

# **UW-Madison Archaeological Sites: Land Management Guidelines November 2013**

## **Background**

The UW-Madison main campus and Arboretum are home to 49 known archaeological sites. Most of these sites recognize Native American occupation of this region, beginning approximately 12,000 years ago. Additionally, a few sites are dedicated to activities associated with European-American occupation during the past 150 years.

In all cases these sites represent a rare and irreplaceable window to the past. This is especially true for the archaeological sites that include Indian burial mounds. UW-Madison is believed to have the largest collection of Indian burial mounds to be found on a university campus—anywhere in the world. Effigy mounds, a unique type of Indian burial mound, are present on the main campus and the Arboretum.

We may know a great deal about the human activities that took place at an archaeological site, or as is often the case, we may know relatively little about what occurred there. But in ALL cases, these places represent the potential to generate important new information about our past. Archaeological sites cannot be replaced. When these archaeological sites are damaged or destroyed a piece of our cultural heritage is lost forever. Therefore, it is essential that land care practices protect these sites from harm.

## **Existing Statutes and Policies**

Archaeological sites on university owned lands may be included on one or more official inventories maintained by the Wisconsin Historical Society (WHS), or the National Park Service (NPS). Archaeological sites are placed on these inventories based on historical documentation and field research conducted by professional archaeologists.

A site that has been added to one of the official WHS or NPS inventories is granted specific protections. Disturbances to these sites are regulated by state statute and federal law. Violation of these state and federal laws may result in fines or imprisonment.

In addition to state and federal law, the university has approved a specific policy for Indian burial mounds (“UW-Madison Indian Burial Sites Management Policy,” approved May 2011, Campus Planning Committee.)

The director of Campus Planning and Landscape Architecture (CPLA), within the Facilities Planning and Management (FPM) division, is responsible for overseeing stewardship of campus archaeological and historic properties. The CPLA office is staffed with two landscape architects, and a historic and cultural resources manager. The staff is available to assist with all land care planning activities that might affect archaeological or historic properties.

**UW-Madison Archaeological Sites: Land Management Guidelines**  
**November 2013**

**Archaeological sites map**

CPLA maintains a detailed and up-to-date map of all archaeological sites located on campus and at the Arboretum. The map is available for use by university staff, in hard-copy form only. This detailed map is not posted on a website or distributed electronically in an effort to minimize the possibility that this information becomes available to individuals who are engaged in illegal disturbance to cultural sites. Contact Daniel Einstein, [deinstein@fpm.wisc.edu](mailto:deinstein@fpm.wisc.edu), 265-3417 for a map.

**Archaeological sites defined: burial and habitation**

Archaeological sites contain objects or evidence of past human cultural activities. Sites may date to over 12,000 years ago or be as “young” as 50 years old. Sites may be defined by the objects found there, such as pieces of pottery, stone tools, spear points, bottles or buttons. Other physical evidence suggesting human occupation might include, an old farmhouse foundation, an old carriage road or earthworks built as part of some ancient ceremonial ritual.

There are two broad categories for archaeological sites: 1) human burial sites (containing human remains) and, 2) human habitation sites (places where people lived or worked). Burial sites and habitation sites may occur separately or they may overlap.

University land managers must understand which type of archaeological site is being affected in order to apply the appropriate management practices. Consult the archaeological sites map or contact CPLA for guidance on site boundaries.

**Human burial sites:** This type of archaeological resource includes sites where human remains were interred. UW-Madison has stewardship responsibility for 34 ancient Native American burial mounds constructed by the earliest occupants of this area, as well as two known burials of early European-American settlers.

Native Americans in the lower Great Lakes region often buried their dead in earthen mounds. These “Indian burial mounds” come in a variety of shapes and sizes. Round mounds are often referred to as “conicals,” and long and narrow mounds are frequently referred to as “linears.” Burial mounds constructed in the shape of animals or water spirits, are referred to as “effigy mounds.”

It is critically important to note that while all mounds are defined as burial sites in Wisconsin, it is also possible that human remains were placed adjacent to or near a mound feature. There are also situations where a burial mound has been documented in the past, but the above-grade feature has since been obliterated. Furthermore, it is quite possible that a human burial has remained intact despite the loss of the above-grade earthwork.

