Urumbal Pocket

Gumbulumba means a sacred place,
Far above the plains,
high in the forest ranges,
To which women came,
To make their special business,
And share their wise old tales,
Of ancient history of the tribe,
Away from ears of males,
They shared their hopes for happiness
And shared their troubles too,
And talked of sacred women's things,
I can’t reveal to you.
They learnt about bush medicine,
Passed down from times of old,
And sat around their fires,
And of the Spirits told.
And sang the praise for all the days,
For their children and their birth.
As they sat beneath the shady trees,
Eating of their fruit.
Where the sparkling waters tumble,
Flowing on down to the sea,
You can feel their spirits present,
And know that they still be,
Sharing Gumbulumba,
For all eternity.

Jean Phillips, Ravenshoe Writers’ Club

Introduction

The principal site used to investigate the pre-European archaeological record of the Evelyn Tableland is the open site of Urumbal Pocket located on Koombooloomba Dam (Fig. 1.1). The aim of constructing a long-term history of Aboriginal occupation at the Urumbal Pocket open site is to create a small window of images into a pre-European Aboriginal rainforest society. Urumbal Pocket’s long-term occupation history is used here as a backdrop to the construction of occupation histories at two archaeological sites used in the more recent past by Aboriginal people, discussed in Chapters 7 and 8. This chapter commences with a background to the archaeological investigations at the Urumbal Pocket open site, describing the methods employed in the excavations. This is followed by a discussion of the site’s stratigraphy and chronology. The assemblage analyses are presented in Chapters 5 and 6.
Figure 4.1 Map of Culpa Lands (historical gold field) in the upper Tully River region and the location of the Urumbal Pocket open archaeological site (circled) on Koombooloomba Dam.

Source: Courtesy of L. May.
Background to the excavations

The name ‘Koombooloomba’ was originally given to the area around the Culpa goldfields on the upper Tully River by gold prospector Michael O’Leary (Fig. 4.1), whose bush diary was discussed in Chapter 3. According to O’Leary, the name Koombooloomba came from the Jirrbal word Gumbulumba, meaning ‘sacred women’s place’, which is supported by Jirrbal oral traditions (Coyyan 1915; M. Barlow, pers. comm., 2004). The first European believed to have stopped and camped in the area of Urumbal Pocket was Edmund Kennedy, whose fatal journey was referred to in Chapter 3. Many of the streams in the Koombooloomba area bear the names of members of the Kennedy party, for example Carron Creek (after a botanist) and Goddard Creek (after a convict) (Fig. 4.1).

Historical reconstructions of Kennedy’s journey in the rainforest region described by Beale (1977) indicate that the party crossed the upper Tully River in the vicinity of Urumbal Pocket:

The next day they crossed the Upper Tully at a spot where they could ford it more easily. Some of the men waded over first, stumbling amongst the round submerged rocks; the horses were then driven across, and caught and hobbled as they emerged on the other side; the sheep placidly followed. A camp was made on the west bank, and there they stayed a day resting the animals and their own bodies, weary and itching from leech-bites. Then on 12 August they set out again in order to get away from those eastern watercourses: it was a more than welcome experience for them, because they were able to go due west without serious obstruction (Beale 1977:181).

The Cardwell Range, with elevations greater than 1,000 m, separates the coastal plains from the Evelyn Tableland. Reconstructions of Kennedy’s rainforest journey suggest that his party partly followed Aboriginal tracks to manoeuvre through dense rainforests in their journey into the upper Tully River area (Beale 1977:181–182). A track used by Jirrbal people to travel to the lower Tully River area, for ceremonies as late as the 1930s, was identified by elders as the probable route used by Kennedy’s team to cross the difficult topography and dense vegetation of the Cardwell Range (Duke and Collins 1999). Campbell’s 1922–23 survey maps of the upper Tully River district identify the same track as part of ‘the main Aboriginal track to the coast’ and other early maps show it as a ‘pack track’ (Craig 1947). In addition, during the clearing of the Misty Mountain Trail in the 1990s—a walking track that crosses the Tully River and the Cardwell Range to connect the Evelyn Tableland with the coast—many slate seed grinding dishes and slate and basalt ground-edge axes were observed on the ground along a track still visible through dense rainforest (A. Graham, pers. comm., 2007).

