

MLA Virtual Farm Visit Teacher's Guide

Society & Environment



This teacher's guide includes curriculum links and activities relevant to:

ACT	Social Sciences (Geography and Contemporary Society)
NSW	Human Society and the Environment (Geography)
NT	Studies of Society and the Environment
QLD	Studies of Society and the Environment
SA	Society and Environment
TAS	Society and History
VIC	The Humanities (Geography)
WA	Society and Environment

Links with Curriculum

Video content in this module links with the Australian secondary school curriculum on *Society and Environment* in the following areas.

STATE OR TERRITORY	SUBJECT	AREA	COURSE DESCRIPTION
ACT	Geography	21.EA.2	How the geography of Australia influences what people do to survive and prosper (e.g. where people live, the location of natural resources and the development of industries and cities).
ACT	Contemporary Society	21.EA.8	Current issues and challenges facing the local community and Australian society.
ACT		21.EA.9	Use geographical language, tools and conventions to interpret and create representations of Australia's physical and human geography (e.g. a variety of maps, diagrams, images and data).
ACT	Geography	21.LA.1	Factors changing communities, geographical issues affecting Australian environments.
ACT		21.LA.7	Select and apply geographical tools and processes (e.g. maps, graphs, photographs, flow charts, fieldwork, action research) to gather, interpret and present geographical information on Australia.
NSW	Geography	4G1 – Investigating the World	The nature of geography – physical and human elements of the environment.

STATE OR TERRITORY	SUBJECT	AREA	COURSE DESCRIPTION
NSW	Geography	4G4 – Global Issues and the Role of Citizenship	Global geographical issues – climate change; land degradation.
NSW	Geography	5A1 – Investigating Australia’s Physical Environments	Physical characteristics that make Australia unique – climate and natural hazards.
NSW	Geography	5A2 – Changing Australian Communities	Types of communities in Australia Factors causing change in Australian communities.
NSW	Geography	5A3 – Issues in Australian Environments	Geographical issues - Land and water management.
NSW	Geography	5A4 – Australia in Its Regional and Global Contexts	Australia’s regional and global links – trade.
NSW	Geography (Elective)	E3	Geography of Primary Production.
NT	SOSE	Place and Space	Governments and communities need to balance economic, social, political and environmental factors through sustainable development, consumption and production e.g. resource use and environmental impacts; logging and the survival of small communities dependent on that industry.

STATE OR TERRITORY	SUBJECT	AREA	COURSE DESCRIPTION
NT	SOSE	Place and Space	Interrelationships between human activity and environments result in particular patterns of land and resource use, and can cause environmental problems, e.g. overgrazing and erosion; overuse of fossil fuels and carbon dioxide emissions.
NT	SOSE	Natural systems	Explore the responses of people, plants and animals to changes in a natural system.
NT	SOSE	Environmental awareness and care	Evaluate the impact of innovations which may have negative and positive effects on the environment, e.g. the introduction of cane toads, refrigerators.
NT	SOSE	Place, Landforms and Features	Compare and contrast Indigenous and European land management strategies and their impact on place, landforms and features.
NT	SOSE	Life Roles	Analyse skills required for different organisations and types of work and identify personal transferable skills.
NT	SOSE	Life Roles	Investigate and discuss the impact and influence of technology on career paths and trends.
QLD	SOSE	Place and Space	Interrelationships between human activity and environments result in particular patterns of land and resource use, and can cause environmental problems.




