Old Bones

By Adrian Greaves

While conducting research for a student member I came across references to the mass collection of bones of dead Zulus being used for commercial and agricultural practices. Documentation and forum history regarding the aftermath of conflicts like the Anglo-Zulu War have rarely recorded instances where local bones - including concerns over disrespect to fallen combatants - were processed into bone fertilizer for crops. However, some six months following the Battle of Ulundi there were references to Zulu women and girls busily collecting the piles of desiccated bones of fallen Zulu warriors from around Ulundi, and carrying them in large baskets to an enterprising trader in exchange for necessities such as corn and grain. The bones were then transported by wagon to Durban where they were ground down for fertilizer. All was well until the Durban press revealed the process and following public uproar, about the lack of decency towards the fallen Zulu warriors, brought the process to an end.

Other historical and battlefield accounts note that such remains from the Anglo-Zulu War had actually received the same treatment, similar to practices following 19th century European conflicts, including Waterloo, where bones of the fallen were quietly harvested to be ground down for use as agricultural bone meal fertilizer.

Rather unexpectedly I discovered that, in the 19th century, human and animal bones from European battlefields were regularly gathered and sent to Britain to be milled into phosphate-rich agricultural fertilizer. *The Investigator* 1823, (a literary and religious periodical)(1) estimated that ‘more than a million tons of human and inhuman bones were imported last year from the principle battles of Leipzic (sic) Austerlitz and Waterloo’, commenting… ‘It is certainly a singular fact that Great Britain should have sent out such multitudes of soldiers to fight the battles of this country in Europe, and should then import their bones as an article of commerce to fatten her soil’.

The making of fertilizer from soldiers’ bones wasn’t limited to Britain. Despite the condescending tone of ‘*The Manufacturer and Builder’* (an influential American monthly trade magazine published in New York City during the late 19th century) human bones were also harvested from various American Civil War battlefields. Permits were granted to collect ‘animal’ bones and it was inevitable that human bones were also collected. Indeed an account written up in the *National Museum of Civil War Medicine* (1866) says: ‘A ship’s captain transporting bones for the fertiliser industry reported that 25% of the bones were human and from battlefields such as Richmond’.

This was not a new business. In the 1870s human bones were mass imported from Egypt into Britain for the production of fertilizer. In addition to human bones, large volumes of mummified cats were also imported and auctioned off, an example of that being recorded in Liverpool in 1888 (gathered from an enormous feline tomb in the desert of Beni Hassan).

Most of the soldiers and horses killed at the Battle of Waterloo (June 18, 1815), were swiftly stripped of their belongings and equipment and buried soon afterward. The exact number of dead is uncertain, and the details of their burials are only casually documented. Later accounts claim that some remains had been excavated and used for industrial purposes, but the extent of this practice - and whether it involved human remains from Waterloo specifically - remains disputed. In the days after the battle, local residents, camp followers, and scavengers scoured the battlefield for valuables. Contemporary accounts and later historical research noted the removal of uniforms, weapons, and other belongings from the

dead 25,000 French troops and 23,000 Allied and Prussian troops. There are also reports that teeth were extracted from corpses and sold for use in dentures. These dentures later became associated with the name ‘Waterloo teeth,’ although the label does not prove that all, or even most, of the teeth came from Waterloo itself. (2)

Decades later, during the nineteenth century, commercial bone collectors excavated other European battlefields and burial sites. Human and animal bones were duly processed into bone meal for fertilizer, What remains uncertain is whether large quantities of human remains from Waterloo were excavated and used in this way. Some Waterloo historians and organizations have pointed to documentary evidence and historical reports suggesting that Waterloo may have been targeted by bone collectors from the 1830s onward. Other researchers have questioned how conclusive this evidence is, noting that records often refer generally to battlefield bones without identifying their precise origin.

The claim that Waterloo’s dead were systematically dug up, shipped to Britain, and processed into fertilizer or additionally used in the refining of sugar, should therefore be presented as a possibility or contested interpretation, not as an established fact. The looting of personal belongings, the rapid burial of the dead, and the nineteenth-century bone trade are well attested in broader terms. The direct connection between Waterloo’s human remains and later industrial use, however, remains uncertain.

It is well documented that, in the days after the battle, local residents, camp followers, and scavengers searched the battlefield for valuables. Contemporary accounts and later historical research document the removal of uniforms, weapons, and other belongings from the dead. Once the battlefield had been looted, the bodies had to be cleared and buried quickly. Estimates vary, but roughly 25,000 French troops and 23,000 Allied and Prussian troops are often cited among the battle’s killed, wounded, and missing. These figures should not be treated as precise counts of those buried at Waterloo. Thousands of horses also died – their bones were equally sought after.

Reports indicate that many bodies were placed in mass graves or other large burial pits, possibly including shell craters.(3) The burials were likely intended to clear the battlefield and reduce public-health risks, but the exact locations and contents of many graves remain uncertain. Decades later, during the nineteenth century, commercial bone collectors excavated some European battlefields and other burial sites. Human and animal bones were processed into bone meal for fertilizer, while bone char was used in industries such as sugar refining.

What remains uncertain is whether large quantities of human remains from Waterloo were excavated and used in this way. Some historians and organizations, including *Waterloo Uncovered*, have pointed to documentary evidence and historical reports suggesting that Waterloo may have been targeted by bone collectors from the 1830s onward. The claim that Waterloo’s dead were systematically dug up, shipped to Britain, and processed into fertilizer or sugar-refining materials should therefore be presented as a possibility or contested interpretation, not as an established fact.(4) The looting of personal belongings, the rapid burial of the dead, and the dark nineteenth-century bone trade are well attested in broader terms.

References

1. Active in the early 1820s, with religious, moral, literary, and philosophical essays, reviews, and intelligence related to Christian missions, the Bible Society, and general cultural topics of the era.

2. In the years following the 1815 Battle of Waterloo, local people and commercial agents dug up the many shallow mass graves at Waterloo and other Napoleonic battlefields across Europe. Bones of dead soldiers from were exhumed from mass graves and shipped to Britain, to ports like Hull, on an industrial scale to be ground into bone-meal agricultural fertiliser or used for sugar processing refining sugar beet

This trade in battlefield remains persisted through the 19th century until public campaigns and newspaper criticisms finally ended the practice in the 1860s.

3. According to AI records, between 10,000 and 20,000 men died at Waterloo.

4. Only two complete human skeletons have ever been found on the battlefield: one in 2012 and another in 2022.