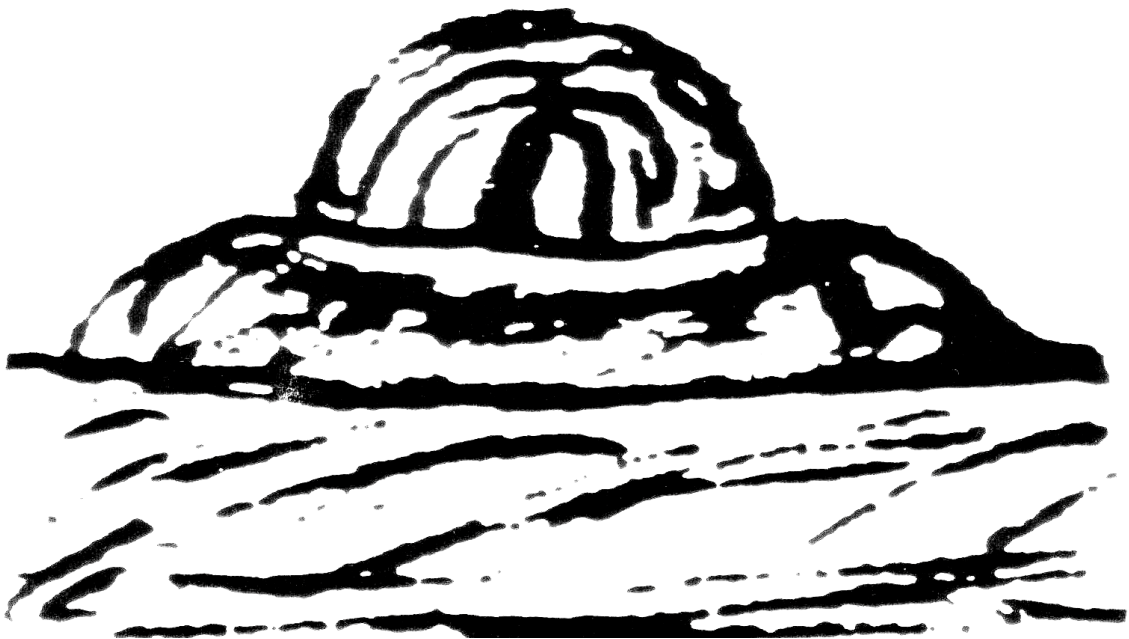


The Traditional Settlement Pattern in South West Victoria Reconsidered



Rupert Gerritsen

The Traditional Settlement Pattern in South West Victoria Reconsidered

Rupert Gerritsen

Intellectual Property Publications

The Traditional Settlement Pattern in South West Victoria Reconsidered.

Intellectual Property Publications

LPO Box A145

Australian National University

Canberra ACT 2601

Copyright © Rupert Gerritsen 2000

This publication is copyright. Apart from any fair dealing for the purpose of private research, research, criticism or review, as permitted under the Copyright Act, no part may be reproduced by any process without written permission. Enquiries should be made to the publisher.

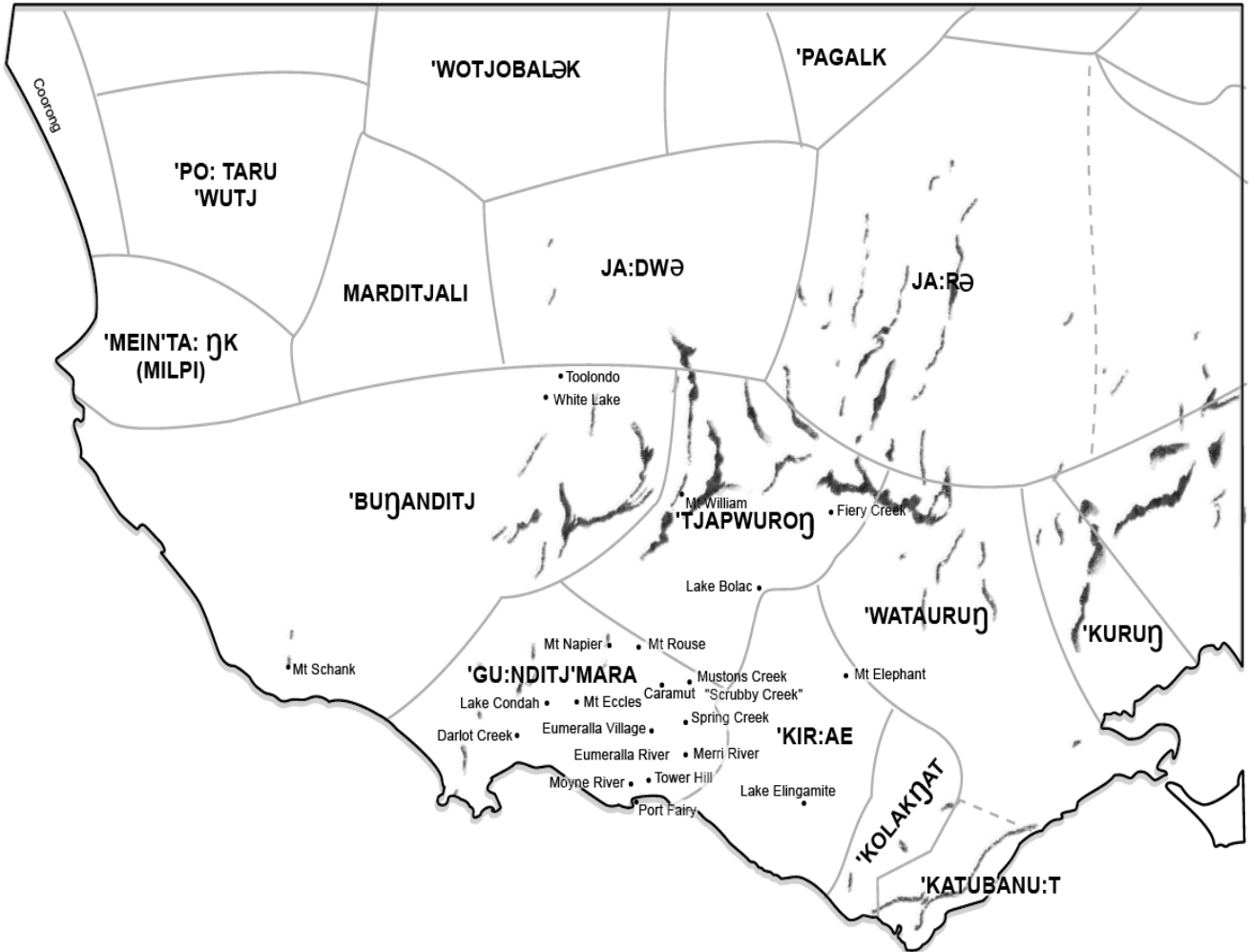
NOTE: Pagination and some formatting in this electronic version differs from the original edition published in 2000.

© Rupert Gerritsen 2011

CONTENTS

Introduction	1
Archaeology Around Lake Condah	3
Archaeology at Other Village Sites	6
The Origins, Nature and Extent of Habitations and Settlement in SW Victoria	20
The Settlement Pattern	26
Sedentism	30
How Sedentary?	33
Subsistence and Mobility	40
Conclusions	43
Acknowledgements	45
Notes	46
Bibliography	62

South West Victoria



The traditional settlement pattern in south west Victoria reconsidered.

Rupert Gerritsen

Introduction

Considerable interest has been aroused over the last twenty-five years in regard to claims that there were, in Australian terms, unusual features present in traditional Aboriginal societies in south west Victoria, particularly the Western District, at the time of colonial occupation. According to the proponents of this view a body of evidence has been accumulating indicating, in relative terms, denser, semi-sedentary, populations in this region with a more complex economy and possibly more developed sociopolitical linkages.¹ Manifestations of this were extensive use of occupation/ cooking mounds, fish traps, weirs and eel canals, as well as permanent habitations, often of substantial construction, with aggregations in some localities being described as villages.² Nevertheless questions and debates have arisen challenging some of this evidence, the supporting arguments and the conclusions. For example, the identification, particularly in the Lake Condah area, of low stone walled features as permanent huts, the duration of their occupation, and the extent of simultaneous occupation, even their exact form, have become contentious issues.³ It has also been argued that the so-called "villages" were not necessarily a feature of traditional Aboriginal society in the Western Districts but were quite possibly a post-contact phenomenon. The "villages", it is claimed, appeared as a consequence of colonial occupation and intrusion, with local populations withdrawing into "refuge areas" or being forced to concentrate in the remnants of their traditional lands.⁴ An alternative view suggests the "villages" may have arisen as an adaptive response, in the late pre-contact and early contact period, to the impacts of European influences such as disease, trade with sealers, or vanguard settlements such as the Hentys' station at Portland.⁵ In either scenario the resultant "villages" were then observed and recorded by amateur ethnographers early in the contact period. The presence of items of European manufacture such as glass and tobacco pipes in occupation floors, evidence of only short-term occupation and the lack of pre-contact radiocarbon dates from these sites, is cited as evidence in support of this case.⁶

Among those adopting the position that permanent or semi-permanent structures, and possibly villages or larger settlements, were part of the traditional settlement pattern a separate issue exists regarding the degree of sedentism.⁷ Evidently there is no clear consensus in this regard, with Lourandos, for example, characterising the Western District settlements in terms of a higher degree of sedentism or as semi-sedentary,⁸ while Williams has classified them as "semi-sedentary or semi-nomadic".⁹ Coutts and his colleagues, although accepting the existence of clusters of permanent or semi-permanent habitations prior to contact, of a "semi-sedentary nature", with the population exhibiting "seasonal nomadism",¹⁰ describe the agglomerations encountered around the time of contact as "special camps",¹¹ with an unspecified degree of sedentism. It would appear that several issues are actually embedded in this debate, these being the classification and definition of degrees of mobility and sedentism, the determination of the degree of sedentism, and the origins, pre-contact or post-contact, of the phenomenon. To attempt resolve some of these issues and debates it is my intention to consider a corpus of evidence relating to habitations and settlements types in south west Victoria. I will also consider the geographical extent of particular types of habitations and

settlements, as well as provide a framework in which such habitations and settlements can be appropriately characterised. Historical and historical ethnographic evidence¹² will be extensively employed, but archaeological evidence will also be included with a view to developing a consistent and integrated reconstruction.

Undoubtedly a considerable amount of historical ethnographic research has previously been undertaken, often in the context of archaeological investigations, in relation to Aboriginal settlements in the Western District of Victoria. This research has relied principally upon the findings and observations of George Augustus Robinson,¹³ as recorded in his journals, James Dawson¹⁴ and R. Brough Smyth,¹⁵ along with a range of other rapporteurs and lesser sources such as Thomas Mitchell,¹⁶ William Thomas,¹⁷ Foster Fyans,¹⁸ Charles Griffiths,¹⁹ and so forth. However, research of this nature has, with notable exceptions, been of limited depth. By increasing the depth of such research, as well as consolidating, correlating and corroborating all the evidence, as far as is possible, it is my belief new insights can be provided into the traditional settlement pattern in south west Victoria. A simple illustration of this can be found in relation to habitations in the Wimmera. On 26 July 1836, explorer Thomas Mitchell, in the vicinity of White Lake at the western end of the Grampians, recorded that he had:

*"noticed some huts of a very different construction ... being large, circular, and made of straight rods meeting at an upright pole in the centre; the outside had first been covered with bark and grass, and the entirety coated over with clay. The fire appeared to have been made nearly in the centre; and a hole at the top had been left as a chimney."*²⁰

This observation is well known and frequently referred to.²¹ It is cited as a comparable example to the more substantial habitations reported in the Western District. However, on the same day, in his journal, Mitchell's deputy, Stapylton, noted:

*"passed to day several Guneaks of very Large dimensions one capable of containing at least 40 persons and of very superior construction."*²²

As far as I am able to ascertain these two accounts have never been associated. Taken together they appear to strongly imply that Aboriginal people in the southern Wimmera²³ built well executed dome-, teepee- or tent-shaped structures capable of holding 40 people. A single residence of these dimensions, if this conjecture is correct, is qualitatively different to any previously reported in the Western District, and a most remarkable structure by Australian standards. While difficult to verify, possible support for this reconstruction can, nevertheless, also be found in Robinson's journals. When in the central west of the Western District, at Emu [*Bone.yere.mu*] and Smoky Creeks [Crawford River] in June 1841 he recorded: "Arrived at Bone.yere.mu, Emu Creek. Found two large native huts."²⁴ Robinson then made a drawing of these huts (Figure 1) which appear to be structurally similar to those described by Mitchell.



Figure 1: Emu Creek Huts
(Robinson in Clark 1998:2:298 Figure 6.25)

Meanwhile Dawson, in discussing traditional habitations of the region, wrote in 1881 that, in "what appears to be one dwelling, fifty or more persons can be accommodated."²⁵ In the context in which he was writing, describing agglomerations, groupings, of family *wuurns*, this was a rather incongruous statement. However, it is possible Dawson was attempting to integrate information he had received in a letter from Rev. J. Francis, manager of the Lake Condah Mission in 1868. This advised Dawson that people at the Mission, who had come from all over the western part of the Western District, had told Francis they had formerly lived in, "communities of 30-40 and even more, occupying one Mia mia"²⁶ and may refer to residences such as those at White Lake. With other indirect lines of evidence giving the case further credence,^{27,28} a completely new dimension is added to the debate on the nature of the traditional settlement pattern in south west Victoria.

Archaeology Around Lake Condah

Another, more critical, example in terms of the settlement debate, of the effective employment of historical ethnographic evidence, concerns habitations around Lake Condah, Condah Swamp [Palmer or Allambie site] and Louth Swamp [Kinghorn]. Here, in contrast to the White Lake example, extensive archaeological surveys and investigations have been conducted by Coutts *et al.*, Wesson, Clarke and others.²⁹ The findings contained in two of these studies form the main basis for arguments that the stone structures, or "stone circles", in the Condah area were, contrary to expectations, foundations of huts built and occupied during the contact period.³⁰ By extension, it was further argued that villages reported elsewhere in the early contact period must also have been part of a post-contact phenomenon.³¹ Attention was drawn initially to the sites in the Lake Condah, Condah Swamp and Mount Eccles area as a result of information contained in two papers published by A.S. Kenyon, in 1912 and 1930.³² All published archaeological studies pertaining to the Lake Condah and Condah Swamp area cite either or both of these papers. In the first instance Kenyon reported information supplied by Mr. Alex. Ingram, that there were, "many semi-circular stone formations to be found in the ... Mount Eccles stones,"³³ with Ingram also providing an extensive description of the Lake Condah fish traps.³⁴ Later Kenyon stated that among, "the stony rises south of Lake Condah, and around Mount Eccles, Mr. Alex. Ingram found a

number of these stone circles, about the year 1898, and learnt, from one of the old natives of the Condah Mission Station, that they had been roofed over with boughs and bark like an ordinary hut."³⁵ While general statements such as these were sufficient to guide investigators to the area, there is actually an earlier, and more informative, account of the fish traps and stone circle "foundations" in the Lake Condah area, written by Thomas Worsnop in 1897.³⁶ Had this well-known work been consulted the investigators would have learnt that Mr. Ingram had, "lately lighted on a cluster of hut circles ... among the broken lava near one of the arms of the [Condah] swamp,"³⁷ thus establishing a clearer association between the stone circles and Condah Swamp. They would also have learnt something of the informant, Tommy White, the "old native" Kenyon referred to, his antecedents and his credentials. He, in fact, had been born "at a similar camping-place"³⁸ called *Allumyung*, 16-17 km from Lake Condah.³⁹ More importantly this source sheds some light on the contentious issue of the form and structure of these habitations,⁴⁰ White reportedly indicating "the ordinary mia-mia of branches and bark was erected," on 1 ft. [30cm] high stone foundations.⁴¹

While the original archaeological studies located hundreds of stone circles in the Condah area, the identification of many of these features was subsequently questioned.⁴² Detailed investigations at the Allambie and Kinghorn sites, furthermore, showed that occupation had only been of brief duration, and that European artifacts such as pipes, glass and metal were present in some of the occupation floors. In addition, all radiocarbon dates were found to be "modern".⁴³ From this it was concluded stone circle habitations were not of pre-contact provenience but, were, "being built and occupied during the contact period,"⁴⁴ not only around Lake Condah but at other sites in the Western District. Although Coutts and his co-workers were not able to explain the location of sites such as Kinghorn, Wesson suggested that they were refuges, created by local Aboriginal people, "when their lifestyles had been disrupted," following colonial occupation.⁴⁵ While such findings, that the habitations were of post-contact vintage, may have been unexpected, they are not surprising when the historical ethnographic and ethnohistorical evidence is fully considered. Much of this evidence is, in fact, contained in the very sources employed in the archaeological studies. For example, every study refers to the accounts of explorer Thomas Mitchell. Closer scrutiny of this source reveals that he and his party spent a whole week at Condah Swamp, from 1 September to 8 September, 1836.⁴⁶ In Mitchell's, and Stapylton's,⁴⁷ account there is not the slightest indication of any habitations there at that time, even though Mitchell crossed and recrossed the swamp on two occasions. Yet, while on an excursion to Mt Napier during this period, he encountered two, "very substantial huts," at a location 10 km from Condah Swamp, probably around Byaduk North.⁴⁸ It is reasonable to conclude from this, and the fact that there is not a single account in any other source of any habitations in the area around Lake Condah and Condah Swamp during the early contact period, that this area was quite possibly not a traditional occupation site.⁴⁹

When sources from the post-contact period are considered, the works of Kenyon,⁵⁰ and Massola,⁵¹ are frequently cited. One of these, Massola's history of the Lake Condah Mission, contains an extract from the Sixth Report of the Central Board of the Aborigines, dated 1869. This report indicates that two years after its founding only 4 huts had been constructed at the Mission, occupied by "a few" of the 70 residents, while the "remainder live in mia-mias."⁵² It was another year before all the residents were finally living in cottages.⁵³ Thus the concentration of people from the region at the Mission without the provision of accommodation appears to have made it necessary for them to live for a period of about three years in traditional or quasi-traditional habitations. Evidence in Kenyon's and Massola's works of the continued pursuit of elements of traditional subsistence activities, specifically

hunting and at times intensive exploitation of the fish traps, into the 1890s, is also highly relevant in this context.⁵⁴ Clearly quasi-traditional occupation and subsistence activities such as these, in a post-contact setting, could produce many of the elements detected archaeologically. None of this evidence, critical to investigations into site formation processes, dating of sites and interpretation of the archaeological evidence in the Condah area, has been taken into consideration in any of the studies carried out there. If this information is taken into account, however, and additional historical and ethnohistorical evidence brought to bear, it may be possible to arrive at a plausible framework for understanding the archaeological and structural evidence from the Condah area.

The rapid expansion of the Port Phillip colony saw squatting begin in earnest west of the "frontier" line from Port Fairy to Mt Napier around 1842.⁵⁵ This also heralded a period characterised by extensive conflict between the encroaching squatters and the traditional owners of the land in that area. Critchett, in her analysis of the ensuing hostilities, identified three phases of "resistance" before "pacification"⁵⁶ took effect. The first phase entailed an almost immediate attack, in January 1842, on Hunter's "Eumeralla" station, the first run established in the Mount Eccles area, late in 1841.⁵⁷ "Eumeralla" was attacked on several other occasions during the next two years. This was followed by a more general and concerted response, the second phase, known as the "Eumeralla War", commencing in the summer at the beginning of 1844. Finally, the third phase, consisting of a type of guerrilla war, occurred in the Port Fairy area from March 1845 to April 1847.⁵⁸ While these "collisions" were in progress squatting runs were still being taken up at a considerable rate. By the end of 1844, as the main phase of resistance was coming to an end, squatting runs had been established claiming every part of the district except for one area, the stony country and swamps on the western, north western and northern side of Mount Eccles.⁵⁹ This encircled, unclaimed, "island" incorporated what is now known as the Kinghorn and Allambie sites, as well as the eastern side of Condah Swamp and the eastern and southern parts of Lake Condah. Only the western side of Lake Condah had been appropriated at this point in time, in 1843, when "Lake Condah" had been formed.⁶⁰ Then, in 1846 and 1847, in a final burst of dispossession, as "pacification" was becoming the predominant basis of relations, this remaining area was "taken up" and "Knebsworth", "Lyne", "Euremete", "Louth", "Grafton" and "Ellengowan" were licensed and gazetted.⁶¹ Later, in 1850, C.P. Cooke took over "Lake Condah".⁶² Apparently the Cooke family were highly sympathetic to the local indigenous population and the station appears to have been something of a refuge. This may have also have been a factor in the later selection of Lake Condah as the site for the Mission.⁶³

Based on this and the preceding evidence I would suggest there were three phases in the formation of sites in the Condah area. These were the Pre-contact Phase [pre-1842], the Refuge Phase [1843-66] and the Mission Phase [1867-1918]. A proposed interpretation of sites within this framework would suggest that the Lake Condah fish traps were constructed during the Pre-Contact Phase, but were perhaps repaired, and possibly modified, during subsequent phases, as the local hydrological regime was altered.⁶⁴ It is quite possible there was no occupation of this locality in the Pre-Contact Phase, the fish traps being accessed by people based elsewhere, as suggested by Clarke.⁶⁵ During the Refuge Phase, as part of a series of complex responses to the colonists' intrusion,⁶⁶ a proportion of the people displaced by the squatters elsewhere chose to withdraw to the unoccupied and isolated Condah area. Occupation sites such as Allambie and Kinghorn probably arose at that time, although usage may have continued into the Mission Phase. This would explain the short occupation history, the modern dating and the presence of European artifacts. As there have been no excavations of the stone circles at Lake Condah itself it is difficult to determine at what point in time they

were constructed. Observational evidence does suggest, however, that occupation was of short duration.⁶⁷ Consequently these sites may have first been occupied during the initial Refuge Phase, or in the later Refuge Phase when C.P. Cooke took over "Lake Condah". Or they may have arisen in the early Mission Phase while the Mission accommodation was being built, they may even have been constructed as part of the continuing pursuit of traditional subsistence activities during the Mission Phase. Whatever the case, at least it is possible, within the 3 Phase framework, to achieve a more discriminating interpretation of such sites because it recognises the degree of complexity in site formation in the Condah area. The critical point, however, is the recognition of the situational differences between the occupation sites investigated in the Condah area and the habitations, settlements and villages reported elsewhere. As pointed out earlier there is no report from the early contact period of habitations in the Condah area. In fact the only ethnographic evidence available from that period, Mitchell's, seems to positively indicate there were no habitations at least in the area around Condah Swamp. This stands in stark contrast to the habitations reported elsewhere, as will become apparent. Furthermore, it could be argued that a unique set of historical circumstances led to the concentration of a segment of the Aboriginal population from the region in the Condah area, first as a refuge and later as part of the Mission. By way of comparison, observations and events elsewhere often indicate that habitations and settlements were present at first contact, that these were a traditional occupation site, that there was no preceding history of conflict and no evidence of encirclement or concentration of remnant populations. As will be shown, they were present from the moment the first tentative intrusions beyond the "frontier" occurred.

Archaeology At Other Village Sites

If the preceding arguments are correct then the occupation sites in the Condah area cannot be seen as representative of traditional settlements reported in the historical ethnographic literature. Ideally, to overcome these defects, investigations need to be carried out at habitation and settlement sites which meet the criteria alluded to above :

- a) that they were observed or noted at first contact,
- b) there was evidence indicating this was a traditional, longer-term, not transitory, occupation site,
- c) that there was no preceding history of conflict, and
- d) there is no evidence of encirclement or concentration of remnant populations.

