TEACHING YOUNG JUDGES

Incorporating agricultural young judges and paraders competitions into your classroom

Handbook for Teacher
AGRICULTURAL SHOWS AUSTRALIA

ASA AGRICULTURAL SHOWS AUSTRALIA

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Introduction

Participating in young judges and paraders competitions with your students can cover several curriculum areas supporting a broad range of units of work.

The National Agricultural Shows Australia (ASA) Young Judges and Paraders Championships are a series of Competitions that provide education and experience for young people with an interest in a career or hobby in agriculture through judging and handling.

Young judging and parading competitions and training programs provides young people with the opportunity to develop lifelong skills in visually assessing and handling agricultural commodities, plus public speaking and networking skills through the Competition process.

Young Judges and Paraders develop a better understanding of - and make a valuable contribution to- agricultural industries.

Judging is a skill that incorporates the visual assessment of agricultural products and public speaking. Agricultural producers, breeders, feeders and buyers all judge and evaluate livestock and commodities for their potential as either breeding or market stock. Through the Young Judges competition, young people will learn to consider the production purpose of the animal or commodity, and how different form and function will contribute to increased productivity. In Australia, examples of different livestock purpose includes wool production, meat production, milk production, egg production or breeding progeny.

Parading is a skill in preparing, presenting and handling livestock. Livestock producers, breeders, feeders and buyers will visually assess livestock prior to purchase or service. Young people will learn skills to showcase and handle livestock to display the best characteristics for the market to a judging ring or potential buyer. In Australia, examples of different presenting requirements includes bull sales, fairy cow judging, working horse performances, progeny sales, etc.

Students start their judging at local competitions, progress to Group group/sub chamber finals and then to the State finals at the State Royal Show. Winners from each State then can progress to the National Finals. The National ASA Young Judges and Paraders Championships rotate around the Royal Shows held in each state in Australia.

Agricultural Shows across Australia host young judging or parading competitions nearly every weekend of the year. A school excursion to a local show offers a range of benefits to both students and the local community. Specific to judging and parading competitions, local shows offer students a friendly, encouraging environment in which to start their agricultural career. There are often a number of competitions being held at the one location on the same day for students to focus in on their own interests, and there is the opportunity to progress to a higher level in the same competition category. Most shows often host their competitions in a relaxed environment to encourage participation, support first-time participants and give advice and instruction during the competition.

To get your students started, contact your local Show Society to see if they conduct Young Judges or Paraders Competitions. When offering these competitions to your students, consider the agricultural sectors (and relevant competitions) that:

1. Suit your school program
2. Suit your students interests, and
3. Are relevant to your local district.

This handbook will support teachers gain an understanding of the nine competitions offered from a local through to National championship level of competition. It should be used as a guide to assist teachers in incorporating young judges and paraders competitions into their classroom and used as a tool for teaching about Australian agriculture.

Using the Competition for Learning

Participating in young judges and paraders competitions with your students can cover several curriculum areas supporting a broad range of units of work.

Curriculum Links - National

Year 7

- Interactions between organisms, including the effects of human activities can be represented by food chains and food webs (ACSSU112)
- People use science understanding and skills in their occupations and these have influenced the development of practices in areas of human activity (ACSHE121)
- Solutions to contemporary issues that are found using science and technology, may impact on other areas of society and may involve ethical considerations (ACSHE120)
- Measure and control variables, select equipment appropriate to the task and collect data with accuracy (ACSIS126)
- Communicate ideas, findings and evidence based solutions to problems using scientific language, and representations, using digital technologies as appropriate (ACSIS133)

Year 8

- Solutions to contemporary issues that are found using science and technology, may impact on other areas of society and may involve ethical considerations (ACSHE135)
- People use science understanding and skills in their occupations and these have influenced the development of practices in areas of human activity (ACSHE136)

Year 9

- Multi-cellular organisms rely on coordinated and interdependent internal systems to respond to changes to their environment (ACSSU175)
- Advances in scientific understanding often rely on technological advances and are often linked to scientific discoveries (ACSHE158)
- People use scientific knowledge to evaluate whether they accept claims, explanations or predictions, and advances in science can affect people's lives, including generating new career opportunities (ACSHE160)
- Select and use appropriate equipment, including digital technologies, to collect and record data systematically and accurately (ACSIS166)
- Analyse patterns and trends in data, including describing relationships between variables and identifying inconsistencies (ACSIS169)

Year 10

- Transmission of heritable characteristics from one generation to the next involves DNA and genes (ACSSU184)
- The theory of evolution by natural selection explains the diversity of living things and is supported by a range of scientific evidence (ACSSU185)
- People use scientific knowledge to evaluate whether they accept claims, explanations or predictions, and advances in science can affect people's lives, including generating new career opportunities (ACSHE194)
- Values and needs of contemporary society can influence the focus of scientific research (ACSHE230)
- Select and use appropriate equipment, including digital technologies, to collect and record data systematically and accurately (ACSIS200)
- Communicate scientific ideas and information for a particular purpose, including constructing evidence-based arguments and using appropriate scientific language, conventions and representations (ACSIS208)

General Rules and Regulations

Most Young Judges and Paraders Competitions at Shows across Australia follow similar basic rules and regulations to those listed below. Please check before entering each competition, to ensure you understand the results that will impact your students.

- Competitors must be fifteen (15) and under twenty-five (25) years of age on first (1st) May in the year of the Competition. Competitors under the age of eighteen (18) must be accompanied by a chaperone.
- The Computer Scoring Program and the Hormel Slide often used for calculation of the points and placings.
- At no time during the competition during the competition should a Competitor talk with the Judge unless directed to do so by the Steward.
- Competitors may be eliminated from the competition if the Judge or Steward considers they are receiving outside assistance including the use of unauthorised devices.

Use of Animals

- Animals to be displayed or paraded one, two, three, four (1, 2, 3, 4) in order. Poultry should be exhibited in cages, pigs are to be displayed together in a pen.
- Led animals are often lined up head to tail, then to be lined up side-by-side for young judges to inspect.

Use of Judging Cards

- Judging Cards are simple in design. All that is required by Competitors is to place animals in order one, two, three, four (1, 2, 3, 4).
- The Computer Scoring Program and Hormel Slide show the degree of penalty (splits) as related to the degree of difference between animal placings and the Competitor is scored accordingly.
- The Oral Section Guideline may be retained by the Competitor. It is designed to ensure Competitors use comparative details in their Oral description of the Class.
- The Work Sheet is to note the features of each animal and the reason it was placed in its position.

Competition Timing

To maintain the interest of Competitors, the animals and the spectators competitions are typically completed in approximately one and a half (1½) hours. The timing differ per competition, however are roughly as follows:

- Visual Judging: Eight to Ten minutes per class
- Oral Judging: Two minutes speaking. Points are deducted from the competitors score if they speak over their 2 min timeslot.

Dress Code

A competitor's appearance is also important and judges can deduct from scores for poor presentation. Competitors must wear a dust coat and closed in shoes. Appropriate dress includes clean pants or skirt, belt, button up shirt and tie/ scarf/pearl necklace. Blazers should be worn except when handling sheep and a hat may be worn outside. Attire should be clean and tidy.

Health and Safety – Biosecurity and Safety with Animals

Under Section 26 of the Act, every school using animals must hold a current, completed Animal Research Authority to use animals for research or teaching purposes.

Responsibility Structure:

School Sectors

The state body or department that governs the school system is responsible for:

- issuing to each school an annual Animal Research Authority (Schools)
- ensuring that grievance procedures are in place to resolve concerns by members of the SACEC or teachers who are concerned about SACEC decisions
- providing adequate resources to enable the SACEC to do its job and to enable schools to provide appropriate standards of care for animals in their charge.

The School

Once the school has a current, completed Animal Research Authority it then has the responsibility to ensure the provision of:

- adequate resources and facilities for the appropriate care and welfare of the animals
- adequate security to ensure the safety of the animals, including during weekends and school holidays
- a plan for handling emergency situations, including bushfire, flood, drought and vandalism, based on a current risk assessment related to the animals in the school's care
- a procedure that is consistent with the SACEC grievance procedures to resolve any grievances relating to the care and use of animals in schools.

The Principal

The principal is responsible for:

- ensuring compliance with all relevant legislation and the advice, standards and guidelines provided on the Animals in schools website
- ensuring that all relevant documentation under the Act is maintained and available for inspection by duly authorised people
- appointing an Animal Welfare Liaison Officer (AWLO). In primary schools, the principal is the AWLO
- ensuring that adequate resources are provided to maintain in good repair the facilities for handling and holding animals and to ensure that the needs of animals can be met
- ensuring that the SACEC is advised when animal-related incidents trigger the reporting provisions under the serious incidents policy. More information is available in Responding to incidents
- resolving grievances regarding the use of animals in his or her school.

