



Grading Up To Wiltshire Sheep

Effects on skin and leather

Year 1



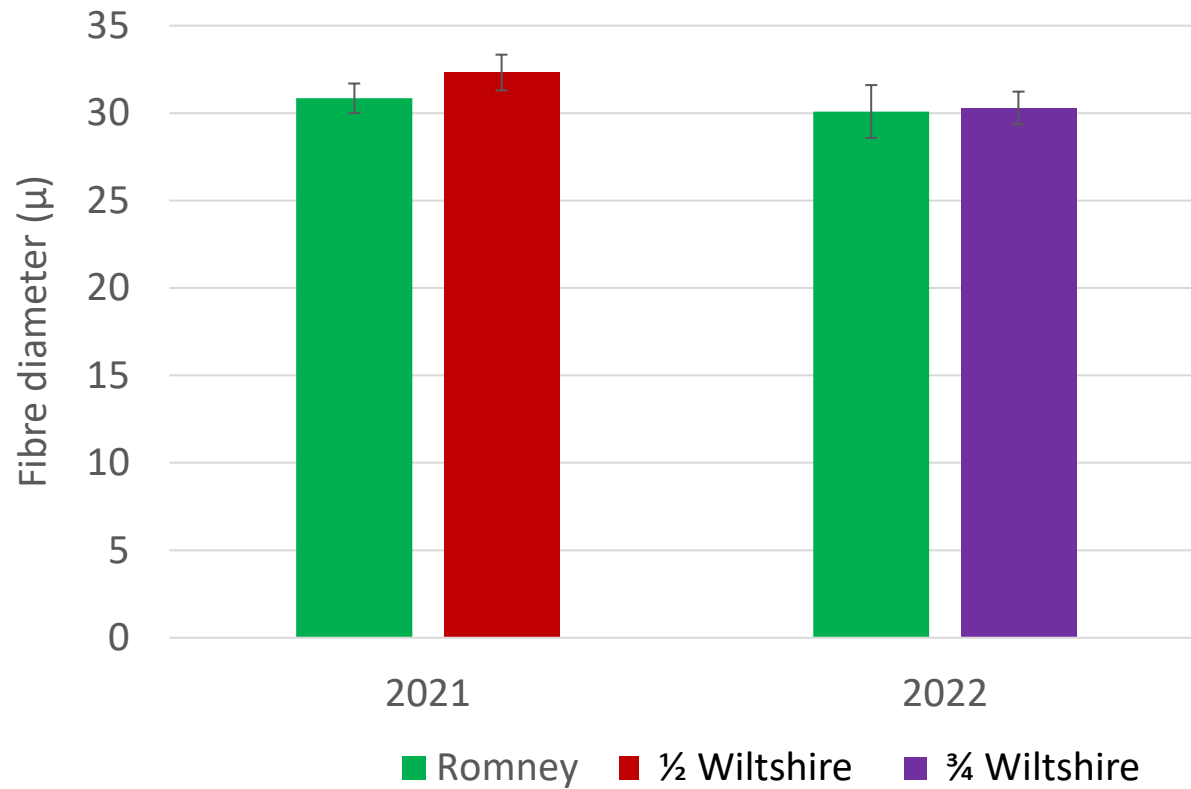
Year 2



