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ONCE WERE BORROWERS

Michael Trotter and Beverley McCulloch
Summer Wine Initiatives
Tuahiwi, North Canterbury

It all started with Canon James West Stack.

In 1893 he published a description of kumara gardens that had been maintained by the occupants of Kaiapoi Pa near Woodend in North Canterbury.

“To regulate the temperature of the soil, and to secure perfect drainage, they covered the surface of the Kumera plantations with fine gravel, to a depth of six inches, which was afterwards formed into mounds about two feet in diameter, and arranged over the field with the precision of a chess board, and in these mounds the Kumera tubers were planted ... The pits and gravel-strewn surfaces in the Woodend district, which have puzzled the English settlers there to account for, remain to remind this generation that Canterbury once included amongst its vegetable products a tropical plant which is now extinct, but the cultivation of which for many generations occupied much of the time and thought of the former inhabitants of the country.” (Stack 1893: 24, 26).

Stack also mentioned two specific localities where shrines dedicated to the growing of kumara were known to exist in the Kaiapoi Pa area. One was near Tuahiwi (which Stack called St Stephens after the church he had had built there in 1867); the other in a locality referred to historically as Waituere (Stack 1893: 25), identified today as Church Bush. This latter is an area where, in 1848, ‘native gardens’ were recorded during the earliest survey of the area by Walter Mantell and Alfred Wills – gardens are marked from here to Woodend on this

map by Wills (shown redrawn in Hawkins 1983: 16. The original, Lands & Survey R151, is held in the Canterbury Museum). Incidentally, a local kaumatua has told us that he knows the present location of at least one of the atua associated with these shrines, now buried in a secret place.

Stack's description of kumara growing in this area has largely been thought to be generic – a description of a practice seen (and described) elsewhere rather than specific to Kaiapoi, although his reference to “pits and gravel-strewn surfaces in the Woodend district” does seem to relate to actual physical features that were seen and known locally. A number of writers have dismissed this account of kumara gardening – for instance Tony Walton considered that “it has no validity as a description of the practice” (Walton 1982: 22).

The problem seems to relate mainly to Stack's known habit of embellishing his writing for effect. In this case, what has since proved to be his accurate assessment of probable kumara growing in the 'Kaiapoi' area – based on abundant physical evidence – has been treated with distrust because of the too obviously generalized description of Maori gardening practices which accompanied it – practices that doubtless ceased before Stack came to the district.

We had some friends in Ashburton – a well-read, intelligent, professional couple – who went so far as to maintain that kumaras were never grown in the South Island at all, and they had accumulated a massive amount of evidence to prove it. There was some thought, too, that the Kaiapoi gardens were for the production of white potatoes, and there is some small evidence that these were being grown in the area in the early 1830s (Tamihana Te Rauparaha n.d., referred to in Trotter and McCulloch 1998: 94).

(Just for the hell of it, some years ago, we went to the trouble of growing traditional types of kumara in Christchurch and Akaroa – two different microclimates which produced a mediocre (though useable) crop in Christchurch and an excellent crop in Akaroa.)

Be all that as it may, in 1958, Tony Fomison was the first to formally record archaeological evidence of kumara growing in the area – some pits immediately to the south of the historic St Stephens Church at Tuahiwi. He noted that “At least two of these have the asymmetrical vague form usually recognised as pits made in the excavation of gravel for spreading on kumera grounds” (site record S76/9, now M35/14). For many years, these remained the only recorded field

