effects of the selected type of vegetation and failing to monitor its effects on the in situ resource on the character-defining elements.</i>
27	Monitoring archaeological sites on a regular basis in order to maintain a stable environment.	<i>Failing to monitor the condition of archaeological sites on a regular basis, thus increasing the chances of a destructive change in the site's environment going undetected and untreated.</i>
28	Monitoring the effectiveness of protective and stabilization structures regularly to assess if they are achieving expected preservation results.	<i>Installing protective and stabilizing structures without monitoring their effectiveness.</i>

We invite you to send us a site photo that captures the intent of this section, such as the use of a landscape design to represent excavated features.

ADDITIONAL GUIDELINES FOR EXHIBITION	
RECOMMENDED	NOT RECOMMENDED
<p><b>1 Preserving and revealing</b> the character-defining elements in order to convey the heritage value. This must be based on sound research and is closely linked to the state of progress of research.</p>	<p><i>Revealing the character-defining elements using methods that do not preserve them and compromise the heritage value.</i></p>
<p><b>2</b> Installing a shelter that enhances the aesthetics as well as the heritage value of the archaeological site.</p>	<p><i>Installing a shelter that hides the site or obscures the understanding of the site's heritage value.</i></p>
<p><b>3</b> Exhibiting archaeological sites only when the proposed project can be sustainable and will best preserve the site's heritage value.</p>	<p><i>Exhibiting archaeological sites without ensuring that appropriate resources and commitments are available for the long-term preservation of the site.</i></p>
<p><b>4 Repairing</b> deteriorated, collapsed, deformed, or incorrectly placed components of features and structures through minimal interventions, and using original building methods and same materials as much as possible. This could include resetting, reassembling, retying, and jointing.</p>	<p><i>Repairing deteriorated, collapsed, deformed, or incorrectly placed components of features and structures using contemporary building methods and materials that are incompatible with original building methods and materials, and methods that would affect the heritage value. This includes such approaches as dismantling and in situ reconstruction, or reassembling without proper documentation.</i></p>
<p><b>5 Repairing and stabilizing</b> deteriorated wooden or masonry elements by structural reinforcement, weather protection, or the correction of unsafe conditions, as required, until any additional work is undertaken. Repairs should be physically and visually compatible.</p>	<p><i>Failing to repair and stabilize deteriorated wooden or masonry elements, or proceeding with physically and visually incompatible temporary repairs and stabilizing work.</i></p>

ADDITIONAL GUIDELINES FOR EXHIBITION	
RECOMMENDED	NOT RECOMMENDED
<b>GROUNDMARKING</b>	
<b>1</b> <b>Protecting</b> and <b>preserving</b> the site prior to installing ground markings.	<i>Installing ground markings without providing adequate protection for the site's preservation.</i>
<b>2</b> <b>Protecting</b> the site using materials and an installation that will not disturb the physical integrity of the character-defining elements.	<i>Selecting materials and/or installation methods that will disturb the physical integrity of the site's character-defining elements.</i>
<b>3</b> Using materials that are compatible with the setting, that will require low maintenance and convey efficiently the heritage value such as through the use of textures, colours and shapes.	<i>Selecting materials or settings that will not efficiently convey the site's heritage value and/or that will require high maintenance to convey its heritage value.</i>
<b>4</b> Ground marking only in areas where archaeological sites were found, surveyed, recorded, and preserved <i>in situ</i> . Ground marking should only be an option when there is no risk of negative impact to the site's heritage value or character-defining elements.	<i>Proceeding with ground marking without having adequately surveyed, recorded and preserved the archaeological site beforehand or considering ground marking as an option when it poses a risk to the preservation of the site's heritage value or character-defining elements.</i>
<b>PATHWAYS</b>	
<b>1</b> Designing pathways that will not disturb the physical integrity of the character-defining elements, such as by building them in sterile or disturbed areas.	<i>Designing pathways that disturb the character-defining elements, including on top of former pathways.</i>
<b>2</b> Using materials that are compatible with the setting and with the heritage value of the site.	<i>Using materials that are incompatible with the setting and the heritage value of the site.</i>
<b>3</b> Designing pathways that will allow for access to the character-defining elements while protecting the site. If a new access point is required, it should be distinguishable and have no impact on the site's heritage value.	<i>Designing pathways that do not take into consideration the site's protection and jeopardizes its character-defining elements.</i>
<b>4</b> Allowing access to the character-defining elements while protecting the heritage value. Allowing access only to safe and secure areas of the site while preserving the site's heritage value and character-defining elements. If it is not possible, then it is recommended not to allow access.	<i>Allowing access without considering the preservation of the site's heritage value and character-defining elements, which could negatively impact the site. This includes issues arising from code and regulation compliance.</i>

ADDITIONAL GUIDELINES FOR EXHIBITION	
RECOMMENDED	NOT RECOMMENDED
<b>STRUCTURES</b>	
<b>1</b> Designing and building structures such as shelters, buildings or interpretive constructs, that will neither disturb the character-defining elements such as the physical integrity of remains, nor affect the historic place's heritage value.	<i>Designing and building structures that will disturb the character-defining elements such as the physical integrity of remains, or impede on viewscape, and affect the historic place's heritage value.</i>
<b>2</b> Using materials and forms in the design of structures that are aesthetically compatible with the setting and that do not have a negative impact on the heritage value. For interpretive constructs, using only new materials and basing the interpretation on the results of archaeological investigations.	<i>Using materials and forms that are incompatible with the historic place's heritage value and character-defining elements.</i>
<b>3</b> Distinguishing the interpretive construct from the character-defining elements, marking speculative components, and allowing access to the archaeological site so as not to create a false sense of the past.	<i>Creating interpretive constructs and speculative components that could be confused with the site's character-defining elements and create a false sense of the past.</i>
<b>4</b> <b>Maintaining</b> interpretive constructs from decay to protect the historic place's character-defining elements.	<i>Failing to maintain an interpretive construct resulting in the archaeological site being negatively impacted by the construct's decay.</i>
<b>REASSEMBLY</b>	
<b>1</b> <b>Reassembling</b> components of character-defining elements only when their original location, information on the original material, degree of deterioration, and human induced and natural pressures have been recorded and assessed. Most constituent elements will need to be preserved. This should only be performed if it contributes to the heritage value and if it does not disturb, directly or indirectly, the character-defining elements.	<i>Considering the reassembly of components of the site's character-defining elements without adequately assessing and recording the site's original location, information on its original material, degree of deterioration and human induced and natural pressures.</i>
<b>2</b> <b>Reassembling</b> using the least intrusive adhesives, staples or nails.	<i>Proceeding with reassembly using intrusive elements and without considering less intrusive methods.</i>
<b>3</b> When reassembling, <b>integrating</b> missing components that are clearly distinguishable from the original components.	<i>Integrating missing elements in such a manner that they could be confused with the site's character-defining elements.</i>
<b>4</b> Cleaning stone surfaces using the least harmful methods.	<i>Cleaning stone using ill-suited, harmful methods.</i>

*We invite you to send us a site photo that captures the intent of this section, such as a landscape design that incorporates archaeological features, a building constructed around archaeological structures, etc.*

#### ADDITIONAL GUIDELINES FOR INTEGRATION

	RECOMMENDED	NOT RECOMMENDED
<b>1</b>	<b>Preserving</b> and <b>protecting</b> the heritage value and character-defining elements in the design of the integration project. A design where a load is to be supported by the remains should be considered only after careful consideration has been given to alternative designs. If a load is to be supported by the remains, taking the necessary actions so that the physical integrity and heritage value of the historic place are preserved.	<i>Implementing an integration design where the remains support a load, without due consideration for effective alternative options, and jeopardize the historic place's heritage value and the physical integrity of the character-defining elements.</i>
<b>2</b>	<b>Researching</b> and determining building techniques and materials for historic features and structures, as well as for the new features and structures in the proposed design in the proposed integration design.	<i>Implementing an integration design without considering the historic building techniques and materials, and using building techniques and materials that could affect the heritage value of the site.</i>
<b>3</b>	<b>Retaining</b> sound features and structures.	<i>Failing to maintain features and structures or implementing an inadequate maintenance plan.</i>
<b>4</b>	Taking the necessary actions so that the archaeological features and structures are self-explanatory, to some degree, and harmonize with an existing or new building.	<i>Integrating archaeological features and structures to a landscape, or to an existing or new building for an aesthetic or functional purpose, without taking into consideration the heritage value or the character-defining elements.</i>
<b>5</b>	Considering the archaeological site's heritage value and character-defining elements when restoring missing elements of a landscape.	<i>Restoring missing elements of a landscape without consideration for the heritage value and character-defining elements of the archaeological site.</i>

**GUIDELINES FOR ARCHAEOLOGICAL SITES IN THEIR SETTING**

In addition to the previous guidelines that apply to all archaeological sites, the following guidelines provide guidance for interventions in an **urban environment**, for **industrial sites**, sites in **landscapes**, sites in **natural areas**, sites **underwater**, sites **above ground**, and **sacred places**.

