Bison Cow Hunt Orientation

Utah Division of Wildlife Resources

Wade Paskett
Regional Wildlife Biologist

Justin Shannon
Big Game Program Coordinator

Kent R. Hersey
Big Game Project Leader

UTAH DNR WILDLIFE RESOURCES

Introduction

In this orientation you will find information on what to expect on your bison hunt, how to determine a cow from a bull, horn growth that can be helpful in deciding which animal you may want to harvest, and what equipment you might find useful. At the end of this orientation, you will find information on bison hunting and Capital Reef National Park. If you plan to access or leave the Henry Mountains hunt unit through the park, please pay close attention to this information.

Prior to your hunt, you will receive a tooth collection packet in the mail. If you harvest a bison, please remove the two middle incisors for aging purposes. Please follow the instructions included in the kit and mail in the teeth using the self addressed envelope.

In addition to your tooth packet, you may also receive a blood collection kit in the mail. This kit is used to test for brucellosis in the Henry Mountains bison herd. If you successfully harvest a bison, please collect a blood sample from your animal by following the instructions on the kit. Please make every effort to collect this sample correctly and send it in promptly. Note that not every hunter will receive a blood collection kit.

During the winters of 2011 and 2013, 77 adult bison on the Henry Mountains were captured and fitted with GPS and/or VHF radio collars for a long-term research project monitoring bison movements and survival. If you harvest a collared bison, it is very important that we receive the collar(s) in order to download stored GPS data and reuse the collar/s. Please do not cut the collar off. Doing so makes the collar unusable, and they are very expensive to replace. A small adjustable wrench or multi-tool pliers can remove the collar fasteners/nuts. If the threaded posts are bent pliers may be needed to twist or break off the posts. The cape of a harvested collared bison could show wear from the collar.

Please remember to complete the Mandatory Reporting Survey. This information is needed to better manage the bison herd. All Once-In-A-Lifetime, Premium Limited Entry or CWMU hunters must provide survey information **within 30 days** of the final day of the hunt by either logging on to the Division of Wildlife Resources website at: http://wildlife.utah.gov/dwr/hunting/harvest-reporting.html or calling in your information to 1-800 221-0659.

This survey must be completed even if you did not harvest an animal. If you fail to complete your survey you will be ineligible to apply for permits or bonus points in the following year. Note that sending in your tooth packet or blood sample, does not fulfill your harvest reporting requirements.

Bison on the Henry Mountains

The Henry Mountain bison herd was transplanted from Yellowstone National Park to the San Rafael Desert in 1941 when 15 cows and 3 bulls were released. Shortly after release, the 3 bulls abandoned the herd and 5 more bulls were transplanted the following year. The herd moved from the San Rafael Desert to the Burr Desert and later began to use the Henry Mountains.

Transplanting the bison in 1941

Bison roaming somewhere on the San Rafael or Burr Desert

Law Enforcement

Any bison hunter that accidentally or otherwise kills the wrong sex of bison or kills extra bison has the obligation of salvaging the animal and reporting the incident to DWR law enforcement immediately. Failure to do this may result in felony criminal charges. If you kill the wrong sex, clean the animal and move it to a location where it will not spoil. Then call one of the numbers listed below, starting with Price Dispatch. If there is no answer, please leave a message including phone numbers and contact information so an officer can get in touch with you.

Price Dispatch (435) 637-0893
Ben Sterns - Bullfrog/Henry Mtns (435) 630-5312
Lt J Shirley - Price (435) 820-6011
Stacey Jones - Price (435) 820-6445
Ben Wolford - Monticello (435)220-0526

Patience is Key

(Bull left, cow right)

The longer you watch a bison the better your chances for gathering enough clues to determine its sex. Take the time to learn the identifying characteristics described in this course. It is very important to use all the characteristics to avoid accidentally shooting a bull.

Identifying Characteristics

Cow	Mature Bull	Yearling Bull
Penile sheath absent	Penile sheath present	Penile sheath may not be visible
Horns thin at base	Horns heavy at base	Horn thickness intermediate
Horns curve inward	Horns generally have less inward curve	Horns jut out at an angle
Head narrow	Head broad, triangular dark and wooly	Head intermediate
Body smaller, less muscular	Body large, stocky and muscular	Body smaller, less muscular
Neck noticeable	Shoulder and head seem to merge, no neck	Neck noticeable

REMEMBER: There are exceptions to every characteristic, so use several to make your determination.

For cows look specifically for:

1) The absence of a penile sheath
2) Horns that are thin at the base
3) Horns curving inward. However, realize that some bulls have highly curved horns. Use the basal diameter of the horn to help judge.

Stay away from:

1) Heavy horns
2) Horns with no inward curve
3) Horns that jut out at an angle

Young bulls are sometimes mistaken for cows. Their horns are beginning to curve and the base circumference is similar to that of older cows.

