



Aboriginal Sites

There are an unknown number of traditional Aboriginal cultural heritage sites across the Border Rivers and Gwydir catchments. These sites are in different environmental zones and reflect a great variety of land uses and forms of interaction with the environment. It is probable that all areas of the Border Rivers and Gwydir catchments were occupied by Aboriginal people at some stage in the past. Therefore, Aboriginal sites may be found in any location.

Most sites are a reflection of the available food and shelter in the area where they are located, and of the geology and landforms of that area.

Some of the Aboriginal sites that can be found across the catchment include:

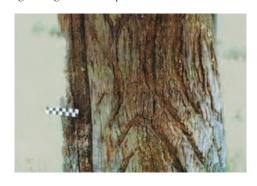
- burials (dhanmurr) / skeletal remains
- open camp sites (maraay) / fire hearths
- isolated stone (maayama) artefacts and stone artefact scatters
- middens containing shells (waa), bones (buya), organic material
- scarred trees, both ceremonially carved and for tools and weapons
- quarry sites for stone (maayama) and ochre
- rock overhangs, shelters, and camp sites (maraay)
- · axe grinding grooves
- stone fish traps (badi)
- · painted and engraved rock art
- ceremonial sites, earth ring bora grounds and stone (maayama) arrangements
- cultural sites / dreaming sites of significance

Burials

Warning: This Chapter contains information regarding Aboriginal burial practices.



Aboriginal mound graves and associated carved trees on Keera Station near Bingara. Note the carved trees with the concentric diamond patterns (also pictured right). No signs of the mound graves now exist as a set of sheep yards were built over them in the early 20th century. (Painted by Mrs Emma Macpherson (1856–57) (Macpherson 2007))



Remaining carved tree stump from Keera burials. The concentric diamond pattern indicates this stump belongs to the tree on the right of the above left painting. Today, a tin roof shelter protects this remaining stump (scale in centimetres).



Remains of an Aboriginal burial mound located in the western area of the Border Rivers catchment. Burials in this area are often on sandy red ridges running along the edges of grey cracking clays.





Aboriginal people disposed of their deceased in a number of different ways. Across the Border Rivers and Gwydir catchments several Aboriginal burials (*dhanmurr*) were recorded by early settlers as being:

- · mounds overlain by logs and timber
- identified by several trees in the nearby area carved with various designs, concentric diamonds being common.

It is highly unlikely that any grave mounds could still be found undisturbed today, but disturbed and partial examples do exist. In other cases, erosion may have exposed skeletal material across the surface of the landscape or burial sites may become exposed during development works. In all cases Aboriginal skeletal material should be treated with respect.

Aboriginal people living within the region were also known to have disposed of deceased people in hollow logs using the natural feature as a 'coffin'. Aboriginal people are also recorded as being buried 'draped' in their possum skin rug or cloak (guudii). Cloaks (guudii) were major items of material culture as they were practical for winter. Records also indicate that the cloaks (guudii), made of kangaroo or possum skins, were often decorated with designs which may have reflected totems or levels of rank and kinship within the group.

Mrs. Emma McPherson in 1860 wrote:

When a sufficient number of skins have been collected they are sewn together by the women, whose needles are wooden skewers, and their thread the sinews of some animal, or the fibres of some plant, and thus are formed the skin cloaks, the only native garment of the Australian black ... in cold or wet weather the skin cloak answers all requirements. (Macpherson 2007, p. 207)

In 1896 Catherine Langloh Parker wrote:

Their opossum rugs used to have designs scratched on the skin sides and also painted patterns, some say tribal marks, others just to look pretty and distinguish their own. (Parker 1905, p. 110)

Observations also record that many burials were undertaken with the deceased in a trussed up sitting position.

Alfred William Howitt noted in his book, *The Native Tribes of South-East Australia* (1904) speaking specifically of the Kamilaroi:

They bought nets and opossum rugs as wrappers for the corpse, spread them on the ground, and doubled the body into the form of a bale, with the knees and chin touching each other. Then they wrapped the bale in the nets and rugs and tied it tightly. A shallow hole was dug with yam-sticks, in which the body was placed and being filled in with soil was covered with logs and dead wood ... if there was not any soft ground at hand the body was placed in a hollow log. (Howitt 1904, p. 466)

As well as several written descriptions, early artists provide us with excellent painted accounts of mound burials (*dhanmurr*) associated with carved trees. One of the best ethnographic examples being depicted at "Keera" near Bingara in 1856-1857.

Mrs. Emma McPherson further wrote:

...the first of these graves met our view. It was a large mound made of gravel, surrounded and supported by branches of trees evidently lately placed there and bore the appearance of being tended with no little care; so that it would appear that, however much they dislike to name the dead or visit their last abodes they do not allow the tombs of their friends to suffer from their neglect. There were three or four similar mounds within sight, and the trunks of the surrounding trees were carved with the hieroglyphics to which I have before alluded. (Macpherson 2007, p 113)

Many traditional Aboriginal burials (dhanmurr) are not recognisable in the landscape today and their exposure and discovery often occurs by accident. Earthworks, particularly in areas of sandy soil, erosion gullies and the bank lines of water courses are all likely to expose Aboriginal skeletal material which should be treated with respect and not interfered with. In all cases where potential burial sites or Aboriginal skeletal remains are discovered, please contact the Local Aboriginal Land Council (LALC) office in your area or the Border Rivers-Gwydir CMA.

Carved or Sacred Trees

Carved trees are obviously significant items of Aboriginal cultural heritage. The only carvings by Australian Aborigines within the Border Rivers and Gwydir catchments are to be seen on carved trees (dhiil), which have a wide distribution in New South Wales. Trees used for ceremonial purposes were often carved with a pattern that had a symbolic meaning to Aboriginal people. They were largely associated with ceremonial grounds (buurra) and burial (dhanmurr) locations.

Carved trees are generally associated with men's sites and were used to indicate ceremonial, initiation (buurru) or burial places (dhanmurr). Carved trees differ from scarred trees in that they have geometric designs cut into the pith-wood of the tree and the bark has not been used to make utensils.

Carved or sacred trees were used to mark or display significant cultural and or spiritual events of a local tribe. They were carved for initiation ceremonies (buurra) and as grave-posts. Each of the designs, which have a mythological significance, belongs to a totemic clan, local group or tribe. Sacred trees can be many hundreds of years old and hold great cultural value. Many sacred trees have intricate designs carved into the bark with a hand-held axe (yuundu) or axe head. The use of bold diagonal lines or circular designs was a prominent feature of sacred trees. In some cases, the carving, meaning or placement of a sacred tree, was only known to the local tribe of the area and was not shared with other tribes or communities.



Trees carved with symbols or patterns by Aboriginal people were called dendroglyphs by early anthropological observers. If the trees were associated with a burial they were also referred to as taphoglyphs. *Glyph* is a Greek word that means 'a mark with a meaning'.

When the Egyptian writing marks that we now call hieroglyphics were first discovered, they were believed to be *heiro* or sacred religious markings. Similarly, *dendro* is a Greek word meaning tree and *tapho* means 'burial' or 'grave'.

One of the best ethnographic examples of carved trees associated with burials comes from "Keera" near Bingara. Mrs. Emma McPherson, in her book *My Experiences in Australia: Being Recollections of a Visit to the Australian Colonies in 1856-1857*, wrote that:

...the nearest approach to hieroglyphics in use among them are the rude carvings on trees in the vicinity of their burial places,

and

...the trunks of the surrounding trees were carved with the hieroglyphics ... rude representations of weapons, such as the boomerang, waddy, etc. and others supposed to delineate opossums and other kinds of game. (Macpherson 2007)

Many carved trees that existed in the region were removed during the first half of the 20th century by 'collectors' who were often operating on behalf of government agencies. A major 'collecting' expedition on behalf of the State Museum of South Australia (Adelaide) and the National Museum (Melbourne) in 1949 removed 52 carved trees from the Collarenebri area for accession by these museums. The 52 trees were removed from a bora (buurru) ground on Old Pokataroo station west of Collymongle Station. In addition, thirteen trees had been removed earlier in the 1930s and placed in the Collymongle Station garden as ornaments. Today several of the garden ornament trees are preserved at the entrance to Collymongle Station in a purpose-built gazebo (see image on following page).

