

## Archaeological Investigations at the Battlefield of Rorke's Drift

*Very few military items were recovered which support the historical accounts; thus spoke Dr Lita Webley who conducted the archaeological survey of Rorke's Drift.*

One individual in particular, Sir Bartle-Frere, was particularly responsible for the original interest in archaeological research relating to the area of Rorke's Drift. It will be remembered that Frere was appointed Governor of the Cape Colony and British High Commissioner in South Africa in 1877, and it was Frere who was responsible for the British invasion of Zululand in 1879. Frere had wide ranging interests that included a passion for archaeology and anthropology. Before moving to South Africa he had been the President of the Asiatic Society in 1872 and the following year he became President of the Royal Geographical Society. He was an avid collector of artefacts, especially from Natal and Zululand, and most items from his collection are now deposited with the British Museum in the Department of Ethnography.

During the Zulu War, a number of British officers collected artefacts; many came from Rorke's Drift, others from along the Buffalo River, Isandlwana and Pietermaritzberg. One officer, Colonel Henry Fielden, was one who not only collected artefacts but also subsequently established that Bushmen collected glass from soldiers' discarded soda water bottles to make arrowheads. Fielden's Zulu War collection came from his line of march from Newcastle to Rorke's Drift; he wrote that he 'took advantage of every opportunity that arose for leaving the line of march and examining the 'dongas' and denuded surfaces that lay contiguous to this route'. (1) Artefacts collected by Fielden are now held in the Sturge collection in the British Museum and Liverpool Museum. At first sight, it appears strange that officers would take time from their official duties to study and collect artefacts; yet perusal of many early collects reveal that army officers were initially responsible for many collections, ranging from the Anglo Zulu War, the Boer Wars through to the Bechuanaland Expedition of 1884; their endeavours were certainly responsible for spurring initial interest in archaeology in this area although little more happened until the period between 1983 and 1993.

During this later period, a serious archaeological excavation was undertaken at Rorke's Drift with the aim of further elucidating the course of events at the Mission Station during the Anglo Zulu War of 1879. The foundations of the British Commissariat store as well as the hospital burnt down by the Zulu were located. Walling, which can probably be linked to Fort Bromhead, was uncovered and a preliminary survey with a metal detector provided new information on the Zulu side of the war. Surprisingly, very few items were recovered which could unequivocally be linked to the battle despite the scale of military operations at the site both during and after the conflict of 22nd January 1879. Indeed, when Bertram Mitford visited the battlefields in 1882 he found the site at Isandlwana littered with battle debris:

Strewn about are tent pegs, cartridge cases, broken glass, bits of rope, meat tins and sardine boxes pierced with assegai stabs, shrivelled pieces of shoe leather and rubbish of every description; bone of horses and oxen gleam white and ghastly and here and there in the grass one stumbles upon a half-buried skeleton. (2)

He found very little evidence of any conflict at Rorke's Drift:

Few or no traces of the old fortifications remain, but a large house, was in the course of construction. Outhouses stood around hard by was the chapel, belonging to the Mission, but of the defences, not a trace.(3)

### Background to the excavations

Before the Central Column descended on Rorke's Drift, Assistant Commissary Chermiside turned the church into a commissariat store and the missionary's 'eleven-roomed house' into a field hospital. Witt gave the dimensions of the store as 80 foot by 20 foot while the hospital was 60 foot by 18 foot in size. (4) Although the walls of the store are reported to have been of solid stone, photographs taken of this structure soon after the battle indicate a combination of stone and brick.

Most books written on the subject claim that British soldiers fired some 20,000 rounds of ammunition during the battle; their source appears to be the classic *The Washing of the Spears* by Morris. If this were so, the majority of these cartridge cases are likely to have fallen within the temporary barricades.(5) The British used the Martini-Henry breech-loading rifle and, while some of the Zulu are reported to have owned obsolete firearms, such as muzzle-loading flintlocks, these are considered to have had no significant effect on Zulu tactics. (6) The hospital was set alight during the battle and the ruins offered cover to the Zulus until the next morning, for this reason Chard ordered that

the walls of the hospital be pulled down. The stones of the walls were brought across to the storehouse to strengthen the redoubt.