Such studies have been attempted. The first example to be considered here, which might meet such criteria, relates to an historically documented "village" site near Caramut, in the central part of the Western District. Based on information provided by an informant, identified as George Arabin,⁶⁸ a number of relatively detailed descriptions were prepared by Sub-Protector William Thomas, along with a rough map of the location and sketches of the village itself. The Sketch Map showing the location of the "Blacks Village" is reproduced below:

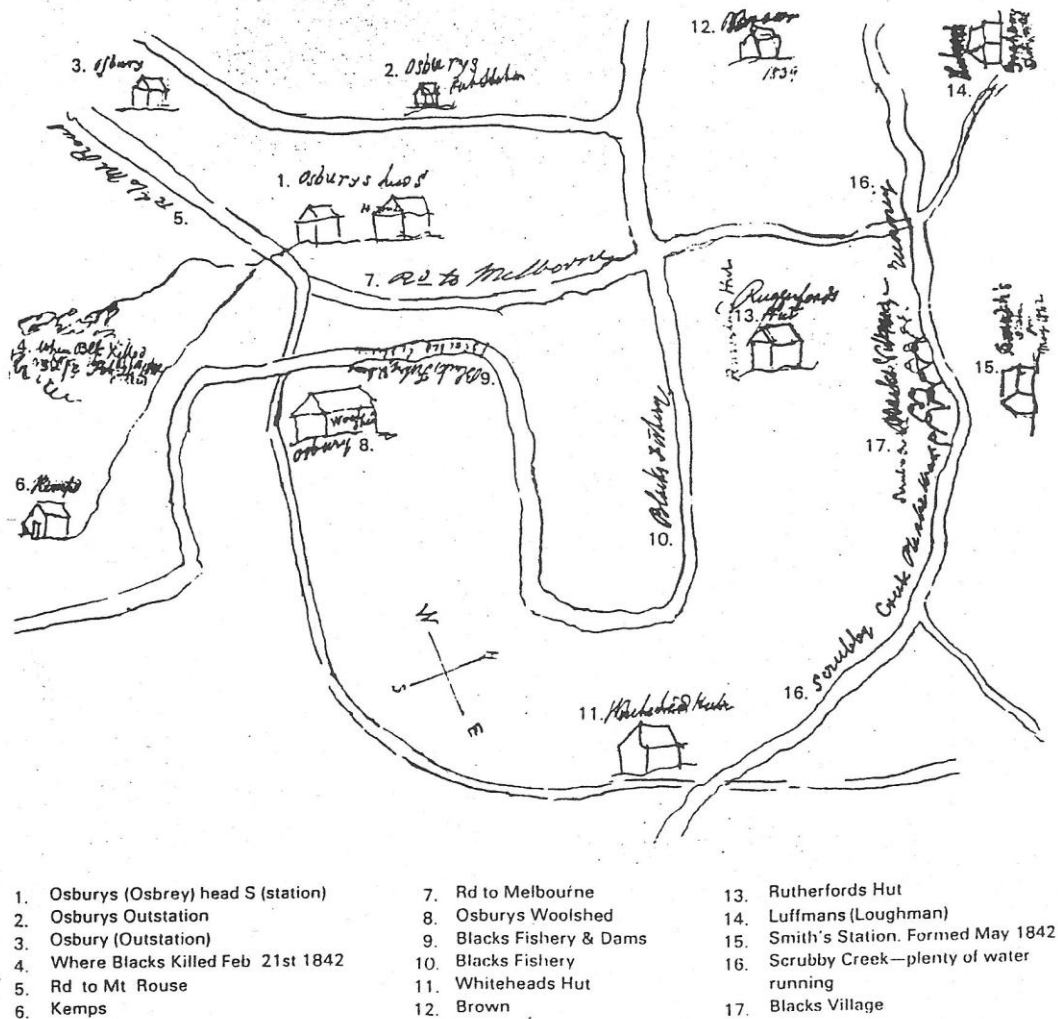
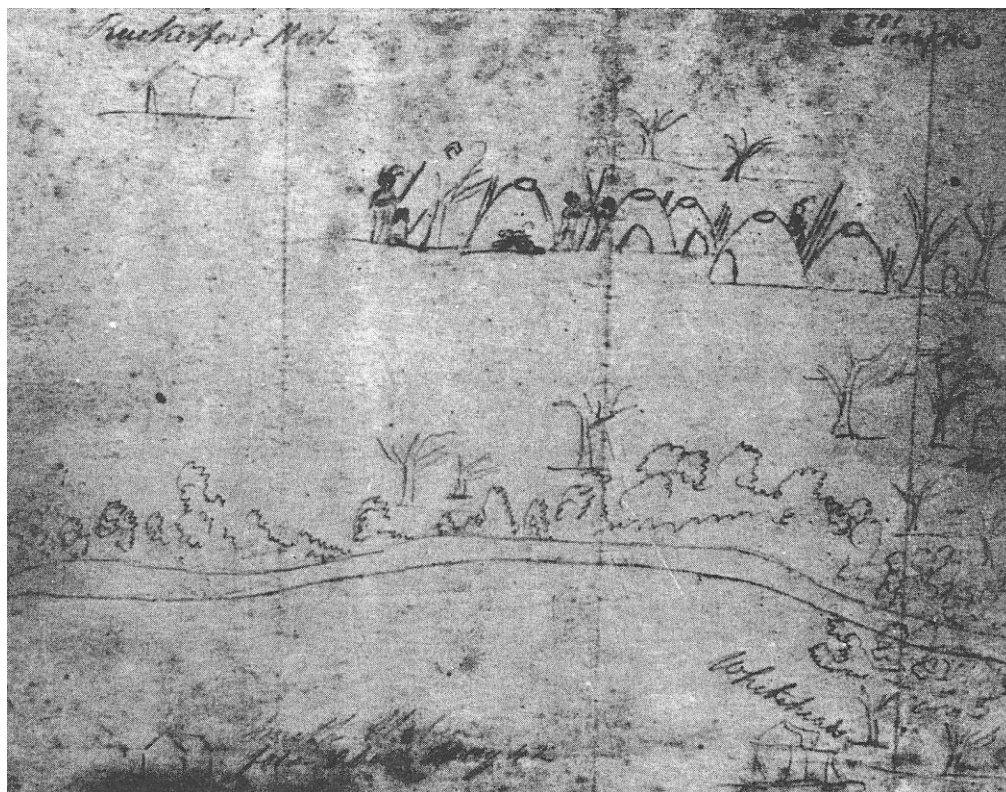
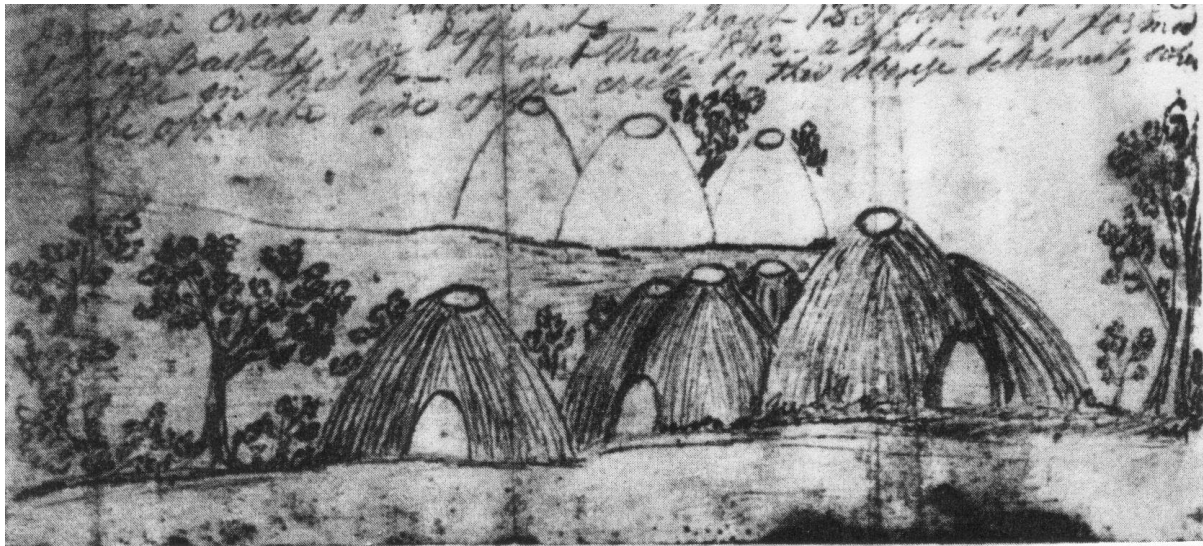


Figure 2: Sketch Map of Village at Caramut
 (Thomas Papers: Set 214, Item 22 p.537)

In his most extensive description Thomas stated:

"... by Mustons and the Scrubby Creek to the westward ... first settlers found a regular aboriginal settlement. This settlement was about 50 miles NE of Port fairy. There was on the banks of the creek between 20 and 30 huts in the form of a beehive or sugar loaf, some of them capable of holding a dozen people. These huts were about 6 feet high or little more, about 10' in diameter, an opening about 3 feet 6 inches high for a door which they closed at night if they required with a sheet of bark, an aperture at the top 8 or 9 inches to let out the smoke which in wet weather they covered with a sod. These buildings were all made of a circular form, closely worked and then covered with mud, they would bear the weight of a man on them without injury. These blacks made various well constructed dams in the creek which by certain heights acted as sluice gates in the flooding season ..."⁶⁹

Accompanying this description were two drawings of the village.



Figures 3a,b: Sketches of Village at Caramut
(Notebook of William Thomas, Smyth Papers)

In another account Thomas added that "some fragments and foundations" of the dams could still be found in the creek.⁷⁰ Guided by this information, Elizabeth Williams, in more recent times, identified the original location of the village as being at the junction of Muston's and Scrubby Creeks and subsequently carried out investigations there.⁷¹ Williams specifically identified the "Ovens paddock cluster", Location E in Figure 4 below, as "probably the site of the documented village."⁷²

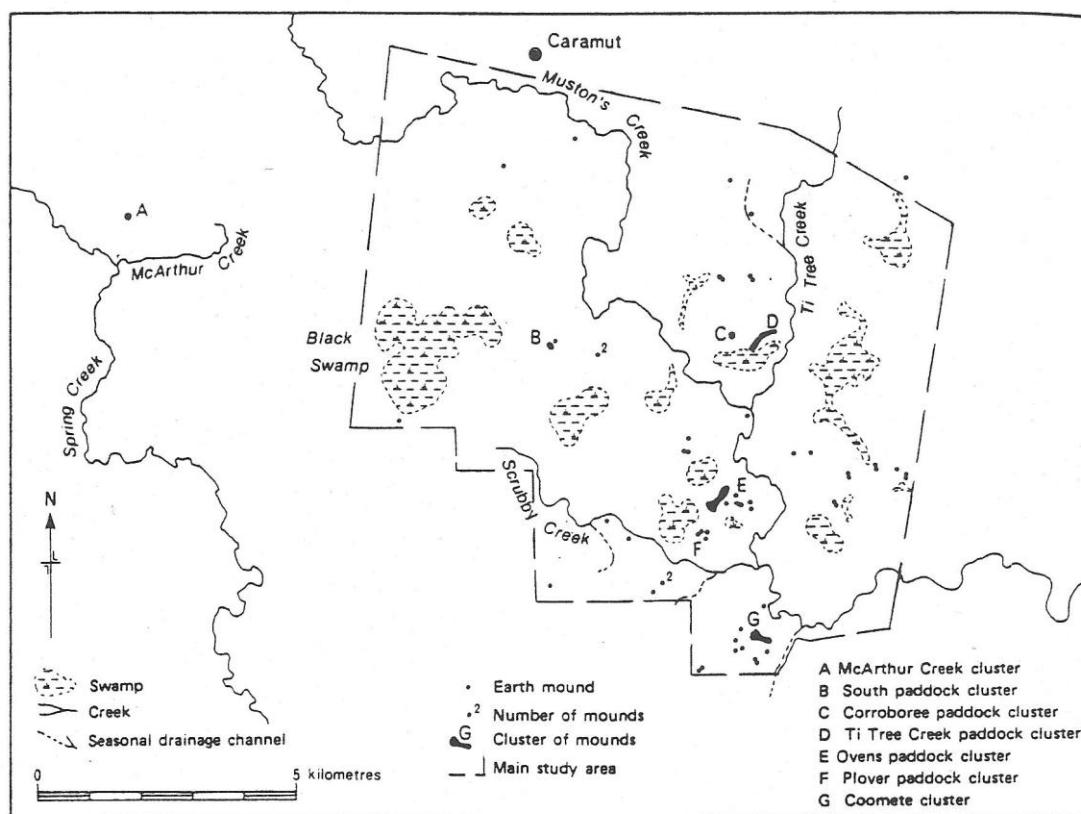


Figure 4: Location of Mound Sites in the Caramut Area
(Williams 1988:128, Figure 6.25)

Williams, however, experienced some difficulties in her study of this village site, apart from the local landowner ploughing up the mounds she intended to excavate.⁷³ She was not able to reconcile the drawing showing the village in the distance close to Rutherford's Hut [Figure 3b] with the location she identified,⁷⁴ nor was she able to locate any sign or remnant of the "dams" referred to by Thomas,⁷⁵ and finally, the mounds there did not "have a form of patterning consistent with that of sites occupied on a settled basis."⁷⁶ I would suggest that these problems arose simply because the wrong site was identified. An examination of the Sketch Map [Figure 2] shows the village was situated on "Scrubby Creek", although elsewhere Thomas stated it was "by Mustons and the Scrubby Creek to the westward,"⁷⁷ and "on Muston's or the Scrubby Creek."⁷⁸ But there are difficulties in identifying this site based on this information. These include the inaccurate representation of the watercourses in the area, such as the course of Muston's Creek, the fact that Thomas, having never been in the district,⁷⁹ was relying upon an informant, and the difficulty of locating individual settler's huts with limited historical information during a period in which European settlement was highly fluid.⁸⁰ Initially Williams attempted to identify "Scrubby Creek", equating this with a watercourse running east into Muston's Creek [Figure 4]. This was based on her unsourced claim that this creek was known locally by that name, that it had appeared as such on a map in 1846,⁸¹ "and has carried this name since at least 1846."⁸² While this watercourse may well be known locally as "Scrubby Creek" it has never been known officially by this name and in fact has no name at all officially.⁸³ Its appearance on the 1846 Run Plan is the only instance I have been able to detect in which that name has been applied to that watercourse, and even this may have been an error.⁸⁴ Alternatively, I would suggest that a confusion between nominative and descriptive terms may be the source of the problem. Put simply Thomas'

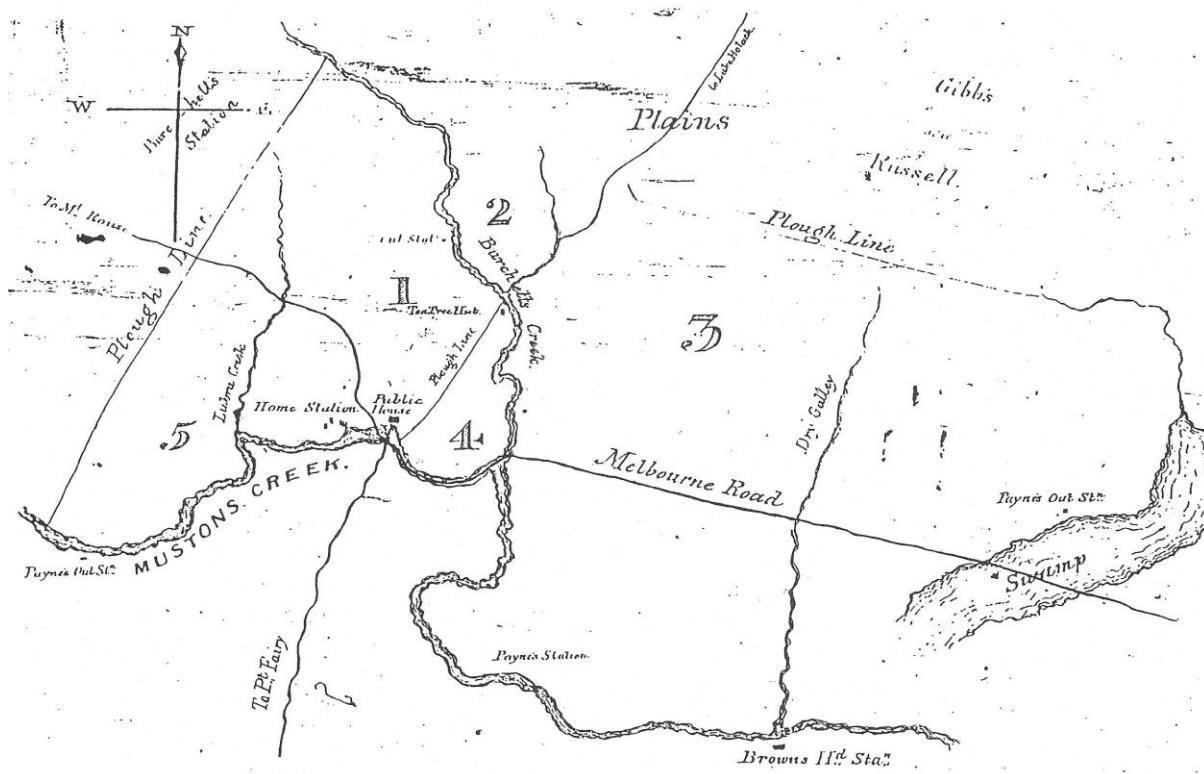


Figure 6: Robinson's Sketch Map of Muston's Creek
(Clark 1998:4:330, Figure 8.1)

By comparing these with the original sketch map of the Caramut area a number of landmarks are readily identifiable. These include Kemp's Hut, the Lubra Creek Massacre site, Osbrey's Home Station, Osbrey's Wool Shed, the road to Mt. Rouse and the two different roads to Melbourne. It seems obvious from these comparisons that the compass rose on Arabin's Sketch Map of Caramut was inaccurately drawn, with north rotated 60 deg. to the east. When the Sketch Map of Caramut is aligned with true north it can be seen that the "Scrubby Creek" village lies on a watercourse running north-south, some distance to the east of Caramut, and south of the Melbourne Road. The only watercourse that meets these specifications is Tea Tree Creek. Quite possibly the village was, therefore, located on Tea Tree Creek in the vicinity of William's mound cluster D, near the junction of Muston's and Tea Tree Creek.⁸⁶ On the basis of this conclusion an extensive examination of Tea Tree Creek was undertaken with a view to locating any sign of the "dams" referred to by Thomas. Unfortunately Thomas did not provide a detailed description of these dams so their exact form is uncertain. Robinson mentions stone fish weirs on the Eumeralla River and Gorrie Swamp,⁸⁷ but most weirs were probably of the well-known yere.roc brush- fence type, anchored at the base with stones.⁸⁸ Presumably this was the type employed in the Caramut area as Nicholas McCann, who began squatting lower down Muston's Creek early in 1840, noted at the time, "the great number of bridges along the waterholes and the large number of woven fences across the shallow portions of the Creek."⁸⁹ My search was based on this assumption and in the course of the examination of Tea Tree Creek a series of stone alignments, forming what may be a fish race and the foundations of a fish weir, were indeed noted.⁹⁰ A photograph of part of this formation appears below.



Plate 1: Photograph of stone alignment across Tea Tree Creek

While it is not certain that these features are the remains of a weir and fish race, only further archaeological investigation could establish this, it does demonstrate the possibilities that may be realised when historical ethnographic evidence is used to full effect. Unfortunately the historical ethnographic evidence also raises the possibility, if the argument is correct, that the attempt to archaeologically investigate a documented village here was flawed, and therefore of limited value to the wider debate.

A further example of the crucial importance of sound historical ethnographic research, especially when related to archaeological research, applies to another "village" site in the Western District, 1 km north north east of the junction of McArthur and Spring Creeks. At this site the archaeological investigation, again conducted by Elizabeth Williams, involved partial excavation of two mounds in a cluster of seven.⁹¹ Drawing on a comment in the journal of Chief Protector Robinson, Williams identified the McArthur Creek Cluster as being "associated with an observation of a 'village.'"⁹² According to Williams it "was in this general locality where Robinson had noted in 1841 Aboriginal 'villages or homesteads.'"⁹³ Having uncovered the remains of a dwelling on one of the two mounds investigated Williams then concluded that this "revealed that this [mound] cluster was an Aboriginal settlement."⁹⁴ Elsewhere she qualifies these statements to a degree by stating that it was "difficult to determine whether this site was the one observed by Robinson,"⁹⁵ and that, "it is possible that this could have been a village site such as the one noted by Robinson."⁹⁶ There are several difficulties with these statements and conclusions however. Firstly, what Robinson actually stated was:

*"Passed by a rivulet ... where there is a spring of excellent water which runs in the driest season. The natives are deprived of this. At the springs and water courses the natives had their fixed residences or villages or homesteads."*⁹⁷

Whereas this statement might be taken as implying there had been a habitation or habitations at this spot it certainly does not specifically refer to any village. Robinson's comment may well have been just a general statement and there was, in fact, no habitation there at all. Closer scrutiny of his entry for 3 May, 1841 also strongly suggests he was not in the vicinity of the McArthur Creek mounds at all when he made his observation. He began the day at Robert Whitehead's "Spring Creek" station, heading for the Protectorate Station at Mt. Rouse, noting the spring one and a half miles [2.4 km] from "Spring Creek", before reaching Gibb's "Stony Plains" [formerly "Bird's"], south of Mt. Rouse,⁹⁸ in the early afternoon. This reconstruction, supported by other researchers,⁹⁹ indicates he had proceeded in a west or north westerly direction, and leads to the conclusion that Robinson made his observation just east of "Green Hills" homestead. Robinson would only have encountered the McArthur Creek mound cluster if he had headed due north. The reconstructions of his path appear to indicate Robinson did not come closer than 2 km to the mound cluster. It is highly unlikely he would have been able to observe the mounds or any associated habitations from that distance, especially as the area was probably open woodland at that time, "thinly timbered" as Robinson described it.¹⁰⁰ Finally, Williams only investigated the McArthur Creek mounds because they "appeared to be the only large mound cluster in the immediate vicinity,"¹⁰¹ but with time constraints, she was unable "to confirm this."¹⁰² If this was the case, and a search for alternative sites not carried out, it further undermines the validity of an association between the mounds and any putative village site in this locality.

While the investigation of the McArthur Creek mounds may be imperfect in terms the relationship between the archaeological findings and historical ethnographic reports of "village" type settlements, the significance of Williams study should not be underestimated. It was, as far as I am aware, only the second time archaeological evidence of a habitation structure had been discovered in a mound in an archaeological context,¹⁰³ and the first systematic archaeological investigation of such a site. The relevance of Williams findings will be discussed later. But as a final example of the critical importance of sound historical ethnography in guiding archaeological investigations I now turn to consideration of the settlement pattern in and around the basalt lava flow, the "stony rises", on the south eastern side of Mt. Eccles. Here again Elizabeth Williams carried out investigations, at a site she designated as Gorrie Swamp Hut site [GSH in Figure 7 below].

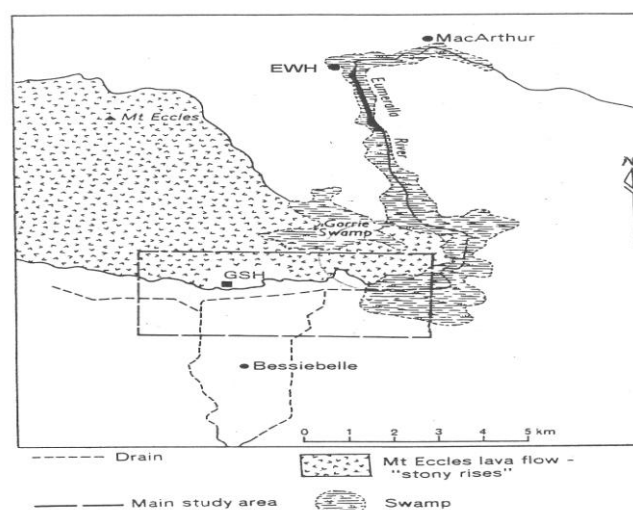


Figure 7: Map of South East Mt. Eccles Lava Flows
(Adapted from Williams 1988:Figure 7.1)

At this site there were "at least ten stone-walled features", "2 to 3 metres in diameter", "with walls in common", which had been "three and four courses high", but were "now only about 1 m high."¹⁰⁴ Two radiocarbon dates were obtained, one from the centre of the excavated Hut A, was 380 ± 150 bp, the other to the left of the entrance was "modern".¹⁰⁵ According to Williams the structures here "seemed identical in size, shape and method of construction to the Condah sites."¹⁰⁶ I would actually question this, however. They appear to be qualitatively different to those at Lake Condah. The extant walls of the Lake Condah or Condah Swamp [Allambie] structures were only 30 to 75 cm high, and none appeared to have common walls, all being "stand alone", as far as can be determined from the survey reports.¹⁰⁷ The same also seems true, with one possible exception, of the cluster of "stone circles" at the Kinghorn site 10 km north east of Condah Swamp.¹⁰⁸ A typical "stone circle" of this type is illustrated below:



Plate 2: Stone Circle
(Clarke 1994:Figure 5)

Williams in this instance associated the Gorrie Swamp Hut site with a "sort of a village" reported, again by Chief Protector Robinson, in this region.¹⁰⁹ Robinson's account of this "sort of village" appears in two forms, the first in his journal (20 March 1842) and the second in a report to La Trobe (9 April 1842). To test the validity of this association it is necessary at this point to consider the relevant parts of both accounts. In his journal Robinson recorded:

"Sat. 19 March 1842 The native name of Hunter's place or river is Eumer.ral.lar. ... The station very pleasant ... - called 'Eumeralla'. The river is like a lake, is two miles long: serpents, plenty fish deep water.