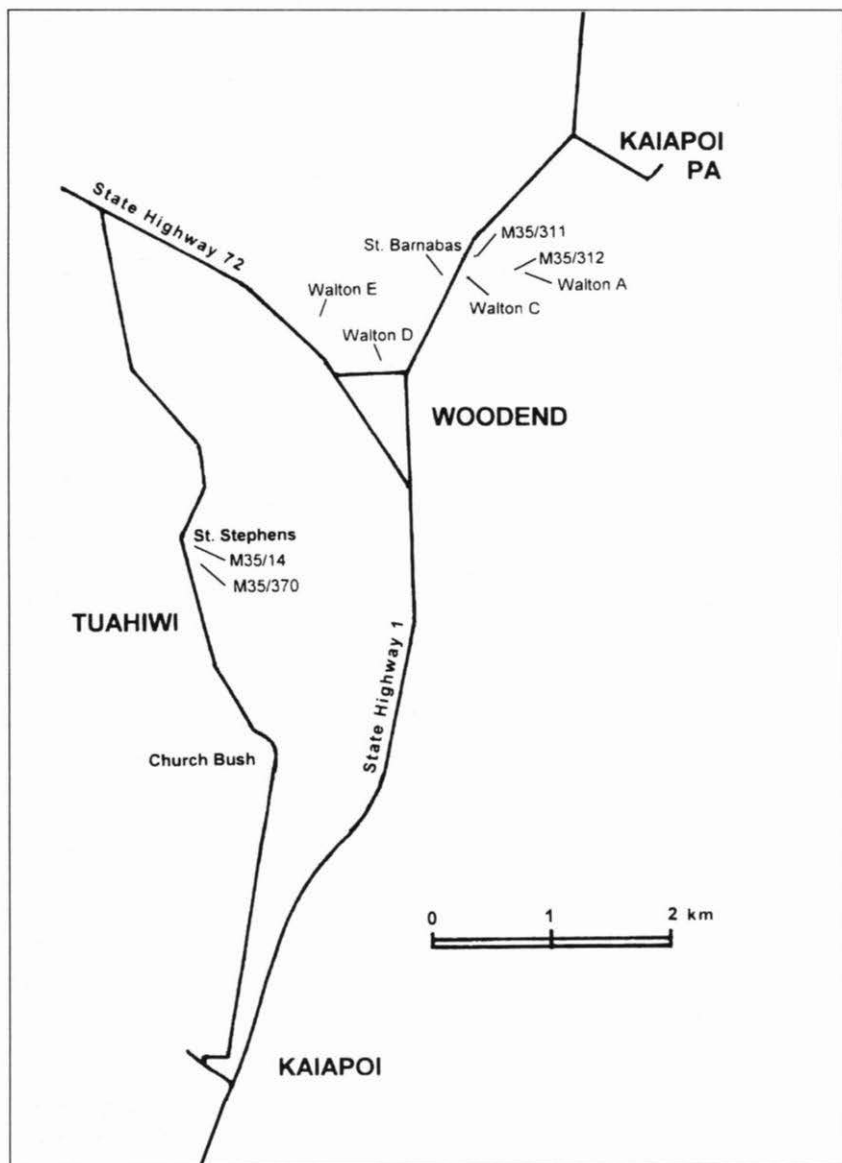


Figure 1. Sketch map of the area between Kaiapo Pa, Tuahiwi and Kaiapo township, showing sites and localities referred to.

evidence evidence for prehistoric cultivation in North Canterbury. (Tuahiwi is five kilometres south-west of Kaiapoi Pa and Woodend lies between them. The present Kaiapoi township is some six kilometres south of Woodend – see Figure 1.)

Further evidence for gravel-assisted gardening in North Canterbury (which we believe was for kumaras rather than potatoes) was found in 1980 when we located, and later recorded, some borrow pits (which we called gravel pits) southwest of Kaiapoi Pa, north of the township of Woodend. These pits were in two groups (site S76/149, now M35/311, and S76/150, now M35/312, respectively). At the latter site were piles of large discarded stones; as is often the case, only the finer material had been utilized for spreading on garden soil. There were some small farm buildings and large trees in them and the shape of the pits themselves had been slightly modified in places. In a cultivated paddock to the north of this site, spread gravel was clearly visible in the recently worked ground. We noted on the site record form that a plan should be made of the pits and the gravel area confirmed – but of course it was never done.

About the same time, Tony Walton, working on the basis of borrow pits (or quarry pits) visible in 1942 aerial photographs of the Kaiapoi area of North Canterbury, concluded that gravel-added soils here were not very extensive (Walton 1982: 25). Later, Tony published more details of the locations of these borrow pits, placing them in “four, or possibly five, restricted areas” north of Woodend (Walton 1985: 113). One of these areas, Tony’s ‘B’, was our previously recorded site, M35/311, described above.

