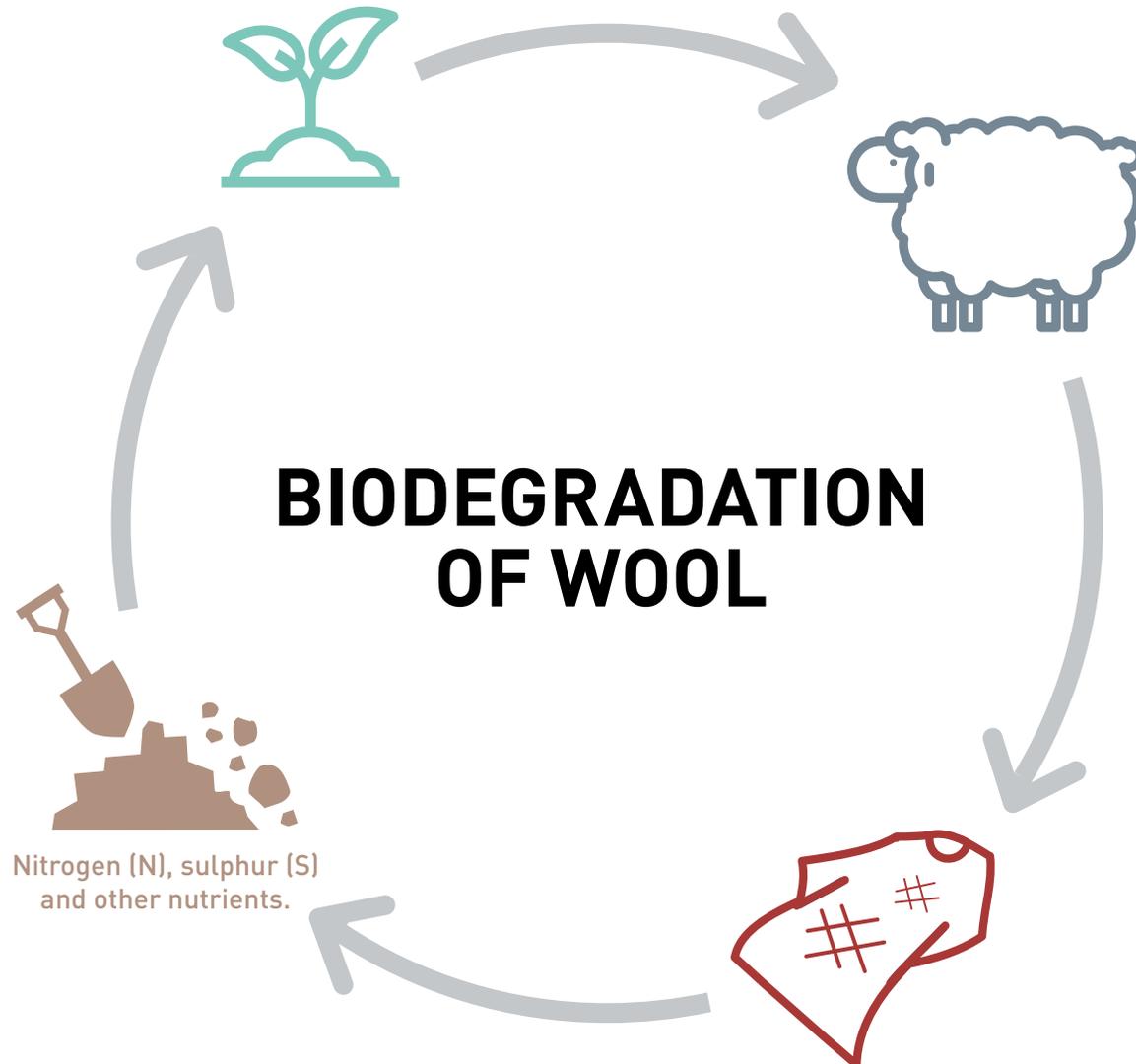


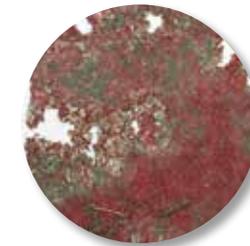
# WOOL IS 100% BIODEGRADABLE



100% MERINO WOOL  
CHUNKY KNIT



BEFORE BEING BURIED



BURIED FOR 3 MONTHS



BURIED FOR 6 MONTHS



## Wool is 100% biodegradable

Wool is a 100% natural, **renewable** and **biodegradable** resource produced by sheep.