The Student

Students are required to treat animals with respect and consider their welfare at all times. Students should be given opportunities to exercise responsible care and use of animals. Students should:

- care for and use animals in accordance with instructions from responsible teachers
- obtain a written undertaking from the parent or caregiver that the animal will be adequately cared for if the student takes the animal home
- comply with legislation relating to the care and use of animals for scientific purposes
- actively consider ethical and community values and expectations as well as legislative requirements for the care and use of animals.

The Animal Welfare Liaison Officer

For each school there is to be an Animal Welfare Liaison Officer (AWLO). The AWLO is to be the principal of the school in a primary school. The AWLO in a secondary school is to be appointed for the school by the principal. The duties of the AWLO include:

- promoting awareness of the requirements of the Animal Research Act, other relevant legislation and the advice, standards and guidelines provided on the Animals in schools website
- monitoring school programs to ensure that activities that use animals have SACEC approval
- monitoring animal use at the school to ensure compliance with the guidelines or the terms of SACEC approval
- ensuring that the school maintains appropriate records relating to the use of animals.
- liaising with the SACEC, other teachers approved by the principal to use animals in the school, and the principal (in secondary schools)
- making submissions on behalf of teachers to the SACEC for approval to conduct activities outside the guidelines
- promoting, among teachers and students involved in the use of animals, discussion of the ethical issues of using animals and the evolving community expectations about the use of animals in research and teaching.

The Teacher

- The teacher is responsible under the Act for the decision to use animals to achieve educational objectives. When animals are used, the teacher is always responsible for the care and use of the animals by:
- ensuring that the care and use of animals are in accordance with all relevant legislation and the advice, standards and guidelines provided on the Animals in schools website
- having an appropriate depth of understanding of the physical, behavioural and social needs of any species used
- instructing students in their legal responsibilities and providing them with opportunities to explore the ethical and social issues involved in the use of animals
- providing instruction and ensuring students have the appropriate level of competency to perform approved activities
- identifying and incorporating methods which may replace, reduce or refine the use of animals in schools
- obtaining written approval from the SACEC prior to commencement for any activities using animals for which approval is required. Application forms can be downloaded from Application forms
- maintaining appropriate records as required by the Code and the AWLO. More information is available in Record keeping
- carrying out close and competent supervision of students when they are engaged in tasks
- ensuring that parents have provided an appropriate written undertaking to care adequately for any animals that students may take home
- ensuring that appropriate monitoring of the animals occurs at all times (including during weekends and holidays)
- taking immediate steps to alleviate any pain, distress or illness in any animal
- disposing of animals appropriately.

For more information on your responsibilities, contact your relevant State education department.

Judging Process – General Tips

Judging How To

The purpose of an agricultural commodity is important to consider when judging. It is very important because it determines what the commodity has been grown or produced for. In Australia, examples include beef cattle are produced for food (beef), laying hens are raised for laying eggs, fruits and vegetables are grown food, sheep are grown for food, fibre or sometimes both. However, to ensure we have a secure food source in the future, productively also includes the ability of the animal to breed and produce many, healthy progeny. So, when judging livestock that would be used to breed, the emphasis is placed on both high quality production (for example, muscularity in beef cattle) and characteristics which effect breeding and productivity (for example, good udders in merino or meat ewes).

Start your Judging

- Take notes on each animals strengths and weaknesses.
- Determine the class purpose (carcase only or breeding and carcase)
- Are all the animals the same breed?
- Are all the animals the same sex?
- Are all animals the same age?
- Compare the frame size between all animals in the class
- If it's a class of females are there any females that are proven breeders (pregnant or offspring at foot)?

For each animal:

- Check head (check the eyes, nostrils and bite, then the poll or horns and ears), neck, brisket, shoulders, front legs and feet.
- Check underside of the animal including udders in females and scrotum and sheath in males, followed by back legs and feet.
- Check the pin bones and hips, then the topline and back to the shoulders and neck.
- View the animal from the side, from the front, and from behind.
- Watch the animal track looking for athleticism, under stepping or any signs of pain or stiffness.
- Conduct a visual and manual assessment of carcass concentrating on evenness and amount of fat cover and volume of muscle
- Write placings on judging card

Young Judges Speech – General Tips

The Oral Section of the Young Judges Competitions is an opportunity for young people to demonstrate their familiarity to agri-food production, their understanding of the competition-specific industry plus their confidence in presenting their ideas to crowds. Judging is objective, so an important judging skill is how clearly a young judge can express their decision and how they validate it.

Out of 50 points, 15 points are allocated each for accuracy of observation and comparison between exhibits and 10 points are allocated each for dress and speaking ability. The judge will determine the value of the justifications and presentation throughout the speech.

Judging Criteria

- **Accuracy of observation**

  Young judges must ensure the characteristics and features being used in the speech are correct and accurate. Points are deducted for incorrect statements that do not match the class judged. Identify the strengths and weaknesses of the entire class then put them into a place order from first to fourth.

- **Ability to compare relevant characteristics**

  Successful young judges present a detailed speech with clear thoughts on the exhibits judged. Competitors should compare the exhibits instead of describing them.

- **Speaking skills**

  An effective speech means the message reaches its audience. Young judges should speak clearly, concisely and in a conversational tone.

- **Presentation**

  Dress cleanly, according to the competition dress code.

Structure the Speech:

Competitors should use a structured speech:

- beginning with thanks to the show society hosting the event, to the judge assessing the competition, to any sponsors and to the exhibitors for providing the exhibits that were judged.
- then an introduction to the class that was judged and your placings (for example, I placed this class and list the numbered placings),
- then body of the speech is the direct comparison between placings, and
- finish with a conclusion (e.g. thank people for listening).

The speech has a maximum time of two minutes allowed per competitor, so aim for clarity and conciseness when justifying your placings.

The main goal of the speech is for competitors to explain to the judge why they have placed the animals in the order chosen by comparing the animals in pairs - first place with second, second against third, and finally third against fourth. Rather than describing each animal individually, competitors draw comparisons against the attributes of each pair. For example, "In the top pair, I placed animal numbered [eg four] ahead of [eg one] because ... [highlight the strengths before weaknesses, if any are present]." Remember to prioritise the most important reasons first and pick only two or three differences.

Be as descriptive and explanatory as possible. For example, use gender terms rather than "it" and go beyond saying explain one characteristic is "better" when comparing a pair by highlighting why the characteristic is superior.

Young Judges – Alpaca

Purpose and Benefits of the Competition

Young judging provides young people with the opportunity to develop lifelong skills in visually assessing alpacas and their fleeces as well as public speaking through comparing animals and fleeces against each other. These skills not only develop a better understanding of alpacas, they also enable young people to make a valuable contribution to the industry.

Stakeholders in the livestock industry invest time and money into continually improving their stock. The best way to do this is to evaluate – or judge - the characteristics of their animals and their products. In the case of alpacas, judging is divided into two classes to assess the animal's conformation (body) and its fleece. It's important to be able to identify and understand why certain traits have significant commercial value. Not only do these qualities have higher value at sale, but breeders will want to pass these desirable characteristics onto the next generation to improve the overall herd.

This is intended to be a general guide and there may be some variations in rules and expectations between shows. Individual shows will provide further advice and clarification.

Competition Structure (competition specific)

The animals are divided into four classes - four Huacaya alpacas and four Suri alpacas, then four fleeces each from the respective breeds. The alpacas will typically be the same sex and age. Entries will be numbered and include measurements.

Visual judging of the animals will take place first, followed by fleece judging. Competitors will have 10 minutes to assess each class and complete a visual judging card. These cards are simple, with competitors ranking the entries in order from first to fourth place.

Competitors will be judged on their interaction with the animals, handling of the fleeces and their chosen rankings, compared to the findings of an experienced judge. Competitors who score high enough in the visual section will go on to compete in the oral section where they choose one class for their presentation.

Before oral judging starts, each competitor will ask the Ring Steward to place the ribbons on first, second, third and fourth placings.

For the oral presentation, competitors are allocated two minutes to explain their reasoning behind how they've placed the entries in both classes. It's important to stick to the allocated time – for every 10 seconds a competitor goes over their time, they will be penalised one point.

Judging How To

There are two different breeds of alpaca in Australia, Huacaya and Suri. The Huacaya is most common and its fibre is crimpy and grows outwards from its body, similar to a Merino sheep. It is also identifiable by a fluffy bob or bonnet on its forehead and mutton chops on its cheeks. The Suri fleece is silky and soft, draping over the body. Alpacas originated in South America and so males are referred to as "machos" and females "hembras".