20 March 1842 decided to stay and go to natives Set off south through wooded land ... - crossed a swamp (dry) and at five miles came to the stony rises masses of lavre, steep stone ... Led our horses into the stony rises: ... plenty ash hills [mounds], round sharp layrs, plenty huts of dirt and others built of stone. Stone houses, stone weirs. Saw Mt. Eel [Eccles]¹¹⁰. Mt Napier bore north and Mt Eels WNW."¹¹¹

while in his report he stated:

"On the 19th I visited Mr Hunter's station ... Mr H was absent ... Whilst in the neighbourhood I deemed it advisable to effect a communication with the natives, and on the 20th crossed a swamp to some strong rises, and succeeded in conferring with the blacks; they had a sort of a village and some of their habitations were of stone. I passed several stone and wooden weirs for taking fish, also places for snaring birds; their dwellings are among rocky fragments and loose crags, thickly wooded and bound by swamps."¹¹²

Key points of identification given by Robinson in these accounts include Mt. Eccles being "WNW" and Mt. Napier "north", the stony rises "south ... five miles [8 km]" from "Hunter's" and the village in the stony rises being "bound by swamps". By "Hunter's" he was referring to "Eumeralla" Station, the homestead situated on what is now "Eumeralla West" on the western side of the Eumeralla River [EWH in Figure 7], a little under 2 km south west of Macarthur.¹¹³ Williams Gorrie Swamp Hut site is actually 9.5 km south south west of old "Eumeralla", with Mt Eccles north north west and Mt Napier north north east. Nor is it bounded by swamps. However, the stony peninsula or point in Figure 7 [circled] is 7.5 to 8.0 km [4.7-5.0 miles] due south of "Eumeralla West", is bounded by swamps, Gorrie Swamp, with Mt Eccles almost directly west north west and Mt Napier almost directly north from there.¹¹⁴ This evidence strongly supports the proposition that the village was located not at Gorrie Swamp Hut site but within the circled area on Figure 7. That Robinson described crossing a swamp to the stony rises, but made no mention of crossing the stony rises, an extremely difficult undertaking with horses,¹¹⁵ provides some measure of corroboration for the proposition. Sub-Protector Charles Sievwright, who accompanied Robinson on the day in question, also referred in his report to their visit to the "native encampment which was situated among the rocks to the South of a large Swamp ... the approach to it on foot extremely difficult, and on horseback impossible."¹¹⁶ This, again, is consistent with the "village" being located in the stony peninsula, the only part of Gorrie Swamp where stony rises are present on the south side of the swamp.

According to Williams yet another settlement in her study area was, "located on the edge of the rises near where the Eumeralla forms a large swamp (possibly Gorrie Swamp)."¹¹⁷ The basis for this belief was an account published in 1851 by William Westgarth. In this account Westgarth stated:

"There was a 'native township' as it was termed, on the banks of the Eumaralla Lake or swamp where the stony rises in that part of the country commence. The Aborigines generally encamped there during a portion of the year, for the purpose of fishing, with occasional rambling over the neighbouring country. At the period above alluded to [June 1844], these Eumaralla blacks were stated to be about two hundred in number; but two years previously [1842], when this locality was first taken up for pasturage the 'township' was said to contain five hundred."¹¹⁸

In actual fact this was the third occasion Westgarth had published such an account, the first being in 1846,¹¹⁹ and the next in 1848.¹²⁰ In his 1846 account Westgarth wrote:

*"[June 1844] There was a 'native township', as it was termed, on the banks of the Eumeralla Lake or swamp, where the stony rises in that part of the country commence. The aborigines generally encamped there during a portion of the year, for the purpose of fishing, with occasional rambling over the neighbouring country. Mount Eeles [Eccles], an adjoining volcanic hill, with a large and romantic crater, appears to have been a favourite resort, their repeated visits having worn a distinct track to the summit. At the period above alluded to, these Eumaralla blacks were stated to be about two hundred in number, but two years previously, when this locality was first taken up for pasturage, the township was said to contain five hundred."*¹²¹

It appears from Westgarth's descriptions that he is referring to Gorrie Swamp, where the stony rises commence. This is consistent with the location identified as the site of the "sort of village" noted by Robinson. Rather than there being two settlements in this area, I would assert there was just one, which, based on Westgarth's account, was quite large in population terms. Westgarth described the circumstances of his report years later in his *Personal Recollections*, when he visited Robert Craufurd, manager of "Eumeralla East" Station at the time, June 1844. According to Westgarth, whilst he was there they, "were soon off over the stony rises," and climbed the track to the summit of Mt. Eccles, commenting that, "we saw nothing of the natives, however."¹²² It seems likely, therefore, that the real source of his information, the person he indirectly refers to in the preceding accounts, was Robert Craufurd, brother of Lord Ardmillan, described by Boldrewood as "a fair scholar" and clearly sympathetic to the local population.¹²³ Boldrewood also approached this area, although he doesn't seem to have entered the "village". Based at "Squattlesea Mere", just south south east of the stony peninsula, he commented on frequently seeing, "fires in 'The Rocks',"¹²⁴ with, "an unusual number and brilliancy of fires at the black camp in the Rocks,"¹²⁵ on one occasion. On another occasion he was involved in pursuit of a large body of the *Nillan gundidj* clan, reporting "the trail grew broader and more plain ... We followed the track to a thick brake of reeds nearly opposite a jutting cape of the lava country,"¹²⁶ before ending the pursuit. In an attempt to suppress the resistance emanating from the stony rises the Commissioner of Crown Lands, Foster Fyans, also had occasion to visit the village in the stony rises some months after Robinson. Basing himself at "Eumeralla" Station he reported to La Trobe that:

"In the hope of seizing them I left this morning on the 9th Inst. at 3 o'Clock; we could make no use of the Horses; from the quantity of water in the marshes, and the Rocky Ground, we proposed to circle close to Mt Eels [Eccles] the party proceeded on foot, and waded with considerable difficulty through the marshes nearly one mile and entered a great stone Range to a point called the Township; we reached it about 9 o'Clock, a distance not more than seven miles from this ["Eumeralla"]: not finding any natives, we proceeded as far as we were able."¹²⁷

Apart from the specified distance of "not more than seven miles," which would encompass both Williams' Gorrie Swamp Hut site and the stony peninsula, Fyans' account broadly matches the others. During the course of her research Williams was also informed by a local landowner, Mr William Thomas, that the stony peninsula was one area where stone circle sites, "are particularly common."¹²⁸ She visited the area and "found a number of these features" but did not record them as it was too difficult.¹²⁹ Since then a local farmer, Robert

Young, and a local ranger, Andy Carmichael, reported finding what they believed to be, "an Aboriginal village site near Lake Gorrie in the Stony Rises,"¹³⁰ a small water body on the northern side of the base of the "stony peninsula". This site was examined by a contingent of stakeholders revealing, "several stone house sites ... and a fish trap," but it was considered to be, "not particularly noteworthy,"¹³¹ and was not registered as a heritage site.¹³²

As a result of the information outlined above, I formed the conclusion that some sort of village had been in existence during the early contact period in the "stony peninsula", and made a brief visit to this locality on 4 December 1999. In an area where the northern edge of the stony rises here borders on the southern edge of Gorrie Swamp, just to the west of where Lake Gorrie Road intersects the stony point, I observed what appeared to be numerous stone circles among the long grass and bracken fern. Some appeared to identical in form to those reported elsewhere, as illustrated in Plate 2, although others appeared to have common walls and a central dividing or support wall. Two other structures seemed to be quite different in form to those previously reported. One of these, which I interpreted as a complex galleried or multi-roomed arrangement is illustrated below [Plate 3].¹³³



Plate 3: Complex Stone Arrangement, Stony Peninsula
(Stick in left centre 70 cm long)

The other structure, which had the appearance of an all stone house with collapsed walls,¹³⁴ is also illustrated below [Plate 4]. This was situated in a picturesque glade, on a low prominence where a finger of Gorrie Swamp reaches into the stony rise.¹³⁵ This second structure may have been around 2 m high originally. Whereas it has been pointed out previously that natural processes may produce "stone circles", and that some have consequently been misidentified,¹³⁶ I was unable to conceive of any natural process, or non-Aboriginal activity, that could have formed either type of arrangement.¹³⁷



Plate 4: "Stone House", Stony Peninsula
(Stick in centre 70 cm long)

While it is difficult to verify the claim that this was a stone house without further investigation it should be noted that Robinson did mention "stone houses" in his journal account and, in his report to La Trobe, stated that "some of their habitations were of stone."¹³⁸ Another relevant question was the size and nature of this settlement. Robinson described it as a "sort of a village" but Westgarth and Fyans alluded to a "township". In numerical terms Sievwright counted 33 on the day of his visit, but this was only "a portion of the tribe."¹³⁹ Robinson eventually took the names of 82 *Nillan gundidj*, the clan that have been associated with this area.¹⁴⁰ Against these figures is Westgarth's assertion that the population of the "township" was 200 in 1844 but that it had been 500 two years previously. This last figure is difficult to credit although there is some support for it. Hunter claimed that on 10 August 1842, "upwards of 150 blacks" had attacked his station.¹⁴¹ By analysing population figures a ratio of adult males to total population can be established. Different sources produce ratios from 3.29 to 3.89, and as high as 4.20.¹⁴² If Hunter's attackers were all males then this, using the lowest ratio, represents a population of 493. Hunter's figure needs to be treated with caution, however, as similar reports elsewhere have been shown to vary by a factor of three or more.¹⁴³ Nevertheless Fyans, on a trip from Geelong to Portland in 1839, being unable to cross the Tyrendarra lava flow with his horses, turned toward the southern edge of the Mount Eccles rises and in this vicinity was "surrounded by, I suppose, 150 natives, following us with their spears."¹⁴⁴ It is possible this encounter coincided with a ceremonial gathering, or two or more clans united in their efforts to repel the incursion, as Critchett suggests they may have done against Hunter, thus inflating local population counts.¹⁴⁵ Given this degree of uncertainty, it is not feasible, therefore, to arrive at a valid or specific figure for the population of this "sort of village" at this point, although there were undoubtedly significant numbers residing there. Regarding the question of the nature of this settlement it is necessary

to return to some of the issues raised earlier, such as the degree of sedentism and the origins of such settlements. Before concluding, however, it should be pointed out that if the preceding arguments are correct then no archaeological excavations have as yet been carried out at the site of any village or substantial settlement reported in the historical ethnographic literature. Williams, it would appear, may have investigated an outlier of the main village or another small settlement, but did not, in my view, directly investigate the "sort of village" alluded to by Robinson.

The Origins, Nature and Extent of Habitations and Settlements in SW Victoria

As mentioned earlier, it has been argued by some that the larger settlements noted in the historical ethnographic literature were quite possibly a manifestation of early-contact or post-contact dynamics, or simply short-term concentrations of population in keeping with traditional ceremonial occasions.¹⁴⁶ In the first instance, according to this line of reasoning, the process of dispossession forced local Aboriginal populations to seek refuge in marginal or unoccupied areas, or to suffer involuntary concentration in the same type of areas or at missions. As discussed previously, this would appear to provide the best explanation for the occupation evidence in the Condah area. But the shortcomings of this example have already been pointed out. Conversely, when the two best documented villages are considered instead, neither the early-/post-contact scenario, nor invocations of ceremonial gatherings, appear to provide valid explanations. The two villages in question are the Caramut village and the "stony point" village, which will be referred to henceforth, for convenience, as the "Eumeralla" village. At Caramut the village was encountered when the "first settlers found a regular aboriginal settlement."¹⁴⁷ Apparently the population of the village was "perfectly harmless and stationary" but, near the end of 1840 or beginning of 1841, the "white people set fire to and demolished the aboriginal settlement," "while the Blacks were from their village, up the creek, seeking their daily fare."¹⁴⁸ The Caramut district was not encircled by squatting runs at the time the village site at Tea Tree Creek was "taken up", as the frontier was only just reaching there from beyond the Hopkins River, just to the east.¹⁴⁹ For a village such as Caramut to have been formed as a result of an early-contact dynamic a significant and almost immediate displacement of local Aboriginal groups would have been required, with these refugees establishing their "village" beyond the "frontier". There is no evidence to support such an unlikely scenario. In fact the evidence suggests that the squatters, initially, only effectively occupied their home station areas and, when displaced, Aboriginal people usually endeavoured to remain in the vicinity of their traditional holdings.¹⁵⁰ The events at Caramut, however, appear to be typical of a dynamic even alluded to in the 19th century, whereby the pattern of constructing more permanent habitations and settlements was abandoned, not induced, as a direct result of squatters' incursions and aggressions.¹⁵¹

A similar argument applies to the Eumeralla village, except that this settlement has been characterised as a post-contact guerrilla base.¹⁵² However, as has already been noted, as early as 1839 Fyans had been confronted by 150 warriors when he approached this area, at a time when there was not a single European settlement of any sort for 25 km.¹⁵³ Even when Hunter tried to establish "Eumeralla" late in 1841, suffering almost immediate attacks from the direction of the Eumeralla village, there were no other squatters occupying lands within 10 km.¹⁵⁴ Westgarth claimed, anyway, that the village was there "when the locality was first taken up",¹⁵⁵ and this seems to be supported by Boldrewood, who appears to imply at various points that the *Nillan gundidj* had traditionally occupied "The Rocks".¹⁵⁶ Undoubtedly the Eumeralla village was a centre of resistance during the squatter invasion,¹⁵⁷ but the historical sequence does not indicate that this village was formed in response to the invasion. Quite the

contrary, it was already there when the squatters arrived. But this sequence may also possibly account for the appearance of the post-contact habitations at Kinghorn and Allambie. According to Westgarth the population of the Eumeralla village dropped from 500 in 1842 to 200 at the time of the "Eumeralla War" in 1844. While these figures may be exaggerated it is quite conceivable a proportion of the surviving population could have sought refuge from the hostilities during that period, or perhaps at their conclusion, in the unoccupied Condah area.

Other, more speculative, "post-contact" arguments that have been advanced, such as disease, sealers or the influence of the Hentys, are difficult to refute because there is so little evidence put forward to support them. How epidemics might have led to the construction of permanent habitations and large settlements is difficult to fathom, common sense suggesting the resultant depopulation would, in all likelihood, have the opposite effect. That an estimated dozen sealers operating along the whole Victorian coast by 1834 might have triggered a transformation in habitations and settlement is also difficult to credit.¹⁵⁸ Comparable visits by the Macassans to the Arnhem Land coast over decades, even centuries, while apparently stimulating the ceremonial exchange cycle far inland, certainly do not seem to have initiated any settlement pattern there akin to that found in south west Victoria.¹⁵⁹ Ascribing a similarly disproportionate influence to the Hentys' vanguard settlement is equally implausible. Such an explanation becomes more improbable when it is realised that the Hentys were encountering the sort of habitations characteristic of south western Victoria almost from the moment they arrived. For example, Edward Henty noted "many Native Huts" on the Fitzroy River in 1834, and even "stopped the Night in some Native Huts" on the Surrey River in 1835.¹⁶⁰ Likewise, in August the following year, Mitchell slept in "a snug old hut of the natives" near the mouth of the Surrey River.¹⁶¹ A further weakness in schema attributing habitation types and settlement patterns to exogenous influences lies in the extent of the phenomenon, with ethnographic reports of more permanent habitations and villages from the early contact period covering an area of 20,000 sq. km. Lacking a clear mechanism to account for this, as well as providing little supporting evidence, the "exogenous influence" theses do not provide cogent alternatives.

As stated, observations of "substantial" huts, singly, in clusters or in groups, occurred over an area of 20,000 sq. km, perhaps more. Many were noted by Robinson in particular. One well-known example was the "village" consisting, "previous to its occupation by white men," of, "13 large huts built in the form of a cupola," reported by Robinson near Mt. Napier on 10 May 1841, although only 3 of these huts had been occupied, "a day or two previous to my visit," according to Robinson.¹⁶² He also referred to another village in this area the following day, "One of the old men went, pm, to his village but returned again in the evening."¹⁶³ Earlier, he mentioned that he had passed, on his way to Mt. Napier from "The Grange", near Hamilton, "at least 20 well built worns or native huts."¹⁶⁴ At "Forlonge's Dairy Station", again near Hamilton, two days before, Robinson had commented that, a "whole village, therefore, has been forced away from their ancient pool [spring]."¹⁶⁵ Elsewhere he had reportedly been told by Robert Whitehead of Spring Creek that, "there was a large number of huts on the river when they first came."¹⁶⁶ And at Lake Elingamite in the eastern part of the Western District, Robinson encountered a village with a population of 60 to 70:

*"Passed a deserted Elangermot native camp of nine huts of recent construction; each hut was large enough to contain seven or eight persons (adults). They were in form of a cupola with bark and sods over them with a doorway."*¹⁶⁷

Furthermore, near Port Fairy, according to Robinson:

*"There is a large swamp on the east of the Port Fairy River [Moyne River] where the natives get their chief support, roots etc. and near to the small eminence on the edge of this swamp, called by Campbell's men 'Tower Hill', is a native village: an assemblage of huts"*¹⁶⁸

Upon his return there the following year Robinson referred to it as a "native township", and appears to indicate the population may have been up to 150.¹⁶⁹ Sievwright, who accompanied Robinson on this occasion, reported that they, "visited a tribe who constantly reside in the neighbourhood of Port Fairy."¹⁷⁰

While these are the more noteworthy examples of larger settlements in south west Victoria, Robinson, and others, often mention single or multiple dwellings in close proximity. Such residences, often described as "permanent" or "substantial",¹⁷¹ were widely reported in south west Victoria. These reports range from upper Fiery Creek toward the north east of the Western District,¹⁷² to Lake Elingamite, as indicated earlier, in the east,¹⁷³ and White Lake in the south west Wimmera. Robinson even observed a cupola-type residence in South Australia, at Mt. Burr, to the north of Mt. Gambier, "Left Sturt's accompanied by Adelaide police Past a Native hut, made like those of Tapoc [Mt. Napier], with logs and turf."¹⁷⁴ Confirming distribution into South Australia, Gideon S. Lang, who took up squatting at Kentbrush on the coast west of Portland in 1842, described not only the habitations in rare and significant detail, but their construction as well:

*"The huts are generally about nine feet [2.7 m] in diameter, five feet [1.5 m] high, and in the shape resembling half an orange. They are built in the first place of ... dry stiff branches ... the lower row set in the ground, and the rest interlaced above in the manner of a bird's nest. Upon this they place branches of trees, reeds, or long grass; over this they again place grass, turf, and above all sand if they have it, the top being rendered around and smooth like the Esquimaux winter hut. There is one low opening or door at one side of the hut, and in the opening is placed a fire. The largest of these huts I ever saw was on the Koorong [The Coorong], an arm of the sea behind the coast sandhills [Younghusband Peninsula], between Adelaide and Portland; it was fourteen feet [4.2 m] in diameter and quite eight feet [2.4 m] in height inside, and rose perpendicularly at the sides, and could accommodate an unusually large number of people."*¹⁷⁵

Thus far a variety of habitation types have been mentioned in passing, the "tent" or "teepee" form from White Lake, the "beehive" and "sugarloaf" from Caramut, and the "cupola" type frequently identified in reports. Before attempting to elucidate the nature of these dwellings and others identified in the literature it is necessary to look briefly at the form referred to as the "sugarloaf". The Chief Protector described one type of shelter which may have been a "sugarloaf", these being, "like a cupola are sometimes double and have two entrances."¹⁷⁶ He recorded an example in his travels, at "The Great Swamp" near Mt. Napier, "a fine large double hut ... with two entrances."¹⁷⁷ Charles Griffiths, in another reference to dwellings around Port Fairy and Portland, wrote in 1845:

*"they construct a kind of hut for the winter season, which is more durable in character. They do this by heaping sods and clay on top of the original mi-mi ... when they remain in one place for any length of time, these earths reach considerable size: I have seen one fully fifteen feet [4.5 m] long, and high enough for a man to stand upright in."*¹⁷⁸

This too could have been a "sugarloaf" type of dwelling, Griffiths's indication that it was "fifteen feet long" suggesting it was not circular as the other types were. Dawson, in discussing what appears to have been the cupola-type "family wuurn" capable of accommodating 12 or more people, adds that, "when the family is grown up the wuurn is partitioned off into apartments, each facing the fire in the centre."¹⁷⁹ Although these descriptions are not very detailed it is possible to conclude that larger, multi-roomed structures were another form of habitation in the central parts of the Western District, which will be denoted as the "sugarloaf" type.

Discussions of habitations in south west Victoria have been characterised by two approaches to classification. In these the habitations are categorised either according to the degree of permanence or the type of dwelling. Typically, in the former, just two sub-classes are created, "temporary" or "ephemeral", and "well-built" or "semi-permanent".¹⁸⁰ Alternatively, dwelling-type classification simply recognises a number of different habitation exemplars. Williams employs this system, recognising three types of structure, the "windbreak", "cupola" and "weatherproof beehive".¹⁸¹ Coutts *et al.*, however, nominate four structural forms as sub-types within their "semi-permanent" class - specifically the "tent", "beehive", "timber and turf" and the "stone wall and bark" (as found in the Condah area) types.¹⁸² Before proceeding, however, it is necessary to clarify one further issue in regard to the "beehive" type. The only report of a "beehive" type is found in Thomas' accounts and sketches of the Caramut village. Given that Thomas had never been in the districts where the more substantial dwellings were found, and that he took his information from a naive observer, I would suggest that Thomas' "beehive" is the same as the "cupola" referred to by others. While this cannot be proven it is a reasonable inference, especially as they are almost identical in construction and topology, and consequently it will be assumed that this is the case. This accordingly eliminates distinctions between the "cupola" and "beehive", and "cupola" and "timber and turf" (equivalent to the cupola), while allowing for the separate recognition of the "sugarloaf", also principally of "timber and turf" construction.

Having clarified these matters a habitation typology is now set out below. Drawn from an extensive literature search and personal observation it recognises 3 classes into which habitation types are grouped. By and large these classes, and the order in which each habitation type is listed, reflects the degree of labour invested in the construction of each type of shelter, which also appears to be proximately correlated with the degree of permanency and complexity of each type of shelter.

Table 1: Classification of Habitations

<u>Temporary</u>	<ul style="list-style-type: none"> - windbreak (boughs and grass or stone)¹⁸³ - half cupola (limbs, bark, grass)¹⁸⁴ - temporary cupola (limbs, bark, grass) var. stone foundations.¹⁸⁵
<u>More Permanent</u>	<ul style="list-style-type: none"> - cupola ("substantial", timber and turf, often coated with clay, sand or earth)¹⁸⁶ - stone walled* (stone walls of at least 1 m, roofed with branches and bark)¹⁸⁷

Complex

- sugarloaf (double cupola)¹⁸⁸
- tent (enlarged cupola with central support)¹⁸⁹
- stone gallery* (galleried)¹⁹⁰
- stone* (all stone cupola?)¹⁹¹

* Tentative Identification

The "windbreak", the "half cupola" and the "temporary cupola" are the only forms listed here that have not been previously discussed. Briefly, the windbreak, called "common screens" by Robinson, was only used when mobile and the weather warm.¹⁹² They may also have been made of stone, at least in the stony rises around Lake Purrumbete.¹⁹³ Used as a temporary habitation, where only a short stay was expected, the half cupola, probably only made for one or two individuals, is illustrated in Plate 5. Called a "neich" or "niech" [niche] by Robinson, he observed, "a vast number," of "old" ones, along with, "thousands of dead eels," at the eastern end of Lake Bolac in April 1841.¹⁹⁴



Plate 5: Half Cupola Temporary Shelter
(Wilmot Abraham - Williams 1988:Figure 6.9a)

Initial identification of the temporary cupola relies upon Robinson, in his discussion of cupolas, stating that "some are made with boughs and grass,"¹⁹⁵ and not covered with the usual turf and clay, a form also described by Dawson, though his account possibly conflates this with the half cupola.¹⁹⁶ The description provided by Tommy White, that "the ordinary mia-mia of branches and bark was erected," on the stone circles in the Condah area,¹⁹⁷ is also indicative of this type of shelter, except for the stones which acted as foundations or base

supports. Evidence of a possible relationship between this type and the ordinary, more permanent cupola, can be seen in a sketch Robinson made of such a residence on a mound, showing what may be a similar structural feature around the base.



