

Bison Hunter Packet

Spring 2025



Congratulations on drawing one of the few bison permits available in North America on a wild free-range public land bison herd. Hunting bison on the Kaibab Plateau can be very challenging and frustrating, yet also one of the most rewarding big game hunts in Arizona. These hunts may tax you mentally and physically, so be prepared. We've put this bison hunter packet together to pass along hunting tips learned from past Kaibab bison hunters, some legal requirements concerning your hunt, and characteristics to look for to help you identify sex and age of bison. Our hope is the information contained in this packet will increase your hunting experience with this unique animal, increase your odds of being successful for this once in a lifetime harvest in Arizona and lastly, we hope it will maximize the time bison spend on the Kaibab National Forest where they will be available for hunters during all bison seasons. *What you do prior to and during your hunt will not only have an impact on your hunt, but on other hunters during and after your hunt.*

Arizona Game and Fish Dept. contacts for Kaibab Plateau herd bison hunts- Sam Pogue, 928-587-5657 or spogue@azgfd.gov; Allen Zufelt, 928-214-1248 or azufelt@azgfd.gov; Rob Nelson 928-214-1242 or rnelson@azgfd.gov

BISON HUNTING TIPS

Where to Hunt and What to Expect

Bison on the Kaibab Plateau spend a majority of time on the Grand Canyon National Park (GCNP, Park). They do roam off the Park, where they are available to harvest. For all seasons, concentrate within two miles (and mostly less than ½ mile) of the GCNP and Kaibab National Forest (KNF) boundary. They will occasionally roam further north, but hunting further north without fresh bison activity will be unproductive. Also, driving forest roads in this core area will be counterproductive (see the next section). Bison often leave the Park for water and/or salt and return to the safety of the Park. ***The most effective technique used to harvest a bison is sitting water/salt locations close to the Park and Forest boundary.*** Hunter habits can affect whether the bison spend their time on the KNF or seek the safety of the GCNP. If hunters follow the advice in the following sections, the bison will be more likely to stay where they can be hunted.

Minimize Driving Near GCNP

Extremely Important: Excessive vehicle traffic on the KNF within 2 miles of GCNP will cause the bison to retreat to GCNP. They will become unavailable not only to you, but those hunting after you. Minimizing your driving (including ATVs and UTVs) in this area, especially in the mornings and evenings is critical. Past hunts have shown, more vehicle disturbance in this area will push bison back to GCNP. Consider walking or riding a bike instead of driving to where you want to hunt.

Camp Away From the GCNP Boundary

Camping near the GCNP boundary with the associated camp noise will also increase disturbance to bison and cause bison to retreat to the GCNP. Most hunters camp in the 270/223/269 road area.

If Scouting Use Caution

We encourage hunters to scout and be familiar with the hunting locations; however, please be smart about it. Scouting has the potential to increase herd disturbance and push bison back to GCNP. There is some time for scouting between hunts or at the end of a prior hunt when fewer hunters are still hunting. If scouting during an open bison hunt, please stay away from any locations with parked vehicles, as that likely indicates an active hunter is currently at that location. Other hunters may get upset if you disturb their hunt and rightly so. Scout cautiously as if you were hunting, to minimize disturbance to any bison off the Park. Also, watching the bison hunter clinic videos, talking with past Kaibab bison hunters, and using new mapping software and imaging are great ways to scout without making an actual trip to the Kaibab. Interestingly, on some aerial image maps you can see bison in some of the openings on the Park.

Be Patient When a Herd Approaches and Remain Concealed after Taking a Shot

We cannot overemphasize this, it is very important for all bison hunters to follow. When a herd comes in, be patient, they will usually be there for a while and you don't have to shoot right away. **Take your time and make the first shot count!** This will decrease wounding loss and increase the likelihood of putting your tag on a bison. After a shot is taken at bison, a typical herd response is to surround the wounded/down animal. It frequently does not make a difference if the weapon is a bow, rifle or muzzleloader. It is believed the smell of blood and the behavior of the wounded animal triggers this herd response. This typical response was used long ago by bison hunters to decimate bison in the 1800's. Bison don't necessarily equate the shot, blood and wounded/down animal as a bad thing.