*Do not assume that the above-grade mound features of a burial site represent the totality of the archaeological resource. Referencing an archaeological site map is the only way to determine the legal boundaries of a burial site.*

**UW-Madison Archaeological Sites: Land Management Guidelines**  
**November 2013**

**Catalogued and un-catalogued burial sites:** The Wisconsin Burial Sites Preservation Law includes a provision for an enhanced level of protection for burial sites referred to as, “cataloguing.” A catalogued site has been mapped by a professional surveyor in collaboration with a professional archaeologist who has delineated the visible or documented above-grade earthwork contour. An area extending beyond the mound contour defined by statute as, “sufficient contiguous land necessary to protect the burial site from disturbance” is included in the catalogued site. Many of the above-grade mound features on campus have been catalogued with an area of contiguous land extending a minimum of 25-feet from the edge of the known mound contour.

In addition to the “catalogued” burial sites some mound groups have not received precise mapping by a professional surveyor. These so-call “uncatalogued” burial sites are located on maps based on field notes made by early surveyors and archaeologists who recorded mound features. While the general location of these mounds is known, the above-grade evidence may no longer be visible. This may result in a large site boundary that is intended to describe the general location of the burial mounds.

All burial sites, regardless of their status as “catalogued” or “uncatalogued” have specific restrictions that protect them from soil disturbance. Under very limited circumstances burial sites may be disturbed for land care or construction activities. The Burial Sites Preservation Law (Wisconsin Statute 157.70) provides the regulatory guidance for dealing with situations where disturbance of a burial site may occur.

Receiving permission to disturb any part of a burial site involves a rigorous permit process including consultation with native nations and the approval of the director of the Wisconsin Historical Society. It may take several months before a permit is granted.

*In summary: It is always preferable to avoid soil disturbance at a burial site. If soil disturbance cannot be avoided, a permit is required before a project may proceed.*

**Habitation sites:** The second broad archaeological site category includes places where Native American or early European-American settlers lived and worked. These habitation sites may include evidence of where people created stone tools, built their villages or farmed their land.

Soil disturbance for construction or maintenance of facilities within an archaeological habitation site is possible; however project review by the WHS may be necessary. The WHS may require that an archaeological investigation be conducted prior to a construction/maintenance to determine the potential for adverse effects to the resource. Contact CPLA staff to determine the most appropriate course of action.

If archaeological field research or monitoring is required by the WHS, it will be necessary to apply for a “Public Lands Field Archaeological Permit.” Consult CPLA for the necessary requirements.

## **Part 1: Land Management Practices for Indian Burial Sites**

Land management of archaeological sites will vary based on two property types: 1) Indian burial sites, and 2) habitation sites.

**This section applies to Indian burial sites only.** Refer to “Part 2: Practices for *Habitation Sites*” for management practices for this second property type.

Indian burial sites often include a raised earthwork feature. The generic term is “mound,” and the specialized term for a mound constructed in the shaped of an animal or water spirit is an “effigy mound.” The adjacent land surrounding a mound is also part of the site.

The **ONLY** way to identify the legal boundaries of an Indian burial site (mound feature and adjacent land) is to refer to a map of the site.

*Do NOT assume that you can identify the legally defined site by simply traveling a set number of feet from a visible mound feature. Each site is defined uniquely. Failure to properly identify legal burial site boundaries may result in soil disturbances that could result in prosecution for violating state or federal law.*

### **Caring for Indian Burial Sites**

The UW-Madison Indian Burial Sites Management Policy provides three broad goals that address care of burial sites. The purpose of this guideline is to provide specific practices that will help to achieve these goals. The policy states:

- 1) Preserve structural integrity of mounds. The university will protect mounds from soil disturbance and erosion through the use of appropriate vegetation cover and structural barriers.
- 2) Manage vegetation to preserve visibility of mounds. The university will manage vegetation to permit visibility of mound contours.
- 3) Facilitate compatible land uses on and adjacent to mounds. Where appropriate and consistent with preserving the integrity and sacredness of burial sites, the university will facilitate research, teaching, ecological, and recreational uses on and adjacent to the mounds. Examples of appropriate uses include: data collection, academic coursework, wildlife habitat, and hiking.