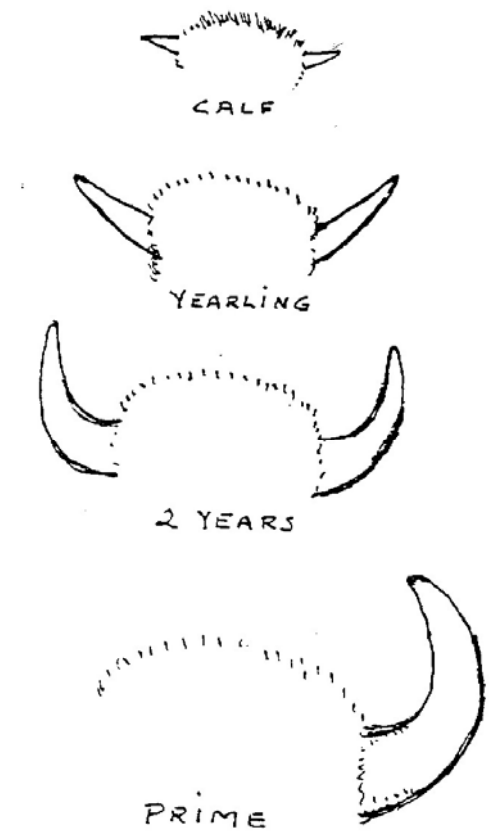
REMEMBER: Take your time and don't take chances.

This bull is between 1 and 2 years old

This bull is between 2 and 3 years old and was taken on the cow hunt because it had curved horns. Use all the identifying characteristics before pulling the trigger

Mature cow bison

Horn Growth



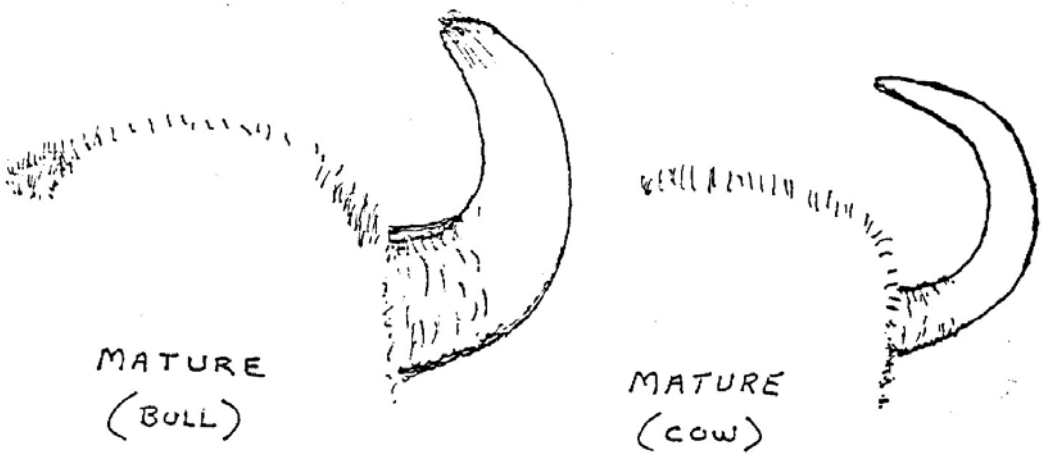
HORN GROWTH IN THE BUFFALO

Both sexes of buffalo start their horn growth soon after birth and the horns continue to grow throughout the life span. These sketches indicate what you may expect to see in the different age groups. The horns are fairly straight through the first year and begin curving up and in as age progesses.

The horns of the bulls have a much larger base circumference than those of the cow with a general more massive appearance.

The cow's horns show less taper with a more constant circumference along the horn length. The cow will also show a sharper curve to the horn with some older cows making almost a half circle.

As the animals become older, the horns show a wrinkling and roughening near the horn base in a growth ring fashion. Old bulls horns will often be worn and split as a result of years of doing the things that a bull buffalo can do with these very effective tools.



The Cows

Although this cow does not have horns that curve inward, notice the narrow face, noticeable neck, and thin bases of the horns.

The Cows

This cow has the classic thin horns that curve inward and the narrow face. The head is also less wooly than a mature bull’s.

The Cows

Although this is clearly a cow (thin horns curving inward, narrow face), this would not be a good shot. The calf is behind her and could be injured if the bullet passes through.

The Cows

This is the same cow as before. The calf is still behind her and still not a good shot to take.

The Cows

Left to Right: Calf, Bull, Cow. Notice the difference in horn curvature and thickness between the bull and the cow, as well as the wooly face on the bull.