In March 1879 troops started with the construction of Fort Melvill overlooking the river in order to both protect the pont and move the troops out of the old fort, which was very unhealthy. The majority of the troops moved out in April although some stayed on until the end of the war in July. It is not known when the walls of the old fort were finally dismantled although the defences of the area were finally abandoned in October 1879. Otto Witt returned and constructed a large house and church on the site after the war. There are no records indicating whether the new mission house was built on top of the foundations of the hospital or whether the church was built on the ruins of the store. It would appear however, that the eight foot high stone walling of the old fort was demolished and the stone used in the construction of the new buildings.

Witt's house and church are still standing and while the latter structure continues to function in daily use the former has now been converted into a museum. The land on which the battlefield is located still belongs to the Evangelical Lutheran Church but has been let to the Natal Provincial Administration on a 99-year lease. The battlefield area was declared a National Monument in 1969.

Prior to the conversion of the mission house into a museum, an eminent South African archaeologist, Dr Lita Webley, was requested to undertake an archaeological research programme in order to establish the following:

1. The original position of the hospital;
2. The position of the commissariat store;
3. To determine whether there was any evidence to substantiate the present position of stones which have been placed to demarcate the original lines of the battle of 22-23 January 1879;
4. To try and find the foundations of Fort Bromhead which was constructed on the site immediately after the battle;
5. To determine whether any evidence could be found for the position of Zulu snipers who apparently fired at the British troops from caves in the hillside of Shiyane.

Excavations were also considered to be of a rescue nature as significant artefacts or in-situ features had to be recovered before building contractors destroyed them. Archaeological excavations commenced in September 1988 with subsequent fieldtrips in May 1989, March, June and August 1990. Members of the Evangelical Lutheran Community assisted with the excavations during the first three fieldtrips.

#### 1. The location of the hospital foundations

To avoid confusion regarding this structure, some of the above history is briefly summarised. Rorke's house, subsequently occupied by Witt, became the field hospital during the Anglo Zulu War. Burnt down by the Zulus, it is believed that Lutheran missionaries returning to the site and rebuilt their mission house on the foundations of the hospital. It is this house which has been converted into a museum.

Some 20 metres were excavated around the house but no trace of previous foundations was observed. The deposit around the house was nowhere very deep. The deposit was not particularly rich anywhere except around the kitchen area where fragments of ceramics, glass and bone were recovered.

A number of trenches were then excavated inside the building. A comparison of the original floor plan of the hospital drawn by Lieutenant John Chard (who was a Royal Engineer) with that of the plan submitted by Otto Witt when he rebuilt the mission house in 1882 indicates that the former was slightly smaller than the latter. Excavations inside the house in Room 7 uncovered several large quartzite stones that form a neat straight edge, as well as a more roughly constructed inner wall running at right angles. These features probably relate to the foundations of the hospital. The deposit around these stones was rich in charcoal and pieces of melted glass that testify to the blaze relating to the battle itself.

#### 2. The location of the Commissariat store

In order to locate the position of the British Commissariat store a trench was excavated at right angles from the present church across the battlefield towards the rocky ledge for a distance of some 12 metres. As the aim of the excavation was to look for a specific feature, the trench was excavated to varying depths with pick and shovels and no sieving was undertaken. Close to the church the trench reached bedrock at about 1.2m while near the end of the trench it was reached at only 45cm. This is because there is a pronounced slope down from the church to the kraal and the position of the original redoubt.

However, while excavating the trench some dressed stone blocks were recovered three metres from the church. Stratigraphically these stones are assisted with a level of sandstone rubble and red brick

some 50cm from the soil surface. Most of the historic artefactual remains such as Martini-Henry cartridge cases and gin bottle fragments were found close to these stones. The excavation strategy was then altered to determine whether these stones were in fact the foundations of the store. Two square metres were uncovered to the west of the trench. More dressed stones were uncovered at the same depth as the previous finds and clearly formed part of the same structure including a well-developed line of sandstone blocks, on occasions two stones high. In addition it was interesting to note the presence of decomposing red brick in association with these stones. It would appear that the store was built of both sandstone and red brick. Large numbers of gin bottle fragments, rusted iron objects and china were found on the inside (i.e. south) of the line of stones. Excavations however, failed to locate any evidence of an interior floor within the structure.