Figure 8: Cupola on Mound
(Robinson in Clark 1998:2:243, Figure 5.11)

Having outlined a classificatory framework a key question still remains as to the degree of permanence of the shelters listed as "More Permanent" and "Complex". The answer is partly dependent upon further analysis of the historical ethnographic evidence but is also intimately related to the question of sedentism. Before addressing these issues, however, and to obtain other necessary insights, the distribution of such abodes across the landscape, the settlement pattern, must firstly be examined.

The Settlement Pattern

The Robinson journals are a rare historical ethnographic resource containing, as they do, observations by an experienced individual focussed on Aboriginal populations over large areas for a number of years. Historical ethnographic information often consists of single accounts relating to a single group in a single location at a specific point in time, and is consequently of limited value in establishing broader regional patterns, even when consolidated and cross-referenced.¹⁹⁸ While Robinson's journals are still far from ideal,¹⁹⁹ they are almost unique in providing frequent comments on the locations where habitations were situated. Recall, for example, the passage quoted earlier, when Robinson was in the Spring Creek/McArthur Creek locality:

*"Passed by a rivulet ... where there is a spring of excellent water which runs in the driest season. The natives are deprived of this. At the springs and water courses the natives had their fixed residence or villages or homesteads."*²⁰⁰

On a number of occasions Robinson made comments such as this, the, "whole village, therefore, has been forced away from their ancient pool,"²⁰¹ being a case in point. Other indicative descriptions of "fixed residences" or "homesteads" were provided by Robinson relating to the mounds commonly found in this region. Near the Hopkins River he recorded:

*"we saw a large mound of earth at least four feet high and 10 feet long, five wide. My native companion said it was a black man's house, a large one like what [sic - white] man's house ... it appeared the whole had been burnt down. A short distance from this, about 200 yards, was the remains of another hut of similar description."*²⁰²

Whereas these "houses" had been on mounds Robinson described another setting where he encountered, near an outstation of "The Grange", "the frame of a small native hut; made very substantial and neat and placed on the slope or declivity of a hill with an oven [mound] at the back."²⁰³ In the end Robinson concluded:

*"Some [wurns] were placed near the river, others on activity of the hills and some on the top of an eminence. One on top of an eminence was erected on a mound of earth thus: [Figure 8]"*²⁰⁴

In general terms Dawson concurred with Robinson's earlier assessment, associating habitations with watercourses and sources, but included certain swamps as well:

*"These comfortable and healthy habitations are occupied by the owners of the land in the neighbourhood, and are situated on dry spots on the bank of a lake, stream, or healthy swamp, but never near a malarious swamp, nor under large trees,"*²⁰⁵

A more extensive and systematic analysis of settlement locations by Lourandos also showed a strong link with wetlands, with a preference for siting in woodlands.²⁰⁶ On this basis, and with the historical ethnographic evidence in mind, I would conclude that habitations and settlements were normally located in close proximity to watercourses, water-bodies, water sources and wetlands. Every example cited thus far, where the location is known, conforms to this pattern. Within those parameters there also is some evidence for a preference, in terms of siting, for woodlands and higher ground or vantage points, "eminences" as Robinson called them. Both the Caramut and Eumeralla villages exhibited this latter preference, occupying favourable defensive positions.²⁰⁷ Interestingly this distribution pattern is virtually identical to that for mounds. Mounds cluster along major drainage systems close to streams, lakes, lagoons and swampy areas subject to flooding, and are found in places where there is good vantage, often just inside the timber line.²⁰⁸ While Bird and Frankel claim that mound, "clustering cannot be construed as evidence of large-scale settlements or sedentism,"²⁰⁹ a claim that may be flawed,²¹⁰ this does not preclude a correlation between mounds and habitation and settlement locations. A correlation such as this would not be surprising given the archaeological and ethnographic indications that mounds were used as habitation and camping sites, activity areas, for cooking, and for burials.²¹¹ Clearly there is some sort of association between mounds and residential activities.²¹² Even if the mounds themselves were only infrequently used as habitation sites the association still holds.

Numerous examples of single residences have been pointed out in passing in this paper, as have some multiple dwelling encampments. Other settlements have also been characterised as villages. Robinson, as noted earlier, appeared to indicate some sort of settlement hierarchy in this array of habitations when he referred to, "their fixed residence or villages or homesteads." But in reporting the Eumeralla village he rather enigmatically described it as "a sort of a village." And what are we to make of the "20 well built wurns or native huts," he passed on his way from "The Grange" to Mt. Napier, which do not seem to have been in clusters but were strung out along the way. Any settlement typology must account for not only the more common settlement types but the less common as well. Williams approached

the problem by attempting to classify the encampments found in south west Victoria in terms of 3 categories : 1) 6 huts or less, 2) more than 6 huts, and 3) 20 or more huts or hearth fires, concluding that "single huts were the most common settlement unit."²¹³ Each of these categories had an assigned level of population (>24-42;28-140;80-200), although there was some overlap between categories. As Williams was unable to arrive at a valid archaeological method for determining settlement population size these categories were based on the sort of observational evidence documented in this paper, despite its recognised limitations, and arbitrary numerical groupings, her "continuous" and "discontinuous" distributions in hut clusterings.²¹⁴ Categories were then related to multiples of family units, bands and supra-bands. However, while this classification may well reflect the social organisation of populations in south west Victoria, it is difficult to validate as a settlement typology. This is because of it depends upon the determination of a correspondence between settlement units and social units, as well as the relationships within corresponding social groups. Furthermore, it does not appear to satisfactorily account for all the disparate examples of the settlement pattern alluded to thus far.

Accepting that an arbitrary element is unavoidable in settlement typologies, the modern distinction in population terms between "villages", "towns" and "cities" being a simple illustration of this, I propose instead to draw on a cross-cultural study of rural settlement fixation. It has been argued that the people of south west Victoria were "complex hunter-gatherers",²¹⁵ that is, hunter-gatherers exhibiting a degree of sedentism.²¹⁶ Many examples have been identified around the world including the late Natufian and early Neolithic of south west Asia, and Jomon Japan, in prehistory, with the Pacific Northwest Coast of North America and the Calusa of Florida being historic examples.²¹⁷ Such societies exhibited many of the settlement characteristics associated with simple agricultural societies.²¹⁸ Therefore, I propose to employ a modified form of Grossman's classification of the "lower limb" of the rural settlement hierarchy,²¹⁹ applying it to structures identified previously as "More Permanent" or "Complex". This classification, which may provide the "best fit" for the available evidence, is as follows:

<u>Homesteads:</u>	<i>Single structures occupied by twenty persons or less at least one kilometre from any other structure</i>
<u>Lodges:</u>	<i>Single structures occupied by twenty to forty persons at least one kilometre from any other structure</i>
<u>Dispersed Settlements:</u>	<i>Non-contiguous structures, or contiguous clusters of structures with less than forty persons, placed at least 150 metres apart but closer than one kilometre</i>
<u>Hamlets:</u>	<i>Contiguous structures having forty to one hundred persons</i>
<u>Villages:</u>	<i>Contiguous structures having more than one hundred persons</i>

In terms of where particular examples fit within this framework, the cupola would appear to be the classic "Homestead" structure typified by the, "hut; made very substantial and neat and placed on the slope or declivity of a hill with an oven at the back."²²⁰ Mound 5 in the McArthur Creek cluster may have been another, rather than the village surmised by Williams. "Lodges" include solitary structures with populations approaching hamlet size, such as the White Lake "tent" and sequestered sugarloaf/double cupola residences of larger dimensions

described by Robinson, Griffiths and Lang. "Dispersed Settlements" were also a feature of settlement in south west Victoria. Habitations, and mounds, it will be recalled, were often found on the banks of watercourses and the margins of water bodies, sources and swamps. These structures appear to have been spaced out, possibly clustering at favourable locations such as the convergence of two water courses, or at a swamp close to a river. Robinson's "20 well built native wurns or huts", probably fringing the "Great Swamp" on the north east of Mt. Napier,²²¹ could be an example, the two mounds near the Hopkins River, 200 yards apart, their residences burnt down, could be another. On Spring Creek, Whitehead's report that there had been, "a large number of huts on the river when they first came,"²²² may also allude to a dispersed settlement. More significantly, this may be what Robinson meant when he described the Eumeralla village as a "sort of a village". Here habitations are found at the edges of the stony rises within reach of Gorrie Swamp and the Eumeralla River. As the terrain would have made concentrated settlement difficult anyway I would suggest that structures were strung out along the edges of the stony rises, forming clusters, such as I observed, at more favourable locations, and outliers like Williams' Gorrie Swamp Hut site. Presumably the densest concentration of habitations, and population, was to be found on the stony point, the "apex" of the margins of the stony rises and a favourable location in terms of resource access and defence. This contention remains to be tested however.

Examples of "Hamlets" and "Villages" have also been mentioned in passing. The settlement at Lake Elingamite, of 9 huts housing 7 to 8 adults, with an adult population of 60 to 70 would represent a "hamlet". If the same level of occupancy was applied to the 20 to 30 "beehive or sugarloaf" residences at the Caramut settlement then this "village" would have had a population somewhere between 140 and 240.²²³

Direct validation of this settlement hierarchy is not possible without more extensive regional archaeological studies being carried out. The limitations of previous work has been discussed, although the post-settlement refuge habitations in the Condah area may still reflect the traditional settlement pattern to some degree.²²⁴ However, a survey of a large sample of mounds (207) by Coutts *et al.* may provide indirect validation of the proposed settlement hierarchy. In this survey data was presented in histogrammatic form, representing various mound parameters.²²⁵ When the number of mounds within a 1 km radius (Figure 9) is considered a tri-modal distribution is apparent.

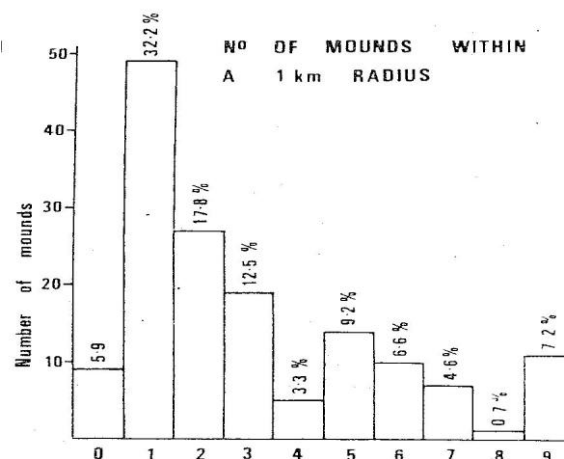


Figure 9: No. of Mounds Within a 1 km Radius
(Coutts *et al.* 1976:Figure 3)

Given the relationship between habitations and mounds postulated before, I would suggest that the largest grouping of 1-3 mounds is indicative of the smaller sites, the "Homesteads", "Lodges" and "Dispersed Settlements", while the other two peaks, 5-7 and 9, may represent larger types of settlements, possibly "Hamlets" and "Villages". Although speculative, support for this proposal can be found in the data on mound diameters and volumes which also show a tri-modal distribution.²²⁶ But, as already stated, further investigations are required to validate this and the hypothetical settlement pattern generally.

Sedentism

Sedentism, where groups, or a proportion of the population, "stay in one place all year round" or "at least for a greater part of the year,"²²⁷ is a complex concept, and difficult to diagnose when those groups or populations no longer follow their traditional patterns of existence. Engendered in this concept are a number of dependent variables that give meaning to the notion, variables such as the degree of permanence of habitations, the length of time people live in one location in their habitations, the proportion of the population living in such circumstances, the frequency with which people move and even how far they move. In addition, the degree of sedentism and the mobility pattern of particular groups is inextricably linked to their mode of subsistence or food production.²²⁸ All these issues need to be addressed in order to understand and assess the degree of sedentism in south west Victoria.

A variety of archaeological methods for directly determining the degree of sedentism have been proposed and tested. Analysis of floral and faunal remains at a site to establish the number of seasons, and hence the annual duration of occupation, is possibly the most frequently employed method.²²⁹ The presence of commensals (mice, house wrens) is another sign of a high degree of residential permanency.²³⁰ Other correlates of sedentism are settlement size,²³¹ permanency of the dwellings,²³² separation distance between structures (less than the dimensions of the structures in a settlement),²³³ artifact density,²³⁴ debris distribution,²³⁵ and specialised lithic assemblages.²³⁶ Indicators of sedentism include thick cultural deposits,²³⁷ pottery,²³⁸ heavy artifacts,²³⁹ storage facilities,²⁴⁰ communal structures (such as kivas and mounds), communal extractive facilities (such as fish traps),²⁴¹ and cemeteries.²⁴²

Attempts to establish the degree of sedentism by building up a floral and faunal inventory have largely been unsuccessful in south west Victoria. Wesson employed faunal evidence as part of her site assessment of the Kinghorn and Allambie sites, showing occupation had only been of short duration.²⁴³ However, when Williams undertook this form of analysis at McArthur Creek, with a view to using palynology to provide an element of the floral evidence, she was unsuccessful, high soil acidity also destroying all other floral evidence and most of the faunal evidence.²⁴⁴ Similarly Williams was confounded by high soil acidity (pH 3.5) in her efforts to determine the seasonality of occupation at Gorrie Swamp Hut.²⁴⁵ High soil acidity is a general problem in south west Victorian sites and most organic remains rapidly decompose and disintegrate.²⁴⁶ Consequently, some animal bones, human remains, charred wood, emu eggshells and mussel shells were the only organic material recovered from the six mounds investigated by Coutts and Witter.²⁴⁷

As no commensals have been detected in south west Victoria, settlement size and dwelling permanency represent the most readily identifiable correlates of sedentism in that region. However, settlement size is difficult to determine on archaeological evidence alone,

principally because of the problem of determining the contemporaneity of habitations.²⁴⁸ While attempts have been made to correlate parameters such as the area of the whole settlement, or that occupied by the dwellings, with the population level no accepted method has been found.²⁴⁹ Consequently, in many instances sedentism is simply assumed on the basis of a large settlement area.²⁵⁰ But the shortcomings in the archaeological investigations of villages in south west Victoria, outlined earlier, mean that even this approach is not viable at present. All we are left with are the historical ethnographic reports of sizable villages.

Permanent habitations do not necessarily equate with sedentism but with a greater degree of sedentism or "low (or no) residential mobility."²⁵¹ Cross-cultural studies show that permanency is related to the degree of labour invested in the erection of habitations,²⁵² that "sedentary people build more substantial houses than non-sedentary people."²⁵³ Presumably this was intuitively recognised by the historical ethnographers who referred to residences as being, "very superior construction", "very substantial", "well constructed", "well built" or "permanent",²⁵⁴ and is the reason they concluded that the larger settlements were "villages" and the like. Although no studies have been carried out regarding the relative amount of labour invested in dwellings in south west Victoria compared to elsewhere, clearly there was considerable effort put in to the erection of these accommodations. This is readily apparent in Mitchell's and Stapylton's accounts from White Lake, Robinson's and Dawson's descriptions of the construction of the cupolas,²⁵⁵ Griffiths' reportage of the growth of the "sugarloaf" and Lang's record of the building of a large cupola on the Coorong.

The solidity of structures, usually with stone walls, has also been used in some contexts as sufficient grounds for assuming permanency of dwellings and being indicative of sedentism.²⁵⁶ However, while certainly suggesting the possibility that the inhabitants were sedentary, the dangers in this assumption were demonstrated in regard to the stone circle structures from the Condah area, some of which had "walls" up to 75 cm high.²⁵⁷ So it is unsafe to conclude on this basis alone that the stone-walled dwellings at Gorrie Swamp Hut and Eumeralla village were necessarily permanent and that their residents were sedentary. Further supporting evidence is required. Certain attributes of dwellings which have been associated with sedentism may provide some of that evidence. Permanent settlement is indicated, according to Clemens, when the separation distance between structures is less than the dimensions of the structures themselves.²⁵⁸ In this case the dwellings at Gorrie Swamp Hut would seem to be permanent, having common walls of minimal separation distance when the dwellings were 2 to 3 m across.²⁵⁹ Another correlate of sedentism is the presence of partitioned and multi-roomed habitations.²⁶⁰ Again the galleried arrangement of the structures I observed in the vicinity of the Eumeralla village [Plate 3] fit this criterion.

When applied to ethnographically observed residences a number of examples can be found of partitioned or multi-roomed habitations. Robinson's double cupola would seem to fit the description of a multi-roomed dwelling and partitioning was another feature reported by Dawson. Furthermore, according to Rafferty, as populations become more sedentary the shape of the dwellings also changes, usually from being circular to more rectangular.²⁶¹ Here the testimony of Lang is most instructive as he specifically stated that the walls of the largest structure he witnessed "rose perpendicularly at the sides." This observation has added significance as there appears to be a time lag between "the advent of sedentariness and the change in the house shape",²⁶² indicating some time depth in the putative sedentism of the region.

Some of the other indicators of sedentism, such as artifact density, debris distribution, specialised lithic assemblages, heavy artifacts, pottery and storage facilities,²⁶³ are either not applicable in south west Victoria, have not been identified, there is insufficient evidence to test them, or the appropriate systematic analysis has not been undertaken. For the remaining indicators, communal structures (such as kivas and mounds), extractive facilities (such as fish traps), cemeteries and thick cultural deposits, relevant evidence is available. Mounds, discussed earlier, are certainly present in this area. Those in south west Victoria are more common and larger than in central Victoria,²⁶⁴ some reaching heights of 6.1 m.²⁶⁵ "Lodges" may fall within the rubric of communal structures as well. Special-purpose extractive facilities, located further away than they are in non-sedentary settlements, were common in south west Victoria. Fish traps have already been mentioned, variously described as "dams" at Caramut, "stone and wooden weirs" near Eumeralla village and large numbers of "woven fences" on lower Muston's Creek. One on the Moyne River was 60 m [200 ft.] long and another on a tributary of the Hopkins River was 90 m [100 yds.].²⁶⁶ In this instance the Lake Condah fish trap system is particularly relevant if, as Clarke suggests, it was accessed by people based elsewhere. Other types of specialised extractive facilities were evident too, fishing platforms being a case in point. These are what McCann referred to as "the great number of bridges along the waterholes" on lower Muston's Creek, other examples being observed by Robinson.²⁶⁷ In reference to another type of extractive facility Sievwright commented that, in returning to Hunter's following his and Robinson's visit to the Eumeralla village, they had, "passed many native snares on a very large scale for kangaroos, birds, etc."²⁶⁸

Burial in mounds appears to have had a long history and been a common occurrence, three of the six mounds investigated by Coutts and Witter, for example, each containing three graves.²⁶⁹ Historical ethnographic evidence, however, indicates mortuary customs were quite complex, with mound interments in the form of considerate burial only occurring in particular circumstances, though still continuing even after a mound had been abandoned.²⁷⁰ The question as to whether these constitute cemeteries is difficult to answer. Cemeteries, according to Pardoe, "are found where large groups and permanent but finite resources coincide."²⁷¹ This may well describe the situation in parts of south west Victoria but more specific defining criteria developed by Pardoe encompass:

- 1) the number of burials (multiple burials, though no absolute figure is required)
- 2) contiguity (burials are adjacent and non-random)
- 3) boundedness (burials in an overall or bounded area)
- 4) exclusivity (not a repeated use living area)²⁷²

Mound burials could be interpreted as possibly fitting the first three of these criteria, but with limited archaeological and historical ethnographic evidence the degree of contiguity is rather uncertain. Further uncertainty pertains to the fourth criterion which depends to some extent on the degree of sedentism, the very factor we are trying to determine, and the usual mobility pattern of local groups in the area. Consequently, without further information, it is not possible arrive at a definitive conclusion in regard to the identification of cemeteries as indicators of sedentism in south west Victoria.

Lastly, mounds may be treated as being within the ambit of "thick cultural deposits" considering their association with occupational and residential activities. Given that a lack of significant cultural deposition was used as an argument to demonstrate only brief occupancy of the stone circle abodes in the Condah area, so the converse, the "thickness" (height) of

mounds may be taken as an indication of the degree of residential permanency. While the process of mound formation has still not been fully elucidated they are undoubtedly a product of the traditional indigenous culture of south west Victoria, evolving over the last 2,500 years.²⁷³ They appear to have been a complex phenomenon possibly involving the deliberate construction of the basal layers and/or accretion through everyday occupational, residential and subsistence activities, and perhaps the accumulation of habitation remains.²⁷⁴ The rate at which mounds accumulated could, therefore, be an indication of the degree of sedentism of the people "building" them.²⁷⁵ Beginning with an examination of the Coutts and Witter's six mound sample,²⁷⁶ it was noted that their average height was 47.5 cm., ranging from 20 cm to 100 cm. Basal dates ranged from 820 BP to 2350 BP, averaging 1232 BP.²⁷⁷ As there is a lack of terminal dates the duration of the depositional period is unknown. However, if it is simply assumed these mounds were in continuous use up until 1845, then they accreted at an average rate of 0.39 mm per annum, though the rate varied considerably between mounds, from 0.15 mm per annum (C/2) to 1.17 mm p.a. (CH/1). Overall the assumption of continuous use until 1845 would understate the average rate of deposition if activity on or around some of the mounds had in fact ceased earlier. Mound destruction, erosion and deflation processes since 1845 may also cause a significant underestimation of the accretional rate. A recent re-examination (1982) of four mounds measured in the 19th century shows they had been reduced, on average, to one quarter of their original height.²⁷⁸ If this is allowed for, the corrected average deposition rate reaches 1.56 mm p.a., with mounds such as CH/1 possibly accumulating at 4.68 mm p.a. Limited verification of such deposition rates is achievable by comparison with mounds in other locales, Mound 5 at McArthur Creek and the 6.1 m [20 ft.] mound near Mt. Elephant, noted earlier, being particular examples. We know the terminal date for Mound 5 because the hut remnants found in the top layer were found to be "modern" by radiocarbon dating. Consequently the period of deposition and depth is known, 790 years and 20 cm, giving a rate of 0.25 mm p.a. But the larger mound, assuming it dates from 2500 BP, grew at a rate of 2.44 mm p.a., faster if it commenced later. Quite possibly the size of the mound is a reflection of intensivity of use and occupation, and hence the degree of sedentism. Some support for this can be found in the Coutts and Witter six mound sample, the two highest mounds (CH/1, KP/1) having a much greater accretion rate than the others, but the sample is much too small, with many uncertainties, to be statistically valid.

How Sedentary?

Having established the mound-accretion methodology as a means of ascertaining the degree of sedentism in south west Victoria, without some "yardstick" the interpretation of the resultant rates remains an open question. To provide a basis for comparison consider the Syro-Palestinian Neolithic site of Tell Aswad. Occupied between 8000 and 6500 BC, the people here left no solid architecture, probably living in wattle and daub huts.²⁷⁹ The maximum depth of the archaeological deposits left by them over a period of 1500 years was 4.50 m.²⁸⁰ This translates as an accretion rate of 3.00 mm p.a. When compared to Victorian mound sites clearly some of the accretion rates there approach this figure, indicating a high degree of sedentism in at least parts of the region. Further investigations, of course, are needed to validate this conclusion, preferably incorporating additional and more precise data based on established date ranges.