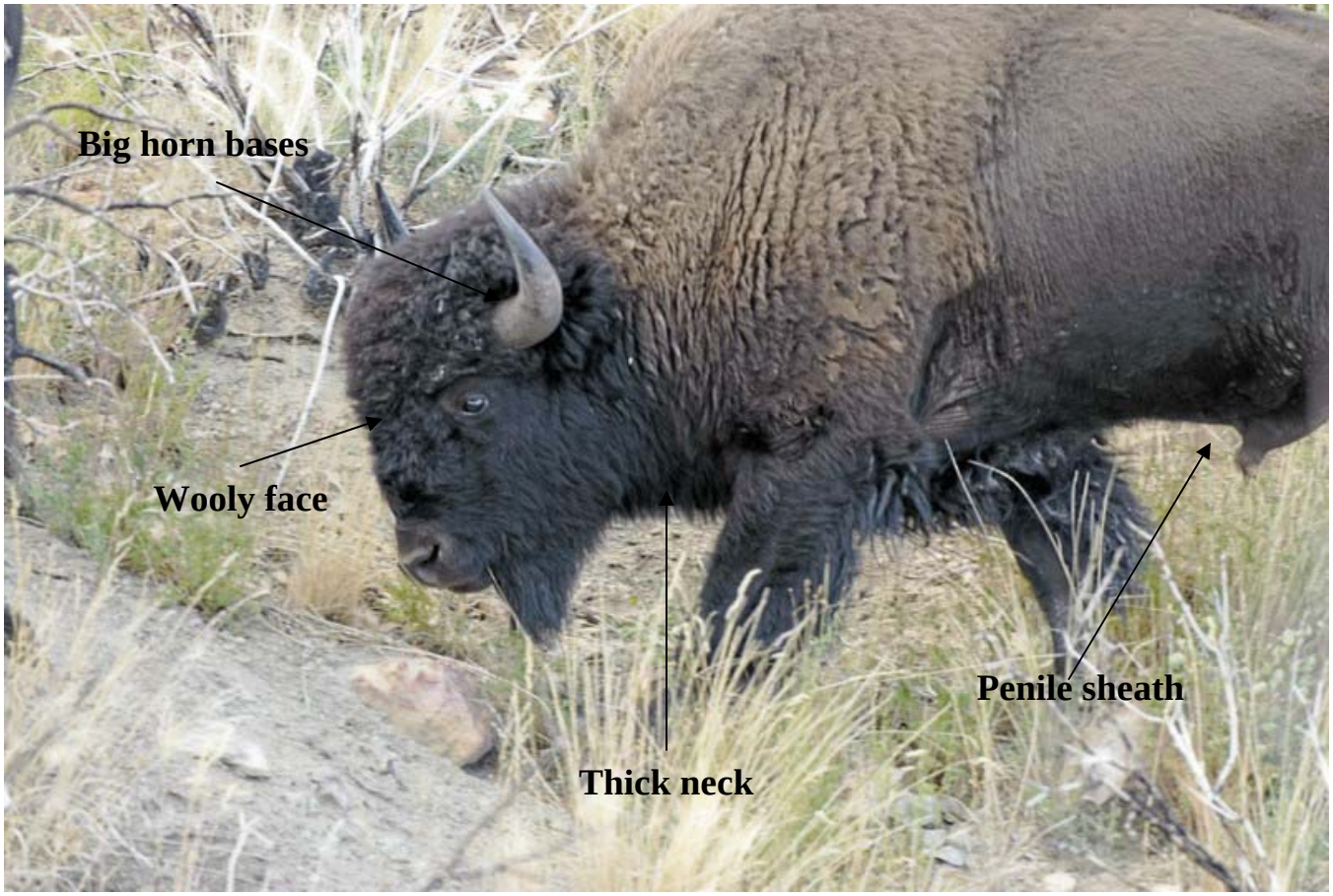
The Cows

The view of this cow is obscured by vegetation. Make sure you have a clear view of all the characteristics described above before deciding to shoot.

The Cows

The face is somewhat wooly but narrow. Notice the curvature of the horns

The Bulls



This picture depicts some of the characteristics that will help you identify a bull bison.

The Bulls

This picture clearly shows the horn characteristics of a bull approximately 3-4 years old. Notice the big horn bases and the curvature of the horns (curve up, not inward)**.** There is individual variation in size and curvature of horns; some bulls have a much more inward curve.

The Bulls

Bulls often have these very dark looking heads. Notice the size of the horns and the wooly head. When looking at a cow with a very dark head use all the identifying characteristics to be sure it is not a bull.

The Bulls

Notice the narrow face and not so wooly head, yet you can see it is a young bull from the penile sheath. The angle of view makes it look like the horns curve in like a cow. This is a very good example of why you need to take your time, get different views, and use all the identifying characteristics before making your decision.

The Bulls

The Bulls

Young bull on right, possible cow on left. Don’t take chances, let young bison go!