Whether or not Urumbal Pocket was where Kennedy crossed the Tully River is yet to be established, but what is clear is that Aboriginal people used this place in the past. An extensive stone artefact scatter on the surface and rich subsurface cultural deposits gave rise to a hypothesis that Aboriginal people used Urumbal Pocket, before and/or after crossing the river, to proceed along a track over the Cardwell Range and down to the coastal lowlands.

Urumbal Pocket has attracted some interest among local historians in recent times as an example of an open forest pocket within dense rainforest:

Pockets [sic], like Urumbal Pocket, were areas of land cleared in rainforest scrub by Aborigines using fire-stick farming methods. This allowed grass to grow and attracted fauna such as wallaby’s [sic], used for food. They became resting places for early settlers to spell horses. Aboriginal tracks up from the coast linked one pocket to another and many small towns grew up on these sites. As examples, Yungaburra is sited on Allumbah Pocket and Priors Forest Pocket became Atherton (Ravenshoe Writers’ Group 1999:29).

As discussed in Chapter 2, early European settlers took advantage of open forest pockets and tracks through the rainforest kept clear by Aboriginal rainforest people, thereby accelerating European settlement of the rainforest.
Cultural heritage investigations in the Koombooloomba area

Previous anthropological and archaeological surveys in the Koombooloomba area were carried out in the context of a cultural heritage assessment by Duke and Collins (1999). Their study was undertaken to assess the cultural heritage of selected areas, as part of background research undertaken for a proposed ecotourism project at Koombooloomba Dam. The report includes the results of an archaeological survey and an assessment of the archaeological evidence in a number of areas in the vicinity of the dam and around its shoreline. Urumbal Pocket is referred to as one of a series of pockets along this stretch of the Tully River, originally sketched by surveyor Campbell in 1922–23 (Fig. 4.2).

Figure 4.2 Campbell’s survey map from 1922–23 (left) and aerial photograph from 1951. Red triangle indicates the location of the archaeological open site at Urumbal Pocket.
Source: Produced by J. de Lange.

Urumbal Pocket is not within the areas investigated in the ecotourism project and, as a result, was not visited by Duke and Collins. However, eucalypt forest pockets in the area (see Fig. 4.2 above) were generally considered to probably contain significant archaeological sites. This assumption was based in part on surveyor Campbell’s note of a ‘nigger camp’ [sic] in another forest pocket along the river. It was also based on the discovery of a substantial archaeological open site opposite a series of pockets of which included Urumbal Pocket (Pentecost in Duke and Collins 1999).

Archaeological surveys

Koombooloomba Dam is located approximately 40 km south of Ravenshoe and was built in the late 1950s for the purposes of generating hydroelectricity. The dam wall is 35 m above the Tully River channel. As a result of dam construction, sections of the old course of the Tully River became submerged. In 2002, Richard Cosgrove and Judith Field undertook surveys along the exposed edge of Koombooloomba Dam, with a team of university students and traditional owners. A lack of rainfall in 2002 had resulted in dam water levels falling below 25% capacity, thereby exposing a band of bare soil (Cosgrove et al. 2007:155). The aim of the survey was to find archaeological open sites suitable for excavation. A second aim was to document Aboriginal surface finds, using a Global Positioning
System (GPS), to gain an understanding of past Aboriginal occupation in the upper Tully River area (R. Cosgrove, pers. comm., 2004). As a result of the survey, many Aboriginal stone artefacts were found on the band of bare soil exposed around Koomboolooomba Dam (Fig. 4.3). In total, 31 artefact scatters, 66 axes, and 34 broken axes were recorded in approximately two-thirds of the dam margin (Stevens 2004). The artefact scatters are composed of cores, flakes and broken flakes, mainly of quartz, crystal quartz, rhyolite, and small amounts of fine-grained raw materials such as chert, jasper, and silcrete. Ground-edge tools, particularly basalt and slate axes, are also common on the exposed soil surface (Fig. 4.4).

Figure 4.3 Surface finds and archaeological stratified sites located in surveys around Koomboolooomba Dam during 2002–03.
Source: Courtesy of R. Cosgrove.
Other implements include complete and broken *morahs* or incised slate grinding plates (Fig. 4.5) and *moogis* or top stones—tools associated with toxic nut processing previously described in the literature (e.g. Colliver and Woolston 1966, 1980).