But other methods for determining the degree of sedentism have been applied in south west Victoria, Williams unsuccessful employment of Clemens methodology at Caramut one which has already been discussed. Wesson developed a novel methodology based on dwelling

orientation and wind direction which she utilised at the Kinghorn and Allambie sites. Noting that the entrances of the vast majority of the shelters at these sites faced between north and east, protecting the occupants from south westerly winds which prevailed in November and December, she concluded that those shelters were only occupied in that period.²⁸¹ However Wesson's analysis may well be based on an erroneous assumption, that protection from winds from that direction was a major factor in hut orientation there, as Dawson states the entrance of such habitations, "generally faces the morning sun or a sheltering rock."²⁸²

Radiocarbon dating of the occupation floor debris and the remains of dwellings, especially those of more durable construction, could potentially provide an indication of the length of time they, and any associated settlement, were occupied, and by extension the degree of sedentism. Such dating was employed in establishing that the Condah encampments were of post-contact vintage. Similarly a "modern" dating of the hut remains found in uppermost level of Mound 5 at McArthur Creek presents unequivocal evidence that this residence was only briefly occupied. With one of the dates from Gorrie Swamp Hut, just at the left of the entrance, also being "modern" Bird and Frankel justifiably claimed that no case had been made for the construction of permanent dwellings in the pre-contact period. But in light of earlier arguments regarding cultural deposits it may be productive to reconsider the dating of Gorrie Swamp Hut, illustrated below.

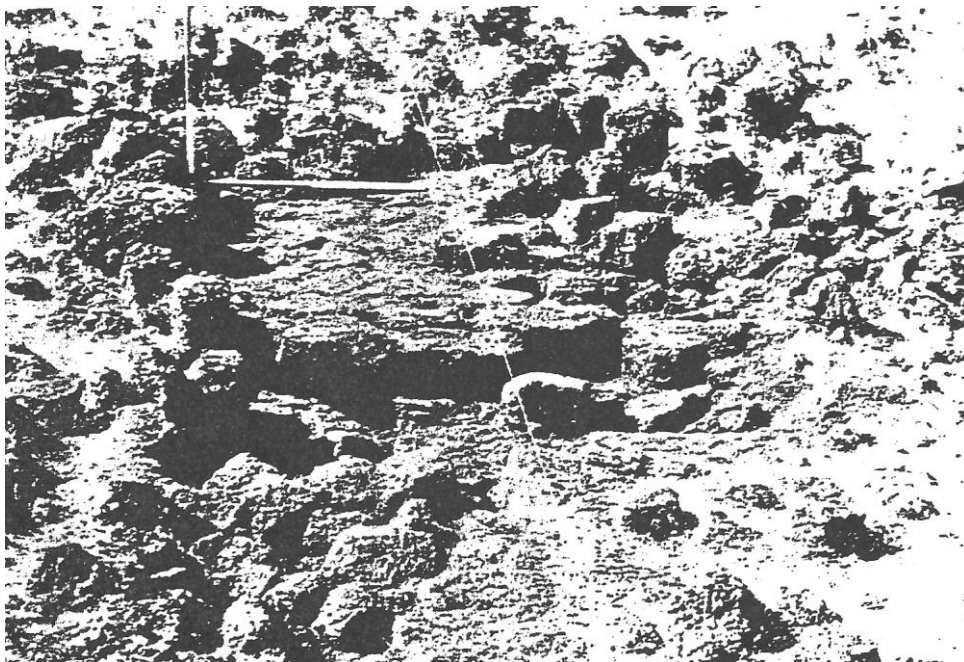


Plate 6: Gorrie Swamp Hut site after excavation
(Williams 1988:Figure 7.4a)

The second date Williams obtained, 380 ± 150 BP [$1570 \text{ AD} \pm 150$ years], was from the 10-20 cm interval in the excavation of the cultural deposits in the hut floor.²⁸³ By ignoring the dating uncertainties for the moment and assuming Gorrie Swamp Hut was abandoned in 1845, and that the sample came from the mid-point in the interval (15 cm), an accretion rate of 0.55 mm p.a. would result. If this rate were applied to the full depth of deposition in the floor of Gorrie Swamp Hut, 25 cm,²⁸⁴ then it can be concluded occupation began at Gorrie Swamp Hut around 1386 AD. These figures imply Gorrie Swamp Hut was a permanent residence but that occupation was not necessarily sedentary, though accretion processes

within a hut may have been different from those on mounds. Even if it were assumed the accretion rate was 3.00 mm p.a., a sedentary rate, then we would be forced to conclude occupation began at Gorrie Swamp Hut in 1762 AD. But, following analysis of the lithics and debitage from Gorrie Swamp Hut, Williams tentatively concluded that this site was used to "repair tools" and was not continuously occupied, that "the main living areas of the cluster were located in other dwellings."²⁸⁵ In summary Gorrie Swamp Hut, while probably a permanent pre-contact residence, was only occupied at particular times or seasons and the residents were, therefore, not fully sedentary. Further insight is required, however, to place Gorrie Swamp Hut properly in context.

Returning to the historical ethnographic evidence for some of this insight, it has been claimed that in respect of settlements this evidence lacks validity, firstly because there were no sustained observations of settlements, that is, over a period of time, and secondly because the observed groups never described or categorised their own settlements.²⁸⁶ In the first instance there are, in fact sustained observations. References to the Eumeralla village, for example, extend over a period of at least 2 years, from the first attack on Hunter's early in 1842 to the "Eumeralla War" in 1844. If Fyans account of the confrontation with the 150 warriors is included then the period is extended to 5 years. Likewise, the village near Port Fairy was initially recorded as such by Robinson in April 1841 and was still there in March 1842. Both these items point to settlements being permanent. As for local groups' alleged failure to describe their own settlements, again this is not borne out by the evidence. Earlier, attention was drawn to a statement from one of Robinson's informants who insisted that the remnants on a mound had been, "a black man's house, a large one like what [sic - white] man's house." What exactly was meant by the comment, whether the residence was similar in terms of being large, permanent or constantly occupied, is open to interpretation, but the fact remains here a resident was describing in some way his mode of habitation. Dawson was another who endeavoured to transmit commentary on habitations and settlements derived principally from those who had lived in these in traditional circumstances. It is even possible to name some of the individual *Gundidjmarra* and *Girai Wurrung* informants, in particular Kaawirn Kuunawarn, Weeratt Kuyuut, Yarruun Parpurn Tarneen and Wombeet Tuulawarn.²⁸⁷ Regarding the times and duration of occupation a number of facets were communicated by Dawson's advisers. According to them, as understood by Dawson, permanent habitations were built on mounds which, "formed homes for many generations."²⁸⁸ These were rebuilt on the same spot in the event of their destruction by fire.²⁸⁹ The inhabitants did, however, "abandon them for a season in search of a variety of food."²⁹⁰ It was at that time, "in summer, or for shelter while travelling,"²⁹¹ that the more temporary forms of accommodation were utilised. Summer was also the period in which the "Great Meetings" were held, such as the one at the marsh at Mirraewuae which Dawson calculated was attended by 2500 people.²⁹² Presumably it was in the season where food was being sought elsewhere that, Dawson relates, for "a month or two the banks of the Salt Creek presented the appearance of a village all the way from Tuureen Tuureen, the outlet of the lake [Bolac], to its junction with the Hopkins."²⁹³ Here Robinson had actually observed on 1 April 1841, "a vast number of old native encampments and huts;The native huts were like those on the west coast [of Tasmania], in the form of a neich [temporary half cupola],"²⁹⁴ as well as, "thousands of dead eels." At Lake Bolac, Robinson reported, "during the eeling season [January to March], from eight hundred to one thousand Natives at one time have been seen."²⁹⁵

Other sources both contradict and to some extent corroborate the evidence of a high degree of sedentism. Westgarth, it will be recalled claimed, in regard to the Eumeralla village that:

*"The aborigines generally encamped there during a portion of the year, for the purpose of fishing, with occasional rambling over the neighbouring country. Mount Eeles [Eccles], an adjoining volcanic hill, with a large and romantic crater, appears to have been a favourite resort, their repeated visits having worn a distinct track to the summit."*²⁹⁶

Griffiths appears to provide supporting evidence, but states that the permanent sod and clay huts were just, "for the winter season." Nonetheless he goes on to say, "when they remain in one place for any length of time these earths reach to a considerable size,"²⁹⁷ implying occupation extended beyond the winter season. In describing the White Lake structure, Mitchell concluded that the "place seemed to have been used for years, as a casual habitation."²⁹⁸ From his account it seems it was inhabited at the time of the expedition's visit, in mid-winter, though the residents had obviously hastily absented themselves prior to the Mitchell's approach.²⁹⁹ But this highlights a problem with the evidence employed in arguing for a higher degree of sedentism, the frequency with which the more substantial residence were unoccupied at the time they were seen.³⁰⁰ White Lake is an example, but only 3 of 13 cupolas near Mt Napier had been occupied, Robinson wrote, "a day or two previous to my visit." Similarly the 9 cupolas at Lake Elingamite were "deserted". Unfortunately it is difficult to account for specific instances with little or no information. Unless the occupiers were fully sedentary then they would inevitably be absent at certain times. Disruption and dislocation may have also been a factor even in the very early contact period, examples have already been mentioned in passing. Another factor could have simply been the close approach of Europeans, seen as a potential threat. Mitchell's reception at White Lake is an illustration of this. At the Eumeralla village neither Fyans in 1842 nor Westgarth in 1844 encountered any of the occupiers and Robinson was initially accorded the same reception as well, though these visits were while the "Eumeralla War" was in progress.³⁰¹ Evidence given to a Victorian Legislative Council Select Committee in 1858-9 has also been cited,³⁰² as indicating habitations were not permanent, that occupation was no longer than 4 to 7 days at a time, and camps did not exceed 4 or 5 huts.³⁰³ However this evidence appears to refer primarily to the post-contact period when the Aboriginal population had been decimated and the traditional settlement pattern was rapidly breaking down.³⁰⁴ Nevertheless Manifold on the Merri River claimed in 1853:

*"I could never perceive that they became in any way attached to a particular spot, or attempted to construct a dwelling having any greater claim to permanency than the common mia-mia."*³⁰⁵

Judgements such as this, running counter to a considerable body of contrary evidence, cannot be specifically refuted. Probably it refers to the post-contact period, perhaps there is another explanation. Ultimately all the evidence must be weighed so as to arrive at a balanced and coherent reconstruction of Aboriginal settlement in south west Victoria. Given the volume and complexities of that evidence the task of finally determining the degree of sedentism, not surprisingly, presents a number of difficulties. One of these difficulties, I believe, lies with the classification of sedentism and nomadism, with terms such as "semi-sedentary", "semi-nomadic" and "seasonal nomadism" being bandied about. The most frequently cited classification of nomadism and sedentism derives from the work of Murdock and his collaborators.³⁰⁶ This classification provides 5 categories for populations to be fully nomadic, semi-nomadic, semi-sedentary, sedentary but impermanent, and sedentary and permanent.³⁰⁷ None of the more permanent settlements in south west Victoria appear to fit into this classification as the categories are defined. Semi-nomadic communities, according to Murdock and Wilson, occupy "temporary camps for much of the year," but aggregate, "in a

fixed settlement at some season or seasons of the year."³⁰⁸ Alternative categories such as "rotating settlements" and "semi-sedentary settlements", "occupied throughout the year,"³⁰⁹ do not appear to be appropriate either. Separate research has cast doubt upon the validity of this system of classification, instancing its inadequacy, ambiguity and semantic shortcomings.³¹⁰ Instead the concept of seasonal sedentism may provide the basis for a sounder framework in which south west Victorian settlements may be placed in terms of their degree of sedentism.

Seasonal sedentism, as the term implies, involves people being sedentary for a particular season, according to their definition and delineation of seasons. Seasonal sedentism has been quite common in traditional Australian lifestyles, even in the most arid areas. For example the *Gugadja* normally retreat to a waterhole or reliable water source during the later dry season, the food sources in the surrounding area having been systematically conserved for this period, and become sedentary until the rains come.³¹¹ Multi-season sedentism, where sedentism extends beyond one season, is not so common and seemingly arises where there are rich, often multiple, food resources and/or the possession of some advantage(s) enabling a higher production and extraction efficiency of existing natural resources.³¹² Naturally if occupation continues for all the seasons of the year then those people might be considered to be fully sedentary. In terms of south west Victoria I would propose that multi-season sedentism was in evidence at the time British colonists began to permanently penetrate and occupy the region. Various lines of evidence clearly point to substantial and permanent habitations being used throughout winter, probably longer, as movement away from these habitations appears to have only taken place at certain times.³¹³ Presumably this is what Westgarth was trying to convey when he asserted that the residents of the Eumeralla village remained there, "during a portion of the year, for the purpose of fishing, with occasional rambling over the neighbouring country." According to Dawson resident populations became mobile for a time in summer, to attend the "Great Meetings", and in early autumn when the eels were migrating back to the sea, Dawson's "season in search of a variety of food." Consequently at the Eumeralla village the inhabitants, as would be expected, appear to have been in residence in early January when "Eumeralla" was first attacked, later March when Robinson visited, June when Westgarth came, August when further attacks took place and October for Fyans. But to fully understand how this multi-season sedentism was possible, and to place it in context, a cursory examination of some of the pertinent evidence regarding the means of subsistence and the mobility pattern is required. Before doing this, however, a brief excursion to consider comparable sites and developments elsewhere would assist in putting south west Victorian settlements in some sort of perspective.

Reports of villages and permanent habitations in Australia are not just restricted to south west Victoria. Mitchell, for example, reported a village on the Darling, "in which the huts were of a very strong and permanent construction."³¹⁴ Likewise, Grey reported at least 3 villages, one with a populations of 150, in the Victoria District on the west coast of Western Australia in 1839.³¹⁵ These villages consisted of substantial, permanent, clay-daubed dwellings capable of holding 10-12 people, the populations exhibiting some degree of sedentism.³¹⁶ In a global context developments in south west Victoria are comparable to some of the Natufian and Pre-Pottery Neolithic A (PPNA) sites in south west Asia, and Early Formative ones in Mesoamerica. Most of the south west Asian Natufian sites, as well as PPNA Jericho, Hatoula 2 and Netiv Hagdud, were not fully sedentary but exhibited multi-season sedentism.³¹⁷ Single-roomed circular or oval dwellings with dimensions of 3 to 8 m were the norm in the PPNA period, partitioning only being evident at Jericho, with its "beehive shape" rooms, Mureybet II, and in one residence at Netiv Hagdud.³¹⁸ Walls, where the remains of permanent

habitations survive, were quite low, only 40 cm high at Gilgal I, where they served as a framework for "huts or tents."³¹⁹ Even at Netiv Hagdud the maximum height of the walls "of cobbles and coated with mud" was only 80 cm.³²⁰ These walls were sometimes supported by wooden posts and the habitation roofed with "some sort of mud mixture."³²¹ PPNA sites mostly only covered areas of 1000-3000 sq. m, with settlements such as Nahal Oren, consisting of 15 semi-subterranean houses, occupying an area of 1000-2000 sq. m.³²² To provide a basis for direct comparison particular examples of some of these structures and sites, from Netiv Hagdud and Pre-Pottery Neolithic B (PPNB) Nahal Oren, are illustrated in Plates 7 and 8 below:

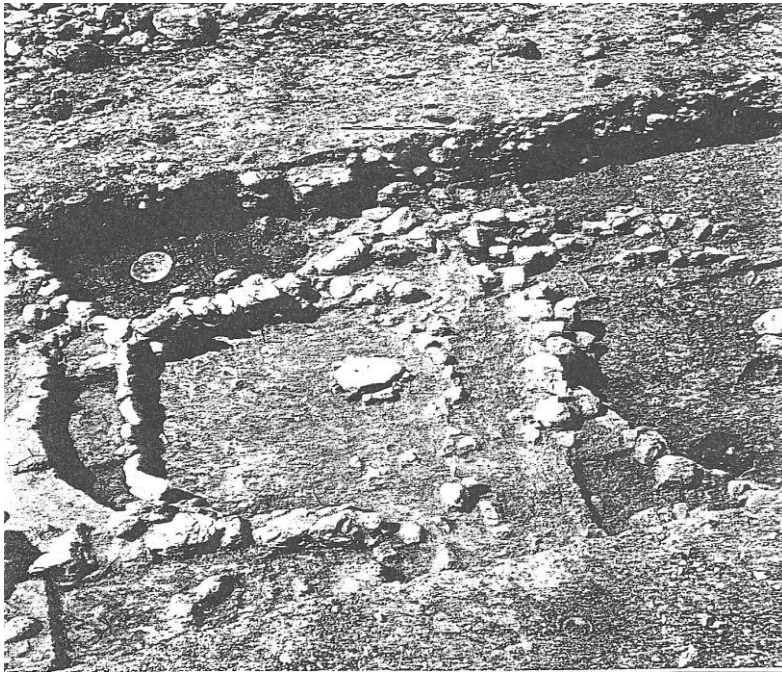


Plate 7: View of the Western Sector, House Loc. 55, Netiv Hagdud [Bar = 1 m]
(Bar-Yosef *et al.* 1991:Figure 5)

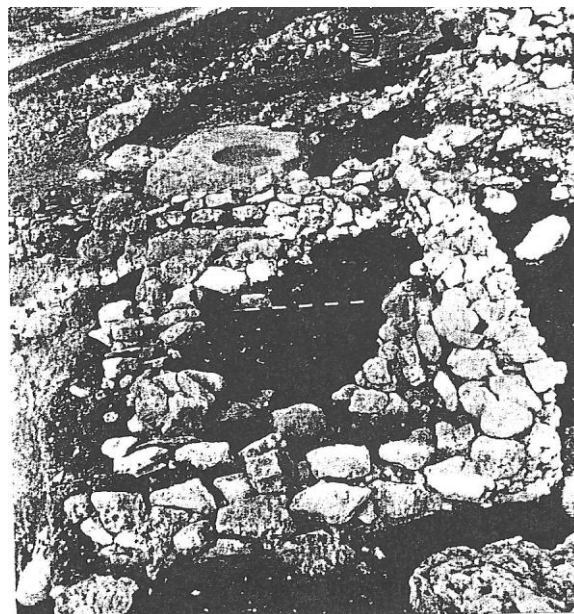


Plate 8: Photo of PPNB House R600, Nahal Oren
(Noy *et al.* 1973:PlateIV)

Comparing settlement populations is difficult because the problem of determining the contemporaneous resident population at prehistoric sites in other parts of the world has been as intractable as it has been in south west Victoria. Nevertheless, in the Early Formative of Mesoamerica, when farming had commenced in the Valleys of Mexico and Oaxaca, village populations have been estimated to be in the range of 80-200.³²³ The population estimates for the Caramut village, ranging from 80 to 240, are comparable to this. Overall, although the significant sites and settlements in south west Victoria may not be directly equivalent to those in other parts of the world, they are, nevertheless, highly analogous. And while the subsistence base was not agricultural it should be noted that hunting remained an "essential food resource", at places such as PPNB Netiv Hagdud and PPNB-Neolithic Ras Sharma, long after the first wild, and then domesticated, crops began to be grown.³²⁴ Just how the populations of south west Victoria supported themselves in their multi-season sedentary settlements is also highly relevant and is considered next.

Subsistence and Mobility

Mobility is a factor when populations do not derive all their subsistence in one location. People, from those who are "nomadic" to those who are less than fully sedentary, become mobile at some point to ensure their subsistence needs are met. Even in modern, "high-tech", societies, where full sedentism is the norm, some groups, such as shearers or fisherfolk, may adopt mobile strategies to earn their living. In regard to populations that are less than fully sedentary, where mobility is, or was, an integral part of subsistence strategies, different mobility patterns have been observed.³²⁵ Hunter-gatherers who are normally highly mobile, camping for a day or two up to several weeks in one location before moving relatively large distances to the next camp, exhibit "point-to-point" mobility.³²⁶ Where territories are more circumscribed, typically in better-watered areas in Australia, "tethered" or "embedded" mobility may feature, distinguished by an annual cycle of repeated visitations and camping at the same sites, often for a season or more, within more rigidly defined, smaller territories.³²⁷ This contrasts with desert areas where traditionally territories were larger, territoriality was not so rigid and movement was more fluid, an adaption to the patchiness of resources in such an unpredictable environment.³²⁸ However, groups who are sedentary for a number of seasons and form a residential base display what is called "radiating mobility".³²⁹ These groups follow "logistic strategies" in obtaining their subsistence, exploiting a central "foraging" zone as well as setting up specialised "stations" some distance away for "task groups" to procure specific seasonal resources by hunting, fishing or trapping.³³⁰ Significantly, logistic strategies signal a shift in socioeconomic organisation, away from the mobile procurement strategy of people moving to food resources, to one where the food resources are brought to the people, located at the residential base camp.³³¹ Yet another type of mobility is evident in the concept of "seasonal nomadism".³³² Although originally intended to describe the residential character of local populations in south west Victoria, "seasonal nomadism" may be apposite when considering Dawson's "season in search of food" and the reports of large gatherings to exploit eels around Lake Bolac during late summer and early autumn.

Earlier, the residents of the types of habitations and settlements found in south west Victoria were classified as exhibiting "multi-season sedentism". Whatever mobility pattern is deemed to be applicable must necessarily complement that and be broadly consistent with the available evidence. It cannot be assumed either that the same mobility pattern was followed across the whole region, remembering that the modes of sedentism and mobility are inextricably linked to the mode of subsistence. On a regional scale there were highly varied

environments arising from distinctive geophysical features. To the east are a series of large crater lakes, to the north the majestic Grampians and, of course, the coast to the south. The predominant feature is, however, the relatively flat central plains consisting of rich volcanic soils, but scattered across this landscape are numerous recent volcanic cones, such as Mt. Eccles, Mt. Rouse and Mt. Napier, accompanied by their extensive lava flows producing the "stony rises". These lava flows disrupted the normal drainage pattern when they occurred several thousand years ago, cutting across rivers and creeks and creating a vast number of lakes, marshes and swamps, some, such as the "Great Swamp", quite large.³³³ Overlaying this is a cline in precipitation, becoming much drier toward the Wimmera in the north west of the region. Consequently 7 vegetation zones occur in south west Victoria with heath, grassland, dry sclerophyll woodland, savannah woodland, woodland and mallee being the most important.³³⁴ Within this environmentally diverse landscape numerous micro-niches occurred as well, largely as a result of the disrupted drainage pattern.³³⁵ Matching this environmental diversity were rich food resources, but with marked local variations. Major vegetal sources were daisy yams (plains), rushes (swamps) and common ferns (stony rises). Eels were a very important aquatic food, along with various species of fish, mussels and tortoises. The plains in some areas abounded in kangaroos and emus as well as the brush turkey. Cockatoos and parrots were also abundant on the plains, with ducks and other aquatic birds, and their eggs, providing additional food sources around the numerous water bodies.³³⁶ Such food sources, their distribution and their proximity is significant, especially in relation to the groups who may be exploiting them, as is the means of exploitation. A fish trap, for example, may produce far higher per capita yields than spear fishing, a net more efficient for catching ducks than a boomerang.³³⁷ It has been observed that hunter-gatherers in "poor" environments are more mobile and position themselves in the centre of ecotones while those in "rich" environments are less mobile and camp at the intersection of multiple ecotones, "where resources from several habitats can be gathered or hunted from the same site."³³⁸ Needless to say the "rich" hunter-gatherers, effectively complex hunter-gatherers, form permanent or semi-permanent base camps or settlements and have specialised camps as part of their logistic procurement strategies.³³⁹ Positioning in relation to food resources and how they were being exploited, therefore, is a crucial consideration in explaining variations in the degree of sedentism and mobility, the permanency of habitations and the size of settlements.

Because of the environmental diversity in south west Victoria, reflected to some degree in the settlement pattern, it is unrealistic to expect that sedentism and mobility would be uniform across the whole region. In terms of the types of mobility identified earlier it would seem that point-to-point mobility was not a characteristic form found in south west Victoria. However, there is evidence to suggest that the other three forms, embedded, seasonal and radiating mobility, may have all been pursued by different groups in different situations. Grounds for identifying embedded mobility are very limited but it would be unsafe to eliminate this as a possibility. Basically support for the existence of embedded mobility rests with a comment made by Robinson indicating one particular group did undertake residential moves. Near Tarrone, on the Moyne River, north of Port Fairy, Robinson met an unnamed man who, "took me to several spots where he had resided and had worns or huts."³⁴⁰ This man was a member of several families that resided in the area who, it appeared, owned a "very fine and large weir" for catching eels. The clear implication of this was that this particular group had huts, probably of a permanent or semi-permanent character, in different locations, that they shifted location with unknown frequency, but they were "tethered" to their weir. Another implication is that mound sites, especially those showing lower accretion rates, may not have been constantly utilised but formed part of an embedded round.

