

# Manjimup Heritage Park

## Education Resource

High School  
Years 7 - 10



SHIRE OF  
**MANJIMUP**

# Classroom links

Content within this pack may be used as part of your preparation for a visit to the Manjimup Heritage Park, or to facilitate post-excursion reflection and further learning back in the classroom.

The activities are provided as standalone teaching and learning ideas, designed to help students engage with the natural and cultural heritage of the south west of WA, and with issues relevant to the region. They do not follow a specific sequence, however they can be incorporated into a broader learning program.

All activity suggestions are linked to the WA Curriculum across a range of year levels and subject areas, as summarised in the table below.

Cover Photo  
Steam Locomotive 'Kalgoorlie'  
hauling a log train.  
Courtesy State Library of WA.  
229019PD

This education kit was  
produced by Alex Kopp  
for the Shire of  
Manjimup



# Classroom links

Page	Activity	Ideas explored	Science	HASS	Arts	Technologies	Health & PE	English
1	Loving forests	Different perspectives on the value of forests		✓				
4	Jarrah and karri	Comparing characteristics of jarrah and karri Impact of logging	✓					
5	Sustainable forests	Strategies to ensure sustainable use of forests	✓		✓			✓
7	Forests for food	Food security Commercial use of native foods		✓		✓		
8	Forests and culture	Intangible values of forests		✓				✓
9	Heritage and liveability	Value of community places Manjimup liveability		✓	✓			✓
11	Better way to power	Renewable energy	✓					✓
12	Old jobs, new jobs	Influence of changing technologies on careers	✓					✓
14	Inventing a better world	Changing technologies	✓					
16	Fabulous produce	Consumer preferences Food promotion and marketing		✓				✓
18	Manjimup in the news	Newspaper feature articles Liveability and tourism		✓				✓
19	Workers in poetry	Exploring work life through poetry						✓
20	Timber cutters at war	Experiences of south west forestry workers during WW2		✓				✓
21	Forest first aid	Safe recreational use of forests					✓	



# Loving forests

Aside from acting as home to hundreds of species of plants and animals, forests are valuable to people. Some of these reasons are listed below.

Next to each idea listed, provide a more detailed explanation, elaboration or a specific example of what makes forests valuable. The first example is done for you.

Reason a forest is valuable

How is that so?

Resource	<i>Eg. Forests provide timber, and potentially other goods, such as medicines and food.</i>
Employment	
Export Dollars	
Carbon sink	
Recreation	
Water production	
Tourism	
Industry	
Beauty	
Habitat	
Culture	



# Loving forests cont'd

Not everyone perceives the value of forests in the same way. How might a value of the forest be different to:

- A carpenter
- A family with kids
- A scientist
- An entrepreneur
- An artist
- An adventurer
- A Noongar traditional custodian



*Pemberton forest.*

*Courtesy Frances Andrijich.*



# Jarrah and karri

Jarrah and karri are among the State's most important timber resources. How the jarrah and karri forests have been cared for has changed over the last 150 years with different methods working best for different trees.

Karri, like other tall, wet forests, needs plenty of room to grow and develop. It grows best when 'clearfelled', the debris burnt to expose the soil (the 'seedbed') and regenerated with seed from retained 'seed trees' or planted with nursery grown seedlings.

Jarrah forest usually consists of many different aged trees. It responds best to 'group selection' cutting. Regeneration in the gaps created in the forest canopy comes from 'lignotubers', small shrubby plants that have developed from seed over many years just waiting for the chance to develop rapidly into saplings when there is space available.

## Activity

1. Find out more about jarrah and karri, and complete a table which compares the two trees in terms of their:
  - Tree size and appearance
  - Age to maturity (ie. how quickly they can re-grow till they can be cut down again)
  - Distribution
  - The quality of timber they produce
  - Use of timber

You can use both text and illustrations or photographs in your table.

2. When a karri or jarrah tree is felled, this affects other species that lived within that forest.

- Identify examples of these species and note their conservation status.
- Are any species at a particular risk from logging?

3. Search online for two articles about Aboriginal fire management, and identify:

- at least three things that they both tell you about traditional use of fire;
- at least one piece of information that is included in one article but not in the other.



# Sustainable forests

Timber is a valuable renewable resource – but how can we make sure we use it sustainably?

Define what is meant by the term ‘sustainable forestry’.

Find a variety of different information sources that explore this topic. Make sure that you read information contained in:

1. At least one source which is published by a government body  
(provide a reference):

2. At least one source which is published by an environmental group  
(provide a reference):



# Sustainable forests cont'd

Give five examples of strategies that people or organisations need to put in place to ensure that our timber resources are collected and managed sustainably. Make your examples as clear and specific as you can, eg. instead of saying 'protect forests', you could say 'reduce the risk of destructive fires by conducting prescribed, low intensity burns'.

