

Conflicting concepts

At first glance, some things in life often seem illogical. One such is the fact that trading in animal hides is based on weight, whereas finished upper leather is bought and sold by area. Shoemakers have traditionally viewed this with suspicion as they have tended to regard it as being a way of masking the true value of hides within the costs of leather making. Somewhere along the line the unit of value shifts from weight (usually kilograms) to area (usually square feet or metres). The conversion constants involved are nevertheless not very clear. What is clear, however, is that neither measurement by weight nor area provides a truly accurate yardstick for predicting either yields or costings. If this is so, why does the leather industry continue with weight?

HIDE COLLECTION

Where the meat-processing industry is fully rationalised, hides, being a by-product within a well-managed structure, can be readily categorised. In this type of situation, an area assessment of each individual hide could be made, despite the fact that they do not lie flat, before proceeding with preservation or passing them quickly into leather manufacture. In actual practice, however, it is much easier to weigh a flayed hide than to open it out, load it onto a conveyor for area measurement on an expensive machine and then unload it. The measurement option is therefore slower and more expensive as well as calling for a greater working area.

In the smaller and less sophisticated operations that still perform much of the world's hide collection in less developed

countries, there is little choice in the matter. In its simplest form, animal slaughter is local, with hide collection through well-established networks of dealers and traders. Area measurement is too difficult to manage through each transaction in the chain, so weight is the long established norm. Nevertheless, the information it provides is often far from satisfactory from the point of view of the purchaser. The goods may be classified and the weight of each hide identified and recorded but, what does this really mean?

MOISTURE CONTENT

Normally, when a commodity is purchased by weight, the moisture content is an essential factor in assessing its true value. Measurement is usually straightforward, with composite samples available for



CREDIT: JAMES HOBBS / SHUTTERSTOCK

analysis. This situation does not occur, however, in the case of hides and skins. Although moisture content may be relatively uniform at the time a hide is removed from the animal, it can then change. Hides are frequently washed to lower their temperature or to remove blood, and the hide will retain much of this water. Alternatively, if hides are preserved by salting, a degree of dewatering will take place. The brine will often drain clear of the hide but, if the hides are stacked high, those at the bottom will retain more moisture than those at the top.

Examples can even be found where high moisture content is encouraged, with a consequent maximising of preserved weight. On the other hand, if air movement is high during curing or storage, extra dewatering can occur. Taking this a stage further, in hot climates hides are often dried out after salting in order to reduce weight and so save on transport costs. Drying also provides added security against putrefaction. Moisture content in a hide is therefore always changing, its weight at slaughter cannot be verified and different methods of preservation result in different values.

Other factors can also mask the true weight of a hide. In temperate climates, hides can become dung- and muck-clad, particularly during the wet winter months and it can be extremely difficult to remove all of this contamination. Although attendance to good animal husbandry and meat hygiene will often minimise this problem, it has not entirely vanished. In this event allowances have to be made for the extra weight and this is naturally difficult to quantify accurately.

HIDE CHARACTERISTICS

Yield is another factor that is not fully addressed by either weight or area measurement. For example, if an ox hide is compared to a cowhide of the same weight, then the potential yields are very different. An ox hide is comparatively thicker in those parts carrying the most muscle and requiring the most protection, whereas a cowhide is thinner and more extended in the belly areas. This means that the potential area of grain leather is less from an ox hide than a cowhide of the same weight. If the thickness of the final upper leather was based on the



Hides at the bottom of a stack will retain more moisture than those at the top.

CREDIT: CLAYTONS OF CHESTERFIELD



Muck on a hide adds extra weight which can be difficult to quantify.

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lower substance potential of the cowhide, the area obtained from the ox hide would be less but the substance and area of the lower value flesh split taken from it would be greater.

However, when hides are sorted, the selection takes both quality and potential substance into account. Ox hides are used for higher substance leathers and require a higher selling price due to the extra weight of hide per unit of area. Cowhides, on the other hand, will be designated for lower substance leathers of greater area, as being theoretically of lesser unit value.

Hide area also affects yield. In practice, splitting and shaving causes damage to the flanks and other peripheral areas, with a greater percentage loss occurring with pieces of

smaller area. Similarly, pleating associated with vacuum drying or toggling is proportionally greater with smaller pieces. This is trimmed away to minimise subsequent machine damage and as part of acceptable customer presentation. The yield also varies according to customer needs and the processing used by tanners. As a general rule, softer leathers, because of the relaxation within the leather's structure, do not produce such high area yields as an extended, firmer leather.

HIDDEN FACTORS

Other factors that may not be readily apparent at first can also affect the prediction of values based on either weight or area assessment. This includes the effects of infestations, poor



It is easier to assess the quality and other values in the blue state. CREDIT: RICHARD DANIELS

animal husbandry, pre-slaughter practices and low level putrefaction, as these can all affect grain quality. These potential losses in terms of area and value are not fully revealed until the hair has been removed. Moreover, defects due to poor flaying practices, such as flay cuts or gouges, might not be apparent initially but will restrict splitting and shaving to low substances. This is to avoid these defects in the flesh side of the grain leather and to provide acceptable yield coefficients for leather cutters.

Nevertheless, these practices are accompanied by a loss in substance potential and, hence, value. Over and above these issues, the reduced value

of the flesh splits produced has to be taken into account. The flesh cuts they carry have now become holes or gouges identified as areas of low substance. In addition, fringe grain damage is not apparent in the wet blue stage and not revealed until the dry pre-finished state. In the worst situations, the leather concerned might be fully finished before the damage becomes clear, with subsequent rejection or downgrading.

Clearly, the whole question of hide classification and quantification, area yield, substance potential and ultimate value is largely determined before the commencement of leather manufacture and with scant chance of

verification. However, where linkages have been formed between meat processors, hide merchants and wet blue units, rationalisation is possible. This is particularly the case where close attention is given to the value-added chain with integrated responsibilities and incentives. In this instance, matters can be better controlled and the hide is no longer quite such an 'unknown' quantity. With wet blue purchases, things become far easier as the grain can be seen, quality reasonably assessed, potential substance evaluated and measurement by area readily managed for the first time.

KNOWN VALUES

With the value of hides traditionally based on weight and purchases made from known and trusted sources, the experienced tanner has long converted weight and category into yield and sales value for a known type of leather. Moreover, understanding the market and predicting shifts rather than following the classic value adding exercise has often generated good profits. On the other hand, many tanneries have gone to the wall as a result of poor judgement and bad purchases rather than a lack of in-house technique or management abilities. Perhaps the stability offered by the more transparent wet blue state is therefore of longer term benefit to both leather producers and their customers. 📌



Turning raw hides into finished leather contains many variables, but no one can deny the beauty and value of the final article. CREDIT: SCOTTISH LEATHER GROUP