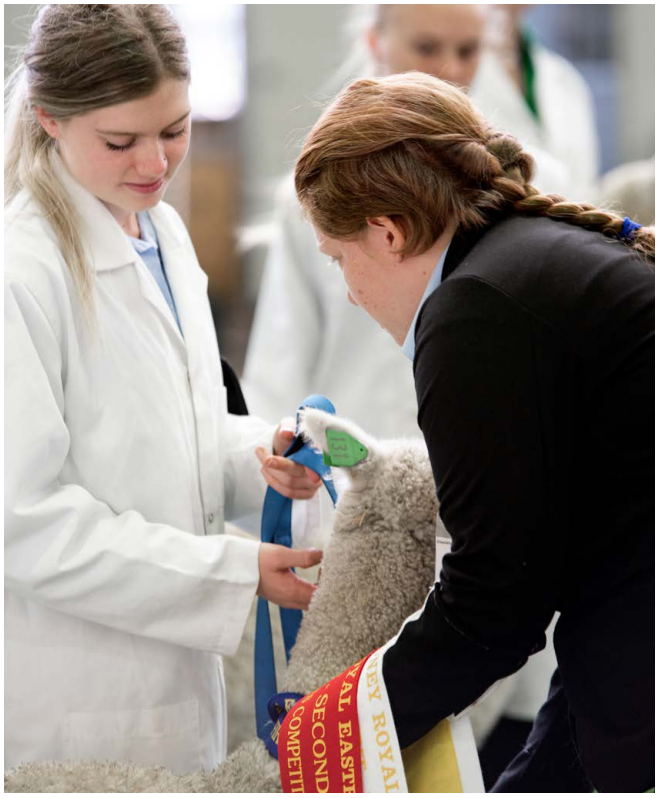
The competition is divided into four classes, a class for assessing the animals and a class for assessing their fleeces (separate classes for Huacaya or Suri). Alpacas are predominately kept for their fleece and breeders will give strong emphasis to the quality of an animal's fleece for its breeding program as a higher quality fleece fetches a higher price. This emphasis on the fleece is represented in the competition's point allocation.

The two breeds' body form is similar. However, there are distinct differences between the fleeces of Suri and Huacaya alpacas so ensure particular attention is given to learning what these are.

You will need to get to know the different parts of the animal and sections of the fleece and be able to name these correctly, as these will be the judging points. When considering the animals' form, the animal should carry its head high and have a smooth, even body. When it comes to the fleece, it is important to understand the difference between the two breeds' fleece. For example, when assessing the Huacaya fleece the density will determine the quantity of saleable fleece as well as preventing dirt and moisture penetration. This compares to the Suri fleece where the lustre and lock structure are considered most important.

Classroom Activity

1. Ask the class: what does market access look like in agriculture? Gather students' ideas on this in a brainstorm before showing them a short video on the alpaca industry and the products we use as consumers from the alpaca industry (fleece and meat).
2. Encourage groups to do their own research on sustainability in the alpaca industry in Australia using appropriate devices. They may use videos or websites that specialise in agriculture.
3. Bring the class back together and open a discussion about what practices could help support the expansion of the alpaca industry in Australia. Record the students' ideas and discuss the merits of each.



Young Judges – Beef Cattle

Purpose and Benefits of the Competition

The Young Beef Judges competition provides young people with the opportunity to develop lifelong skills in visually assessing beef cattle as well as public speaking through comparing animals against each other. These skills not only develop a better understanding of beef as an agricultural commodity, they also enable young people to make a valuable contribution to the industry.

When judging beef cattle, you must first consider the sex, age and production purpose of the animal. The most important purpose of beef cattle for agricultural production is to live a healthy life and grow large and muscular. Therefore the key traits to assess are overall structure and body composition – remember: form and function.

This is intended to be a general guide and there may be some variations in rules and expectations between shows. Individual shows will provide further advice and clarification.

Competition Structure (competition specific)

You may find Local Shows only have one class to judge, at Group Final level you could be expected to judge up to three classes. These may be classes of bulls, females or steers.

Animals in each class should be of a similar age, breed etc.

Where there is more than one class to be judged the oral class will be nominated by the overjudge before judging commences.

Each animal should be judged on its present showing and not on what it has done or might do.

Animals should be judged against the standard of what is considered a good beef type rather than one that pays strict attention to specific breed points.

1. The animals in the class will be identified by "breastplates" numbered 1,2,3,4 and will be paraded in that order. The "breastplate" may also contain the date of birth, weight and any other relevant information available for the animal.
2. The animals in the class will be paraded in order in a clockwise direction around the ring for 2 minutes. Position yourself in the centre of the ring where you can observe each animal as it walks. View each animal from the side and compare each animal with your mental image of the ideal shape and proportions of a beef animal. Make a mental note of your initial rough placings.
3. The animals in the class will then be lined up head to tail, for 2 minutes. This allows time for you to move around each animal and make a more detailed individual assessment of the animals.
4. The animals in the class will then be led around the ring again for a further 2 minutes. Position yourself where you can see the animals walking toward and away from you. Use this time to confirm any structural faults and assess the soundness of each animal. You will also be able to compare the muscularity, condition and growth of each animal.
5. The animals in the class will then be lined up side by side for a further 2 minutes. During this time move around so that you can observe the whole class from the front and the rear and make comparisons between the animals. At this stage you should have identified and memorised the faults and characteristics of each animal.
6. Reassess your initial thoughts about the placings of the animals. Make your final decision about the way you want to place the animals.
7. When assessing the nominated oral class you may take the opportunity to make some notes on the reason.
8. Remember to compare animals when describing exhibits. Industry and market reference when used correctly can give a competitor an advantage.

Judging How To

About the Species

Fat score

Fat score is used for live animal assessment of slaughter animals and body condition of breeding stock.

No breeding animal should be in score less than 2.5

Breeding animals in score 3.5-4.5 will provide optimum production and profitability.

Breeding animals that are too thin (←2.5) will have poor production, increased risk of mortality and poor reproduction.

Animals that are too fat (→5) will have good production but stocking rate will be compromised which has a direct impact on profitability.

No growing calves (i.e. weaners) should be less than score 2.5

Muscle score

Muscling is scored on a scale from A (very heavy) to E (very light). This scoring system can be increased to a 15 point scale by including pluses and minuses around each score (e.g. A+, A, A-... to ...E+, E, E-). Muscle score describes the shape of cattle and is the degree of thickness or convexity of an animal relative to its frame size, after adjustments have been made for fatness. Note that very fat (more than 18 mm at the P8 site) animals may look more muscular than they are. The more muscle in an animal the more profit.

Bulls: When judging bulls we should look for bulls that:-

Have adequate growth and length.

Have adequate frame size and body capacity - low frame score indicates early maturity and high frame score indicates later maturity [this relates to market suitability].

Are highly fertile and tightness of sheath - testicular size and shape can be an indicator of fertility.

Have free movement - structural problems can restrict movement.

Have good strong sound structure [structural traits are highly heritable therefore must be structurally sound]. Problems include straight prominent shoulders, post legs, straight pasterns, sickle hocks and feet problems. Have good muscle and fat composition - don't want extremes of muscling. Females: The main selection criteria to apply to females are:-

Fertility - The main function of a cow is to produce and feed a live calf each year. A highly fertile cow has a graceful feminine appearance, a clean face neck and throat, long smooth muscling, is long from hip to pins and is wide between the pins, has an angular shoulder and is triangular in appearance and is not broad and flat.

Milking ability - The udder should be strong and evenly attached, be of good capacity with even moderate sized teats. Heifers should show signs of potential udder development.

Body shape, size and capacity.

Steers: The main areas to look for when judging steers are:-

Muscle - muscularity can be assessed by looking and considering the expense cuts of meat found along the loin forearm, shoulder and muscle seams in the hind quarter.

Fatness - fat can be detected in the brisket, cod, flank and tail head. It should be noted that carcass fat is measured at 12-13 rib and the P8 Site.

Trade suitability - this is a combination of fat cover, weight and conformation. Each market requires a specific weight range and fat depth.

Structural soundness - less important than in bulls or females but may separate similar steers in the class.

The Terminology

In any judging it is important to use the correct terminology. The following terms may help:-

Bos indicus breeds - Brahman and Brahman derived breeds eg. Brangus, Braford, Santa Gertrudis, Drought Master.

British breeds - breeds that originated in Great Britain eg. Hereford, Angus, Shorthorn, Red Poll.

Bull - entire male

Calf - young from birth to about 18 months of age, either sex.

Cow - female after the birth of her first calf.

E.B.V. - estimated breeding values.

European [Euro] breeds - breeds that originated in Europe eg. Charolais, Limousin, Simmental.

Gestation - time from conception to birth [length of pregnancy].

Heifer - young female before she has her first calf.

Lactation - the process of milk production.

Steer - male, castrated when young.

Structure - the way the skeleton of the animal is made up. If the structure is correct the animal will be able to walk, feed and breed to their utmost ability.

Yearling - animal approximately 12 months of age

Weaner - animal approximately 7 – 12 months of age

Classroom Activity

Can eating beef be used to improve the nutrition and overall health of certain groups of people in society? Gather student's ideas in a class discussion before moving onto the group activity.