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Once you have generated your list, compare and discuss with the rest of the class. Then, working with a partner, prepare a short podcast, role playing an interview between a journalist and a forestry expert, discussing the use of forests as a renewable resource.



# Forests for food

Shire of Manjimup has a wealth of timber resources. It is also renowned for its agricultural products, such as dairy, avocados, apples and potatoes – all of which have been introduced into the area by settlers. However, prior to European settlement the area was also a rich source of both food and timber resources for Noongar people.

## Activity

Consider a 'what if' scenario of commercialising the south west forests as a source of native foods.

- Explore how forests can contribute to global food security and create a fact sheet or poster about different types of foods that can be obtained from forests around the world.
- Identify at least six different plant and animal foods that are native to the south west (search for 'Noongar food' online).
- Watch a video about the challenges of growing bush foods.
- As a class, brainstorm the potential economic, cultural, ethical and sustainability issues that might need to be taken into consideration to make the south west's native foods commercially available.
- Complete a SWOT analysis of using south west forests for commercial food production.

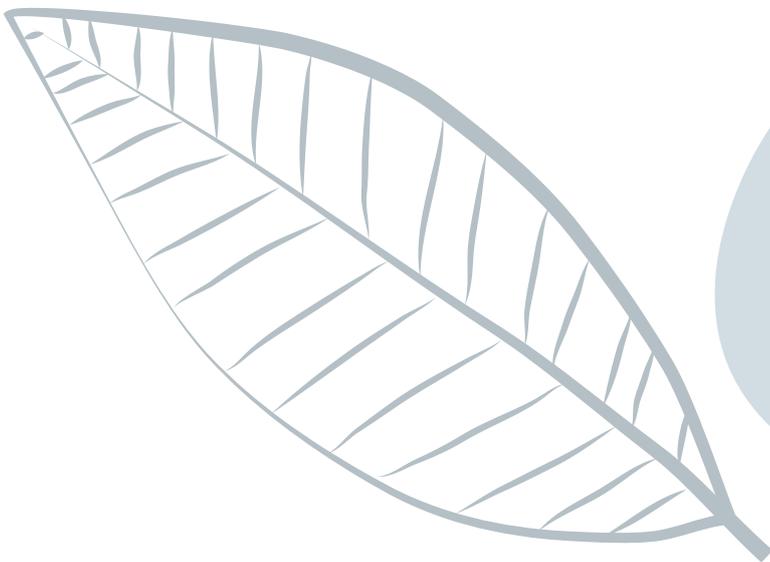


# Forests and culture

Forests have environmental value. They act as the 'lungs of the earth' and provide shelter and sustenance to a wide diversity of living things. Forests also have a tangible economic value, thanks to the timber and other products that can be sourced from them.

Are there other reasons for why forests are important? Explore this question from these different perspectives:

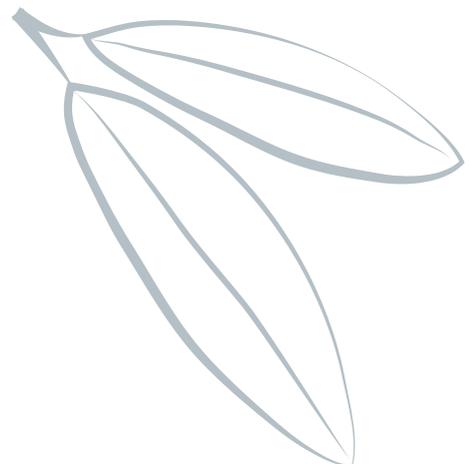
aesthetics    spirituality    culture    recreation



Create a collage - which can include symbols, images, quotes and colours - to visually represent one of these values of forests.

## Discuss

- Are these values more or less important than environmental or economic values of forests?
- To what extent is it true to say that aesthetic, spiritual, cultural and recreational values of forests cannot be measured?



# Heritage and liveability

Urban developments such as the Manjimup Heritage Park add both tourist and local value to the south west.

## Report

Create a report about the Manjimup Heritage Park which explains how this development contributes to the 'liveability' of Manjimup and surrounding areas.

## Activity

On your excursion to the Park, make sure you visit a range of different areas within it, taking photos, videos, audio recordings and notes of the Park's features and facilities.

Consider how you might capture some of the following aspects of the Park

- Accessibility
- Aesthetic value
- Educational value
- Recreational value
- Cultural value
- Environmental value

Use an app such as [ThingLink](#), plus the images, notes and footage you collected to create an interactive map of the Park to include in your report.





# Better way to power

The displays at the Power Up Electricity Museum showcase some technologies which led to tremendous changes to the way people live and work: home appliances, generators that powered saw mills and freezers, and electric powered vehicles, to name a few. Life without electricity today would be hard to imagine.