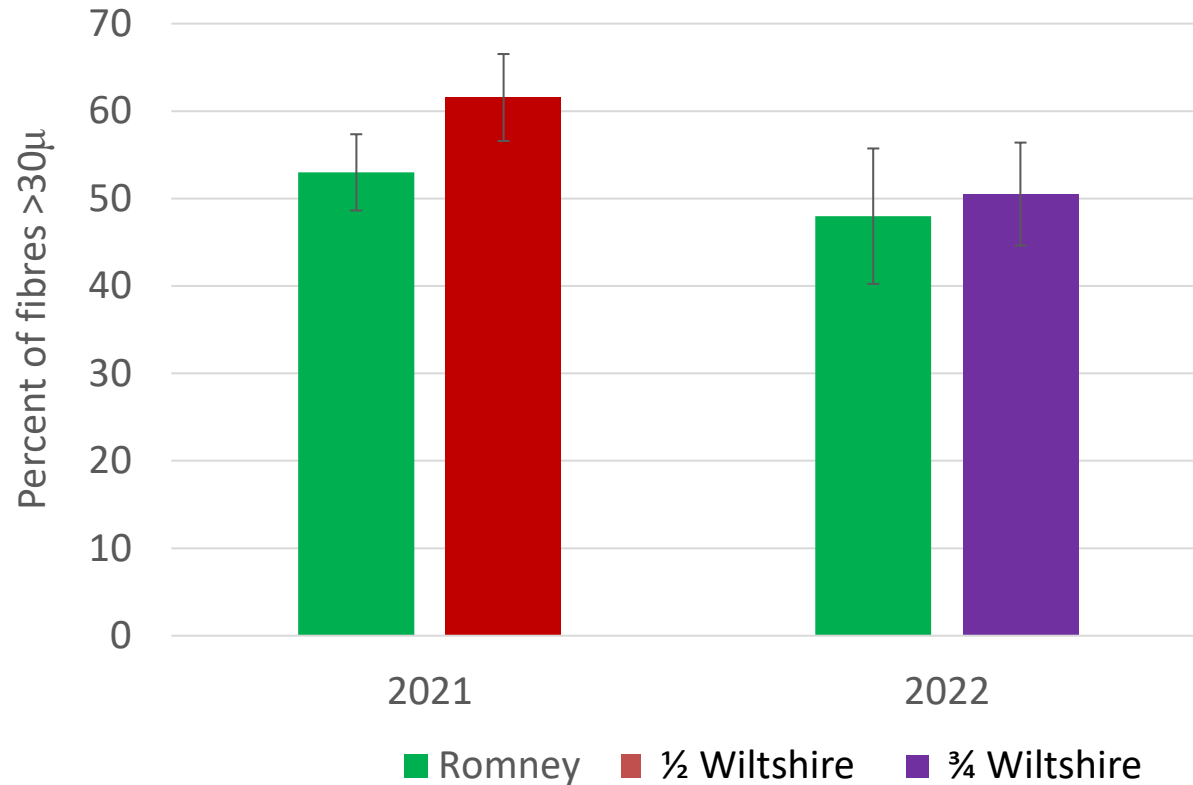
Year 2



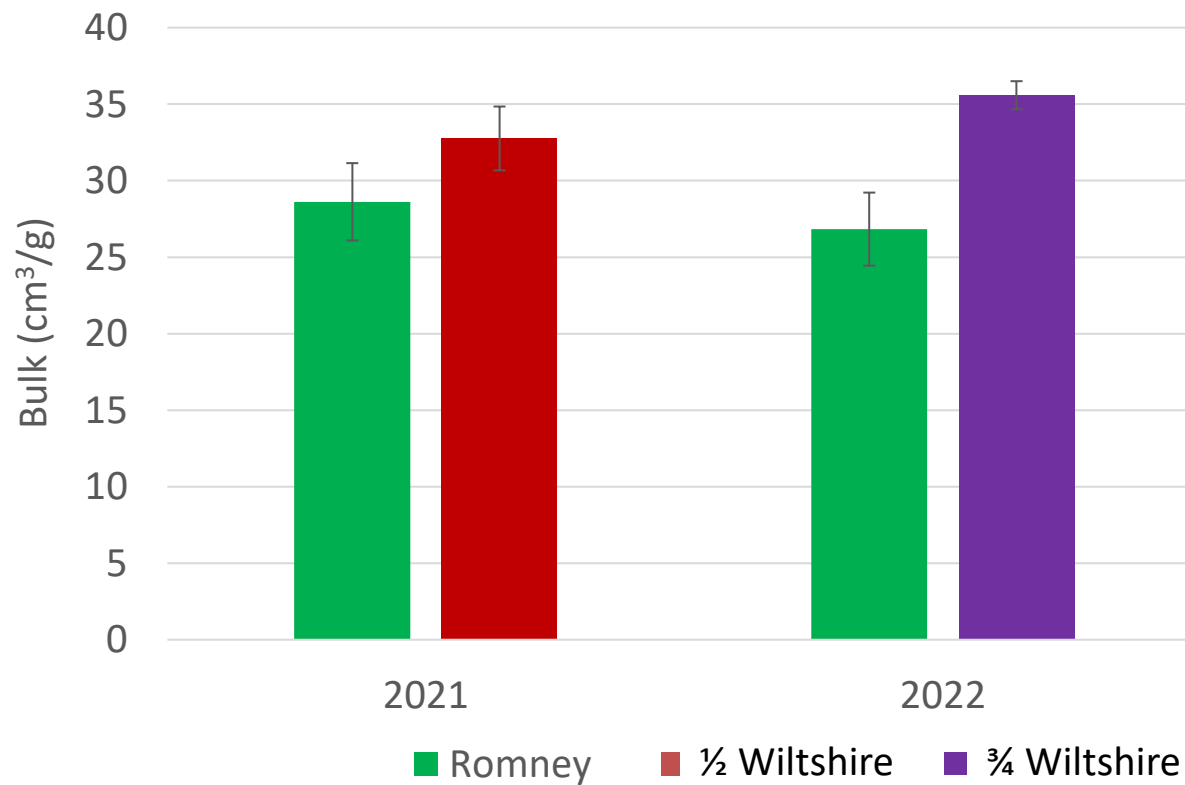
Fibre diameter



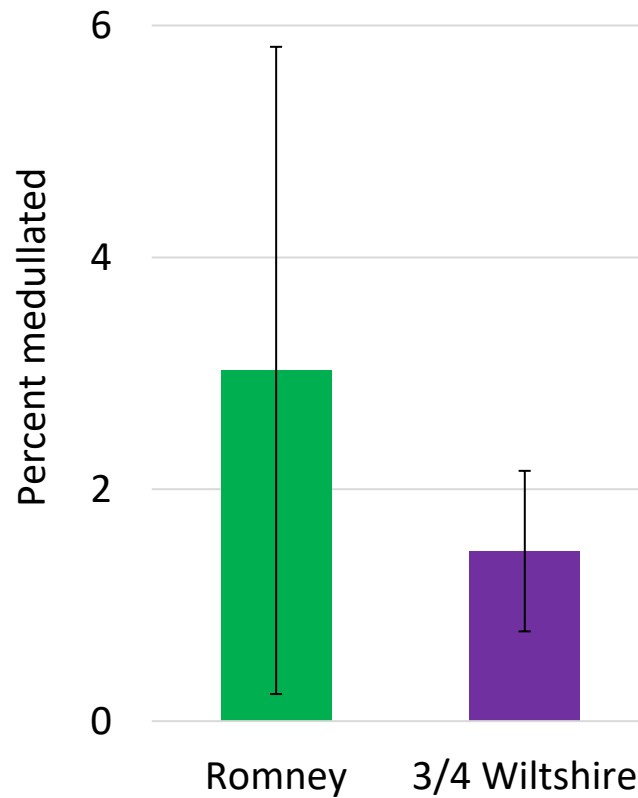
Percent greater than 30μ



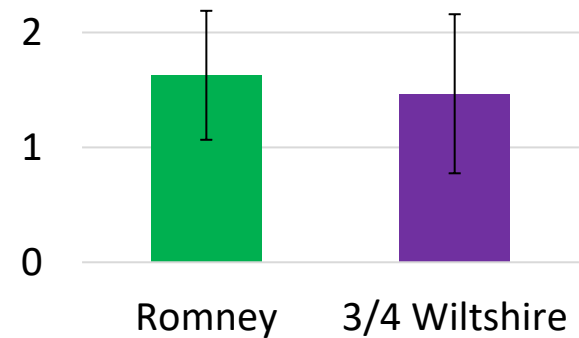
Wool bulk



Medullation (2022 only)