### **Burial Mound Integrity**

The most significant threat to the structural integrity of a burial mound comes from soil disturbance caused by compaction or erosion. Soil compaction can occur from foot traffic or the use of heavy machinery used to cut vegetation. Erosion can occur when there is insufficient vegetative cover on the mound. Adequate vegetative cover that holds soil in place can be impeded by inadequate light conditions, or inappropriate plant species.

### **Mound visibility**

Vegetation on and adjacent to a burial site may interfere with seeing the contours of the mound feature. The presence of woody plants (shrubs and trees) on or adjacent to mounds not only may interfere with seeing the mounds, but the shadow produced by these plants may preclude establishment of the grasses and forbs that are critical to providing the vegetative cover needed to maintain the integrity of the mound.

### **Adjacent uses**

Land management activities near mounds should enhance opportunities to learn and appreciate the educational and ecological dimensions offered by this cultural resource. The placement of trails (or their relocation) and the installation of interpretive or directional signage should be planned in ways that promote greater understanding and respect for these places.

## **Land management practices:**

### **1. Plant Community Assessment**

An initial inventory of the existing plant community on the burial site should be the first step in developing a land care strategy. Forb and grass species should be identified and recorded (e.g., narrative description of location, percent cover map, etc.) —including any endangered, threatened or invasive plants. Individual trees (greater than five inches in diameter at breast height) should be identified and mapped. The health status of these trees (e.g., dead, damaged, diseased, insect-infested, or likely to uproot) should be recorded.

### **2. Woody Vegetation Control/Removal**

It is desirable that trees and shrubs on a burial mound are removed. Trees and shrubs immediately adjacent to a mound should also be evaluated for removal, especially if these trees and shrubs pose a threat to the mound feature. Trees and shrubs that cast significant shading on the mound site (thereby limiting a robust grass and forb ground layer) should also be considered for removal.

Tree and shrub removal should occur when soil disturbance and compaction can be avoided. Land care activities during periods when the ground is saturated (e.g., spring thaw or following significant precipitation), or any other time that renders the site prone to erosion, compaction or disturbance are to be avoided.

It may not be feasible or desirable to remove all targeted woody vegetation at one time, due to labor availability, site conditions or ecological considerations. In cases where removal of all targeted trees cannot be accomplished in a single effort, the removal work can be phased over several seasons or years. For instance:

**UW-Madison Archaeological Sites: Land Management Guidelines**  
**November 2013**

Phase 1: Remove all dead, damaged, diseased, or otherwise hazardous trees, from on the mound or immediately adjacent to the mound. Remove all shrubs from on top of the mounds.

Phase 2: Remove all healthy trees located on the mound, or immediately adjacent to the mound, that are 15-inches in diameter or smaller.

Phase 3: Remove all remaining healthy trees located on the mounds or immediately adjacent to the mound that interfere with groundlayer vegetation establishment.

Phase 4: Remove all undesirable woody vegetation (e.g., non-native or hazardous trees and shrubs) from the burial site, so as to provide enhanced mound visibility from adjacent trails. Consideration should also be given to removal of trees that restrict light levels on the burial site, and therefore suppress ground layer plant communities.

### **3. Stump Removal**

Trees or shrubs should be cut as close to the natural soil surface as feasible. Stump removal by pulling or grinding in a manner that disturbs soil is prohibited on mounds. Depending on the species, it may be desirable to treat a stump with an herbicide to prevent re-sprouting.

In the event a tree uproots and dislodges soil on a mound, land managers should consult CPLA staff for appropriate remediation instructions. In most case it will be possible to carefully knock the soil off of the root plate and remove the stump. Soil dislodged from the tree should be placed back in the hole. If human remains are observed, land managers should secure the site and immediately contact CPLA staff.

### **4. Herbaceous Vegetation**

Control and removal of herbaceous vegetation on mounds will vary by species and to some extent the size/age of a particular specimen. In general, manual pulling of plants is permissible as long as soil conditions allow plant removal with minimal soil disturbance. Areas of minor soil disturbance should be lightly tamped back in place. When specimen size and soil conditions will result in significant soil disturbance, cutting or mowing is the next most appropriate management technique.