These guidelines complement the general guidelines and should be used to consider the challenges and opportunities specific to the environmental, social and cultural settings of archaeological sites. Archaeological site conservation is most effective when archaeological sites are understood and used, and interventions are planned in their proper setting.

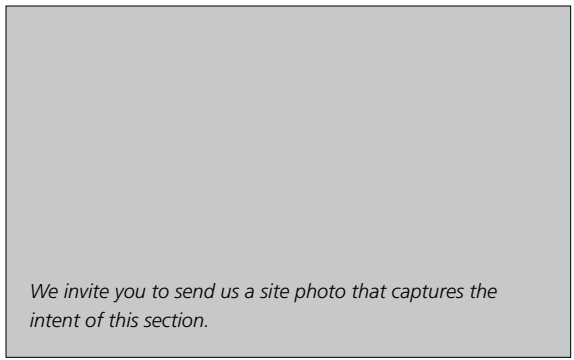
Archaeological sites can have multiple settings and in order to effectively preserve all values, it is necessary to consider all appropriate settings.

### SITES IN URBAN ENVIRONMENTS

Urban environments refer to settlements that have been densely populated over an extensive period of time such as villages, towns and cities. They provide for a large concentration and complexity of archaeological sites including historical period structures and features such as burials, buildings and remains of public works, and Aboriginal sites.

The conservation of archaeological sites in urban environments considers two perspectives. The first looks at the challenges of preserving archaeological sites in an urban environment – or archaeology *in the city* – and the second perspective tackles the study of the evolution of the settlement itself – or archaeology *of the city*. Both perspectives guide conservation towards preserving the relationship between individual sites and the settlement as a whole. It becomes paramount to understand the evolution of the settlement in order to make decisions about what is significant and what is not, and what can be preserved *in situ* and what cannot. Maps and historical accounts can help in understanding this evolution, but certain elements of the evolution can be missing such as the Aboriginal presence. Archaeological surveys are key in providing this missing information. The intent of archaeological site conservation is to focus decisions on the preservation of components whose significance contribute to the understanding of the whole.

Urban environments are rapidly changing as a result of intense development, and a diverse and transient population. This may lead to past functions and uses disappearing because the context has changed and the meaning was lost. Some of the challenges lie in dealing with numerous private owners, intensive traffic, pollution, new construction, upgrades of public works, and land desirable for private development or public activities. The proximity of archaeological sites to public services makes them more accessible to the local community. It also makes them vulnerable to damage. Consequently, recommended actions highlight these issues and focus on providing guidance to **preserve heritage value** and **determine an appropriate use** for archaeological sites.



#### ADDITIONAL GUIDELINES FOR PRESERVATION

	RECOMMENDED	NOT RECOMMENDED
<b>1</b>	<b>Documenting, surveying, and mapping</b> the archaeological sites in urban environments. It is important to have an overall picture of the evolution of the urban environment to determine the significance of individual archaeological sites.	<i>Documenting, surveying and mapping archaeological sites individually without considering the evolution of the urban environment it belongs to.</i>
<b>2</b>	<b>Preserving</b> archaeological sites in urban environments <i>in situ</i> , through minimal interventions such as stabilization, consolidation and repointing. When contemporary uses could threaten the archaeological site, thoroughly documenting the site and using reversible installation methods.	<i>Preserving archaeological sites in urban environments in situ without adequately protecting the site from the potentially harmful effects of contemporary uses.</i>
<b>3</b>	<b>Preserving</b> links with nearby features and historic settlement patterns in order to retain the heritage value of the historic place. This also helps guide decisions concerning further investigation.	<i>Preserving archaeological sites in isolation and/or destroying significant elements of the historic settlement pattern so that the overall understanding of the evolution of the settlement is lost.</i>

## Urban Environment (continued)

ADDITIONAL GUIDELINES FOR PRESERVATION	
RECOMMENDED	NOT RECOMMENDED
<b>4</b> <b>Protecting</b> the character-defining elements from excess motorized and pedestrian traffic by limiting access to and around the archaeological site.	<i>Allowing access to and around the archaeological site without providing adequate protection for the character-defining elements.</i>
<b>5</b> <b>Maintaining</b> and <b>preserving</b> archaeological sites through such actions as removing trash, removing graffiti from character-defining elements, clearing undesirable vegetation and, when appropriate, cleaning traces of pollution.	<i>Failing to take actions to adequately maintain the site and allowing undesirable elements to jeopardize the preservation of the character-defining elements.</i>

ADDITIONAL GUIDELINES FOR EXHIBITION	
RECOMMENDED	NOT RECOMMENDED
<b>1</b> Balancing the need to preserve the site's heritage value and protect its character-defining elements with the desire to allow public access for educational purposes.	<i>Allowing access while compromising the heritage value and character-defining elements.</i>
<b>2</b> <b>Revealing</b> the presence of archaeological sites to preserve the heritage value through such methods as ground marking, interpretive structures or other appropriate methods.	<i>Failing to reveal, or revealing the presence of archaeological sites in ways that do not preserve the heritage value.</i>
<b>3</b> Creating a buffer area around the site in order to enhance visitor experience. The buffer area should facilitate the communication of the site's heritage value directly such as through interpretive panels, and indirectly, by creating an environment that does not distract from it.	<i>Creating a buffer area that deters from communicating the site's heritage value.</i>

ADDITIONAL GUIDELINES FOR INTEGRATION	
RECOMMENDED	NOT RECOMMENDED
<b>1</b> <b>Integrating</b> archaeological sites in the urban fabric while protecting and preserving their heritage value. The use of the area by local citizens should be evaluated to determine whether it is compatible with an <i>in situ</i> preservation of the remains. The intervention should also only consider a future use that is compatible with the heritage value and contemporary needs. In the case of a site that has already been enhanced, if contemporary uses such as public events have the potential of damaging the site's heritage value, it is best not to carry out the activity.	<i>Allowing a use or integrating the site in the urban fabric resulting in damage to the historic place.</i>

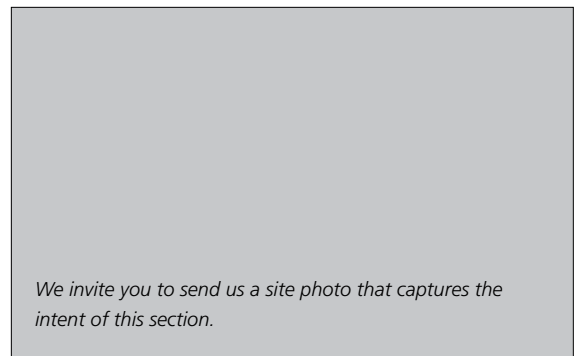
### INDUSTRIAL SITES

Industrial sites are as much a setting – i.e. where archaeological sites can be found on sites of current or past industrial activity – as a methodological approach for doing archaeology.

As such, the aim of industrial archaeology is to conduct a systematic study of structures and archaeological objects so as to better understand our industrial past.

Industrial sites present great challenges because of the size of their resources, the risks associated with some forms of contamination, and the industrial machinery that may be present. Depending upon the circumstances, these features could pose a risk to the health and safety of visitors and area residents. It is important to balance these considerations when assessing the appropriate intervention for the site. The associative values of the site, particularly the patina, i.e. the original protective layer or the crust produced

by certain industrial activities on the machinery, can be particularly important as they can illustrate social significance. In order to understand and convey the meaning of industrial sites, a good grasp of their former use and strong technical expertise are essential. In addition, manufacturing and industrial modernization can make them vulnerable to damage and destruction.