Figure 4.4 Example of a ground-edge basalt axe found on exposed soil at Koombooloomba Dam.

Source: Photograph by R. Cosgrove.

Figure 4.5 Example of incised slate grinding stone (*morah*) found on exposed soil at Koombooloomba Dam.

Source: Photograph by R. Cosgrove.
In addition to stone artefacts, pieces of flaked and unmodified glass were also located on the surface of the bare soil exposed around the dam's edge (Fig. 4.6). Their presence may be an indication of Aboriginal people using this remote area after the arrival of Europeans to the coast. This suggestion is supported by documentary sources and jirrbal oral tradition (Duke and Collins 1994, 1999; M. Barlow, pers. comm., 2005). According to these sources, the area around the upper Tully River became a refuge area for Aboriginal people in the late 1800s (Duke and Collins 1994, 1999; M. Barlow, pers. comm., 2004). The archaeological surface record from Koombooloomba Dam thus demonstrates that this part of the rainforest was probably frequently used by Aboriginal people in prehistory and into the early contact period.

Figure 4.6 Flaked glass artefacts found on exposed band of soil at Koombooloomba Dam (scale=1 cm) (GK/7607, 7601, 7602, 7600).
Source: Photograph by P. Saad.

As a result of the surveys and analyses of documentary sources, two archaeological open sites, Urumbal Pocket and Goddard Creek, were identified at Koombooloomba Dam. One rock-shelter, Murubun, was relocated in the transition zone between sclerophyll and rainforest. All are within the traditional lands of the jirrbal people. The Urumbal Pocket site has been the subject of the most extensive archaeological investigations. All excavation work at Urumbal Pocket was directed by Richard Cosgrove and Judith Field. The stone artefacts and the carbonised plant remains recovered from the excavations were subsequently made available for analysis as a component of the research presented herein.

Site description and setting

The eucalypt pockets that include Urumbal Pocket were first described by Campbell in 1922 as a patchwork of open sclerophyll forest and rainforest (Campbell 1923). The archaeological open site (Fig. 4.7) abuts a large pocket of Eucalyptus spp., Casuarina spp., Xanthorrhoea spp., and sedges, which in turn borders rainforest approximately 170 m from the archaeological site and the dam's current water edge. This vegetation structure marks the transition zone between a wet sclerophyll forest patch and dense rainforest (Cosgrove et al. 2007).
The spur located in front of the eucalypt pocket, which includes the archaeological site, is intermittently flooded and exposed depending on the fluctuating water levels in Koombooloomba Dam. Raw materials in the surface collection include quartz, crystal quartz, rhyolite, chert, slate, basalt, and glass. During the archaeological excavations, a series of 10 test pits were dug along a 150 m transect perpendicular to the site in order to establish the extent of archaeological deposits and stratigraphy away from the spur. The test pits were placed at the interior edge of the border between sclerophyll and rainforest, the wet sclerophyll pocket centre and the outer edge, respectively. The soil was sieved and charcoal samples were obtained from all pits and at various depths (R. Cosgrove, pers. comm., 2004). Radiocarbon dated charcoal samples recovered from the test pits suggest that fire has influenced the vegetation at Urumbal Pocket for about the last 8,000 years (Ferrier and Cosgrove 2012:113). No carbonised nutshell fragments or stone artefacts or other cultural materials were identified in the pits (Cosgrove et al. 2007:161).

**Archaeological excavations**

In total, six 1 x 1 m pits and one 50 x 50 cm pit were excavated in order to confirm the depth, age, and stratigraphy of the site, to establish the spatial distribution of cultural materials, and to facilitate identification of possible activity areas at the site (Fig. 4.8). All of the excavated sediments were weighed and then wet-sieved through 7 mm, 3 mm and 1 mm mesh. Stone artefacts, carbonised plant remains, ochre and charcoal were recovered *in situ* where possible. They were also collected from the sieves, and bagged and labelled on site. Soil colour, based on the Munsell soil colour charts, and soil pH level were recorded at the start of each new spit. Cultural material recovery processes, sorting, cataloguing, and the cultural material analyses are discussed in Chapters 5 and 6.
Figure 4.8 Location of excavation squares at Urumbal Pocket.
Source: Produced by R. Frank.
Square A2
The first phase of excavations at Urumbal Pocket took place in July 2002. One 1 x 1 m pit, square A2 (Fig. 4.8), located in the flat central area on the spur, was selected for excavation because of a concentration of surface artefacts in this area. Excavations in square A2 confirmed a presence of substantial accumulated cultural deposits in this area. A total of 139 artefacts with a maximum dimension of 10 mm or greater were recovered from spit 1. Square A2 was excavated in 5 cm spits, following the stratigraphy where possible. Excavation ceased at a mean depth of 60 cm, where an archaeologically sterile layer of weathered, decomposing granite bedrock was encountered (Fig. 4.9). The pH levels ranged from 5.5 in the top layers to 6.5 in the bottom layers. The total sediment weight for square A2 was 677.3 kg.