### **5. Chemical Treatment**

The use of herbicides to manage vegetation is permitted on mounds, when pulling and cutting are not practical or desirable control strategies.

Use of herbicide may be necessary to control stump regrowth and persistent invasive species, but herbicide should only have a limited role in overall vegetation management. Spot application to individual plants/stems/stumps is the preferred application method. Broadcast applications should be avoided to limit alteration of soil chemistry, and to prevent the mound site from being denuded

**UW-Madison Archaeological Sites: Land Management Guidelines**  
**November 2013**

of vegetation. If a broadcast application is deemed necessary to reclaim a site from an invasive species and prepare the site for establishment of desired vegetation, proper erosion control considerations must be made in the interim, until adequate ground cover vegetation is re-established.

## **6. Vegetation Establishment**

*Herbaceous Vegetation.* Seeding mound sites with desired species is the preferred method for herbaceous vegetation establishment. Over-seeding should be repeated across multiple seasons and years, in combination with other management activities, until the desired ground cover percentage is achieved.

Seed mixes should be developed by land managers and tailored to each mound site. The mixes should be primarily composed of short stature (less than 18”) native plants. Under certain conditions, such as when quick establishment of a “nurse” ground cover is desirable to limit the possibility of erosion, taller annual species may be the appropriate plant choice. In such situations, visibility of mound contours can be maintained by cutting tall vegetation.

Under certain circumstances, due to the growth habits of a desirable plant species, installation of small seedlings or “plugs” may be a more appropriate strategy for establishing vegetation than planting seeds. Small plugs are grown in containers typically no larger than three inches in diameter.

Small seedling plugs should be planted by using methods that insert or press the plant into the soil--without extracting soil for a hole.

Excavation of soil to plant a seedling is generally prohibited within a burial site.

However, if a land manager feels that it is essential to excavate holes for container-grown plants (within a burial site--but NEVER on burial mounds), then a special “permit to disturb” must be requested from the WHS. This permit may involve a lengthy approval process that includes consultation with native nations. It will be faster and easier to re-vegetate a site with seed or small seedlings than to receive a “permit to disturb” for excavating planting holes. Consult with CPLA staff to determine the best approach to achieving the desired vegetation cover.

All planting plans that make use of seedlings must be reviewed by CPLA staff to determine if the installation methods will require special permits or monitoring.

*Woody Vegetation.* Installation of woody vegetation on or immediately adjacent to a mound feature is prohibited.

Planting of woody vegetation within burial sites (but not on or immediately adjacent to a mound feature) may be achieved with bare root stock that is installed with methods that “insert” a small seedling into a soil depression or groove (no soil is excavated). Gently tamp soil around base of seedling.

**UW-Madison Archaeological Sites: Land Management Guidelines**  
**November 2013**

If a land manager feels that it is critical to install container-grown woody plant material on burial sites (not including the mound feature), which requires the excavation of soil for a hole, then a special “permit to disturb” must be requested from the WHS. This permit may involve a lengthy approval process that includes consultation with Native Nations. It will be faster and easier to re-vegetate a site with seeds or small seedlings than to receive a “permit to disturb” for excavating planting holes.

All planting plans must be reviewed by CPLA staff to determine if the installation methods will require special permits or monitoring.

## **7. Erosion Control Materials**

If situations necessitate use of erosion control material, those materials must be biodegradable. Loosely scattering weed free straw mulch across the erodible area is the preferred method, especially on mounds. When using biodegradable erosion control fabric on mound features secure the material with wooden or other biodegradable stakes, as appropriate.

## **8. Maintenance of Turf/Herbaceous plants**

Mowing. Mound sites covered by turf or low-growing vegetation are generally maintained through periodic mowing or cutting. Mowing cycles will be dictated by seasonal growth and site conditions, and may be as infrequent as two times per growing season. Mowing should be timed to allow for desirable plants to flower and set seed, whenever possible.

Mowing must be conducted in a manner that avoids compaction and damage to mound features. It is recommended that only experienced operators perform mowing on and around mounds to avoid damage that could occur from mower decks and blades cutting into the mounds. The mower deck should be set to a minimum of four-inch height (higher is desirable), and mowing should only be conducted as needed to maintain visibility of mound contours. Manually cutting vegetation with weed-wackers, brush cutters, or other tools may be appropriate alternatives to mowing on mounds.