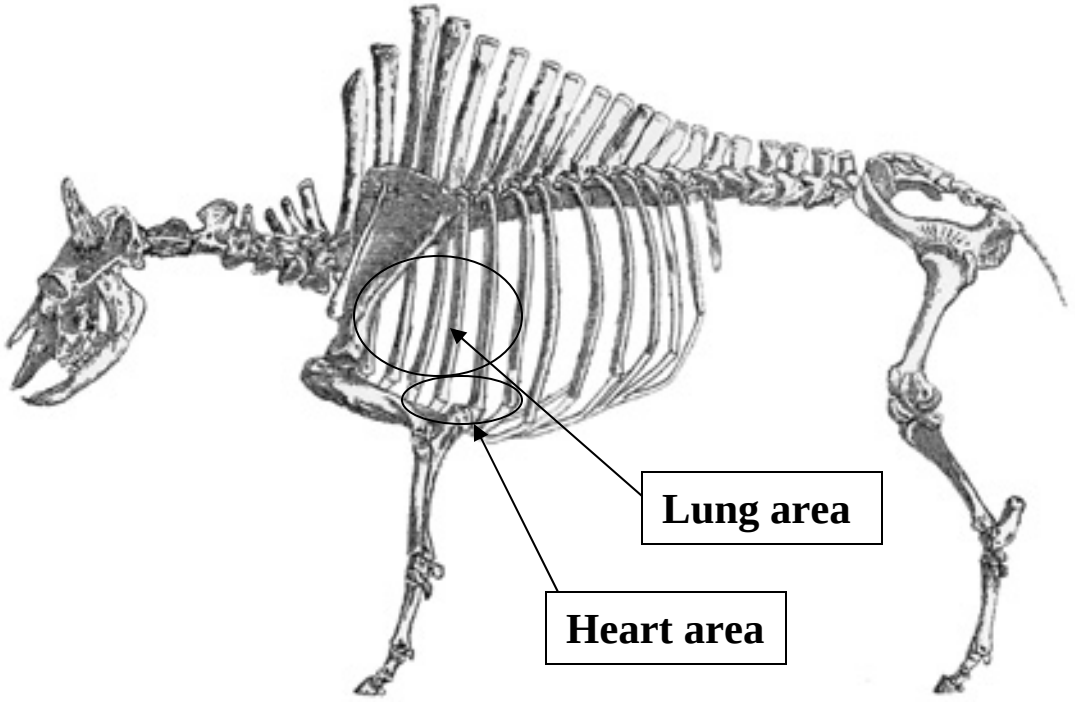
The Bulls

This is a young bull, but notice the face is not wooly and is narrow. The base of the horns is similar to that of a mature cow. This is why young bulls are mistaken for cows. Be patient when making your decision to shoot.

The Bulls

Shot Placement

This diagram will give you an idea of the location of the vitals. Note the vertebrae on the bison skeleton which makes up the 'hump.' The vitals are lower than most people think. Don't shoot too high.



Shot Placement

Shoot or Don’t Shoot?

This is a bull, so don’t shoot.

Don’t set your sights on anything that looks like this bull.

The bull has moved his leg forward and exposed the heart area. The lung area is the largest vital area to shoot.

Shot Placement

This would be a good shot except for the bison lying down behind this cow.

Shoot or Don’t Shoot?

There is a shot at the cow in the upper center.

Shoot or Don’t Shoot?

These are about the size of the calves that you will see, possibly a little larger and darker. Don’t take chances shooting at a calf.

Shoot or Don’t Shoot?

Wait. There is no shot here.

Shoot or Don’t Shoot?

The cow bottom center is moving into the herd. This is not a good shot. The cow to the right is grazing, and this would be a clear shot. If you see a different cow that you want to take, be patient until you have a clear shot.

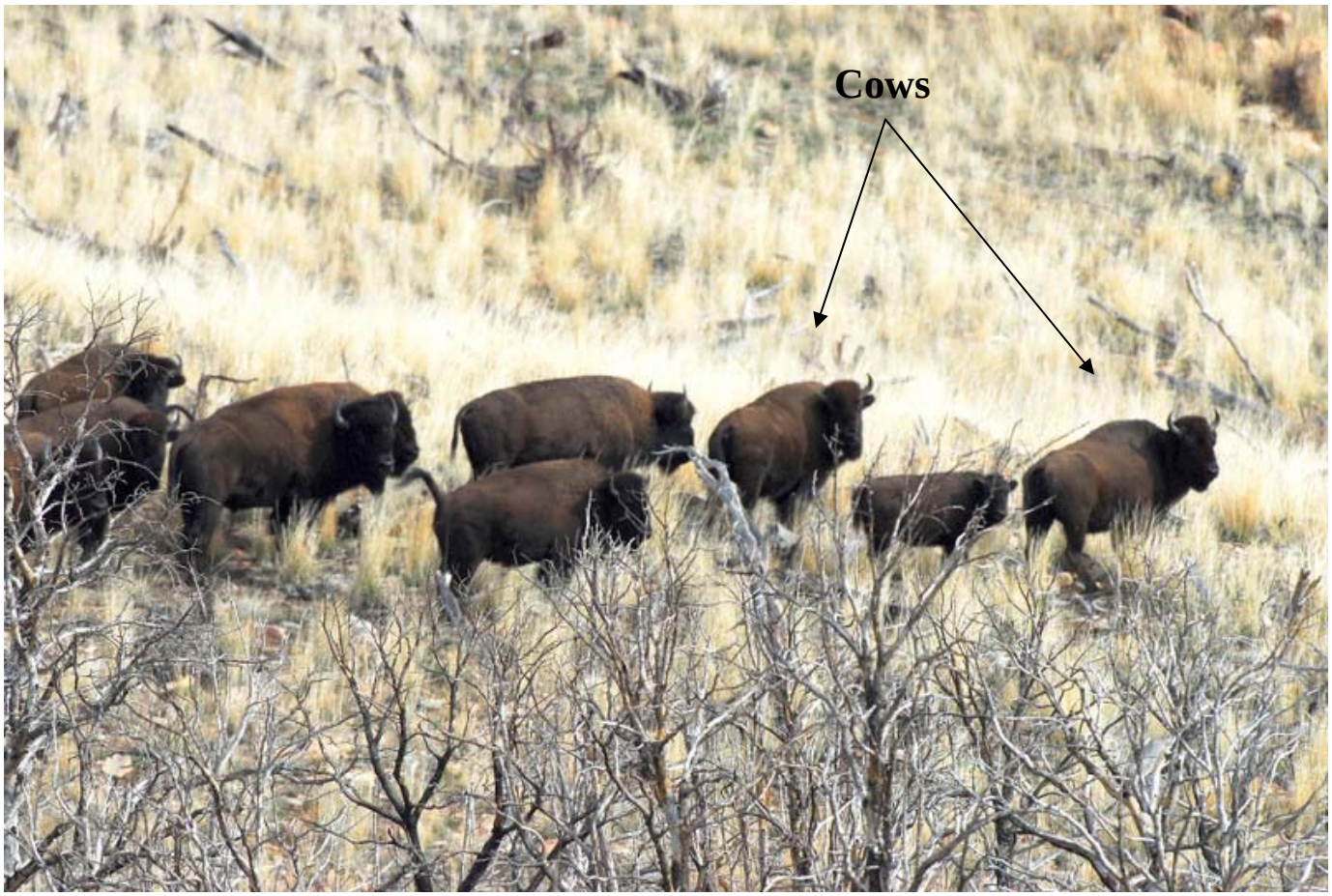
Shoot or Don’t Shoot?

