

## *Some Wool Cloth from St Kilda*

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The cloth fragment here described was found in August 1972, by John Hodder, a member of a National Trust working-party on Hirta, the main island of the St Kilda group, and is now in the National Museum of Antiquities of Scotland. The cloth was wedged in a crevice of the dry-stone wall of a house situated toward the west end of the earlier of the two nineteenth-century villages—that which was built during the years 1834–6 (MacGregor 1960: 8, 28).

With the cloth was found a piece of rusted iron, a semi-circular piece of brass, and what was apparently human hair. Although identification of the hair was not confirmed, such a find is in keeping with the practice, known also in Ireland, of storing hair-clippings in the rafters to prevent them being used for witchcraft, or, as some would say, because one has to account for them at the last judgment. (Dr J. Morton Boyd has informed the writer that in 1959 the Nature Conservancy boatman, Mr Murdo MacDonald, found human hair wrapped in the pages of a Gaelic Bible in a similar situation in a byre in St Kilda, where he replaced it.)

The cloth is of interest because, so far as I am aware, there is no other surviving example of wool cloth made on St Kilda earlier than the present century. Also, since the results of this investigation suggest that it was made from the wool of the now extinct Hebridean sheep which was ousted by the introduction to St Kilda of the Scottish Blackface about 1870, the findings have a relevance to fleece evolution that is of more than local interest.

### *The Construction of the Cloth*

Miss A. S. Henshall, M.A., F.S.A., who kindly examined the construction of the cloth for me, found that both yarns had a Z-twist (spun in a clockwise direction), and that the weave was a 2/2 twill, with 10 threads per cm (23 per in.) in each direction. The fragment had apparently been part of a garment, because one edge had been turned in to make a seam, and there were remains of a two-ply sewing thread.

### *Microscopic Examination of the Wool*

Microscopic examination indicated a general lack of natural coloration (and no evidence of dye). Only a few of the coarser fibres had natural pigment, thus the brown coloration visible to the naked eye is presumably the discoloration commonly found in archaeological specimens of wool cloth.

There were one or two fibre tips, but no clear root ends that would enable a distinction to be made between shorn and plucked wool.

The assumed warp had no evidence of hairy fibres and little fibre-medullation, but the assumed weft had some fibres with non-latticed medullation and a few hairy fibres with latticed medullation. Fibre diameter measurements are shown in Table 1 with other measurements for comparison. These measurements showed that the assumed warp had 1% medullation, and the assumed weft 9% (cf. 15% medullated fibres in the Boreray Blackface).

TABLE I  
*Wool Fibre Diameters (Microns)\**

	Range	Mean ± Standard Deviation	Mode †	Coefficient of Variation (%)	Distribution and Fleece Type
? warp	14-44, 56	24.4 ± 7.7	20	31.7	skewed to fine (generalised medium)
? weft	16-56, 60	27.6 ± 10.4	24	37.6	skewed to fine (hairy medium)
woolly Soay	11-46, 50	24	20	—	skewed to fine (generalised medium)
hairy Soay (Ryder 1968a)	14-98, 100, 104	32	20	—	skewed to fine (hairy medium)
fine Shetland	16-40	24	22	—	skewed to fine (generalised medium)
hairy Shetland (Ryder 1966)	14-54, 86	27	20	—	skewed to fine (hairy medium)
Boreray Blackface (Ryder 1968a and unpublished)	15-170	40.7 ± 38.3	26	94.2	continuous (hairy)

\* 1 micron = 0.001 mm. † most frequent value.

### Discussion

On historical evidence the wool in this cloth could have come from three main kinds of sheep (Ryder 1968b). First, the prehistoric Soay that now runs feral on Hirta, as well as on Soay; second, the mediæval and later Hebridean sheep; and third, the Scottish Blackface, which was introduced about 1870, and has lived feral on Boreray since the islanders left in 1930. (Fleece studies are now being made by the author on a group of these sheep, which were removed in 1971.)

The wool-fibre diameter measurements (Table 1) indicate that the wool is not of Blackface type, and the general lack of natural pigment shows that it was not from the Soay.

One is therefore left with the Hebridean sheep, extinct on St Kilda for the last century or so. This did, however, belong to a larger group of breeds known as the Old Scottish Shortwool, or Dunface, and the surviving Shetland breed was a member of this group. The fibre-diameter measurements in Table 1 are in keeping with the wool being from this general type. But the general similarity in fleece type between the Soay and Shetland, and the variability in diameter within each breed, make diameter comparisons less conclusive. A more conclusive observation is the pigmented nature of the coarser fibres: this is a feature found in the Shetland, but not in the Soay breed.

This identification therefore favours the assumption that the cloth was deposited before 1861-2, when the St Kildans removed to their last village. It could not have been put into the wall before 1834, although it may have been made before, or after, the house itself was built.

#### ACKNOWLEDGMENTS

I would like to thank the Nature Conservancy for drawing my attention to the cloth and the National Trust for Scotland for allowing me to study it.

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