1. Introduction
By the mid-19th century, sheep farming had successfully spread across the Cape Colony and beyond. Indigenous hairy sheep were crossed with European breeds for meat, while Spanish merino flocks produced wool of excellent quality. Following the massive decline of animal numbers during the South African War (1899-1902), the industry experienced unprecedented growth, and eventually became a leading international wool exporter. By 1880, systematic sheep breeding was well established, with several eminent stud farms in the Cape Colony. These farms and studs often overshadowed the smaller scale farmer—particularly the migrant and semi-migrant farmer or trekboer. Combining preliminary results from an archaeozoological study with historical documentary sources, we examine livestock management from the trekboer’s perspective.

2. Case Study
Excavations on the farm Welkomskraal in the Eastern Cape recovered a faunal assemblage dating from the 1880s to 1920s. Sheep remains dominate the assemblage, linking the property to the regional sheep farming economy. Fragmented shears (Fig. 2), landowners’ movable property records and known merino farming within the region all suggest that the remains are those of wool sheep. Archaeozoological methods were used to determine whether sheep farming on Welkomskraal focussed on wool production or whether meat and milk were important as well (i.e. subsistence rather than profit driven economy).

3. Methods
Reconstructing herd management strategies require age-at-death rates to determine kill-off patterns. These patterns vary in reflect whether sheep were managed for meat, milk or wool production, or a combination thereof. Following Greenfield’s model, a predominance of ‘adult’ specimens indicate wool production; ‘very immature’ suggest milk production and a more balanced representation shows meat production. Sheep bones were broadly aged according to epiphysical fusion rates and localised tooth wear patterns and then grouped according to ‘very immature’ (up to one year), ‘sub-adult’ (1 to 3 years) and ‘adult’ (older than 3 years). Grouping specimens in this way did not prove satisfactory since epiphysial fusion rates often overlap between sub-adult and adult ages and it was decided to create a fourth ‘older sub-adult/younger adult’ (2 to 4 years) category.

4. Subsistence or Profit?
The results show that sheep roughly between the age of two and four years dominate the assemblage. This does not fit the expected ‘adult’ or ‘wool pattern’. Instead, a slightly more balanced representation appears, which, according to the model indicates a focus on meat or meat-and-milk production. However, the majority of specimens fall within the older sub-adult/adult group, which possibly reflects a slight emphasis on wool production in combination with meat and milk (i.e. subsistence combined with profit).

5. Current & Future Work
Analysis of the faunal assemblages from two more Welkomskraal farmstead middens is underway, which will increase the sheep sample size and allow for broader comparisons to be made. Osteometric data on modern wool and meat Merino sheep will be collected from veterinary research institutes and compared to historic assemblages to identify different breeds in the archaeological record and track changes in breed improvements over time. In so doing, we hope to move beyond archaeological significance by providing a temporal depth to historical livestock management in South Africa based on the material remains themselves.

References
CAPE ARCHIVE, CSC 2/6/1/393 no. 56, dated 1911
CAPE ARCHIVE, J1 342 Sheep shearing, no date

Acknowledgments: Ditsong National Museum of Natural History, Dr. Shav Badenhorst, Dr. Ina Plug, Xander Antonites

Figure 1: Group of men shearing sheep, unknown location, c. 19th century
Figure 2: Excavated shears from Welkomskraal
Figure 3: Morris, Little & Son sheep dip can found on surface of Welkomskraal, and its advert in a local newspaper (c. 19th century)
Figure 4: Map of South Africa showing political boundaries in 1885, with research area indicated
Figure 5: Percentage of specimens based on Number of Identified Specimen (NISP) counts

The kill-off pattern suggests that small-scale migrant farmers did not keep herds purely for profit. However, archival records show that these farmers may also have kept other sheep breeds in addition to Merino’s. Perhaps the animals killed at prime weight were not wool Merino’s but breeds kept specifically for household consumption. Application of a general slaughter model to 19th century small scale migrant farmers within a market economy is not that simple or straightforward; however, it serves as a useful starting point for further enquiry. Whether Welkomskraal’s farmers actively managed their herds for wool production or whether small profits were a by-product of general subsistence farming remains to be confirmed through further study.