

# THE SKELETAL REMAINS OF DU PREEZHOEK, PRETORIA, SOUTH AFRICA. A BIOARCHAEOLOGICAL INVESTIGATION OF A 19TH-CENTURY PIONEER FAMILY

A Meyer\*, M Steyn\*, S Ouzman\*\*

\*Department of Anatomy, School of Medicine, Faculty of Health Sciences, University of Pretoria \*\*Department of Anthropology and Archaeology, Faculty of Humanities, University of Pretoria

## Introduction

In 2006 a Heritage Impact Assessment revealed part of a 19<sup>th</sup>-century cemetery on the western bank of the Apies River next to the Old *Nederlandsch Zuid-Afrikaanse Spoorweg Maatschappij* railway bridge - a prominent Pretoria landmark (Fig. 1). This area has been destroyed by Gautrain Rapid Rail Link construction. Archaic Heritage Project Management's excavation recovered 11 human skeletons and associated artefacts such as coffin-nails and pins, coffin decorations and handles, and three Martini-Henry bullet casings (Fig. 2) that suggest a mid to late 19<sup>th</sup> century provenance. Bioarchaeological analysis was done in order to assess them for health indicators and also to try and establish their identity taking into account existing archaeological and archival data. Standard physical anthropological techniques were used to analyze these skeletons to determine their age, sex, ancestry, health, and diet after which all remains were reburied in the Old Church Street West Cemetery.

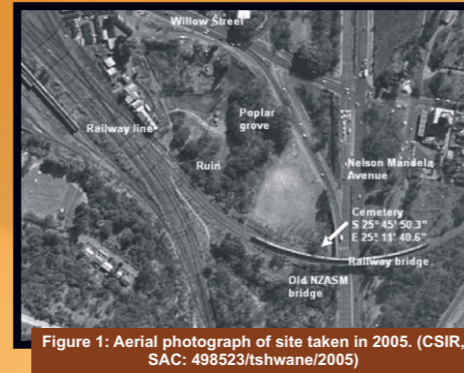


Figure 1: Aerial photograph of site taken in 2005. (CSIR, SAC: 498523/tshwane/2005)



Figure 2: Martini-Henry bullet casing. The Martini-Henry rifle was first used by the British army in 1871 and came into the hands of the Boers around 1880 to 1881 during the outbreak of the First Anglo-Boer War (1880-1881) (Lategan, 1974:57).

## Historical and archaeological background of Du Preezhoek

The Du Preez family, or Du Prés, in its original form, emigrated from France to the Cape of Good Hope in 1688 (Du Preez, 2003:7; Du Preez, 1962:11). The family dispersed across southern Africa (Du Preez, 2003:7; Du Preez, 1962:11). One branch moved to the former Transvaal in the 1840s and settled in the area later to be founded as Pretoria. In 1848 Johannes Petrus du Preez also known as Jan Diknek (1828 - 1899) - along with his father in law, veldkornet Andries van der Walt, purchased a portion of the farm Elandspoort from the original owners, the Bronkhorsts. Jan Diknek renamed it Du Preezhoek (Coetzee, 1993:7-8; Punt, 1951:5). Here he and his wife Maria Magdalena (1831 - 1881) took residence and became one of Pretoria's pioneer families (Punt, 1951:5). An archaeological survey of the area as conducted by Archaic (HPM) revealed the possible remains of the original farm including a poplar grove, building ruins, and a cemetery (Fig. 3).

## Bioarchaeological analysis

Utilizing a bioarchaeological approach that drew from South African data where possible (Steyn et. al. 2004), it was found that three of the excavated individuals were adult females between 30 and 60 years old. Two of these females were of Caucasoid ancestry whereas the third was clearly of mixed ancestry, with both Caucasoid and Negroid characteristics (Figs 4 & 5). All three females gave birth to at least one child as indicated by a prominent pre-auricular sulcus on the os coxae. A fourth person was possibly female and between 12 and 16 years old, though this individual's secondary sex characteristics are largely undeveloped. Of the seven remaining individuals, six were infants between birth and 3 years old and one was a child of 7 to 8 years old.