STATE OR TERRITORY	SUBJECT	AREA	COURSE DESCRIPTION
QLD	SOSE	Culture and identity	Group identities are influenced by different factors, including family, communities, nationality, socioeconomic factors and religious beliefs.
SA	Society & Environment	Space, Place and Environment	(the student) analyses and reports on some factors affecting land use in natural environments and rural or urban areas, using examples from case studies.
SA	Society & Environment	Space, Place and Environment	(The student) explores the influence on change of diverse lobby groups (e.g. farmers' groups, mining companies, corporations such as retail giants, environmental groups), and analyses ways to work for environmental sustainability.
TAS	Society & History		Identify and discuss relationships between land use, climate and human activity in regions of Australia.
TAS	Society & History		Identify and describe an example of land use which demonstrates sustainable practices.
VIC	Humanities - Geography	Level 4 – Geographic Knowledge and Understanding	Identify and describe Australia's significant natural processes. Describe the reaction of people to these processes including the management of natural disasters. Compare the various ways humans have used and affected the Australian environment. Students recommend ways of protecting environmentally sensitive areas in a sustainable way.





STATE OR TERRITORY	SUBJECT	AREA	COURSE DESCRIPTION
VIC	Humanities - Geography	Level 5 – Geographic Knowledge and Understanding	(Students) demonstrate understanding of environmental issues based on inquiry and propose ways of ensuring the sustainability of resources.
WA	Society and Environment	Investigation, communication & participation	Students investigate the ways in which people interact with each other and with their environments in order to make informed decisions and implement relevant social action.
WA	Society and Environment	Place and Space	Students understand that the interaction people have with places in which they live is shaped by the location, patterns and processes associated with natural and built features.
WA	Society and Environment	Natural and Social Systems	Students understand that systems provide order to the dynamic natural and social relationships occurring in the world.
NSW	Geography		Students of Australian Geography learn about the interaction of human and physical geography in a local context. They examine Australia's physical environments and communities and explore how they are changing and responding to change.

Relevant Videos





These videos are relevant to students studying Society, Environment, Geogrphah, Humanities and related subjects.





From Kalyeeda





<p>Pasture management Dur 1:34</p> 	<p>Summary</p> <p>Sustainable farming in The Kimberley and the different strategies producers can apply to ensure the regeneration of the environment.</p>	<p>Location</p> <p>Kalyeeda/Th e Land</p>
<p>The seasons Dur 1:25</p> 	<p>Summary</p> <p>The seasons in The Kimberley and their impact on the management of the station.</p>	<p>Location</p> <p>Kalyeeda/Th e Land</p>
<p>Farming techniques Dur 0:30</p> 	<p>Summary</p> <p>Learning from indigenous people how to better manage the land.</p>	<p>Location</p> <p>Kalyeeda/Th e Land</p>




<p>Working on the farm Dur 1:11</p> 	<p>Summary</p> <p>The people who work at the station and the variety of skills required.</p>	<p>Location</p> <p>Kalyeeda/The Calf</p>
<p>About Kalyeeda Dur 0:57</p> 	<p>Summary</p> <p>Background of the station and its importance for cattle production.</p>	<p>Location</p> <p>Kalyeeda/The Calf</p>
<p>Farming Communities Dur 0:34</p> 	<p>Summary</p> <p>Keeping up to date in farming techniques through industry groups and the community to ensure the station is effectively managed</p>	<p>Location</p> <p>Kalyeeda/The Homestead</p>
<p>Climate Variability Dur 1:39</p> 	<p>Summary</p> <p>The variability of the climate and its impact on breeding and production.</p>	<p>Location</p> <p>Kalyeeda/The Land</p>

