Australian Good Meat Education resources are developed by

MEAT & LIVESTOCK AUSTRALIA

9–10 | LESSON PLAN

This 'Animal welfare considerations' educational resource is provided under a Creative Commons Licence CC-BY-SA 4.0. For more information go to mla.com.au/creative-commons. © Meat & Livestock Australia.

Lesson 2

Animal welfare considerations

AUSTRALIAN CURRICULUM CONTENT



Analyse and make judgements on the ethical, secure and sustainable production and marketing of food and fibre enterprises. (ACTDEK044, AC9TDE10K04)

Analyse needs or opportunities for designing; develop design briefs; and investigate, analyse and select materials, systems, components, tools and equipment to create designed solutions. (ACTDEP048, AC9TDE10P01)

LESSON OBJECTIVE

Students will learn about animal welfare considerations in red meat production.

Document publish date 2022. A third party may hold copyright to some material presented in this manual, as indicated by specific attribution throughout. This licence excludes any material which is specifically attributed to another. You may be required to seek the third party's consent to use the material. You must make your own enquiries in this regard.

Australian Good Meat Education resources are developed by

MEAT & LIVESTOCK AUSTRALIA

Lesson 2

LESSON OVERVIEW

Activity 2.1	What is animal welfare?	30 mins
Activity 2.2	Who cares about animal welfare?	10–20 mins
Activity 2.3	Case study: Sheep industry, Numnuts	25 mins
Activity 2.4	Online learning task: Low stress stock handling	10 mins

CONTENTS

	Page
Australian Curriculum content	1
Contents	2
Resources and equipment	3
Lesson guide	4–5
Student resources	6–12
Answers	13–15

Resources and equipment

ACTIVITY 2.1 – What is animal welfare?

1. Animal wellbeing - Smithfield Cattle Co. (0.42).
2. Worksheet 2.1a – *What is animal welfare?*
3. Every interaction cattle have with people needs to be a positive one - Teys Condamine Feedlot (1.36).
4. Butcher's paper/poster paper, markers, recycled agricultural magazines/papers, scissors, textas, glue, etc. (Alternatively, computer access and design software).
5. MLA Consumer Sentiment Research 2021 (1.27).

ACTIVITY 2.2 – Who cares about animal welfare?

1. Worksheet 2.2a – *Who cares about animal welfare?*
2. Worksheet 2.2b – *Who cares about animal welfare?*
3. Coloured pencils.

ACTIVITY 2.3 – Case study: Sheep industry, Numnuts

1. Worksheet 2.3a – *Case study: Sheep industry, Numnuts.*
2. Numnuts® for Lamb Marking | NumOcaine® Pain Relief for Sheep (2.33).
3. Worksheet 2.3b – *Numnuts technology mind map.*
4. Computer/digital device access.
5. Pens, pencils.
6. Numnuts on track for 2019 release.
7. Numnuts pain relief for sheep officially launches in Armidale.

ACTIVITY 2.4 – Online learning task: Low stress stock handling

1. Computer/digital device access of Lesson 2 Online learning task.
2. Low Stress Stock Handling, Cattle in the Kimberleys (1.27).

ADDITIONAL READING/RESOURCES

- Humane treatment of animals
- Transporting livestock

Lesson guide

ACTIVITY 2.1 – What is animal welfare?

a. Facilitate a discussion about what the term 'welfare' means and what living things need in their daily life to ensure their welfare is being taken care of effectively. Record ideas in a central area.

b. View the video clip Animal wellbeing - Smithfield Cattle Co. (0.42) and discuss how producer, Barb Madden, addresses animal welfare in her production system. (Answers page 13)

c. View the video clip Every interaction cattle have with people needs to be a positive one - Teys Condamine Feedlot (1.36) and then read and highlight important components in the text Worksheet 2.1a – *What is animal welfare?*

d. As a class/in groups, respond to the following questions:
   - Who are some of the stakeholders in animal welfare?
   - Recall the '5 freedoms of animal welfare'. How could you represent each of these freedoms as a picture or series of images?

e. Allocate students into five groups and nominate each group a freedom topic. Provide students with butcher's paper/A3 paper, markers, agricultural magazines/ papers, scissors, glue, etc. Students design and create a visual representation of their freedom for display. (This task could alternatively be completed using digital technology, e.g. Canva).

ACTIVITY 2.2 – Who cares about animal welfare?

a. As a group, revise who the stakeholders in animal welfare are. (Who cares about the issue and has the responsibility to address the issue?)

b. Allocate students into groups and provide them with Worksheet 2.2a – W*ho cares about animal welfare?* Students label the stakeholders on the worksheet in the spaces provided.

c. Encourage students to discuss what the various stakeholders might be thinking about the issue of animal welfare and record a possible thought in each bubble.

d. Provide students with time to feedback their ideas to the class to compare thoughts. (Answers page 13)

e. Extension: Students draw their own concept cartoon on the Worksheet 2.2b – *Who cares about animal welfare?*, showing four different characters involved in animal welfare. Suggestions include: an animal livestock transporter, veterinarian, scientist etc. Students generate ideas in each of their character's thought bubbles.