After following the foundations in a westerly direction, further excavations were undertaken to the east. The excavation of 8 square metres revealed what would appear to be the one corner of the store. The corner was well built and more substantial than the foundation stones in the other excavated areas. In addition, a roughly constructed stonewall angles out from this corner in a northerly direction. It is suggested that this roughly built stonewall is the remains of the fortifications of Fort Bromhead built immediately after the battle linking the ruins of the hospital with the store and well-built kraal. The stones used for Fort Bromhead were probably used in the construction of the church, mission house and school buildings. The highest concentration of bone and Martini-Henry cartridge cases was recovered from the rubble layer in this excavated area.

It would appear that the clearly defined row of stones relates to the British Commissariat store and Dr Webley believed that the foundation stones were probably those of the outer or front wall.

### 3. Excavations on the battlefield

After establishing the position of the 'hospital' and 'store' a number of trenches were excavated to bisect the outer lines of the battlefield. Some trenches were sited along the southern margin while others were intended to sample the top of the rocky ledge to the north. Although the barricades were of a temporary nature, it was hypothesized that particularly dense numbers of cartridge cases and other military debris might indicate these lines. The absence of a clear stratigraphy on the battlefield itself suggests that both the levelling of the site prior to the construction of the new mission house and church in 1882 and gardening activities over a period of 100 years have destroyed much of the original stratigraphy. The dark loamy soil contained fragments of yellow clay, red brick lenses and the densest concentration of artefacts at depths of 0.3 – 0.5m.

It was further hypothesized that artefacts relating to the battle and to the subsequent occupation of the site by British soldiers between February and March 1879 would have been dumped beneath the ledge and would thus be concentrated in this area. Three large areas were therefore excavated immediately below the ledge. Very little artefactual material was recovered from these lower excavations. The dark brown soil was very shallow and overlaid sterile yellow clay. The deposit consisted mainly of recent builders rubble with virtually no historic material. An official from the N.P.A. Work's Branch office in Dundee informed Dr Webley that during the centenary celebrations at Rorke's Drift in 1979 a bulldozer had been used to 'neaten' the area below the ledge. The soil from this area may have been used to construct the ramp onto the battlefield so that visitors to the site could have more convenient access to the battlefield during the celebrations. In addition he reported that members of the public had dug extensively at Rorke's Drift and at Fort Melvill during 1979 in search of artefacts relating to the battle and this is confirmed by newspaper reports from that time.

### 4. The walls of Fort Bromhead

It was hoped that the area next to the ramp leading up to the rocky ledge on the battlefield, would provide some evidence of the gate of Fort Bromhead. However, only recent builders rubble was recovered indicating that this area has been disturbed, perhaps during the construction of the ramp to the site during the centenary celebrations of 1979.

A number of areas were excavated in order to extend the stone 'pathway' first found in 1988. The first three areas contained some stonewalling but were not very rich in artefacts. The next area, situated next to the concrete plinth, was rich in green bottle glass pieces. Two badges, a brass Sphinx and a brass Crown were found here. It was initially thought that the presence of a .577 slug in this area probably indicated extensive disturbance to the deposit but this view has since been re-evaluated.

The most extensive evidence for stone walling was found in the next area where quartzite cobbles and red brick seemed to form part of a wall. The excavations were enlarged to expose more of this feature. Associated with the walling were several cartridge cases, glass, bone and iron objects. It would appear that this might be the remains of the front wall of Fort Bromhead. This wall was left in situ,

photographed and then covered in plastic sheeting and sand. Portions of Fort Bromhead were therefore found along the front (north) of the battlefield as well as adjoining the back corner of the British store.