From Iona



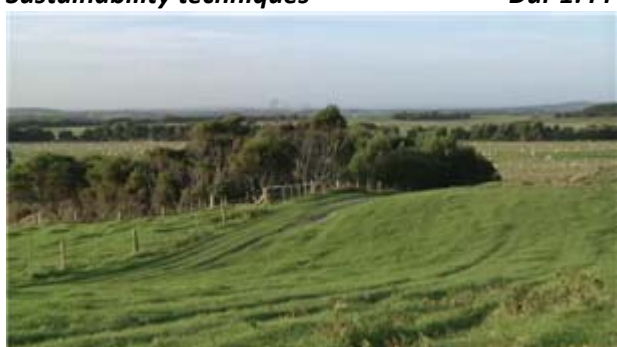

<p>Chemicals and the boom sprayer <i>Dur1:39</i></p> 	<p>Summary</p> <p>The importance of technology to farming in helping to manage crops more effectively and in conserving energy.</p>	<p>Location</p> <p>Iona/The Boom Sprayer</p>
<p>Soil Management <i>Dur1:20</i></p> 	<p>Summary</p> <p>The benefits of direct drilling for healthy soil structure and water preservation.</p>	<p>Location</p> <p>Iona/The Boom Sprayer</p>
<p>Protecting Crops <i>Dur1:32</i></p> 	<p>Summary</p> <p>The importance of herbicides in protecting pastures and crops from insects which may affect them during certain parts of the year.</p>	<p>Location</p> <p>Iona/The Boom Sprayer</p>
<p>Farming skills and technology <i>Dur0:48</i></p> 	<p>Summary</p> <p>The importance of maintaining farming equipment.</p>	<p>Location</p> <p>Iona/The Boom Sprayer</p>





<p>Farming progress through technology <i>Dur 1:33</i></p> 	<p>Summary</p> <p>The use of technology in machinery and communications to ensure the farm is managed as efficiently as possible.</p>	<p>Location</p> <p>Iona/The Boom Sprayer</p>
<p>Keeping up to date <i>Dur1:30</i></p> 	<p>Summary</p> <p>Sources of information on the farm such as community groups and the internet provide information on topics such as sustainable farming, livestock husbandry and personal health.</p>	<p>Location</p> <p>Iona/ The Homestead</p>
<p>About Iona <i>Dur 1:21</i></p> 	<p>Summary</p> <p>The diversity of the land and how it lends itself to the different types of agriculture done on the farm.</p>	<p>Location</p> <p>Iona/The Land & The Calf</p>
<p>Climate <i>Dur 1:30</i></p> 	<p>Summary</p> <p>The affect of climate change on the farm and its flow on effect to the productivity of the business.</p>	<p>Location</p> <p>Iona/The Sky</p>





<p>Challenges of drought <i>Dur 1:39</i></p> 	<p>Summary</p> <p>The affect droughts have on the land and the running of the farm.</p>	<p>Location</p> <p>Iona/The Sky</p>
<p>Sustainable pasture management <i>Dur 2:33</i></p> 	<p>Summary</p> <p>The importance of sustainable pasture management in meeting market demand, and preventing overgrazing and erosion.</p>	<p>Location</p> <p>Iona/The Sky & The Land</p>
<p>Crop and pasture management <i>Dur 1:34</i></p> 	<p>Summary</p> <p>The importance of sustainable farming through crop and pasture management.</p>	<p>Location</p> <p>Iona/The Land</p>
<p>Working with the environment <i>Dur 1:09</i></p> 	<p>Summary</p> <p>The advantages of working with the environment to be more sustainable.</p>	<p>Location</p> <p>Iona/The Land</p>





<p>Managing the farm <i>Dur 1:26</i></p> 	<p>Summary</p> <p>The importance of farm management. Adapting farm production to meet market demands.</p>	<p>Location</p> <p>Iona/The Land</p>
<p>Farming skills <i>Dur 1:08</i></p> 	<p>Summary</p> <p>The skills required to manage a farm.</p>	<p>Location</p> <p>Iona/The Land</p>
<p>Sustainable Pasture Management <i>Dur 2:33</i></p> 	<p>Summary</p> <p>The importance of sustainable pasture management in meeting market demand, and preventing overgrazing and erosion.</p>	<p>Location</p> <p>Iona/The Land</p>