Towards the end of 1996, more than 140 years since Canon Stack arrived at Tuahiwi, we moved to a property at the south end of Tuahiwi Village (which today is the site of the Ngai Tuahuriri Marae and focal point for North Canterbury Ngai Tahu). Here we located, and recorded in 1998, the largest area of pits in the district – by the simple expedient of walking across our property and also looking over our boundary fence. This was a 400 metre-long series up to twenty metres in width (site M35/370), extending from the pits behind St Stephens Church (recorded by Tony Fomison forty years earlier) and finishing well into our land. For the greater part of their length they lay on Maori land, a relic of the original ‘Native Reserve’ laid out around Tuahiwi in the nineteenth century.

This pit series is visible on the 1942 aerial photographs, but is not as readily interpreted from them as the ones Tony Walton identified – the hollows are almost *too* obvious and extensive to be believable as borrow pits, although they undoubtedly are, and on the ground are typical of such.

Local kaumatua are aware of these as borrow pits for obtaining gravel for kumara growing but some maintain that the deeper terminal pit area on our land was actually an extension made by Europeans excavating for road-building material. This seems extremely unlikely – the shape is all wrong and it is too far from the road. (There are actually what are clearly European borrow pits adjacent to the road, as is common throughout much of North Canterbury.)

Finally, there is a 50 x 12 metre gravel pit immediately north of the St Barnabas Church at Woodend. It is locally believed to be a Maori borrow pit but the batter of its sides has been so reduced (even before the 1942 aerial photograph) that we cannot be sure of its origin. At the time of writing we have filled in a site record for this pit but have not yet had it processed.

Borrow pits and garden areas that have been noted or recorded in the area south of Kaiapoi Pa and around Tuahiwi are listed in the accompanying table.

Table 1. Summary of references to, and records of, borrow pits and gardens in the area south of Kaiapoi Pa and around Tuahiwi.

<i>Date</i>	<i>Imperial No.</i>	<i>Metric No.</i>	<i>Walton ID</i>	<i>Grid Ref. M35/</i>
1848	(Early surveyors' reference to "native gardens")			
1893	(Stack's reference to pits and gravel soils in the area)			
1958-64	S76/9	M35/14	–	811 637
1980-82	S76/149	M35/311	B	835 662
1980-82	S76/150	M35/312	–	838 660
1982-85	–	–	A	839 659
1982-85	–	–	C	834 659
1982-85	–	–	D	826 653
1982-85	–	–	E	822 656
1998	–	M35/370	–	812 634
2001	St Barnabas Church, Woodend			832 659

millimetres here because observation of currently cultivated ground does not lead us to believe that it was spread any thicker (in spite of Stack's reference to "six inches"). And less than a hundred metres to the east is Tony Walton's site 'A' which could have yielded another 500 to 600 cubic metres, judging from the 1942 aerial photograph (its present condition makes ground measurement impractical). Within 500 metres to the west is site M35/311, Tony's 'C', and the St Barnabas Church site.



Figure 3. One of the best-preserved borrow pits in the area, part of site M35/312.

None of this negates Tony Walton's 1985 contention that garden soils in the area could be measured in hectares rather than tens of hectares. But add in the rest of the sites – M35/370 at Tuahiwi would have produced many times the amount of gravel of the whole Woodend group – and make allowance for pits no longer visible, and maybe for gardens where mined gravel was not added to the soil, and the impression is that one heck of a lot of kumaras were grown here one time or another! We think, too, that the amount of gravel shifted indicates that it was kumaras, not potatoes, that were grown – the amount of labour involved would not be warranted for potato growing.

Summary

There are more borrow pits in the Kaiapoi Pa-Tuahiwi area than have been hitherto recognized or recorded in the Association's site recording scheme. Several that show on the 1942 aerial photographs are not readily identifiable on later photographs or on the ground today. It is likely that others also occurred in the area but were destroyed or obscured before the time of the 1942 aerial photography. It is our belief that all these are – or were – indicative of kumara growing.

In recent years most of the known pits in the area have been filled in, had their sides reduced or have been built over. Where even a couple of decades ago we could look over the area and conclude without difficulty that "once were borrowers", today we must also add – "once were borrow pits".

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