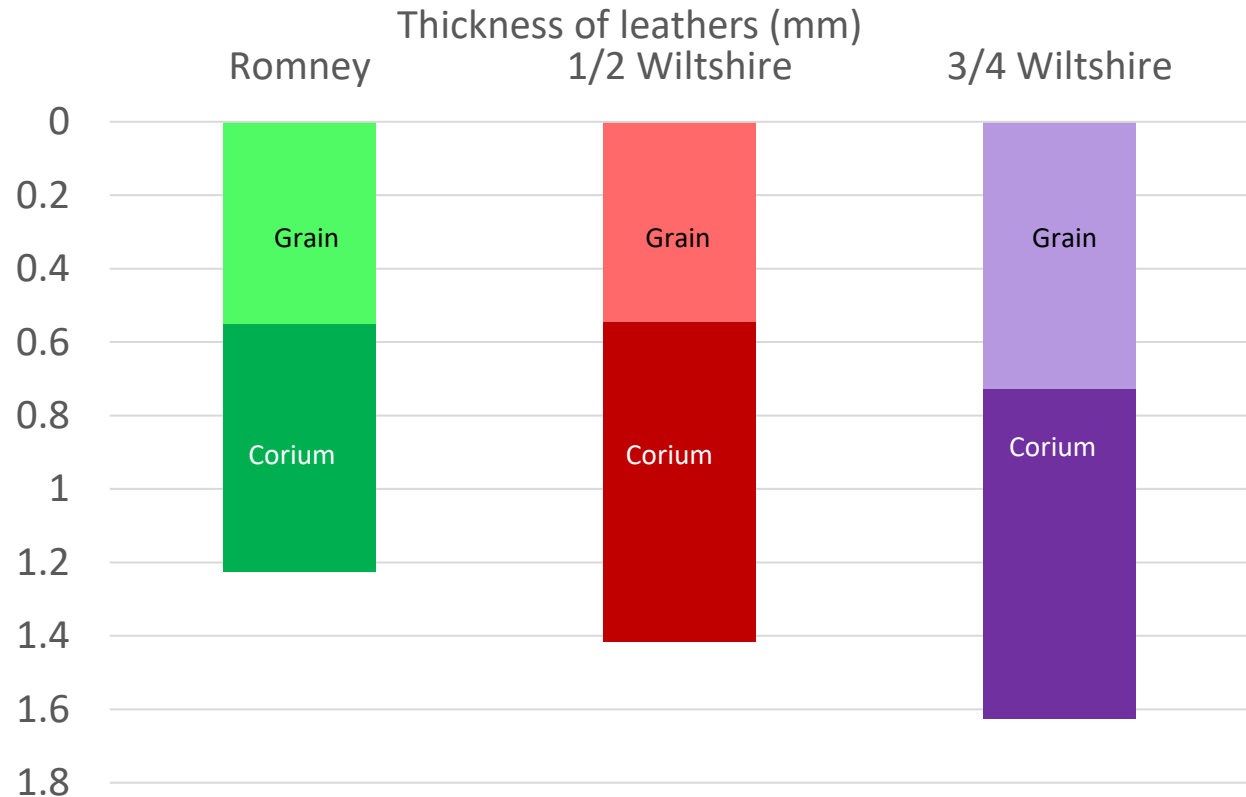
Romney outlier
removed



Grain and corium thickness

- The grain layer is the top layer which is important for appearance
- The underlying corium is responsible for most of the strength
- Skins are almost never used at full thickness – they are shaved to the desired thickness