Much of today's electricity is generated through the burning of fossil fuels such as coal, gas and oil. Whilst efficient, these fossil fuels release greenhouse gases which are leading contributors to global climate change. Many organisations, including the Shire of Manjimup, are looking at other ways to power.

For example, you might have noticed the bollards lining the paths of the Manjimup Heritage Park. There are over 70 of them at the Park, and they are powered by solar electricity. The Park's parking lot is also lit by 9 solar powered overhead lights. There are 100 SunPower solar panels on the roof of the Power Up Electricity Museum, making a total of 32.7kW system which powers the museum and visitor centre. Even the new barbeques are partially powered by solar panels.



## Activity

- Explore some risks associated with climate change.
- Investigate how some renewable, alternative fuel sources (such as solar or wind energy) work.
- Choose one of the 'green' energy sources and identify the strengths, weaknesses, opportunities and threats associated with that type of energy generation.
- Find out what 'hybrid technology' is.

Once you have conducted your research, conduct a class debate to explore the statement: "Hybrid technology is what we should now be focusing on".

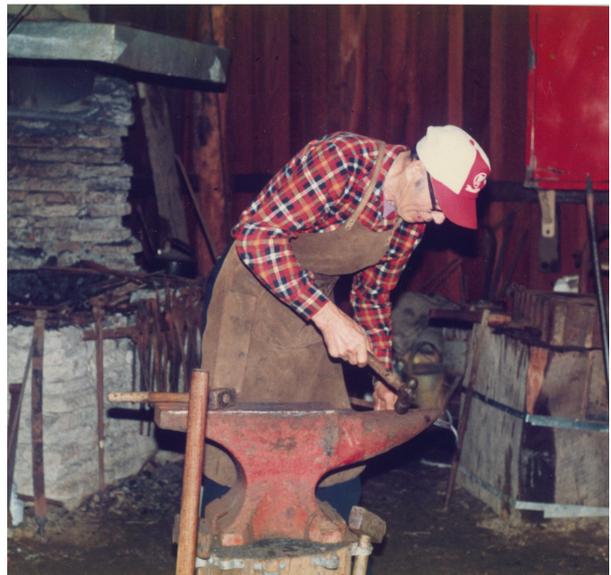


# Old jobs, new jobs

The Manjimup Heritage Park showcases many examples of once common technologies that have since been replaced by newer tools and equipment.

One of the buildings in the Park is a traditional Blacksmith's shed. The shed was built by Ted Martin (pictured), who spent 35 years working as a blacksmith at Manjimup. In the past, when horses and oxen were the main means of transport, blacksmiths held important positions in the community. They made horseshoes, spurs, wheels and axels for carts. They also made nails, built iron gates and fences, mended pots and made farming tools – and more. Today, a lot of the local blacksmith's manual work is mass produced by automated machines in factories, and while there are still people who work as blacksmiths, it is more common for people who want to work with metal to specialise in jobs such as sheet metal worker or boilermaker.

A lot of other, once popular jobs have completely or nearly disappeared as technology changed. Over the page, fill in the table to answer what people did in the each profession do? What inventions made their jobs unnecessary?



## Discuss

What jobs do you think might be replaced by machines in the future?

Can you think of any occupations or job titles that exist now that did not exist 50 years ago?

Write an opinion piece about how young people can best prepare themselves for future jobs that might not yet exist.



# Old jobs, new jobs

Occupation	What this person did	Invention that made their jobs unnecessary
Telegraphist		
Baler		
Town crier		
Compositor		
Stenographer		
Knocker-upper		
Switchboard operator		
Faller		



# Inventing a better world



*Tree felling demonstration.  
Courtesy Jack Bradshaw.*



*Using a mobile, powered  
circular saw.  
Courtesy State Library of WA.*



*Using a mechanical chainsaw.  
Courtesy Wayne Crombie-  
Wilson*



# Inventing a better world cont'd

Look at the images of tree fellers on the previous page.

- What technology are they using?
- What might be the risks associated with using the different technology?
- What might be the advantages?

Brainstorm a list of other inventions which:

- have made our work easier and/or
- helped people to stay healthy or safe and/or
- helped us to understand our world better

You might want to limit your brainstorming. For example, focus only on those inventions which involve electricity, or focus on one industry such as health or agriculture.

## Investigate

Allocate a different invention to each student in class, and then investigate:

- When these inventions were made and who invented them
- What the occupations of the inventors were
- How they came about to make their inventions (eg. What experiments did they run? Were they inspired by the work of someone else?)
- Did the discovery come about by accident, or were they seeking a solution for something in particular?

Share your findings, explaining which aspects of your investigation you found most thought provoking.