From Malabar

<p><i>Impact of Climate Change</i> <i>Dur 2:03</i></p> 	<p>Summary</p> <p>Significant impact of climate change on farm production systems.</p>	<p>Location</p> <p>Malabar/The Sky</p>
<p><i>Environmental Management System</i> <i>Dur 0:43</i></p> 	<p>Summary</p> <p>Implementing an Environmental Management System (EMS) to help manage the farm and ensure its sustainability.</p>	<p>Location</p> <p>Malabar/The Land & The Sky</p>
<p><i>Sustainability techniques</i> <i>Dur 1:44</i></p> 	<p>Summary</p> <p>Importance of maintaining sustainability through shelter belts.</p>	<p>Location</p> <p>Malabar/The Land</p>
<p><i>Sustainable farming</i> <i>Dur1:51</i></p> 	<p>Summary</p> <p>Sustainable farming and the comparison of indigenous and modern farming techniques.</p>	<p>Location</p> <p>Malabar/The Land & The Sky</p>

<p>Skills and knowledge Dur1:31</p> 	<p>Summary</p> <p>The diverse skills and knowledge required for farmers and their continuing role in the community and in managing the environment.</p>	<p>Location</p> <p>Malabar/ The Homestead</p>
<p>Woolpress Dur 1:26</p> 	<p>Summary</p> <p>The use of technology in the shearing shed to increase production efficiency.</p>	<p>Location</p> <p>Malabar/The Shed</p>
<p>Sustainability and community Dur 1:12</p> 	<p>Summary</p> <p>Importance of sustainability - environmental, financial and human sustainability.</p>	<p>Location</p> <p>Malabar/The Sky & The Homestead</p>
<p>Pasture management Dur 1:59</p> 	<p>Summary</p> <p>Managing pasture through rotational grazing to avoid overgrazing and ensure soil nutrients are maintained.</p>	<p>Location</p> <p>Malabar/The Land</p>

<p>Improving through communication <i>Dur 1:32</i></p> 	<p>Summary</p> <p>Importance of information sharing through field days, publications and community discussion groups.</p>	<p>Location</p> <p>Malabar/ The Homestead</p>
<p>Cattle for the Region <i>Dur 2:13</i></p> 	<p>Summary</p> <p>The type of cattle suited to the environment and the affects of markets on breeding selection.</p>	<p>Location</p> <p>Malabar/The Cow</p>
<p>Protecting Animals <i>Dur 1:20</i></p> 	<p>Summary</p> <p>The importance of regular drenching to protect animals from worms and pests.</p>	<p>Location</p> <p>Malabar/The Sheep</p>
<p>Land Management <i>Dur 1:09</i></p> 	<p>Summary</p> <p>The importance of weed management across shelter belts and wildlife channels. Minimising the use of chemicals through spot spraying selective herbicides.</p>	<p>Location</p> <p>Malabar/The Land</p>

<p>Responding to Consumers <i>Dur 1:37</i></p> 	<p>Summary</p> <p>The importance of environmental management and animal welfare in meeting consumer expectations and market demands.</p>	<p>Location</p> <p>Malabar/The Cow & The Sheep & The Land</p>
<p>About Malabar <i>Dur 1:22</i></p> 	<p>Summary</p> <p>The benefits and challenges of high rainfall; and how the markets influence stock ratios.</p>	<p>Location</p> <p>Malabar/The Land</p>
<p>Big Challenges <i>Dur 1:46</i></p> 	<p>Summary</p> <p>The challenges faced by farmers. The cost-price squeeze means farmers must continually increase productivity to remain financially viable</p>	<p>Location</p> <p>Malabar/ The Homestead</p>
<p>Renewing pastures <i>Dur 2:27</i></p> 	<p>Summary</p> <p>Pastures and their management are critical to the farm. On Malabar, a mixture of grasses and clovers form the pastures which help feed the livestock.</p>	<p>Location</p> <p>Malabar/The Land</p>

