



## ACT Heritage Council

### BACKGROUND INFORMATION

#### Umbagog District Park Grinding Grooves

#### Block 143, Section 4, Latham

At its meeting of the ACT Heritage Council decided that the Umbagog District Park Grinding Grooves were eligible for registration.

The information contained in this report was considered by the ACT Heritage Council in assessing the nomination for the Umbagog District Park Grinding Grooves against the heritage significance criteria outlined in s10 of the *Heritage Act 2004*.

### HISTORY

Aboriginal people have occupied the ACT region for tens of thousands of years. Occupation layers at Birrigai rockshelter have been dated to 25,000 years ago (Flood, 2004). Due to its enduring nature, the most common evidence of Aboriginal occupation is usually stone that has been modified by flaking. Evidence of stone flaking is ubiquitous throughout Australia and is mostly represented by open artefact scatters. However, perhaps the most recognisable stone artefacts created by Aboriginal people were ground stone artefacts such as hatchets and grindstones.

Ground-edge stone hatchets have been found in the northern parts of Australia dating to over 25,000 years ago. Ground-edge stone hatchets were traded great distances in the southern regions of Australia and physical evidence of those complex trade networks (Mcbryde 1978, 1979, 1984, 1986, McBryde and Watchman 1976, 1989, Hiscock 2008). In the ACT region this has been linked to feasts of bogong moths and pathways used by local and east coast Aboriginal groups that passed through the area (Flood 1996; kabaila, 2005). Trade with people from outside the region is suggested by the presence of ground edge stone hatchets made from rock that is not of local origin. Conversely, stone hatchet quarries have been found in the local area showing stone was also sourced locally, and quite probably traded out (Mcbryde and Watchman 1989, Comber 1988, Williams 2006).

It has been observed that the proliferation of ground-edge stone axes and grinding technology in the region has a relationship to the use of backed artefacts, in that they have been used for many thousands of years, but it was only ~2,000 years ago that they became more numerous in the archaeological record as backed artefacts become less numerous. If this is related to a risk reduction strategy as Hiscock (1994 and 2008) proposes, then it represents people willing to invest more time in preparing tools for a guaranteed (or at least lower risk) return later on. He goes on to say that:

*“declines in artefact discard over the last two millennia coincided with an increased emphasis on the manufacture and use of ground-edge axes. Axes can be repaired and used for extended periods, and using them reduced the numbers of other tools that need to be made. These are examples of many technological changes that affected the quantity of artefacts discarded in archaeological sites.”* (Hiscock 2008: p.239)

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Edge ground stone artefacts were made by sharpening the working edge of a hatchet by rubbing or grinding it against another stone with abrasive properties. Repeated use of such stone created a groove – a grinding groove. These sites are comparatively rare, and as a consequence when they are found they tend to be assigned high significance.

The most important environmental variable in the location of grinding grooves is the surface geology. The rock has to be of a suitable type for grinding, such as sandstone. Proximity to water is another factor that is important, but several grinding groove sites in the ACT are located hundreds of metres from water. This suggests that the people using the resource had a method of transporting water to the sites, such as bank or wood, or they were only utilised during flood or rain.

Grinding grooves are where Aboriginal people shaped and sharpened stone axes by grinding them against an outcrop of stone. This grinding action left shallow, oval shaped grooves indented into the surface of the outcrop. The grooves are often in clusters of two or more and range from 50 to nearly 80mm in width. They can be over 200 mm in length and 100 mm deep. The best medium for this was sandstone, which is rare in the ACT so other types of stone were also used, including granite (ACT Heritage Council 2005).

Regardless of the ability of these sites to provide archaeological knowledge, they are an evocative monument to past Aboriginal people. The grinding grooves existence demonstrate past knowledge of the land and uptake of technological processes. They provide a link between the current generation of Aboriginal people and their ancestors, which unequivocally demonstrates that their ancestors sat in a place and spent time creating tools crucial to their survival. Mulvaney and Kaminga sum up the heritage significance of grinding groove sites by saying that “These sites do not usually convey much new information to archaeologists, but they are an important heritage for Aboriginal people” (Mulvaney and Kaminga 1999:34).

In the ACT, there are 13 other known groove sites. These are:

- Percival Hill Grinding Grooves, Nicholls.
- Gibraltar Falls Grinding Grooves, Paddys River.
- ‘CD 2’ (single groove in Namadgi National Park), Tennent.
- Naas River 1, Booth.
- Naas River 3, Booth.
- Middle Creek Grinding Grooves 1, Rendezvous Creek.
- Middle Creek Grinding Grooves 3, Rendezvous Creek.
- Honeysuckle Creek Grinding Grooves, Tennent.
- Rendezvous Creek Grinding Grooves, Rendezvous Creek.
- Black Flats Grinding Grooves, Paddys River.
- Greens Picnic Area Grinding Grooves, Paddys River.
- Tuggeranong Grinding Grooves, Theodore.
- Molonglo Valley Grinding Grooves, Molonglo.