***Lesson guide** continued next page*

Lesson guide *continued*

ACTIVITY 2.3 – Case study: Sheep industry, Numnuts.

a. Facilitate a discussion about tail docking and castration in lambs. Student's use Worksheet 2.3a - *Case Study: Sheep industry, Numnuts* to read and highlight why these operations are performed. Teachers should then use the answers on page 13 to discuss the traditional methods of tail docking and castration and the welfare issues related to this farm operation. Students should record their responses on their worksheet.

b. As a class, view the video clip Numnuts® for Lamb Marking | NumOcaine® Pain Relief for Sheep (2.33).

c. Allocate students into groups and provide them with Worksheet 2.3b – *Numnuts technology mind map.* (Answers page 14)

d. Students complete the mind map using information from the clip and the following secondary sources:

- Numnuts on track for 2019 release
- Numnuts pain relief for sheep officially launches in Armidale

e. Provide students with time to share their work with the class.

ACTIVITY 2.4 – Online learning task: Low stress stock handling

a. Students access Online learning task 2 and complete the provided activities focused on low stress stock handling. (Answers page 15).

Student resources

ACTIVITY 2.1 – What is animal welfare?

Worksheet 2.1a	What is animal welfare?

ACTIVITY 2.2 – Who cares about animal welfare?

Worksheet 2.2a	Who cares about animal welfare?
Worksheet 2.2b	Who cares about animal welfare?

ACTIVITY 2.3 – Case study: Sheep industry, Numnuts

Worksheet 2.3a	Case Study: Sheep Industry, Numnuts
Worksheet 2.3b	Numnuts technology mind map

ACTIVITY 2.4 – Online learning task: Low stress stock handling

Lesson 2 Online learning task	Low stress stock handling

Worksheet 2.1a

What is animal welfare?

Animal welfare refers to how an animal is managing with the conditions in which it lives. Farmers must provide animals with their basic needs, and caring for them appropriately is a legal requirement in Australia. There are many stakeholders involved in animal welfare.

The animal

Animals deserve to live a content, stress-free life, and their welfare does not just apply on the farm. Caring for animals is also important in feedlots, sale yards, processing facilities and when being transported around the country or overseas.



The RSPCA considers an animal's welfare in terms of five freedoms[1] (see references).

1. **Freedom from hunger and thirst:** by providing access to fresh water and a diet to maintain full health and vigour.
2. **Freedom from discomfort:** by providing an appropriate environment, including shelter and a comfortable resting area.
3. **Freedom from pain, injury or disease:** by prevention through rapid diagnosis and treatment.
4. **Freedom to express normal behaviour:** by providing sufficient space, proper facilities and company of the animal's own kind.
5. **Freedom from fear and distress:** by ensuring conditions and treatment which avoid mental suffering.

The industry

In Australia, the state and territory governments are responsible for their own animal welfare laws. The livestock industry has a 'Model Codes of Practice for the Welfare of Animals', which is a guide for people who are involved in the production, husbandry and handling of animals to follow.

The Australian red meat industry is strongly committed to ensuring the highest standards of animal welfare practices are maintained throughout the supply chain. The red meat industry is proactive in addressing animal health and welfare and supports farmers in producing red meat in ways that are ethical and considers the needs of all animals.

***Worksheet 2.1a** continued next page*

Worksheet 2.1a continued

Worksheet 2.1a

The industry is continually researching new ways to manage pests, prevent disease and look after livestock in a low stress way. The industry creates programs and checklists for producers to follow to ensure that they are educated about how to care for their animals in the best way possible.

The Australian Animal Welfare Standards and Guidelines cover producers' responsibilities and set out animals' needs in relation to:

- feed and water
- risk management in extreme weather
- natural disasters
- injury and predation
- facilities and equipment
- handling and management/husbandry
- breeding management, and
- humane killing[2] (see references).





The producer

A producer's livelihood is dependent on the health of their stock. Farmers care about their animals' needs and are focused on their humane treatment. Animals that are distressed, injured or diseased, do not thrive, reproduce effectively and will not provide the economic returns to producers that they potentially could.

The consumer

Customers and consumers of red meat both in Australia and overseas need to be reassured that livestock are being cared for in an ethical way. The red meat industry is invested in working with the community to educate people about all areas of red meat production and demonstrate that they are continuously striving towards animal welfare improvements. Research into consumer perceptions is conducted to better understand the sentiments of Australian people and the concerns they have about the industry. The most recent research conducted in 2021 indicates that 2 in 3 Australians feel positive about the beef and lamb industry.