- In groups, design and develop a food product for a chosen social group, (for example, children under five, people aged over sixty, people with specific health challenges, etc) which addresses their individual needs and concerns. The product must contain beef and be deliverable over distance and time. The finished product must display:
- An understanding of the nutritional value of beef
- An understanding of their chosen group's needs
- An understanding of different preparation techniques

Each group must also create a reflection document containing information on their decisions and an evaluation of their product against a class-designed success criteria.

Talk about where beef fit into a healthy diet. Discuss the nutritional value of beef and how they contribute to a healthy diet and body

Young Judges – Dairy Cattle

Purpose and Benefits of the Competition

When judging dairy cows, it is important to remember their purpose: to have a long healthy life producing as much milk as possible. Therefore the key traits to assess are overall structure and udder development with udder conformation of the cow counting for close to half the score when judging.

Remaining factors focus on the longevity of the cow. She should have good "dairy strength", which can be assessed by her depth and capacity. In addition she should have correct and sound legs and a wide rump where the hip bone sits slightly above the pins.

This is intended to be a general guide and there may be some variations in rules and expectations between shows. Individual shows will provide further advice and clarification.

Competition Structure (competition specific)

Many local shows may not have the facilities [access to dairy cattle] to conduct a dairy cattle judging competition. It may be necessary to go straight to a Group Final to participate in this judging competition.

Where competitions are conducted one, two or three classes may be presented for judging, depending on availability of cattle. Each class should consist of a different breed.

Where there is more than one class to be judged the oral class will be nominated by the overjudge before judging commences.

Each animal should be judged on its present showing and not on what it has done or might do.

Animals should judged against the standard of what is considered a good dairy type rather than one that pays strict attention to specific breed points.

Judging How To

Cows: As the prime function of a dairy cow is milk production when judging a dairy cow we should be looking for one that has a well structured udder, is fertile [produces a calf each year] and can walk and feed herself.

Some indicators of these characteristics are

Udder, not fleshy, and well balanced

Fore-udder full and running forward

Rear-udder well up, protruding behind and not rounding abruptly at the top

Four teats of good uniform length and size, wide apart and squarely placed

Milk veins large and prominent

Hips wide apart, rather prominent and fine in the bone

Hind legs squarely placed when viewed from behind and not to cross or sweep when walking

Back straight from withers to setting of tail

Barrel deep broad and long denoting large capacity; ribs round in shape

Heifers: Heifers should show similar characteristics to cows except the udder will not show the development that could be expected to be seen in a cow.

The Terminology

In any judging it is important to use the correct terminology. The following terms may help:-

Barrel the area from the shoulder to the hip - ideally should be long and broad

Bull - entire male

Calf - young from birth to about 12 months of age, either sex.

Cow - female after the birth of her first calf.

Cull - to remove an animal from the herd.

Gestation - time from conception to birth [length of pregnancy].

Heart girth - measurement around the chest - should be deep and broad with well sprung ribs

Heifer - young female before she has her first calf.

Lactation - the process of milk production.

Structure - the way the skeleton of the animal is made up. If the structure is correct the animal will be able to walk, feed and breed to their utmost ability.

Udder [fore and rear] the milk producing mammary tissue
Judging a Class of Dairy Cattle

Classroom Activity

Organise for students to interview a real Australian Dairy farmer to learn from a primary information source about dairy farming. This could be conducted via a face-to-face method (Skype or Zoom meeting, class excursion to an dairy farm) or by email. It is incredibly valuable for students to gain firsthand experience to support their knowledge and understanding of animal husbandry practices in the dairy industry. Groups should design a survey or a list of interview questions for the farmer that will give them relevant information. They should ask questions that aim to fill their knowledge gaps.

Practical Activity

Design and map the distribution journey of an Australian dairy from the farm to the fridge using Minecraft Makecode as an interactive User Experience. With the JavaScript editor within Makecode, students are to program the sequence of key events and create the landscape around it.

This activity can be scaled up or down by adding less or more coding detail to each part of the journey. This gives students the opportunity to create an interactive experience for their peers, apply their research on the topic as well as demonstrate what they have learnt

Young Judges – Meat Breeds Sheep

Purpose and Benefits of the Competition

Young judging provides young people with the opportunity to develop lifelong skills in visually assessing meat breed sheep as well as public speaking through comparing animals against each other. These skills not only develop a better understanding of meat sheep, they also enable young people to make a valuable contribution to the industry.

Stakeholders in the livestock industry invest time and money into continually improving their stock. The best way to do this is to evaluate – or judge - the characteristics of their animals and their products.

When judging meat sheep it is important to remember their purpose: To live a long life producing lambs that will have a high meat yield at slaughter. This means that the breeding stock must carry a good carcase as well as be sound and healthy.

It's important to be able to identify and understand why certain traits have significant commercial value. Not only do these qualities have higher value at sale, but breeders will want to pass these desirable characteristics onto the next generation to improve the overall herd.

This is intended to be a general guide and there may be some variations in rules and expectations between shows. Individual shows will provide further advice and clarification.

Competition Structure (competition specific)

Normally competitors are asked to judge two classes of sheep but local shows may only have one class to judge.

The animals in a class should be all the same breed and sex and similar in age.

Where there are two classes, one normally comprises sheep of one short wool meat breed and all of the one sex, e.g. Poll Dorset rams, while the other class consists of sheep which are all of a long wool meat breed and, usually, all of the opposite sex to the other class, e.g. Border Leicester ewes.

Where there are two classes, the Oral Class will require competitors to speak on both classes.

Animals should be judged against the standard of what is considered a good meat sheep type rather than one that pays strict attention to specific breed points.

Competitors receive a score out of 50 for their placing in each class, a score out of 25 for their handling of the sheep in each class, and, if their scores earn them a place in the final phase of the competition, a score out of 50 for the Oral Class where competitors explain their placings.

Judging How To

About the Species

After you have become familiar with different meat sheep breeds production characteristics, the next step is to learn the names of the parts and carcass regions of the animal. It is important to know the different parts of the animals so that you use the correct terminology in your judging reasons.

Rams:

Structural soundness

When judging rams it is essential to give preference to ones that:

Are robust and masculine in appearance.

Have adequate height and length with balanced proportions.

Have adequate frame size and capacity for carrying meat.

Have strong, sound structure (structural traits are highly heritable) with an absence of structural problems of body (such as prominent shoulders) or of legs and feet (such as being too erect or down in the pasterns).

Have ample muscling and adequate fat cover.

Have straight, free movement.

Are highly fertile (size and shape of testes can be an indicator).

Ewes:

The main selection criteria to apply to female sheep are:

Must be feminine in appearance.

Have adequate height and length with balanced proportions.

Have adequate frame size and capacity for producing a lamb and for carrying meat.

Have strong, sound structure with an absence of problems.

Have ample muscling and adequate fat cover.

Have straight, free movement.

Have an udder with two even teats.

The Terminology

Breech: the rear of the hindquarters below the tail.

Brisket: the front of the chest.

British Breeds: breeds of sheep that originated in Great Britain.

Ewe: adult female sheep.

Hogget: a sheep with two adult teeth.

Lamb: a young sheep with milk (baby) teeth.

Long Wool Breeds (dual purpose): breeds of sheep that grow longer, strong wool, e.g. Lincoln and are also bred for meat.

Pastern: the short bone immediately above the hoof.

Poll: The top of the head / hornless.

Ram: entire adult male sheep.

Short Wool Breeds: breeds of sheep that grow shorter, strong wool, e.g. Suffolk and are bred for terminal sires.

Structure: the bone shape of the animal.

Twist: the area at the top of the inside of the hind legs.

Wether: male sheep castrated at an early age.

Withers: the point at which the shoulder blades come together where the neck joins the back.

Judging How To

When judging sheep, always look at each animal in the same way. To understand all aspects of the animal's structure and be able to compare one animal to the next, it is wise to stick to a routine examination. Carry out the same order of evaluation and repeat that sequence with every animal in the class. One pattern to use may be this:

The animal should be viewed from the side, from the front, and from behind. It should be allowed to walk out, and again be viewed from the side, from the front and from behind to confirm any suspicions of poor leg structure or tracking problems such as a stiff gait or under stepping.

Begin by standing back and viewing the whole class from a distance comparing each sheep with your mental image of the ideal shape and proportions of a meat breeds sheep. View them from various angles and make a note of your initial rough placings. First, stand back and assess the class from a distance, taking in the size of each animal, their shape and the structure of their legs. We want legs to be straight and pasterns to be high.

Then feel each individual animal. Open the mouth, the teeth must sit flat against the pad. Overshot/undershot jaws are a serious issue because the animal cannot eat properly. Check the eyes and ears to ensure they are clear

Now move quietly to the left shoulder of the first sheep in the line-up, and, remembering to be gentle when handling the sheep, check the eyes, nostrils and bite, then the poll (or horns) and ears. Some breeds can have black pigment (suffolks, white suffolks) others can't (Poll Dorsets, Border Leisters).

The primary objective of running your hand over an animal is to estimate the amount and uniformity of finish (fat cover) and to determine the quantity of the muscle in the loin and quarter, to determine the total muscle volume.