In the fall, removal of leaves and thatch is a desirable strategy for maintaining health of grasses and other herbaceous ground cover plants. Mowing, burning, blowing or raking are all good practices-alone or in combination.

Management activity within a burial site must be avoided during periods when the ground is saturated (e.g., spring thaw or following precipitation), or any other time that renders the site prone to erosion, compaction or disturbance from management activity.

Prescribed Fire. The use of prescribed fire is allowed on mound sites when conducted within the context of an approved burn plan. Vehicles used during burns should be staged outside of the burial site (or on road/trail surfaces) unless emergency situations require otherwise. Whenever practical, ignition should take place from the perimeter of mound sites.



**UW-Madison Archaeological Sites: Land Management Guidelines**  
**November 2013**

In some case, it may be necessary for ignition to take place within the boundary of a burial site to achieve burn objectives. The burn boss (the person responsible for planning and executing a prescribed burn) must be familiar with the location of the mound features, so drip torch ignition fuel is not applied on any mounds.

As appropriate, erosion control measures may be needed following a prescribed burn, if erodible soils have been exposed.

Grazing. Grazing livestock is prohibited within the boundary of a burial site.

## **9. Trails and roads**

In the past, trails, sidewalks and roads have been constructed immediately adjacent to mound features. When feasible trails, sidewalks and roads should be relocated at least five feet from a known mound contour. Prior to re-locating a trail, sidewalk or road, CPLA staff must be consulted to determine the possible effects to archeological resources that might occur as a result of a new alignment. WHS may also need to review relocation projects, depending on the construction methods and potential for soil disturbance.

Unpaved surfaces such as trails and some roads, may become muddy when wet and consequently encourage off-trail pedestrian traffic. The use of gravel or wood chips on trails and unpaved roads may curtail muddy conditions that could disturb a mound site. Proper grading of trail and road surfaces, as well as water diversion bars should be employed to keep water pooling or causing soils to erode. Consult CPLA staff to determine the most appropriate site improvement.

## **10. Protective barriers**

Under certain site conditions it may not be possible or desirable to re-align a trail, sidewalk or road that is located adjacent to a mound feature. In situations where pedestrian or vehicles might leave the trail, sidewalk or road surface and damage a mound feature, a protective barrier may be appropriate. The use of a round metal post and chain barrier has proven to be effective barrier. When painted black, this barrier system poses minimal visual impact to a mound site. Sign posts should be erected in soils known to be free of cultural materials. Consult CPLA staff before installing protective barriers.

Alternatively the placement of boulders or logs along the edges of trails, sidewalks and roads may offer added protection to mounds.

Do not use stones/gravel or chalk/lime to permanently mark the perimeter of a mound feature.

## **11. Interpretive signage**

The installation of interpretive signage near a mound site may provide a valuable educational experience for the campus community. Consult CPLA staff before installing sign posts. The text for interpretive signage should be reviewed by CPLA staff to assure factual accuracy and appropriateness. Sign posts should be erected in soils known to be free of cultural materials. Signs should generally be low-profile and located in a manner that does not detract from viewing the mound features.

## **12. Contemporary use of mound sites**

On occasion, mound sites are visited by individuals who leave offerings in nearby trees. Recently observed offerings include tobacco pouches wrapped in fabric and suspended from branches. These offerings should be left undisturbed.

Burial mounds are to be treated with respect befitting an ancient cultural site. Ceremonies or activities such as weddings and picnicking are not appropriate for a mound site.

## Part 2: Land Management Practices on Habitation Sites

Land management of archaeological sites will vary based on two property types: 1) Indian burial sites, and 2) habitation sites.

This section applies to habitation sites only. Refer to Part 1: “Practices on Indian Burial Sites” for management practices for this second property type.

### Land management practices:

#### 1. Plant Community Assessment

An initial inventory of the existing plant community on the habitation site should be the first step in developing a land care strategy. Forb and grass species should be identified and recorded (e.g., narrative descriptions of location, percent cover map, etc.)—including any endangered, threatened or invasive plants. The general health status of trees (e.g., dead, damaged, diseased, insect-infested, or likely to uproot) should be recorded.