Few carved trees exist in situ today. Those that do are often aged and in poor health, dead or under insect attack and decay. They require proper care and preservation.

The existence of dendroglyphs – trees carved with a pattern in association with traditional ceremonies including burials (*dhanmurr*) and bora (*buurra*) or initiation grounds was perhaps first recorded by Surveyor General John Oxley on 29 July, 1817 when he described carved trees associated with a burial on the Lachlan River. Carved trees by the Gomeroi people were recorded as early as 1833 by Lieutenant W. H. Breton who reported 'trees ... covered with grotesque figures and crude representations' (Etheridge, 1918, pp. 2-3).

In the Border Rivers-Gwydir region, Etheridge and Milne recorded carved trees on Collymongle Holding (Collymongle Station) in 1917 (Etheridge 1918). Collecting for museums was common place during the late 19th century and first half of the 20th century. Major collecting expeditions have occurred to remove many of these trees for display. Unfortunately this often occurred with little or no provenance recording or site study.



A good example of carved (sacred) trees in the catchment is at the entrance to Collymongle Station, Collarenebri NSW where nine carved trees are on display under a weather-proof shelter. Please see page 26 for a close up of the carved trees.







 $Carved\ trees\ in\ the\ Collymongle\ shelter.$



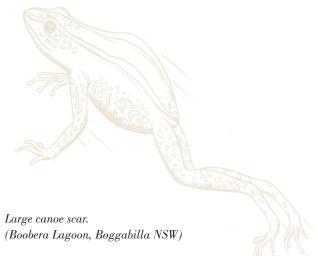


Scarred tree boles removed from Collymongle Station in 1949 now housed in the Melbourne Museum.

Scarred Trees

Many of the wooden tools and implements used by Aboriginal people were sourced from the outer bark of trees (tharraa), leaving a scar (yurrun). Scarred trees show where bark (nganda) for wooden utensils was removed using stone axes (yuundu). The bark carved from these trees was used for coolamons (bin.guwi), shields (burriin), canoes (ganuu), burial slabs (dhanmurr), woomeras (wamara), tribal markings, habitation, construction and artwork (especially in areas where there were no suitable surfaces to paint on). Scarred trees can be found wherever there are mature native trees, especially Box, Red Gum and Pine trees. They are found across the landscape, but most frequently occur along major rivers (bagay), around lakes and on flood plains. They also occur at sacred sites. Scars (yurrun) can be found on both living and dead trees.





Around the edges of watercourses large tree scars indicate the removal of bark to make canoes. Bark canoes were important as they enabled Aboriginal people to utilise a different range of plant and animal resources. Early engravings show Aboriginal people of the Murray-Darling Basin using bark canoes for a range of activities including spearing fish, hunting waterfowl, harvesting bird eggs and diving for tortoises. These pictures often show a small fire in the canoe where the occupants made a clay hearth for cooking or transporting fire sticks to a new location.

Canoes were used for fishing, moving up and down watercourses, transporting people (especially children) across flooded streams and for travelling long distances along river (*bagay*) systems. The process of making a bark canoe (*bunduurraa*) required many hours of labour and often



several men would help with its construction, thus giving them the right to use the finished canoe. Bark canoes were made in the traditional style by folding a sheet of bark at both ends and securing the folds with plant-fibre string (*buurr*). The bow (front) was folded tightly to a point and the stern (rear) had looser folds.

'Possum' trees can still be found today bearing the scars of toe holes used for climbing. They are called 'possum' trees because Aboriginal people climbed up the toe holes to catch possums for food and skins

Observations and recordings by early explorers recorded the following statements.

"There were stops on the tree trunks cut to aid climbing." (Cunningham 1827, observed on 8 July 1827)

"We at length came unawares upon a native in a tree busy at work cutting out an opposum" and then later that same day "native axe at work ... encountered native who offered wild honey." (Mitchell 1839, observed on 8 Janary 1832)

"The hunter selects some tree which he imagines likely to be possums abiding place and examines the bark carefully to see if there are any fresh marks of claws indicating that one has recently gone up a gum tree ...with his stone hatchet he cuts notches in the bark for his toes and quickly runs up the highest trees." (Macpherson 2007)

"Having ascertained the tree in which it [the native bee] has its home they ascend it as before described and carry off its nest with its sweet spoils." (Macpherson 2007)



Toe hole scars on "possum tree" north of Warialda.

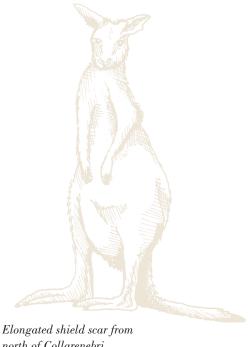


Water colour possum tree. (Source: National Library)

Possums were an important food source, hunted using a combination of techniques. Aboriginal people cut footholds in the trunks of trees to make them easier to climb. Once the hunter was in position another person would light a small fire in a hollow near the tree base, directing smoke into the hollow and forcing any possums 'at home' to flee into the hands or net of the strategically positioned hunter. It was to the Aboriginals' advantage not to let the tree burn as possum trees could be harvested on a regular basis.

Sections of outer tree bark and the cambium layers of trees were also removed by Aboriginal people in the making of items for everyday use. The range of sizes and shapes of the scars reflect the numerous uses that Aboriginal people had for bark. Many containers, often called coolamons, as well as shields and canoes all originate from tight-grained smooth-barked eucalypts. The removal of bark for shelter also occurred on stringybark eucalypts. Refer to page 59 for a detailed description of coolamons.





north of Collarenebri.

Some experience is needed to recognise tree scars of Aboriginal origin. They are generally uniform in shape with parallel sides and rounded ends. Any tree scarred as a result of traditional Aboriginal use must be old, as only mature trees were suitable for bark removal at the time of carving. As such, scarred trees are often dead or subject to insect attack, especially by termites. Fire has also destroyed many scarred trees.

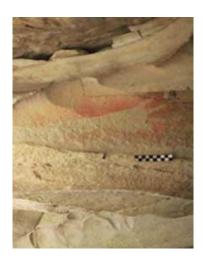


Rock Art Sites

Rock art in the Border Rivers and Gwydir catchments tends to be on overhangs of large boulders that may be isolated or found in clusters. These tend to be in the central sandstone belt or in the eastern area of the catchment where weathering has produced large granite tors. Known rock art sites depict a range of motifs with geometric shapes but hand stencil art and human and animal figures are also found. Multiple hand stencils were produced by spraying an ochre mix over the object being stencilled. Across the Border Rivers and Gwydir catchments only hands and feet are stencilled, but in other areas of Australia a wide range of cultural items were stencilled including boomerangs and axes. Hand stencils often have a missing or tucked under finger – the meaning of which is not known.



Positive left-handprint using a "hand dipped in ochre".



Stencil handprint made by spraying (usually from the mouth) ochre over the stencil object. Note that some fingers are missing or tucked under.



Stencil handprints were often created in multiples.



Red ochre geometrics near Kaloona and Terry Hie Hie, Northern NSW.



Yellow ochre human figure near Ashford, NSW.



Drip line exposure of red ochre "pencils" (shown above) and various flakes/artefacts.







Pecked art where the motif has been pecked through the outer patina (skin) of the rock face to be highlighted by the lighter colour underneath. Examples from Coolatai area, northern NSW (scale in centimetres).



Abraded art where the base rock has been abraded (rubbed) to shape the motif. These are mostly found throughout the sandstone centre of the Border Rivers-Gwydir catchments (scale in centimetres). Example from the Coolatai / Wallangra region of northern NSW.



Ochre quarry site east of Tingha NSW.

While red ochre art is the most common across the catchment, other colours do exist including black, yellow and white. Ochre colour is perhaps more a reflection of the durability of the chemical nature of the raw material rather than the selection of colour by Aboriginal artists. Ochre was prepared on a grindstone and traces of ochre are often found in the drip lines of overhangs. Red ochre was quarried from suitable deposits and often traded as an object of value. Ochre of different colours was used as body decoration with early explorers documenting traditional people daubed with white ochre derived from clay.

