TIPS•FOR•TOURS

Cattle Ranch Tour Tips for Teachers

BRITISH COLUMBIA INVESTMENT AGRICULTURE FOUNDATION

British Columbia Agriculture in the Classroom Foundation

BRITISH COLUMBIA Ministry of Agriculture and Food

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Table of Contents

Why Choose a Cattle Ranch for a Field Trip?.....**5**

Prescribed Learning Outcomes
Cattle Ranch Tour Topics

Planning and Arranging a Tour.....**8**

Choosing a Ranch
Link the Ranch Tour with the Classroom Studies by:
Prior to the Tour
Last Minute Reminders
Information Sharing Form
During the Visit
What to do After the Visit

Related Beef Facts.....**13**

Glossary.....**16**

Support Materials.....**19**

Why Choose a Cattle Ranch for a Field Trip?

Cattle ranch tours are a delight to all who attend. At the same time ranch tours will help teachers to meet the prescribed learning outcomes in the following areas:

Prescribed Learning Outcomes

Grade K-1
Life Science - Science

- Describe the appearance and behaviour of a variety of animals
- Determine the requirements of healthy plants and animals
- Identify the stages in the life cycle of an animal
- Demonstrate how plants and other organic material can be recycled back into then environment

Grade 2/3
Science-Life Science (Animals in the Environment)

- Compare and contrast different types of animal life cycles
- Compare and contrast plant and animal life cycles
- Describe structures that enable animals to survive in different conditions

Social Studies
Society and Culture

- Describe ways members of a community meet one another's needs
- Identify contributions of various occupations to BC's communities
- Describe how technology affects individuals and communities
- Describe the historical development of various BC communities

Grade 4
Science-Life Science (Body Systems and Digestion)

- Compare and contrast the digestive systems of humans and various animals
- Describe the basic structure and function of the organs involved in digestion

Earth and Space Science –Water

- Categorize the various uses of water

- Outline the importance of water to life
- Describe human impacts on the Earth's water resources

Social Studies Environment

- Analyze how people interact with their environment in the past and in the present
- Demonstrate an understanding of why immigrants come to Canada, the challenges they face and their contributions to Canada

Grade 5

Science-Life Science (BC's Living Resources)

- Identify living resources in the local environment
- Describe how humans use BC's living resources
- Describe the known and potential environmental impacts of using BC's living resources
- Devise a strategy for sustaining a living resource

Applications of Science

- Describe the technologies that allow humans to extend their natural abilities
- Identify ways that science is used responsibly in their communities

Social Studies Economy and Technology

- Analyze the relationship between the development of communities and their available resources

Environment

- Demonstrate an understanding of sustainability, stewardship, and renewable versus nonrenewable natural resources
- Assess effects of lifestyles and industries on local and global environments

Society and Culture

- Demonstrate understanding of why immigrants come to Canada, the challenges they face and their contribution to Canada

Grade 10

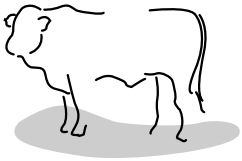
Social Studies Economy and Technology Canada 1815-1914

- Identify factors that contributed to the economy of BC (What did the activity entail? How did it contribute to the local and provincial economies? Did the industry expand or decrease? What were the career opportunities?

Environment (Canada from 1815 to 1914)

- Identify key local and provincial resource development issues from 1815 to the present, considering the concepts of stewardship and sustainability.

Cattle Ranch Tour Topics



A ranch tour provides the opportunity to raise awareness of the role of agriculture and food production in our daily lives.