Watch more at: MLA Consumer Sentiment Research 2021

Worksheet 2.2a

Who cares about animal welfare?

a. Identify the stakeholders involved in animal welfare in the bubbles below.

b. Explain what each of the stakeholders might be thinking about the issue. It could be an issue of concern, an aspect of production they have completed, or recognition of a factor they are pleased to know about animal welfare in the red meat industry.

I am:

.....

I think about:

I am:

.....

I think about:

I am:

.....

I think about:

I am:

.....

I think about:



Worksheet 2.2a continued next page

Worksheet 2.2b continued

Worksheet 2.2b

a. Create your own concept cartoon. Think about other people that may be involved with the issue of animal welfare, e.g. animal transporters, veterinarians, scientists, etc. and draw an image of them in the spaces below.

b. Provide a thought from each of your new stakeholders about a view that they might hold.

I am:

.....

I think about:

I am:

.....

I think about:

I am:

.....

I think about:

I am:

.....

I think about:

Worksheet 2.3a

Case study: Sheep industry, Numnuts

Tail docking and castration are both important husbandry procedures of sheep.

Tail docking, where the tail is removed, is performed on sheep to reduce the incidence of blowfly strike (blowflies lay eggs that hatch into maggots causing disease) that may result from urine and faecal staining of the fleece around the perineum (area of skin in front/under the anus).



Castration is when the testicles are removed or destroyed in male sheep. Castration is important to prevent unwanted breeding, reduced aggression and improved meat quality.

Both these husbandry procedures are routine practices on most sheep farms in Australia, however, there are some animal welfare concerns that are associated with more traditional methods of tail docking and castration.

a. Describe the traditional methods of tail docking and castration.

b. Identify any animal welfare issues associated with tail docking and castration.

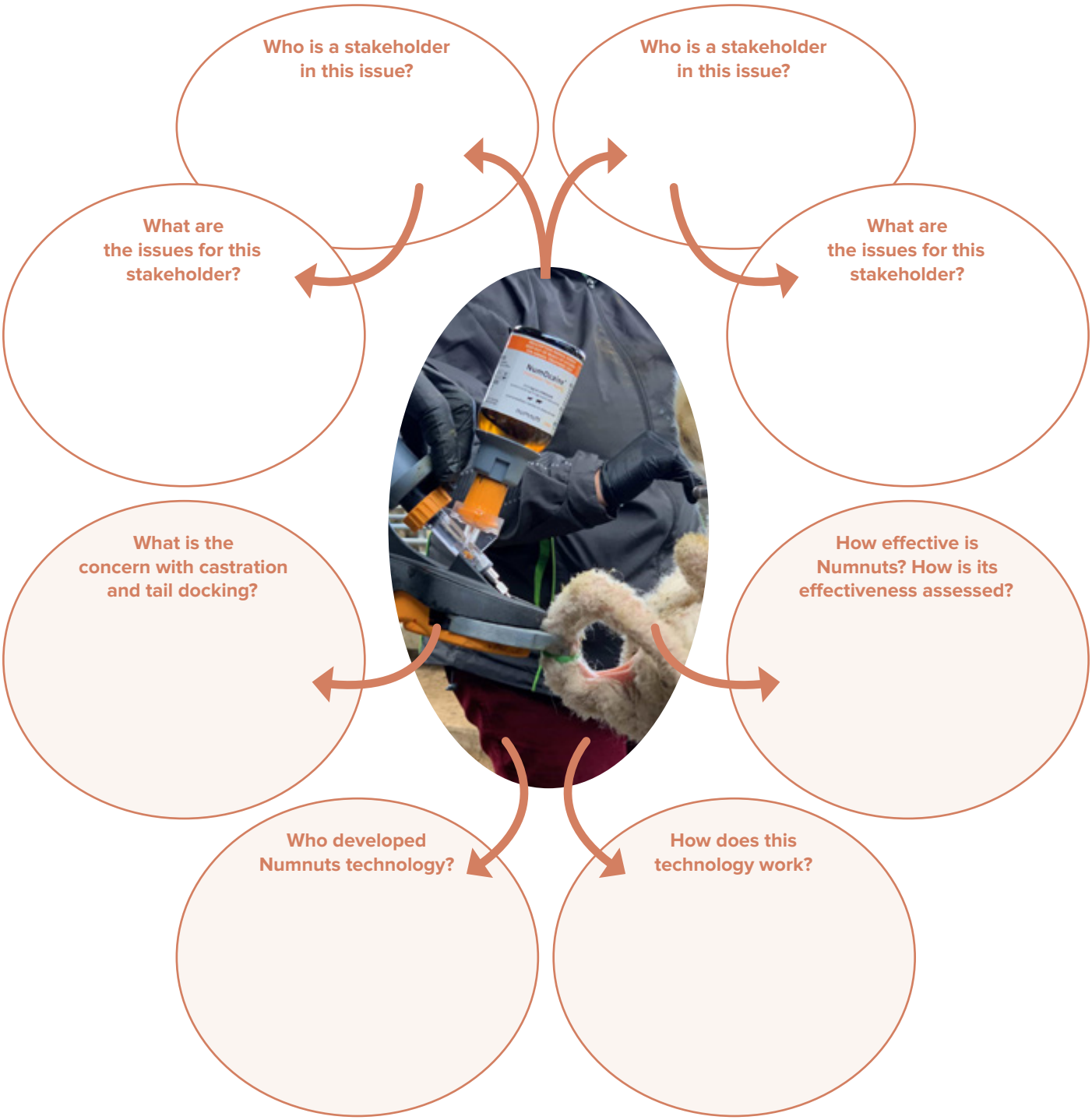
***Worksheet 2.3a** continued next page*