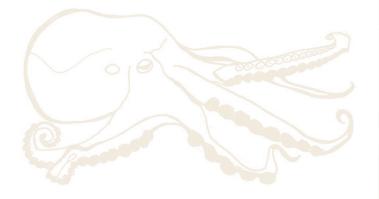
On 9 January 1832 the explorer Thomas Mitchell wrote, "He was a tall man covered with pipe-clay" and on 9 February 1832, "The peculiar colour of their bodies covered in pipe clay gave them the appearance of being dressed" (Mitchell 1839). Mrs. Emma McPherson in 1860 wrote, "They also bedaub themselves with a species of red and yellow ochre and admire one another greatly when thus decorated".



Typical large granite overhang that provided shelter and surface for art work. The drip line at the front of the overhang often provides evidence of occupation.



Typical large free-standing boulder showing small caves at ground level.







Typical large free standing boulders, usually granite or sandstone could be used as a living shelter and/or art site.



Small ochre-stained grind stone with ochre piece, both exposed in an overhanging drip line.

Rock art was also engraved by abrasion where the motif was formed in a soft base rock, usually sandstone, by rubbing a harder rock to produce the art work. Many animal track motifs are found in engraved rock art sites of the central sandstone belt of the catchment.

Rock art sites are very fragile. Even touching them can be very destructive. Ochre work should never be touched, and nor should the soft sandstone be engraved or rubbed. Historical graffiti is found in some rock art sites but modern legislation under the NSW National Parks and Wildlife Act, 1974, makes it an offence to interfere with any Aboriginal sites.

Middens

Middens are an accumulation of meal leftovers at sites where Aboriginal people regularly ate and left behind the remains of their eating. Freshwater shellfish was a common meal which led to large accumulations of shells and associated detritus such as ash, bone (buya) and stone tools.

Large middens occur along the coast of New South Wales but smaller middens are also found along inland rivers (bagay) including those in the Border Rivers and Gwydir catchments. In these inland rivers (bagay), various species of freshwater mussel are the dominant shellfish. Middens often appear as bands of shells exposed in darker soil on the eroded banks of rivers (baga). The darker colour is an accumulation of ash and organic matter.

The explorer Thomas Mitchell on 15 January 1832 wrote;

The numerous marks of feet in the banks with the abundant remains of mussels, bones of aquatic animals proved that human existence was limited to these channels not only on account of water but of those animals, birds, and fishes also which are man's natural prey

and on 16 January, 1832 he wrote:

A large lagoon covered by ducks surrounded with the remains of numerous fires of natives, besides which lay heaps of mussel shells mixed with bones of the pelican and kangaroo (Mitchell 1839).



Midden accumulation of mussel shell, bone, tortoise shell and various stone tools.



Freshwater mussels in base of watercourse.





Stone Tools

Aboriginal people used a wide range of stone (maayama) tools to perform specific tasks. These ranged from very large grinding stones that formed the base plate for seed grinding to very small sharp edges called microliths that were inserted into the edges of spears to form barbs.

Mrs. Emma Macpherson in her book wrote, "There is also a species of grass growing in some districts known to the learned as 'Panicum Laevonide', the seeds of which the natives gather and make into a cake" (Macpherson 2007).

Catherine Langloh Parker wrote, "The seeds ... were ground on their flat dayoorl (dhayurr) and made into cakes. These dayoorl or grinding stones are handed down from generation to generation being kept each in the family to whom it had first belonged ... [and] ground on the large flat dayoorl stones with a smaller flat stone held in both hands by the one grinding; this stone was rubbed up and down the dayoorl, grinding the seed on it." (Parker 1905)

A common stone (maayama) tool was the edge ground axe formed by grinding a base rock in a groove to make a sharp edge. Edge grounds produced a sharp yet solid cutting blade that could be hafted onto a wooden handle to produce what is commonly called an axe. The term 'haft' means fixing the head of a stone axe (or knife) to a wooden handle. Material for edge grounds could be a water-worn pebble or a quarried igneous rock. Quarry sites are recognisable by the large-scale smashing of rocks displaying 'fresh faces' and the scattering of chips with perhaps the presence of preformed axe 'blanks'. An axe blank is a stone that has been chipped from natural rock to form the basis of an axe shape prior to being ground to form an 'edge' (see images on following page). These blanks were then edge ground or traded as not all Aboriginal groups had access to suitable fine grained local igneous rocks.

In 1896 Catherine Langloh Parker also wrote, "Their tomahawks or cumbees were of dark green stone of which there is none in this district so it must have been obtained by barter ... for which Gidya boomerangs were given in exchange ... the stone tomahawks have a handle put over one end of the stone, gummed on with beef wood gum then drawn together under the stone, crossed and the two ends tied together as a handle, with sinews of emus, opposums or kangaroos." (Parker 1905)

Archaelogists Raymond Binns and Isabel McBryde (Binns & McBryde 1972) investigated aspects of the manufacture of ground edge axes, the sources and the trading of these tools across northern New South Wales. They found that trade was extensive, with distribution along watercourses, right across the Border Rivers-Gwydir region extending as far west as the Lower Paroo near Wilcannia.

Stone (maayama) tool making usually produced a large number of waste flakes, core rocks from which flakes had been removed, and occasionally, partially completed stone (maayama) tools.

In May 1987, Dan Witter, a Regional Archaeologist with National Parks and Wildlife Service, investigated stone (maayama) material in the vicinity of a prehistoric burial (dhanmurr) site found at Collarenebri that was being studied by fellow archaeologist Colin Pardoe. Pardoe reported that, "Dan examined the stone tools that lay nearby. He says that about 6% of the pieces were tools and the rest were waste, which is about normal. The tools were made from local silcrete. The main work was probably resharpening, reshaping and repairing small core tools. This means that stone was scarce enough to work it down to tiny sizes. The cores were then probably taken with the people to other camps." (Pardoe n.d., p.10)

Stone (maayama) tools were often used to make another tool or artefact, such as the stone wedges used to pry off a piece of bark to make coolamons. Stone (maayama) tools and scatters are often the dominant evidence of prior Aboriginal occupation. The long-lasting nature of stone (maayama) means that it still exists in the landscape when other cultural items have long since disappeared.



Erosion gullies often reveal Aboriginal cultural heritage items such as stone artefacts. They may also reveal skeletal material. A ground edge axe (shown with arrow) was found to the left of the measuring stick, centre slope.



Preformed axe blank with ground edge eroding from gully side.



Typical shape horse hoof core with many flakes removed.







Preformed axe blank eroding from gully side.



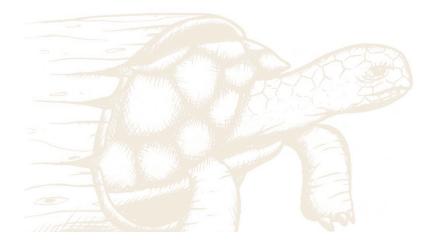
Ground edge axe with waisted hafting groove.



Ground edge axe with tapered hafting / holding end.



Large grind stone with grinding top stone (called a muller).





 $Rocky\ deposit-a\ resource\ for\ raw\ material.$



Drip line exposure of various artefacts including core to left of scale.



 $\label{prop:line} \textit{Drip line exposure of mussel shell and flakes.}$



Aboriginal quarry sites often have a large number of smashed rocks with fresh faces where the Aboriginal people reduced the base rock into workable pieces prior to flaking / shaping.



Kimberley Points

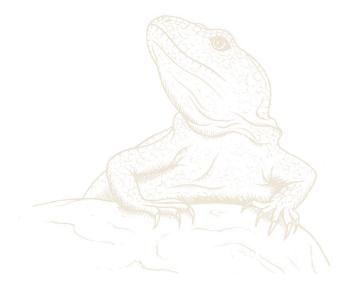
Aboriginal stone tools can be found throughout Australia, yet few match the level of craftsmanship exhibited in the small cutting blades known as Kimberley Points. Although the points were originally made of stone, the use of glass, ceramic and metal materials became widespread following contact with Europeans in the late 19th century. A sophisticated pressure-flaking technique was developed to produce a sharp cutting edge on the glass points. This process also gave them their name and unique beauty.

Kimberley Points were largely produced in the Kimberley region of Western Australia. Evidence suggests that they were primarily used as spear points and as prestige exchange items. They may also have been used in a variety of ceremonial contexts. Over periods of time, it is quite possible that some of the stone Kimberley Points could have made their way into the Border Rivers and Gwydir catchment region through trading.