Only carry out the following steps with quiet, handled, restrained animals. Always be gentle with animals when manually handling and do not surprise them.

The way the animal stands can affect what you are able to feel. The animal should be standing square. If the animal is not freshly shorn, you must work your fingers through the wool to the skin level.

Place your flattened and outstretched hand over the top of both shoulders with the spine in the centre of your hand. Feel the width and smoothens along the top of the shoulders. Heavily muscled animals will be wide and full; lightly muscled animals will be narrow and angular.

To determine the amount of loin muscle, move your hand from the shoulder, down the topline (spine) to the last ribs. Lightly squeeze or cup your hand over the loin area to evaluate the depth and width of loin. The loin should be a wide, deep and long muscle, containing the 'expensive' cuts in the animal.

Next handle the animal to determine the width and length of rump and size and fleshing of hind legs using your hands to measure. The leg muscle should feel firm and heavily muscled and the muscle should extend down the thigh toward the hock.

Determine the finish (fat cover) over the animal's top line (spine), progressing back toward the top of the shoulder. Then determine the finish near the elbow and run your flattened hand toward the last rib.

Take note of the amount and uniformity of finish over the various areas of the animal's rib region. Fat feels soft, muscle feels firm and bone is hard.

Look at the animal's brisket and pin bones/tail area for signs of excess fat. Fat is important for carcass eating quality and tenderness. Inadequate fat cover results in tougher meat and excess fat provides wastage.

Next, feel the strength of the neck and its setting in the shoulders which should be tapered not square and without prominent withers. We want the shoulders to be smooth.

Feel the brisket which should protrude forward of the front legs.

Now check the spine is straight, smooth and level right to the tail and measure its length by spanning it.

Check the spring of the ribs, the width of the loin and the fleshing of the hindquarter. Feel fat cover over the ribs, we want some coverage but not too much.

Span the distance from hip to pin, check the tail is set high and ensure the twist is well fleshed. Assess the size of the loin by gently feeling it with your hands. The loin is the most valuable cut of meat, so bigger is much better! Also take the time to feel the backbone over the loin, if it is prominent, the animal is underweight feel the size of the twist, the second most valuable cut of meat resides here. Bigger is better!

Without unnecessarily disturbing the animal, check the testes or udder.

Examine the wool (unless the sheep are woolless) making sure it is even, has no black fibres and is growing on soft, loose, pink skin.

Check whether the sheep stands square, has healthy looking hooves, and pasterns that are neither too erect nor too angled back.

When the sheep are walked, note whether each sheep is moving smoothly and bringing each foot through straight.

Stand back and check that the parts (forequarters, barrel and hindquarters) are in balanced proportions.

Refer to the cattle section for main concepts and structural issues. These structural issues are transferrable to sheep.

Observing an animal's structure

1. Start with head (check the eyes, nostrils and bite, then the poll or horns and ears), neck, brisket, shoulders, front legs and feet.
2. Next view along the underside to the sheath, then testicles in males; or udder in females and the back legs and feet.
3. Follow your way up to the pin bones and hips, then the topline and back to the shoulders and neck.
4. Examine the wool (unless the sheep are wool-less) making sure it is even, has no black fibres and is growing on soft, loose, pink skin.

Fat score is used for live animal assessment of slaughter animals and body condition of breeding stock. In New South Wales, fat score has been adapted to assess the nutritional status of adult sheep. Scores are based on the tissue thickness (both fat and lean muscle tissue) at the GR site. The GR measurement site is 110mm from the carcase midline over the 12th rib. This site is used as a reference point because it is easy to measure on both the live animal (by manual palpation) and the hot carcase and provides a good indication of the overall fatness (and yield) of the whole carcase.

No breeding animal should be in score less than 2.

Breeding animals in score 2.5-3.5 will provide optimum production and profitability.

Breeding animals that are too thin (<2.5) will have poor production, increased risk of mortality and poor reproduction.

Animals that are too fat (>3.5) will have good production but stocking rate will be compromised which has a direct impact on profitability.

No growing sheep (i.e. weaners) should be less than score 2.

Classroom Activity

1. Brainstorm with students the main inputs into a farm. What does a farm need to be able to run (for example, water, people, energy, feed, land, etc)? Think about all the resources needed and note down key phrases and words.
2. Direct students to think about electricity and energy on a farm and start a discussion about renewable or clean energy sources. What do students already know about it? Record their ideas and key words on the Renewable (Clean) Energy slide.
3. Talk about why it is important for us to use renewable energy sources and clean energy. Gather students' ideas for how renewable energy sources could be used on a farm.
4. Challenge students to work in their groups to create (or plan) a model which uses clean energy to either lift a load from floor to table or move a load from A to B. Models should be simple and able to be created with common materials such as cardboard, dowling rods, and sticky tape.

Young Judges – Merino Fleece

Purpose and Benefits of the Competition

Young judging provides young people with the opportunity to develop lifelong skills in visually assessing merino fleeces as well as public speaking through comparing fleeces against each other. These skills not only develop a better understanding of merino fleece and the wool industry, they also enable young people to make a valuable contribution to the industry.

To continually improve the industry, livestock producers will evaluate – or judge - the characteristics of their animals and their products. When judging a fleece after it has been shorn, it is important to remember the purpose of the product, whether that is high quality wool for clothes, or medium and low quality wools for manufacturing and carpeting. This means that fleeces must demonstrate a range of quality traits. It's important to be able to identify and understand why these traits have significant commercial value. Not only do these qualities have higher value at sale, but breeders will want to pass these desirable characteristics onto the next generation to improve the overall herd.

This is intended to be a general guide and there may be some variations in rules and expectations between shows. Individual shows will provide further advice and clarification.

Competition Structure (competition specific)

Some notes for students preparing to compete in or teachers helping students prepare for a Merino Fleece Judging Competition.

The Competition:

Normally competitors are asked to judge two classes of fleeces but local shows may only have one class to judge.

The fleeces in a class should be of similar wool type.

Where there are two classes, one normally comprises fleeces of one wool type, while the other class may consist of fleeces of another wool type.

Where there are two classes, the Oral Class will require competitors to speak on only one class which will be nominated by the Senior Judge or the Steward-in-Charge before the competition begins.

Competitors receive a score out of 50 for their placing in each class, a score out of 50 for their handling of the fleeces in one class, and, if their scores earn them a place in the final phase of the competition, a score out of 50 for the Oral Class where competitors explain their placings.

Judging How To

About the Fleece:

Wool Characteristics and Point Score

Fleeces are judged by awarding points for a set of wool characteristics and adding up these points to arrive at placings.

1. **Trueness to Type (Max. 10 points)**

   This characteristic is based on the wool style as determined by the Australian Wool Industry Description system.

   Choicest Style – 10 points
   Superior Style - 9 points
   Spinners Style - 8 points
   Best Topmaking – 7 points
   Good Topmaking – 5 points.

2. **Uniformity of Length (Max. 10 points)**

   To achieve the maximum points a fleece would need to be of uniform length throughout and that length would need to be the required length for the fleece's wool type.

   Excellent – 10 points
   Good – 8 points
   Average – 6 points
   Irregular – 4 points

3. **Soundness (Max. 10 points)**

   For a fleece to obtain the maximum points, there should be no indication of wool weakness anywhere in the fleece.

   Sound – 10 points
   Part Tender – 7 points
   Tender – 4 points.

4. Handle (Max. 8 points)

The maximum points are awarded for very soft and elastic fleece as required for spinning.

Very Soft – 8 points
Soft – 7 points
Average – 5 points
Harsh – 3 points.

5. Colour or Bloom (Max. 6 points) The ideal is bright, white wool.

Very Bright – 6 points
Bright – 5 points
Creamy – 4 points
Dull – 3 points.

6. Wool Character (Max. 10 points)

This is based on the definition or clarity of the crimp and its consistency from tip to base of each staple and throughout the fleece.

Excellent – 10 points
Good – 9 points
Fair – 8 points
Irregular – 6 points
Plain – 5 points
Poor – 3 points.

7. Wool Density (Max. 6 points)

Density is concerned with the compactness of the fibres in a fleece.

Excellent – 6 points
Good – 5 points
Average – 3 points
Poor – 2 points.

8. Evenness (Max. 10 points)

This characteristic is concerned with the uniformity of the level of quality throughout the fleece.

Excellent - 10 points
Good – 8 points
Average – 6 points
Irregular – 4 points
Very Irregular – 2 points.

9. Top and Noil Product (30 points)

This involves the calculation, using the estimated yield, of the weight of clean wool that would be obtained from an unwashed fleece and the allocation of a points value to that clean fleece.

The Terminology:

Brightness – a wool characteristic where the ideal is bright, white wool.

Crimp – the tiny waves in wool along the length of a staple. (Finer wool usually has smaller waves.)

Doggy Wool – wool in which the crimp is uneven and less defined along the length of the staple.