Worksheet 2.3b

Numnuts technology mind map

Complete the mind map using the information discussed in class and the video clip.
Access the following links to secondary sources to answer elements of the mind map.

Secondary source 1: Numnuts on track for 2019 release Secondary source 2: Numnuts pain relief for sheep officially launches in Armidale



Activity 2.1

What is animal welfare?

ACTIVITY 2.1 – What is animal welfare?

b. Barb Madden describes the welfare of her animals as follows: Day to day is calm, stress free, animals have ample food, shade, are with their mob and free from harm. Staff members are educated about the animals so that they know how to care for them.

Activity 2.2

Who cares about animal welfare?

ACTIVITY 2.2 - Who cares about animal welfare?

c. Answers will vary, suggestions include:

Animals: "What is this vaccination protecting me from?"
Producer: "How will I provide my livestock with enough food and water during a drought?"
Chef: "How can I ensure the meat I am cooking has come from an animal that was stress free and treated well?" and
Consumer: "I wonder if this meat comes from an animal that was treated kindly?"

Activity 2.3

Case study: Sheep industry, Numnuts

ACTIVITY 2.3 - Case study: Sheep industry, Numnuts

a. Traditionally, sheep have been castrated using lamb-marking rings or a lamb-marking knife. Of these two methods, lamb-marking rings are preferred, and are used by approximately 90% of Australian sheep producers to castrate lambs. Lamb marking knives used to be widespread for tail docking. The best method of docking lambs is to use a gas-heated tail-docking knife or lamb-marking rings, rather than the lamb-marking knife.

b. Animal welfare issues to be aware of include: pain, stress, and risk of disease (tetanus).

ACTIVITY 2.3 continued next page

ACTIVITY 2.3 continued

Activity 2.3

Worksheet 2.3b - Numnuts technology mind map

Who is a stakeholder in this issue?

Lambs

Who is a stakeholder in this issue?

Farmers

What are the issues for this stakeholder?

Pain at site of docking/ castration. Injectable pain relief needs to be effectively targeted - at the site of pain.

What are the issues for this stakeholder?

Delivering pain relief in a manner that is safe, quick, easy and affordable.



What is the concern with castration and tail docking?

Pain is experienced by the animal during the necessary procedures of tail docking and castration.

How effective is Numnuts? How is its effectiveness assessed?

Very effective. During farm testing, observational data was collected and indicated that lambs recover more quickly than without pain relief.

Who developed Numnuts technology?

4C Design (Scotland); Meat & Livestock Australia (MLA); and, Australia Wool Innovation, validated by the CSIRO.

How does this technology work?

When the button is compressed, an applicator applies a rubber ring to the tail or testes. As the button is pressed further, an injector dispenses NumOcaine anaesthetic to the tail or testes.

Activity 2.4

Online learning task: Low stress stock handling

Advantages and disadvantages of low stress stock handling.

	Advantages	Disadvantages
Cattle	Lower stress means that cattle have: • Greater growth rates • Better health • More successful reproduction	Nil. (Teacher to facilitate a class discussion about whether there are any disadvantages to encourage critical thinking).
Farmers	Easier animal handling means less stress on the farmers. This is because cattle are much easier to handle when they are comfortable and relaxed. Animals will be less stressed when transported off farm, therefore, less impact on meat quality and greater financial returns.	Takes time to teach cattle to follow horses/move them to where they want them to go. Education and training is required in the process. Need well-designed infrastructure to accommodate the animals.

4. Various answers.
5. **Freedom 4.** Freedom to express normal behaviour: by providing sufficient space and more natural movement of stock, ie. letting them move as a mob.
   Freedom 5. Freedom from fear and distress: by reducing stress in cattle and by "helping them to do what you want them to do, rather than controlling them" and letting them move with the mob.