The Caramut village was originally situated in a, "mosaic of different environments, including woodland, swamps and small patches of both forest and open country,"³⁴¹ positioned to exploit various ecotones. In addition it lay near the confluence of Muston's and Tea Tree Creek, where the inhabitants had, "various well constructed dams," which, "acted as sluice gates in the flooding season," as Thomas described it. On the day their village was burnt down they were, "up the creek, seeking their daily fare," while they reportedly lived on "fish, grubs and small animals."³⁴² There can be little doubt they were sedentary for much of the year. The "flooding season" was winter,³⁴³ and they still appear to have been in residence in summer when their village was destroyed because it was at this time that the "grass got bare or scarce." Although Thomas explicitly states that they were "stationary" they may well have been seasonally nomadic, in late summer to early autumn during the eeling season. No direct evidence exists for this contention but the proximity of the Caramut village to Lake Bolac and Salt Creek makes this a distinct possibility. Dawson's information was that the temporary settlement during the eeling season ran all the way from Lake Bolac down Salt Creek to the Hopkins River, a matter of only 15 kms at that point east of the Caramut village. This proximity would make the Caramut village people prime candidates for forming part of the large numbers who congregated there for the eels, and, therefore, an exemplar of seasonal nomadism.

There can be little doubt that the Eumeralla village was situated in a "rich" environment with, "the juxtaposition of two quite different land systems and presence of large swamps."³⁴⁴ While the stony rises themselves did not offer much, apart from the prolific ferns, the village was well situated to exploit several ecotones. Gorrie Swamp was quite extensive, "a Large swamp," as Sievwright saw it, but the Eumeralla River, just before it reached the swamp, was "like a lake, is two miles long: serpents [eels], plenty fish deep water," Robinson recorded. Immediately to the east, north east and south of Gorrie Swamp were the plains. On these plains Mitchell noted that, "kangaroos were more numerous in this part of the country than any we had traversed."³⁴⁵ Robinson also remarked upon the "abundance of kangaroos"³⁴⁶ in this area, but Fyans in 1839 was even more effusive, "the most magnificent arable and pasture countries in the world ... kangaroos and emu running before us, crossing in every direction; quails, parrots, cockatoos, and various kinds of the feathered tribe here."³⁴⁷ Consequently, with stony rises, a swamp, a lake and the plains, every major food source was in theory accessible from this one location. Moreover, elaborate procurement facilities and methods had been developed to take advantage of some of these sources. Apart from commenting on the "ash hills" [large mounds] at the village Robinson, it will be recalled, reported "several stone and wooden weirs for taking fish, also places for snaring birds,"³⁴⁸ corroborated in part by Sievwright's observation, "passed many native snares on a very large scale for kangaroos, birds, etc." as they crossed the plain back to "Eumeralla". An ingenious method for catching brush turkeys was also employed in this area, involving the hunter camouflaged by a "bush shield" using a pole about 3-4 m long with a noose at the end and a lure of a butterfly or feathers. Mesmerised by the lure the birds were easily caught.³⁴⁹

With such a food rich environment, well developed procurement methods and extractive facilities, as well as strong signs of a high degree of sedentism, it is quite reasonable for the movements of the inhabitants of the Eumeralla village to be categorised as "radiating mobility" and to contend they followed "logistic procurement strategies". Originally Williams proposed what might be described as semi-annual sedentism for the inhabitants of this area, "rotating" between two settlements.³⁵⁰ But, as was discussed earlier, she appears to have misinterpreted the historical ethnographic evidence which indicates only one, not two, settlements here. Conversely several lines of evidence support the "radiating mobility/logistic

strategies" scenario. Westgarth's reference, for example, to "occasional rambling over the neighbouring country" may be interpreted as an attempt to describe such a pattern. The Gorrie Swamp Hut habitations, in this context, could be interpreted as a "station" for hunting kangaroos and emus on the plains to the south, explaining the permanent but non-sedentary nature of the site as well as "tool repair" being a predominant feature of the site's lithics.³⁵¹ Another of Westgarth's observations, that Mt. Eccles was "a favourite resort, their repeated visits having worn a distinct track to the summit,"³⁵² offers the possibility that there was a direct line of communication between the Eumeralla village and the Lake Condah fish traps which lay in that direction, a distance of only 11 to 12 km. As has been pointed out previously, Clarke suggested that the Lake Condah fish traps may have been exploited by people residing elsewhere. The residents of the Eumeralla village in this case were well positioned to do so, even if they may not have had exclusive rights, when the traps became operable following heavy or sustained rainfall.³⁵³ If such was the case it would be quite consistent with the pursuit of a "radiating mobility/logistic strategies" mode of mobility by the *Nillan gundidj*. Further research is, of course, also required in this instance to verify the proposition.

Conclusions

Initially a number of issues were raised and debates identified in this paper regarding the nature of habitations and settlements in south west Victoria. Consequently questions as to the degree of permanence of these habitations and settlements, and the extent to which their occupants were sedentary, have been considered, along with their origins, pre- or post-contact. Relevant archaeological evidence has been extensively employed, as has historical ethnographic evidence, with a view to achieving a deeper, more comprehensive and integrated explanation of the traditional settlement pattern in this region.

Several findings resulted from this integrated approach. Historical ethnographic evidence was adduced strongly suggesting that permanent habitation structures of previously unsuspected larger dimensions, capable of accommodating around 40 people, were constructed in the north west of the region. Furthermore, an explanation for the short-term, post-contact, occupation of habitations, represented by the "stone circles", in the vicinity of Condah and Louth Swamps and Lake Condah, was developed. This explanation showed that there is no historical ethnographic evidence of permanent habitations in that area in the earliest contact period and that particular historical factors led to the later formation of those sites, which subsequently came under archaeological investigation. These historical factors, which were not taken into account in the course of the ensuing archaeological investigations, were, it was argued, site specific. Consequently these sites, in terms of their origins, type and duration of occupation and settlement could not be taken as representative of those in other parts of south west Victoria, as some have contended.

Closer scrutiny of archaeological investigations of alleged village sites outside of the Condah area also employed this integrated approach, with additional historical ethnographic evidence brought to bear. This reconsideration showed possible flaws in site identification which compromised the subsequent archaeological investigations. By applying the revised historical ethnographic evidence a fish trap associated with one of the village sites was possibly identified, along with stone structures interpreted as habitations at another village site.

Following this, a large body of evidence pertaining to habitations and settlements was analysed. This analysis demonstrated that a proportion of habitations and settlements present

at time of contact were permanent, and that this had been a feature of traditional societies in the region. A more comprehensive habitation typology was also developed from this body of evidence. In addition a settlement typology and pattern indicative of a settlement hierarchy was identified that appeared to correspond to the frequency and distribution of the mounds found in south west Victoria.

The issue of the degree of sedentism was addressed next, once more employing historical ethnographic and archaeological evidence. Given earlier deductions regarding the permanency of dwellings and settlements, comparisons were then made with known correlates of sedentism identified by studies elsewhere. Supplementing this was an approach utilising mound accretion rates as a measure of the degree of sedentism. A revision to the system for classifying degrees of sedentism and mobility was proposed, and it was concluded from this, and the different lines of enquiry that were pursued, that "multi-season" sedentism was apparent in south west Victoria, comparable in form to early agricultural settlements in other parts of the world. Complementing this, different degrees and types of mobility were considered in their application to traditional practices in south west Victoria within the context of the subsistence base. Here it was found that different mobility patterns, "embedded", "seasonal" and "radiating", the last being associated with "logistic procurement strategies", may have been followed in accordance with the type of subsistence regime possible in respective environments. Some evidence was also presented indicating that the various features of the traditional settlement pattern, as observed early in the contact period, may have commenced as early as 550 BP.

It has been pointed out on a number of occasions in this work that further research is required to validate not only specific findings but also the classificatory systems and reconstructions of the settlement pattern in south west Victoria as posited here. Modelling of the interrelationship between habitations, settlements, sedentism, subsistence and mobility as part of that settlement pattern, as has been attempted, builds upon previous work by other researchers, but the outcome cannot be treated in any way as definitive. Hopefully it will, at least, provide some guidance for future research, not only in establishing the validity of the models but in deepening our understanding of traditional life in south west Victoria. Other aspects, such as broader socioeconomic articulation,³⁵⁴ and the degree of sociopolitical complexity,³⁵⁵ which have remained outside the scope of this paper, may also offer research opportunities with the potential to realise another level of integration. Whatever course is adopted, however, it is crucial that future research not only embrace well-documented or explicit hypotheses but also consider more speculative alternatives, so that the boundaries of our knowledge are truly tested, our grasp is extended and our understandings enhanced.

Acknowledgments

Obviously a work of this nature is not possible without the support, advice and assistance of a wide range of people. I would like to take this opportunity of thanking all of them, in particular:

The library staff of the National Library of Australia, especially the staff of the Petherick Reading Room and the Map Room; Judith Scurfield, Map Section, Victorian State Library; Dr Mary O'Dowd; Dr Rolf Gerritsen; Allen Mawer; Katharine West; Jamon Moon, Registrar of Heritage Sites, Aboriginal Affairs Victoria; Professor John Parker, Registrar of Geographic Names, Victoria, Anita Jaroslawski, Dept. of Natural Resources and Environment, Victoria; Margaret Saville,; Jenny Ward; Rodrigo Aguilera; Lesley Hyndal.

NOTES

¹ Lourandos 1977;1980a,b;1985:404-8; 1988:153-4; Coutts *et al.* 1978:41-2; Wesson 1981; Williams 1984, 1985, 1987, 1988.

² Coutts *et al.* 1976; Coutts *et al.* 1978; Lourandos 1976; 1980b; 1985:404-8; 1988:153-4; Wesson 1981; Williams 1984, 1987, 1988.

³ Bird and Frankel 1991:8,10; Clarke 1994.

⁴ Coutts *et al.* 1977a:199-203; Wesson 1981:96-7; Bird and Frankel 1991:8; Schell 1998:1.

It has even been suggested that construction of more substantial huts may have been influenced by European styles (Coutts *et al.* 1977b:32) and that stone-walled huts may have arisen as a result of attempts to copy the colonists' dwellings (Wesson 1981:14). There would seem to be little support for such propositions, however. In the first instance the example used by Coutts *et al.* 1977b relates to a highly artificial setting, a Protectorate Station in central Victoria, and is of doubtful validity. Secondly, stone dwellings were initially quite rare in the Western District until the passing of the Land Act in 1847 (Kiddle 1983:171). Prior to that squatters usually erected sod and thatch, or wooden slab, huts (See Boldrewood 1884:32-3,34,37-8,45,226,228-9; Wesson 1981:12).

⁵ Coutts *et al.* 1977a:203.

⁶ Coutts *et al.* 1977a:201; Wesson 1981:82-95.

⁷ Clarke 1994:10-12; Flood 1995:244.

⁸ Lourandos 1977:220-1; 1997:212.

⁹ Williams 1988:68.

¹⁰ Coutts *et al.* 1978:42.

¹¹ Coutts *et al.* 1977a:199,201.

¹² By historical ethnography I mean the reconstruction of the ethnography of a particular group at a certain point in time, in the context of Australian indigenous studies, usually at time of contact. I see this as being distinct from ethnohistory which I would define as a reconstruction of the history of a particular group over a period of time, typified by the history of an Aboriginal group or population over a specified period of time, perhaps since contact.

¹³ Various journals and papers contained in a variety of sources. The compilation of Robinson's journals by Clark (1998) will be exclusively used in this paper. All citations will be by date to ensure easy reference to selected passages in other compilations. It should be noted, however, that there are frequently date discrepancies of a day or two between the different sources.

¹⁴ Dawson 1881.

¹⁵ Smyth 1878.

¹⁶ Mitchell 1839.

¹⁷ Various papers and sources.

¹⁸ Various papers and sources.

¹⁹ Griffiths 1845.

²⁰ Mitchell 1839:2:194.

²¹ e. g. Coutts *et al.* 1976:8; Coutts *et al.* 1977b:32; Coutts *et al.* 1978:41; Lourandos 1980a:156b.

²² Stapylton in Andrews 1986:146. Because he was unable to credit the local people with building the structure Stapylton attributed it to escaped convict William Buckley: "He was seen and conversed with lately near Port Phillip their superior acomadation [sic] I attribute to the influence of this man." (Stapylton 1986:146)

²³ White Lake is in the south west Wimmera, as defined in Corris (1968:1).

²⁴ Robinson 22 June 1841.

²⁵ Dawson 1881:10.

²⁶ Francis to Dawson 14 April, 1868 In Williams 1985:75.

²⁷ A comment by William Westgarth in 1846, that Chief Protector George Augustus Robinson had reported a particular habitation, "belonging to the Wimmera blacks, of a fanciful structure," (1846a:39) in 1845, may also offer further support for the existence of large structures there. There is no reference, however, in Robinson's journals during that period (Clark 1998, Vol. 4) which could be interpreted as describing any "fanciful structure", although there is a two day gap during one of the periods Robinson was in the Wimmera (12-13 May 1845).

²⁸ With Stapylton claiming they had passed several large "Guneaks" during the course of their travels on that day, and the White Lake site being only 20 km from the Toolondo fish traps, the possibility that there was a previously unsuspected level of complexity in the subsistence economy of this region must also be given serious consideration. According to Lourandos (1980a:389) there is another fish trap system 2 km south of

Toolondo. Robinson (8/5/1845) noted fish channels near Naracoorte as well, 90 km west of White Lake, "same as under Mt William" in form.

²⁹ Coutts *et al.* 1977a,b; Coutts *et al.* 1978; Wesson 1981; Geering 1985; Clark and Geering 1986; Clarke 1994; Schell 1998.

³⁰ Coutts *et al.* 1977a,b; Wesson 1981.

³¹ See Coutts *et al.* 1977a:199-203; Coutts *et al.* 1977b:32-40; Wesson 1981:96-7; Bird and Frankel 1991:8; Schell 1998:1.

³² Kenyon 1912,1930.

Schell (1998:3), in attempting to establish an ethnographic linkage, claims a report of a village near Caramut describes "Aboriginal dwellings of the Lake Condah area.", even though the Caramut site is 60 km from Lake Condah, the type of dwellings appear to be quite different and the site locations are, geophysically, strikingly different.

³³ Kenyon 1912:102.

³⁴ Kenyon 1912:109-10.

³⁵ Kenyon 1930:71.

³⁶ Worsnop 1897:78,104-6.

Much of the information and the quotations in Kenyon are absolutely identical to those found in Worsnop, suggesting there is a common unidentified source. Internal evidence in the 3 documents point to an article written by Ingram around 1895-6, and possibly published in a local newspaper in the Hamilton district.

³⁷ Worsnop 1897:78.

³⁸ Worsnop 1897:104.

³⁹ Two other "camping-places" in the vicinity of Allumyung are also mentioned, *Narrarrabeen*, "consisting of about twenty stone foundations, of horseshoe form, from 4ft. to 7ft. in diameter, and opening towards the east ..." and another called *Eullameet* (Worsnop 1897:105).

⁴⁰ Clarke 1994:10.

⁴¹ Worsnop 1897:105.

⁴² Coutts *et al.* 1977a,b; Coutts *et al.* 1978:1,16; Wesson 1981; Geering 1985; Clark and Geering 1986; Clarke 1994.

⁴³ Coutts *et al.* 1977a:201; Coutts *et al.* 1977b:38; Wesson 1981:49,76.

⁴⁴ Coutts *et al.* 1977b:33.

⁴⁵ Coutts *et al.* 1977b:40; Wesson 1981:96.

⁴⁶ Mitchell 1839:2:245-252.

⁴⁷ Stapylton in Andrews 1986:177-84.

⁴⁸ Mitchell 1839:2:247.

This sighting took place 11 km [7 miles] west or west south west of Mt Napier..

⁴⁹ The information provided by Tommy White could be seen as providing some corroboration of this. He specifically names two other "camping-places" beside *Allumyung*, *Narrarrabeen* and *Eullameet*, all in close proximity, 16-17 km from Lake Condah (Worsnop 1897:105). Yet he didn't appear to provide a name for any traditional occupation sites in the Lake Condah area. It could be inferred that this was because there were no traditional "camping-places" in that area.

⁵⁰ Kenyon 1912 - cited in Coutts *et al.* 1977a,b; Coutts *et al.* 1978; Clarke 1994; Schell 1998.

Kenyon 1930 - cited in Coutts *et al.* 1977a,b; Wesson 1981; Schell 1998.

⁵¹ Massola 1968 - cited in Coutts *et al.* 1978; Clarke 1994.

Massola 1970 - cited in Coutts *et al.* 1978; Wesson 1981.

⁵² "Sixth Report of the Central Board of the Aborigines" In Massola 1970:97.

⁵³ Massola 1970:98.

⁵⁴ Massola 1970:103; Kenyon 1912:110; Massola 1968:198.

According to Penney and Rhodes (1990:1:37) the *Gundidj* based at the Mission were engaged in traditional subsistence activities, "several days a week."

⁵⁵ Fyans In Bride 1898:116. See also Billis and Kenyon 1974.

⁵⁶ As characterised in Critchett 1998:27-8.

⁵⁷ *Geelong Advertiser* 10 January 1842:3; "Report by J Blair" Police Magistrate, Portland, 29 January 1842. In British Parliamentary Papers (Aborigines) 1844:3:202.

⁵⁸ Critchett 1990:99,109-10.

⁵⁹ Billis and Kenyon 1974:166-7,187,196,205,206,232,245,252,258,280,299,300.

⁶⁰ Billis and Kenyon 1974:232.

⁶¹ Billis and Kenyon: 204,205,216,228,238,239.

Even then Penney and Rhodes (1990:1:28) describe this area, "the Stones", as "isolated, an island of land," owing to its remoteness and the difficulties of travelling across it.

⁶² Billis and Kenyon 1974:232.

Archaeological investigations of the British colonial settlement history in the Lake Condah area appears to offer some corroboration of this reconstruction (Penney and Rhodes 1990:2:40).

⁶³ Massola 1970:96; Penney and Rhodes 1990:1:20.

⁶⁴ Penney and Rhodes 1990:1:40-42.

⁶⁵ Clarke 1994:10-11.

⁶⁶ Critchett 1990:23.

⁶⁷ Clarke 1994:9.

Most of the stone circles here occur on the eastern and southern margins of the Lake (Coutts *et al.* 1978:1). This part of the Lake was not incorporated into any squatting claim until "Knebsworth", "Grafton" and "Ellengowan" were established in 1846-7, pointing to possible early Refuge Phase occupation here. However, proximity to "Lake Condah" and the Condah Mission also suggest the possibility of later occupation episodes..

⁶⁸ Williams 1984:177-8.

⁶⁹ Papers of William Thomas, MSS 214, Box 24, Item 11: "Aborigines Superior Race" 1858.

⁷⁰ Thomas, W. Journal of Proceedings for period 1.12.1843 - 1.3.1844 Note.

In this same Note Thomas mentions "Settled Villages", "on the Banks of Thorn's River," of "well built slab huts some capable of holding 15 or 20 persons", one village "supposed to contain 400 Inhabitants." However, despite intensive research I was unable to identify "Thorn's River".

⁷¹ Williams 1984,1988.

⁷² Williams 1988:129.

⁷³ Williams 1984:183.

⁷⁴ Williams 1984:179.

⁷⁵ Williams 1988:135.

⁷⁶ Williams 1988:131.

⁷⁷ Papers of William Thomas, MSS 214, Box 24, Item 11 : "Aborigines Superior Race" 1858.

⁷⁸ Thomas, W. Journal of Proceedings for period 1.12.1843 - 1.3.1844 Note.

⁷⁹ Williams 1984:177.

⁸⁰ Williams 1984:179,182.

⁸¹ Lands Department Map No. 336 (Run Plan).

⁸² Williams 1984:179.

⁸³ Victorian Place Names Register; Jones 1960:83-4; Victorian Topographic Map 1:25,000 Quamby 7421-4-4.

⁸⁴ Whitworth 1879:420 lists a Scrubby Creek flowing east into nearby Spring Creek. Furthermore, the "Scrubby Creek" on the 1846 Run Plan appears to run into Black Swamp, although a short, thin, faint line, which may be a boundary line, is shown connecting it to Muston's Creek.

⁸⁵ The McGuinness Sketch Map, like Arabin's, was presumably drawn with Thomas' assistance as McGuinness could read but not write (Clark 1995:36).

⁸⁶ There is still a discrepancy in the second sketch of the village, however, in its position relative to Smith's, Whitehead's and Rutherford's huts. But this sketch places Whitehead's on the same side of the creek as Smith's, contrary to their positions on the first Sketch Map. I would suggest that Thomas has either transposed the position of Whitehead's or possibly the village is viewed not from Smith's Station but Osbury's Woolshed, looking eastward across Muston's Creek.

Interestingly Black Swamp, which Williams equates with Dawson's famous Mirraewuae Swamp, "not many miles west of Caramut" (1881:3), and site of meetings of 2,500 or more people, lies 6 km [3.75 miles] exactly due west of the Tea Tree Creek site. William's "Scrubby Creek" site lies a similar distance away but with Black Swamp being in a west north west direction. I have reservations, however, about the identification of Black Swamp as Mirraewuae.

⁸⁷ British Parliamentary Papers (Aborigines) 1844:209; Robinson 20 March 1842.

See also Coutts *et al.* 1978:12-31.

⁸⁸ Robinson 30 April 1841.

⁸⁹ McCann In Critchett 1990:63.

⁹⁰ Personal Observation : 18-19 September 1999, 4 December 1999.

An unusual series of stone dams were also noted in Tea Tree Creek but further and more intensive investigations would also be required to ascertain if they have any relationship to the subsistence activities described by Thomas, or are of more recent construction.

⁹¹ Williams 1984,1988.

⁹² Williams 1988:76.

⁹³ Williams 1988:76.

⁹⁴ Williams 1988:91.

⁹⁵ Williams 1984:184.

-
- ⁹⁶ Williams 1988:95.
- ⁹⁷ Robinson 3 May 1841.
- ⁹⁸ Billis and Kenyon 1974:71,281; Lingham's "Settler's Map" (1842) In Critchett 1984:frontpiece.
Sub-Protector Sievwright followed the same path on 29-30 March 1842 when returning to the Mt. Rouse Protectorate Station (Siewwright 29-30 March 1842).
- ⁹⁹ Spreadborough In Critchett 1990:16-7; Clark 1990:98, Fig.1.
- ¹⁰⁰ Robinson 3 May 1841; Williams 1988:77.
- ¹⁰¹ Williams 1988:76.
- ¹⁰² Williams 1988:77.
- ¹⁰³ The other being the Corra 3 site near Chatsworth (Coutts and Witter 1977:64). Unfortunately this find was not radiocarbon dated.
- ¹⁰⁴ Williams 1988:137,139.
- ¹⁰⁵ Williams 1988:145.
- ¹⁰⁶ Williams 1988:137.
- ¹⁰⁷ Coutts *et al.* 1978:1,16; Wesson 1981:32-3; Geering 1985; Clarke 1994:3-12.
- ¹⁰⁸ Coutts *et al.* 1977a:200-1; Coutts *et al.* 1977b: 37-40,51-59.
- KH/5 [7222/017] (p52) may be the exception.
- ¹⁰⁹ Williams 1988:67-8,137.
- ¹¹⁰ Mt. Eels name was changed to Mt. Eccles in the 1850s as the result of a clerical error.
- ¹¹¹ Robinson 19-20 March 1842.
- ¹¹² British Parliamentary Papers (Aborigines) 1844:3:209.
- ¹¹³ Boldrewood 1884:47; Billis and Kenyon 1974:206; Australian Topographic Map 1:100,000 Portland 7221; Victorian Topographic Map 1:25,000 Eccles 7221-1-1.
Occupation of this squatting run by Hunter, Hoskin and Davidson, appears to have began late in 1841, before it was officially registered in October 1842 following a visit from Foster Fyans, Commissioner of Crown Lands. It was taken over by Boyd in October 1843 and split into Eumeralla East and West, with Robert Craufurd managing Eumeralla East. It came under frequent attack, beginning in January 1842, by large bodies of the local Aboriginal population, principally the *Nillan gundidj*, coming out of the stony rises from the stony peninsula
- ¹¹⁴ Australian Topographic Map 1:100,000 Portland 7221; Victorian Topographic Maps 1:25,000 Eccles 7221-1-1, Eumeralla 7221-1-2.
- ¹¹⁵ See for example Boldrewood 1884:40; Fyans to La Trobe 9 October 1842 In British Parliamentary Papers (Aborigines) 1844:235; Fyans In Bride 1898:117 on the extreme difficulties of crossing the stony rises with horses.
- ¹¹⁶ Sievwright 20 March 1842.
- ¹¹⁷ Williams 1988:68.
- ¹¹⁸ Westgarth 1851:707n.
- ¹¹⁹ Westgarth 1846a:8n.
- ¹²⁰ Westgarth 1848:100-1.
- ¹²¹ Westgarth 1846:8n.
- ¹²² Westgarth 1888:42-3.
- ¹²³ Boldrewood 1884:48.
- ¹²⁴ Boldrewood 1884:36.
- ¹²⁵ Boldrewood 1884:53.
- ¹²⁶ Boldrewood 1884:65-6.
- ¹²⁷ "Captain Fyans to Superintendent La Trobe." Eumeralla, 9 Oct. 1842. In British Parliamentary Papers (Aborigines) 3:235.
- ¹²⁸ Williams 1988:139.
- Worsnop 1897:105-6 also reports that stone circles foundations were to be "found among the rough basalt around Mount Eccles and Lake Gorrie."
- ¹²⁹ Williams 1988:139.
- ¹³⁰ Clark 1989:2.
- ¹³¹ Clark 1989:2.
- ¹³² Personal Communication - Mr Jamon Moon, Registrar of Heritage Sites, Aboriginal Affairs Victoria, 19 January 2000.
There is a VAS [Victorian Archaeological Survey] File Note "Field Inspection by Nora van Waarden - Lake Gorrie" which may relate to this site (Penney and Rhodes 1990:1:95)
- ¹³³ The Registrar of Heritage Sites, Aboriginal Affairs Victoria, has been informed of my observations, and has been provided more specific locational information as well as additional photographic evidence.