ADDITIONAL GUIDELINES FOR PRESERVATION		
	RECOMMENDED	NOT RECOMMENDED
1	<b>Protecting</b> and <b>maintaining</b> the industrial machinery in place to preserve the heritage value.	<i>Moving the industrial machinery and impacting the heritage value.</i>
2	<b>Maintaining</b> the patina of industrial objects and processes.	<i>Removing or damaging the patina of industrial objects or processes.</i>
3	Allowing for the investigation of contaminated areas unless they represent a health and safety issue.	<i>Damaging or destroying archaeological industrial structures, features and objects located in a contaminated environment that would compromise the heritage value.</i>

ADDITIONAL GUIDELINES FOR EXHIBITION		
	RECOMMENDED	NOT RECOMMENDED
1	<b>Preserving</b> archaeological industrial structures and features <i>in situ</i> in order to preserve functional integrity.	<i>Removing or displacing archaeological industrial structures and features that would compromise the heritage value.</i>
2	<b>Maintaining</b> original patterns of circulation and activity as they were discovered.	<i>Creating new patterns of circulation and activity that are inconsistent with the original patterns of circulation and activity that would compromise the heritage value.</i>

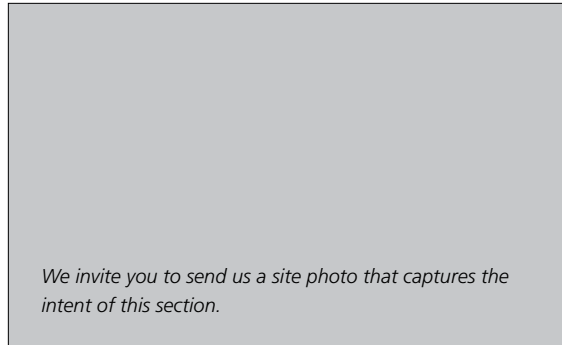
**SITES IN LANDSCAPES**

Landscapes can be described as exterior spaces that have been assigned cultural (including spiritual) meaning, or have been deliberately altered in the past for aesthetic, cultural or functional reasons. Archaeological sites in landscapes can be components of such places as Aboriginal landscapes, city parks, or rural and agricultural areas. These may include hunting and fishing sites, bison jumps, driving lanes, medicine wheels, cairns, and Aboriginal sacred sites.

A conservation approach that endeavours to preserve the heritage value of a cultural landscape with archaeological sites will consider the relationship between dispersed archaeological sites, and between the sites and their natural environment. It requires taking into consideration factors such as the visual impacts of interventions in order to preserve a landscape that often is a character-defining element of the historic place. In addition, they are often living sites where local communities still carry out their activities, e.g. at fishing weirs. Archaeological

sites in landscapes can be identified by traditional archaeological techniques and/or the oral tradition of local communities.

Archaeological sites in landscapes can be vulnerable to natural erosion, animal grazing and burrowing, and land alteration, as well as to such human factors as ploughing, infrastructure development and recreational activities.



ADDITIONAL GUIDELINES FOR PRESERVATION	
RECOMMENDED	NOT RECOMMENDED
<p><b>1 Documenting</b> oral tradition associated with the archaeological site in order to preserve its heritage value.</p>	<p><i>Documenting the physical elements of an archaeological site without documenting the oral tradition associated with the site.</i></p>
<p><b>2 Preserving</b> archaeological sites <i>in situ</i>. When there are numerous sites that form a network such as military sites that form part of a defensive line, and preserving all of them is impossible, preserving representative samples <i>in situ</i> and the relationships between all the sites in order to preserve the heritage value.</p>	<p><i>Preserving a sample of in situ resources without considering the relationship between the selected sites, thus impacting the heritage value.</i></p>
<p><b>3 Protecting and maintaining</b> the environmental conditions that protect the archaeological sites.</p>	<p><i>Altering environmental conditions that could result in potential damage to the archaeological sites.</i></p>
<p><b>4 Protecting</b> the character-defining elements from the impacts of agricultural activities by applying sensitive agricultural practices such as lifting the ploughshare to the appropriate level, avoiding identified areas, managing grazing by livestock and assessing appropriate stock levels. Crop selection based on the depth and density of roots as well as the need to plough can also be an effective strategy.</p>	<p><i>Selecting agricultural practices without considering the archaeological site and the practices' potential effects on the site's character-defining elements.</i></p>

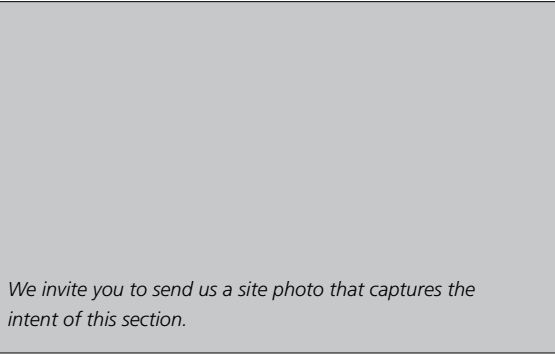
*Sites in Landscapes (continued)*

ADDITIONAL GUIDELINES FOR PRESERVATION		
	RECOMMENDED	NOT RECOMMENDED
5	<b>Stabilizing</b> archaeological sites with appropriate use and maintenance of preferably native vegetation. If non-native species are to be used, the planting material selected needs to be understood and the impact of its use should be evaluated.	<i>Failing to maintain vegetation or using inappropriate vegetation, resulting in a deterioration of the archaeological sites and loss of information.</i>
6	<b>Protecting</b> and <b>maintaining</b> past links between archaeological sites such as roads, paths and viewsapes.	<i>Damaging or altering former elements connecting archaeological sites.</i>
7	<b>Protecting, maintaining</b> and <b>documenting</b> the patterns of sites located in a landscape as their multiplicity sometimes qualifies them as character-defining elements.	<i>Documenting sites individually without documenting the pattern on the landscape, which could compromise the heritage value and character-defining elements.</i>
8	<b>Protecting</b> and <b>maintaining</b> natural features and environments that are character-defining elements and give meaning to the archaeological sites such as cliffs, hills, shores, viewsapes and landscapes.	<i>Damaging natural features and environments that are character-defining elements, e.g. by landscape remodelling, reshaping, or installing structures that will impact negatively on the viewsapes and landscapes.</i>
9	<b>Protecting</b> and <b>maintaining</b> archaeological sites by developing a vegetation management strategy. It could include opening up the landscape by thinning or removing trees from the archaeological site without compromising the heritage value. If clear felling is necessary, it is recommended that a number of trees be preserved in order to protect the site as well as the landscape. The necessary steps should be taken to leave as much space and visibility as possible around the archaeological site.	<i>Altering the landscape or vegetation without previously developing a vegetation management strategy based on the archaeological site's heritage value.</i>
10	Planning forestry activities to avoid creating access routes and storage areas on or in close proximity to archaeological sites.	<i>Storing timber and not removing logging waste on the site when it compromises the heritage value and impacts the character-defining elements.</i>
11	Staggering forestry activities to avoid sudden changes in the landscape that might impact on the heritage value and the character-defining elements.	<i>Planning forestry activities without considering the potential sudden changes in landscapes they could trigger and their potential impact on the site's heritage value and character-defining elements.</i>
12	<b>Maintaining</b> the site and controlling undesired vegetation, using methods that have the least impact, and only if they do not damage the character-defining elements, including the environment.	<i>Maintaining the site using methods that can disturb the archaeological site, such as uprooting plants and trees, using all-purpose weed-killer or burning.</i>

**SITES IN PROTECTED NATURAL AREAS**

Areas that protect natural heritage such as national or provincial parks, conservation areas or wetlands can include archaeological sites of significance that contribute to the heritage value of the area. In other instances, large areas of historical significance such as rural districts can include protected natural areas that contribute to the historic place's heritage value. It is at times challenging to reach the goals of conserving both the cultural and the natural heritage without compromising one or the other. Understanding the area's values and the involvement of relevant expertise are key in determining measures that will help reach these goals. Ecological restoration programmes can be an opportunity to maintain or enhance the preservation of archaeological sites. They can also be destructive if the appropriate research on the environmental conditions necessary for the preservation of the archaeological sites is not done.

