

CHANGING THE LANDSCAPE, CHALLENGING TIMES

HASS

How have people changed the area around Toodyay and what were some challenges they had to overcome in the process?

Students will:

- Explore the environmental features of the Avon Valley.
- Consider how these features contributed to the spread of colonial settlement.
- Discuss how Aboriginal people and European settlers have contributed to the environmental characteristics of the area around Toodyay.
- Understand some of the challenges faced by early colonial settlers.
- Consider the impact of European settlement on Aboriginal people and vice versa.

ENGAGE

Discuss:

- What sort of things do farmers, graziers, shepherds and other agricultural workers do?

Brainstorm ideas for the following hypothetical situation: You are a farmer who wants to start up a new farm somewhere. What would be the IDEAL location for this farm? Think about:

- Weather (hot or cold, how windy, variability and amount of rainfall)
- Existing vegetation (trees, bushes, shrubs, ground cover)
- Native animals to that area
- Soil
- Landforms (mountains, rivers)
- What other people are already doing in the area

EXPLORE

Use [Google Maps](#) (satellite view, street view, maps and photos) and the [Australian Meteorology](#) website to identify and discuss some current environmental features around Toodyay and the broader Avon Valley, eg:

- How much farmland is there compared to urban areas or natural bush reserves?
- What are some natural / built features in the area?
- What is the Toodyay climate like?

Look at pictures of a native environment around Toodyay, eg. Avon Valley National Park (you can search for other images online).

- What do these pictures tell you about what the environment around Toodyay would have been like before European settlement?
- How do you think Aboriginal people would have used this environment?
- What might have led European explorers into the Avon Valley to think that this area would make good farming land?
- What are some things early European settlers would have had to do in order to change the original landscape into the Avon Valley we have today? (eg. vegetation clearance, fencing, urban development, roads and rail etc)



EXPLAIN

- Today, the Avon Valley is an important regional centre with home to industries such as agriculture, manufacturing, transport and tourism.

- Toodyay sits on Ballardong Noongar country, close to Whadjuk and Yued Noongar lands. The Avon Valley area contains [extensive Noongar heritage sites](#). The presence of waterways such as the Avon River meant that the Valley was abundant in food. One of the ways that the Noongar people looked after this area was through fire stick farming – setting fire to the bush to stimulate fresh growth. This practice also led to an open, pasture like landscape rather than dense bush, which would have made it attractive to early European settler farmers.
- Show students the two quotes from early explores into the area, and discuss their impressions of the country and its suitability for farming.

EXTEND

Explain that there were many problems which had to be overcome in the process of changing the native bushland into good farming country. Show a picture of Toodyay in flood, as one example. Explain that one of the ways this was eventually managed was through the River Training Scheme. This deepened the river channel, removed dead logs and debris, and straightened out some of the river's minor kinks and bends. It reduced the frequency of floods but unfortunately also caused long term environmental damage by increasing the flow rate of the water, causing erosion of the banks and silting up of the deep pools along the river.

Provide students with a list of other issues that early agricultural workers in the Avon Valley had to (and in many cases, still have to) overcome. Depending on the ability of your students, either get them to work in groups and discuss reasons why each of the issues might have been a problem for the European settlers, or get them to match the issue to the reason it is a problem using the worksheet provided. Discuss some of the ways these problems were addressed.



EARLY CHALLENGES (a)
Look at the list of issues facing early European settlers in the Avon Valley. Why do you think this issue might have been a problem for people wanting to start up a farm in the area?

UNFAMILIAR SEASONS	
FUNGAL PLANT DISEASES	
POISONOUS PLANTS	
LABOUR SHORTAGES	
ABORIGINAL FIRE PRACTICES	
POOR ROADS	
Can you think of another problem?	

EVALUATE AND REFLECT

- Re-consider the development of Avon Valley, this time from an Aboriginal perspective: What sort of challenges do you think the Noongar people had to face when European settlers arrived?
- How do you think Toodyay will change in the future?

WANT TO DO MORE?

- Investigate problems caused by introduction of new plants and animals into the environment.