Figure 4.9 Square A2 showing the surface of spit 10 at a depth of 60 cm.
Source: Photograph by R. Cosgrove.

Two main stratigraphic units containing cultural materials were distinguished on the basis of colour and structure: an upper dark humic layer and an underlying lighter layer overlying granite bedrock. The soil is defined as Yellow Kandosol (McKenzie et al. 2004:246–247), and is common in the area. The deposit consists of an artefact-rich stratigraphic unit 1, which may be described as a homogeneous dark brown (5YR 1.7/1) unconsolidated sandy loam layer approximately 40 cm deep.
A transition zone is located at an approximate depth of 40 cm, and consists of a dark brown (7.5YR 2/3) deposit with a slight tendency towards orange mottling and the occurrence of gravel. Cultural materials are present in lower quantities and charcoal becomes more fragmented throughout the transition layer. The deposit in stratigraphic unit 2 is increasingly gritty, with particles from the decomposing granite bedrock incorporated into the soil. Cultural materials cease at a depth of around 50 cm. It appears that the deposit in square A2 was relatively intact and no evidence of major post-depositional disturbance was noted during excavation. Figure 4.10 shows the stratigraphic sections in square A2 and all radiocarbon dates from Urumbal Pocket are listed in Table 4.1.
Square V5

Excavations at Urumbal Pocket continued in September 2002. It was decided to excavate a 1 x 1 m pit five metres west of square A2, within the perimeter of the flat central area on the spur (Fig. 4.8). This square, called V5, is located closer to the edge of the flat section, where the ground gradually begins to incline. This slope continues past the present-day edge of the eucalypt forest pocket. Square V5 was chosen in order to determine whether or not the richness of cultural deposits recovered from square A2 extended beyond the apparent central activity zone and to further investigate the stratigraphy, depth and age of the deposit. Another aim was to investigate site formation processes that may have affected the site’s integrity, particularly water running over the surface during heavy downpours.

Excavation in square V5 proceeded in 5 cm spits, but ceased, due to time constraints, at a depth of 23 cm at the top of spit 5. Stone artefacts, carbonised plant remains, ochre and charcoal were recovered during the excavation. The pit was lined with plastic and backfilled. The investigators returned with a field crew in June 2003 and square V5 was reopened and excavated in 5 cm spits. When investigators encountered deposits with weathered granite rocks and rubble, similar in appearance to unit 2 in square A2, ongoing excavation was reduced to a 50 x 50 cm cell in the southeastern quadrant, to establish the depth of the basal layer of unit 2 (Fig. 4.11).

![Figure 4.11 Square V5, surface of spit 12 at a depth of 65 cm (in southeastern quadrant).](source)

The stratigraphic sequence (Fig. 4.12) to square V5 is similar to that in square A2 in that it consists of an artefact-rich stratigraphic unit 1, which may be described as a dark brown/black (7YR 2/2) unconsolidated and homogenous sandy loam layer approximately 40 cm deep. Below this was a thin transition zone with some orange mottling visible (2.5YR 2/3). Sediments then became increasingly gritty with particles from the decomposing granite bedrock incorporated into the soil. The total sediment weight for V5 was 625.7 kg. The transition zone indicates a change in the stratigraphy to stratigraphic unit 2, a dark reddish-brown (5YR 5/8) clay-dominated deposit. Orange mottling, decomposing granite and quartz grit gradually increased with depth. Stratigraphic unit 2 is more consolidated than stratigraphic unit 1.
URUMBAL POCKET: SQUARE V5

Figure 4.12 Stratigraphic sections in square V5.
Source: Drawing by Å. Ferrier.

