

SDG 13 CASE (PART 1)

The impact of climate change on St Enochs Farm



In this case study, you will meet a Farm Hand called Katherine Bain, a wool expert who works on her family's sheep farm, St Enochs, in rural Victoria.

In this interview, Katherine talks about her experiences as a farmer and the impact climate change has had on the farm.

(The words in *green* are explained in a **glossary** at the bottom of this sheet).

WHAT CAN YOU TELL US ABOUT YOUR PROPERTY?

My farm, called St Enochs, is roughly 2,000 *hectares*, located about 2 hours west of Melbourne. It has been in my family since the 1890's and we have always raised sheep.

Currently we run a mix of *Merino sheep* and *Coopworth sheep*. We have nearly 9000 altogether, a mix of *ewes* and *wethers*.



HI, THIS IS ME, KATHERINE, WITH A MERINO LAMB!



MEET MY DOG LENNY WITH SOME COOPWORTH SHEEP.



THESE ARE SOME OF OUR MERINO EWES AND LAMBS.



MEET MY DOG LENNY WITH SOME COOPWORTH SHEEP.

The farm is located on *volcanic basalt plains* which means the land is very rocky and there are lots of natural springs which supply the stock with water. We have an average rainfall of 625mm a year which mostly falls in the winter.

The region is also known to be very windy. In 2018, Stockyard Hill, a large wind farm was built, and we now have 6 towers on our property. We do not receive power directly from these wind towers.

Our lambs are born in August, and we **shear** all our sheep in November, which means Spring is our busiest time of the year.

Our sheep are run on mostly unimproved pasture, and we currently have roughly 500 hectares protected under a **native grassland's biodiversity program**. We are working hard to protect and improve our native grassland area as there is currently only 1% of this type of grassland left in south-western Victoria.

Unimproved pastures generally means we don't sow any seeds in the paddock and rely on what grows naturally. It is a bit different from the native grasslands as most of the plant species growing are introduced. We also don't do a lot of fertilising on these **paddocks**, but that is mostly because they are very rocky and hard to drive a tractor through.



INTRODUCING YOU TO OUR MAIN MODE OF TRANSPORT ON THE FARM - A POLARIS RANGER!

WHAT CAN YOU TELL US ABOUT YOUR PROPERTY?

We have had no measurable impacts from climate at this stage, but there is no denying an increase in unpredictable weather that is making farming more challenging than it already is.

We can see a loss in **biodiversity**, especially regarding native grass species, which can result in poorer soils and therefore an **ecosystem** that can't handle the increasingly changing weather patterns.

Our biggest risk are extremely dry years where we don't get enough grass grown for the sheep to eat. This means we either have to sell some of our stock, or spend lots of money feeding them grain (usually barley).

Extremely wet years can also have terrible effects, as it usually means we lose more lamb because of environmental exposure. The worst case is continuous rain and wind with very cold temperatures. If the lambs get separated from the herd, they can die from the extreme weather.

GLOSSARY

Hectare: a unit of measurement of a large area. It is equal to 10,000 square metres, or a square with sides of 100 by 100 metres.

Merino sheep: a sheep that provides wool.

Coopworth sheep: a sheep bred for meat

Ewes: female sheep.

Wethers: castrated male sheep.

Volcanic basalt plains: huge, smooth plains formed by volcanic flooding.

Shearing: cutting off the wool of the sheep.

Native grassland biodiversity program: A government scheme to protect the natural habitats and ecosystems of the Victorian grassland.

Biodiversity: the variety of life in a particular habitat or ecosystem

Ecosystem: a biological community of interacting organisms and their physical environment.

Paddock: small field