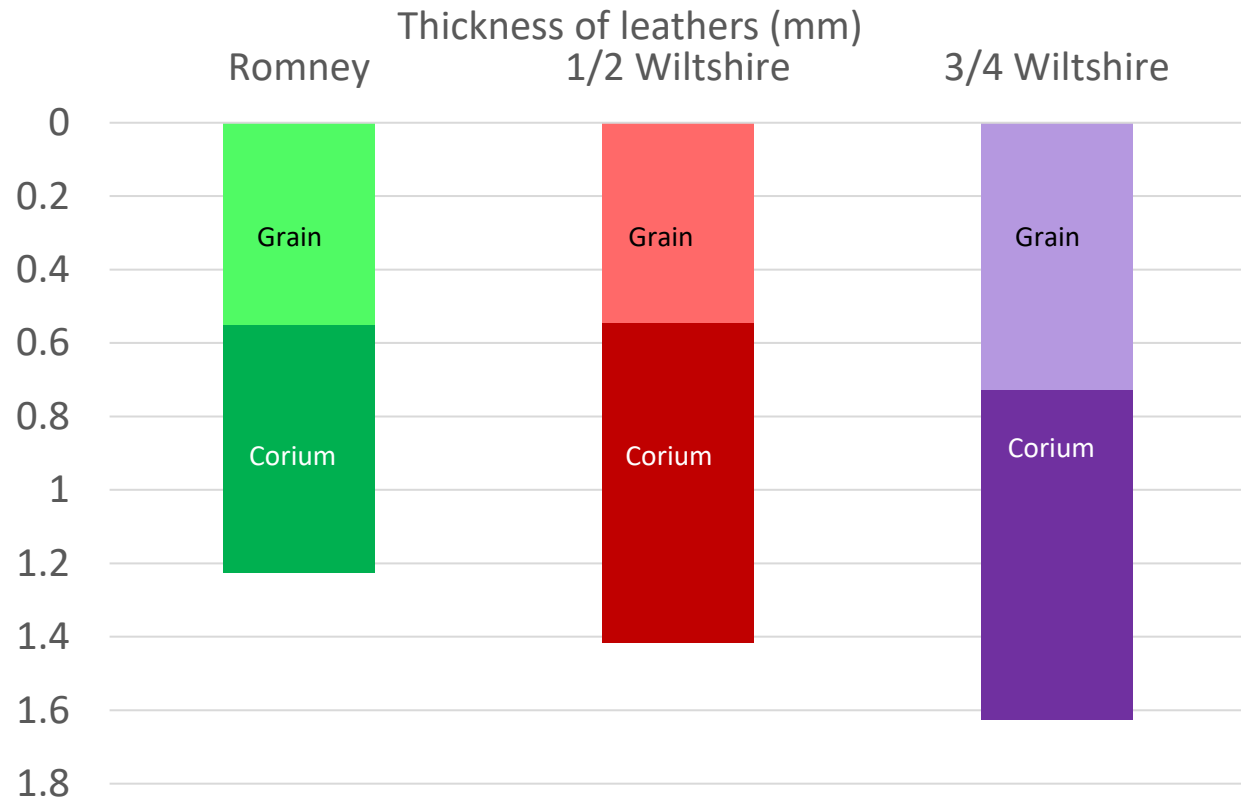
Grain and corium thickness



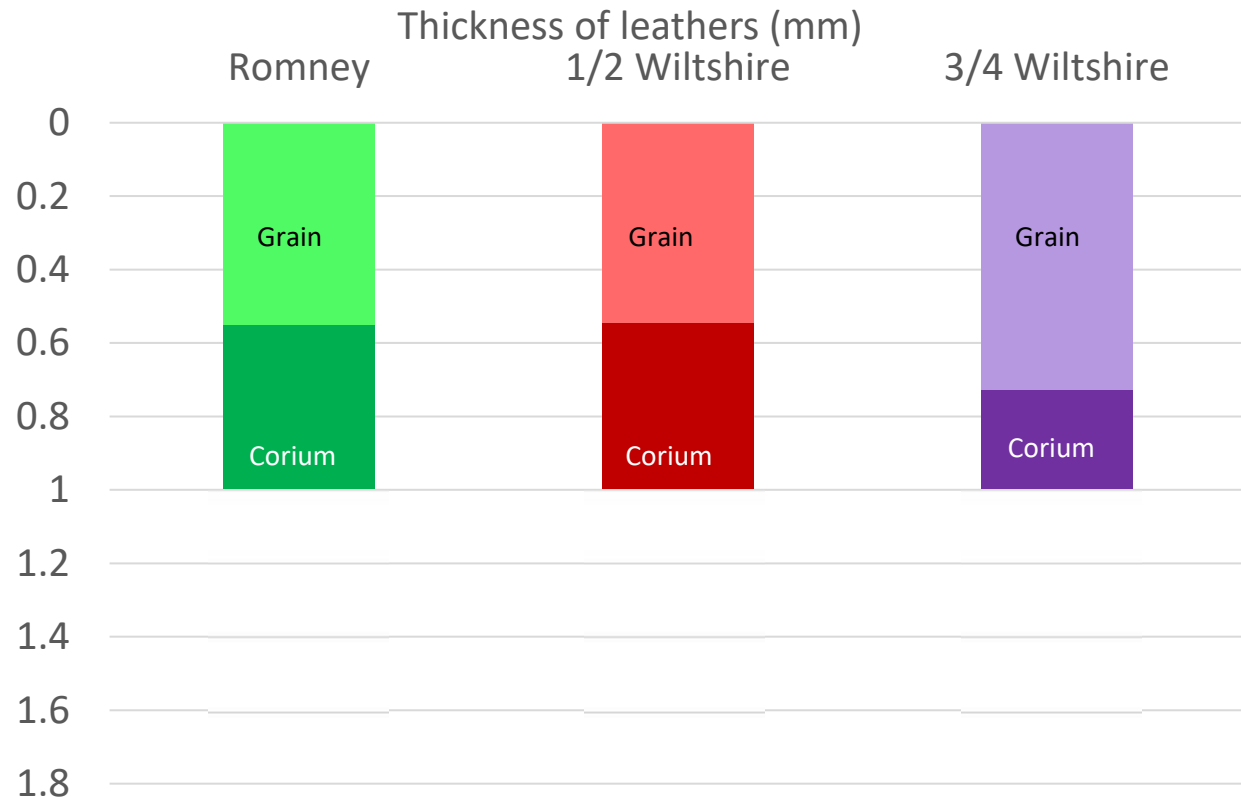
Grain and corium thickness

- The more Wiltshire in the mix, the thicker the skin
- $\frac{1}{2}$ Wiltshire the increase was all corium
- $\frac{3}{4}$ Wiltshire the increase was all grain layer