Fine Wool – wool with the individual fibres measuring 18.6 to19.5 microns.

Fine Medium Wool – wool measuring 19.6 to 20.5 micron.

Handle – the way wool feels to the touch. It may be soft, harsh or even prickly.

Kemp – short hairs usually found low on the hindquarters of sheep and undesirable in a fleece.

Micron – an abbreviation of "micrometre"(one millionth of a metre), the measure of the diameter of the individual fibres in a fleece (e.g. medium Merino wool is made up of 20.6 to 22.5 micron fibres.)

Staple – the term for a cluster or group of wool fibres. Staples are joined by oblique fibres called "binders" to form a fleece.

Strong Wool – wool made up of slightly thicker fibres. Strong Merino wool measure 22.6 to 24.5 micron.(Extra Strong wool measures 24.6 micron and up.)

Superfine Wool – wool where the diameter of individual fibres is 17.6 to 18.5micron. (Ultrafine Wool is of fibres 16.1 to 17.5 and Extra Ultrafine 16.0 and under.)

Tender – the term used to describe a weak area somewhere along the length of each staple in a fleece, usually caused by illness or a nutritional problem.

Top Making – spinning wool into a thread; a term used in describing the quality of wool.

Top and Noil – the clean fleece after scouring consisting of "tops" (the long fibres used in spinning) and "noils" (the short fibres used in making felts).

Vegetable Matter – the pasture products such as grass, burrs and other seeds which must be removed from the fleece before it can be used.

Yolk – the natural oils which help to waterproof wool and which are removed from greasy wool in scouring.

Yield – the percentage of clean wool derived from a greasy fleece.

First and foremost, top and noil must be calculated using a top and noil book. Top and noil is best described as "how much yarn will this fleece give us once we clean and process it?" The more we get at the end, the higher the point score.

Style is perhaps the most difficult attribute to define and refers to the overall quality of the wool.

Uniformity of length refers to how much of the fleece is the same length. We want a fleece that is as even as possible

Soundness defines whether the staples will tear under pressure. This happens when the sheep has had a stressful event in the last 12 months. Gently tap the individual staples to assess this

Handle refers to softness. Grab the fleece in a few places to asses this. The softer, the higher the score.

Character refers to how well the fleece crimps. Does the staple have the same amount of crimp the whole way down it? Is the crimp the same when you compare staples? The more uniform, the better.

Density refers to "how much wool is in a handful". Grab a few handfuls of fleece in places to assess this.

Judging How-to

When judging fleece, it is important to remember the purpose of each individual fleece, which is to create as many top quality garments as possible.

When judging Merino fleeces there are two cardinal rules:

1. No fleece should be damaged by the judging process, which means it should not be plucked or pulled apart or twisted and tangled;
2. Efficient judging requires a systematic assessment of each fleece working through the list of wool characteristics for each fleece in turn.

Fleeces are judged a little differently to most competitions, as each fleece is assigned as score card (see page 7 in National Regulations). Do not let this scare you – it is a useful guide to ensuring you are checking all the right things! The best way to judge fleeces is to go through each fleece one at a time, checking it against the score cards provided.

a. **Uniformity of Length** – look at 5 or 6 staples in various parts of the fleece, remember- ing that it is not necessary to pluck the staples from the fleece for this assessment or the next two (Soundness and Wool Character) but in all cases the process can be completed by drawing the staple to a point where it can be seen and stretched but leaving it as part of the fleece still attached by the binder fibres.

b. **Soundness** – test (by tugging or finger flicking stretched staples) in at least four areas of the fleece.

c. **Wool Character** – study the crimp and check its uniformity in several staples from different parts of the fleece.

d. **Handle** – feel the softness of the wool in 5 or 6 places.

e. **Colour or Bloom** – look at the whiteness of the fleece in several spots.

f. **Density** – compress a handful of wool and estimate its level of compactness in several parts of the fleece.

g. **Evenness** – look at the uniformity of quality in various parts of the fleece.

h. **Trueness To Type** – consider how the fleece performs in all the areas examined and its trueness of quality.

i. **Top and Noil** (This is left until last because it involves using tables and some calculation.)

   (i) Begin by estimating the yield percentage of clean wool that you believe will be produced when the fleece is cleaned. (A fairly clean fleece might produce 75 to 80% of clean fleece while a fleece with lots of grease, dust and vegetable matter might produce 55 to 60% of clean wool.)

   (ii) Then multiply the given fleece weight by your estimated yield percentage to give a clean fleece weight.

   (iii) Look up the clean fleece weight on the points table chart to give the points earned by the fleece.

j. Total up the 9 lots of points for the fleece.

k. Do this for all four fleeces, then take a moment for a final check of the whole class of fleeces so that the points totals and the consequent placings accurately represent your judgement of the four fleeces.

Classroom Activity

Present the following problem to the students: Design and produce a 5-8 min documentary to develop the understanding of children in Years 5 and 6 about wool production in Australia, specifically fine wool and merino sheep. Include information about:

- Different wool types
- Different sheep production systems
- Social perceptions and values about wool production
- Sustainability

Young Judges – Merino Sheep

Purpose and Benefits of the Competition

Young judging provides young people with the opportunity to develop lifelong skills in visually assessing Merino sheep and public speaking through comparing animals against each other. These skills not only develop a better understanding of Merino sheep and the wool industry, they also enable young people to make a valuable contribution to the industry.

Stakeholders in the Merino industry invest time and money into continually improving their stock, which is crucial as Australia produces about half of the world's Merino wool.

To continually improve the industry, livestock producers will evaluate – or judge - the characteristics of their animals and their products. It's important to be able to identify and understand why certain traits have significant commercial value. Not only will the animals and fleeces have higher value at sale, but breeders will want to pass these desirable qualities onto the next generation to improve the overall flock and wool quality.

This is intended to be a general guide and there may be some variations in rules and expectations between shows. Individual shows will provide further advice and clarification.

Competition Structure (competition specific)

Notes for students preparing to compete in, or teachers helping students prepare for, a Merino Sheep Judging Competition.The animals in a class should be stud Merino sheep, all the same sex and similar in age and wool type.

Where there are two classes, one normally comprises ewes, while the other class consists of rams.

Where there are two classes, the Oral Class will require competitors to speak on one class which will be nominated by the Senior Judge or the Steward-in-charge before the competition begins.

Competitors receive a score out of 50 for their placing in each class, a score out of 50 for their handling of the sheep in one class, and, if their scores earn them a place in the final phase of the competition, a score out of 50 for the Oral Class where competitors explain their placings.

Judging How To

About the Species

Rams:

When judging rams it is essential to give preference to ones that:

Are robust and masculine in appearance.

Have adequate height and length with balanced proportions.

Have adequate frame size.

Have strong, sound structure (structural traits are highly heritable) with an absence of structural problems of body (such as prominent shoulders) or of legs and feet (such as being too erect or down in the pasterns).

Have wool which is of even type, soft and bright, dense, of uniform length, sound and of excellent character. (Wool is obviously of major importance in judging Merinos.)

Are highly fertile (size and shape of testes can be an indicator).

Ewes:

The main selection criteria to apply to female sheep are:

Must be feminine in appearance.

Have adequate height and length with balanced proportions.

Have adequate frame size and capacity for producing a lamb and for carrying meat.

Have strong, sound structure with an absence of problems.

Have wool which is of even type, soft and bright, dense, of uniform length, sound and of excellent character. (Wool is obviously of major importance in judging Merinos.)

Have an udder with two even teats.

The Terminology

Breech: the rear of the hindquarters below the tail.

Brisket: the front of the chest.

Devil's Grip: a depression behind the wither indicating a conformation fault. For example, tighter girth or Pastern Faults. Fine Wool: wool which comprises individual fibres of 18.6 to 19.5 microns diameter.

Ewe: adult female sheep.

Hogget: a sheep with two adult teeth.

Lamb: a young sheep with milk (baby) teeth.

Medium Wool : wool which comprises individual fibres of 20.6 to 22.5 microns diameter. (Fine medium wool comprises 19.6 to 20.5 micron.)

Pastern: the short bone immediately above the hoof.

Poll: The top of the head / hornless.

Ram: entire adult male sheep.

Strong Wool : Merino wool which comprises individual fibres of 22.6 to 24.5 microns diameter. (Extra strong wool is 24.6 micron and upwards.)

Structure: the bone shape of the animal.

Superfine Wool: wool where the average diameter of fibres is 17.6 to 18.5 micron. (Ultrafine Wool is of fibres 16.1 to 17.6 and Extra Ultrafine 16.0 and under.)

Wether: male sheep castrated at an early age.

Withers: the point at which the shoulder blades come together where the neck joins the back.

Judging How-to

When judging a merino, the primary function must be kept in mind; which is an animal that produces excellent quality wool with a constitution that ensures a long lifespan.

When judging a merino sheep, always approach the animal in the same way.