There is no shot here, but eventually with patience you would expect to have one.

NOTE: A few years ago a hunter shot at a bison in a herd. After being shot, the bison moved and mixed in with the other animals. Believing the shot missed, the hunter took a second shot. Again the bison mixed with the herd. The hunter took a third shot at a third bison. When the herd eventually moved away, there were three dead bison.

When you shoot at a bison in a herd, make sure you keep a visual of the animal you shot. It might not be evident that you hit the animal, but it is critical that you keep with the same bison until it goes down. Bison can travel a long distance when they are wounded.

Shoot or Don’t Shoot?



This would make for a good shot

Shoot or Don’t Shoot?

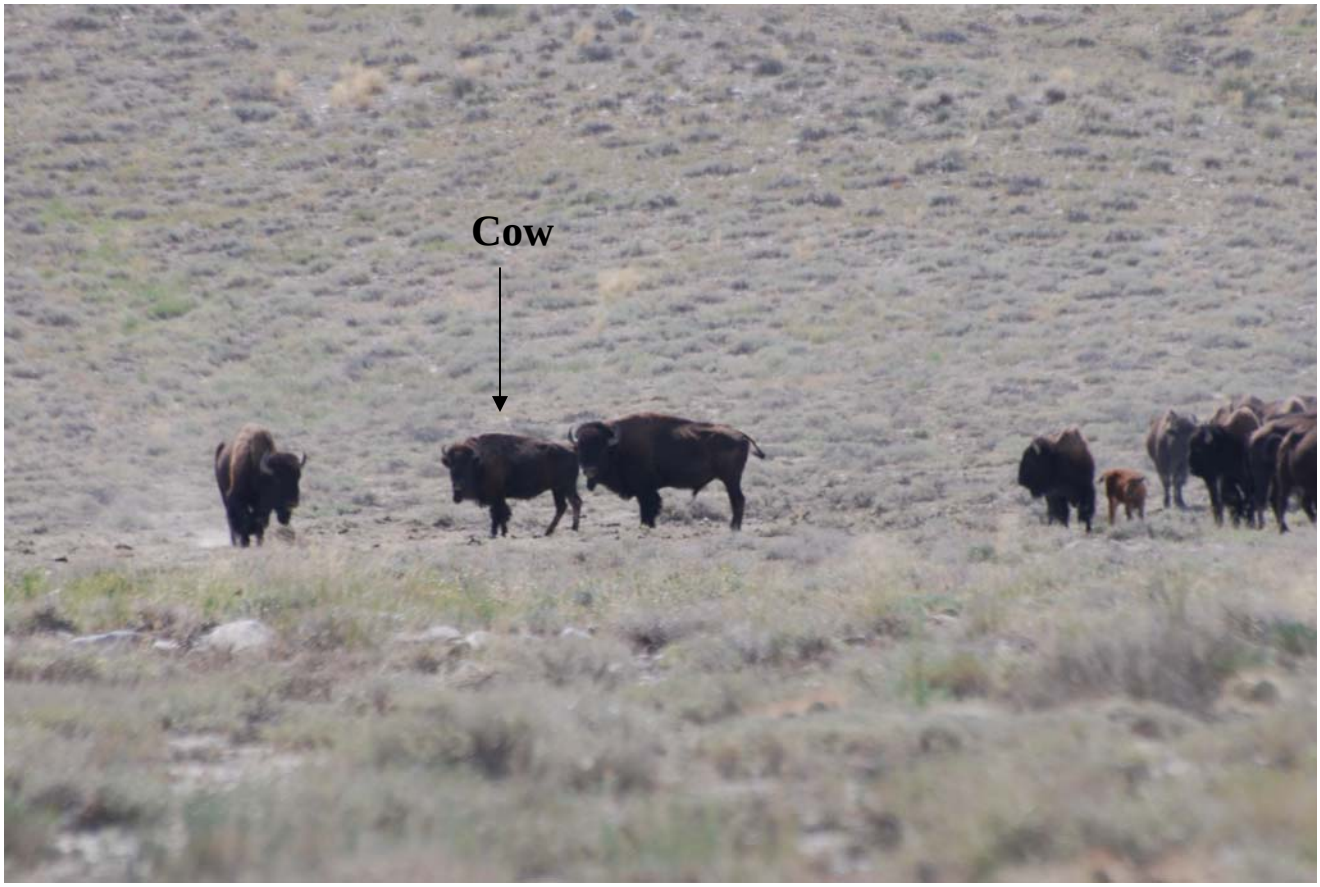
This would make for a good shot

Shoot or Don’t Shoot?

Have you ever seen a five-legged bison?

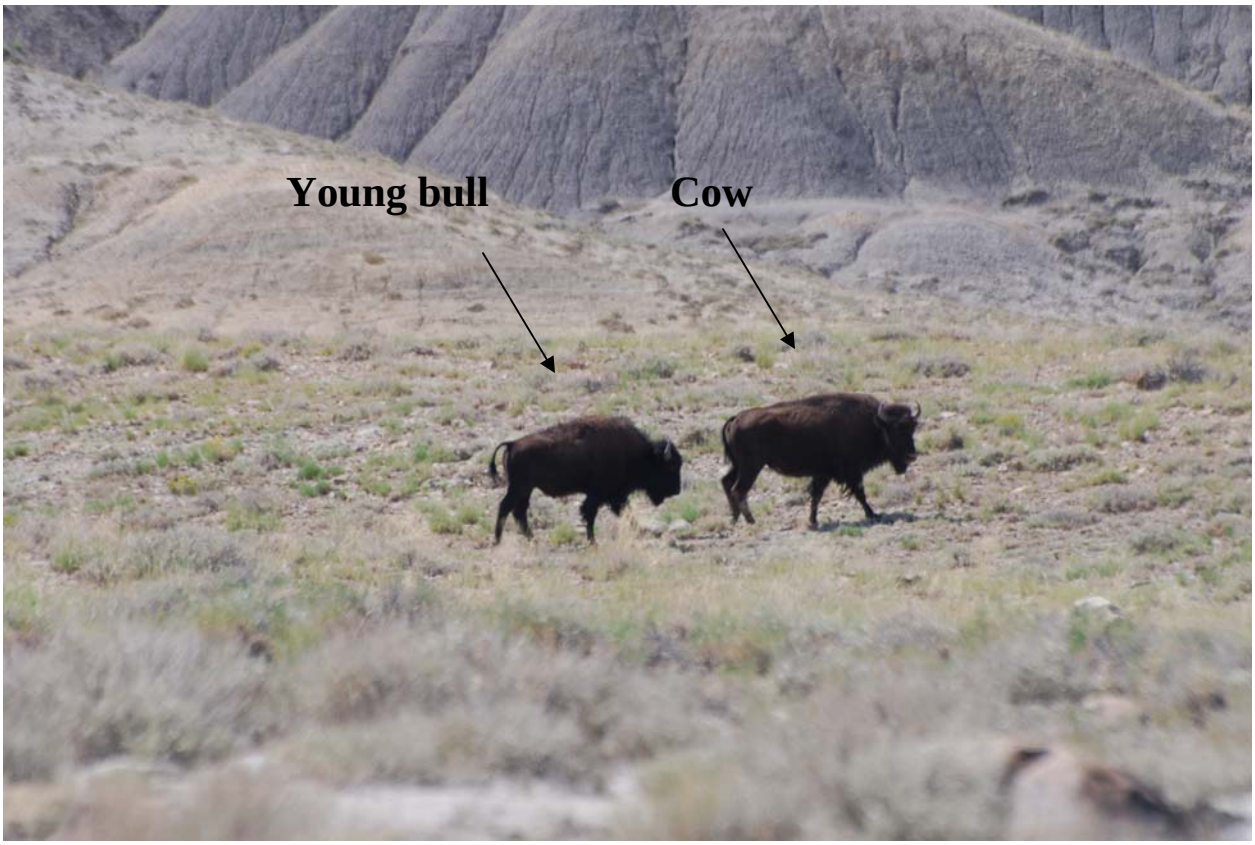
The cow on the right has a calf behind her, and the cow on the left is young.

Shoot or Don’t Shoot?



If you were absolutely sure that this was a cow, this would be a clear shot.

Shoot or Don’t Shoot?