Grain and corium thickness



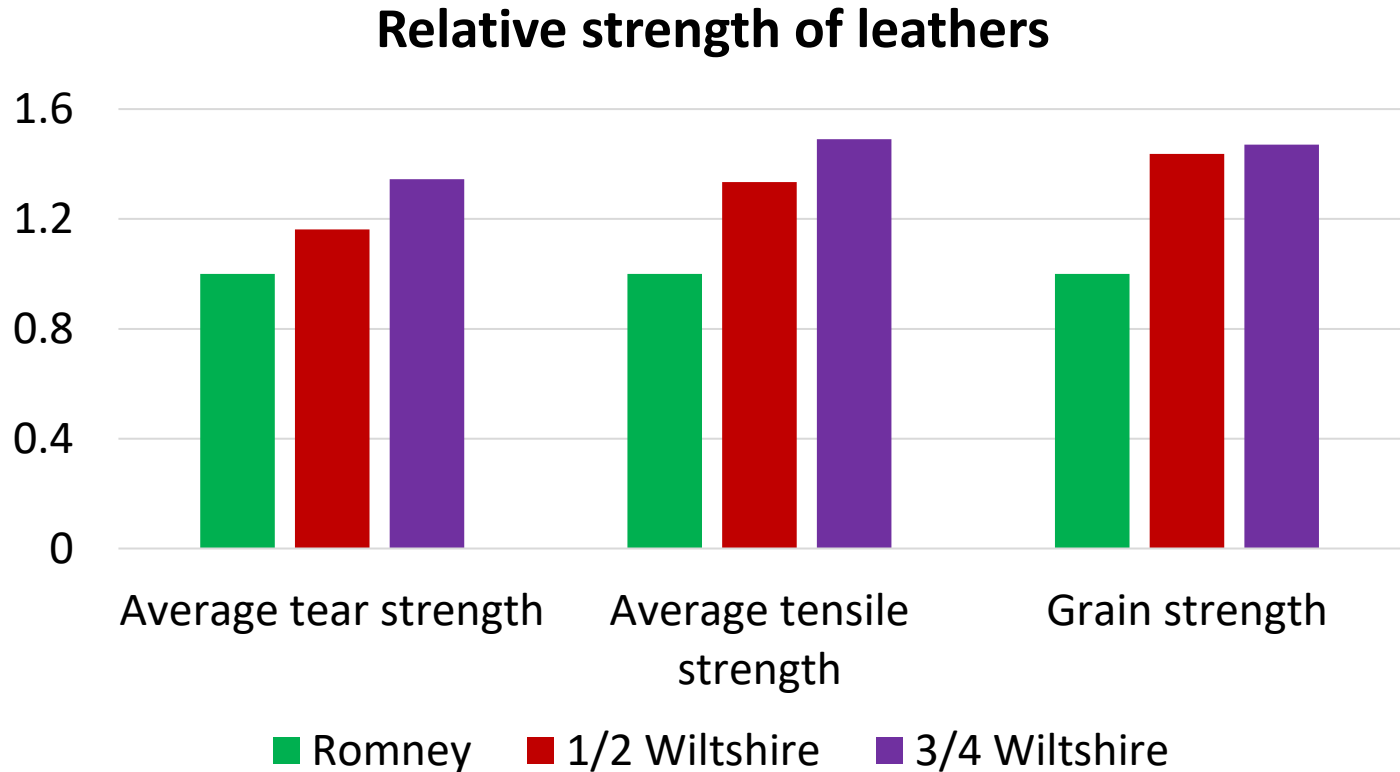
Grain and corium thickness



Strength of leathers

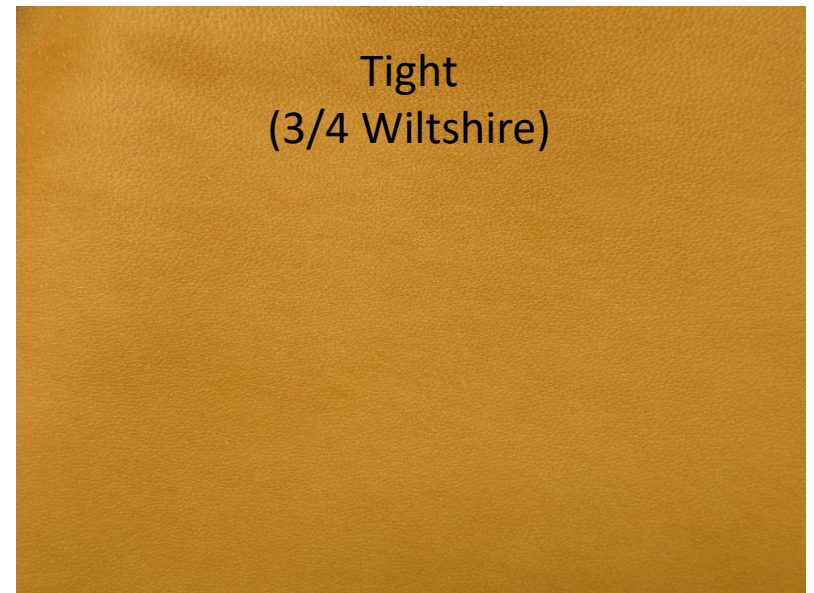
- The figures given are the ratio of the Wiltshire-cross value to that of the control Romneys for the same season
- This accounts for any processing variability between seasons, as strength can be affected by processing