1. Begin by standing back and viewing the whole class from a distance comparing each sheep with your mental image of the ideal shape and proportions of a merino sheep. View them from various angles and make a note of your initial rough placings. Stand back to look at the class first, assessing the frame and structure of each animal. We want animals with sound, straight legs, high pasterns, and a deep body that will yield a high volume of wool.
2. Now move quietly to the left shoulder of the first sheep in the line-up, and, remembering to be gentle when handling the sheep, check the eyes, nostrils and bite, then the poll (or horns) and ears. Inspect the teeth to ensure they are square against the pad. Overshot or undershot jaws are a concern as the animal will not be able to eat properly. Ensure there are no black spots on the face or ears. If judging rams, check the horns to ensure they are not too tight.
3. Next, feel the strength of the neck and its setting in the shoulders which should be tapered not square and without prominent withers.
4. Now check the spine is straight, smooth and level right to the tail.
5. Check the spring of the ribs and that the body is adequately fleshed.
6. Without unnecessarily disturbing the animal, check the testes or udder.
7. Examine the wool, at least on the neck, at the shoulder, mid-side and hip, making sure it is of bright, even type, has no black fibres and is growing on soft, loose, pink skin. Part the fleece in several spots, just beside the back, along the side and down the leg. We are looking for fleece that is uniform in length, character, brightness and density. Fleece should be free from disease (eg dermatitis, fleece rot), bright white, evenly crimped throughout and soft.
8. Check whether the sheep stands square, has healthy looking hooves, and pasterns that are neither too erect nor too angled back.
9. When the sheep are walked, note whether each is moving smoothly and bringing each foot through straight.
10. Stand back and check that the parts (forequarters, barrel and hindquarters) are in balanced

Classroom Activity

1. In groups, students are to research how 3 sustainable farming techniques/technologies for merino sheep farming works and how they will support the farmer, the animals and increase profits and how they will support and contribute to the local community and environment.
2. Groups are to research how much each sustainable technique or technology will approximately cost. Add these details to their plan.
3. Groups are to present three of their sustainable techniques or technologies to the class in detail. The rest of the class should aim to analyse the effectiveness of each of these in terms of practicality and cost. For example, will the set up of these methods cost more than the energy saved? How much will the materials and equipment cost? Can it be set up using natural resources? How long will it take to make back the initial investment in the project?
4. Groups are to make any changes to their plan and notes based on the feedback they receive, applying this practical thinking to the rest of their features. Groups should record the changes and any updated understanding or knowledge in their learning journals.

Young Judges – Poultry

Purpose and Benefits of the Competition

Young judging provides young people with the opportunity to develop lifelong skills in visually and physically assessing poultry and public speaking through comparing birds. These skills not only develop a better understanding of the different poultry, they also enable young people to make a valuable contribution to the industry.

Exhibition poultry breeders invest time and money into continually improving their birds, maintaining the standards and genetic pool of breeds of domestic land (handfeather and softfeather) and waterfowl in Australia. Breeders strive to perpetuate the characteristics and excellence of type required to conform with the recognised breed Standard. The Exhibition Poultry industry is the 'genetic archive' of the commercial poultry industry, by keeping and promoting vast seed-stock flocks and maintaining genotypic traits that are no longer represented in the commercial poultry flocks of today. The best way to ensure that breeds of domestic poultry are not extinct is to evaluate – or judge - the characteristics of their animals by examining their type, plumage and condition against the breed standard. It's important to remember that exhibition poultry breeds are maintained to be a physical (phenotypic) representation of the breed standard, which sometimes has little emphasis on laying eggs or producing meat.

Being able to understand and identify the characteristics of the breed standards and orally present to an audience are skills that can be learnt and take practice. Importantly, this process develops competitors' confidence, decision making and attention to detail, which are skills that will also translate into future careers.

While many young people become involved in young judging and other agricultural show competitions through their school, tertiary education institution or from a farming background, there are other ways to become involved. By approaching a local show society, members can provide guidance and support to anyone interested in participating. Many shows now hold education days and there are opportunities to connect with farms, markets and other local shows to learn more.

Generally, young judges compete at a local show first. Winners then go on to compete at their state royal show and from there one competitor will be selected to represent each state or territory at the National Poultry Championship. Young judging is for entrants aged 15 and under 25 years old on May 1 in the year of the competition.

This is intended to be a general guide and there may be some variations in rules and expectations between shows. Individual shows will provide further advice and clarification.

Competition Structure (competition specific)

For each type of poultry - hardfeather, softfeather, waterfowl, birds will be divided into three classes, one class each of waterfowl, softfeather and hardfeather. They will be numbered in their pens and will be judged by competitors one at a time.

Visual judging will take place first and competitors will be allowed eight minutes to judge the four birds and complete a visual judging card. These cards are simple, with competitors ranking the animals in order from first to fourth place.

Competitors choose one class for their oral presentation. They are allowed one minute to move the birds in order from first to fourth place before speaking for two minutes to explain the reasoning behind their ranking. It's important to stick to the allocated time – for every 10 seconds a competitor goes over their time, they will be penalised one point.

Competitors are judged on three components - their visual rankings, their handling technique and their oral presentation.

Judging How To

About the Species:

There are many types of poultry within the categories of hardfeather, softfeather and waterfowl. This can include fowl/chickens, geese, ducks and turkeys and their subsequent breeds, seperated into sizes: standard and bantam. It is important to learn about the different breeds as their breed standards and scale of points vary significantly. For example, the Wyandotte chicken is a softfeather, heavy, breed, with more emphasis on feather colour and markings and body shape (type), compared to the Australian Game chicken, a hardfeather breed which is judged on body symmetry, strength, size and condition, with no points allocated to feather colour.

It is very important that you read up on the Australian Poultry Standards (2nd edition). Birds in each class should be the same breed and they should be judged to the specific breed characteristics, as set out in the Australian Poultry Standards.

When judging it is important to consider key characteristics for judging poultry, including: type, size, colour and condition.

Their type is the most important quality to identify. The reason we focus on type through judging is because this is the most identifying characteristic to determine breeds of poultry - if it does not display the TYPE of the breed, it should be disqualified. Most 'true to type' birds, as listed in the standard, are birds that are identified by their best breed qualities, that breeders want to pass on to the next generation for continual improvement of the breed. Remember, a good type is representative of good structure and these features enable an animals to feed, breed and maintain the standard of the breed for future generations.

You will need to get to know the different parts of the animal and be able to name these correctly, as these will be the judging points. It is important to examine the bird standing in the pen and removed from the pen 'in-hand'. It is important to understand the judging priorities for different types of poultry - handfeather, softfeather and waterfowl. It's important to reflect on the bird's type, the plumage (feathers), as well as looking at the legs and feet, checking again for colour and uniformity. When examining the head, consider the comb, the eye colour and beak colour.

TOP TIP: Practice handling poultry of all types. Remember to be gentle, hold the bird close to your body and support it from underneath. Practice handling birds of all sizes, both in and out of the pen. The judge will be looking for correct techniques for moving the birds in the pen, securing the bird for safe removal and return to the pen - plus how well you assess the bird in hand.

The Terminology:

In any judging it is important to use the correct terminology. The following terms may help:-

Type: the way the skeleton of the bird is structured. The type is the most important aspect of breed identification.

Cock: male chicken over 12 months old

Hen: female chicken over 12 months old

Cockerel: male chicken under 12 months old

Pullet: female chicken under 12 months old

Hackle: neck feathers of a chicken

Saddle: back feathers of a chicken

Comb: fleshy, featherless skin folds on top of a chicken head. A number of comb varieties exist including single, rose, pea, cushion, etc.

Wattle: fleshy, featherless skin flaps hanging from the underside of a chicken beak

Ear-lobe: featherless skin on the neck under the ear of the chicken

Beak: the mouth and jaw of a chicken and some other poultry species

Drake: male duck

Duck: female duck

Bill: the mouth and jaw of duck species

Webbing: skin between toes of waterfowl species

Classroom Activity

Access the 'Marketing' page on the Australian Eggs website and read about the Get Cracking campaign. Why might Australian Eggs have chosen these three groups to focus their campaign on? Choose one of the groups and create an empathy map for them, with the aim of understanding them: a consumer of eggs. Use the template below or create your own. Support: Research a marketing campaign or a business in your local area. Answer the following questions:

1. Who is the intended audience for the campaign?
2. What is the main message?
3. What is the unique business selling point?
4. What is the main 'Call to Action'? (i.e. what does the business want people to do?)
5. How might a different audience respond to this campaign? What could be changed to suit a different audience?

Practical Activity

Work in groups to develop a plan for a sustainable farm. The farm should: utilise a range of technology; include ideas for renewable energy sources; demonstrate a clear understanding of poultry health; and present a plan of how to use sustainability techniques on the poultry farm to decrease expenditure and increase profit, and to support and contribute to the local community and environment.