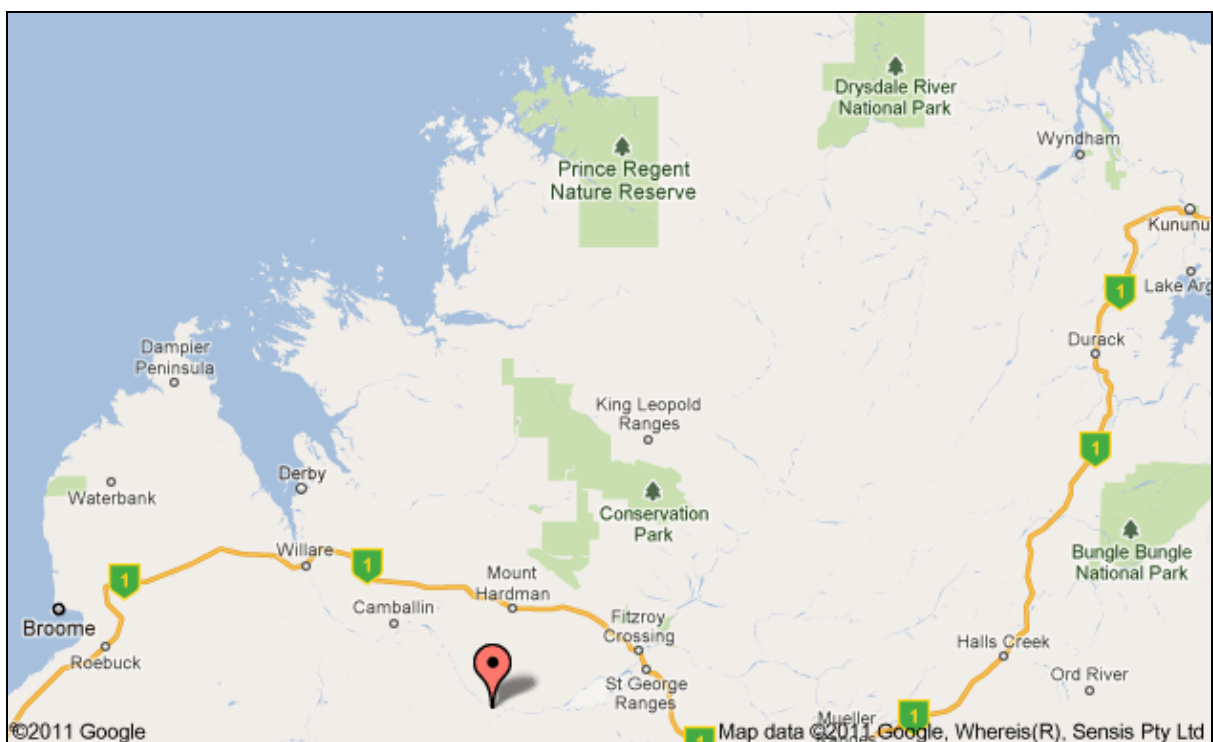
Soil Health	Dur 1:40	Summary	Location
		<p>The soils on the farm and their continued testing and management to ensure soil health and sustainability.</p>	<p>Malabar/The Land</p>

Background Information

Kalyeeda Station

The Kimberley, Western Australia

Kalyeeda is a 140,000 hectare cattle station in the Kimberley region of WA. It's 3 hours drive south of Derby, which is the nearest town. On Kalyeeda's northern boundary is the Fitzroy River and to the south is the edge of the Sandy Desert.



Source: Google Maps

(Approximate location of Kalyeeda station)

Iona

Yeoval, New South Wales

Iona is in central western NSW. It's around 1,100 hectares and is a mixed farming property that grows crops, as well as running beef cattle and sheep for wool and meat. The area is very diverse which lends itself well a variety of agricultural businesses.