When engaging in the ecological preservation or restoration of a protected natural area, it is important to understand the evolution and human settlement of the area in order to preserve the archaeological sites of significance that may be encountered and the environmental conditions that allowed their preservation.



ADDITIONAL GUIDELINES FOR PRESERVATION	
RECOMMENDED	NOT RECOMMENDED
<p><b>1</b> <b>Documenting</b> the human settlement of a protected natural area. This includes understanding the effects of human settlement and symbiosis with the environment. Archaeological investigations, archival research and oral tradition can contribute to this understanding.</p>	<p><i>Failing to understand the human settlement and its impact on the environment of a protected natural area.</i></p>
<p><b>2</b> <b>Preserving</b> the heritage value and character-defining elements of archaeological sites <i>in situ</i> without compromising the ecological integrity of the protected natural area. In many instances, ecological preservation or restoration strategies can preserve archaeological sites effectively.</p>	<p><i>Destroying archaeological sites to preserve the ecological integrity of the protected natural area.</i></p>
<p><b>3</b> <b>Protecting</b> and <b>preserving</b> the heritage value and character-defining elements of archaeological sites when developing and implementing an ecological restoration programme.</p>	<p><i>Developing and implementing an ecological restoration programme without protecting and preserving the heritage value and character-defining elements of archaeological sites.</i></p>
<p><b>4</b> <b>Protecting</b> and <b>maintaining</b> the environmental conditions that preserve the archaeological sites.</p>	<p><i>Altering the environmental conditions without consideration for their role in the preservation of archaeological sites.</i></p>

*Sites in Protected Natural Areas (continued)*

ADDITIONAL GUIDELINES FOR PRESERVATION		
	RECOMMENDED	NOT RECOMMENDED
5	<b>Stabilizing</b> archaeological sites with appropriate use of vegetation that preserves both the heritage value and character-defining elements of the archaeological sites and the ecological integrity of the area. The planting material selected needs to be understood and its impacts evaluated.	<i>Planting vegetation that would negatively impact the preservation of archaeological sites.</i>
6	<b>Protecting</b> and <b>maintaining</b> natural features and environments that are character-defining elements and give meaning to the archaeological sites such as cliffs, hills, shores, viewscapes and landscapes.	<i>Altering landscape features for the purpose of ecological integrity without consideration for impacts on the heritage value of archaeological sites.</i>
7	<b>Protecting</b> and <b>maintaining</b> archaeological sites by developing and implementing a vegetation management strategy. It should preserve both the heritage value and character-defining elements of the archaeological sites and preserve the ecological integrity of the area.	<i>Developing and implementing a vegetation management strategy that will impact negatively the heritage value and/or character-defining elements of archaeological sites, or the ecological integrity of the protected natural areas.</i>

**SITES UNDERWATER**

Underwater archaeological sites include such sites as wrecks, debris fields, intertidal structures such as fish weirs or canoe runs, and sites inundated by reservoirs or rises in sea level.

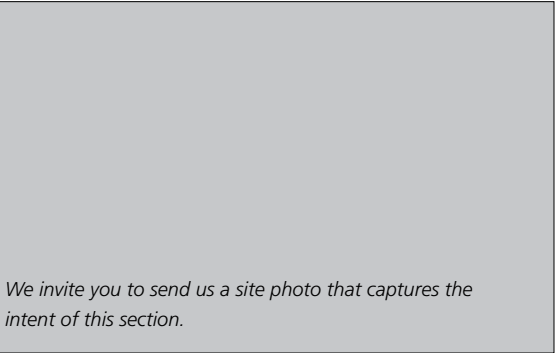
In general, after several years or decades of rapid initial deterioration, sites underwater reach a state that is stable and that will last for many centuries depending on the environment. Sites under water, although stable, are very fragile. This equilibrium can be damaged by both human and natural events without anyone knowing. This equilibrium can be damaged by both human and natural events without it being apparent. Any change in their wet environment, level of contaminants or acidity will affect the resources.

Prior to identifying an intervention, it is important to assess whether there is any potential and direct impact resulting from such activities as waterbed or coastal development, anchoring or looting. A non-intrusive

approach, which excludes excavation, is recommended in order to understand the site and its environment.

These sites are particularly rich in organic material, which represents the main preservation challenge.

The following additional guidelines emphasize the importance of protecting the resource from unwanted activities.



**ADDITIONAL GUIDELINES FOR PRESERVATION**

	<b>RECOMMENDED</b>	<b>NOT RECOMMENDED</b>
<b>1</b>	<b>Preserving and documenting</b> archaeological sites <i>in situ</i> using non-intrusive methods. In exceptional circumstances, including when both natural elements and human activities constitute threats, removal of objects, features and structures, following extensive documentation and planning, could be appropriate to preserve them. Existing environments such as levels of humidity should be understood and maintained.	<i>Removing objects, features and structures in order to preserve them and compromising the site's heritage value. This includes removing objects without planning and proper documentation about their location of origin.</i>
<b>2</b>	Understanding the site and its environment prior to any intervention. This includes such data as water temperature, variations in depths, currents, salt content and microorganisms. It is also important to collect as much data about the site as possible in order to guide potential emergency excavations. For sites in wetlands, this includes collecting data on soil layers and quality.	<i>Conducting an intervention without understanding the site and its environment.</i>

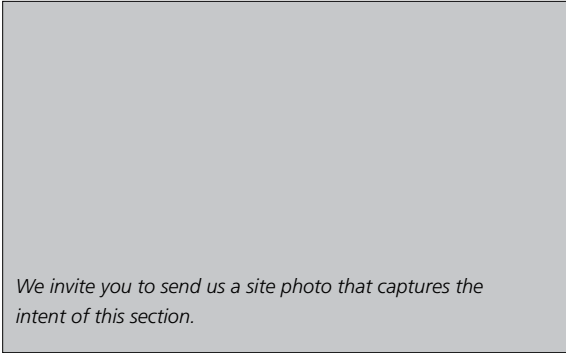
*Sites Underwater (continued)*

ADDITIONAL GUIDELINES FOR PRESERVATION		
	RECOMMENDED	NOT RECOMMENDED
<b>3</b>	<b>Protecting</b> underwater sites from human impacts by establishing a protected zone. Protected zones can allow for a monitored access, and protective systems can be installed so that the sites are not damaged by human activities. These should not impact the site's heritage value or character-defining elements.	<i>Allowing human activities in the vicinity of underwater sites and establishing protected zones that could impact the site's heritage value or character-defining elements.</i>
<b>4</b>	<b>Protecting</b> archaeological sites from erosion through such measures as selecting excavation methods that do not create a depression or subsidence that might adversely impact the site, protecting exposed character-defining elements from current-borne abrasives, or using natural or artificial sea grass that can act as sediment traps.	<i>Selecting protection methods without considering their impact on the character-defining elements.</i>
<b>5</b>	<b>Maintaining</b> and <b>stabilizing</b> the environmental conditions in order to preserve character-defining elements.	<i>Modifying the environmental conditions that contribute to the preservation of the site's character-defining elements.</i>
<b>6</b>	<b>Stabilizing</b> the character-defining elements of sites under water through such methods as re-deposition of sediments or sandbagging. Before sandbagging, consideration will be given to matters such as direction and flow of current.	<i>Stabilizing underwater sites using methods that can damage character-defining elements.</i>

ADDITIONAL GUIDELINES FOR EXHIBITION		
	RECOMMENDED	NOT RECOMMENDED
<b>1</b>	<b>Monitoring</b> visitor and navigation impact on archaeological sites. Public access should be fostered while taking the necessary actions so that the heritage value is not threatened.	<i>Allowing public access, including navigation, without monitoring its impact on archaeological sites.</i>
<b>2</b>	Installing structures and systems that would allow visitors to access the site without impacting the resources. This could include systems such as permanent mooring systems that would protect the sites from inadvertent damage by anchors as well as the installation of trail systems.	<i>Implementing the installation of structures and systems for the purpose of visitor access that could have a negative impact on the archaeological resources.</i>

**SITES ABOVE GROUND: ROCK ART AND CULTURALLY MODIFIED TREES**

Above ground archaeological sites include such sites as effigies, rock art and culturally modified trees (CMTs). These sites are more sensitive to environmental and human impacts than most archaeological sites because they are more exposed. They usually have a strong association with the natural surroundings, a character-defining element that contributes to their heritage value, and may have an association with a local community.