Strength of leathers



Looseness of leather

- Looseness is the tendency of the skin to wrinkle under tension

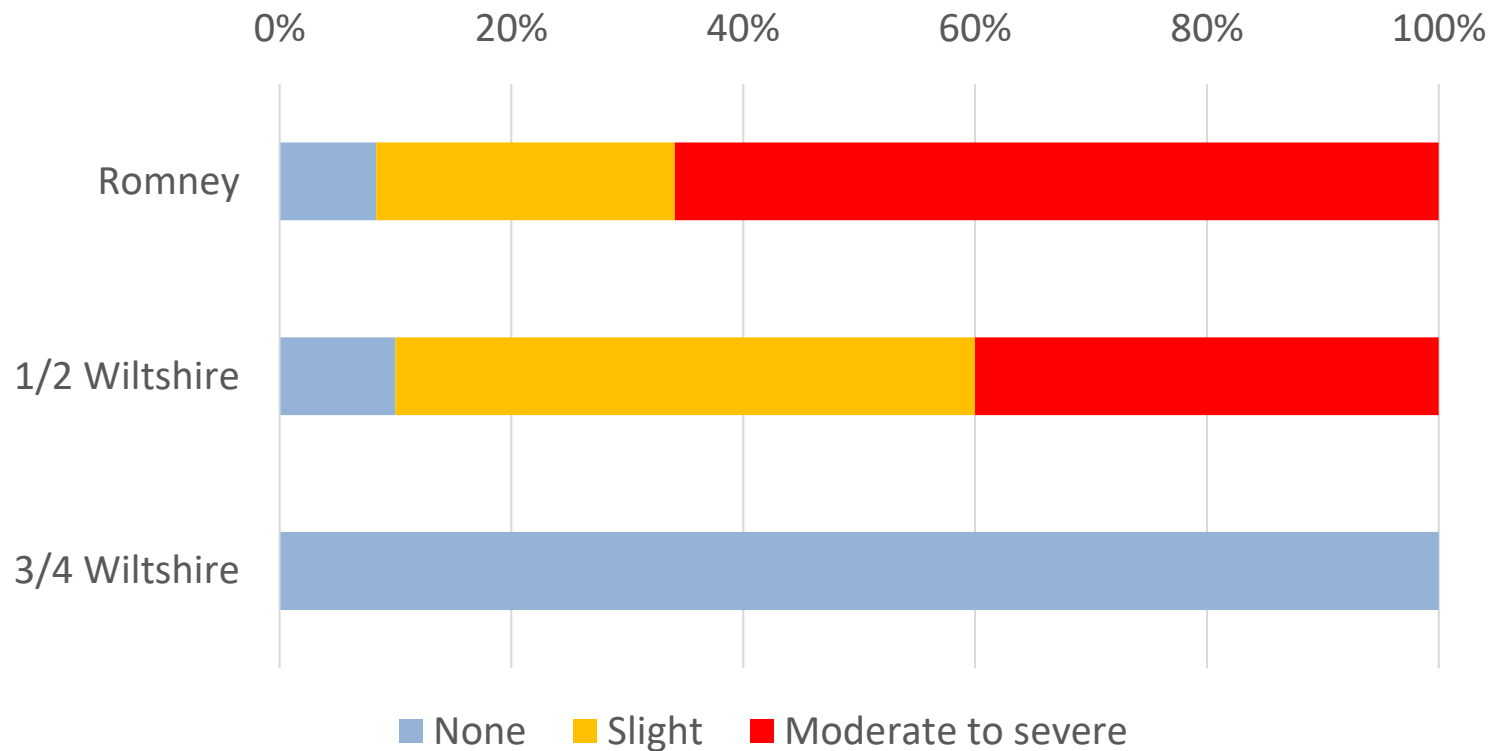


Looseness of leather

- In ovine skin it results from delamination of skin layers



Looseness of leather



Pinhole on leather

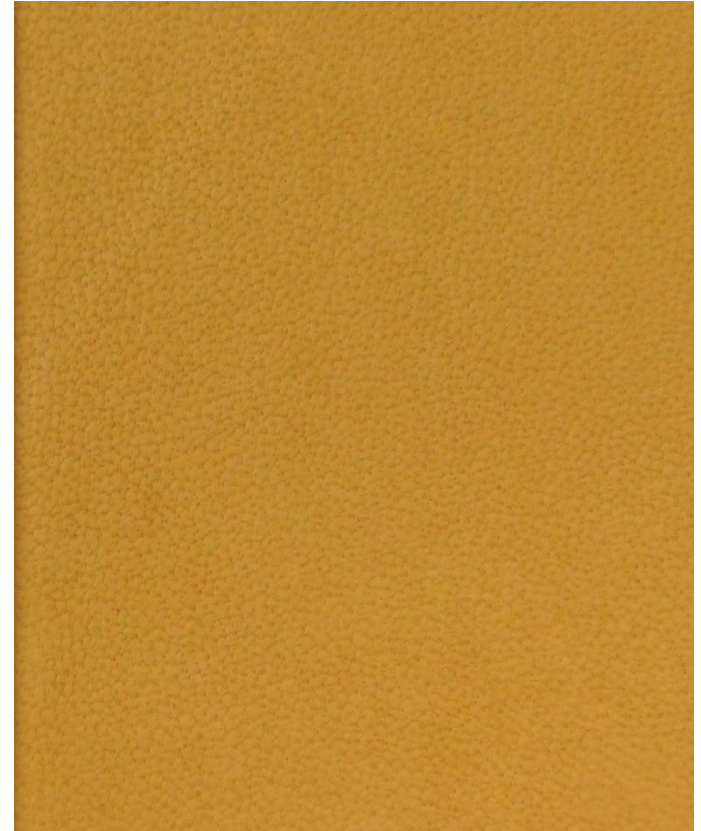
- Small pits in the leather caused by merging of follicles
- Is a cosmetic fault
- Downgrades the pelts to either “pinhole” or “thirds” grade depending on severity



Pinhole on leather - visual

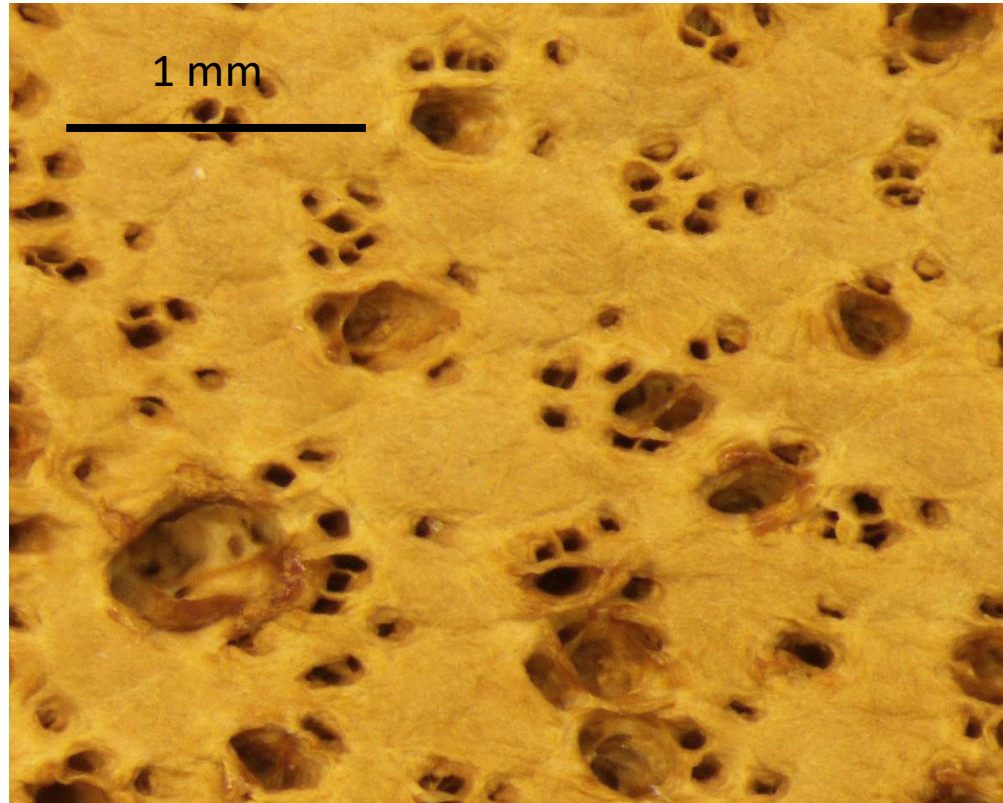


Pinhole
($\frac{3}{4}$ Wiltshire)



Normal
(Romney)

Pinhole on leather - photomicrograph




$\frac{3}{4}$ Wiltshire

Pinhole grading of skins

	Grade		
	Run	Pinhole	Third
Romney	90%	5%	5%
½ Wiltshire	90%	10%	0%
¾ Wiltshire	25%	25%	50%

Value of pelt



Summary

- Slupe wool – diameter unchanged, but bulkier
- Thickness – increased
- Strength – increased
- Looseness – gone
- Pinhole – significantly worse



We would like to acknowledge the assistance of:

- Massey University for making the lambs available
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