Use this behavior for the benefit of other hunters. After shooting a bison, remain quiet and hidden and do not reveal yourself until the herd moves out of the area, leaving the harvested animal behind. Be patient; this may take a while. If you push the herd off the wounded animal and cause them to run off, the herd will typically retreat to the GCNP and you may lose a wounded animal that can still keep up with the herd. If they walk off on their own, they will likely be available for other hunters either during or following your hunt. You may also be able to get another opportunity to put down a wounded animal by remaining hidden or you may also be able to call other hunters into your location by radio to take additional bison. This practice has been used in the past to harvest up to five animals from the same herd.

Work Together with Other Bison Hunters

Our hope is hunters will work together to increase everyone's hunt success. Coordinating your hunt with other hunters is encouraged. Unlike other big game animals, bison typically remain after a shot and this behavior can increase hunt success for other hunters. Use this behavior to your advantage as it can lead to multiple animals being taken from the same herd at

the same time. As discussed earlier, most hunters camp in the 270/223/269 road area. Stop by other hunter camps and share information with them on who is hunting and where you want to hunt.

Bison Herd Structure and Natural History

Each bison social group consists of roughly 3-50 animals and are matriarchal, meaning the herd is led by a female. When the lead female is removed, she usually is replaced by one of her offspring or other relative. Again, this herd behavior was identified and used by the early bison hunters to decimate plains bison in the 1870-80's. Sometimes these social groups come together to form larger groups of over 100 animals. Even in these larger groups, the individual social groups stay together.

The rut typically runs from mid-July through September. During this time, herd bulls will likely be with each social group. Outside of the rut, the older mature bulls will roam together or singularly, similar to the behavior observed in bull elk. Bulls younger than 4 or 5 years of age will usually remain with the social groups year-round. For this reason, it is important to look at multiple sex identification characteristics rather than relying on any single characteristic.

LEGAL REQUIREMENTS

What must be removed from the field after the harvest of a bison?

1. Arizona Revised Statutes (ARS) 17-309A.5 states it is unlawful for a person to take a game bird, game mammal or game fish and knowingly permit edible portions to go to waste. **All** edible meat from a bison must be removed from the field. Organs (heart, liver, etc.) are not considered meat and can be left in the field.
2. ARS 17-309A.19 states it is unlawful for a person to possess or transport the carcass or parts of a carcass of any wildlife that cannot be identified to species and legality. This means you must keep in your possession, parts that can readily be identified as coming from a bison; including any sex or age requirements.
3. The hunter must possess the hind leg gambrel ligament with the tag attached through the gambrel (R12-4-302). The tagged gambrel must be kept in your possession till you reach either your home or a meat processor. In addition, with the following permit designations, you must have the following **at a minimum**:

1. **Bull bison only** permit- neither a yearling cow nor adult cow is legal and cannot be harvested during this hunt.
 - Proof of sex- the genitalia attached to a patch of hide or pictures showing the genitalia and date stamp with you
2. **Cow bison only** permit- neither a yearling bull nor adult bull is legal and cannot be harvested during this hunt.
 - Proof of sex- the udder or genitalia attached to a patch of hide or pictures showing the genitalia and date stamp with you

Checkout Requirements

There is a check out requirement (Commission Rule **R12-4-306**) for all bison hunters. Each hunter issued a bison permit **shall check out no more than three days after the end of the hunt, regardless of whether you are successful, unsuccessful or did not hunt.** There is no physical checkout required. The online bison hunt checkout form can be accessed at the bottom of the Department's bison hunt webpage at: <https://www.azgfd.com/hunting/species/bison-hunt/>.

Baiting

Baiting with edible or ingestible substances is unlawful. Placing bait like hay and grain to attract bison is illegal and those responsible for doing so will be cited. The following is the exact wording of Commission Rule R12-4-303A:

- a. An individual shall not use edible or ingestible substances to aid in taking big game. The use of edible or ingestible substances to aid in taking big game is unlawful when:
 - i. An individual places edible or ingestible substances for the purpose of attracting or taking game, or
 - ii. An individual knowingly takes big game with the aid of edible or ingestible substances placed for the purpose of attracting wildlife to a specific location.
- iii. The aforementioned does not limit Department employees or Department agents in performing their official duties.

