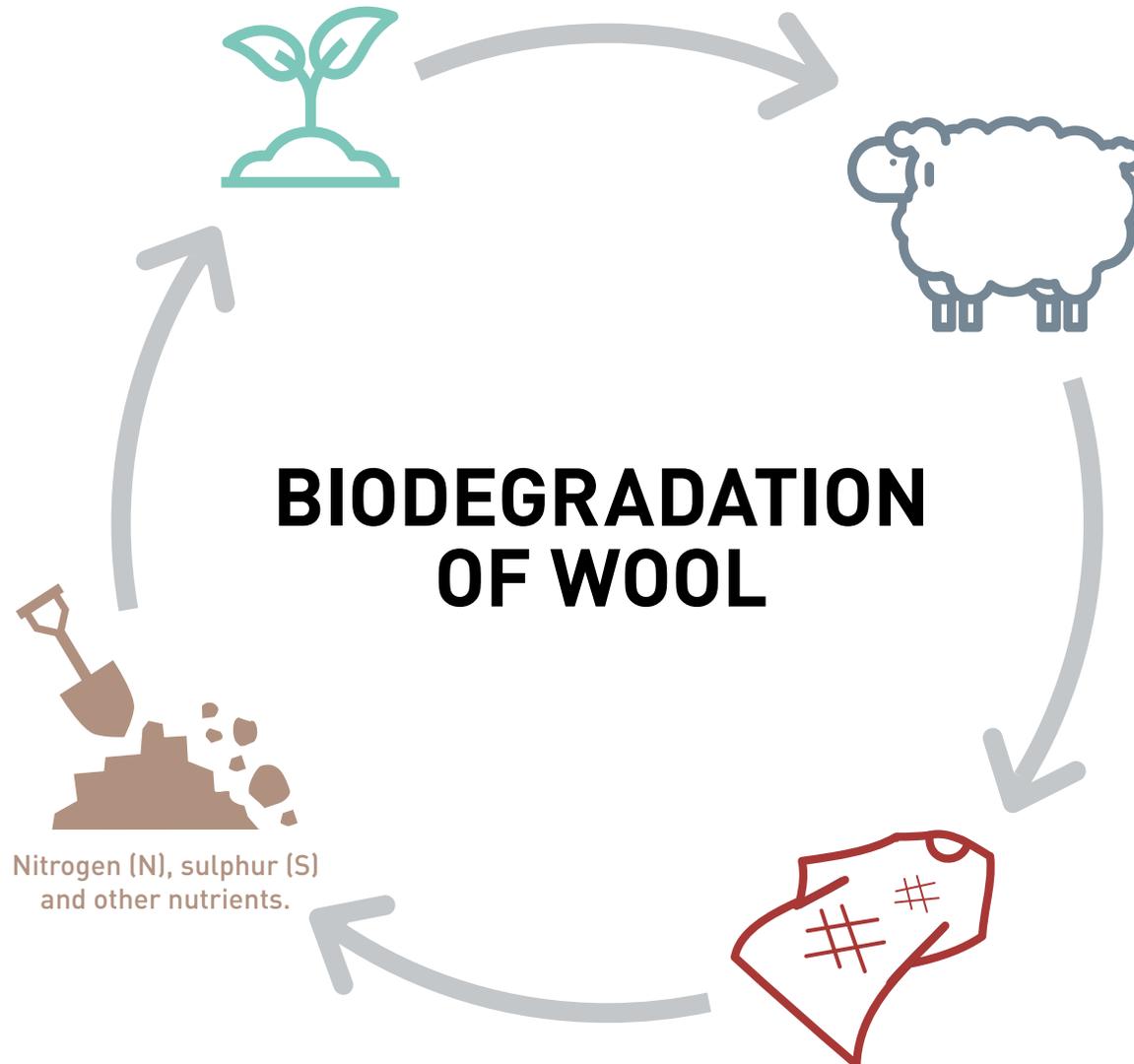


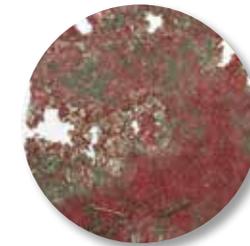
WOOL IS 100% BIODEGRADABLE



**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?

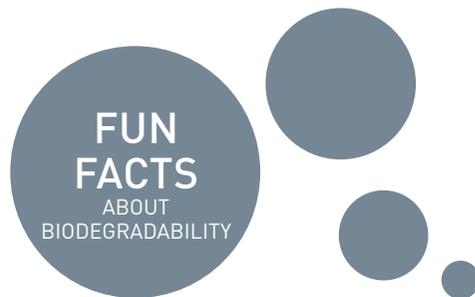
Wool can **decompose** in soil in as little as three to four months, depending on environmental conditions. Wool will **decompose** most rapidly in warm, moist conditions. If wool is kept clean and dry, it does not readily **biodegrade**.

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**.

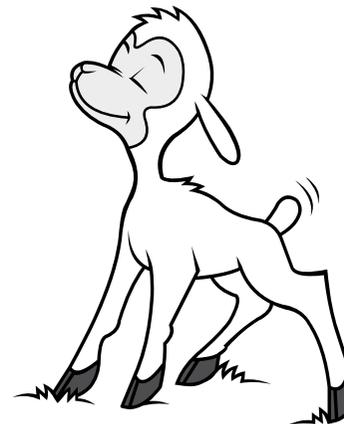
Wool fibres do not add to landfill or aquatic microfibre pollution.

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
- beyondthebale.wool.com
- wool.com

