



# Aboriginal Cultural Guidelines for Fuel and Fire Management Operations in the ACT



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## **List of Terms and Abbreviations**

ACT – Australian Capital Territory

BOP – Bushfire Operation Plan

FMU – Fire Management Unit

GPS – Global Positioning System

PCS – Parks and Conservation Services

TAMS – Territory and Municipal Services

## 1. Purpose

There is extensive recorded material highlighting Aboriginal occupation in the ACT. As land managers with extensive access to remote locations throughout the ACT, it is essential that the PCS FMU is highly aware and competent in identifying, recording and protecting Aboriginal cultural sites.

It is a requirement of the *Heritage Act 2004* that all Aboriginal cultural sites identified within the ACT are reported. The purpose of the *Aboriginal Cultural Guidelines for Fuel and Fire Management Operations in the ACT* is to:

- Explain the various cultural sites that ACT PaCS staff are likely to encounter on a fire site;
- Clearly stipulate procedures for the recording and protection of cultural sites and;
- Define a 'Cultural-Ecological Burn' and clearly explain the processes involved with planning and executing Cultural-Ecological burns.

Whilst these guidelines have been developed specifically for the ACT PaCS FMU, it can be used as a *guide* for other land managers, community organisations or individuals.

## 2. General Principles

Aboriginal people have lived in the ACT and surrounding districts for thousands of generations. Many of the first European settlements were established at locations Aboriginal people already lived such as New Acton, Duntroon and Tidbinbilla. As such, Aboriginal cultural heritage exists throughout every part of the



ACT. PCS acknowledges the Ngunnawal people as the Traditional Custodians of the ACT and recognises their continuing connection to the lands and waters throughout the region.

Cultural heritage sites have a high level of spiritual significance to Traditional Custodians. Some of these sites may not contain physical artefacts. The Aboriginal Cultural Guidelines for Fuel and Fire Management acknowledges that cultural heritage cannot be thought of only in terms of physical sites and artefacts. Cultural heritage in the context that it is described herein, describes the attachment of people to place, their shared history and the ongoing connection Traditional Custodians have their homelands. Areas that have been identified by Traditional Custodians to be of cultural and historical significance (regardless of the presence of physical remains of occupation) will be afforded the same protection as any site where physical artefacts have been uncovered. Section 3 details the different types of cultural heritage sites common throughout the region.

PCS acknowledge that Aboriginal cultural heritage including sites and artefacts are the cultural and intellectual property of Traditional Custodians. Decisions made concerning the health and management of any cultural sites must be made in consultation with Traditional Custodians. A 'cultural site' in this context is a location or locations that artefacts, objects or larger structural items (such as dwellings, trees or large rocky escarpments) are suspected of being from Aboriginal occupation. These sites can be found throughout every part of the ACT including the urban interface, parklands and reserves as well as throughout Namadgi

National Park and Tidbinbilla Nature Reserve. As of January 2015, there are over 3,000 registered cultural sites throughout the ACT. It is most common for sites to be uncovered in areas that have experienced disturbance such as urban development areas, dams, erosion scalds and fire trails. Cultural sites rarely occur in singularity. In the event that an artefact or location is identified, there is a high probability that other artefacts or locations exist in the immediate vicinity. Section 4 details the procedures and requirements that must be followed if a suspected cultural site has been uncovered.

In the event that a suspected cultural site or artefact(s) has been uncovered, certain protection methods relevant to any site must be implemented. These protection methods are detailed in Section 6. It is vitally important that at any sites or artefacts uncovered are left in situ, where it is safe to do so. Under no circumstances, other than the immediate threat to an area or artefact, should that location be disturbed more so than it already is, or an artefact be removed from its location. Following recording and reporting of any site or sites, an assessment will be made by appropriate people within ACT PaCS and Traditional Custodians.

Section 6 explains the general principle of planning and executing a 'Cultural-Ecological Burn' within the context of the ACT BOP.

### 3. Identifying Cultural Sites

This section explains the general assessment principles for identifying suspected cultural sites. This may include before, during or after a fire event.

#### 3.1 Stone Artefacts



Stone artefacts are the most common artefacts that are uncovered throughout the ACT. It is most common for stone artefacts to be uncovered when there is disturbance to the ground soil such as in a fire or land clearing. Stone artefacts scatters are found throughout every part of the ACT. Stone artefact scatters are mainly composed of flaked stone and cores. Artefacts can be found in isolation but are more commonly uncovered in groups.