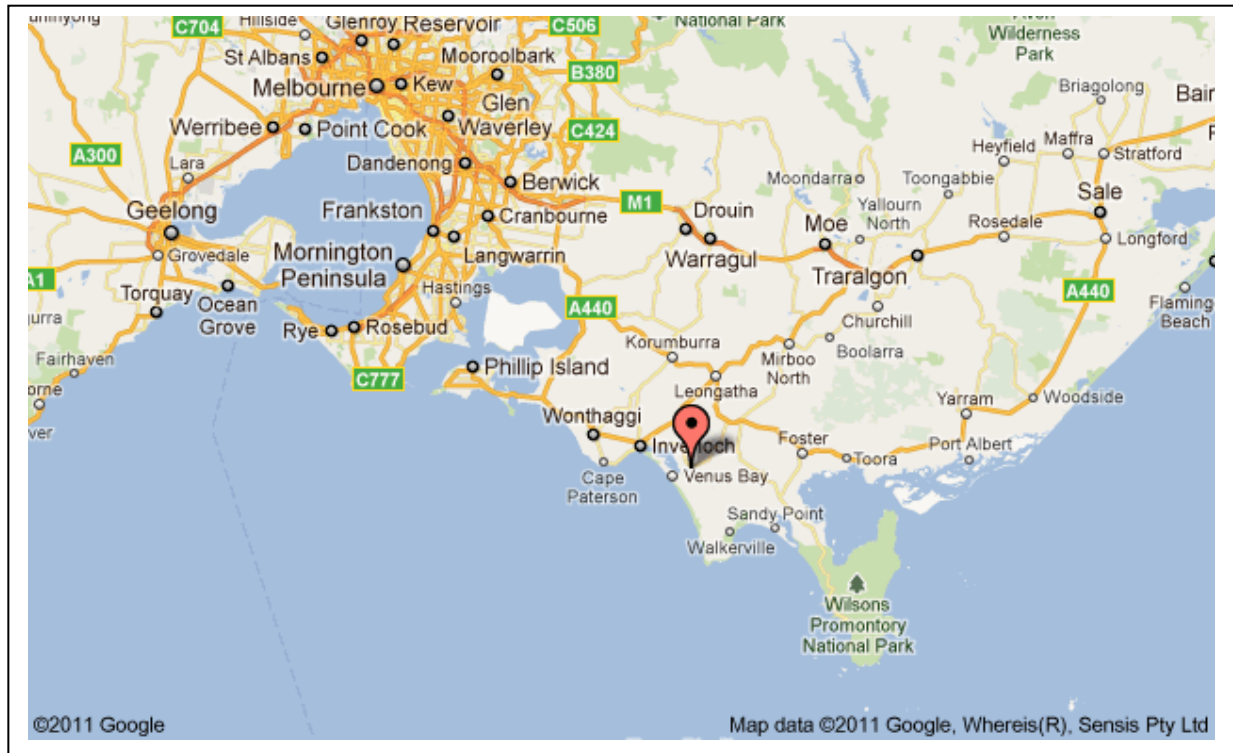


Source: Google Maps

Malabar

Gippsland

Malabar farm is a 640 hectare beef and sheep farm in South Gippsland Victoria. It's situated 2 hours drive south east of Melbourne and is 2 kilometres from the coast.



Source: Google Maps

Questions for students

The following questions may assist in guiding students through the module video content.

Describe the consequences for each farm, if overgrazing was to occur.

At Kalyeeda

At Iona

At Malabar

Has there been a major change to the environment on any of the three properties during the current owners' time on the farm? - a fire, a flood, a drought, climate change

At Kalyeeda

At Iona

At Malabar

Describe the effects of the change on the land, animals and business. How have farmers responded to this?

Describe an innovation used on any farm, which has had a positive effect on the environment.

Describe each farm's land management strategy.

Farms employ a lot of different types of people - How many different jobs are done on each farm?

How has technology changed the types of jobs that are done on each farm? Have there been any cases, for example, where technology has replaced a worker?

What factors do you think need to be taken into account by governments and the community, in order to make farming a sustainable industry?

Changing Australian communities

1. Visit the 3 farms and identify characteristics that contribute to the communities sense of identity (HINT: click on the houses)

Farm	Characteristics
Kalyeeda	
Iona	
Malabar	

2. Explore the farms and suggest factors causing change in these communities. Describe how each farm is responding to these factors.

Farm	Factors	Responses
Kalyeeda		
Iona		
Malabar		