Traditionally, Kimberley Points were made from a variety of fine-grained stone and ranged from approximately one to eight centimetres in length. They have a very distinctive appearance as a result of a careful finishing technique called 'pressure-flaking', in which very fine, uniform flakes were removed from the surface and margins of the point with the use of a bone tool.

Aboriginal toolmakers found that glass and ceramic materials, including ceramic telegraph line insulators, were well suited to the production of Kimberley Points. In fact, the suitability of the new materials, coupled with increased demand from both Aboriginal exchange networks and an emergent tourist trade with non-Aboriginal people, may have influenced the refinement of the techniques used and their size. Finely finished glass points up to 20 centimetres long have been documented.

The points are still manufactured in a few remote communities in the Kimberley by a small number of Aboriginal craftsmen.





An impressive display of glass Kimberley Points, showing 'Blue', 'Smoke', 'Green', 'Black', 'Amber' and 'Clear varieties. Note: The 'Dentate' or serrated style shown in glass form - top row fourth from left hand side. (Source: Private collection)



Stone manufactured spear points. The 'Dentate' or serrated style, shown on top row. (Source: Private collection)



Manufactured stone spear points. (Source: Private collection)



A glass Kimberley Point hafted onto a wooden rod and used as a spear. (Source: Private collection)





Axe Grinding Grooves

Axe grinding grooves usually occur in areas of sandstone or similar sedimentary rock. They are the result of Aboriginal people grinding either a preformed axe blank or a water-worn rock into a ground edge axe (yuundu). The grinding process took several hours to complete and was usually carried out where water could be added to produce slurry to help the grinding process.

On 6 May 1827, the explorer Allan Cunningham wrote, "The rocks of a low ridge near our encampment were of sandstone and some of it had evidently been used by natives to sharpen their hatchets" and again on 27 May, "(Natives) took advantage of the softness of the [rocks] to sharpen their mogos or stone hatchets upon them ... traces of their operations both recent and distant were observed on stony ledges in different parts of the creek." (Cunningham 1827)

In the belt of sandstone that runs through the central region of the Border Rivers and Gwydir catchments there are several locations where groups of axe grinding grooves are found. Most are along the edges of creeks but occasionally they are located away from watercourses where the rock slab has a depression to catch ephemeral water or where water could be carried. There are usually several axe grinding grooves at each site, as after several repeat uses, the groove gets too deep to comfortably push and pull the axe blank. Sandstone was the best rock type to use as a grindstone base due to the even particle size, the hardness of the individual quartz grains and the soft friable nature of the bedrock. In some areas, portable sandstone slabs were also used to grind axes. Some wooden and bone (buya) tools were ground in similar grooves. These grooves are often narrower and deeper than those used for stone tools.





Groups of axe grinding grooves in creek beds of the Wallangra / Coolatai area, northern NSW.



Axe grinding grooves in isolated boulder – Bassendean near Tingha, NSW.

Bora Grounds and Stone Arrangements



Stone arrangement on exposed large granite flag rock – west of Bundarra, NSW.

Bora (buurra) grounds were used for rites of passage into manhood and for the explanation of cultural law to maintain the functioning of traditional lifestyle. Across the catchment, bora (buurra) grounds are recorded by early ethnographers as generally consisting of two earth rings, one larger and one smaller, connected by a pathway several hundred metres long. As bora grounds were earth structures, they were particularly vulnerable to cultivation, the introduction of livestock and a lack of maintenance. Our knowledge of their existence is only through historical records and literature.



Robert Hamilton Mathews (1841–1918) was a prolific ethnographic collector, observer and recorder of Aboriginal culture. From 1893 until his death in 1918, he published 168 articles on various aspects of Aboriginal culture. Several of his articles were direct records of bora (buurra) grounds and ceremonies across the Border Rivers and Gwydir catchments. These included:

- Gundabloui (between Mungindi and Collarenebri) in 1894
- Kamilaroi Tribe two articles in 1895 and 1896, "The Bora or Initiation Ceremonies
 of the Kamilaroi Tribe" Journal of the Anthropological Institute Part I. Vol 24, 1895
 pp 411-427; Part II. Vol 25, 1896 pp 318-339.

In 1917, Mathews published an article in the *Journal of the Royal Society of NSW*, entitled 'Description of Two Bora Grounds of the Kamilaroi Tribe' in which he outlines how he described a bora (*buurra*) ring complex at Terry Hie Hie in 1901 believing the last use of the site was 'fifteen or twenty years previously':

"The bora or large ring ... was still in a good state of preservation ...with a diameter of 103 feet (approx 34 metres) being practically a circle. The boundary of the ring was defined by a raised bank of earth ... 12 to 15 inches (30–38 centimetres) but had probably been several inches (6–8 centimetres) higher. An opening of about five feet (1.5 metres) in the boundary of the circle led to a path ... (combined length 24 chains or approx 482 metres) ... to the goonaba or smaller ring. The surface consisted of loose sand and any marks made upon it would have been leveled down by the trampling of sheep and cattle for so many years." (Mathews 1917)

In the same article, Mathews also describes a second bora ring complex north of Mungindi, NSW. He described this complex in 1892, a year after it had been used for ceremony. His description is very similar to the Terry Hie Hie complex, consisting of large and small earth rings connected by a pathway he calls 'thunburuga'. Mathews also records various associated aspects of the bora (buurra) ceremony including ground sculptures, marked and ceremonially positioned trees as well as aspects of the ceremonies themselves.

While there is continuing debate as to the accuracy of each article by Mathews, his descriptions of these now "disappeared" items of Aboriginal cultural heritage are invaluable.

Isabel McBryde comments: "In September 1964, I visited Terry-Hie-Hie [sic] and recorded one very weathered carved tree, but saw little trace besides this, of the ceremonial grounds." (McBryde 1974, p.61)

The last bora (buurra) ceremonies for the Gomeroi were recorded in:

- Garah in 1880
- Terry Hie Hie in 1883
- Collymongle in 1890
- Kunopia in 1891
- Talwood (Qld) in 1893 and 1895
- · Gandabluey / Goondablui in 1894; and
- Wee Waa (Wiawa) in 1905

NB: Above list based on Noeline Briggs-Smith (1999, p.2) and O'Rourke (1995, p.25).

An excellent reference on this item of Aboriginal cultural heritage, largely specific to one bora (buurra) of the region, is by Lindsay Black (1941) titled The Bora Ground. This booklet is a study of the Banaway bora (buurra) ground near Collarenebri, where Black was able to describe and extensively photograph many carved trees in situ, as well as several specimens lying on the ground.

Stone (maayama) arrangements (bora grounds) tended to be found on large exposed expanses of granite rock platforms across the eastern reaches of the catchment. These sites consisted of a variety of arrangements involving cairns, standing stones or patterns made from stones (maayama). West of the catchment, Lindsay Black recorded ceremonial grounds made by placing stones in lines forming circles and other types of enclosures similar to the dirt bora (buurra) structures of the Kamilaroi.

Following several years living with Aboriginal people across the eastern reaches of the catchment in the mid-1800s, William Wyndham described a bora (buurra) in 1890 where, "all the circles were marked with stones." (Wyndham 1890, p.38)

The use of stone (maayama) arrangements is almost certainly linked to ceremony and they remain fragile items of Aboriginal cultural heritage. Care should be taken not to disturb, remove or rearrange the positioning of any stones (maayama) of stone arrangements encountered.



Fish Traps

Perhaps the best known fish traps in the Kamilaroi nation are the stone wall structures (badi) of the Darling River at Brewarrina in western NSW. Other fish traps can be found in the Armidale and Tingha districts.

In 1896 Catherine Langloh Parker wrote, "To catch fish they also make small weirs and dams of stones, with narrow passages of stones leading to them. The fish are swept by the current into these yards and there either caught by the blacks with their hands or speared ... traps are eminently successful, many thousands of Murray cod and other fish being caught in them." She added, "The blacks make a bough break beginning on each bank and almost meeting in the middle, across the gap they place a fishing net which folds in like a bag thus forming a fish trap." (Parker 1905)

Flood waters, 19th century clearing by river boat crews and agricultural and urban developments have seen most of the stone wall fish traps (badi) disappear. However, early recordings by settlers recall traditional hunting by both spearing and catching fish in nets (gulay) when a prominent stone in the fish trap was removed. Early records also indicate Aboriginal people built wooden weirs across rivers (bagay) and caught the fish in a centrally located net (gulay).