USEFUL SOURCES

- Have a look at a couple of diaries kept by early 20th century farmers in Toodyay: <http://www.toodyay.com/Historical-Toodyay/Toodyays-Heritage/Twentieth-Century>



Avon Valley National Park

Alex Kopp



Avon River

Alex Kopp

The general characteristics of the soil of the country to the eastward of Mount Mackie, which we considered to be the eastern extremity of Darling's Range, was a light, sandy loam, the subsoil of which was clay, which occasionally appeared on the surface. In some places there was a rich, red loam, and the banks of the river were principally alluvial.

Ensign Dale, August 1830

The best soil I have seen since I left England is about the base of this hill [Mount Bakewell]; the grass, also, is truly good and thick set. The land walked over this morning is of excellent quality, generally speaking, very nicely situated, and well suited for grazing and agricultural purposes.

J.W. Hardy, September 1830



Avon River in Flood at Toodyay Bridge in 1936
Shire of Toodyay local history collection 2001.1779

EARLY CHALLENGES (a)

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**UNFAMILIAR
SEASONS**

**FUNGAL PLANT
DISEASES**

POISONOUS PLANTS

LABOUR SHORTAGES

**ABORIGINAL FIRE
PRACTICES**

POOR ROADS

**Can you think of
another problem?**

EARLY CHALLENGES (b)

Look at the list of issues facing early European settlers in the Avon Valley. Match each issue to an explanation for why it might have been a problem for people wanting to start up a farm in the area.

UNFAMILIAR SEASONS

A. Reduces how much of a plant crop can be harvested and/or how much is available for seed.

FUNGAL PLANT DISEASES

B. Farmers did not know the best time to plough, sow and harvest produce.

POISONOUS PLANTS

C. Bush fires spread to farm fields and destroy crops before they can be harvested.

LABOUR SHORTAGES

D. Getting farming equipment to farms, and farm produce to market, is slow and difficult.

ABORIGINAL FIRE PRACTICES

E. Can make farm animals, such as cows, sheep and goats, sick and die.

POOR ROADS

F. Long work hours for farmers. Jobs get done slowly, or not at all.

Can you think of another problem?

EARLY CHALLENGES - ANSWERS AND TEACHER NOTES

ISSUE	REASON IT WAS A PROBLEM	ADDITIONAL DISCUSSION NOTES
UNFAMILIAR SEASONS	Farmers did not know the best time to plough, sow and harvest produce.	The farmers were used to predicting the weather according to the European seasons, which were different to the six seasons observed by the Noongar people. Also, both floods and droughts contributed to crop losses.
FUNGAL PLANT DISEASES	Reduces how much of a plant crop can be harvested and/or how much is available for seed.	Farmers 'pickled' seed in a solution of copper sulphate. This protected it from fungal diseases such as bunt and smut.
POISONOUS PLANTS	Can make farm animals, such as cows, sheep and goats, sick and die.	The poisonous plants are from the <i>Gastrolobium</i> family. These were pulled out before farm animals were let into an area. This job was commonly done by unskilled Ticket of Leave convicts. (Later, the same plants were used to develop the 1080 bait poison to control introduced species!)
LABOUR SHORTAGES	Long work hours for farmers. Jobs get done slowly, or not at all.	European settlers depended on the local Ballardong people as shepherds, fencers, farmhands and trackers. By 1891, more than half of the Aboriginal population of Toodyay were listed as working on farms. These labourers were often paid low wages, or only in rations, blankets or clothing (the requirement for equal wages for Aboriginal workers was not established until 1965). In 1851, the labour shortage was filled by convicts from England. However, their arrival ended up reducing the wages for free labourers.
ABORIGINAL FIRE PRACTICES	Bush fires spread to farm fields and destroy crops before they can be harvested.	European settlers bribed Aboriginal people with gifts of rice, sugar and blankets to persuade them to burn off after the harvest was gathered. Later, 'Native Police' force was introduced specifically to deal with Aboriginal issues, which included fire practices and theft of stock or produce from farmers.
POOR ROADS	Getting farming equipment to farms, and farm produce to market, is slow and difficult.	Some of the earliest roads were built along long established tracks used by Aboriginal people. In 1887, a narrow gauge spur line was built, running from Clackline to Newcastle (now known as Toodyay), which improved transport in and out of the area. However, a standard gauge line (which now directly connects Toodyay to Fremantle, Kalgoorlie and beyond) wasn't built until the 1960s.