Flakes may be identified by the following characteristics:

- Flakes have relatively sharp edges, possibly with retouch (smaller flakes removed from the edge to sharpen it further)
- A bulb of percussion can usually be found on the ventral surface (the 'front' side, where it detaches from the core), just below the striking platform
- Flakes are usually only a few centimetres long (i.e. 1-5 cm)
- One end of the flake will have a striking platform, which is the area where the original core was struck in order to remove the flake. Sometimes there can be a fracture mark at the impact point on the platform
- The dorsal surface (the back of the flake, which was exposed prior to the flake being detached from the core) can sometimes show evidence of one or more previous flake scars.

Cores are the original rock from which the flakes are detached. These are most often identified by the presence of one or more flake scars.

Another way to help identify flakes is to look for stone types that are exotic to the local area.



## 3.2 Modified trees

A modified tree is a tree that has been artificially manipulated. Modified trees in the ACT were most commonly created before the late 19<sup>th</sup> century however, Traditional Custodians continue to scar trees throughout the ACT. Recently created modified trees are treated equally as those created before or at the onset of European occupation.

There are three types of modified trees found throughout the ACT:

- **Scarred Trees:** The most common form of modified tree is a 'scarred tree'. Scarred trees were created when Aboriginal peoples removed bark for a variety of purposes including making coolamons, canoes and shields
- **Carved Trees:** Carved trees were created when bark was removed and artistic designs and patterns were carved into the scar as a form of visual communication. Carved trees were created for a number of reasons including to mark boundaries, burial sites or simply as a form of artistic expression
- **Knot trees:** Knot trees were created when people tied together branches of a growing tree. The result of tying together branches at the early stages of a trees development was that the branches would grow through one another and create a knot or circle in the tree. These were used as boundary markers, to signify Women's sites and also as birthing trees.



### 3.3 Rock Shelters



Rock shelters were utilised by Aboriginal people throughout Australia. These shelters are naturally formed and were used to protect people from the elements. Some were also used for ceremonies. Most shelters were used on a recurring basis as camp sites or on travelling routes. Any protected rock overhang has the potential to have been used by Aboriginal people. Within the ACT, many suitable sites occurred throughout granite outcrops. If a shelter was utilised by Aboriginal people, it is highly likely that an accumulation of artefacts within the rock shelter and its immediate vicinity are present. Shelters with well-covered overhangs have the possibility of containing rock-art.

### 3.4 Rock Art



There are several rock art sites registered throughout Namadgi National Park and Tidbinbilla Nature Reserve. New sites continue to be uncovered every year in the ACT. Yankee Hat is the only rock art site that is open to the public. Rock art sites are commonly found on sheltered surfaces that are protected from natural elements such as rain and wind. Rock art ranges in its observability from very visible to near non-detectable with the naked eye.



### 3.5 Grinding Grooves and Stones



Grinding grooves are often found close to water courses in areas with rocky outcrops. They are formed during the production of axes or by crushing, grinding or pounding materials (such as seeds) on rocks. Grinding stones are relatively large stones that were used to crush, grind and pound these materials. Grinding grooves are identified by one or more worn depressions on the grinding surface. Within the depressions there may be glossy stains caused by fats or stains from pigment which may have been used to grind and mix ochre. Grinding stones are relatively large stones that have worn smooth surfaces. They are most commonly flat and round. Generally, grinding stones will comfortably fit into the hand. It is common to find additional grinding grooves and stones in the immediate vicinity of exposed grooves.

### **3.6 Stone Arrangements**

Stone arrangements were made by Aboriginal people for a range of purposes. Stone arrangements are found both in open areas and in creeks and riverbeds. Some common uses for stone arrangements include being used as markers, part of ceremonial sites, to mark pathways and fish traps.

Any arrangement that does not appear to be naturally occurring could potentially be of Aboriginal origin. Stone arrangements created by Aboriginal people range from simple cairns or piles of rock to more elaborate arrangements such as straight, curved or circular stone arrangements or standing slabs of rocks.

### 3.7 Burials

A variety of burial types have been found within the ACT. Examples include burials:

- Under stone cairns or rock piles
- Dug into the side of hill slopes
- In pits dug into the ground
- In naturally formed caves.

If a burial was placed in the ground, remains will often be found in relatively deep, loosely compacted soils that are generally close to water. Pit burials are often fired before burial; this will be evidenced by baked clay and charcoal.