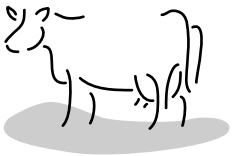
Agriculture is a business that affects all of us within our communites. During the course of a tour students can begin to understand the multifaceted role of a rancher— in the stewardship of the land and the ranch, in the care and well being of the livestock, in the machinery and technology and in the interactive role with the community. Some of the topics that can be introduced are the:

- history of ranching, the ranch family, how ranching has changed, plights and joys of ranching, the ranch lifestyle;
- importance of agriculture in providing diverse career opportunities;
- top quality products BC agriculture has to offer, the types of foods produced and the process by which they reach the consumer;
- costs of ranching—how a tractor compares to a car
- relationship of ranch animals and crops to the food and non-food products we use daily (by-products);
- chemicals used in agriculture both natural and artificial; their use and handling; chemical costs and alternatives;
- safety standards for workers and for food handling and preparation;
- weather and seasons— impacts on ranch and production
- problem solving and innovations;
- animals on the ranch—their similarities and differences; the variety of crops and types of animals, care of animals, products derived from the ranch;
- role technology has in improving the safety and quality of agriculture and the products it produces.

Farming/ranching is our "bread and butter". Seeing, breathing and experiencing farming helps all of us see how we are connected in the most basic of all things—food.

Planning and Arranging a Tour

Choosing a Farm



Not all farms are created equal. Some farms may have more emphasis on one subject area than another. Time of year or season will also effect what you see and the availability of staff to assist you in answering your questions. Dairy farms for example are busiest during the spring, summer and early fall months as field work adds to their already busy schedule.

To determine which type of farm and the best time of year to visit review the following:

Farm Type	What You May See	Farm Availability
Dairy Farm	Wide range of activities both plant and animal. Use of technology e.g. computers, machinery and a systems approach (milking equipment).	Best time is in winter.
Fruit and Vegetable growers	Product on the vine, tree, root. Machinery in use. Some may have a processing plant on-farm.	In fall during harvest is best but availability may be limited.
Beef Farm or Sheep Farm	Life cycle, animal care, feeding will be highlights. Machinery or technology may not be highly visible although computers will be used for accounting/records.	Spring-(March/April) after calving or lambing.
Goat Farm (Dairy)	Similar to a dairy cow operation but with goats. Some may have a processing plant in close proximity to goat operation.	Winter is best.
Greenhouse Flowers	Check with grower.	
Greenhouse Vegetables	Check with grower.	Fall during or after harvest.

Tip: For a list of farm tours please visit BC Agriculture in the Classroom at **http://www.aitc.ca/bc**

Link the Ranch Tour with the Classroom Studies

- Use videos and Agriculture in the Classroom materials to give students some insights as to what they may see during the visit.
- Find out if anyone has a family member who farms. Get them to share their experiences.
- Review, *Grow BC a Teachers Handbook* to become familiar with the different types of farm productions.
- Have the students prepare some questions ahead of time.
- Worksheet for bus ride—spotting items on the way that relate to agriculture. Compare the terms "farming" and "ranching". Discover differences and similarities.

Prior to the Tour

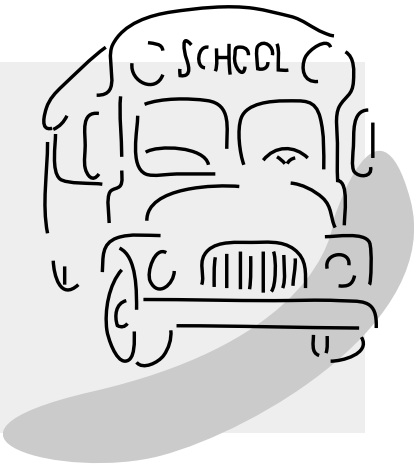
- ❑ Book the bus or arrange car pooling.
- ❑ Permission slips sent, returned and signed by parent or guardians prior to the event.
- ❑ Visit the farm and go over the tour plan if possible.
- ❑ Arrange for volunteer supervisors.
- ❑ Complete *Information Sharing Form* in this package.
- ❑ Equipment—camera, video, note pads, pencils, first aid kit.

Last Minute Reminders

- Wear easy to clean warm clothes and wear waterproof footwear for wet weather.
- Use washroom facilities before you leave the school.

Other possible stops or things to note while enroute:

1. Processing plant
2. Farmer's market, grocery store
3. Other farms
4. Agricultural research station
5. Agri-business—e.g. feed mill, farm machinery dealer



Information Sharing Form

For the teacher to fill out.

