

Beef

Cattle: Making Good Use of the Land

Canada has 77 million acres of land which aren't suitable for growing crops or vegetables. Cattle offer a way to harvest food from land which is too rough, rocky, dry, wet, cold, sandy or infertile to be used for crops. Much of this land will only grow grass. The cattle have the ability to graze and eat the coarse vegetation, and they convert it to meat and milk for people. Only ruminant animals, such as cattle, sheep, goats and bison can use this harsh land which cannot be used for crop production.

Well managed cattle herds are

part of a healthy, functioning environment. When the grass is chewed the roots of the grasses grow more and help to keep the range healthy. These roots hold down the soil and prevent erosion. The grasses on pasture land for cattle prevent soil erosion by wind and water that can occur on tilled soil. Cattle manure further enriches the soil, and helps provide nutrients for grasses and other plants.

The feed and water that are provided for cattle on these lands also serve as feed and water for wildlife. Both

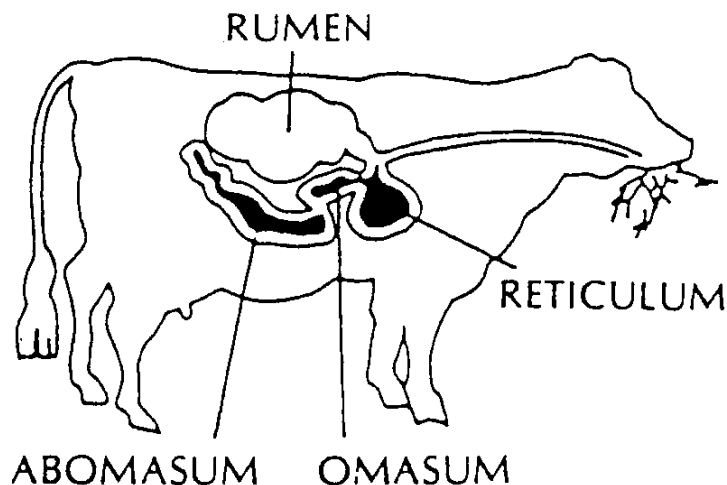


cattle and wildlife depend on forages for food. Forages are plants such as grasses, alfalfa, clover, and hay. Because cattle and grazing wildlife are attracted to different kinds of forages, they are able to co-exist on the same range. Good management by the beef farmer and rancher prevents over-grazing by cattle. Good range practices include:

- balancing animal demand with grass supply;
- distributing livestock evenly on the range;
- resting the land after grazing.

Cattle feed comes mainly from a great variety of plant roughage, such as hay, straw, grass and by-products—such as potato peelings from a processing plant—not edible by people. Cattle use these otherwise wasted resources and convert them into beef which has all the essential proteins and nutrients that people need to be healthy. While cattle are finished on grain, much of the grain that they eat is coarse feed grain that cannot be converted to human food.

Those AMAZING Ruminants



While people have a stomach with only one compartment, cattle's stomachs have **four compartments**. Animals with this kind of stomach are called ruminants. Ruminants are an important way for Canadians to make good use of land that can not be used to plant crops. Ruminants' unique digestive systems allow them to convert coarse fibre into high quality protein. This sets them apart from other livestock. Animals with one stomach, such as pigs and chickens cannot digest coarse grasses.



Getting beef from the field to your table is not as simple as it might seem. Cattle producers rely on elements they are unable to control, such as the weather, especially rain, and the value of cattle in the markets. Prices received by cattle producers are determined by supply and demand at the time of sale. The cattle business is not a margin-added business (means the profit is built into the price), like most manufacturing companies.

Cattle are bought by a processing plant to be converted from *beef on the hoof* to *beef for the table*. At the processing plant there is inspection of live animals and meat before chilling and grading. Refrigerated trucks take beef to stores and restaurants where it sells as steaks, roasts, stew and hamburgers.

A 500 kg steer doesn't yield the same volume of processed beef. Once

the hide, bones and other by-products are removed, there is about 41% of the steer or 205 kg of retail beef available for the consumer. Parts of the animal not suitable for meat are used to make by-products. These are used in a variety of foods, toiletries, clothing, manufactured items and medicines.

Cattle today have more lean meat and less fat finish than cattle produced 30 years ago. This leanness is due to improvements in genetics and feeding. That means today's beef has fewer calories, 50% less fat, and 21% less cholesterol. This makes beef an excellent food choice because it is a nutrient-dense food providing an abundance of nutrients for a small amount of calories.

Beef is particularly important for providing people with protein, zinc and iron. They are all necessary for growth, development and energy.



Cattle Have Health Concerns Too

Cattle need to be kept healthy, just like you. For this reason, when they are young they are given vaccinations to prevent them from getting sick. If they do get sick, the cattle producer will sometimes give them medicines called antibiotics to make them well again.