Cultural materials are less dense and almost absent toward the base of unit 2, and charcoal becomes more fragmented throughout, when compared to unit 1. Cultural materials cease at a depth of around 50 cm. Below this level, deposits excavated from a 50 x 50 cm cell in the southeast corner of V5 change to a sterile clay structure, with a large quantity of rubble consisting, predominantly, of decomposed granite bedrock. Excavation was stopped at a depth of 65 cm, where the deposit turned into consolidated clay. The pH levels range from 6 in the top layers to 4–5 in the bottom layers.
At the completion of square V5, a decision was made to excavate in 2.5 cm spits. The approach was adapted in order to test whether a finer resolution, i.e. a change to smaller spits, would increase the ability to carry out temporal and spatial analyses on material culture remains in squares with strong chronological control. It was also to understand the effects of depositional and post-depositional processes on the deposit. In June – July 2003, the final excavation season at Urumbal Pocket, a further four 1 x 1 m pits (S2, O2, V8, Z3) and one 50 x 50 cm cell (Z7) were excavated (refer to Fig. 4.8). The location of excavation squares S2, O2, V8 and Z7 was chosen primarily to understand the extent of subsurface deposits away from the culturally rich area identified in the flat central area on the spur. It was also to assess the impact of cultural and natural depositional disturbances and processes on the deposits across a larger area. Square Z3, adjacent to square A2, was chosen in order to increase the sample size from an area previously established as artefact-rich, and to investigate variability in Aboriginal activities across the site.

**Square S2**

The surface of square S2 was patchy in appearance, probably as a result of soil and sand washing down the slope. Quartz and slate artefacts (n=91) were collected from the surface and from spit 1. At a depth of 2 cm, the deposit turned into a homogenous dark brown/black (7.5YR 1.7/1) sandy loam, similar in colour and consistency to unit 1 in other squares. Some small root intrusions were encountered. The pH levels ranged from 4–5.5 in the top layers to 4 in the bottom layers. The bottom layers of unit 1 were a reddish-brown colour (7.5YR 5/8) (Fig. 4.13). The stratigraphic sequence of S2 was also similar to other squares in that it consisted of an artefact-rich stratigraphic unit 1, a dark brown/black unconsolidated and homogenous sandy loam layer, approximately 35–45 cm deep. Below this lay a transition zone that marks a change to stratigraphic unit 2. This layer had a distinguishable orange mottling originating from underlying decomposing granite bedrock. The transition layer in square S2 was considerably thicker (by approximately 10 cm) than in the squares located in the flat central area approximately 10 m away.

Figure 4.13 Square S2, surface of spit 18 (top of unit 2) at a depth of 45 cm.
Source: Photograph by R. Cosgrove.
Stratigraphic unit 2 was a consolidated, dark reddish-brown (2.5YR 7/6) silty clay. The lower deposit became increasingly gritty with particles from the decomposing granite bedrock incorporated into the soil. Cultural materials were almost absent and charcoal became more fragmented throughout unit 2 compared to unit 1. Cultural material ceased at a depth of around 50 cm. The deposits excavated below this level, from a 50 x 50 cm cell in the southeast corner, changed to a sterile clay with a large quantity of rubble of decomposed granite bedrock and what appeared to be decomposing roots. The excavation in square S2 reached bedrock at an approximate depth of 70 cm, with 731.6 kg the total weight of removed sediment. The stratigraphic sections in square S2 are illustrated in Figure 4.14.

**URUMBAL POCKET: SQUARE S2**

![Stratigraphic sections in square S2](image)

*Figure 4.14 Stratigraphic sections in square S2.*

*Source: Drawing by Å. Ferrier.*
Square O2

The surface colour of square O2 was patchy in appearance, with a mixture of light-coloured sand (2.5YR 8/1) and a darker red loam (7.5YR 1.7/1) washed in from the slope above. The pH levels ranged from 4 to 6 in the top layers. The mixed sand/loam deposit continued to a further 2.5 cm below, with small roots throughout.

Figure 4.15 Square O2, surface of spit 12 (top of unit 2) at a depth of 30 cm.
Source: Photograph by R. Cosgrove.

