



A shearer harvesting wool from a sheep

Wool is a natural fibre because it grows on sheep. The process of getting wool from sheep is called shearing. The people who do this are called shearers.

After wool has been shorn it can be made into many different products. After it has been shorn it also grows again.

Wool shorn of a sheep is called a fleece. Good dictionaries will tell you the word fleece means "the wool coat of a sheep".

Wool is wonderfully...

- **insulating** (keeps you warm in the cold and cool in the heat)
- **fire retardant** (doesn't burn easily)
- **lightweight**
- **water repelling** (drives water and moisture away before absorbing it)
- **strong**
- **soft**



Wool keeps us warm in the cold

Now you understand why humans have been using it for thousands of years for clothing, textiles, furnishings and insulation.

When conditions are extreme and space is limited wool is the perfect fibre for clothing. It is therefore worn by astronauts in space, sailors who navigate the oceans, polar scientists and people who strike oil in sub-zero temperatures in Alaska. They all rely on wool products for warmth and protection.

Though it is ancient as a fibre, it is also perfect for space travel, bundu-bashing, climbing Mount Everest or simply wearing around the house.

(Text partially adapted from the International Wool Textile Organisation, I.W.T.O.)



The wool fleece looks like this when it is growing on the sheep



WOW WOOL

Wool fibres can bend 30 000 times without breaking or becoming damaged. It can be stretched up to one third of its length and then spring back into place. It can also absorb a considerable amount of moisture without feeling wet, which makes it ideal for sportswear.



WHAT IS WOOL?

Wool is a natural fibre grown by sheep to form a protective **fleece** that covers most of their body. The fleece is shorter around the face, legs and belly, but longer and softer across the back and sides of the body.

This woollen fleece protects sheep from the weather. It keeps them warm during winter and cool during summer. Wool also protects the sheep's skin against sunburn.

Wool fibres are made of **protein**, with a small amount of fat, **calcium** and **sodium**.

As wool grows out from the sheep's skin, it naturally forms into groups of fibres called **staples**. Wool fibres are not straight: they grow with a natural crimp (wave), which gives wool its elasticity (springiness).

HOW DOES WOOL GROW?

Continuously, which means non-stop. Each wool fibre grows outwards from the sheep's skin.

A fleece can be shorn off each year. It will then regrow until the next **shearing**.

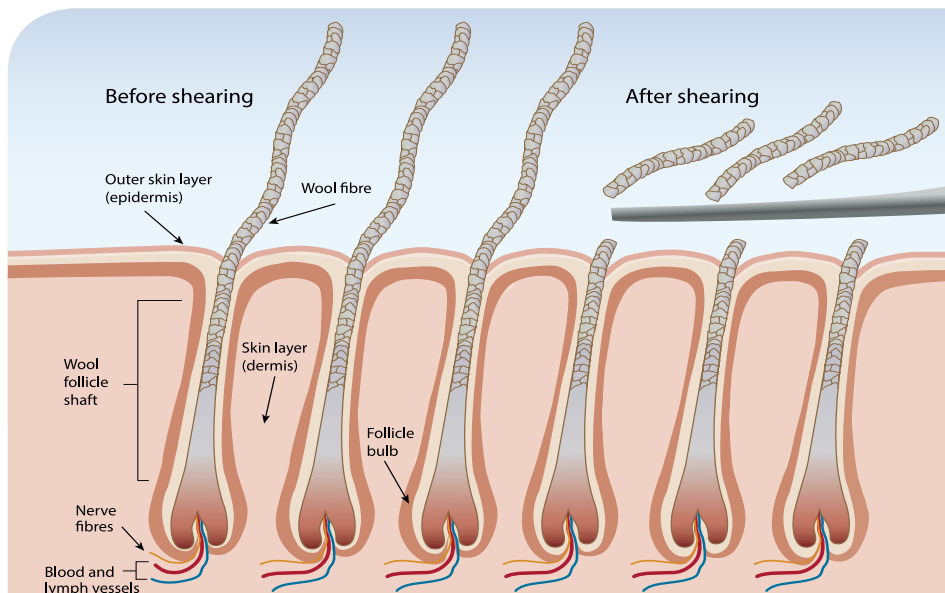
Wool grows between 6 mm and 10 mm per month, but this varies depending on breed, nutrition and **environment**.

WHAT DOES WOOL FEEL LIKE?

It feels soft and slightly oily before it is washed or processed.

The natural oil in wool (lanolin) coats each fibre and helps to insulate the fleece. It is the lanolin which makes the wool water resistant.

This helps to keep sheep warm during cold weather and dry when it is wet.



How a wool fibre grows from the sheep's skin

Wool fibres have a natural crimp (wave)



WOW WOOL

Wool grows about 6 mm in a month. Age, health and even the climate can slow growth down, or hurry hairy matters up.

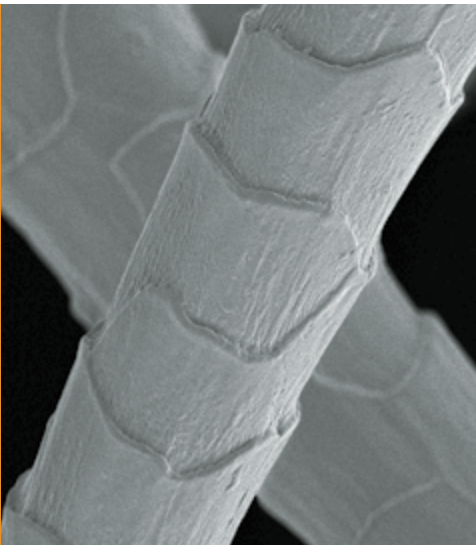
WHAT DOES WOOL LOOK LIKE?

The wool produced on most South African properties is a creamy white colour.

As the wool grows, the outer ends of the fibres obviously become dirty. Luckily the wool closer to the skin stays bright and white, or creamy.

When long fleece is carefully parted to reveal the groups of fibres (which are called staples) the crimp (wave) of the staples is clearly visible.

Some sheep grow wool in shades of brown and black.



Under a microscope wool looks scaly



Wool fibres form groups called staples



Some sheep grow coloured wool



Wool removed from a sheep is called a fleece

WOW WOOL



An average Merino wether can produce up to 4,5 kg of wool each year.



Wool regrows after shearing