Thomas Mitchell, wrote on 22 January 1832, "Several weirs for catching fish [that were] worked very neatly stood on ground quite dry and hard". At the time, the area was experiencing severe drought. On 30 January Mitchell also wrote, "The frame of each trellis was as well squared as if it had been the work of a carpenter, and the twigs were inserted at regular intervals so as to form by crossing each other a strong and efficient net or snare. Where these are erected a small opening was left towards the middle of the current probably so that some bag or netting might be applied to receive the fish while natives in the river above drive the fish towards it." (Mitchell 1839)



Fish trap at Brewarrina.

Dreaming Sites and Places of Significance

In the landscape, there are many natural features that are entwined with elements of Aboriginal cultural heritage. These items may be actual landforms such as mountains or waterholes, but they may also be the flora and fauna that are totems and kinship patterns.

Many natural sites help explain elements of what is generally referred to as 'The Dreamtime'. These sites are connected with creation, traditional law and cultural organisation. They may vary from small isolated features such as the 'Tingha Stone Woman' or whole landscape units such as Boobera Lagoon at Boggabilla, NSW. Their interpretation requires the cultural knowledge of Aboriginal people. Often there is little or no material evidence of occupation, but some locations such as Boobera Lagoon have associated artefacts due to its intensity of use.

Boobera Lagoon contains a number of Aboriginal cultural heritage sites including a burial (dhanmurr) ground, scarred trees from a coolamon (bin.guwi) and a canoe (nganda) and extensive stone (maayama) artefact scatters. In addition to the physical sites, there is the recognition of Boobera Lagoon as an Aboriginal place with associations to a significant Dreamtime creation story involving the Kurrea, a huge snake-like animal, perhaps a bunyip, that created the series of billabongs and watercourses, of which Boobera Lagoon is one.

There are also more recent places of special significance such as the site of the Myall Creek Massacre and other historical cemeteries. The Myall Creek Massacre involved the killing of 28 unarmed Aboriginal men, women and children near Myall Creek Station (located between Inverell and Bingara in northern NSW) on 10 June 1838. After two trials, seven of the 12 settlers involved in the killings were found guilty of murder and hanged. The Myall Creek Massacre site now serves as both a harrowing reminder of Australia's colonial violence towards Aboriginal people and an example of modern-day reconciliation. At the time, this was the only massacre for which Europeans were charged, found guilty and punished. The Myall Creek Massacre and memorial site was added to the National Heritage List (no. 79) on 7 June 2008 and is thereby protected under Commonwealth law.

Across the Border Rivers and Gwydir catchments, there are several declared 'Aboriginal Places' where attachment to the landscape by Aboriginal people is recognised and given legislative status. In addition to Boobera Lagoon, there are sites at Terry Hie Hie, Glen Innes, Guyra, Moree, Inverell and Tenterfield to name a few within the catchment.

Dreaming sites and places of significance are scattered throughout the region. For further information or locations, please contact the Local Aboriginal Land Council (LALC) in that area. See page 86 for contact details.





Map showing the Local Aboriginal Land Councils within the Border Rivers-Gwydir Catchment Management Authority area.



Coolamon scar and isolated wetland river channel at Boobera Lagoon.



Myall Creek Memorial Site.

Spears

Spears (bilaarr) came in many shapes and sizes and were made for a variety of purposes from different materials. Spearheads were made of either stone or wood. When making a spear, Aboriginal men would often use fire (wii) to help straighten or harden the spear shaft.

The traditional hunting spear was approximately 150-180 centimetres long and the head was usually an elongated oval shape. Hunting spears were made for killing large animals such as kangaroos (bandaarr) and emus (dhinawan). They needed to be made out of strong hardwood in order to penetrate the skin of kangaroos or the feathers of emus (gundiirr). In some cases the spear point was made from stone (maayama) that was knapped (specially shaped) into a point and attached to the spear with resin and string (buurr), hair, fibre or sinew (dhunbilyabi). Fire was also used to straighten and harden the wooden spear shaft.

Fishing spears (*dhindi*) or three pronged spears were a common hunting weapon for all tribes across Australia. Fishing spears were made out of lighter wood and usually had several barbed points attached. The extra points were either made by splitting the wood along the shaft or by attaching several pieces of wood to the shaft. The extra points were held in place by resin, string (*buurr*) or sinew (*dhunbilyabi*).

Bird hunting spears were made out of light wood and were thrown so that they would hit the birds in flight, damaging their wings and necks, rather than impaling them. Boomerangs (barran) were also used for the same purpose.

Some spears (bilaarr) were made exclusively for fighting, and were made from hard woods and had barbs on them so that they could not be removed. The only way to remove the barb was to push it through the skin, or to break it off, leaving the barb in the flesh.

Some fighting and hunting spears had stone (maayama) flakes or chips glued along the edge. In some cases the teeth of animals were used. The stone flakes used for this purpose were mostly of silica or grey-black chert. These were tied on with string or animal sinew (dhunbilyabi) and glued in place using natural resins. The resins were collected from plants (for example Xanthorrhoea – Grass Tree (dhalan) and spinifex (garaarr)) and could be softened and worked into place over a small fire (wii). The resins would turn hard as they cooled down. When a spear struck its intended target, in some cases the stone (maayama) flakes broke off, embedding themselves inside the victim. They were extremely hard to dislodge or remove and these flakes ultimately caused infection and the victim eventually succumbed to the attack.

Specially decorated spears were used at tribal corroborees or at a bora during men's initiation (buurru) ceremonies. These spears (bilaarr) were highly decorated using ochres and feathers (yadhaarr) local to the tribe who made them. The spear head was decorated with multiple teeth or points of various designs along the edge.



The biodegradable nature of wooden spears means they are usually not found intact in the landscape. Stone spear points are more likely to be found.







 $Spear\ Heads.\ (Source: Private\ collection)$

For more information go to 'Kimberley Points' on page 40.

Woomeras

Woomeras (wamara) or spear throwers were often used with spears (bilaarr) to increase the distance they could be thrown. They were made out of hard wood and are usually 45-150 centimetres long. They have a peg (yiya) at one end where the spear fits in and the thrower holds it by the other end to throw the spear. Using a woomera (wamara), an expert thrower can get two to three times the distance he could throw without using one.

Woomeras (wamara) work according to the principle of leverage – the peg (yiya) is the fulcrum, the spear (bilaarr) is the load and the effort is provided by the thrower.

Some woomeras (wamara) could also be used to produce fire (wii) by rubbing the edge against another softer piece of wood while keeping some kindling nearby.

Studies have shown that in the highland areas of the New England, woomeras (wamara) were not used at all because trees were closer together, enabling hunters to get close to their quarry and there is no evidence of woomera scars (yurrun) on trees on the tablelands until the flatter, more open terrain begins.

Woomera (wamara) is a name commonly used instead of spear thrower, although it is a name used only by some language groups in parts of New South Wales.



Woomera. (Source: Private collection)

NB. The town of Woomera in South Australia was established in 1947 when Australia was working with the British to develop rockets and missiles.





Emu Callers

Emu callers (buubuwin) are short versions of a Didgeridoo. Usually about 30 centimetres in length, emu callers (buubuwin) were traditionally used to hunt emus (dhinawan) or collect eggs from their nests (gawu).

When one strikes an emu caller (buubuwin) at one end with the open palm of the hand (mara) it makes a deep hollow sound that arouses the emu's (dhinawan) curiosity. This lures it away from the nest (gaarimay) so that the Aboriginal people could safely remove some of the emu eggs which were highly sought after.

The emu caller (*buubuwin*) was also used to lure emus out of the bush and make them easy prey for a waiting hunting party.





 $Emu\ caller.\ (Source: Private\ collection)$

Boomerangs

There are two types of boomerangs (barran) – returning and non-returning. The returning boomerangs (gulagarranba) were invented by the Aborigines thousands of years ago to hunt animals and they are unique to Australia. Because of its wide arc of flight, the returning boomerang (gulagarranba) was never used in warfare. The non-returning boomerang (barran) would strike with greater force and could be thrown further. It was used in both hunting and warfare.