This cannot cause any harm to people when they eat beef, because there are rules that the producer must follow to make sure all the drugs are

gone from the animal's body before it goes to market. Beef cannot be sold if it has traces of antibiotics.

The federal government has about 300 animal doctors called veterinarians and 1,200 meat inspectors who work at packing plants to make sure the rules are being followed. When producers do not follow the rules, they don't get paid. The condemned beef is used as fertilizer.

For More Information ...

Please contact:

Beef Information Centre

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Saskatchewan Stockgrowers Association:

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Saskatchewan Cattle Feeders Association:

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Canadian Cattlemen's Association:

www.cattle.ca

Cattle in Sustainable Agriculture

Cattle play an important role in environmentally sustainable food production. Growing grasses and legumes for cattle feed is an excellent way to protect some types of land from erosion. Native range and tame grass pastures make up almost one third of Canada's farmland. Much of this pasture land is too rocky, dry, marshy, or susceptible to erosion to be cultivated for vegetables or cereal crops.

Good resource management makes sense to cattle producers. Farm families know that preserving the land for future generations depends on today's care. Listed below are the components of an environmentally sustainable cattle production system. Can you find them?

agriculture	Q P A S T U R E W P R E S E R V I N G E Q G W L V G G
barley	K R W J D W A F B G K X F G Z T V G R S O I L X Z E G
bovine	L A L U N Q N Y C X H U J K R Q I O H U Z P P V H A O
bull	G I F Z T D G E E S E Z X W Z L G R A S S E S P S Z O
by-products	R R O S B R E M F C V N J K C T K D C T W F A G G C D
calf	A I U W E E N S F E R U T L U C I R G A K U J L C H S
cattle	I E C M I T J R I D L U Z L U Z I B Z I I Z W O L D T
conservation	N V D N I B N C C O N S E R V A T I O N K V Q C Z X E
cow	S A N A A N C H I O S B V R S L Q F N A C F P N P F W
deer	U E L D N L A W E Q E D E G F N M P H B A R L E Y X A
ducks	R F Z Y R Y T N N Y Y X U N Z D Y I V L C E V I V O R
efficient	P S X A B P W A T E R F O W L Z A P N E K N Z R E E D
enhancing	L M A N U R E D F G E O D I X W A R H R J E K N I I S
feed grains	U A N B L V A V T O S R B C N X Q O O P H W H T Z L P
forage	S V N B L S T M J O O A T S Q S N D W E X A X Y I R T
geese	H F A V D S H R G O U G A F R P O U F T I B S U X U Y
good stewards	N F G G B C E J K Z R E L G Z J M C A V U L O X D C V
grain surplus	X I N C Y B R S E O C A T T L E V T K L L E B V C A A
grasses	G M T M P N B V C X E Z G L K B I I G R K A A L I Q S
habitat	G F R R R F D E S Z S U N D R B V O G U B T P R D N W
humane	T T X G O X H Y U O M X O J A I A N K O P L M F D G E
manure	E F E E D G R A I N S M F H N J X P B E G A I S N X D
nitrogen cycle	F V G N U K E W S T B T D X C O V R P N U S Q I C C H
oats	I P F C C Y Q N X T V X E F H Y Y A L A G T C D K B B
pasture	L T V N T V Y S C O W D M E E V X C G M J N A T U F G
prairie	D U C K S L O Y K Y Z S M Q R S F T B U A L L J B D Z
preserving	L Y Y V S Z A S Q F C X M O R G P I A H C N F B C C G
production	I K G S D M V M E O I L A A C P U C N M B S N S U T N
practice	W N X V S D Y D F W A T E R O V F E W N G F X A B V S
rancher	
range	
renewable	
resources	
ruminant	
soil	
steer	
sustainable	
water	
waterfowl	
weather	
wildlife	

Canadian Cattlemen's Association

Getting Your Beef Facts Right!

Test your knowledge by responding true or false to the following statements:

- T F 1. Cattle have a stomach with 4 compartments that is able to digest coarse vegetation.
- T F 2. Cattle and other ruminants thrive in dry, rough, or mountainous areas where crops will not grow.
- T F 3. The grain fed to cattle does not prevent grain from being used for human consumption.
- T F 4. Cattle eat grain only for a short time to produce tender beef.
- T F 5. Only about 2.5 kg of grain is needed to produce .5 kg of retail beef.
- T F 6. Cattle help to enrich our soil.
- T F 7. Reducing beef consumption in Canada will have no impact on rates of tropical deforestation.
- T F 8. Canadian meat inspection has the reputation of being one of the best systems in the world.
- T F 9. Beef by-products serve as source materials for other industries, including pharmaceuticals, chemicals, and textiles.
- T F 10. Beef is an important source of essential nutrients.