A concentration of charcoal was encountered in the upper layers in the southern section of the square but no cultural material was observed during the excavation. However, stone artefacts (n=93) were collected from the sieves. Stratigraphic unit 1 was a 30 cm thick, unconsolidated dark reddish-brown (5YR 3/3) layer with a pH of 4. Cultural materials were restricted to this unit. Below this was a 5 cm thick transition zone, identified by an increase in orange mottling, similar to that found in the other squares, with decomposing granite bedrock and a clay-like texture (Fig. 4.16). Overall, stratigraphic unit 2 was an archaeologically sterile, consolidated bright reddish-brown clay deposit (5YR 5/8) with decomposing granite gravel that increased in density and size with depth. The excavation in square O2 reached sterile layers at an approximate depth of 35 cm, with a total 225.9 kg of excavated sediment. The stratigraphic sections in square O2 are illustrated in Figure 4.16.

Square O2 was placed on the western boundary of the open site at Urumbal Pocket (Fig. 4.8). The topography of the landscape sets a natural boundary to its western and eastern limit, with slopes that form part of the Tully River bank as it existed before this section of the river was dammed. Similarly, the southern side has a natural boundary as it gradually slopes down towards the river. This topography led to a decision to focus the remaining excavation squares in the area with high surface artefact densities and to determine the site’s northern limits.
URUMBAL POCKET: SQUARE O2

Figure 4.16 Stratigraphic sections in square O2.
Source: Drawing by Å. Ferrier.

**Square V8**

The deposit in square V8 was similar to previously discussed squares. It consisted of two stratigraphic units with a thin transition zone in between. Unit 1 may be described as a black (7.5YR 1.7/1) unconsolidated and homogeneous sandy loam layer approximately 30 cm deep. The pH levels ranged from 5.5 to 6. Some roots and large granite rocks were noted in the upper layers. Below unit 1 lay a thin transition zone that indicated a change in the deposits and the start of stratigraphic unit 2 at a depth of around 35 cm. The upper layers in unit 2 have some orange mottling and the sediments become increasingly gritty with particles from the decomposing granite bedrock being incorporated into the soil. Stratigraphic unit 2 consisted of a wet, brown deposit (5YR 5/8) with a pH of 6. Orange mottling and weathered granite and quartz grit gradually increased in density and size with depth (Fig. 4.17).
Cultural materials were recovered in much lower numbers than elsewhere on the site and ceased at a depth of around 30 cm. The total weight of removed sediment for V8 was 364.4 kg. The stratigraphic sections in square V8 are illustrated in Figure 4.18.

**URUMBAL POCKET: SQUARE V8**

Figure 4.17 Square V8, surface of spit 12 at a depth of 30 cm.
Source: Photograph by R. Cosgrove.

Figure 4.18 Stratigraphic sections in square V8.
Source: Drawing by A. Ferrier.
Square Z3

Square Z3 was located in the flat central area on the spur (Fig. 4.8). It was selected for excavation in order to expand the sample of materials from a suspected central activity zone at the site. The stratigraphy in square Z3 was, in general, similar to that in squares A2 and V5. Two main stratigraphic units may be distinguished based on soil colour, texture and type; a distinct transition layer separated them. Unit 1 consisted of an artefact-rich dark brown/black loam, with the Munsell colour ranging from 10YR 1/7 in the top layers to 7.5YR 4/6 in the bottom layers. The sediments in unit 1 may be described as a homogeneous and unconsolidated sandy loam deposit with fine grit throughout.

The sediment was derived from the surrounding organic soil and lower layers were mixed with an increasing amount of grit derived from decomposing granite bedrock. The transition layer separated the two units and was distinguished by some orange mottling. Its top was situated at a depth of 35–40 cm and it was approximately 10 cm thick. Sediments in unit 2 became increasingly gritty and less homogeneous with depth, with particles from the decomposing granite bedrock becoming incorporated into the soil (Fig. 4.19).

In unit 2, granite rubble and rocks appeared in greater numbers and cultural material was less common than in unit 1. Cultural materials ceased to occur at a depth of around 45 cm. Excavations of a 50 x 50 cm cell established an archaeologically sterile granitic soil layer (7.5YR 4/4) below stratigraphic unit 2. Excavations were stopped at a depth of 55 cm, where bedrock was encountered. The total weight of removed sediment for Z3 was 3,667.1 kg. Figure 4.20 illustrates the stratigraphic sections in square Z3.