**ADDITIONAL GUIDELINES FOR PRESERVATION**

	<b>RECOMMENDED</b>	<b>NOT RECOMMENDED</b>
<b>1</b>	<b>Documenting</b> rock art and culturally modified trees using non-intrusive methods such as photography and drawing.	<i>Enhancing faint engravings and paintings through such procedures as wetting paintings and chalking engravings in order to better record the rock art. These procedures can destroy evidence and make analysis and dating difficult.</i>
<b>2</b>	<b>Preserving</b> rock art <i>in situ</i> .	<i>Removing components or entire panels of rock art. This should only be performed in extreme emergency situations and under the supervision of professionals, including a highly experienced stone specialist, and only if it does not impact the heritage value.</i>
<b>3</b>	<b>Stabilizing</b> rock art <i>in situ</i> .	<i>Highlighting faded rock art or adding new images for aesthetic purposes and compromising the heritage value.</i>
<b>4</b>	Removing as much graffiti from rock art as is needed to protect and preserve the site's heritage value and after having confirmed that the graffiti doesn't contribute to its heritage value. Recording graffiti and character-defining motifs prior to removal of graffiti, and documenting removal techniques and places of removal. Avoiding over-cleaning and infilling the damaged spaces within the character-defining motifs. If the character-defining motifs of rock art are badly damaged and infill is necessary, it should be done by a qualified professional who will take the necessary steps to include a modern signature in the infill.	<i>Removing graffiti to an extent that impacts the heritage value.</i>

*Sites Above Ground (Continued)*

ADDITIONAL GUIDELINES FOR PRESERVATION		
	RECOMMENDED	NOT RECOMMENDED
5	<b>Protecting</b> rock art, as needed and without compromising the heritage value, from animals, wind, sunlight, water, natural growths such as algae and fungi, and dust. In all cases, it is necessary to perform a proper assessment and to understand the materials and forces.	<i>Proceeding with preservation methods against animals, wind, sunlight, water, natural growths such as algae and fungi, and dust without assessing their impact on the place's heritage value.</i>
6	<b>Monitoring</b> stability of the rock surface, salt and moisture distribution, and levels of air pollution so that appropriate measures are taken to protect rock art and preserve the heritage value.	<i>Proceeding with protection and preservation methods without the information obtained from appropriate monitoring of stability of the rock surface, salt and moisture distribution, and levels of air pollution.</i>
7	<b>Protecting</b> and <b>maintaining</b> the surroundings of archaeological rock art sites by regular maintenance and cleaning by specialized personnel, as required.	<i>Failing to maintain and clean the surroundings of rock art.</i>
8	Repainting or regrooving rock art when it contributes to the heritage value and only when it is consistent with a demonstrated uninterrupted Aboriginal practice. It should strive to balance the need to preserve the character-defining elements and the need to preserve all components of the heritage value. It is an exceptional intervention that should involve all interested parties and should implement appropriate recording and analysis of the character-defining elements prior to the intervention.	<i>Repainting or regrooving rock art when it has an impact on the heritage value.</i>
9	<b>Protecting</b> and <b>maintaining</b> culturally modified trees by monitoring environmental impacts such as insects, fungi, and water.	<i>Failing to protect and maintain the surroundings of culturally modified trees archaeological sites resulting in loss of information and inappropriate environmental conditions.</i>
10	<b>Protecting</b> culturally modified trees by identifying them using non-intrusive and non-permanent methods.	<i>Identifying culturally modified trees using intrusive methods leaving visible, permanent traces.</i>
11	<b>Protecting</b> and <b>preserving</b> culturally modified trees in place.	<i>Removing dead culturally modified trees or relocating culturally modified trees.</i>

## Sites Above Ground (continued)

ADDITIONAL GUIDELINES FOR EXHIBITION		
	RECOMMENDED	NOT RECOMMENDED
1	Removing recently deposited dust for preservation and exhibition purposes and preserve heritage value.	<i>Removing surface accretions to make rock art more visible or attractive. They may contain valuable information that is related to the heritage value.</i>
2	Limiting access to rock art sites and culturally modified trees through such means as guided tours, visitor quotas, and educational introductions in order to control deterioration from visitor contact.	<i>Allowing unrestricted access.</i>
3	<b>Protecting</b> the archaeological site and the character-defining elements by installing obstacles to control direct contact. They should avoid impacting the heritage value and should not be supported by the character-defining elements. These obstacles should be discreet, removable, and allow the character-defining elements to be seen.	<i>Protecting the archaeological site with an installation that is supported by the character-defining elements, that is physically and aesthetically incompatible with the site and its surroundings, and that cannot be removed without damaging, in part or in whole, the archaeological site. Some types of cages, especially those with an incompatible shape and/or material, can have a significant impact as they can damage the archaeological site, leave residues on the ground and the rock art, and cannot be removed without damaging the site.</i>
4	<b>Providing</b> effective and simple installations for remote sites to indicate that they are important. These may include such installations as a visitor registry that can include a text explaining the heritage value of the site and provide a place for visitors to record comments and impressions.	<i>Failing to provide installations when a site is located in a remote area.</i>
5	<b>Protecting</b> archaeological sites and rock art by installing removable structures, pathways and boardwalks, to allow access and viewing, while limiting trampling of the site, stirring of dust particles, and scratching of the rock surface. These should be constructed to rest on the site without being supported by it or attached to the rock surface, should be compatible with the surroundings, and should contain informative material. They should also be designed to protect and preserve character-defining vegetation and rock features.	<i>Installing permanent or removable structures, pathways and boardwalks that, upon installation or removal, could impact the heritage value and character-defining elements.</i>
6	Presenting a representative sample of culturally modified trees.	<i>Selecting a sample of culturally modified trees based on reasons that do not respect the heritage value.</i>
7	<b>Preserving</b> culturally modified trees <i>in situ</i> .	<i>Altering culturally modified trees such as regrooving graffiti.</i>

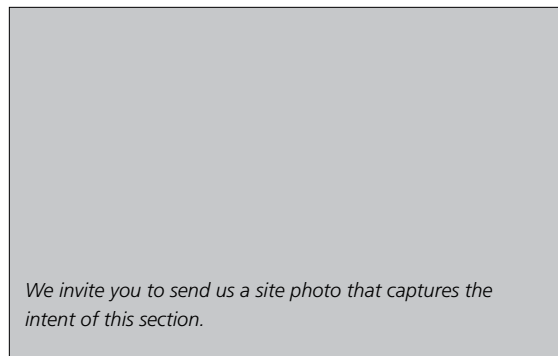
**SACRED PLACES: SPIRITUAL PLACES, BURIAL GROUNDS AND CEMETERIES**

Sacred places include burial grounds, above-ground burials, abandoned cemeteries, traditional gathering places and other sites of sacred value to a community. Sacred places deserve a separate section of the guidelines as their *heritage value* most often resides in their cultural, social and spiritual significance.

Sacred places have been included in the Standards and Guidelines for the Conservation of Archaeological Sites because the document will be used as a decision-making tool by individuals whose actions may have a direct impact on these resources. Given that the heritage value of sacred places is not proportional to the extent or state of their physical remains, great sensitivity is required so that conservation strategies preserve the associated values of these places, even when there is only little tangible evidence on or in the ground. Conservation activities should protect the scientific value but it may be subordinate to the above-mentioned significance. This is applicable to the conservation of human remains, the conservation of abandoned cemeteries, burial grounds, and Aboriginal sacred places

such as medicine wheels and effigies. These types of archaeological sites can be found in other contexts such as in an urban or landscape environment. Any action on human remains should only be performed according to provincial and territorial legislation and with the support of the affiliated community.

Sacred sites include sites that relate to myths, rituals, or any site of religious significance.