#### 5. A metal-detector survey of the slope of Shiyane. (Oskarsberg)

One of the aims of the archaeological research had been to attempt to gain new insights into the Zulu side of the battle. With the possible exception of the trade beads no artefacts were recovered which could unequivocally be linked to them. With this in mind, Dr Webley and her team determined to survey the slopes of Shiyane, in particular examining the caves and ledges from which the Zulus are reported to have fired on the British. Most of the mortalities suffered by the British were as a result of Zulu sharpshooters firing from Shiyane. Since tourists have visited this area for over a hundred years, the team decided that a metal-detector survey would be the most economical means of recovering buried spears and spent bullets. At least three slugs of a .577 calibre were recovered from a cave overlooking the battlefield. They were within a metre of each other and were probably dropped by the same sharpshooter. The calibre of these bullets matched those of a wax-moulded bullet recovered from the front ledge of the battlefield. Furthermore, during the construction of a car park in front of the battlefield similar wax-moulded, fired slugs were recovered. These discoveries suggested that the team were recovering bullets that had been used during the battle of 1879. The fact that many of these slugs were recovered from the car park area (to the north of the battlefield) confirms reports that the Zulus were overshooting their targets.

One of the spent bullets from the car park area had three rifling marks that suggested to a gun expert that it had been fired in an Enfield rifle. This would confirm observations in an article on firearms in the Zulu kingdom by Professor Guy (7) that muzzleloaders were fairly common in the period up to the 1870's. The Zulus could purchase both percussion Enfields and Tower muskets cheaply from suppliers in Mozambique, but these weapons were frequently obsolete and ineffective.

It is tempting to link the percussion caps found on the front of the rocky ledge to muzzle loaders used by the Zulu during the battle. However, Mechanick (8) has claimed that some of the Natal Native Contingent were still armed with muzzle-loading, percussion Enfields. The percussion caps may well have been dropped prior to the battle, before the NNC fled the scene. However, they may perhaps also be linked to James Rorke's occupation of the site. His will of 1876 lists 'a Rifle, a Dble (double-barrelled gun?) gun and a revolver with cartridges'. We may also assume that since Rorke was a trader he probably dealt in arms and ammunition.

The metal-detector survey also recovered a number of Martini-Henry slugs in the vicinity of the caves on Shiyane suggesting that the British soldiers were shooting at a distance of 400 yards or more with their rifles.

### ARTEFACTUAL REMAINS

#### Fauna

Large samples of faunal remains were recovered from the excavations. Areas around the mission house as well as close to the rocky ledge were particularly rich in what appeared to be sheep, goat and cattle remains. The historic accounts indicate that livestock was slaughtered for the soldiers at the front of Fort Bromhead. Dr Webley tentatively identified pig and baboon from the same site. Other finds included a piece of ivory tooth and a grooved and snapped bone tube.

#### Metal

Two iron hoes were recovered behind the mission house next to doorways which have since been bricked in. The hoes were planted vertically in the soil and were used as shoe scrapers by the missionaries. Rusted nails were most commonly recovered. Other finds include buttons, buckles, tins, a spoon and a fork handle, a penknife, a trowel, iron bars, the heel of a boot, watch chains, brass razor blades, regimental buttons, small brass containers and coins including an 1862 Queen Victoria half penny. The sphinx badge (of the 24<sup>th</sup> Regiment) would probably have been worn on the collar, while the crown badge had probably broken off a helmet.

A total of 33 Martini-Henry cartridge cases and 7 unfired Martini-Henry bullets are all that bear testimony to the battle. Eleven percussion caps were found to the front of the rocky ledge. Unusual calibres include a .38 Smith and Wesson cartridge. One 12-bore shotgun firing pin was recovered from Extension 5 among all the Martini-Henry cartridges suggesting that other firearms may also have been used during the battle. It is possible that this cartridge dates to the occupation of the site after the battle, as many officers owned their own hunting rifles. The wax-moulded slug of .577 calibre recovered from the rocky ledge matches slugs found in both a cave on Shiyane and in the car park area to the front of the actual fortified area. They present new light on the Zulu side of the battle.

## Glass

Of interest were the many pieces of melted glass around the kitchen area of the mission house and under the floor in the excavated room. They suggest a high temperature that may be related to the fire in the hospital. Generally most of the glass fragments from the excavation were either olive green or aqua coloured. One bottle stopper bore the embossed letters of Lea & Perrins. The majority of glass fragments recovered near the store were dark and green and probably derive from spirit bottles. Two square-based gin bottles were partially reconstructed; one had the name 'Schiedam' embossed on the side, another had 'Schiedam' embossed on a shoulder seal.