The boomerang (barran) is a wooden implement used particularly for hunting and fighting, but also for digging sticks (ganaay) and making music as Clap Sticks. The boomerang (barran) is a powerful weapon. Its spinning action makes it strike its target with more force than a non-spinning projectile. Boomerangs (barran) were not used in all parts of the tableland region due to the close proximity of trees. The word 'boomerang' came originally from the Tharawal people south of Sydney.

The returning, or come-back, boomerang (gulagarranba) was frequently used for hunting small birds. They are made of hard wood and are roughly V-shaped, approximately 30 to 75 centimetres in length, with arms slightly skewed. The angle between the arms ranges from about 90 to 160 degrees. Both edges of the arm are sharpened. One surface is flat and the other is slightly convex.

When boomerangs (barran) are thrown they are held vertically. They are thrown on a trajectory parallel to the ground. When first thrown, the boomerang stays at the same level, inclines to its flat side, rises and curves to the left, and, still curving, glides back to the thrower. When launching the boomerang, the thrower flicks the boomerang (barran) with a wrist action at the same time as throwing it forward. The boomerang (barran) spins about 10 times a second at about 100 kilometres per hour, and can be thrown about as far as 150 metres.

The non-returning boomerang (barran) is straighter and heavier. It ranges in length from 61 to 91 centimetres, and was used in war and for hunting large game. It could kill an enemy or bring down game at a distance of 150 metres. Their design allows them to be thrown further and they keep on spinning, even when they hit the ground.

Boomerangs (barran) are made from hardwood. Mulga (Acacia aneura), a type of wattle, is commonly used in central Australia, whilst Sheoak (genus Allocasuarina) is often used in southeast Australia. Depending on the angle of the boomerang (barran), the piece of wood is selected because of a curve in the tree trunk or the way a branch comes off the trunk. The piece is cut off and split so that it is possible to make two boomerangs (barran). Before they had metal axes and hatchets, the boomerang (barran) makers used stone axes (yuundu) and adzes to cut out the boomerangs (barran), and they finished them by using stone scrapers (gayn). The shape of the boomerang (barran) was cut out of the wood, sometimes using another boomerang (barran) to match the design. Often the boomerang had to be put over a small fire (wii) so that it could be bent into shape, particularly to twist the ends up or down. Traditional designs were sometimes painted or engraved on the surface of the boomerang (barran).



Shields

Shields (burriin) were used throughout Australia and came in many shapes and designs. Some were used for fighting and others for ceremonial purposes.

Parrying shields warded off spears (bilaarr) and blows from boomerangs (barran) or clubs (bundi). The traditional shield (burriin) was approximately 75 to 90 centimetres tall by 10 to 15 centimetres wide, and was used in tribal warfare. They were carved from solid wood and easily deflected missiles. Parrying shields were also useful for close-in fighting and could be manoeuvred easily to knock an opponent off balance. On the concave inner face of the shield, a hollowed handhold was cut within the single piece of wood. The shield was usually cut out of the bark and inner layer of a tree, leaving a scar (yurrun) on the surface of the tree.

Broad-bark shields were thin but light and easy to handle. Their light weight was not a handicap because they were not meant to stop a spear (bilaarr). It was necessary to regularly renew them because they soon became damaged through use, or their fragile covering dried and warped. The handle was usually a wooden stem bent through two holes placed near the centre.

Whilst some shields (burriin) were plain, others were decorated with geometric patterns which were incised or painted, often in white, with bold bars added, perhaps in red (guwaymbarra). The designs linked the bearers with their Dreaming ancestors and totemic spirits, to help provide strength, security and protection. The sizes of shields (burriin) and their decorations varied from region to region.









 $Shields.\ (Source: Private\ collection)$





Clubs

The nulla nulla (*guthurru*) is a weapon either used at close range or thrown from a distance. It was used only in war or for inflicting punishment. When used for punishment, the person to be punished was given a shield and had to run through a double row of warriors of the tribe, which would use a nulla nulla (*guthurru*) to hit him or her.

Their shape varied between tribes in this catchment and they could be used as a club (bundi) or throwing stick (wagarraa). They were made by selecting a suitable piece of wood from the branches or roots of trees, cutting them into shape with a stone axe (yuundu), chiselling off rough areas with a stone (maayama) tool, grinding them smooth with a grind stone (giba) and hardening them in hot ashes. They could then be oiled, painted with ochre or inscribed with decorations. The handles taper to a point near the handgrip. Towards the other end, the handle widens into a bulb. Like the boomerang (barran), the nulla nulla (guthurru) was used to light fires (wii) by spinning it quickly with downward pressure in the surface crack of a dry log until a spark was ignited.

The lil lil is a bladed club well suited to shallow carving. These weapons were typically carved with two to four rows of narrow parallel grooves, curving around each side of the lil lil and enclosing designs such as fluted circles and ovals and emu (*dhinawan*) tracks. Many lil lil clubs were stained with vegetable juice and polished smooth, a custom that was unique to weapons of eastern Australia. In some cases lil lil clubs were coloured with red (*guwaymbarra*) ochre.











 $Clubs.\ (Source: Private\ collection)$





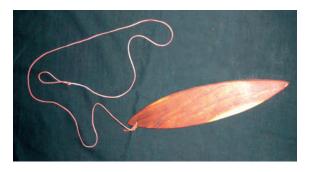
Bull Roarer

A wind instrument used mainly for ritual or ceremonial purposes. Bull roarers (garrarana) were made from a flat piece of elongated oval-shaped wood suspended from a string (buurr), vine or sinew (dhunbilyabi) tied to form a 'handle' at one end. Bull roarers were usually 35 to 45 centimetres long by 7.5 to 15 centimetres wide and were decorated with paint and incised totemic designs in which spirals were a dominant feature. A bull roarer is whirled around the head at arm's length by the string, making a whirring sound which grows louder and louder the faster it is swung.

The bull roarer was considered a sacred object that was hidden from sight and used only during initiation (buurru) rites and other important ceremonies. Only men who were fully initiated were allowed to use them. Only the wisest men were able to understand what the bull roarer (garrarana) said, as it was the voice of a great ancestral spirit – the voice of the Dreamtime. At the time of his initiation (buurru), the candidate left the women's part of the camp (maraay) when he heard the bull roarers wailing in the distance. It was the voice of the spirit to whom he was to be dedicated, who would swallow him and reject him. This was the ritual of death and rebirth into the sacred life of a grown man.

Some of the more common uses for a bull roarer (garrarana) were:

- · to call in Byame (the Creator) before a ceremony or corroboree
- to ward off evil spirits from a site or gathering
- · to call the candidate to leave the women's camp and go to the initiation site
- to warn the uninitiated to keep away from a men's site (bora) (buurra)
- to express feelings of friendship between initiated men
- to symbolise the totemic ancestors of the tribe or of the Creator spirit himself.



Bull Roarer. (Source: Private collection)

Clap Sticks

Music and dance were a constant part of the Australian Aboriginal way of life. They were a means of passing on sacred lore, and of telling tales about everyday events. Clap sticks were made from any straight piece of timber. The root of a tree was ideal, as tree roots are hard, strong and straight. Clap sticks were played by both men and women at corroborees and were used as a means of 'keeping the beat' of a traditional song. Some clap sticks were specifically prepared and decorated for spiritually significant celebrations. Clap sticks were sometimes used to accompany a Didgeridoo for keeping the rhythm at corroborees.





Clap Sticks. (Source: Private collection)

Coolamons









Coolamons of various sizes and uses. (Source: Private collection)

Coolamons (bin.guwi) have a wide range of uses, such as carrying tubers, roots and other food, carrying new-born babies, collecting water, winnowing seed to remove husks, sun protection and sometimes for digging up shallow plants or grasses.

After the bark (nganda) for the coolamon was removed from the tree, it was soaked in water and moulded into shape, sometimes being tied with string (buurr) to hold its shape, then dried beside a warm fire (wii). It could then be engraved, painted or etched if desired.