¹³⁴ While the collapsed walls may be attributable to neglect following abandonment of the site, elsewhere stock damage has been identified as a source of site destruction (Winter In Critchett 1990:66; Penney and Rhodes 1990:31; Schell 1998:21), as was deliberate destruction by squatters (e.g. Critchett 1990:30,65,67). This last option must be considered a distinct possibility given the degree of conflict between the *Nillan gundidj* based here and the early squatters in this area, both before and during the "Eumeralla War". See Boldrewood 1884:48-73; Clark 1989; Critchett 1990:99-111.

¹³⁵ This site seems to share some similarities with the one described by Boldrewood's Overseer, Joe Burge, who described an incident where, "we came in sight of the [Eumeralla] lake, and just on a little knob on the left-hand side, with a bit of a flat under it, was the camp." (Boldrewood 1884:57)

¹³⁶ Clarke 1994:4-6.

¹³⁷ The possibility that these were European built structures was considered. However, they appear to be quite different in form and construction to identified examples of stone structures built by colonists in the early colonial period. See for comparative examples Penney and Rhodes 1990:2:52, Plate 2; 2:53, Plate 3; 2:55, Plate 5. Other possibilities such as a shepherd's camp, a modern barbecue or a campsite, were considered but not seen as viable explanations. The inaccessibility of the site also made these possibilities less likely, unless they had been built by bushrangers, escaped convicts or such like.

I did also note 2 "wells", about 30 cm across, perhaps 1 m deep, with blocks 30- 60 cm fallen across or laid over them. These may be wells, storage pits, or simply features resulting from the growth of trees (most in the area were about 30 cm diam.) that had since died and decayed away.

¹³⁸ British Parliamentary Papers (Aborigines) 1844:3:209.

¹³⁹ Sievwright 20 March 1842.

Initially all except a few women fled on the approach of Robinson and the four others in his party, although some obviously returned later.

¹⁴⁰ Critchett 1990:108.

¹⁴¹ "James Hunter to C. J. La Trobe 1 September 1842" In British Parliamentary Papers (Aborigines) 1844:3:234. Boldrewood 1884:40 talks of observing "tolerable numbers" of camp fires in "The Rocks" and on another occasion was visited by a party of nearly 50 from there.

¹⁴² Robinson 8-9 August 1841; Critchett 1990:27; Williams 1985:74.

¹⁴³ Critchett 1990:124.

However, it should be noted that earlier in the year, in early January 1842, it was reported that "Eumeralla" had been attacked by, "a great number of blacks," (*Geelong Advertiser* 10 January 1842:3).

¹⁴⁴ Fyans In Bride 1898:117.

¹⁴⁵ Critchett 1990:108.

¹⁴⁶ Coutts *et al.* 1977b:35 point to a camp on the south bank of the Yarra River with a population of up to 100 (Robinson 7 November 1839 - 3 January 1840) as an example of a "special camp". This appeared to have been a ceremonial gathering of clans from the Melbourne and Goulburn River area lasting nearly 2 months. It could be argued that an observer only briefly encountering such a gathering might conclude that there was a village there, although Robinson certainly did not conclude this or indicate any degree of permanency in the dwellings or the "settlement". Similarly Williams 1985:76 suggests the possibility that the Caramut village may have been a manifestation of one of the "Great Meetings" reportedly held at Dawson's "Mirraewuae" swamp, but this is not supported by any evidence.

¹⁴⁷ Papers of William Thomas, MSS 214, Box 24, Item 11: "Aborigines Superior Race" 1858.

¹⁴⁸ Papers of William Thomas, MSS 214, Box 24, Item 11: "Aborigines Superior Race" 1858.

¹⁴⁹ Manifest In Bride 1898:136; Roberts 1970:151; Billis and Kenyon 1974:187-8,218,221,229,234,242,243,253,257,263,268,279; Critchett 1990:62-66.

In that area only two "runs" had leapfrogged the frontier to locations north west of the village on Tea Tree Creek, Burchett's "The Gums" and Muston's "Caramut", both in the previous year, 1839.

¹⁵⁰ Boldrewood 1884:49; Critchett 1990:23.

¹⁵¹ Smyth 1878:1:128n; Williams 1985:77; Critchett 1990:30,62,65,67.

Temporary forms of accommodation appear to have become the norm following abandonment of substantial habitations and settlements.

The evidence of burning at Allambie (Wesson 1981:58,70-1) and Gorrie Swamp Hut (Williams 1988:145,151) may possibly be further examples of deliberate acts by squatters to force Aboriginal people to abandon anything approaching permanent settlements on their runs.

¹⁵² Clark 1989; Schell 1998:1.

¹⁵³ Kenyon 1932. The nearest was just beyond that distance, "Urang Aranga" near Port Fairy (Billis and Kenyon 1974:294).

¹⁵⁴ This was "Dunmore" (April 1841). The next nearest were "Harton Hills" and "Mt. Napier", both 16 km away (Kenyon 1932; Billis and Kenyon 1974:202,219,252).

-
- ¹⁵⁵ Westgarth 1846:8n.
- ¹⁵⁶ Boldrewood 1884:49-50,63-4,119.
- ¹⁵⁷ Critchett 1990:99.
- ¹⁵⁸ Critchett 1990:21.
- ¹⁵⁹ Thomson 1949.
- ¹⁶⁰ E. Henty 2 December 1834, 15 November 1835 In Peel 1996:40,96.
- ¹⁶¹ Mitchell 1839:2:243.
- Other very early reports include the White Lake structure (1836), the "very substantial huts" seen by Mitchell at Byaduk North (1836), and "large well constructed winter huts" in the Wannon Valley in 1837 (Winter In Critchett 1990:66; Smyth 1878:1:126).
- ¹⁶² Robinson 10 May 1841.
- ¹⁶³ Robinson 11 May 1841.
- ¹⁶⁴ Robinson 11 May 1841.
- ¹⁶⁵ Robinson 9 May 1841.
- ¹⁶⁶ Robinson 2 May 1841.
- Whitehead arrived in April/May 1840.
- ¹⁶⁷ Robinson 16 April 1841.
- ¹⁶⁸ Robinson 28 April 1841. On 29 April Robinson added that it was, "near the sandhills."
- It could be fairly argued that the Port Fairy village was a post-contact concentration as this area had been occupied by whalers and the like for several years. But without any additional information it is difficult to make a case either way.
- ¹⁶⁹ Robinson 23 March 1842.
- Robinson wrote, "30 to 40 natives present at Cambell's [the adjacent farm]. Mr Campbell in communication with 150."
- ¹⁷⁰ Sievwright 23 March 1842.
- ¹⁷¹ Robinson 10 May 1841; 9 May 1841.
- ¹⁷² Robinson 27 July 1841.
- ¹⁷³ Toward the east of the Western District, Chauncy (1878:2:234) reported, "stone mia-mys ... on the western margin of the Stony Rises, south of Lake Purumbete," but this should be balanced against Manifold's account (Kenyon 1930:71) of stone "break-winds" on the eastern side of Purumbete. See also Dawson 1881:11. (There are in fact stony rises in the form of a district basalt flow forming a tongue 5-6 km long south of Lake Purumbete - Personal Observation: 18 September 1999.)
- Black (In Critchett 1990:66-7), in 1839-40, reported what appears to have been an earth covered cupola-type habitation of "superior style" in this region as well, at Glenormiston, near Terang.
- ¹⁷⁴ Robinson 1 May 1845.
- ¹⁷⁵ Lang 1865:26.
- ¹⁷⁶ Robinson 10 May 1841.
- ¹⁷⁷ Robinson 10 May 1841.
- See also British Parliamentary Papers (Aborigines) 1844:3:240.
- ¹⁷⁸ Griffiths 1845:152.
- ¹⁷⁹ Dawson 1881:10.
- ¹⁸⁰ Coutts *et al.* 1976:8; Lourandos 1980a:148-9; Wesson 1981:19.
- ¹⁸¹ Williams 1988:59; Clarke 1994:10.
- ¹⁸² Coutts *et al.* 1976:8.
- ¹⁸³ Dawson 1881:11; British Parliamentary Papers (Aborigines) 1844:3:240; Manifold In Kenyon 1930:71.
- ¹⁸⁴ Robinson 10 May 1841; British Parliamentary Papers (Aborigines) 1844:3:240; Dawson 1881:10-11.
- ¹⁸⁵ Robinson 10 May 1841; British Parliamentary Papers (Aborigines) 1844:3:240; Dawson 1881:10-11; Worsnop 1897:105.
- ¹⁸⁶ Robinson 16 April 1841, 10 May 1841; British Parliamentary Papers (Aborigines) 1844:3:240; Thomas 1858; Lang 1865:26; Dawson 1881:10.
- ¹⁸⁷ Williams 1988:139.
- ¹⁸⁸ Robinson 10 May 1841; British Parliamentary Papers (Aborigines) 1844:3:240; Griffiths 1845:152; Thomas 1858; Dawson 1881:10.
- ¹⁸⁹ Mitchell 1839:2:194; Robinson 22 June 1841, Figure 6.25 In Clark 1998:2:298; Stapylton in Andrews 1986:146.
- ¹⁹⁰ Personal Observation: 4 December 1999; Plate 3.
- ¹⁹¹ Robinson 20 March 1842; British Parliamentary Papers (Aborigines) 1844:3:209. Personal Observation: 4 December 1999; Plate 4.
- ¹⁹² Robinson 10 May 1841; Dawson 1881:11.

¹⁹³ Manifold In Kenyon 1930:71.

¹⁹⁴ Robinson 1 April 1841; 10 May 1841.

¹⁹⁵ British Parliamentary Papers (Aborigines) 1844:3:240.

¹⁹⁶ Dawson 1881:10-11.

¹⁹⁷ Worsnop 1897:105.

This places the Condah area dwellings in the "Temporary" class which is consistent with the occupational evidence, the historical sequence proposed earlier, and the tendency noted elsewhere to adopt less permanent forms of shelter following displacement.

¹⁹⁸ Wobst 1978:303; Yesner 1980:727.

¹⁹⁹ Although Robinson had a long history of involvement with Aboriginal peoples, both in Victoria and Tasmania, his journals still have many limitations. His role as Chief Protector was his primary concern and the collection of ethnographic information was an important but secondary consideration. This shifted the focus of his information gathering, especially in later years where much of it simply relates to the actions of and gossip about colonists. While he claims to have met just about every clan in western Victoria, a claim some uncritically accept, I would doubt that this was the case. There were many areas not visited, there are unknowns about Aboriginal responses to his presence, he was at times confused about things such as clan names, and he was not always rigorous in his information collection. While his material is highly indicative, attempts to base analyses on it are fraught with difficulties and, although useful, probably lack validity (See Williams 1985:74-6).

²⁰⁰ Robinson 3 May 1841.

²⁰¹ Robinson 9 May 1841.

²⁰² Robinson 24 April 1841.

²⁰³ Robinson 9 May 1841.

²⁰⁴ Robinson 11 May 1841.

²⁰⁵ Dawson 1881:10.

²⁰⁶ Lourandos 1980a:156; b:162-3; Williams 1988:62.

²⁰⁷ British Parliamentary Papers (Aborigines) 1844:3:209; Boldrewood 1884:49; Williams 1985:78; Clark 1989:3; Personal Observation : 18-19 September 1999, 4 December 1999.

²⁰⁸ Chauncy 1878:2:232; Smyth 1878:1:239; MacPherson 1885:50; Coutts *et al.* 1976:1,9-13; Coutts *et al.* 1977b:21; Williams 1988:12; Bird and Frankel 1991:7.

²⁰⁹ Bird and Frankel 1991:8.

²¹⁰ Unless there is evidence of contemporaneous occupation or utilisation of mounds, then mound clusters cannot be considered evidence, *per se*, of large-scale settlements. However, Bird and Frankel's argument rejecting mounds as large-scale settlements because the basal dates of contiguous mounds may be separated by as much as 1,000 years is invalid. This time gap may simply reflect new mounds being created over time as populations grew. Bird and Frankel's reasoning would only hold if there were significant time gaps in the terminal, not the basal, layers.

²¹¹ Robinson 1841-2; Chauncy 1878:2:232; Smyth 1878:1:239; Dawson 1881:103; MacPherson 1885:55; Coutts *et al.* 1976; Coutts and Witter 1977:62-6; Williams 1988:16-21,135,206; Bird and Frankel 1991:7.

²¹² Coutts and Witter 1977:66; Williams 1985:79.

²¹³ Williams 1985:75-6.

²¹⁴ Williams 1985:73-6,78-80. See also footnote 199 above.

²¹⁵ Williams 1988.

²¹⁶ Hayden 1990:33.

²¹⁷ Contenson 1983:61; Henry 1989; Habu 1996; Ames 1991,1994; Marquandt 1988.

²¹⁸ Price and Brown 1985:16; Henry 1991:365-9; Hard and Merrill 1992.

²¹⁹ Grossman 1992:1-2.

²²⁰ Robinson 9 May 1841

²²¹ Robinson 9 May 1841.

²²² Robinson 2 May 1841.

²²³ Williams 1985:76 estimates the population of Caramut to be 80-200. Duff (n.d.:3) states "the Muston's Creek tribe consisted of 600 blacks."

²²⁴ Wesson 1981:32 does show a tri-modal distribution

²²⁵ Coutts *et al.* 1976:Fig. 3.

²²⁶ Coutts *et al.* 1976:Fig. 3.

Although a post-contact settlement, and possibly misidentifying some sites, Wesson's data on stone circle distribution at the Allambie (PAL) site (1981:32) also shows a tri-modal clustering. Williams (1985:79) sample of mounds (117) from her study area shows a tri-modal distribution as well.

²²⁷ Rafferty 1985:114.

²²⁸ Kent 1989:3.

-
- ²²⁹ Rafferty 1985:135; Henry 1989:38-9; Bar-Yosef *et al.* 1991:423.
- ²³⁰ Henry 1989:39; Tchernov 1991:315.
- ²³¹ Rafferty 1985:115; Kelly 1992:56; Habu 1996:39.
- ²³² Rafferty 1985:115,129; Henry 1989:38-9; Kent 1989:2; Kelly 1992:57.
- ²³³ Clemens 1979:72-3.
- ²³⁴ Henry 1989:39; Tchernov 1991:315; Kelly 1992:56.
- ²³⁵ Andresen *et al.* 1981:33-4.
- ²³⁶ Habu 1996.
- ²³⁷ Henry 1989:39.
- ²³⁸ Rafferty 1985:131; Haaland 1997:376.
- ²³⁹ Rafferty 1985:131; Tchernov 1991:315.
- ²⁴⁰ Rafferty 1985:131; Henry 1989:39.
- ²⁴¹ Rafferty 1985:131.
- ²⁴² Pardoe 1988:1-2; Henry 1989:39; Tchernov 1991:315.
- ²⁴³ Wesson 1981:76.
- ²⁴⁴ Williams 1988:80,96.
- Williams encountered this problem at Gorrie Swamp Hut as well, soil acidity destroying all faunal evidence (1988:141).
- ²⁴⁵ Williams 1988:141.
- ²⁴⁶ Williams 1988:141,184,190; Clarke 1994:9.
- ²⁴⁷ Coutts and Witter 1977:62-5.
- Similar composition is reported in the historical ethnographic literature. See for example: Chauncy 1878:2:232; Smyth 1878:1:239; Dawson 1881:103-4; MacPherson 1885:55.
- ²⁴⁸ Hassan 1981:91; Schacht 1981:131; Williams 1985:73; Bird and Frankel 1991:10; Clarke 1994:12
- ²⁴⁹ Hassan 1981:63-83; Schacht 1981:124-31; Williams 1985:73-5.
- Helskog and Schweder (1989) have used C¹⁴ dates as a means of establishing contemporaneity and this is probably the most viable method.
- ²⁵⁰ Habu 1996:39.
- ²⁵¹ Kelly 1992:57.
- ²⁵² Kelly 1992:57.
- ²⁵³ Rafferty 1985:129.
- ²⁵⁴ e.g. Stapylton in Andrews 1986:146; Robinson 9-10 May 1841; British Parliamentary Papers (Aborigines) 1844:3:209; Dawson 1881:10-11
- ²⁵⁵ Robinson 10 May 1841; British Parliamentary Papers (Aborigines) 1844:3:209; Dawson 1881:10.
- ²⁵⁶ Kenyon 1957:52-3; Henry 1989:38-9; Habu 1996:38-9.
- ²⁵⁷ Clarke 1994:10.
- ²⁵⁸ Clemens 1979:72-3.
- ²⁵⁹ Williams 1988:137.
- ²⁶⁰ Clemens 1979:72-3; Noy *et al.* 1980:69; Rafferty 1985:129-30; Henry 1989:226; Bar-Yosef *et al.* 1991:408.
- ²⁶¹ Rafferty 1985:130.
- ²⁶² Rafferty 1985:130.
- ²⁶³ Although there is no evidence of storage facilities according to Lourandos (1980b:250), "elementary and short-term food storage," was practised in the region.
- ²⁶⁴ Williams 1988:12-13.
- The other main distribution of mounds in Victoria is in the Murray River Valley.
- ²⁶⁵ Currie In *Select Committee of the Legislative Council* 1858-9:62; Smyth 1878:1:240; Williams 1988:13, Table 2.1.
- ²⁶⁶ Robinson 24,30 April 1841.
- ²⁶⁷ Robinson 29 April 1841, 6 April 1842; British Parliamentary Papers (Aborigines) 1844:3:240.
- It would appear that fishing, for fish and eels, from these platforms took place at night using, "a worm on a thing [of] tree twigs." (Robinson 6 April 1842) Both Dawson and Buckley provide a slightly different or more elaborate description of this, "by tying a bunch of worms, with cord made of the inner bark of the prickly acacia, to the end of a long supple wand like a fishing-rod ... when swallowed by the fish [eels according to Buckley (Morgan 1852:48)], it is pulled up quickly before the fish can disgorge it." (Dawson 1881:94).
- These platforms are strongly reminiscent of those found on the rivers of the Pacific Northwest Coast of North America.
- ²⁶⁸ Sievwright 20 March 1841.
- ²⁶⁹ Godfrey In *Select Committee of the Legislative Council* 1858-9:62; Smyth 1878:1:239; Dawson 1881:103; Williams 1988:16,19; Schell 1998:113; Coutts and Witter 1977:63-4.

-
- ²⁷⁰ Dawson 1881:63-4,103.
- ²⁷¹ Pardoe 1988:1
- ²⁷² Pardoe 1988:1-2.
- ²⁷³ Coutts *et al.* 1976; Bird and Frankel 1991:9.
- ²⁷⁴ Coutts *et al.* 1976; Coutts and Witter 1977:62-6; Coutts *et al.* 1979:Fig.1; Williams 1988; Dawson 1881:103; Bird and Frankel 1991:7.
- ²⁷⁵ MacPherson 1885:57 suggested that there may have been a correlation between mound density and population density. This may be quite a reasonable suggestion but probably now quite difficult to test.
- ²⁷⁶ Coutts and Witter 1977:62-5. Bird and Frankel 1991:15.
- ²⁷⁷ For simplicity the uncertainties in the radiocarbon dates have been ignored.
- ²⁷⁸ Williams 1988:15,Table 2.2.
- ²⁷⁹ Contenson 1983:58.
- ²⁸⁰ Contenson 1983:57,66.
- ²⁸¹ Wesson 1981:32,77,79,Fig.28.
- An alternative explanation may be that the huts' entrances were oriented in a direction where the wind was least likely to come from, NE being the least likely wind direction for all months except July, when it was 2nd least likely (Wesson 1981:Fig.28). On that basis one could conclude occupation was almost year-round.
- ²⁸² Dawson 1881:10.
- The ethnographic evidence seems to indicate that November and December was the period where people were least sedentary and highly mobile. Furthermore, on the Wannon the permanent cupolas apparently faced north west (Smyth 1878:1:126).
- ²⁸³ Williams 1988:145.
- ²⁸⁴ Williams 1988:141.
- ²⁸⁵ Williams 1988:151.
- ²⁸⁶ Williams 1985:76; Clarke 1994:12.
- ²⁸⁷ Critchett 1990:1,3.
- ²⁸⁸ Dawson 1881:103.
- ²⁸⁹ Dawson 1881:11.
- ²⁹⁰ Dawson 1881:10.
- ²⁹¹ Dawson 1881:10-11.
- ²⁹² Dawson 1881:3.
- ²⁹³ Dawson 1881:94.
- ²⁹⁴ Robinson 1 April 1841.
- ²⁹⁵ Robinson 27 April 1841.
- ²⁹⁶ Westgarth 1846:8n.
- ²⁹⁷ Griffiths 1845:152.
- ²⁹⁸ Mitchell 1839:2:194.
- ²⁹⁹ Mitchell 1839:2:194-5.
- ³⁰⁰ Lourandos 1980a:163; Wesson 1981:19; Williams 1985:76-7; 1988:62; Clarke 1994:12.
- ³⁰¹ Robinson 20 March 1842; Sievwright 20 March 1842.
- ³⁰² Williams 1985:77.
- ³⁰³ J. M. Allan, Murray, Gottreux In *Select Committee of the Legislative Council 1858-9*:61
- ³⁰⁴ This is based on the fact some of the relevant witnesses did not take over their runs until well into the contact period, 1849 in Gottreux's case (Billis and Kenyon 1974:73), that their evidence is not consistent with what we know witnesses such as Thomas and Sievwright knew (*Select Committee 1858-9*:61,74), and their own assessments on the degree to which traditional life was still being followed (Allan, Thomas and others In *Select Committee 1858-9*:67,Q72). The framing of the questions put to witnesses, especially the failure to distinguish between the traditional and the contemporary situation, also suggests to me that part of the purpose of the Select Committee may have been to refute inconvenient claims that Aboriginal people in south west Victoria lived in permanent habitations and villages and were largely sedentary.
- ³⁰⁵ Manifold In *Bride* 1898:137.
- ³⁰⁶ Murdock 1967:51; Murdock and Wilson 1972; Murdock and Provost 1973.
- ³⁰⁷ Murdock and Provost 1973:380.
- ³⁰⁸ Murdock and Wilson 1972:257.
- ³⁰⁹ Murdock and Wilson 1972:257.
- ³¹⁰ Rafferty 1985:114; Kent 1989:2; Hard and Merrill 1992; Kelly 1992:49; Habu 1996:38. See also Binford 1980:16.