#### 2. Woody Vegetation Control/Removal

The type and density of woody vegetation cover on archaeological habitation sites will vary according to ecological management plans. In all cases, consideration should be given to the soil surface conditions created by woody vegetation canopy cover. Heavy tree and shrub canopy cover may create bare soil conditions where erosion is more likely.

Tree and shrub removal should occur at times when soil erosion, disturbance and compaction can be avoided. Land care activities during periods when the ground is saturated (e.g., spring thaw or following significant precipitation), are to be avoided.

#### 3. Stump Removal

Trees or shrubs should be cut as close to the natural soil surface as feasible. Stump removal by pulling or grinding may occur if soil disturbance is limited to the top 6” of soil. Gently tamp loosened soil after stump removal. Depending on the species, it may be desirable to treat a stump with an herbicide to prevent re-sprouting.

#### 4. Herbaceous Vegetation

Control and removal of herbaceous vegetation within habitation sites will vary by species and to some extent the size/age of a particular specimen. In general, manual pulling of plants is allowable as long as soil conditions allow plant removal with minimal soil disturbance. Areas of minor soil disturbance should be lightly tamped back in place. When specimen size and soil conditions will result in significant soil disturbance, cutting or mowing is the next most appropriate management technique.

## **5. Chemical Treatment**

The use of herbicides to manage vegetation within habitation sites is generally acceptable, when pulling and cutting are not practical or desirable control strategies.

Use of herbicide may be necessary to control stump regrowth or certain persistent invasive species, but herbicide should only have a limited role in overall vegetation management. Spot application to individual plants/stems/stumps is the preferred application method. Broadcast applications should be avoided to limit alteration of soil chemistry, and to prevent the habitation site from being denuded of vegetation. If a broadcast application is deemed necessary to reclaim a site from an invasive species and prepare the site for establishment of desired vegetation, proper erosion control considerations must be made in the interim, until adequate ground cover vegetation is re-established.

Herbicide formulations that include phosphorous (e.g., the compound glyphosate) may leave a chemical signature in the soil that could compromise archaeological research activities. Glyphosate may occur in many herbicide formulations. Round-up (brand name) is one example of a glyphosate herbicide. Consult with CPLA staff to determine areas on campus that have been designated as high priority archaeological research areas. Refrain from using herbicides containing phosphorus in these research areas.

## **6. Vegetation Establishment**

Herbaceous Vegetation. Seeding habitation sites is the preferred method for herbaceous vegetation establishment. Over-seeding should be repeated across multiple seasons and years, in combination with other management activities, until the desired ground cover percentage is achieved.

Use of potted or bare root herbaceous plants may, under limited circumstances, be preferable to seeding. The number (density) of planting holes in a given area, and the depth of the planting holes may result in disturbance to a habitation site that may require review by the WHS. The WHS may determine that any soil excavation for the purpose of planting herbaceous vegetation be monitored by a qualified archaeologist. Present a planting plan to CPLA for review.

Woody Vegetation. Planting of woody vegetation within habitation sites may be achieved with bare root stock that is installed with methods that “insert” a small seedling into a soil depression or groove (no soil is excavated). Gently tamp the soil around the base of the seedling.

If a land manager feels that it is essential to excavate soil in order to install container-grown woody plants within a habitation sites, then a review by WHS may be necessary. The WHS may allow soil excavation if a qualified archaeologist monitors the excavation to determine if intact cultural materials are being disturbed.

All planting plans must be reviewed by CPLA staff to determine if the installation methods will require special permits or monitoring.

## **7. Erosion Control Materials**

If situations necessitate use of erosion control material, those materials must be biodegradable. Loosely scattering weed free straw mulch across the erodible area is the preferred method. When appropriate, secure erosion control fabric with wooden or other biodegradable stakes.

## **8. Maintenance of Turf/Herbaceous plants**

Mowing. Habitation sites covered by turf or low-growing vegetation are generally maintained through periodic mowing or cutting. Mowing cycles will be dictated by seasonal growth and site conditions, and may be as infrequent as two times per growing season. Mowing should be timed to allow for desirable plants to flower and set seed, whenever possible.