Figure 4.19 Square Z3, surface of spit 18 (in south-eastern quadrant) at a depth of 55 cm.
Source: Photograph by R. Cosgrove.
**URUMBAL POCKET: SQUARE Z3**

![Stratigraphic sections in square Z3.](image)

Source: Drawing by Á. Ferrier.

**Stratigraphic summary**

The excavations at Urumbal Pocket reached sterile layers with exposed bedrock in all squares except square Z7. As a result of its proximity to the edge of the dam, square Z7 became waterlogged when the transition layer between unit 1 and unit 2 had most likely been encountered. The excavation of square Z7, therefore, was stopped before bedrock or an identified sterile layer had been reached. For this reason, cultural materials recovered from square Z7 have not been included in the material culture analyses presented here. The average depth of cultural deposits is 45–50 cm in squares A2 and Z3, and somewhat less in the other squares. Large quantities of charcoal, stone artefacts, carbonised endocarp fragments, complete and partially complete seeds and small amounts
of ochre were recovered from squares A2, Z3, V5 and S2. No bones were recovered. This may be a result of the acidic nature of the deposits, but it is possible that the site was mostly used for plant processing. Apart from some small hollows caused by insects and roots, no obvious evidence for post-depositional disturbance was observed during excavation. The size distribution of stone artefacts and plant remains in the deposits is discussed in the assemblage analyses (Chapters 5 and 6) in order to address the integrity of the deposits and assemblage formation processes. The spatial distribution of cultural materials recovered was also analysed as a component of the cultural material analyses and is discussed in Chapters 5 and 6. The excavation squares at the completion of the third season is shown in Figure 4.21.

![Excavation squares at Urumbal Pocket at the end of the third season. Squares A2 and V5 were excavated in season 1 and 2 respectively.](image)

**Figure 4.21** Excavation squares at Urumbal Pocket at the end of the third season. Squares A2 and V5 were excavated in season 1 and 2 respectively.

**Chronology**

Charcoal was recovered from all squares. A total of 23 radiocarbon dates were obtained (Table 4.1.). Of these, 17 were from samples of *in situ* charcoal pieces recovered during the Urumbal Pocket excavations. They show a correspondence between stratigraphic and chronological order and support the suggestion that the site is relatively undisturbed. About 70% of the dates are younger than 1500 BP. Six AMS dates were obtained from carbonised endocarp fragments that are believed to be the remains of past Aboriginal tree nut processing (discussed in Chapter 6). Five of these were from square Z3 and one was from V8. The sample from square V8 was a carbonised Lauraceae endocarp fragment, and could be from either the yellow walnut (*Beilschmedia bancroftii*) or the black walnut...
(Endiandra palmerstonii). It was submitted for analysis to date early use of toxic plants at Urumbal Pocket, and dates to 1585±40 BP (OZJ718). This date is consistent with evidence for toxic plant use from other archaeological sites in the region, which all date to the late Holocene period.

At Jiyer Cave, evidence of toxic rainforest species within cultural deposits date to less than 1000 BP. At the Mulgrave River open site (Fig. 1.1), toxic nuts found in association with quartz artefacts have been dated to around 2000 BP (Horsfall 1987:268). Radiocarbon dates from these two sites were obtained on charcoal samples in layers associated with nutshell fragments. The dated endocarp fragments from Urumbal Pocket provide a more certain age for the appearance of toxic nut processing in the rainforest region. The five nutshell samples from the cultural deposits in square Z3 were selected, subsequent to the dating of charcoal pieces, to assist with interpreting the apparently intensive late Holocene occupation phase at Urumbal Pocket. The dates on the nutshell fragments broadly correlate with the dates on the charcoal samples, except in square V8 where there is a discrepancy between spits 8 and 9. These two spits have very low stone artefact numbers (n=8) and nutshell fragments. Some mixing of cultural materials may also have occurred in deposits dated to around 650 BP to 850 BP in square Z3, where approximately 10 cm of deposit separates the two dates. Such mixing of deposits is not surprising and may be related to the amount of human activity that appears to have taken place at Urumbal Pocket in the last 1,500 to 1,000 years.

Table 4.1 Conventional and calibrated radiocarbon dates for Urumbal Pocket. Codes followed by an asterisk are AMS dates.