Of the inventions that you explored as a class, which one do you think had the greatest positive impact on the world?



# Fabulous produce

Despite its regional location, Manjimup's produce is sent around the world. But the high costs of production and transport make it a challenge when competing in a global market. That's why the south west aims to produce a premium quality product that is highly sought after.

Closer to home, the demands of nationwide supermarket chains impact on prices and affect what growers can sell. However, the rise in popularity of farmers markets and the 'Buy Local' movement means local growers have an audience hungry for good quality local produce.

Consider two apple varieties that have been developed in Manjimup:

- Pink Lady Apple
- Bravo Apple



## Discuss

- Do you think these apples qualify as 'premium quality products'? Why/why not?
- What individuals or organisations were involved in developing these apple varieties?
- Why did they bother to develop new apple varieties, when there are already so many on the market? What does this suggest about consumer demand?



# Fabulous produce cont'd

## Activity

Search online for examples of advertisements for these two apple varieties (look at both videos and images when you do your search).

Is the advertising for Pink Lady and Bravo apples similar, or do you think the two brands have a distinctly different 'feel'?

Choose at least two advertisements, and with reference to each one explain:

- Who do you think is the target audience for these ads?
- What does the advertiser want the audience to feel, think or understand about the apples? What makes you say this?

Using the advertisements for apples as inspiration, create an advertisement for one of the following Manjimup products:

Avocados    Cherries    Truffles    Karri or Jarrah honey



Your advert messaging should focus on either the premium quality of the product, or appeal to the 'Buy Local' movement.



# Manjimup in the news

Examine an article from a 5 December, 1937 edition of The Sunday Times, describing Manjimup.

**Make a list of the different aspects of Manjimup that are described (eg. water supply, history)**

- Are these aspects of the town described in positive, neutral or negative terms? Justify your answer, using specific examples from the text.
- What information about Manjimup might still hold true today, and what might have changed?

Compare this article to a more recent article about Manjimup, published in the Sydney Morning Herald on February 8, 2004.

**What aspects of Manjimup are described in this article, and are they positive, neutral or negative?**

## Discuss

How might articles such as these affect people's decisions about a) visiting Manjimup as tourists and b) moving to Manjimup to live?

What other sources of information would you use to make your decision about visiting or moving to Manjimup?

## Activity

Look at some present day examples of travel feature articles that describe places (eg. The Sunday Times and West Australian have regular travel sections). Note the elements of the page, and the features of the stories included – headlines, photos, maps, tables etc. Working in groups, prepare a page for a newspaper that showcases a suburb, town or city you are familiar with. You might want to try using an online newspaper template to help you finish this task.



# Workers in poetry

Week in, week out, from morn till night,  
You can hear his bellows blow;  
You can hear him swing his heavy sledge,  
With measured beat and slow,  
Like a sexton ringing the village bell,  
When the evening sun is low

Did you notice this quote on one of the interpretive panels at the Manjimup Heritage Park?

People write poetry to express feelings about something – even mundane, everyday things such as work. This quote is from a poem 'The Village Blacksmith', written in 1840 by Henry Wadsworth Longfellow.

## Activity 1

Read or listen to the poem in full.

- According to this poem, what do you think life of a blacksmith was like?
- What sort of person was he? What makes you say this?
- Do you think this is an 'idealised' version of reality, or reflective of what the life of a blacksmith might really have been like?

## Activity 2

Read some other poems or songs about work (for example [Click go the shears](#) or [Song of the axeman](#)), then write your own poem, using your visit to the Heritage Park as inspiration.

You might want to write about:

- A teacher, teaching in a small one teacher school;
- A fire lookout operator, perched high up in a lookout tree;
- A bullock driver, guiding a team of oxen to take karri logs through the bush;
- A saw mill worker, cutting up logs, surrounded by noise and heat;
- An electricity linesman, connecting power to south west towns for the first time;
- A new farmer, clearing land so that they could plant fruit trees.



# Timber cutters at war



*Memorial plaque on a bridge in the Manjimup Heritage Park.*

The contributions of Australian soldiers from World War 1 and 2 who fought in places such as Gallipoli, on the front lines at Kokoda or in the trenches of the Somme are well known. However, a memorial plaque at the Manjimup Heritage Park commemorates the less frequently told story of the Australian Forestry Companies of the Royal Australian Engineers.

## Activity

Read about the experience of these soldiers and identify:

- the places where they were sent to
- what challenges they faced
- examples of work they did and how they did it (eg. equipment they worked with)
- how they were treated by others
- any positive experiences they had

You can also explore the photographs and artworks related to the forestry units at the Australian War Memorial website.

Use the information you learned to write a letter from one of the forestry soldiers to his family back home in the south west, talking about his experiences.