Another clear shot

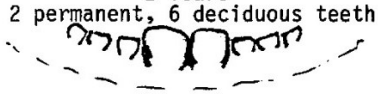
Aging Bison Using Tooth Replacement

You will need to report the number of permanent teeth your bison has on the Mandatory Reporting Survey.

BISON AGE DETERMINATION BY TOOTH DEVELOPMENT

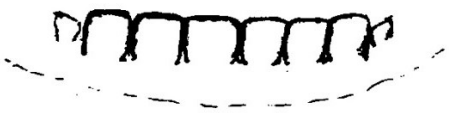
Calf
8 deciduous (baby) teeth

2 Years
2 permanent, 6 deciduous teeth

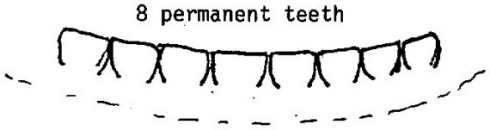


3 Years
4 permanent, 4 deciduous teeth

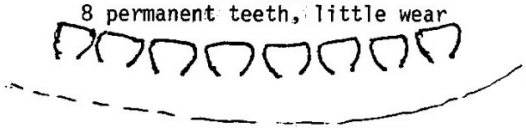
4 Years
6 permanent, 2 deciduous teeth



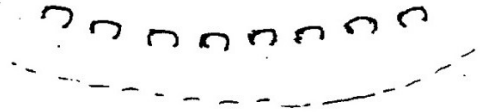
5 Years
8 permanent teeth



5 - 10 Years
8 permanent teeth, little wear



10+ Years
8 permanent teeth, considerable wear



Like all cud chewing animals, the buffalo have no upper incisor teeth but rather a dental pad. The lower incisors act as a clipper against this pad as the animal feeds with a nose forward motion. These sketches show how these lower incisors can be used for age determination with reasonable accuracy up to about five years of age. There are methods for aging beyond five years using other teeth which we won't consider in this quick field guide.

Calves have their eight (four pairs) deciduous (baby) teeth soon after birth. The first pair of permanent teeth will replace the center pair of baby teeth during the second year of life and are usually up "in wear" by the second birthday. The second pair of permanents are in by the third birthday, the third pair by the fourth birthday and the fourth pair - "full mouth" - by the fifth birthday. This pattern is similar to that of domestic cattle with the buffalo a little later in arriving at a full mouth.

As the animal gets older, the teeth wear down and the gums recede, giving the appearance of wider tooth spacing. In advanced age only root stubs may be present and some or all of the teeth may be gone. It would be unusual for a wild animal to survive for long at this stage.

There will be individual variations in tooth wear of older animals depending on range conditions, general health and other factors. Since most buffalo are born during the spring months, animals taken during the fall hunts will be mid-year in age and this might be considered in the age determination of the younger animals.

Robert J. Sigfrid, DVM

Helpful Hints to Ensure a Successful Overall Hunting Experience

- Hunter orange is not required when hunting bison unless there is another big game rifle hunt in progress. Because big game hunts often overlap, please consult the big game guidebook to determine when hunter orange is required.

- Remember to tag your animal before the carcass is moved or you leave the site of kill.

- Remember to leave evidence of sex attached to the largest portion of the carcass.

- It is unlawful for a person to waste or permit to be wasted (spoiled) any protected wildlife or any part of them.

- Extreme care should be taken before you shoot. Cows can be hard to distinguish from bulls from some angles. If a mistake is made and a bull is taken, please contact the Help Stop Poaching Hotline at 1-800-662-3337 or the local sheriff or highway patrol dispatcher. They will send an officer to investigate. A decision on any action taken will be based upon the officer's investigation and the fact that you contacted the Division and did not allow the animal to waste.

- Remember leaving the animal to waste could result in 3rd degree Felony charges, regardless of whether the death of the animal was an honest mistake or not. It is in your best interest to contact a Division conservation officer and report any mistakes.

- Report violations to the Help Stop Poaching Hotline: 1-800-662-DEER

National Park Service
Department of the Interior

Capitol Reef National Park

435-425-4132
www.nps.gov/care

Bison Hunting and Capitol Reef National Park

For 2015, Swap Canyon will be the only cross country route open in Capitol Reef National Park for bison hunter access.