Figure 4: Frontal view of DPH 08



Figure 5: Profile view DPH 08

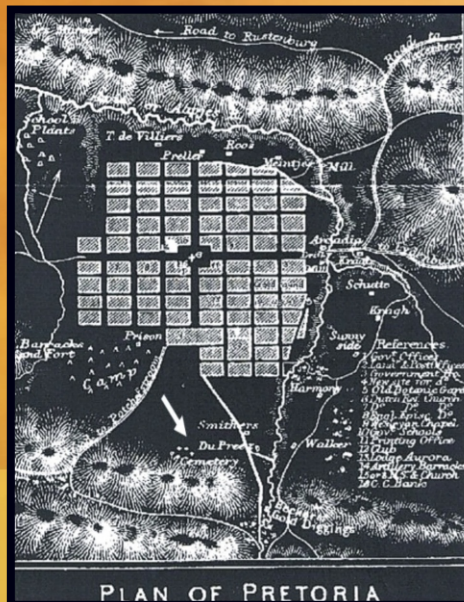


Figure 3: Map of Pretoria 1877. (Arrow indicates location of the Du Preez cemetery) (Van Der Waal Collection, Africana, UP)

## Pathology and lifestyle

Subperiosteal bone growth (Fig. 6) was identified on two of the individuals, which may have been due to chronic infection or conditions such as scurvy (Ortner, 2005). Dental lesions included dental calculus and dental caries (Figs 7 & 8) on the teeth of the three adults and one adolescent suggesting poor oral hygiene as well as a diet rich in carbohydrates. Periodontal disease (Fig. 9) was observed in one of the female skeletons. Furthermore, the presence of enamel hypoplasia on the teeth of one of the adult females and the adolescent of undetermined sex indicates episodes of severe illness or malnutrition during childhood. Other indicators of these people's daily hardships were reflected by the presence of Schmorl nodes (Fig. 10) on the lumbar vertebrae, as well as osteophytic lipping of elbow and knee joints. This suggests that these individuals engaged in strenuous physical labour, probably typical of the life of 19<sup>th</sup> century pioneers.



Figure 6: Subperiosteal bone growth on fibula



Figure 7: Dental caries of the second and third molars

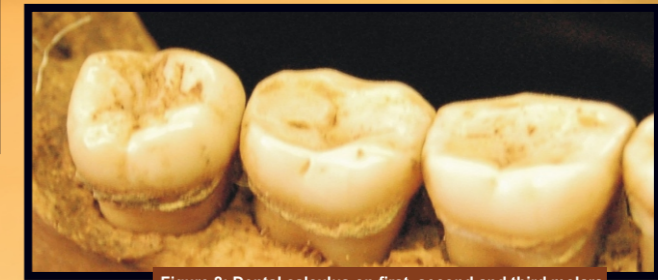


Figure 8: Dental calculus on first, second and third molars



Figure 9: Periodontal disease on mandible

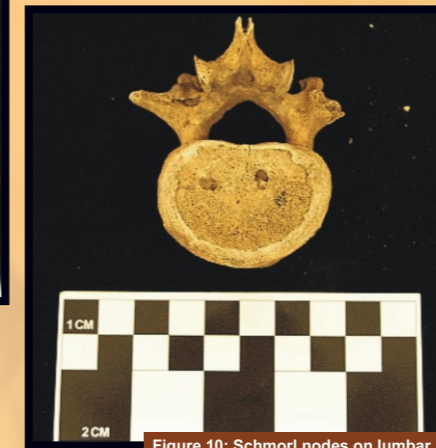


Figure 10: Schmorl nodes on lumbar vertebra

## Acknowledgements

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- All research was carried out according to established legal and ethical protocols, *inter alia*, the Vermillion Accord, SAHRA legislation, and University of Pretoria guidelines

## Conclusion

The Du Preezhoek remains provide insight into the daily aspects of early Pioneer life. Pathological conditions told of the hardships endured by Pioneers of the mid-19<sup>th</sup> century; a lifestyle shaped by and passed on from the times of The Great Trek. Ancestral mixture observed in one of the adult females reveals the early interaction between various populations living in South Africa. The high death rate observed amongst infants from this family along with the presence of enamel hypoplasia, subperiosteal bone growth, and high caries rates in adults is suggestive of a stressful lifestyle, possibly due to malnutrition and or disease. Degenerative pathology further reveals the strenuous physical activities engaged by early Pioneers on a daily basis. Overall the Du Preezhoek remains provides a glimpse into the life of one of Pretoria's first Pioneer families.