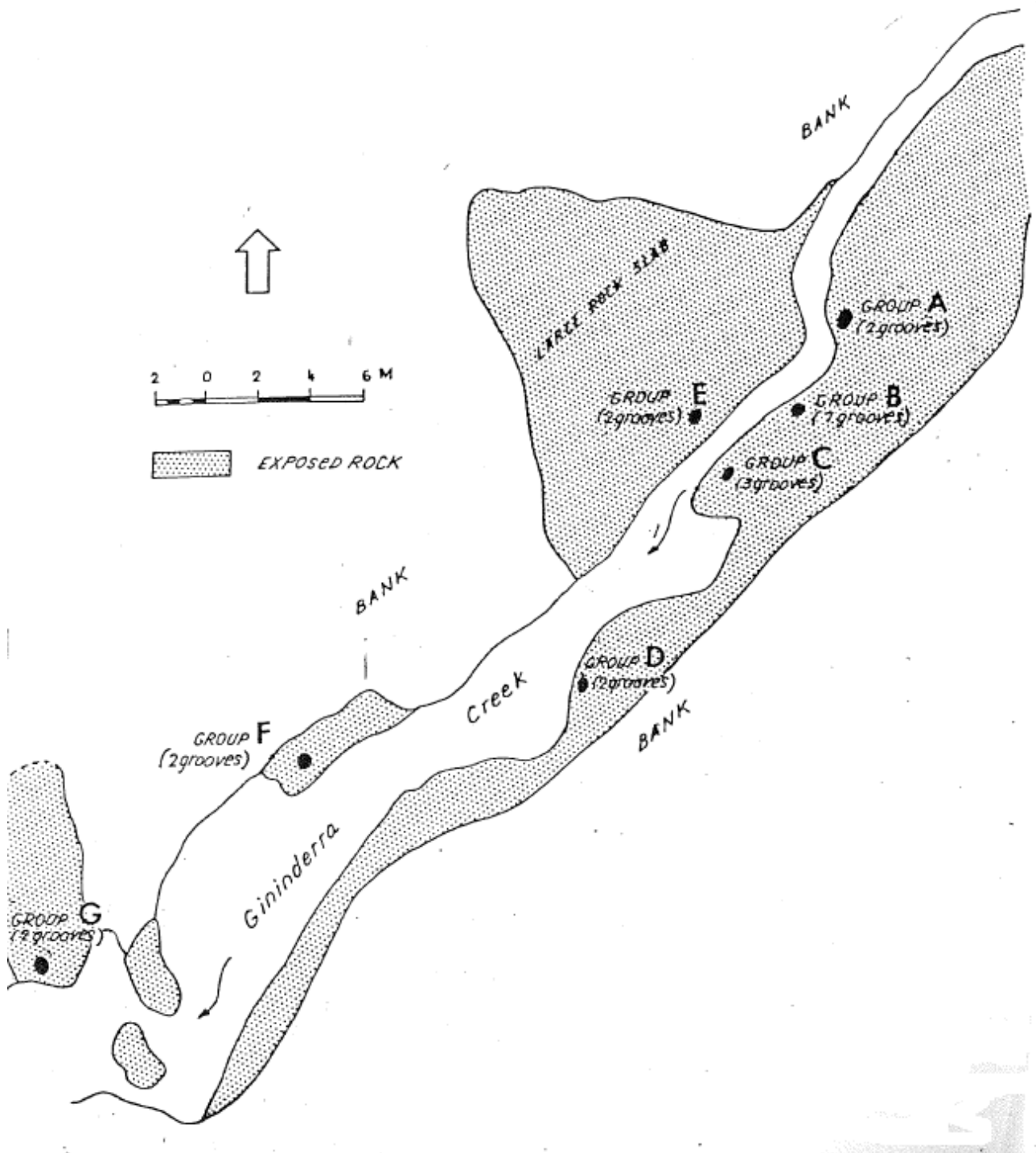
Of these 13 sites, three (Percival Hill, Tuggeranong, and Molonglo) are situated in a lowland context similar to the Umbagog District Park Grinding Grooves. The Tuggeranong Grinding Grooves are a more extensive, better preserved example of grinding groove sites than the other sites, allowing for more detailed interpretation.

In 1978 the National Capital Development Commission (NCDC) proposed to use the Ginninderra Creek area in the suburb of Latham for recreational open space. This proposal was to incorporate large scale facilities such as mini-bike trails and horse agistment paddocks, however the local community response to these proposals favoured less intrusive, more ‘park-like’ methods of development.