On 17 January 1832 Major Mitchell wrote:

"He soon came upon a tribe of about thirty men, women and children, seated by the ponds, with half a kangaroo and some crayfish cooked before them, and also a large vessel of bark, containing water." (Mitchell 1839)

In 1896 Catherine Langloh Parker wrote:

"The two principal drinks were ... water sweetened with honey and another made of the flowers of the Coolibah or Bibbil soaked all night in binguies (bin guwi) canoe shaped wooden vessels – of water." (Parker 1905)

She also reported that,

"Shields were of three kinds; a narrow kind made of hardwood, a broad flat kind of kurrajong and a medium sized one of birah or whitewood." (Parker 1905)

Message Sticks

Throughout Australia, Aboriginals had over 200 different languages and 600 dialects, but no written language. For tens of thousands of years, communication of information between all these different groups was often through a message stick (dhulu). Each stick was carved in a way that would help the carrier remember the message and prove to the recipient that the information was genuine. Message sticks (dhulu) enabled complex or very long messages to be communicated between people, particularly those who acted as 'diplomats' or were multilingual and used as translators.

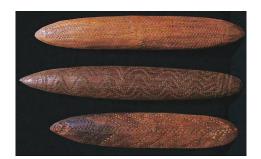
Messages were painted, carved or burnt on a stick, which was then transported by hand. One who carried the message stick (dhulu) was traditionally granted safe passage and protected entry to other nations' territory. The message stick operated like a visa or passport.

Those who found the messenger on their land had an obligation to safely deliver the messenger to the Elders of their people. The messenger would then convey the message to the Elders. These Elders then had an obligation to ensure the messenger was granted safe passage across their land – either returning to his own people or moving on to another Aboriginal nation to spread the message further.

The messages inscribed on the stick were primarily 'prompts' for the messager, so that the message would be conveyed consistently to each different nation's Elders. Typical messages were announcements of ceremonies, disputes, invitations, warnings, meetings and events.

The message stick carried the mark of the sender and identified the carrier and was colour coded. Some message sticks (dhulu) have been described as being 17.5 centimetres long and 2.5 centimetres at the bottom, tapering to about 1.3 centimetres at the top. Some message sticks were flat, with sides slightly rounded off, and had markings on both sides. Other types were elongated and oval and ranged from 20 centimetres to over 350 centimetres in length.

Some message sticks (dhulu) carried the same message every time, such as a bora (buurra) message stick (dhulu) that was used to convey information to participating males regarding the convening of a bora initiation ceremony.









Message Sticks. (Source: Private collection)



Carved message stone. (Photo: Sue Hudson)



Broken stone message. (Photo: Sue Hudson)



Didgeridoo

The didgeridoo was originally a musical instrument of the north Australian Aboriginal, in particular from the East Kimberley region in Western Australia, the northernmost parts of the Northern Territory and east to the Gulf country and the Queensland border. Due to its popularity and uniqueness, the use of the Didgeridoo has now spread to many other tribes across Australia.

It is sometimes played in conjunction with clap sticks and boomerangs (barran) (played the same way as clap sticks) in corroborees, or the player tapped out rhythms on the side of the didgeridoo whilst playing.

The didgeridoo is a straight, hollow piece of timber, usually with a slight taper and is played like a trumpet. The mouth piece is part of the log and formed with the use of bees wax or resin. It is made from a tree branch or trunk, which has usually been hollowed out by termites. Termite nests are abundant in the northern parts of Australia and in many parts of the Border Rivers and Gwydir catchment area, which is why the didgeridoo is a northern Aboriginal instrument. Common species used to make didgeridoos within the Border Rivers and Gwydir catchments include smooth bark apple, spotted gum, ironbark, coolibah, river red gum, bloodwood and various species of box trees.

The length of the instrument varies but is usually from 1.0 to 1.5 metres long, although there are instruments 2.5 metres or longer, used in ceremonies.

To make a didgeridoo, the desired length is cut, the bark is stripped from the outside and any termites (baamagaaliyan) are removed by banging the log on the ground. The preferred timber is Eucalyptus although other types such as bloodwood and bamboo have been used. A rim of bees wax (mayaarr) is sometimes applied to the mouthpiece end of the instrument to help make it more comfortable to play and create a seal over the end piece. The instrument is sometimes decorated with ochre or painted with symbols of animals or totems of the local tribe or of the player who plays the instrument.



Didgeridoo. (Source: Private collection)

As the didgeridoo made its way throughout Australia, various tribes made laws associated with it. In some tribes, the use of the didgeridoo is considered sacred and is played only at corroborees and only by designated male tribal members. Over a period of time the didgeridoo has become a recognisable musical instrument, and is played at major cultural events (NAIDOC Week, Welcome to Country etc.) throughout the catchment.

In most cases the didgeridoo was played by men only and in some tribes women were forbidden to touch a didgeridoo. If these tribal laws were broken severe penalties were sometimes enforced including banishment from the tribe.

String / Weaving

Fibre nets (*gulay*), traps, baskets and bags (*man.garr*) were used extensively for fishing and hunting. In earlier times, fibre objects were crucial for the sustenance of family groups. Some baskets and bags (*man.garr*) were so tightly woven that they could carry honey and liquids. They were mainly used for collecting and carrying food and sometimes for carrying babies. String bags (*gulay*) were also used to sift seeds (*yiya*).

Bags (man.garr) were made from bush string (burr), cordyline and knotted grass stalks. Aboriginal women used swamp reeds (dharill), native flax, sedge grasses, water vine and sea grasses to make baskets, mats and nets. The leaves or other parts of these plants were collected and torn into strips to prepare the weaving fibre. The strips were dyed yellow (gidjiirr), red (guwaymbarra) or brown (gunagunaa) using dyes from other plants before the strips were prepared for weaving.

Whilst weaving was mostly women's work, the men were often involved in making fish and bird nets. Fish traps (badi) were made out of bulrushes (burrarra) growing alongside wetlands, and bird nets (gulay) were usually made from reeds (thariil) or string (buurr). Nets (gulay) were used around lagoons and wetlands to catch birds. The nets were cast at sunrise or sunset when birds were low-flying. Women and children were strategically positioned and would make loud noises to stir the birds so that they flew into the nets. It was the men's job to retrieve the trapped birds from the nets and recast them for the next catch.



Most weaving was undertaken by coiling, twining and looping grasses, reeds and vines. As women had to earn their position in the community, weaving baskets and bags (man.garr) helped to define their knowledge and status in Aboriginal communities.

Aboriginal women's basket work benefited from a significant amount of knowledge being sourced, collected and passed on. Highly regarded weavers passed on their methods of collecting materials and different weaving techniques to other generations of women and this strengthened the tradition of weaving over time.

Fibres and weaving techniques varied between tribes due to their locality and the availability of material. In the New England region, reeds and other aquatic plants located in lagoons and in rivers (bagay) were a popular choice of material.

String (buurr) was made from the fibres of various plants or from the hair or fur of animals and humans. It was then woven into ropes to give it increased strength. String (buurr) had many uses, including making baskets, dilly bags (gulay) and traps. It was also used for making rope (buurr) or for binding axe (yuundu) or stone (maayama) heads to handles or shafts of tools, weapons and implements.



String woven bags. (Source: Private collection)

Skin Cloaks



This cloak is made from eight possum skins decorated with a series of lines set in a field of cross-hatching. (Source: Private collection)



Cloaks (guudii), usually made of possum (muthay), kangaroo (bandaarr) or koala (guda) skins, were worn with the fur inside during the day. Aboriginals living in the southern half of Australia, including those in the Border Rivers and Gwydir catchments, used them as rugs at night during the winter months. The skins were scraped, tanned in the sun, and then sewn together using vegetable fibre or animal sinews. A design was cut in the skin with a shell knife (nhaayba), and the grooves were painted with red ochre (guuwarr) to make them distinctive. The motifs included herringbone, chevrons, bird-tracks, concentric figures, line patterns, and animals. These motifs were unique to the craftsmen and women who made them, and to the tribes that the owners of the cloaks belonged to. The skins of up to 80 possums (muthay) were sown together to make heavy cloaks (guudii), which were so highly prized that people were often buried in their cloaks.



Weet Weets



Weet Weet.

A weet weet ('wit-wit') was a throwing toy shaped like a giant tadpole (nguuluwi). Weet weets weighed about 60 grams and were about 60 centimetres long.