Paraders – Beef Cattle

Purpose and Benefits of the Competition

The young paraders competition provides 15 to 25-year-olds the opportunity to develop lifelong skills while building their confidence and providing networking opportunities with leaders in the agricultural industry.

This competition gives young people the unique and important opportunity to work directly with cattle, implementing their knowledge and initiative in handling and presenting an animal in front of a judge and a show audience.

These skills can open the door to career pathways in the beef industry, lead to future steward or judge opportunities in the Australia-wide show circuit and give young people the chance to meet likeminded individuals in the competition, which progresses from a local level through to state and national. Some states also include regional or sub chamber finals.

While parading gives young people the chance to develop their confidence and experience with handling livestock and competing in front of an audience, it's also a valuable tool for breeders to publicly showcase their animals.

While many young people become involved in young parading and other agricultural show competitions through their school, tertiary education institution or from a farming background, there are other ways to become involved. By approaching a local show society, members can provide guidance and support to anyone interested in participating. Many shows now hold education days and there are opportunities to connect with farms, studs, saleyards and other local shows to learn more. Many states also hold other events featuring cattle handling and parading, such as Heifer Expos. It would be worthwhile attending one of these or watching videos online to become familiar with how they work.

This is intended to be a general guide and there may be some variations in rules and expectations between shows. Individual shows will provide further advice and clarification.

Competition Structure (competition specific)

At a local or state level, competitors generally choose what animal they will parade, eg cow, heifer, bull or steer. In the national championship, competitors will ballot for their animal – either a steer or heifer.

Competitors have one hour to prepare their animal unassisted for presentation in the ring.

When competitors lead their animal, they move clockwise around the ring. For beef cattle, this means the competitor walks at the shoulder of the animal forward and carries a show cane to help direct their animal. Judges will ask questions about the animal, for example, about its age, breed and weight. The judge may also swap animals between competitors to see how they handle a different animal.

Winners will be determined by who has prepared, presented and paraded their animal before a judge the best.

It's not all about the cattle – competitor appearance is also important and judges can mark down for poor presentation. Competitors must wear a white coat, a hat (broad brimmed recommended), long pants and closed in shoes. Long hair must be tied back and only minimal jewellery is allowed. Male competitors must wear a tie and long pants. Chewing gum and shorts are not permitted.

Parading - How To

- How to prepare the animal
- Competitors will wash, clip and groom their animal.
- The key is to clip areas to accentuate the desirable characteristics, but also hide any faults. For example, trimming hair on the high points along the back and leaving the low points to create a straight and even spine.
- Remove the hair off the top and front of the head, bringing the clippers down between the ear and the eye.
- Top half of the tail is then trimmed and blended into the back.
- Tidy up the belly, legs and behind the ears.
- The animal is then washed, using a comb to get the cleaning foam through the hair.
- After drying, brush upwards brushes to expose long hair for trimming. Pay particular attention to the back, but being careful not to take too much off.
- Blending with the clippers will help give the trim a natural appearance.
- Back comb the bottom of tail to fluff the hair.
- Rub soap, show shine or oil across the animal and comb in upwards strokes again.
- Adjust the halter so it fits well. The band across the nose should be about halfway between the eyes and the nostrils and the metal clasp should be facing out so it doesn't dig into the animal.
- Roll up the leather strap when leading the animal for a neat appearance.

TOP TIP: Be careful not to clip too much. Stand back every now and then and check how it looks.

What judges look for

Judges will be looking at presentation, confidence and technique in handling the animal. They will also assess a competitor's knowledge about their animal and use of cattle terminology.

Hold the head in a natural position, aiming for a straight line between the poll to the nose to the competitor's elbow.

Walk in unison with the animal, try to stay at the shoulder and keep in step and aim for it to always have a straight back.

The judge will signal to competitors to stop walking by raising their hands. Aim to set up the animal so the back leg nearest the judge is furthest back – this makes the body appear stretched and long - and the front feet are apart and parallel to each other.

The judge will individually approach each animal and feel it. Ideally, pull the head away from the judge to stretch the skin for a better feel of the ribs.

When the judge approaches the front of the animal, the competitor should move away from the animal to give the judge a full view of the animal's conformation.

When the judge moves around to the other side (outside), switch the back legs so the leg nearest the judge is furthest away on this side.

After the judge has finished this inspection, the competitor will move on and a steward will assist with showing where to stand.

TOP TIP: Be confident with the animal and show you can stand up to it, but also be confident within yourself – shoulders back and keep your eyes up and on the judge.

Paraders – Dairy Cattle

Purpose and Benefits of the Competition

The young paraders competition provides 15 to 25-year-olds the opportunity to develop lifelong skills while building their confidence and providing networking opportunities with leaders in the agricultural industry.

This competition gives young people the unique and important opportunity to work directly with cattle, implementing their knowledge and initiative in handling and presenting an animal in front of a judge and a show audience.

These skills can open the door to career pathways in the dairy industry, lead to future steward or judge opportunities in the Australia-wide show circuit and give young people the chance to meet likeminded individuals in the competition, which progresses from a local level through to state and national. Some states also include regional or sub chamber finals.

While parading gives young people the chance to develop their confidence and experience with handling livestock and competing in front of an audience, it's also a valuable tool for breeders to publicly showcase their animals.

While many young people become involved in young parading and other agricultural show competitions through their school, tertiary education institution or from a farming background, there are other ways to become involved. By approaching a local show society, members can provide guidance and support to anyone interested in participating. Many shows now hold education days and there are opportunities to connect with farms, studs, saleyards and other local shows to learn more. Many states also hold other events featuring cattle handling and parading, such as Heifer Expos. It would be worthwhile attending one of these or watching videos online to become familiar with how they work.

This is intended to be a general guide and there may be some variations in rules and expectations between shows. Individual shows will provide further advice and clarification.

Competition Structure (competition specific)

At a local or state level, competitors generally choose what animal they will parade, eg cow or heifer. In the national championship, competitors will ballot for their animal.

Competitors have one hour to prepare their animal unassisted for presentation in the ring.

When competitors lead their animal, they move clockwise around the ring. For dairy cattle, this means the competitor walks backwards. A show cane isn't used for dairy cattle, instead paraders use pressure points to gently guide animals into position. Judges will ask questions about the animal, for example, about its age, breed and weight. The judge may also swap animals between competitors to see how they handle a different animal.

Winners will be determined by who has prepared, presented and paraded their animal before a judge the best.

It's not all about the cattle – competitor appearance is also important and judges can mark down for poor presentation. Competitors must wear a white coat, long, white pants and closed in shoes. Long hair must be tied back and only minimal jewellery is allowed. Male competitors must wear a tie and long pants. Chewing gum and shorts are not permitted.

Parading How To

How to prepare the animal

- Competitors will wash, clip and groom their animal.
- The key is to clip areas to accentuate the desirable characteristics, but also hide any faults. For example, trimming hair on the high points along the back and leaving the low points to create a straight and even spine.
- Remove the hair off the top and front of the head, bringing the clippers down between the ear and the eye.
- Top half of the tail is then trimmed and blended into the back.
- Tidy up the belly, legs and behind the ears.
- The animal is then washed, using a comb to get the cleaning foam through the hair.
- After drying, brush upwards brushes to expose long hair for trimming. Pay particular attention to the back, but being careful not to take too much off.
- Blending with the clippers will help give the trim a natural appearance.
- Back comb the bottom of tail to fluff the hair.
- Rub soap, show shine or oil across the animal and comb in upwards strokes again.
- Adjust the halter so it fits well. The band across the nose should be about halfway between the eyes and the nostrils and the metal clasp should be facing out so it doesn't dig into the animal.
- Roll up the leather strap when leading the animal for a neat appearance.

Leading the animal in the judging ring

- Judges will be looking at presentation, confidence and technique in handling the animal. They will also assess a competitor's knowledge about their animal and use of cattle terminology.
- Hold the head in a natural position, aiming for a straight line between the poll to the nose to the competitor's elbow.
- Walk in unison with the animal and aim for it to always have a straight back.
- The judge will signal to competitors to stop walking by raising their hands. Aim to set up the animal so the back leg nearest the judge is furthest back – this makes the body appear stretched and long - and the front feet are apart and parallel to each other.
- The judge will individually approach each animal and feel it. Ideally, pull the head away from the judge to stretch the skin for a better feel of the ribs.
- When the judge approaches the front of the animal, the competitor should move away from the animal to give the judge a full view of the animal's conformation.
- When the judge moves around to the other side (outside), switch the back legs so the leg nearest the judge is furthest away on this side.
- After the judge has finished this inspection, the competitor will move on and a steward will assist with indicating where to stand.

References and Further Resources

ASA Young Judges and Paraders Fact Sheets

ASA Young Judges and Paraders Video Series

Industry Resources

Australian Alpaca Association

awi Australian Wool Innovation Limited

AgriFutures® Chicken Meat

Dairy Australia

NSW Government Department of Primary Industries

mla Meat & Livestock Australia

PoultryHub

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