In 1982 the NCDC amended their Draft development of Ginninderra Creek to allow for the protection and maintenance of the axe grinding grooves, which were reported to the NCDC by the Canberra Archaeological society after a resident of Latham noticed the Grooves in Ginninderra Creek.

**DESCRIPTION**

Josephine Flood mapped and recorded 20 grooves arranged in 7 groups (A-G) at Umbagog District Park Grinding Grooves site between 1982 and 1983. While most of these grooves were not as well defined in 2016 as in 1982, the rock exposures within Ginninderra Craak are still present, and the site plan demonstrates the groove network with reasonable accuracy:



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Flood also tabled the dimensions of the 20 grooves:

	<u>Length</u>	<u>Breadth</u>	<u>Depth</u>	<u>Volume</u>	<u>Comments</u>
<u>Group A</u>					
groove 1	30cm	15cm	4cm	50ml	Groove has anvil-type pitting at its N. end.
2	29cm	20cm	3.5cm	95ml	
<u>Group B</u>					
groove 3	15cm	15cm	1cm	20ml	Shallow depression with anvil-type pitting on S.W. side.
4	18cm	16cm	2cm	28ml	Shallow depressions on a large rock slab.
5	12cm	7cm	3cm	17ml	
6	19cm	11.5cm	1.5cm	16.5ml	
7	28cm	16cm	2cm	-	
8	16cm	5cm	0.5cm	6ml	
9	15cm	6cm	0.5cm	8ml	
<u>Group C</u>					
groove 10	20cm	20cm	6cm	-	A broad depression sloping steeply downwards
11	25cm	6cm	2cm	-	A pronounced long narrow, deep but open-ended groove bearing 'use-shen'.
12	20cm	8cm	1.5cm	-	
<u>Group D</u>					
groove 13	38cm	11cm	4cm	50ml	These are two of the most pronounced grooves, with a vein of harder rock running between them.
14	30cm	9cm	1.5cm at centre, 2cm at S. end.	44ml	
<u>Group E</u>					
groove 15	25cm	15cm	2.5cm	32ml	
16	15cm	12cm	1.5cm	6ml	
<u>Group F</u>					
groove 17	39cm	16cm	4cm	153ml	Higher edge of W. side
18	19cm	17cm	1cm	-	On a slope
<u>Group G</u>					
groove 19	26cm	14cm	2.5cm	34ml	There are shallow sills in the centre of this groove dividing it into 3 sections
groove 20	30cm	10cm	2.3cm	-	This is on a slope with a protruding ridge on the W.

## BACKGROUND INFORMATION – Umbagog District Park Grinding Grooves

The 20 grooves and other possible incipient ones lie in a 50m stretch of Ginninderra Creek. Some grooves are deep cut and well preserved (see Figure 2 and Figure 3). Some have worn over time making visibility difficult (see Figure 4 and Figure 5). There is some build up of creek sediment and vegetation which encroaches slightly on the rocky outcrops where the grooves are situated (see Figure 6 and Figure 7). The grooves lie on boulders and rock slabs of tuff on both sides of the creek (see Figure 8 and Figure 9).

A concrete pathway leads to the site from Macrossan Crescent. The rock outcrop at the base of this path (also known as the rock holes) is the only rocky feature along the banks of Ginninderra Creek for several kilometres. The landscape surrounding the site is open parkland. A cycleway and walking path follow one side of the creek. Trees grow along both sides of the creek. A concrete footbridge overlooks the creek a few metres east of the rocky outcrop that the grooves lie on.

A site visit on the 30<sup>th</sup> March 2016 revealed the entire parkland area to be well maintained, with no apparent litter; this is credit to the Ginninderra Catchment Group, Umbagog Landcare, that cares for the Umbagog District Park. A Ngunnawal elder, Wally Bell, helps run this Landcare group to care for the grinding grooves. Further, the site is frequented by tour groups organised by *Thunderstone Aboriginal Cultural and Land Management Services*, generating significant community interest and awareness in this important Aboriginal cultural heritage site.