**ADDITIONAL GUIDELINES FOR PRESERVATION**

	<b>RECOMMENDED</b>	<b>NOT RECOMMENDED</b>
<b>1</b>	<b>Protecting and preserving</b> the landscape and natural features that directly contribute to the heritage value.	<i>Failing to protect and preserve the landscape and natural features that directly contribute to the heritage value.</i>
<b>2</b>	<b>Recording</b> , in consultation with the affiliated community, the elements that contribute to the heritage value without disturbing them.	<i>Recording the elements that contribute to the heritage value using methods that would disrespect the sacred nature of these sites.</i>
<b>3</b>	<b>Stabilizing</b> the character-defining elements using methods that will not affect the heritage value of the site by impacting its aesthetic, historic, cultural, scientific and/or spiritual importance.	<i>Straightening, repairing, moving or reconstructing character-defining elements.</i>
<b>4</b>	Working with interested parties, in particular the affiliated community, to define acceptable activities for sacred places.	<i>Allowing activities in sacred places without notifying interested parties, resulting in negative impacts on the heritage value.</i>

*Sacred Places (continued)*

ADDITIONAL GUIDELINES FOR PRESERVATION		
	RECOMMENDED	NOT RECOMMENDED
5	<b>Preserving</b> the relationship between interested parties and archaeological sites when it contributes to the heritage value. This may include allowing restricted access and use for rituals, ceremonies and traditional gatherings to members of the communities involved. The need to preserve the relationship should be balanced with the need to preserve the character-defining elements.	<i>Failing to preserve the relationships between interested parties and archaeological sites, resulting in an impact on the heritage value.</i>
6	<b>Protecting</b> the context of burials to preserve the information.	<i>Disturbing the context of burials, resulting in a loss of information.</i>
7	Removing human remains, only if appropriate and necessary, including surrounding soil. Prior to removing them, their position should be recorded.	<i>Removing human remains without the support of the affiliated community and outside of its context.</i>

## GLOSSARY

**Archaeological object:** An artefact, a sample or any material that is of archaeological interest.

**Archaeological site:** For the purpose of this document, an archaeological site means a place or area where the evidence of past human activity is or was located *in situ* on, below, or above the ground, or lands under water, of which the recovery and understanding of this evidence can be achieved using archaeological methods.

**Character-defining elements:** The materials, forms, location, spatial configurations, uses and cultural associations or meanings that contribute to the *heritage value* of a *historic place*, which must be retained in order to preserve its *heritage value*.

**Conservation:** All actions or processes that are aimed at safeguarding the *character-defining elements* of a cultural resource so as to retain its heritage value and extend its physical life. This may involve “*Preservation*”, “*Rehabilitation*”, “*Restoration*”, or a combination of these actions or processes. Reconstruction or reconstitution of a disappeared cultural resource is not considered conservation and is therefore not addressed in this document. “*Preservation*”, “*Exhibition*”, and “*Integration*” are the typical treatments applicable to archaeological sites.

**Exhibition:** The action or process of revealing or representing an archaeological site by making its *character-defining elements* visible and accessible while protecting its heritage value.

**Heritage value:** The aesthetic, historic, scientific, cultural, social or spiritual importance or significance for past, present or future generations. The *heritage value* of a *historic place* is embodied in its character-defining materials, forms, location, spatial configurations, uses and cultural associations or meanings.

**Integration:** The action or process of making possible a compatible use of a space containing an archaeological site, by incorporating the *character-defining elements* in a contemporary building, structure or landscape or in a historic place, while protecting its heritage value.

**In situ:** This term means ‘in place’ and as used in this document, it refers to the action of protecting, maintaining and/or stabilizing the existing materials of an archaeological site in the location where they were found. It is the main recommended action associated with minimal intervention.

**Intervention:** Any action, other than demolition or destruction, that results in a physical change to an element of a historic place.

**Maintenance:** The routine, cyclical, non-destructive actions necessary to slow the deterioration of a *historic place*. It entails periodic inspection as well as routine, cyclical, non-destructive cleaning, minor repair and refinishing operations, and replacement of damaged or deteriorated materials that are impractical to save.

**Preservation:** The action or process of protecting, maintaining and/or stabilizing the existing materials, form and integrity of a *historic place*, or of an individual component, while protecting its heritage value.

**Stressors:** Elements or events that could potentially disturb or put pressure on the archaeological *site’s character-defining elements* and/or *heritage value*.

## SELECTED BIBLIOGRAPHY

The following bibliography is a selection of key sources that speak to the concepts applied in the Standards and Guidelines for the Conservation of Archaeological Sites. They also provide guidance for further reading.

### INTERNATIONAL CONVENTIONS AND CHARTERS

The following are the foundation documents for these standards and guidelines.

**Australia ICOMOS, 1999** *The Burra: The Australia ICOMOS Charter for the Conservation of Places of Cultural Significance*

**ICOMOS, 1965.** *The Venice Charter: International Charter for the Conservation and Restoration of Monuments and Sites.*

**ICAHM, 1990.** *ICOMOS Charter for the Protection and Management of the Archaeological Heritage.*

**ICUCH, 1996.** *ICOMOS Charter on the Protection and Management of Underwater Cultural Heritage.*

**TICCIH, 2003.** *The Moscow Charter for the Industrial Heritage.* The International Committee for the Conservation of the Industrial Heritage (TICCIH).

**UNESCO, 1956.** *Recommendation on International Principles Applicable to Archaeological Excavations.*

**UNESCO, 1972.** *Convention Concerning the Protection of the World Cultural and Natural Heritage.*

**UNESCO, 2001.** *Convention on the Protection of the Underwater Cultural Heritage.*

### CANADIAN LEGISLATION, POLICIES AND GUIDES

Many Canadian organizations and government agencies have produced guides to assist archaeologists and developers in protecting heritage. The following is a sample of the key guides that inspired sections of this document. These should be used in the appropriate jurisdiction, as applicable, to ensure compliance.

**Alberta, Government of, 2003.** *Best Practices Handbook for Traditional Use Studies.* Minister of Aboriginal Affairs and Northern Development.

**Bergeron, A., Rémillard F., et al., 1991.** *L'archéologue et la conservation : vade mecum québécois.* Québec, Publications du Québec.

**British Columbia, Government of, 2000.** *Heritage Resource Policy.* Ministry of Sustainable Resource Management.

**British Columbia, Government of, 1989.** *Archaeological Impact Assessment Guidelines.* Ministry of Sustainable Resource Management, Archaeology Branch.

**British Columbia, Government of, 2001.** *Culturally Modified Trees of British Columbia.* Archaeology Branch, Tourism and Culture, Resources Inventory Committee.

**Canadian Archaeological Association, 2000.** *Principles of Ethical Conduct.*

**Canadian Archaeological Association, N/A.** *Statement of Principles for Ethical Conduct Pertaining to Aboriginal Peoples.*

**New Brunswick, Government of, 2004.** *Guide to Heritage Resource Impact Assessment in New Brunswick.* New Brunswick Manuscripts in Archaeology 35, Culture and Sport Secretariat (ASNB).

**Northwest Territories, Government of, 2005.** *Conservation Manual for Northern Archaeologists* (Prince of Wales Northern Heritage Centre and Canadian Conservation Institute).

**Ontario, Government of, 2004.** *Drafts, Standards and Guidelines for Consultant Archaeologists.* A. C. S. Project, Ministry of Culture.

**Parks Canada, 2005.** *Guidelines for the Management of Archaeological Resources.* Parks Canada.

**Parks Canada, 2000.** *Unearthing the Law: Archaeological Legislation on Lands in Canada.* Parks Canada.

**Saskatchewan, Government of, 1992.** *Guide to the Saskatchewan Archaeological Resource Record.*

**Yukon, Government of, 2003.** *Guidelines for the Management and Protection of Historic Resources for Geoscience Exploration.*

## **TECHNICAL EXPERTISE ABROAD**

These Standards and Guidelines for the Conservation of Archaeological Sites relied on the previous experiences and expertise developed in other countries. This information was relied upon when it was relevant to the Canadian context.