Before the Tour

- Pre-Visit the ranch and go over tour plan if possible
- Prepayment of contract
- Arrangement of specific activities or achievement of specific goals

Things the rancher needs to know

- Teacher's name_____
- School_____
- Contact #_____
- Age level of the group_____
- Number of children and supervisors (does not include one teacher per class)

Children_____ Supervisors_____

Recommended ratios of children to adults:

1. *Primary (kindergarten-Grade 3): 6 children to 1 adult*
2. *Intermediate (Grades 4-7): 10 children to 1 adult*
3. *Secondary (Grades 8-12): supervisors if any children with special needs or behaviour problems*

- Topics the teacher would like introduced

_____

_____

_____

- If there are any special needs children (e.g. wheel chair accessibility) or children with allergies (e.g. hay allergies)

_____

_____

_____

- What are the hours, days or months that the visit is preferred_____

For the rancher to fill out.

Things the teacher needs to know

- Name of ranch_____
- Contact name_____
- Contact #_____
- Type of farm/ranch_____

_____

- What specific time limitations are there

_____

_____

- Appropriate clothing (e.g. rubber boots, jackets, rain gear, etc.) required

_____

_____

- Restrictions on group sizes. If they will need to be divided into supervised smaller groups

_____

_____

- Any monetary charges for visit or for snacks (e.g. cartons of milk)_____

_____

- Contract required: yes ❑ no ❑

Location of the ranch

- Provide a map with a clearly marked route. Indicate distance from the school.
- The type of parking facilities and distance to the assembly area—is there capacity for cars (car pooling) or buses.
- Where to assemble upon arrival

During the Visit

- Class supervision is necessary during the entire visit. **Ensure that parents agree to stay focused on the tour at all times. The farm tour is educational and not a time to socialize.**
- Follow the rancher's rules for your safety around animals, machinery, equipment and structures. Remember the ranch is a working ranch and like any manufacturing workplace, dangers are possible.
- Avoid loud noises and sudden movements. These will frighten the livestock and potentially create dangers for you and reduce production for the rancher.
- Always be on the lookout for potential hazards. What may seem obvious to the rancher as a danger, may not be to you and your group.
- Students or teacher/supervisor collect memories
    1. Take pictures for school displays. Remember some pictures, drawings or stories written by the children may be appreciated by the rancher too.
    2. Tape sounds.
    3. Samples of feed, hay (with permission from rancher). Bring plastic grocery bags.

What to do After the Visit

- Use the notes, pictures, samples collected and make illustrated big books.
- Library display of ranching and related books.
- Career day—listing and outlining all the various careers—invite professionals to the class.
- Theme week or skit to share with a wider audience within the school.
- In-depth research of some of the issues revealed during the ranch visit.
- Art display of ranch sights and activities.
- Poster contest of what ranching is all about or where beef comes from.
- Arrange for an "adoption"—follow the growth of a beef calf from birth to her first calf.
- Use Agriculture in the Classroom lesson plans where available.
- Take a product, e.g. a hamburger, and determine all the job related activities.

Did you know that one of the ingredients in rubber tires is stearic acid which helps the rubber hold its shape. Stearic acid is a beef by-product.

- Create a board game with issues and dangers concerning the rancher's operation.
- Create a model of the ranch.
- Consider entering agriculture models and issues in Science Fairs.
- Chronicle a week in the life of a rancher.
- Consider incorporating *Four Seasons on a Cattle Ranch*– grades 4-5 or *Confolks in Kindergarten*.
- Compile a catalogue of (cattle) products or create a sales flyer advertising things a rancher might need.
- Collect recipes for a (beef) cookbook. Try one of the recipes with the class.
- Research why people need iron.
- Find out how many famous stories, riddles, sayings have farm terms in them, e.g. Jack and the Beanstalk; "Don't cry over spilt milk", "A bull in a china shop".
- Below is a list of some products that can contain beef by-products:

  Candies
  Chewing gum
  Cookies
  Gelatin in Salads
  Ice Cream
  "Light" products
  Marshmallows
  Yogurt
  Boots
  Candles
  Cosmetics
  Crayons
  Detergents
  Fabric softeners
  Floor wax
  Glue
  Toothpaste

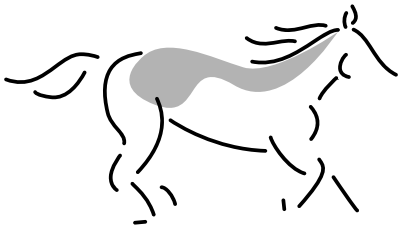
Related Beef Facts

- All cows are female. The mother cow is called the dam.
- A female that has not calved is called a heifer.
- Males are called bulls. The father is called the sire.
- A castrated male is called a steer.
- The most common breeds are the Hereford, Angus, Simmental, Charolais and Saler.
- A cow sees in black and white, not colour.
- Cows have difficulty judging distances.
- Cows have extremely sensitive hearing and can detect sounds that people can't hear. Cows soon learn the sound of the tractor or voice that feeds them.
- Cows like to be treated quietly and calmly.
- Cows require clean and dry environments in which to sleep, eat and bear their young. For beef cattle this is generally out doors.
- Cows have adapted well to their environment and show little change from season to season. Extra hair growth occurs for winter and is shed in spring. The new growth is short and much cooler. Cattle stay warmer when they are dry and clean because a clean dry coat has better insulating power.
- BC has a diverse climate from very wet on the south coast to very cold and dry in the north. It also has a diverse topography from mountains to grasslands to deserts. Cattle can adapt to these varying conditions.
- Cows require fresh, well balanced diets that include forage, grains, minerals, vitamins and water. Cows prefer to eat all day, and when the rumen is full they'll lie down and chew their cud. During the spring, summer and fall they graze on pastures and rangeland.
- Cows are mammals and like all mammals produce milk for their young.
- The cow must be a mother before she will produce milk.
- When a beef cow reaches about 15 months of age she is bred. Pregnancy in a cow lasts about 9 months.
- Once a beef cow calves (gives birth) she produces milk to feed the calf. The calf will be weaned between 5-8 months of age. The cow will be bred again for next year's calf.
- A newborn calf weighs about 45kg and can walk within one hour after birth.
- Heifers—some stay on the ranch to become cows in the herd, some go to other ranches, some are fed until they are big enough to go to the feed lot. In a feed lot cattle are fed high quality feeds before they become food.
- Bulls—some are used for breeding, some are castrated and sent to the feed lot and some stay on grass until they become food.
- The manure a cow produces contains nutrients. The manure can be applied to the soil as a fertilizer and soil conditioner.
- If a cow gets sick she will be treated and may be given antibiotics.
- Antibiotics are medicines that help the cow fight infections. The farmer works with a doctor (veterinarian) and under his/her advice will provide medicine to the cow. The farmer or vet will take great care in the amount and way they give medicine to the cow. Antibiotics if not used properly will find their way into the meat.