### What is biodegradability?

Substances that can be broken down by the actions of living things, such as soil **fungi** and **bacteria**, into products that do not harm the environment are said to be '**biodegradable**'.

### How does wool biodegrade?

**Fungi** and **bacteria** in the soil produce **enzymes**, which break down the wool fibres. As wool **decomposes** it releases essential nutrients back to the soil, like a slow-release fertiliser.

These nutrients include nitrogen, sulphur and magnesium, which can help plants grow. These plants include the grasses sheep eat to help them grow more wool!

### How long does it take?

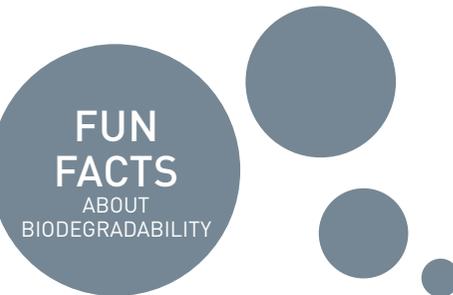
Wool can **decompose** in soil in as little as three to four months, depending on environmental conditions. Wool will **decompose** most rapidly in warm, moist conditions. If wool is kept clean and dry, it does not readily **biodegrade**.

**Synthetic fibres**, such as polyester, can remain in the soil for many years. They break down into what are known as microplastics or microfibrils – tiny little pieces less than 5mm in diameter. These tiny pieces of plastic build up in aquatic environments, such as oceans, and **landfill**. Microplastics can damage **ecosystems**.

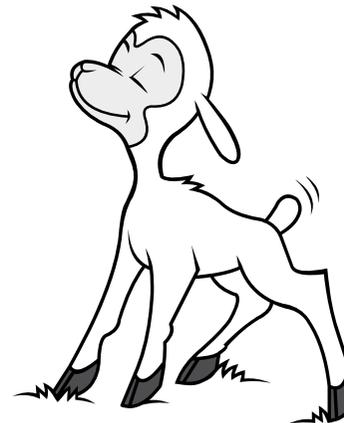
Wool fibres do not add to landfill or aquatic microfibre pollution.

## Did you know?

- Wool is 100% natural, grown year-round by Australia's 65 million sheep
- Sheep have a simple diet; all they need to produce wool is water, air, sunshine and grass.
- A single polyester fleece garment can produce more than 1900 microfibrils per wash.



- Nitrogen in plants helps keep them green.
- Dry wool does not break down as easily as wet wool because of the fibre's tough outer coat.
- Wool is made of keratin (a natural substance), also found in human hair and fingernails.



## Glossary

**Bacteria** — tiny living organisms that get their nutrients from the environment in which they live.

**Biodegradable** — a substance that will decompose naturally.

**Decompose** — to break down into smaller parts.

**Ecosystems** — an ecosystem is made up of all the living and non-living things in an area.

**Enzymes** — substances in plants and animals that speed up chemical reactions.

**Fungi** — organisms slightly larger than bacteria that live in soil and get their nutrients from other substances.

**Landfill** — a land-based disposal site.

**Renewable** — a resource that can be replaced or regrown after it has been used.

**Synthetic fibres** — fibres made from oils and plastics that are not natural, renewable or biodegradable.

### More information

To find out more about the biodegradability of wool and other textiles take a look at:

- [learnaboutwool.com](http://learnaboutwool.com)
- [beyondthebale.wool.com](http://beyondthebale.wool.com)
- [wool.com](http://wool.com)

