

Sheep Showing and the Stage 5 Agriculture Syllabus

Students will develop:	Stage 5 Outcomes	Sheep Preparation and Showing provides the following:-
<p>1. knowledge and understanding of agriculture as a dynamic and interactive system that uses plants and animals to produce food, fibre and other derivatives</p>	<p>5.1.1 explains why identified plant species and animal breeds have been used in agricultural enterprises and developed for the Australian environment and/or markets</p>	<p>Students have the opportunity to examine the fleece/ carcase traits of the sheep they have raised and shown. They can look and compare with other animals of the same and different breeds both at the show and in the show results for same animals. They can identify breed trends in breeding for phenotype to meet market criteria. They can observe how breeds best fit or are aiming to breed livestock that will fulfil these criteria. They can examine pests and diseases and environmental impacts that have affected their sheep. They see the impacts of heat resistance if their sheep reduce feed consumption during warmer days, but they also appreciate the wool auction penalty on bales that contain vegetative matter and how deleterious traits in the breeds impact on how a sheep products meet consumer expectations with regards wool and sheep meat.</p>
	<p>5.1.2 explains the interactions within and between agricultural enterprises and systems</p>	<p>Students are able to examine firsthand the interactions between the plant, animal, soil and management subsystems. They observe how sheep can impact soils and their structure, but also how sheep can add nutrients to soil through their faeces. They observe how plants contribute to weight gain in their sheep and also observe that sheep grazing benefit plants by the nutrients applied to the soil and the cropping of grass that promotes grasses reshooting at multiple growth nodes. Students have the opportunity to observe cause and effect between the successful</p>



		management of the soil, plant and animal subsystems and how this can impact on the farms overall productivity and therefore be selected as representative of best practice when judged amongst its peers in the Sheep industry by attending shows. For example, when students assist in daily feeding they are able to quantitatively measure body weight; fleece weights, fibre diameter and feed conversion ratios then measure these against industry standards.
2. knowledge and understanding of the local and global interaction of agriculture with Australia's economy, culture and society	5.2.1 explains the interactions within and between the agricultural sector and Australia's economy, culture and society	Students learn how the sheep industry in Australia is the second largest exporter of wool in the world (ref National Farmers Federation) and how their participation at a world class event such as the Sydney Royal Easter Show is where students examine excellence through competition and how Australian sheep have, and continue to, strive to meet global demand and market expectations.
3. knowledge of and skills in the effective and responsible production and marketing of agricultural products	5.3.2 investigates and applies responsible marketing principles and processes	Students are able to examine auction processes through their participation in the Sydney Royal Easter Show. Students more fully appreciate the supply and demand concept and how those animals which best meet market criteria are awarded more competitive pricing in the market place as a result of attending the Sydney Royal Easter Show.
	5.3.3 explains and evaluates the impact of management decisions on plant production enterprises	Students are able to examine the feedstuffs fed to sheep. They are able to examine their feed components as well as how these components are affected by both mechanical cultivation, fertiliser application and herbicide use. The management applications affect the protein and energy content of the feed in addition to the overall yield per hectare which thereby impact on the feed conversion (\$/ha). The overall yield of the sheep relies



		<p>on the price and quality of the products going into it. Students have the opportunity to learn from industry representatives and discuss ideas whilst at the Sydney Royal Easter Show.</p>
<p>4. an understanding of sustainable and ethical practices that support productive and profitable agriculture</p>	<p>5.3.4 explains and evaluates the impact of management decisions on animal production enterprises</p>	<p>Students are able to gain firsthand knowledge and experience of the management processes that affect sheep. They are able to evaluate feed conversion based on various feedstuffs fed in the sheep ration diet. They examine how preventative measures such as probiotics additives can assist feed conversion and how best practice in disease prevention through vaccinations and drenches etc. promotes optimum growth and overall productivity. By preparing sheep for a market deadline (attending the Sydney Royal Easter Show) students understand the concept of preparation for a show/sale window and how their management processes will assist or hinder the stock being market ready at the appointed show date.</p>
	<p>5.4.1 evaluates the impact of past and current agricultural practices on agricultural sustainability</p>	<p>Students look at the previous industry use of unevaluated feed stuffs, the lack of market criteria available to farmers and how the lack of knowledge in these areas had impacted on the economic sustainability of sheep enterprises... Students also explore how Sydney Royal Easter Show demands livestock shearing dates and how marked and shorn sheep bounce back gaining weight and how this leads to improved wool prices and carcase yield</p>
	<p>5.4.2 evaluates management practices in terms of profitability, technology, sustainability, social issues and ethics</p>	<p>Students examine the use of technology including the use of electronic tagging systems, how this has aided the lifelong traceability of stock. This in turn has yielded benefits in disease control, improvements in breeding systems by affording more accurate record keeping for the parents of the animal they have</p>



		at school and the genetic heritability of traits from both sire and dam. DNA sequencing has afforded the breeding of desirable genes and the culling of animals with less desirable genes that impact on sheep enterprise profitability. As students replicate behaviour of farmers who have adopted more sustainable practices such as topical skin applications of pesticides the farmer has also reduced the ethical and animal welfare implications of more invasive disease control such as mulesing.
	5.4.3 implements and justifies the application of animal welfare guidelines to agricultural practices	Students examine the implications of animal welfare guidelines, particularly in relation to the gentling of stock in preparation for attending the show ring at Sydney Royal Easter Show and how this process requires skills to minimise impacts on the animals and also prevents lost profitability to the overall sheep enterprise.
5. skills in problem-solving including investigating, collecting, analysing, interpreting and communicating information in	5.5.1 designs, undertakes, analyses and evaluates experiments and investigates problems in agricultural contexts	Students have the capacity to measure both quantitative outcomes with regards sheep height, weight, staple length, fibre diameter and fat coverage. Students can determine both limiting as well as beneficial criteria that affect their experiments. For example students can quantify weight variations based on disease or improved weight gain from protection from adverse weather conditions such as cold and wet natural environments



<p>agricultural contexts</p>	<p>5.5.2 collects and analyses agricultural data and communicates results using a range of technologies</p>	<p>In conducting feed conversion trials amongst a cohort of sheep, students can be assessed on their understanding through written, electronic and media presentation formats. The showing of sheep affords the opportunity for public speaking in sheep and Fleece judging competitions at the Sydney Royal Easter Show. Here students display the depth of knowledge of the criteria essential to carcass production and how live assessments can be used in making management decisions. Students develop their comparative analysis skills, critical thinking and assessment of agricultural production systems based on quantitative and qualitative criteria.</p>
<p>6. knowledge and skills in implementing Cooperative & safe work practices in agricultural contexts</p>	<p>5.6.1 applies Occupational Health and Safety requirements when using, maintaining and storing chemicals, tools and agricultural machinery</p>	<p>Students have the opportunity to reinforce and behaviour around livestock through experiential learning opportunities. Students develop their forward thinking skills to offset potential accidents in a work environment as well as use displaying safe operating procedures that are compliant with handling the chemicals and tools involved in sheep husbandry.</p>
	<p>5.6.2 performs plant and animal management practices safely and in cooperation with others</p>	<p>Students are required to develop effective team building skills. Gentling a sheep is an experiential opportunity for students to develop skills working as a team so that they achieve the outcome as safely and quickly/efficiently as possible.</p>