- To be sure antibiotics do not enter in the meat, all meat carcasses are checked for antibiotics.
- Cows are built to graze and eat lots of grass. Their cloven hooves provide the traction to walk on pastures, and their large rumens (stomachs) allow them to consume large quantities of grass to digest later when no predators (concerns) are about.
- Cows usually have their ears pierced with I.D. tags. Each cow has a different number that allows the rancher to track her activities by computer.
- Beef producer supplies to the community:
    1. beef;
    2. beef by-products;
    3. markets (machinery sales, seed/ fertilizer sales, veterinarians, processors, etc.).
- Ranchers grow grass, clover, grains (in the Peace River region), alfalfa (Interior region).
- A number of people are involved in getting the beef from the ranch to the table:
    1. ranch owner, manager and staff (cowboys, herdsmen, field personnel, machinery operators, mechanics and welders);
    2. feedlot operators;
    3. truckers;
    4. equipment dealers;
    5. veterinarians, nutritionists and feed dealers;
    6. irrigation and water works dealers;
    7. stockyard employees;
    8. accountants, bankers, lawyers;
    9. government inspectors and advisors;
    10. government and university researchers;
    11. store owners and employees.
- A cow that is milking can eat up to 40kg of grass, forage, and hay a day and drink up to 170L of water a day, especially on hot days. That's over a bathtub full.
- A cow's diet consists of hay, grass, silage and grain.
- A cow's diet is formulated and fed according to the energy, protein and other nutritional needs of the animal.
- On the top front part of the jaw, cows have a tough pad of skin instead of teeth. They have 8 incisors on the bottom front and 6 strong molars on the top and bottom of each side to grind their food. Cows have a total of 32 teeth. Cows use their tongue against the pad to rip the grass.
- Cows are ruminants and regurgitate their food and chew cud. A cow spends a lot of time eating—up to 8 hours per day.
- A cow has 4 parts to the stomach—rumen (the largest), reticulum, omasum and abomasum. It is the abomasum that is the most like ours.
- The amount of water required by a cow is affected by her body size, the amount she eats, how fast she grows and how much milk she produces, as well as by salt consumption and outside air temperature.
- Ranching is a way of life. Ranchers work 365 days of the year.
- Changes from past to present
    1. Past—one farm was often diversified, i.e. had a variety of animals and crops; often only fed the family members or a very small community; work was done by hand, horse or oxen.

2. Present—one farm, one role, if there is any diversification it may be on a separate farm, run by a manager or other family member; feed a large number of people with the volume produced; use of modern technology and equipment to run the farm. Ranchers are from all cultures.

- Use of biotechnology has improved livestock and crop varieties that are more disease-resistant or of better quality. Biotechnology has improved foods, feeds, fertilizers, disease vaccines and pest control products.
- The Canadian cattle industry has developed a cattle population of the highest genetic level in the world. Due to strict standards for disease control, Canadian cattle are free of all major diseases. Maintaining this record is the responsibility of the Canadian Food Inspection Agency.
- The New World had its first exposure to domestic cattle in 1518, but it wasn't until Samuel de Champlain brought them to Quebec in 1608 that they became an enduring part of N. American agriculture.
- By 1660, breeding cows brought from Brittany and Normandy became the basis of the only breed of dairy cow developed in Canada—called appropriately enough—the Canadienne.
- 1884 Milk bottle invented by Dr. Hervey D. Thatcher, Potsdam, New York.
- In the 1890s there were no cars, few telephones and little electricity. Most of the work now done by gasoline and diesel powered equipment was done by the 17,000 horses in use on BC farms in 1894.



- Tractors first appeared in the early 20th century and by 1922 numbered 332. Today there are well over 33,000.
- Beef Industry Facts
    1. Beef production contributes 15% to BC's 1.9 billion dollar agricultural industry.
    2. Ranching occurs in almost all regions of the province and provides an important stabilizing influence to many lumber milling and service based rural communities.
    3. Fourteen percent of BC's beef is consumed within the province, 67% is sold to Alberta, 19% to other provinces and the US.
    5. British Columbia has about 6% of the total number of cows in Canada. Canada has 14.4 million head of cows– 17 million head if yearlings are included in the count.
    6. Fifty percent of Candian beef production is exported, of this 87% goes to the US.
    7. Cow-calf production predominates the BC industry based on the abundant forage (range and pasture) resource in BC.

Glossary

Amino acids: Nitrogen-containing compounds that are the building blocks from which proteins are made.

Antibiotics: A class of drug usually produced by living organisms (moulds, bacteria or green plants), which can inhibit or kill undesirable bacteria. Example: penicillin.

Available protein: The portion of the crude protein that can be used by the animal.

Average daily gain (ADG): The average daily liveweight increase of a growing animal, usually expressed in kg, g or lb./day.

Bacteria: Microscopic unicellular organisms found almost everywhere.