### ***Australia***

Australia provides up to date guidance on the conservation of archaeological sites, on understanding values and translating them into conservation action, and on working with Aboriginal communities. Each Australian state has its own legislation and most have their own set of guidelines. However, the following guides by the Australian Heritage Commission (now the Australian Heritage Council) are particularly instructive:

**Australian Heritage Commission, 1993.** *People's Places: Identifying and Assessing Social Value for Communities.* 1993 Technical Workshop Series No.6. S. Blair. Melbourne, Australian Heritage Commission.

**Australian Heritage Commission, 1993.** *Placing the Past: Identifying Aboriginal Historical Places in East Gippsland, Victoria.* 1993 Technical Workshop Series No.4. C. C. S. Feary. Crown, Australian Heritage Commission.

**Australian Heritage Commission, 2002.** *Ask First: A Guide to Respecting Indigenous Heritage Places and Values.* Melbourne, Australian Heritage Commission.

**Australian Council of National Trusts and the Australian Heritage Commission (Pearson, M. B. M.), 2000.** *Mining Heritage Places Assessment Manual.* Melbourne, Australian Heritage Commission.

### ***United Kingdom***

The United Kingdom has pioneered the development of management planning for archaeology. There are many good reference guides available from English Heritage, the Department of Communities and Local Governments, and Historic Scotland. They provide particular expertise on the care of historic environments and the management of projects.

**United Kingdom, Government of (Communities and Local Government), 1990.** *Planning Policy Guidance 16: Archaeology and Planning.*

**United Kingdom, Government of (English Heritage), 1991.** *Management of Archaeological Projects 2.*

**United Kingdom, Government of (English Heritage), 2003.** *Archaeological Science at PPG16 Interventions: Best Practice Guidance for Curators and Commissioning Archaeologists.*

**United Kingdom, Government of (Historic Scotland), 1994.** *The Care of Historic Buildings and Ancient Monuments by Government Departments in Scotland.*

**United Kingdom, Government of (Historic Scotland), 1999.** *Conserving the Underwater Heritage: Historic Scotland Policy Paper.*

**United Kingdom, Government of (Historic Scotland), 2002.** *Passed to the Future: Historic Scotland's Policy for the Sustainable Management of the Historic Environment.*

### ***Ireland***

Ireland is a good source of information on protecting cemeteries and has worked extensively on developing sustainable approaches to farming and the protection of cultural heritage.

**Ireland, Government of (Department of the Environment, Heritage and Local Government), 2003.** *Good Farming Practice and Archaeology*. Dublin, Ireland.

**Ireland, Government of (Dúchas), 1997.** *The Care and Conservation of Graveyards*. Dublin, Stationery Office.

### **Conservation Institutes and Centres**

The following documents are but a small sample of the expertise available from three leading conservation centres: ICCROM (Rome), the Getty Conservation Institute, and the Canadian Conservation Institute.

**Agnew, N. a. M. D., 2004.** *Principles for the Conservation of Heritage Sites in China*. Los Angeles, the Getty Conservation Institute.

**Fielden, B., and J. Jokilehto, 1993.** *Management Guidelines for World Cultural Heritage Sites*, Rome: ICCROM.

**Teutonico, J. M., G. Palumbo, et al., 2000.** *Management planning for archaeological sites: an international workshop organized by the Getty Conservation Institute and Loyola Marymount University, 19-22 May 2000, Corinth, Greece*. Los Angeles, the Getty Conservation Institute.

**Northwest Territories, Government of, 2005.** *Conservation Manual for Northern Archaeologists* (Prince of Wales Northern Heritage Centre and Canadian Conservation Institute).

**Organization of World Heritage Cities, 1991.** *Management Guide of Historic Cities*, OVPM – OWHC.

### **Council of Europe and European Commission**

In their efforts to standardize land management practices and heritage conservation in Europe, and in the spirit of European Conventions, the Council of Europe and the European Commission developed tools to address the conservation of archaeological sites. Areas of particular interest are management practices and the preservation of archaeological heritage in urban environments.

**Asensio M., Colomer L., Diaz Pedregal P., Fohn M. (†), Hachimi T., Hupet P., Lefert S., Léon Lozano C., Léotard J-M., Luxen J-L., Le Bouëtte S., Nicolau Imarti A., Martinet F., Miles D., PÁLL L., Ruiz-Jimenez J., Sanz N., Sarkadi E., Teller J., Tinant M., Zidda G., Zwetkoff C., Warnotte A., and Wilson V., 2006.** *The APPEAR method: A practical guide for the management of enhancement projects on urban archaeological sites*. Retrieved 2006-08-17 [http://www.in-situ.be/guide\\_en.pdf](http://www.in-situ.be/guide_en.pdf)

**Council of Europe, 2000.** *Guidelines for the protection of the archaeological heritage*.

### **Finland**

Finland has some of the strictest legislation in the world aimed at protecting archaeological heritage. Given our similar environmental conditions and land use, guidance developed by the National Board of Antiquities has proven very relevant to Canada.

**Finland, Government of (National Board of Antiquities), 2004 (24.2.2005).** *Forestry*. Retrieved 2005/06/17, 2005, from <http://www.museovirasto.fi/en/metsanhoitoeng>.

**Finland, Government of (National Board of Antiquities), 1995.** *Archaeological Heritage Management in Finland*. Helsinki, Helsinki University Press.

### **Netherlands**

In 2004, the Netherlands developed a quality assessment tool for archaeological projects in order to set a standard for the country as a result of competition from European contractors. It is one of the more thorough and elaborate standards available.

**Netherlands, Government of (State Inspectorate for Archaeology), 2004.** *Dutch Archaeology Quality Standard* also available online at [http://www.erfgoedinspectie.nl/\\_media/publications/knauk.pdf](http://www.erfgoedinspectie.nl/_media/publications/knauk.pdf).

## ***New Zealand***

New Zealand had also produced very relevant literature, particularly for sites of Aboriginal importance and for site stabilization using native vegetation.

**New Zealand, Government of (Department of Conservation), 2002.** *Caring for archaeological sites: New Zealand guidelines*. Wellington, New Zealand.

**New Zealand Historic Places Trust, 2004.** *Heritage Management Guidelines for Resources Management Practitioners*. Wellington, New Zealand Historic Places Trust.

## **United States**

The federal government's key documents are The Secretary of the Interior's Standards for the Treatment of Historic Properties, and Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings which includes guidelines for documenting archaeological sites. But many states and federal departments developed guidance specific to their needs. The National Park Service has produced a number of technical briefs addressing key preservation issues that are a useful start.

**National Park Service (US), 1988.** Filter Fabric: A Technique for Short-Term Site Stabilization, Technical Brief 1.

**National Park Service (US), 1989.** Intentional Site Burial: A Technique to Protect Against Natural or Mechanical Loss, Technical Brief 5.

**National Park Service (US), 1990.** Revegetation: The Soft Approach to Site Stabilization, Technical Brief 8.

**National Park Service (US), 1991.** Site Stabilization Information Sources, Technical Brief 12.

**National Park Service (US), 1992.** Managing Archaeological Resources from the Museum Perspective, Technical Brief 13.

**National Park Service (US), (...)** *Secretary of the Interior's Standards for Archaeological Documentation*.

**National Park Service (US), 1995.** *The Secretary of the Interior's Standards for the Treatment of Historic Properties, and Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings*.

**National Park Service (US), 1997.** *Cultural Resource Management Guideline*, National Park Service. 5: 351.

**National Park Service (US), 2004.** Protecting Archaeological Sites on Eroding Shorelines: A Hay Bales Approach, Technical Brief 18.

## **CONSERVATION ACTIONS AND SETTINGS**

The following is a selection of references on different conservation actions pertaining to archaeological sites and the setting in which they are found.

### ***Understanding, Planning, Documenting and Recording***

**Carter, R. W. a. R. B., 2002.** "Defining Heritage Values and Significance for Improved Resource Management: an application to Australian tourism". *International Journal of Heritage Studies* 8(3): 175-199.

**Chapman, H. P., William G. Fletcher and Gavin Thomas, 2000.** "Quantifying the effects of erosion on the archaeology of intertidal environments: A new approach and its implications for their management". *Conservation and Management of Archaeological Sites* 4(4).

