

Attention of Michael Wittner

Examination of composition of three items of apparel

1. I collected three items of apparel from Wittner Shoes, Shop 034B at Westfield, Woden, ACT on Saturday 12 March 2011.

These items consisted of two sleeveless jackets and a cylindrical wrap.

The first two items differed in appearance only in colour with one being essentially brown in colour and the other grey in colour.

The third item was a cylindrical shaped wrap or muff. This was a black and white colour.

2. I have been instructed to examine these items to determine their fibre composition. I have not made a detailed examination of the construction of the items but all three appear to comprise pieces of peltage or fur held in an overall structure by an underlying fabric structure.
3. The two jackets were labelled as being 100% rabbit fur and the fur trim 100% racoon. The body of the jacket had two types of peltage. The main body had shorter hairs with pieces of peltage having longer hairs. Visually these longer hairs were similar in colour and length to the 'fur trim'. I sampled hairs from the two visually distinct peltages from the main body and from the fur trim.
4. The microscopic examination of animal hairs is a comparative process and it is important to understand that it is not normally possible to identify in absolute terms the species of animal from which the hairs came.

The process of microscopic examination involves looking at the features associated with the three main parts of a hair, the outer scale layer, the main body or cortex and a central part called the medulla. In animal hair examination the patterns of the scale layer and medulla type help differentiate hairs from different animals.

In this case I examined the sampled hairs and compared them against descriptions of rabbit and other animals from the published literature. [A B Wildman, *The Microscopy of Animal Textile Fibres*, Pub. WIRA, Leeds, 1954. B J. Teerink, *Hair of West-European Mammals*, Pub. Cambridge Univ. Press, Cambridge, 1991.] The peltage of animals also contains more than one type of hair with so called 'guard' hairs and 'underhairs' usually being present. The microscopic features used in hair comparisons usually rely on those found in the guard hairs with the underhairs being considered as less definitive.

Based on my microscopic examination I am satisfied that the shorter hairs forming the major construction of the two jackets are consistent with being from the peltage of rabbits. The collar or trim and peltage inserts with longer hairs in these two items are not from rabbit. As I do not have reference samples with which to compare these hairs I am only able to conclude that I cannot exclude them as being from a fur bearing species such as Raccoon or Musquash. I can exclude the hairs from these two items as having come from a dog.

5. The third item comprised peltage with only short underhairs which had also been dyed. On the basis of their microscopic features I cannot exclude these as being rabbit hairs. It is unlikely that these are dog hairs.

Signed:

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