Placing salt produced for the livestock industry however, is legal to use and hunt over. There are already multiple salt "stations" in the main bison hunt areas near GCNP. These established salt locations are productive in harvesting bison.

What if you wound an animal and it moves onto GCNP?

Hunting is not permitted on GCNP; however, individuals wishing to remove wildlife that has been legally shot outside of the Park boundary and has subsequently died within the Park must contact Grand Canyon National Park Dispatch at **928-**

638-7805 and give the location of the animal in question. You may also tell the Park entrance station attendant and they will call a Ranger for you.

The ranger needs to determine the animal was originally wounded outside the park and has been legally harvested. Once the determination is made, the ranger is authorized to release the animal to you. These are guidelines and the investigating Park Ranger has the final say.

Vehicle retrieval though is not allowed on GCNP

Motorized Big Game Retrieval of Legally Taken Bison

The Kaibab National Forest allows for the motorized big game retrieval of all legally taken bison with the exception of any wilderness area. Retrieval is allowed within one mile of an open road and one trip (one vehicle) in and out. This includes the meadows along Highway 67. If it is wet or muddy and driving off road will leave ruts, retrieval is not allowed, as it will cause resource damage and you can be cited. As stated above, there is no motorized retrieval on GCNP. If a wounded animal dies on GCNP, you will have to pack it out (see above section for details).

Hunting Areas on Public Land are NOT Exclusively Reserved for Any Hunter

From page 14 of the 2024-25 Arizona Hunting Regulations: “Ethics about First Come–First Served” is a common **courtesy** that should be used when more than one person wants to hunt the same area or waterhole, regardless of who has a tree stand or blind in the area. The Arizona Game and Fish Department reminds all hunters that confrontations in hunting situations can involve firearms and hot tempers. Whether you are in the city or next to a waterhole, any threats, intimidation, assault, or disorderly conduct can result in citations, arrests and/or jail time. Please refrain from confrontational behavior - ethical hunting is everyone’s business”.

This includes salt stations. We encourage all hunters to work together for an enjoyable hunt. There are enough hunting locations for all. Teaming up with other hunters on a single location is also encouraged, especially given bison herd behavior to stick around and surround a wounded animal. **Placing salt, water or a blind at a location does not reserve any public land site. There will be zero tolerance for anyone disrupting another’s hunt by intimidation, confrontation, disruptive behavior or blocking roads/access to any hunting location. For those who do, possible violations include Disorderly Conduct and/or Interference with Rights of Hunters.**

Lead-Free Ammunition

The North Kaibab is home to Arizona’s only population of California Condors. Condors are an endangered species and are very susceptible to lead poisoning obtained from lead fragments in animal carcasses and gut piles. Additionally, lead poisoning can affect all scavenging raptors and vultures. Using lead-free ammunition is a voluntary choice hunters can make to help reduce the lead burden on the landscape. The Department recommends bison hunters use lead-free ammunition to reduce lead available to condors and other raptors within the condor range.

The Department offers a free or discounted box of lead-free ammunition for big game hunters (except for turkey hunters) within the condor range, which includes Kaibab Plateau bison herd hunters. A separate mailer will be sent to Kaibab Plateau bison herd hunters that will contain more lead-free information, along with a coupon to obtain a free or discounted box of lead-free ammunition. Please consider continuing the long tradition North American sportsmen and women have demonstrated over the years in wildlife conservation. Further information can be obtained from Erin Brown, the Department’s Lead-Free Ammunition Coordinator at (928) 214-1249 or ebrown@azgfd.gov or condor@azgfd.gov.

Please Report Any and All Hunting Violations Promptly to:



The sooner a violation is reported, the greater the likelihood of apprehension.

If you have made a mistake and multiple animals or the wrong animal is killed, please call the Operation Game Thief number to report the situation promptly. A game ranger will respond and assess the circumstances. Failure to report mistakes may result in full prosecution.