The throwing of the play-stick was a popular activity among Aboriginal people in some parts of Australia, and contests were held to see who could throw the weet weet the furthest.

The weet west was often referred to as the 'kangaroo rat' (gunharr) because when thrown correctly its flight resembled the

leaping action of this small marsupial. The 'tail' of the weet weet was made from a flexible stick and was so supple that, when thrown, it could bend almost in half.

After being thrown onto (or through) a small mound or pile of bushes, a weet weet could leap along the ground in a succession of bounds, spin in a 'bouncing' action as it turned end over end, travel in a parabola and strike the ground before travelling further. It could also simply be thrown to slide along the ground.

Digging Sticks

Digging sticks (ganaay) also called yam sticks, were long with one end pointed and the other end much broader and flatter. Often they were hardened over a fire (wii). Widespread throughout Australia and used only by women, these digging sticks were carefully fashioned from hardwood. With digging sticks (ganaay) women collected edible tubers (tampanta) and roots (warran), dug out small marsupials and reptiles, opened up termite mounds or stripped bark from trees (tharraa) and dug earth ovens.

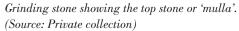


Far Left: Digging Stick. (Source: Private collection)

Left: Yam Sticks. (Source: Private collection)

Grinding Stones







 $Broken\ mill\ stone.\ (Photo: Sue\ Hudson)$

Grinding stones (giba - small) (dhayurr - large) are slabs of stone (maayama) that Aboriginal people used to grind and crush different materials. They were among the largest stone (maayama) implements of Aboriginal people.

Grinding stones (giba/dhayurr) were usually made from abrasive rock such as sandstone or coarse-grained basalt or quartzite. The stones are sometimes found upside down, with the grinding surface facing the ground to preserve it from the weather. Upper and lower grinding stones (giba/dhayurr) are not necessarily found together.

Some types of food are poisonous in their natural state, and could only be eaten after being crushed and washed. Milling seeds on large flat grinding stones (giba/dhayurr) was common practice. Leaves and bark were crushed on grinding stones (giba/dhayurr) to make medicines. Bracken fern roots, bulbs, seeds, tubers and berries, as well as insects, small mammals and reptiles, were crushed and pulped on grinding stones (giba/dhayurr) before cooking.

Grinding stones (*giba/dhayurr*) are usually found where Aboriginal people lived and camped (*maraay*). For example, they have been found in shell middens and rock shelters, and at open camp sites (*maraay*) and rock art sites.

Rocky outcrops are rare in some regions, so the Aboriginal people imported slabs of suitable stone (maayama). Large grinding stones (dhayurr) were rarely moved. Aboriginal people carried as little as possible when they moved camp, and they often left heavy items such as grinding stones (giba/dhayurr) as permanent camp items to be used on the next visit.

Natural processes such as wind and water erosion may disturb grinding stones (*giba*), but human interference poses the greatest threat. Development and earthworks may disturb Aboriginal sites, and ploughing can break or cut stones.

Grinding stones (*giba/dhayurr*) are unmistakable Aboriginal artefacts and many have been collected as souvenirs.



Lower Stones (Characteristics)

- Stones can range in size from very small (150 millimetres across) to very large (700 millimetres across) and can weigh several kilograms. They can be any shape.
- Grinding stones (*giba/dhayurr*) made from sandstone or quartzite are usually flat. Basalt stones can be more rounded.
- Grinding stones (giba/dhayurr) usually have a worn depression varying in shape from
 a circle to a long thin groove, depending on their size. Some grinding surfaces have
 decorative lines etched into them.
- The depth of the grinding area may vary, and a hole may have formed where the stone (maayama) is completely worn away.
- There are sometimes traces of food or pigments on the stone (*maayama*). Fats may leave glossy stains.
- Depressions or grooves can occur on different sides of the same stone (maayama).

Upper Stones (Characteristics)

- The smaller upper stones (giba) can be flat or rounded. They may have more than one smooth surface.
- They are usually small enough to hold in one hand.
- They may be damaged on the working edge if they were used as a pounder.
- Aboriginal people also used small grinding stones (giba) to crush soft rocks and
 clays (such as ochre) to make pigments. The pigments were used to decorate bodies
 for ceremonies, to paint rock art, and to decorate objects such as possum skin cloaks
 (guudii) and weapons.

Rainmakers

In some tribes a designated Rainmaker was appointed, who was responsible for making rain appear. Tribes were dependent on water for survival so the role of the Rainmaker was very important.

The Rainmaker used (amongst other things) a rainmaking device (also called a rainmaker) similar in appearance and length to a didgeridoo, with the ends sealed or covered. The ends were sealed with animal hide, bee's wax (mayaarr), resin or other locally sourced materials.

A series of small holes were made along the shaft by using a sharp pointed bone to allow the sound within to be heard. Inside the core of the rainmaker, seed pods (dhinggal), small rocks or grain (guli) were placed prior to the sealing off of each end. During the Rainmaker's ritual, the rainmaker would slowly be tipped end over end, making the sound of rain (gali) falling.

In many cases the rainmaker was constructed of hollow bamboo, as they originated from coastal or aquatic tribes. In some cases the tube would be decorated according to local tribal custom.









Art, Carvings and Craft

Aboriginal art has developed in one form or another, for well over 40,000 years. Traditional art in its many styles and forms was a most significant feature in the lives of all Indigenous Australians.

During the traditional period, it was the privilege of chosen men within each tribal group to paint, sculpt or carve. Women used their artistic skills in collage making, weaving dilly bags, designing and decorating body ornaments, and in some areas, cloaks. Almost all traditional Aboriginal art forms had a cultural purpose. Art was a means of showing one's identity (i.e. one's totem), providing entertainment or instruction (i.e. as a support to storytelling), aiding communication (i.e. message sticks) and a form of self-expression.

In traditional times, as is evident at various locations throughout the Border Rivers and Gwydir catchments, Aboriginal art was mainly confined to rock surfaces and body painting for ceremonial occasions (e.g. *buurra* and corroborees). Aboriginal art has expanded to include carvings, sculptures and canvas paintings to meet the demands of the modern day tourism trade and commercialism.

Whilst there were many forms and styles of art used by Aboriginal people in traditional times, most styles were associated with the localities in which they were produced. Two of the most recognisable styles in Aboriginal art are the 'dot' and 'cross-hatching' styles. Other specific styles portrayed traditional spiritual figures relating to particular geographical areas, such as the Wanjina (in the Kimberleys) and Mimi (in Arnhem Land) figures. Another popular style was X-ray painting, where the internal organs of animals were drawn. It is clear from paintings done in this style that Aboriginal people had a good knowledge of animals' anatomy. *Stencilling*, where the outline of a hand, for example, was drawn and *iconology*, where symbols were used to tell a story or message, were both common styles of art.

Since the beginning of the twentieth century there has been a gradual increase in interest in Aboriginal art from both Indigenous and non-Indigenous people which has resulted in more and more artists emerging and being recognised as artists of distinction.





X-ray art.

Cross-hatching art.















Aboriginal people used natural materials from the area in which they lived. The pictures below show intricately carved pearl shells from the northern coastal regions of Western Australia.







Artwork carved into pearl shell. (Source: Private collection)

Carved Emu egg.

The Boab/Baobab (Adansonia gregorii) tree, otherwise known as the 'bottle tree', is native to Madagascar (six species), Arabia, Africa (each have one species, shared with Madagascar) and Australia (one species, unique to Australia). It grows only in the Kimberley region of West Australia and the Victoria River area of the Northern Territory. It has a large trunk and its branches are spider-like in comparison to its bulky trunk. Often trees are seen growing in "triplicate" having three trunks intertwined.

Aboriginal people used these trees for shelter, and collected their large nuts for food and medicinal purposes. In more recent times the nuts were used for painting and carving. The way in which the nuts to be used for artefacts are picked, is vital to the finished product. The nuts must dry on the trees and be picked before the wind can send the nuts crashing to the hard earth below.







Boab Tree.

 $Carved\ Boab\ nuts.\ (Source: Private\ collection)$

Carved Boab nuts have gained popularity amongst tourists and collectors due to the various designs that have been carved onto their outer surface.





