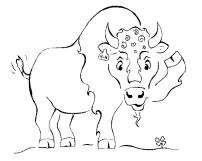
Alberta 4-H Bison Project – Member Level One

Range and Pasture Management



Roll Call:

Name one plant that you might find out in the pasture.

Range or pasture?

Most bison operations have both range and pasture land. WAIT A MINUTE!!! Are they not the same thing?

Pasture is land that grows plants put there by man. Pasture land is usually more productive than range land.

Range is not suited for growing crops because it is too dry, rocky or rolling. Range land grows native plants; those that naturally grow in that area.



What is range and pasture management?

Range and pasture management is your plan for the care and use of your range and pasture land. This plan allows you to get the most product (meat, live animal, etc.) per hectare of land, while keeping the land in reusable condition. You want to make sure you do not harm the plants, soil and water of the land.

Without such a plan, your range and pasture would not stay in good condition and you would be unable to get the same return from it in the future.

Range and pasture management is much more than turning your bison out to graze. It is important.

By caring for the land, you make the best plants grow at the fastest rate. The bison essentially harvest these plants. Thus turning the plant into a product that can provide an income for the operation.

With good management, you will always have a reserve of feed. Intensive grazing of a small area will cause the plants to die off.

With proper management, you can keep a good plant cover. The grasses and plants will have strong root systems. This plant cover will help to protect the soil from erosion.

To give your range and pasture land good management, follow these rules:

Use the right season for grazing.

Some plants (native western wheatgrass and Russian rye grass) are cool season grasses. They begin to grow early in the spring. Warm season plants (blue grama grass) do not begin to grow until the weather becomes warmer.

In the spring, allow the plants to grow to a height of 15 cm before you put the bison out in the spring pasture to graze.

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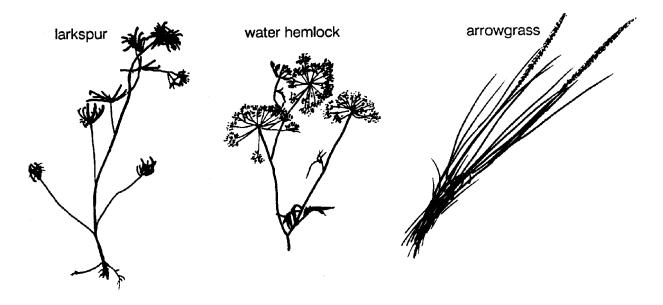
Use the right number of animals.

Do not let too many animals graze any area. Change the number of animals grazing your land so that half of the annual grass is left at the end of the grazing season. Remember that the green leaves make the food for the roots to grow. There is an old saying "it takes grass to make grass".

Use the right amount of time for grazing. Bison are natural migrants. In the wild, the bison herds naturally use a form of rotational grazing patterns. We could learn a thing or two from them!!

Know the range and pasture plants.

It is important to be able to recognize plants that are poisonous and can harm your livestock. You will need to get rid of them or fence them out. Three plants that can poison your bison are



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Range and pasture plants

Many different types of plants grow on our land. These plants differ in their appearance and growth habits. There are four main plant groups:

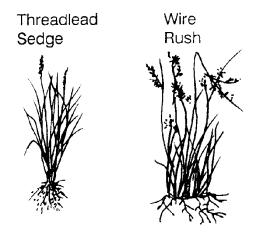
Grasses are the most important range plant group. They supply most of the feed for our bison. They have hollow, jointed stems and the leaves are in two rows on the stem. Veins on the leaves are parallel. Examples are rough fescue, quackgrass, smooth brome grass, orchard grass, and wheatgrass brome.

Find a sample of any of the following; rough fescue, quackgrass, smooth brome grass, orchard grass, or wheatgrass brome and tape it here.



Western Wheatgrass

Grasslike plants look like grass but they do not have a hollow stem and the stem is not jointed. Veins in the leaves are usually net like. They include **SEDGES** (triangular stems) and **RUSHES** (round stems).



Can you find either of these?