## Ceramics

Large numbers of ceramic pieces were recovered, the majority from around the mission house and very few from the store area. Several potsherds were found around the mission house. They are all undecorated and it is impossible to determine whether they predate 1849 or are contemporary with the historic occupation. However, the sherds are most common around the kitchen area and were found together with imported glass and china fragments. This may indicate that either Rorke or the later missionaries used locally fired clay pots or employed people who did.

## CONCLUSIONS

All the aims of the archaeological project at Rorke's Drift were achieved but with varying degrees of success. Sections of the foundations of the hospital were recovered under the floor of the present mission house-cum-museum. Charcoal pieces and fragments of melted glass confirm that this structure overlies the ruins of the field hospital burnt down by the Zulu.

The foundation stones of the front wall of the British Commissariat store were also located. It appears to have been largely situated underneath the present church, which would mean that the marker stones used to delineate the position of the store are incorrectly placed. They should be moved back (i.e. southward or toward Shiyane) some 8 metres. Excavations have uncovered 20 metres of the front foundations of the store and it is therefore quite possible that the store could have been 80 foot in length as described by Otto Witt.

It is clear that the very intensive occupation of the battlefield for some three months after the battle probably resulted in a fairly complex stratigraphy. However, the deposit in and around the battlefield appears to have been subject to considerable disturbance right up to 1979 and it now seems unlikely that much would be gained by more extensive excavations of the area.

In addition to finding the position of the store, excavations also appear to have uncovered at least a portion of the walls of Fort Bromhead. A section of roughly constructed stonewall was found adjoining the back corner of the store while a substantial portion of walling was also uncovered on the edge of the rocky ledge.

One important discovery, which resulted from the metal-detector survey, is that it appears that the Zulu were indeed over-firing the battlefield. It was recommended that another survey be undertaken of the slopes of Shiyane once the grass has been burnt even though Dr Webley believed that most of the material has been collected by visitors to the site during the last 100 years.

Aerial photographs of the mission area have highlighted some unusual features such as cross-hatching in the field in front of the mission house and circular features near the turnstile in front of the rocky ledge. These features may be due to the British occupation of the area in 1879 but they could equally be ascribed to the agricultural activities of the missionaries; only archaeological research will solve this issue. Furthermore, Dr Webley felt that research should also be aimed at integrating the site with Fort Melvill, the military road to Isandlwana, May's Hotel, Sihayo's kraal and Isandlwana itself as Rorke's Drift should not be viewed in isolation.

The excavations at Rorke's Drift are a salutary reminder of the significant changes that can occur at a particular site over a very short period of time (archaeologically speaking). Despite the scale of the military conflict at Rorke's Drift, very few military items were recovered which support the historical accounts.

## References

1. AZWHS Journal December 2000 Article by Dr Peter J. Mitchell.
2. Henderson, Sheila, *The Turbulent Frontier* as quoted in *The Zulu War and The Colony of Natal* edited by G. Chadwick and E. Hobson 1979.
3. *ditto*

4. Gon, P. 1979. *The Road to Isandlwana*. London Bancroft, J.W. 1991.0
5. Following the battle, Rorke's Drift suffered torrential rain and it could be presumed that that the spent cartridge cases would have been trodden into the mud. During the archaeological excavations of the site during 1993, virtually none were found, even though excavations were conducted to a depth of 100cm. Visitors to the site would certainly have collected mementos lying around, and metal detectors have been used; yet the amount found by the archaeologists seems very low. Perhaps the spent rounds were collected up and deposited elsewhere, but this seems unlikely given the conditions prevailing at the time and that more urgent survival tasks needed to be performed. There is no evidence that the British troops ever collected spent rounds during this war. This tends to confirm my belief that the engagement was more hand-to-hand than previously thought.
6. Laband, J. & Thompson, P. *Kingdom in Crisis. The Zulu response to the British invasion of 1879*. 1992 Pietermaritzburg: University of Natal Press.
7. Guy, J.J. 1971. *A note on firearms in the Zulu kingdom with special reference to the Anglo-Zulu War 1879*. *Journal of African History* (4):557-570.
8. Mechanick, F. 1979 *Firepower and firearms in the Zulu War of 1879*. *Military History Journal* 4 (6): 218-220.