Mowing must be conducted in a manner that avoids compaction and damage to habitation sites. The mower deck should be set to a minimum of four-inch height (higher is desirable). Manually cutting vegetation with weed-wackers, brush cutters, or other tools may be appropriate alternatives to mowing.

In the fall, removal of leaves and thatch is a desirable strategy for maintaining health of grasses and other herbaceous ground cover plants. Mowing, burning, blowing or raking are all good practices- alone or in combination.

Management activity within a habitation site must be avoided during periods when the ground is saturated (e.g., spring thaw or following precipitation), or any other time that renders the site prone to erosion, compaction or disturbance from management activity.

Prescribed Fire. The use of prescribed fire is allowed within habitation sites when conducted within the context of an approved burn plan. Vehicles used during burns should be staged outside of the habitation site (or on road/trail surfaces) unless emergency situations require otherwise.

As appropriate, erosion control measures may be needed following a prescribed burn, if erodible soils have been exposed.

Grazing. Use of livestock for land management or educational research on habitation sites may be possible under certain conditions. Consult with CPLA staff for review and approval.

## **9. Removal of cultural materials**

Historic cultural materials (generally defined as objects more than 50 years old) may be observed lying on the surface within a listed habitation site. These objects may include items such as pottery, stone tools, bottles, bricks, and scrap metal. If this material does not pose an immediate safety concern, it should be left in place.

The location of historic cultural material should be noted and this information should be communicated to staff at CPLA. Historic cultural material may not be removed from an archaeological site on state property without a research permit issued by the WHS.

If surface materials are believed to be less than 50 years old, and/or the material poses a safety concern, then immediate removal and disposal may be appropriate.

Some archaeological sites include the remains of historic structures (generally defined as having been built more than 50 years ago). These structures may include old foundation walls, stairs, retaining walls, cisterns, or latrine pits. These structures may yield information important to our history and therefore, unless there is safety concern, should be retained without modification. If these structures must be removed, then the project will need to be reviewed by staff at CPLA.

### **Online Resources:**

UW-Madison Indian Burial Sites Management Policy. May 26, 2011.

<https://fpm-www3.fpm.wisc.edu/campusplanning/CampusPlanningHome/CulturalLandscapes/tabid/64/Default.aspx>

### **For more information:**

Daniel Einstein, Historic and Cultural Resources Manager  
UW-Madison, Facilities Planning & Management  
Campus Planning and Landscape Architecture

deinstein@fpm.wisc.edu  
(608) 265-3417

**UW-Madison Archaeological Sites: Land Management Guidelines**  
**November 2013**

Summary Table: UW-Madison Land Management Practices for Archaeological Sites

<b>Activity</b>	<b>On a mound feature</b>	<b>Within a burial site (not on mound)</b>	<b>Within a habitation site</b>
Establish vegetation using seeds	Preferred method	Preferred method	Preferred method
Plant seedling herbaceous plants using insertion method ( no excavation)	Limited use*	Limited use*	Limited use*
Plant seedling woody plants-bare root, using insertion method ( no excavation)	Prohibited	Limited use*	Limited use*
Install container grown material (herbaceous or woody) by excavating planting hole	Prohibited	Requires WHS “permission to disturb.” Long approval process required.*	May be possible under limited conditions with monitoring by a qualified archaeologist.*
Control vegetation using phosphorus based herbicide (e.g., glyphosate/common trade name is “Round-up”)	OK	OK	Only in areas where changes to soil chemistry will not affect anticipated research.
Control vegetation using herbicide (but NOT phosphorus based compound)	OK	OK	OK
Pull small stumps	Prohibited	OK*	OK*
Grind large stumps	Prohibited	Limited use*	Limited use*
Pull small herbaceous plants without significant soil disturbance	OK	OK	OK
Mow undesirable plants (under conditions when soil is firm and not prone to compaction)	OK	OK	OK
Use fire to control vegetation	As fire permit allows	As fire permit allows	As fire permit allows
Use grazing animals to control vegetation	Prohibited	Prohibited	Limited use*
<i>* Present a plan to Campus Planning and Landscape Architecture staff for review and possible permit requirements</i>			