**Clark, K., 2001.** "Preserving What Matters: Value-Led Planning for Cultural Heritage Sites". *Conservation, the Getty Conservation Institute Newsletter* 16(3): 5-12.

**Cronyn, J. M. and W. S. Robinson, 1990.** *The elements of archaeological conservation*. London, New York, NY, Routledge.

- Demoule J.-P., Giligny F., Lehoërff A., Schnapp A., 2002.** *Guide des méthodes de l'archéologie*. Paris.
- Hardesty, D. L., Little, B.J., Fowler, D., 2000.** *Assessing Site Significance: A Guide for Archaeologists and Historians*. Walnut Creek, Calif., Alta Mira Press.
- Hey, G. M. L., 2001.** *Evaluation of Archaeological Decision-making Processes and Sampling Strategies*. Oxford, Alden Group Limited.
- Kerber, J. E., 1994.** *Cultural resource management: archaeological research, preservation planning, and public education in the Northeastern United States*. Westport, Conn., Bergin & Garvey.
- MacManamon, F. P. and Hatton, A., 2000.** *Cultural resource management in contemporary society: perspectives on managing and presenting the past*. New York, Routledge.
- Matero, F. G., 1999.** "Lessons from the Great House: Condition and treatment history as prologue to site conservation and management at Casa Grande Ruins National Monument". *Conservation and Management of Archaeological Sites* **3**(4).
- Mathers, C. (Ed.), Darvill, T. (Ed.), and Little, B.J. (Ed.), 2004.** *Heritage of Value, Archaeology of Renown: Reshaping Archaeological Assessment and Significance*. Cultural Heritage Studies series, University Press of Florida.
- Stanley-Price, N. P., 1996.** "New ethical statements on site preservation for North American archaeologists". *Conservation and Management of Archaeological Sites* **1**(3).

### ***Protecting, Preserving, and Exhibiting***

- Agnew, N., 2001.** "Methodology, conservation criteria and performance evaluation for archaeological site shelters". *Conservation and Management of Archaeological Sites* **5**(1/2).
- ICAHM, 1994.** *Archaeological remains, in situ preservation / Vestiges archéologiques, la conservation in situ*. 2nd ICAHM International Conference, Montreal.
- INAH, 1986.** *In Situ Archaeological Conservation*, Mexico, INAH, GCI.
- Jameson, J. H., 2003.** *The reconstructed past: reconstructions in the public interpretation of archaeology and history*. Walnut Creek, CA, AltaMira Press.
- Museum of London Archaeology Service, 2001.** *Preserving archaeological remains in situ? 2*, London, Museum of London Archaeology Service.
- Priess, P. J., 1985.** "Archaeology and Restoration, A Question of Responsibilities". *APT XVII* **3 & 4**: 57-60.
- Schmidt, H., 1999.** "The impossibility of resurrecting the past: reconstructions on archaeological excavation sites". *Conservation and Management of Archaeological Sites* **4**(2).
- South, S. A., 2002.** *Archaeological pathways to historic site development*. New York, Kluwer Academic/Plenum Publishers.
- Stanley-Price, N. P. a. J. J., 2001.** "The decision to shelter archaeological sites: Three case studies from Sicily". *Conservation and Management of Archaeological Sites* **5**(1/2).

### ***Integration***

- Governing Body of Suomenlinna, 2003.** *Modern re-uses for the historic architecture, today. Architecture, garden, landscape: new exchange fields in Europe*. General Assembly of the European network. Cultural Center - Historic Monuments, Suomenlinna, Helsinki, the Governing Body of Suomenlinna.
- SACL Inc. and Ville de Montréal, 2003.** *Le parc archéologique de Pointe-des-Seigneurs. Un paysage à lire, un paysage à vivre!* SACL. Montreal: 46-49.

## **Urban**

**ARKÉOS Inc. and Bournival, M-T., 2003.** *Protocole d'accès du public aux sites archéologiques de la Ville de Montréal.*

**L'Anglais, P.-G., M. Moussette, et al., 1994.** *La recherche archéologique en milieu urbain: d'une archéologie dans la ville vers une archéologie de la ville.* Québec, CELAT.

**Montréal, Ville de (Bureau du patrimoine et de la toponymie), 2002.** *Sur les traces de Montréal, ville fortifiée au XVIIIe siècle. Marquage in situ des vestiges archéologiques.*

**Montréal, Ville de (Bureau du patrimoine et de la toponymie), 2004.** *Évaluation du patrimoine urbain..* D. d. p. e. d. l. toponymie. Montréal

**Teller, J. a. A. W., 2003.** *The enhancement of archaeological remains in an urban context.* [Position Paper](#) Retrieved 2005/06/22, 2005.

**Urtane, M., 2000.** Visible Archaeological Remains in Towns and Parks. *International Journal of Heritage Studies* 6(1): 77-82.

## **Industrial**

**Desjardins, P., 2003.** *Évaluation du patrimoine industriel.* Montréal, Ville de Montréal: 70.

**Alfrey, J., and T. Putnam, 1992.** *The industrial heritage: managing resources and uses.* London, New York, Routledge.

## **Landscapes**

**Buggey, S., 1999.** *An approach to Aboriginal cultural landscapes.* Gatineau, Québec, Parks Canada.

**Andrews, T. D., et al., 2004.** "The Land is Like a Book: Cultural Landscape Management in the Northwest Territories, Canada". *Circumpolar Anthropology* 5: 301-375.

**Jones, K. L., 2000.** "Native grasslands and the stabilization of earthwork archaeological sites on the middle Missouri River, North Dakota". *Conservation and Management of Archaeological Sites* 4(3).

**Ontario, Government of, 1991.** *Timber Management Guidelines for the Protection of Cultural Heritage Resources.*

## **Protected Natural Areas**

**Musée du Federsee à Bad Buchau, 1999.** *Archéologie et Protection de la Nature dans le Marais du Federsee,* Musée du Federsee à Bad Buchau, Landesdenkmalamtes Baden-Württemberg.

**Sánchez, M. L., and M. Creasey, 1992.** *The cultural and natural resources of Los Caminos del Rio Heritage Corridor: an interdisciplinary evaluation.* Texas, Texas Historical Commission and the National Park Service.

**Mason, A. R., 2004.** *Cultural Resource Management and Forestry in British Columbia:* 1-24.

**Lambrick, Georges (ed.), 1985.** *Archaeology and Nature Conservation,* Oxford, Oxford University Department for External Studies.

**Lennon, J., Egloff, B., Davey, A., and Taylor, K., 1999.** *Conserving the Cultural Values of Natural Areas, A discussion paper,* report for Australia ICOMOS.

## **Underwater**

**Commerce, (US) Department of (National Oceanic and Atmospheric Administration), 2001.** *Guidelines for Research, Exploration and Salvage of RMS Titanic.*

**Gregory, D., 2000.** "In situ corrosion studies on the submarine Resurgam: A preliminary assessment of her state of preservation". *Conservation and Management of Archaeological Sites* 3(1/2).

**Grenier, Robert, David Nutley, and Ian Cochran (eds.), 2006.** *Underwater Cultural Heritage At Risk: Managing Natural and Human Impacts*. Paris: ICOMOS.

**Watson, K. a. a., 1992.** *Archaeology Underwater: The NAS Guide to Principles and Practice*. Dorset, Nautical Archaeology Society.

### ***Above Ground: Rock Art and CMTs***

**Eldridge, M., 1997.** *The Significance and Management of Culturally Modified Trees*. C. S. S. C. Vancouver Forest Region, Millennia Research Ltd: 33.

**Muir, R. J. H. M., 2000.** *Sampling Culturally Modified Tree Sites*. A. A. B. The Ministry of Forest: 43.

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**Whitley, D. S., 2001.** *Rock Art and Rock Art Research in Worldwide Perspective: An Introduction. Handbook of rock art research*. D. S. Whitley. Walnut Creek, Calif., AltaMira Press: 80-115.

### ***Sacred Sites***

**Larocque, R., 2003.** «Les modalités d'intervention archéologique dans les cimetières».. *Archéologiques* 17.

**Larocque, R., 2004.** «Commençons par le commencement, ou ce qu'il ne faut pas faire avec nos cimetières anciens».. *Archéologiques* 17: 20-25.

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