## **4. What to do if you encounter a site**

The following section details the four steps that must be observed in every instance where cultural sites and/or artefacts may be uncovered:

1. Protect
2. Record
3. Report
4. Leave

### **4.1 Protect**

In the first instance that a suspected site or artefact is uncovered, check for any immediate threats to the area or artefact. These hazards include but are not limited to:

- Fire
- Water
- Machinery
- Human impacts (such as walking trails or recreation parks)
- Animal impacts (such as wombat or rabbit diggings or animal grazing)
- Plant impacts (such as invasive weeds)

Where it is safe to do so, these threats should be removed or minimised to ensure the safety and integrity of any cultural area or artefact.

## 4.2 Record

Any cultural site or artefact must be recorded. Of particular importance in this process is recording the specific location of any such site. This can include but is not limited to recording:

- Longitude and Latitude
- GPS coordinates
- Detailed location using another landmark (such as a road or asset) as a reference point

Once the location has been recorded, a description of the area or artefact is required. This can be through use of a photo with a camera or camera phone, or a detailed description of the site and/or artefact. This information may include the size, shape and condition of the artefact or site. Any perceived threats to a site that cannot be immediately addressed must also be recorded.

***It is vitally important that any recording not be disclosed to the general public or with wider networks.*** Many sites are culturally sensitive and making any information public without first being properly advised may result in cultural harm to Traditional Custodians. Once notified, an assessment of the site will be conducted.

## 4.3 Report

Following recording of any suspected cultural site, reporting is required. In the event of an incident (such as hazard reduction burn or wildfire), this reporting must be made in accordance with the chain of command. This must then be relayed to the Aboriginal Liaison Officer within the Incident Control Team. In the event that an Aboriginal Liaison Officer is not available, the Values Officer can also be notified.

As soon as it is possible, any suspected cultural site must be reported to the ACT Heritage Unit and the Partnerships Coordinator, Indigenous Programs, within the ACT PCS Community and Visitor Programs.



#### 4.4 Leave

After steps one through three, it is required that the object or area is left in situ. In the event that an object or objects are moved to prevent harm, place them at the nearest safe location to the original area (such as at the base of an adjacent tree). Many cultural sites or artefacts carry spiritual and religious meaning for Traditional Custodians and removing any objects from their original location may cause cultural harm.

Leaving in situ is also important for subsequent investigations to obtain the clearest possible interpretation of the meaning and significance of sites. ***Do not under any circumstances remove an object or objects from their original locations.***

## **5. Protection Methods**

The following section details protection methods for cultural sites detailed in Section 3. These protection methods can be applied in a fire event and throughout pre and post burn works.

### **5.1 Stone Artefacts**

5.1.1 Avoid (if possible) operating heavy machinery (such as dozers or tankers) through location

5.1.2 Do not water bomb immediate vicinity of location

5.1.3 Limit (where possible) release of water throughout the immediate area

### **5.2 Modified Trees**

5.2.1 Rake hoe around base of tree for 2 metres - Area of earth must be bare with no immediate surface, near-surface or elevated fuels

5.2.2 Ensure that there are no threats from other trees. Should a threat exist such as a dangerous tree adjacent to modified tree, mark said tree and notify the appropriate supervisory personnel that threat exists

5.2.3 Do not water bomb within immediate vicinity of location

5.2.4 If tree has fire report immediately up chain of command, apply water through direct attack

5.2.5 Do not operate heavy machinery within immediate vicinity of tree

### **5.3 Rock Shelters**

5.3.1 Avoid (where possible) water bombing immediate vicinity of location

5.3.2 Record area(s) location and report following an event or incident (immediate reporting is not required for rock shelters where no artefacts or rock art have been uncovered)

## **5.4 Rock Art**

5.4.1 Remove fuels around the base of the rock surface and the entrance for at least 2 metres from base of site (more if fuels are located under an overhang). Area of earth must be bare with no immediate surface, near-surface or elevated fuels

5.4.2 Should an area be too large or build-up of fuels is too great to immediately remove, efforts should be directed to the specific area where art has been uncovered. All efforts should be directed to limit radiant heat in the immediate vicinity of any location

5.4.3 Do not water bomb location

5.4.4 Do not release water on surface of rock(s)

5.4.5 Do not use retardants/FozChek

## **5.5 Grinding Grooves and Stones**

5.5.1 Tape-off area for no-less than 5 metres surrounding location of exposed grooves

5.5.2 Do not allow heavy machinery to operate within the immediate vicinity of area

5.5.3 Do not water bomb

5.5.4 Limit (where possible) release of water in or near immediate vicinity of location

## **5.6 Stone Arrangements**

5.6.1 Tape-off area for no-less than 5 metres surrounding location of stone arrangements. If stone arrangements are located in creeks or riverbeds, mark area with tape adjacent to location