In my view the overall validity of Murdock and Wilson's methodology is questionable, exemplified by their choice of the *Tiwi* and *Arrente* as the only Australian representatives in their sample. Without a sufficiently

large sample from hunter-gatherer and complex hunter-gatherer societies the small, but significant, variations and distinctions in the degree of sedentism and mobility have been overlooked. Consequently their classification is of little value in determining levels of sedentism in groups that are partially sedentary in some way.

³¹¹ Cane 1984.

³¹² Lieberman 1993:600,609; Habu 1996:38.

³¹³ Williams 1988:41-2 basically concurs with this conclusion though for slightly different reasons.

³¹⁴ Mitchell 1839:1:262.

³¹⁵ Grey 1841:2:19-38.

³¹⁶ Gerritsen 1994:88-92.

³¹⁷ Noy *et al.* 1980:69,82; Bar-Yosef *et al.* 1991:423; Lieberman 1993:607.

³¹⁸ Kenyon, K. 1957:53,71; 1960-83:3:2,6,8,19; Noy *et al.* 1980:69; Henry 1989:225-6; Bar-Yosef *et al.* 1991:408.

³¹⁹ Noy *et al.* 1980:64-5.

³²⁰ Bar-Yosef *et al.* 1991:411.

³²¹ Bar-Yosef *et al.* 1991:408.

³²² Henry 1989:225-6.

³²³ Hassan 1981:52,93

³²⁴ Contenson 1983:61; Bar-Yosef *et al.* 1991:417-23.

³²⁵ Although it should be recognised there is no simple continuum of mobility (Kelly 1992:92).

³²⁶ Binford 1982:9.

³²⁷ Binford 1980:7,9; Hassan 1981:91-2; Kelly 1992:57.

³²⁸ Fisher 1997:20.

³²⁹ Binford 1980:9-10.

³³⁰ Binford 1980:10-18; 1982:7-8; Kent 1989:4.

³³¹ Binford 1980:10,15.

³³² Coutts *et al.* 1978:42.

³³³ Coutts *et al.* 1976:9.

³³⁴ Coutts *et al.* 1978:39; Coutts 1981:43,53.

³³⁵ Coutts *et al.* 1976:9-10,19; Lourandos 1980a:163.

³³⁶ Robinson 11 May 1841; Westgarth 1846:39; Boldrewood 1884:36,39,49; Coutts *et al.* 1978:38-9; Lourandos 1980a:111a-c,113,146; 1980b:249; Coutts 1981:37, Fig.19; Gott 1987; Williams 1988:23-34.

Other possible significant food sources may have included frogs, swamp snails, wombats and possums.

³³⁷ Hayden 1981; Satterthwait 1987.

³³⁸ Lieberman 1993:600.

³³⁹ Lieberman 1993:600.

³⁴⁰ Robinson 30 April 1841.

³⁴¹ Williams 1988:23.

³⁴² Papers of William Thomas, MSS 214, Box 24, Item 11 : "Aborigines Superior Race" 1858.

³⁴³ Robinson 30 April 1841.

³⁴⁴ Williams 1988:34.

³⁴⁵ Mitchell 1839:2:252.

³⁴⁶ Robinson 22 May 1842. A similar comment was made on 20 March 1842.

³⁴⁷ Fyans in Brown 1986:230.

See also Boldrewood 1884:36,39,49.

³⁴⁸ These fish traps do not seem to have been located. Because of her misinterpretation of the evidence Williams looked for them on the south side of Gorrie Swamp but, of course, was unable to find them, although she did find a 50 metre ditch and bank, which may have been an eel canal (Williams 1988:166). A fish trap has, however, been noted at Lake Gorrie (Clark 1989:2)

³⁴⁹ Robinson 25 April, 10 May 1841 [Figs 4.26, 5.8]; Griffiths 1845:154; Lloyd 1862:409; Smyth 1878:1:192.

³⁵⁰ Williams 1988:68-9.

³⁵¹ Another "station" may have been recorded by Robinson on the heights of the Corroir Valley (Robinson 7 June 1841 [Fig. 6.14]).

³⁵² Westgarth 1888:43 states, "We were guided latterly by a well-beaten native track, for this seemed a favourite walk of the aborigines."

³⁵³ Coutts *et al.* 1978:8-10, 24-5, 28, 31-3; Clarke 1994:10.

The fish traps at Ettrick and Tyrendarra (Kenyon 1912:110; Massola 1968; Schell 1998:17) may also have fallen within the orbit of the Eumeralla village, but as they were on a smaller scale, and 20 km or more away, it seems more likely they were built and utilised by other groups.

³⁵⁴ Buckley's (Morgan 1852:56-7) description of trade in bulk foods is one particularly important element of socioeconomic articulation worth further investigation.

³⁵⁵ I would draw attention to two items of evidence that are germane to this issue that have not been cited in any of the literature, as far as I am aware. The first is the discovery of, "a small heap of twenty-five bandicoot mandibles and other items clustered at the right shoulder," of one of the burials in mound FM/1 (Cutts and Witter 1977:64). This is possibility indicative of a status burial, though there may, of course, be other explanations. The second item is a description of a marriage ceremony provided by Sievwright (13 April 1842). In this refers to the "hut of the Chief of her [the bride's] tribe which was well stored with provisions which were distributed amongst the party". While the term "Chief" may simply describe a clan leader or a "Big Man" the suggestion of a redistributive function is most intriguing, although not necessarily if the "Chief" had a direct stake in the marriage that was about to take place.

REFERENCES

- Ames, K. M. 1991 The archaeology of the longue duree temporal and spatial scale in the evolution of social complexity on the southern Northwest Coast. *Antiquity* 65(249):935-945.
- Ames, K. M. 1994 The Northwest Coast: Complex hunter-gatherers, ecology and social evolution. *Annual Review of Anthropology* 32:209-229.
- Andresen, J. M., Byrd, B. F., Elson, M. D., McGuire, R. H., Mendoza, R. G., Staski, E. and White, J. P. 1981 The deer hunters: Star Carr reconsidered. *World Archaeology* 13(1):31-46.
- Andrews, A. E. J. (ed.) 1986 *Stapylton With Major Mitchell's Australia Felix Expedition*. Hobart: Blubberhead Press.
- Australian Topographic Maps 1:100,000 Series.
- Bar-Yosef, O., Gopher, A., Tchernov, E. and Kislev, M. E. 1991 Netiv Hagdud: An early Neolithic village site in the Jordan valley. *Journal of Field Archaeology* 18(4):405-424.
- Billis, R. V. and Kenyon, A. S. 1974 *Pastoral Pioneers of Port Phillip*. Melbourne: Stockland Press.
- Binford, L. R. 1980 Willow smoke and dog's tails: Hunter-gatherer settlement systems and archaeological site formation. *American Antiquity* 45(1):4-20.
- Binford, L. R. 1982 The archaeology of place. *Journal of Anthropological Archaeology* 1:5-31.
- Bird, C. F. M. and Frankel, D. 1991 Chronology and explanation in western Victoria and south-east South Australia. *Archaeology in Oceania* 26(1):1-16.
- Boldrewood, R. [T. A. Browne] 1884 *Old Melbourne Memories*. Melbourne: George Robertson.
- Bride, T. F. (ed.) 1898 *Letters from Victorian Pioneers*. Melbourne: Government Printer.
- Brown, P. L. (ed.) 1986 *Memoirs Recorded at Geelong, Victoria, Australia by Captain Foster Fyans*. Geelong: Geelong Advertiser.
- Cane, S. 1984 'Desert camps: A case study of stone artifacts and Aboriginal behaviour in the Western Desert.' Unpublished PhD thesis, Australian National University, Canberra.
- Chauncy, P. 1878 Notes and anecdotes of the Aborigines of Australia. In R. Brough Smyth *The Aborigines of Victoria*, vol. 2, pp.221-284. Melbourne: Government Printer.
- Clark, D. and Geering, K. 1986 'Aboriginal stone houses on the 'Allambie' property, southwestern Victoria.' Unpublished report, Aboriginal Affairs Victoria.
- Clark, I. D. 1989 'A guerrilla base camp in the Eumeralla Aboriginal War in SW Victoria (1840s).' Unpublished report, Victorian Tourism Commission.
- Clark, I. D. 1990 In quest of the tribes: G. A. Robinson's unabridged report of his 1841 expedition among Western Victorian Aboriginal tribes; Kenyon's 'condensation' reconsidered. *Memoirs of the Museum of Victoria (Anthropology and History)* 1(1):97-129.
- Clark, I. D. 1995 *Scars in the Landscape : A Register of Massacre Sites in Western Victoria 1803-1859*. Canberra: Aboriginal Studies Press.
- Clark, I. D. (ed.) 1998 *The Journals of George Augustus Robinson, Chief Protector, Port Phillip Aboriginal Protectorate*. 4 vols. Melbourne: Heritage Matters.
- Clarke, A. 1994 Romancing the Stones: The cultural construction of an archaeological landscape in the Western District of Victoria. *Archaeology in Oceania* 29:1-15.

-
- Clemens, H. 1979 'Nomad's space: An investigation of the patterning of temporarily occupied settlements and the movements and groupings of the occupants.' Unpublished BA (Hons.) thesis, University of Sydney, Sydney.
- Contenson, H. de 1983 Early agriculture in western Asia. In T. C. Young, P. Mortenson and P. E. L. Smith (eds) *The Hilly Flanks and Beyond: Essays on the Prehistory of Southwestern Asia*, pp.57-74. Chicago: Oriental Institute of the University of Chicago.
- Corris, P. 1968 *Aborigines and Europeans in Western Victoria. Occasional Papers in Aboriginal Studies No. 12 Ethnohistory Series No. 1*. Canberra: Australian Institute of Aboriginal Studies.
- Coutts, P. J. F. 1981 *Readings in Victorian Prehistory*. Melbourne: Ministry for Conservation, Vol. 3: *The Victorian Aborigines 1800 to 1860*.
- Coutts, P.J.F., Frank, R. K. and Hughes, P. 1978 *Aboriginal Engineers of the Western District, Victoria*. Melbourne: Ministry of Conservation, *Records of the Victorian Archaeological Survey*, No. 7.
- Coutts, P. J. F., Henderson, P. and Fullagar, R. L. K. 1979 *A Preliminary Investigation of Mounds in North-Western Victoria*. Melbourne: Ministry of Conservation, *Records of the Victorian Archaeological Survey*, No. 9.
- Coutts, P. J. F. and Witter, D. C. 1977 New radiocarbon dates for Victorian archaeological sites. *Records of the Victorian Archaeological Survey* 4:59-73.
- Coutts, P. J. F., Witter, D., McIlwraith, M. and Frank, R. 1976 *The Mound People of Western Victoria*. Melbourne: Ministry of Conservation *Records of the Victorian Archaeological Survey*, No. 1.
- Coutts, P. J. F., Witter, D. and Parsons, D. M. 1977a Impact of European settlement on Aboriginal society in western Victoria. *Search* 8(6):194-205.
- Coutts, P. J. F., Witter, D. and Parsons, D. M. 1977b Impact of European settlement on Aboriginal society in western Victoria. *Records of the Victorian Archaeological Survey* 4:17-58.
- Critchett, J. (ed) 1984 *Richard Bennett's Early Days of Port Fairy*. Warnambool: WIAE Press.
- Critchett, J. 1990 *A 'Distant Field of Murder': Western District Frontiers 1834-1848*. Melbourne: Melbourne University Press.
- Critchett, J. 1998 *Untold Stories: Memories and Lives of Victorian Kooris*. Melbourne: Melbourne University Press.
- Dawson, J. 1881 *Australian Aborigines*. Melbourne: George Robertson.
- Duff, L. P. n.d. *The History of Caramut Ararat*: Ararat Advertiser.
- Fisher, J. 1997 Information exchange, rock art and long run economic growth in Australia. *Australian Archaeology* 44:17-22.
- Flood, J. 1995 *Archaeology of the Dreamtime*. Pymble: Angus and Robertson.
- Geelong Advertiser* 10 January 1842, p3.
- Geering, K. 1985 'Report on VAS fieldtrips to 'Allambie' 12-16 March and 14-18 April 1985.' Unpublished report, Aboriginal Affairs Victoria.
- Gerritsen, R. 1994 *And Their Ghosts May Be Heard*. South Fremantle: Fremantle Art Centre Press.
- Gott, B. 1987 Grampians Aboriginal plants. In *Australia Felix: The Chap Wurrung and Major Mitchell*, pp.37-51. Dunkeld and District Historical Museum.
- Great Britain Parliamentary Papers 1834-44, Vol.3, Papers Relative to the Aborigines.
- Grey, G. 1841 *A Journal of Two Expeditions in North-West and Western Australia ... 1837-39*. Vol. 2. London: T. & W. Boone.

-
- Griffiths, C. 1845 *The Present State and Prospects of the Port Phillip District of New South Wales*. Dublin: William Curry Jnr.
- Grossman, D. 1992 *Rural Process-Pattern Relationships: Nomadization, Sedentarization and Settlement Fixation*. New York: Praeger.
- Haaland, R. 1997 Emergence of sedentism: New ways of living, new ways of symbolizing. *Antiquity* 71(272):374-385.
- Habu, J. Jomon sedentism and intersite variability: Collectors of the early Jomon Moroiso phase in Japan. *Arctic Anthropology* 33(2):38-49.
- Hard, R. J. and Merrill, W. L. 1992 Mobile agriculturalists and the emergence of sedentism: Perspectives from northern Mexico. *American Anthropologist* 94(3):601-620.
- Hassan, F. A 1981 *Demographic Archaeology*. New York: Academic Press.
- Hayden, B. 1981 Research and development in the Stone Age: Technological transitions among hunter-gatherers. *Current Anthropology* 22(5):519-548.
- Hayden, B. 1990 Nimrods, piscators, pluckers and planters: The emergence of food production. *Journal of Anthropological Archaeology* 9:31-69.
- Helskog, K. and Schweder, T. 1989 Estimating the number of contemporaneous houses from ¹⁴C dates. *Antiquity* 63(238):166-172.
- Henry, D. O. 1989 *From Foraging to Agriculture: The Levant at the End of the Ice Age*. Philadelphia: University of Pennsylvania Press.
- Henry, D. O. 1991 Foraging, sedentism, and adaptive vigour in the Natufian: Rethinking the linkages. In G. A. Clark (ed.) *Perspectives on the Past: Theoretical Biases in Mediterranean Hunter-Gatherer Research*, pp.353-370. Philadelphia: University of Pennsylvania Press.
- Jones, V. R. (comp.) 1960 *Alphabetical Index of Victorian Streams*. Victoria: State Rivers and Water Supply Commission of Victoria.
- Kelly, R. L. 1992 Mobility/sedentism: Concepts, archaeological measures and effects. *Annual Review of Anthropology* 21:43-66.
- Kent, S. 1989 Cross-cultural perceptions of farmers as hunters and the value of meat. In Kent, S. (ed.) *Farmers as Hunters: The Implications for Sedentism*, pp.1-17. Cambridge: Cambridge University Press.
- Kenyon, A. S. 1912 Camping places of the Aborigines of south-eastern Australia. *Victorian Historical Society Magazine* 2(3):97-110.
- Kenyon, A. S. 1930 Stone structures of the Australian Aborigines. *The Victorian Naturalist* 47:71-75.
- Kenyon, A. S. (comp.) 1932 *Map Showing the Pastoral Holdings of the Port Phillip District 1835-51, Now Victoria*. Melbourne: Crown Lands Department.
- Kenyon, K. M. 1957 *Digging Up Jericho*. London: Ernst Benn.
- Kenyon, K. M. 1960-83 *Excavations at Jericho*. Vol. 3. London: British School of Archaeology in Jerusalem.
- Kiddle, M. 1983 *Men of Yesterday*. Melbourne: Melbourne University Press.
- Lands Department Map No. 336 (Run Plan) 1846. [Map Section, Victorian State Library.]
- Lang, G. S. 1865 *The Aborigines of Australia*. Melbourne: Wilson and Mackinnon.
- Lieberman, D.E. 1993 The rise and fall of seasonal mobility among hunter-gatherers: The case of the southern Levant. *Current Anthropology* 34(5):599-631.
- Lloyd, G. T. 1862 *Thirty-Three Years in Tasmania and Victoria*. London: Houston and Wright.
- Lourandos, H. 1976 Aboriginal settlement and land use in south western Victoria: A report on current field work. *The Artefact* 1(4):174-193.

-
- Lourandos, H. 1977 Aboriginal spatial organization and population: South western Victoria reconsidered. *Archaeology and Physical Anthropology in Oceania* 12:202-225.
- Lourandos, H. 1980a 'Forces of Change: Aboriginal technology and population in south western Victoria.' Unpublished PhD thesis, University of Sydney, Sydney.
- Lourandos, H. 1980b Change or stability? : Hydraulics, hunter-gatherers and population in temperate Australia. *World Archaeology* 11(3):245-264.
- Lourandos, H. 1985 Intensification and Australian prehistory. In T. D. Price and J. A. Brown (eds) *Prehistoric Hunter-Gatherers: The Emergence of Complexity*, pp.385-423. San Diego: Academic Press.
- Lourandos, H. 1988 Paleopolitics: Resource intensification in Aboriginal Australia and Papua New Guinea. In T. Ingold, D. Riches and J. Woodburn (eds) *Hunters and Gatherers 1: History, Evolution and Social Change*, pp.148-60. Oxford: Berg.
- Lourandos, H. 1997 *Continent of Hunter-Gatherers: New Perspectives in Australian Prehistory*. Cambridge; Cambridge University Press.
- MacPherson, P. 1885 The oven-mounds of the Aborigines in Victoria. *Journal and Proceedings of the Royal Society of New South Wales* 18:49-59.
- Marquandt, W. H. 1988 Politics and production among the Calusa of southern Florida. In T. Ingold, D. Riches and J. Woodburn (eds) *Hunters and Gatherers 1: History, Evolution and Social Change*, pp.161-188. Oxford: Berg.
- Massola, A. 1968 The Aboriginal fish traps at Homerton. *The Victorian Naturalist* 85(7):197-200.
- Massola, A. 1970 *Aboriginal Mission Stations in Victoria: Yelta, Ebenezer, Ramahyuck, Lake Condah*. Melbourne: Hawthorn Press.
- Mitchell, T. L. 1839 *Three Expeditions into the Interior of Eastern Australia*. 2 vols. London: T. & W. Boone.
- Morgan, J. 1852 *The Life and Adventures of William Buckley*. Hobart: Archibald MacDougall.
- Murdock, G. P. 1967 *Ethnographic Atlas*. Pittsburgh: University of Pittsburgh Press.
- Murdock, G. P. and Provost, C. 1973 Measurement of cultural complexity. *Ethnology* 12(4):379-392.
- Murdock, G. P. and Wilson, S. F. 1972 Settlement patterns and community organization: Cross-cultural codes. *Ethnology* 11(3):254-295.
- Noy, T., Legge, A.J. and Higgs, E. S. 1973 Recent excavations at Nahal Oren, Israel. *Proceedings of the Prehistoric Society* 39:75-99.
- Noy, T., Schuldenrein, J., and Tchernov, E. 1980 Gilgal, a Pre-Pottery Neolithic A site in the Lower Jordan Valley. *Israel Exploration Quarterly* 30:63-82.
- Pardoe, C. 1988 The cemetery as symbol. The distribution of prehistoric Aboriginal burial grounds in southeastern Australia. *Archaeology in Oceania* 23(1):1-16.
- Peel, L. (ed.) 1996 *The Henty Journals: A Record of Farming, Whaling and Shipping at Portland Bay 1834-39*. Melbourne: Miegunyah Press.
- Penney, J. and Rhodes, D. 1990 *Lake Condah Archaeological Project: Post-Contact Archaeological Component*. 2 Parts. Melbourne: Dept. of Conservation and Environment.
- Price, T. D. and Brown, J. A. 1985 Aspects of hunter-gatherer complexity. In T. D. Price and J. A. Brown (eds) *Prehistoric Hunter-Gatherers: The Emergence of Cultural Complexity*, pp.3-20. San Diego: Academic Press.
- Rafferty, J. E. 1985 The archaeological record on sedentariness: Recognition, development, and implications. *Advances in Archaeological Method and Theory* 8:113-156.
- Roberts, S. H. 1970 *The Squatting Age in Australia*. Melbourne: Melbourne University Press.

-
- Satterthwait, L. D. 1987 Socioeconomic implications of Australian Aboriginal net hunting. *Man* 22:613-636.
- Schacht, R. M. 1981 Estimating past population trends. *Annual Review of Anthropology* 10:119-140.
- Schell, P. 1998 *The Archaeology of the Stony Rises*. Melbourne: Aboriginal Affairs Victoria.
- Sievwright, C. Journal of the proceedings of Assistant Protector Sievwright, Western District, from 1st March to 31st March 1842. Archival estrays : Official Papers of New South Wales, List 11 CSIL/11. [Dixson Library, Sydney.]
- Smyth, R. Brough 1878 *The Aborigines of Victoria*. 2 Vols. Melbourne: Government Printer.
- Tchernov, E. 1991 Biological evidence for human sedentism in Southwest Asia during the Natufian. In Bar-Yosef, O. and Valla, F.R. (eds) *The Natufian Culture in the Levant*, pp.315-340. Ann Arbor: International Monographs in Prehistory.
- Thomas, W. Journal of Proceedings 2.3.1844 for period 1.12.1843 - 1.3.1844. PROV VA512 Aboriginal Protectorate Records: VPRS 4467, Reel 2, Unit 3 No. 79, Aboriginal Protectorate Records Weekly, Quarterly and Annual Reports. [Public Records Office, Laverton, Victoria.]
- Thomas, W. Papers of William Thomas, MSS 214, Box 24, Item 11: "Aborigines Superior Race" 1858. [Mitchell Library, Sydney.]
- Thomson, D. F. 1949 *Economic Structure and Ceremonial Exchange in Arnhem Land*. Melbourne: Macmillan.
- Victoria: Legislative Council, Votes and Proceedings 1858-9 *Report of the Select Committee of the Legislative Council on the Aborigines, together with the Proceedings of the Committee, Minutes of Evidence and Appendices*.
- Victorian Topographic Maps 1:25,000 Series.
- Victorian Place Names Register.
- Wesson, J. P. 1981 'Excavations of stone structures in the Condah area.' Unpublished Masters Preliminary thesis, La Trobe University, Melbourne.
- Westgarth, W. 1846 *A Report on the Conditions, Capabilities and Prospects of the Australian Aborigines*. Melbourne: W. Clarke.
- Westgarth, W. 1848 *Australia Felix*. London: Oliver and Boyd.
- Westgarth, W. 1851 Report on the condition and prospects of the Aborigines of Australia. *Journal of the Indian Archipelago and Eastern Asia* 5(2):704-28.
- Westgarth, W. 1888/1970 *Personal Recollections of Early Melbourne and Victoria*. Geelong: Rippleside Press.
- Whitworth, R. P. (comp.) 1879 *Bailliere's Victorian Gazetteer*. Melbourne: F. F Bailliere.
- Williams, E. 1984 Documentation and archaeological investigation of an Aboriginal 'village' site in south western Victoria. *Aboriginal History* 8(2):173-188.
- Williams, E. 1985 Estimation of prehistoric populations of archaeological sites in south western Victoria: Some problems. *Archaeology in Oceania* 20(3):73-80.
- Williams, E. 1987 Complex hunter-gatherers: A view from Australia. *Antiquity* 61(232):310-321.
- Williams, E. 1988 *Complex Hunter-Gatherers: A Late Holocene Example From Temperate Australia*. Oxford: British Archaeological Reports. *International Series* 423.
- Wobst, H. M. 1978 The archaeo-ethnology of hunter-gatherers or the tyranny of the ethnographic record in archaeology. *American Antiquity* 43(2):303-309.
- Worsnop, T. 1897 *The Prehistoric Arts, Manufactures, Works, Weapons etc. of the Aborigines of Australia*. Adelaide: Government Printer.
- Yesner, D. R. 1980 Maritime hunter-gatherers: Ecology and prehistory. *Current Anthropology* 21(6):727-750.