Balanced ration: A 24-hour feed allowance that provides an animal with appropriate amounts and proportions of all nutrients required for a given level of performance.

Barn: Place where animals, feed and/or machinery may be housed.

Breed: Variety of animals within a species. To produce offspring.

Bull: Adult male. Potentially a very strong, dangerous animal needed to be treated with respect and distance.

By-product: Produced as a result of industrial manufacturing, plant or animal processing. Examples: distillers grains, beet pulp, meat and bone meal, fish meal, leather, medicine, marshmallows, stearic acid.

Calf: Young dairy cattle that are between 0 and 6 months of age.

Carbohydrates: Major energy providing substrates including starches, sugars, cellulose and hemicellulose. All carbohydrates contain carbon, hydrogen and oxygen, and are usually divided into two fractions - structural (fibre) and non-structural (sugars and starches).

Chaff: Husks or other seed coverings and other plant parts separated from seed during harvest or processing.

Chute: Narrow fenced walkway used to restrain cattle.

Colostrum : The milk secreted by female mammals for the first few days after giving birth. It is particularly rich in nutrients and antibodies essential for newborn survival.

Complete feed: A thoroughly blended mixture of different feed ingredients formulated to meet specific nutrient requirements.

Concentrate: A mixture of different grains fed to the cows in order to meet the animals nutrient requirements for growth, pregnancy and maintenance.

Corral: Fenced area used to confine cattle.

Cow: Mature female cattle that are over 24 months of age.

Dam: Adult female cow. Used only when refering to her calf (e.g. the mother of the calf is the Dam).

Digestion: The changes that occur to a feed within the animal's digestive tract to prepare it for absorption and use.

Dry matter: Feed residue left after all moisture has been removed by drying (100% dry matter).

Energy: A nutrient essential for maintenance, growth, production and reproduction. Energy is required in larger amounts than any other nutrient except water, and is often the limiting factor in livestock production.

Escherichia coli *(E. coli):* E. Coli is of the coliform group, which are organisms associated with the intestinal tract flora. Presence of coliforms is usually an indication of unsanitary handling or processing procedures.

Fat (nutrient): A term used in a general sense to refer to both fats and oils. Fat supplies 2.25 times as much energy as carbohydrates. Both fats and oils share the same general structure and chemical properties, but have different physical properties, i.e., oil is a liquid at room temperature, while fat is a solid.

Feed additives: Products added to basic feed mixes to improve the rate and/or efficiency of gain, prevent certain diseases, or preserve feeds.

Feed lot: A place where many cattle are housed together and fed a special diet. Most go to slaughter but some go back to the ranch.

Feed processing: Physical or chemical changes made to feed to make it more nutritious, store easier or make more pallatable, e.g. pelleted grain, flattened grain, chopped hay, cubed hay, silage.

Food-borne illness: The sickness resulting from eating food contaminated with either bacterial toxins or by certain bacteria in the food which can be caused by improper storage, handling or preparation, often resulting in vomiting and/or diarrhea. The booklet *Chill Out* is available from the Beef Information Centre with more information on this topic.

Forage: Plants or plant parts fed to, or grazed by, domestic animals. Forage may be fresh, dry or fermented (pasture, green chop, hay, haylage or silage). Term is often used interchangeably with roughage.

Grain: Any of the common cereal seeds e.g. oats, barley, wheat.

Hay: Dried, cut forage packaged in the form of bales that can be small square bales weighing around 35 kg to large 1 tonne round or square bales.

Heifer: A young cow between the ages of 6 months and 24 months, that has not had a calf.

Metabolism: All of the chemical changes nutrients undergo following absorption from the digestive tract.

Micronutrient: Any ingredient, such as minerals,or vitamins, added in very small amounts to a ration.

Microorganism: Any microscopic animal or plant-like organism including bacteria, yeasts, viruses and single-celled algae.

Milk replacer: A substitute for fresh whole milk, fortified with vitamins, minerals and sometimes antibiotics; used as a nutrient source for young animals.