5.6.2 Do not water bomb

5.6.3 Do not release water within immediate vicinity of location

5.6.4 Do not operate heavy machinery within immediate vicinity of location

## 5.7 Burials

5.7.1 Tape-off area for no-less than 5 metres surrounding location

5.7.2 Report *immediately* up chain of command

5.7.3 Do not water bomb

5.7.4 Do not operate heavy machinery within immediate vicinity of location

5.7.5 Do not release water within immediate vicinity if location

5.7.6 If area has been disturbed by wildlife and has the potential of continued disturbance, block off area (in so far as possible) to limit additional disturbance. Large rocks may be put at the entrance to any holes (such as wombat or rabbit holes) to prevent further damage

## 6. Cultural-Ecological Burns



Aboriginal people have been managing lands and waters throughout the ACT region for over 25,000 years. A large component of this management was the purposeful implementation of effective fire regimes. The use of fire in Aboriginal societies was closely guarded by interconnection sets or cultural Lore and customs. These rules and regulations provided the foundations of land-management practices that achieved sustainable living balances with the surrounding environment by promoting healthy ecosystems, where people were safe to live within, and that supported their activities.

Fire management techniques implemented by Aboriginal peoples proved successful for many thousands of years. Considering the vast changes that have occurred to the landscape since colonisation however, implementation of Aboriginal fire management techniques in isolation may prove insufficient and unrealistic.

The introduction of exotic plants and weeds, urbanisation and development has transformed much of Australia's native landscapes. Although much of the landscape has changed, many philosophies of Aboriginal fire management persist. Cultural-Ecological burns are a vital component of implementing highly effective fire regimes for the future. In conjunction with ACT PaCS FMU, whom have legislative responsibilities to implement fire management regimes in the ACT, Cultural-Ecological burns are being applied in fire management operations throughout the ACT. These activities will utilise a 'two toolbox'<sup>1</sup>

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<sup>1</sup> 'The Indigenous 'toolbox' containing traditional ecological knowledge and customary law and the non-Indigenous 'toolbox' containing science, legislation and public policy (Cary, J., Lindenmayer, D. & Dovers, S. [2003] *Australia Burning: Fire Ecology, Policy and Management Issues*. CSIRO Publishing Canberra, AUS. p. 215)

approach to planning and executing Cultural-Ecological burns. The following section explains the processes, outcomes and methods needed to implement successful Cultural-Ecological burns as set out in the ACT BOP.

## 6.1 Processes

An Aboriginal people or person(s) is required to facilitate every phase of planning, implementing and monitoring of Cultural-Ecological burns. Any such identified person is required to be a staff member of ACT Parks and Conservation and adhere to working standards of the Fire Management Unit (FMU). This position (or positions) may be within the FMU or the Murumbung Yurung Murra Aboriginal Rangers team (or both). The phases for planning, preparing, implementing and monitoring any Cultural-Ecological burns include:

1. Identification of potential sites
2. Planning
3. Pre-burn works
4. Burning
5. Monitoring
6. Rehabilitation

The people or person(s) responsible for planning and implementing cultural burns are required to work closely with both the FMU and Traditional Custodians. Traditional Custodians must be given the opportunity to be involved in any (or all) step(s) of the planning, implementation and monitoring phases. Of importance in Phase 4 (Burning), a Traditional Custodian is *required* to be part of any team that implements any burn<sup>2</sup>. The people or person(s) planning and facilitating a cultural burn is not required themselves to be, a Traditional Custodian. All steps needed for authorisation of Cultural-Ecological burns are subject to the same authorisation and approval of other burns and activities set out in the ACT BOP.

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<sup>2</sup> Any person on the fire-ground must be appropriately trained and certified in accordance with ACT Parks and Conservation's FMU standards. These training opportunities are detailed in the Indigenous Fire Management Plan.

## 6.2 Outcomes

A Cultural-Ecological burn is designed and implemented for a specific purpose or purposes. A primary purpose of any such burn is cultural renewal. Outcomes that may be achieved that compliment this outcome include (but are not limited to):

- Renewal of native vegetation
- Safeguarding culturally significant sites
- Hazard reduction
- Maintaining the health of groundwater sources and water catchment areas

## 6.3 Method

Cultural-Ecological burns are generally known as ‘cool burns’. They are generally of low-intensity and severity. Cultural burns take place within a traditional seasonal calendar indicated by certain native flora and fauna species. In the Western calendar, these burning practices take place throughout autumn. Burns are lit from multiple ignition points and ‘creep’ or ‘trickle’ through the surface, near-surface and elevated fuel layers with very little to no crown scorching (under 10% when lit in a forested area).