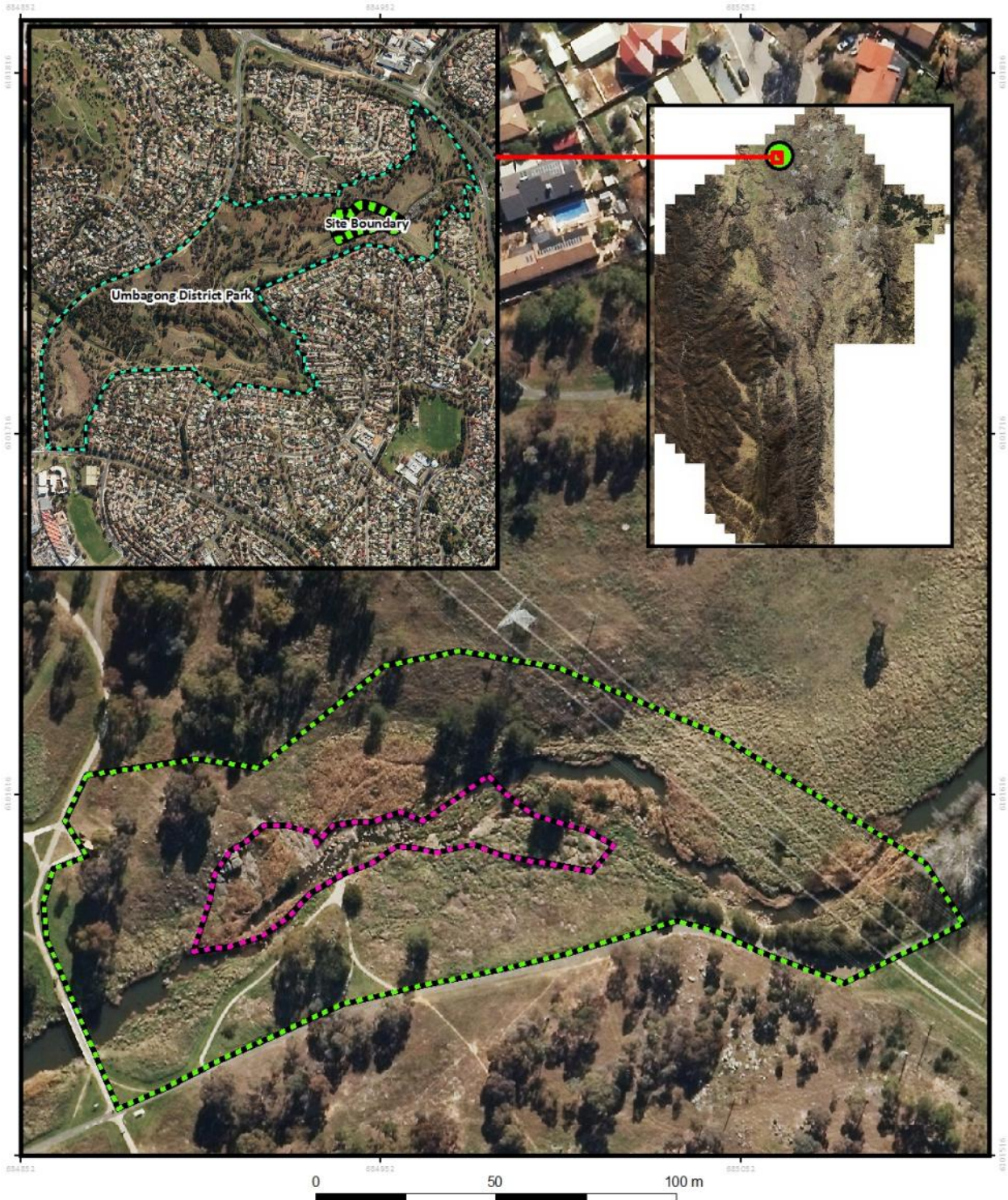
### Physical condition and integrity

Invasive weeds and native flora are a cause for concern; they're encroaching on the rock outcrop which is causing a build up of soil, which is preventing water from running freely through the creek (see images 7 – 8).

Since 1982, Ginninderra Creek has been used as a storm water drain and there has been a significant accumulation of silt and rubbish around the rock outcrop. Gillepsie in Flood (1983) describes the creek as having been intermittent and drying to leave only pools in the summer months.



SITE PLAN



Umbagog District Park Grinding Grooves (part) Block 143, Section 4, Latham



Coordinate System: MGAS4 Zone 55  
Projection: Trans vers e Mercator  
Datum: GDA 94



Figure 1 Site Boundary Umbagog District Park Grinding Grooves





**Figure 2** Prominent groove on rocky outcrop at Umbagong Creek (ACT Heritage 2016).



**Figure 3** Deep cut and prominent groove at Umbagong Creek (ACT Heritage 2016).



**Figure 4** Shallow groove at Umbagong Creek (ACT Heritage 2016).



**Figure 5** Water highlights set of shallow grooves at Umbagong Creek (ACT Heritage 2016).



**Figure 6** Built up sediment, weeds and native fauna may pose a threat to integrity of the grooves (ACT Heritage 2016).



**Figure 7** Built up sediment, weeds and native fauna may pose a threat to integrity of the grooves (ACT Heritage 2016).



**Figure 8 Rocky outcrop in Umbagog Creek where grooves recorded (ACT Heritage 2016).**



**Figure 9 Rocky outcrop in Umbagog Creek where grooves recorded (ACT Heritage 2016).**



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