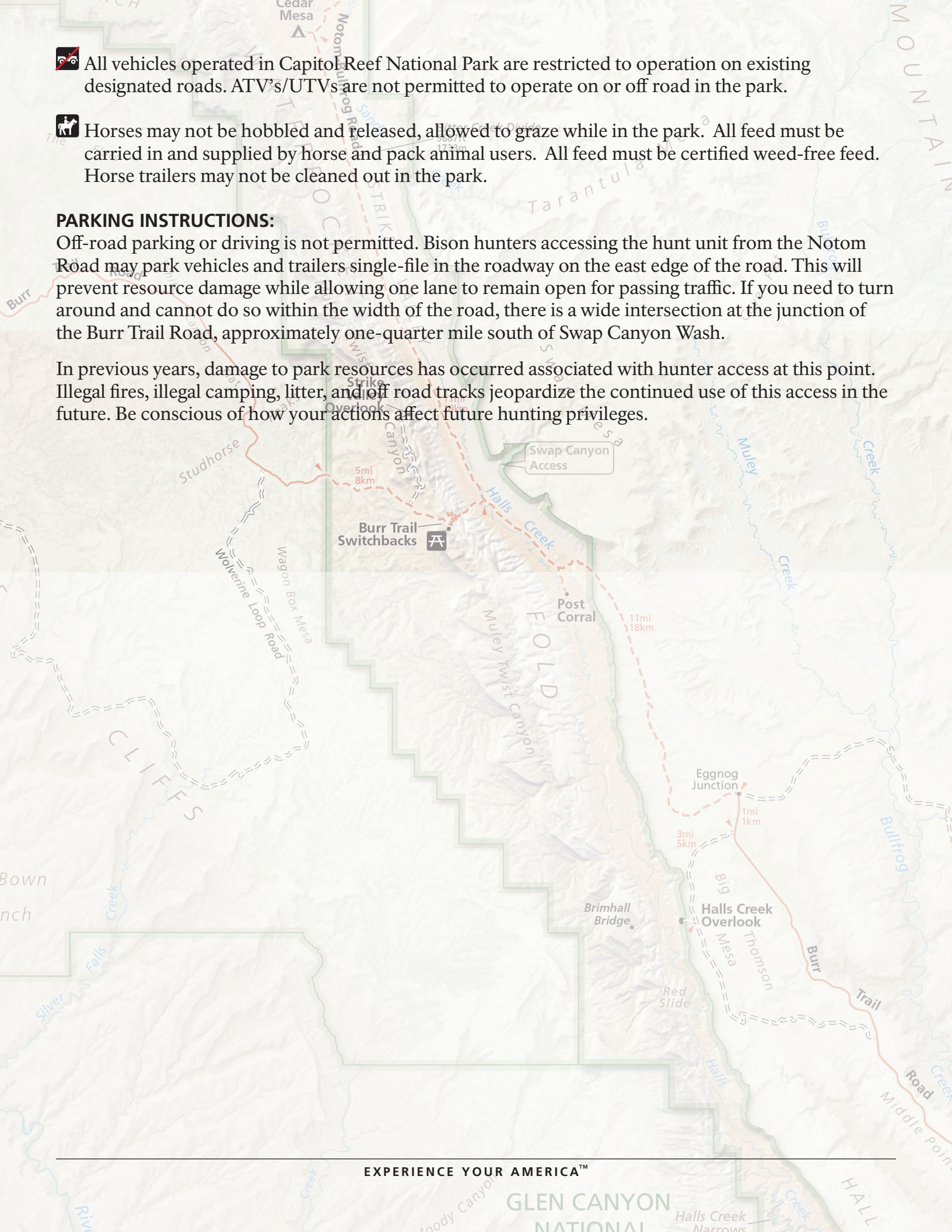
It is your responsibility as the license holder to see that all members of your party, including guides and non-hunters, are aware of these and other regulations:

- **Hunting is not permitted within the park.** Bison seen within the park may not be harassed or chased into a legal hunting area outside the park. It is your responsibility to know where the park boundaries are located. Note that the eastern park boundary is not the Notom Road but is typically the top of the 400 foot cliff wall a mile or more east of the road.
- The transportation of taken game is only allowed on through roads in the park and in the Swap Canyon Wash between the park boundary and the Notom Road. Transportation of taken game across any other park land is prohibited.
- **Firearms may not be used while in the park.** Use is defined as discharging, shouldering, or looking through a scope.
- If a bison is shot outside the park and then enters the park, it may not be followed, handled or retrieved until a National Park Service Ranger or UDWR officer has first been contacted through the Richfield Dispatch Center at 800-356-8757, (twenty-four hours a day). The dispatch center will contact the appropriate ranger/officer.
- **Dogs are not permitted** to accompany hunting parties across park lands and may not be left unattended in vehicles or trailers.
- Members of hunting parties are not permitted to camp within Capitol Reef National Park.
- Fires are not permitted.

All vehicles operated in Capitol Reef National Park are restricted to operation on existing designated roads. ATV's/UTVs are not permitted to operate on or off road in the park.

Horses may not be hobbled and released, allowed to graze while in the park. All feed must be carried in and supplied by horse and pack animal users. All feed must be certified weed-free feed. Horse trailers may not be cleaned out in the park.

PARKING INSTRUCTIONS:

Off-road parking or driving is not permitted. Bison hunters accessing the hunt unit from the Notom Road may park vehicles and trailers single-file in the roadway on the east edge of the road. This will prevent resource damage while allowing one lane to remain open for passing traffic. If you need to turn around and cannot do so within the width of the road, there is a wide intersection at the junction of the Burr Trail Road, approximately one-quarter mile south of Swap Canyon Wash.

In previous years, damage to park resources has occurred associated with hunter access at this point. Illegal fires, illegal camping, litter, and off road tracks jeopardize the continued use of this access in the future. Be conscious of how your actions affect future hunting privileges.