<table>
<thead>
<tr>
<th>Square</th>
<th>Spit</th>
<th>Material dated</th>
<th>Conventional age</th>
<th>Calendric age calBP</th>
<th>68% range calBP</th>
<th>Code</th>
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<td>569±48</td>
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<td>Wk-11341</td>
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<td>980±51</td>
<td>929-1031</td>
<td>Wk-11342</td>
</tr>
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<td>8</td>
<td>Charcoal</td>
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<td>3579±82</td>
<td>3497-3661</td>
<td>Wk-11343</td>
</tr>
<tr>
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<td>Charcoal</td>
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<tr>
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<td>Wk-13569</td>
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<td>1424-1519</td>
<td>Wk-13570</td>
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<td>9</td>
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<td>7987-8117</td>
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<td>2762±34</td>
<td>2728-2796</td>
<td>Wk-13573</td>
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<td>9</td>
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<td>OZJ718*</td>
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<td>OZJ719*</td>
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<td>Endocarp</td>
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<td>727-829</td>
<td>OZJ720*</td>
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<td>1181±64</td>
<td>1117-1245</td>
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<tr>
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<td>Endocarp</td>
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<td>1486±54</td>
<td>1434-1537</td>
<td>OZJ722*</td>
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<td>Endocarp</td>
<td>1595±40BP</td>
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<td>1431-1528</td>
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</tbody>
</table>

Occupation periods

The set of radiocarbon determinations (Table 4.1) indicates three periods of site use, with the last two phases corresponding with evidence for human occupation periods in archaeological sites excavated across the region (Cosgrove et al. 2007; Horsfall 1996). The earliest dates at Urumbal Pocket, 7445±68 BP (calBP 8273±67) (Wk-13578) and 7212±46 BP (calBP 8052±65) (Wk-13571) are from square Z3 and V5 respectively. The charcoal samples, found in the lower spits of unit 2 together with a small number of quartz artefacts, suggest that this part of the rainforest region was used by Aboriginal people in a very early phase of rapid but variable rainforest expansion that took place after the end of the last ice age (Haberle 2005). The archaeological remains associated with this early phase of rainforest use by Aboriginal people is modest, but nevertheless indicates that people were occasionally visiting the area, perhaps as early as 8,000 years ago.

Table 4.2 Calibrated radiocarbon dates from Urumbal Pocket, in descending chronological order, are broadly grouped into three phases of site use. Bold dates represent the transition zone within stratigraphic unit 2. About 70% date to Phase 3, after 1500 BP.

<table>
<thead>
<tr>
<th>Stratigraphic unit 2</th>
<th>Stratigraphic unit 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1: occasional visits ca. 8000-7000 BP</td>
<td>Phase 2: occasional visits ca. 5000-2000 BP (includes the transition zone)</td>
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<tr>
<td>8273±67BP</td>
<td>5267±111BP</td>
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<td>8052±65BP</td>
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<td>980±518BP</td>
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<tr>
<td>980±518BP</td>
<td>778±518BP</td>
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</tbody>
</table>

Source: Produced by Å. Ferrier.

Table 4.2 shows how the grouping of radiocarbon dates from Urumbal Pocket suggests three phases of Aboriginal rainforest occupation and that about 70% date to after 1500 BP. The three phases are correlated with increasingly high numbers of cultural materials through time.
Summary

The Aboriginal cultural heritage in the Koombooloomba area and the association between people and open forest pockets are clearly significant in terms of understanding long-term Aboriginal rainforest occupation. Walking routes to and from the Evelyn Tableland across the Cardwell Range down to the coast, passed through this area (Duke and Collins 1999). Documentary sources and previously recorded oral-historical tradition indicate that the Koombooloomba area and remote locations in the upper reaches of the Tully River were places of great significance to the Jirrbal people and their neighbours at contact and subsequently became a refuge for Aboriginal people.

Excavations at the Urumbal Pocket open site consistently demonstrate that two main stratigraphic units exist at the site. They are represented by an artefact-rich stratigraphic unit 1, a 40–50 cm deep deposit, which is separated by a thin transition zone from stratigraphic unit 2. This unit has low levels of cultural material that drops off before sterile bedrock is encountered. For the purposes of the material culture analyses presented in Chapters 5 and 6, the transitional zone is included in stratigraphic unit 2, thus resulting in the construction of two analytical units.