Forbs are non grassy plants with annual stems or tops. They include range weeds and flowers. Examples are gumweed, skelton, tapertip hawksbeard, bull thistle and tumbling mustard.

Do you know where you can find some of this?



Shrubs are the woody plants with stems and buds that winter above the ground and stems that branch near the base of the plant. Examples are sagebrush, wolf willow, rabbitbrush and bitterbrush.





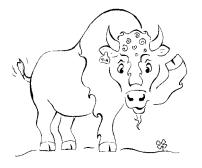
Know your plants!

Below are some of the important words you have learned in this unit. Unscramble them and put the words in the blanks.

NGREA	 Activity
RSTUPAE	
BROFS	
ZAERG	
NMGEAA	
SSBRHU	
SSSEARG	
DGSSEE	 Know your plants
SSHRUE	

Alberta 4-H Bison Project - Member Level One

Business Management



Roll Call:

Can you list one thing that would be important to keep as a record?

Why bother keeping records?

Records you keep on your farm might be for production, financial, or personal reasons. Some of these records might be

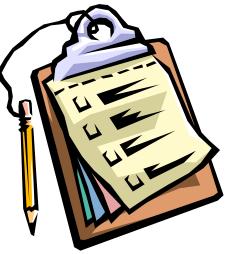
- Vaccination dates
- Weaning dates/weights
- Birth dates
- Health problems

Good records help you to know many things about your farm and its animals including:

- Good and poor mothers
- I dentification of your animals
- Healthy cow families
- I ncome and expenses
- Overall herd health

By keeping accurate records, you will have the information you need to make informed decisions about your operation and its future.

In 4-H, we require that you keep detailed records about your project. By doing this, we hope that you will realize how important records are.



Where and how do you keep farm records?

It is important to keep your farm records in a way that works for you and your operation. There are many different ways that producers have of keeping records. It is not important what system you use, it is only important that you use a system that will allow you access to those records when you need them.

No matter how you keep the records, you will need to decide:

Where you will keep your books and important farm information. It is important to keep your information organized and all together in a place where you can easily access it (office, desk, filing cabinet, etc.)

When you will update your records. One farmer routinely records all of his information in his computer every Friday afternoon. During the week, he jots notes in a small book he carries in his pocket.

Who will record the information? If more than one person is recording, it is important that both or all of you do it the same way.

How you will use your records is also important to determine. Will you use them to make farm decisions or just for income tax purposes?

What information you want to be able to get from your records. You can use your information and prices to find out profit per animal, how much you can afford to spend per calf purchased next season, or almost anything else you want to know. Decide in advance how you want to use the information and store it in a form that you can use.

Why your records are valuable to you. A farm is a business and good farm records are one of the most valuable assets.

Keeping a calendar

The advantage to keeping good records is that you will have a documented history of events. If you keep the proper records you will know when the last time you treated a specific animal was, or when you gave your cows their vaccination, or when you put the bull out with the cows. Knowing all these dates will help you manage your herd more effectively.



What sort of information do you need to record in your project book?

At the beginning of the 4-H year you were given a regional calendar, what sorts of information was put on there for you?

Record it - BISON!

This is a fun activity to do with your club. Involve all the members, parents and siblings. The first thing that you need to do is fill in the card below. This will be your "bison" card; this is like a bingo card.



In the five squares under the letter "B" put down any five numbers from 0 - 9. In the five squares under the letter "I" put down any five numbers from 10 - 19. In the five squares under the letter "S" put down any five numbers from 20 - 29. In the five squares under the letter "O" put down any five numbers from 30 - 31. In the five squares under the letter "N" put down any five numbers from 40 - 49.

Once you have completed this, you are ready to start the game. The number caller will decide what pattern you need to fill on your "bison" card. For example, all squares on the card are a blackout, or all the squares in the top line and all the squares in the "S" column, this would be a "T". When the game starts, you will hear the caller say something like "S 29" then if you have that number you fill in that square. Once you have the pattern that was said at the beginning all filled in you put up your hand and yell "BI SON"!

B	S	Ο	Ν