Macro (or major) minerals: Minerals required in relatively large amounts by livestock. Includes calcium (Ca), phosphorus (P), magnesium (Mg), potassium (K), chlorine (CI), sulphur (S) and sodium (Na).

Micro (or trace) minerals: Minor mineral elements required in very small amounts in the ration of animals. Includes manganese (Mn), copper (Cu), zinc (Zn), selenium (Se), iron (Fe), cobalt (Co), iodine (I) and fluorine (Fl).

Minerals: Inorganic feed elements essential for life.

Mineral supplement: A rich source of one or more mineral elements.

Monogastric: An animal having a single or simple stomach system. Example: swine.

Nutrients: Feed components required for the maintenance, production and health of animals (water, carbohydrates, lipids, proteins, minerals and vitamins).

Nutrient requirements: The minimal amounts of nutrients (energy, protein, minerals and vitamins) necessary to meet an

animal's minimal needs for maintenance, growth, reproduction, lactation or work.

Palatability: The appeal and acceptability of feedstuffs. Affected by the taste, odour, texture and temperature of the feed.

Pathogen: Any microorganism that can cause disease. Salmonella is always considered a pathogenic microorganism. E. Coli is considered an opportunistic pathogen. It is not always pathogenic, but given the opportunity, it can cause food-borne illness.

pH: A measure of acidity or alkalinity. Values range from 0 (most acidic) to 14 (most alkaline or basic). A ph value of 7.0 is neutral (neither acidic nor alkaline).

Pasture: A fenced grass field.

Protein: Naturally-occurring compounds containing nitrogen, carbon, hydrogen and oxygen, and sometimes sulphur or phosphorus. Proteins are made up of complex combinations of amino acids and are essential for animal growth, production and reproduction.

Range: Large tracts of grasslands used for grazing.

Ration: A diet that may include grains, minerals, vitamins, salt, forages. The 24-hour feed allowance for an individual animal.

Roughage: A term used to describe a feed high in fibre (greater than 18% crude fibre). Roughage tends to be bulky, coarse, and low in energy. Example: straw.

Ruminant: A cud-chewing animal having four stomach compartments. The rumen (first stomach), is a major site of microbial fermentation of feeds permitting breakdown of fibre. Examples of ruminants: cattle, sheep, goats.

Salmonella: A group of organisms named after a U.S. veterinarian, D.E. Salmon. There are over 2,000 species within the genus Salmonella that will infect man. These rod-shaped bacteria cause various diseases in man and animals, including typhoid fever and food poisoning.

Saturated fat: A completely hydrogenated fat. Saturated fats are solid at room temperature. Example: animal tallow.

Screenings: Small, imperfect kernels, broken grains, hulls, weed seeds and other foreign material obtained from the cleaning of grain.

Silage: Feed preserved by an anaerobic (no oxygen) fermentation process. Examples: corn silage, haylage, high moisture corn.

Silage additives: Substances added during the ensiling process to enhance the correct and rapid fermentation of the feed.

Silo: Structure used to store forage. Stores it in a manner that prevents spoilage over long periods of time.

Sire: Adult male. Only used when refering to a calf's father.

Steer: A castrated bull.

Sweet feed: A commercial feed sweetened with molasses to improve palatability.

Teats: Nipples on the udder. The baby calf nurses by instinct.

Tie stalls: Stalls or beds where an animal is designated to and can not roam free.

Total mixed ration (TMR): All ration ingredients, including roughages, mixed mechanically to provide one homogenous mixture. TMRs are used in large dairy or beef feedlot operations.

Udder: The part of the cow that produces milk (mammary gland).

Unsaturated fat: Any fat that is not completely hydrogenated. Unsaturated fats are liquid at room temperature. Examples: corn oil, vegetable oil.

Vitamins: Organic compounds that function as parts of enzyme systems essential for many metabolic functions.

Support Materials

Support Materials available from British Columbia Agriculture in the Classroom:

1767 Angus Campbell Road
Abbotsford, BC V3G 2M3
Phone: (604) 556-3088
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