Maps

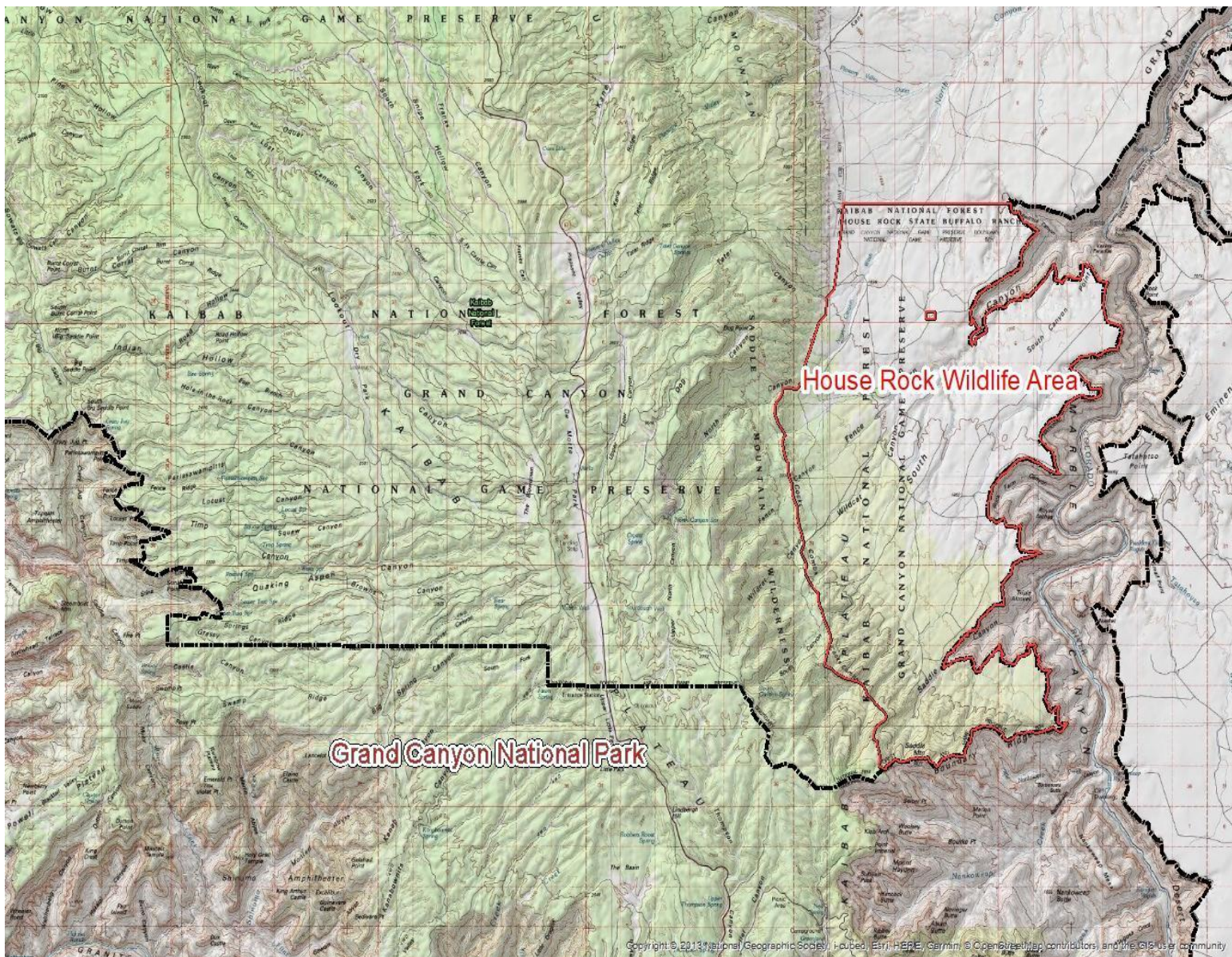
Digital versions of the various maps outlined in this packet can also be found at <https://live-azgfd-main.pantheonsite.io/hunting/hunt-draw-and-licenses/species-hunt-information/bison-hunting-in-arizona/>.

Another good map to have is the North Kaibab Ranger District-Kaibab National Forest “Motor Vehicle Use Map”. These maps show all the open forest service roads by number along the Park/Forest boundary. These are available at the Kaibab National Forest offices and the Flagstaff Regional Game and Fish office Monday-Friday 8:00-5:00.

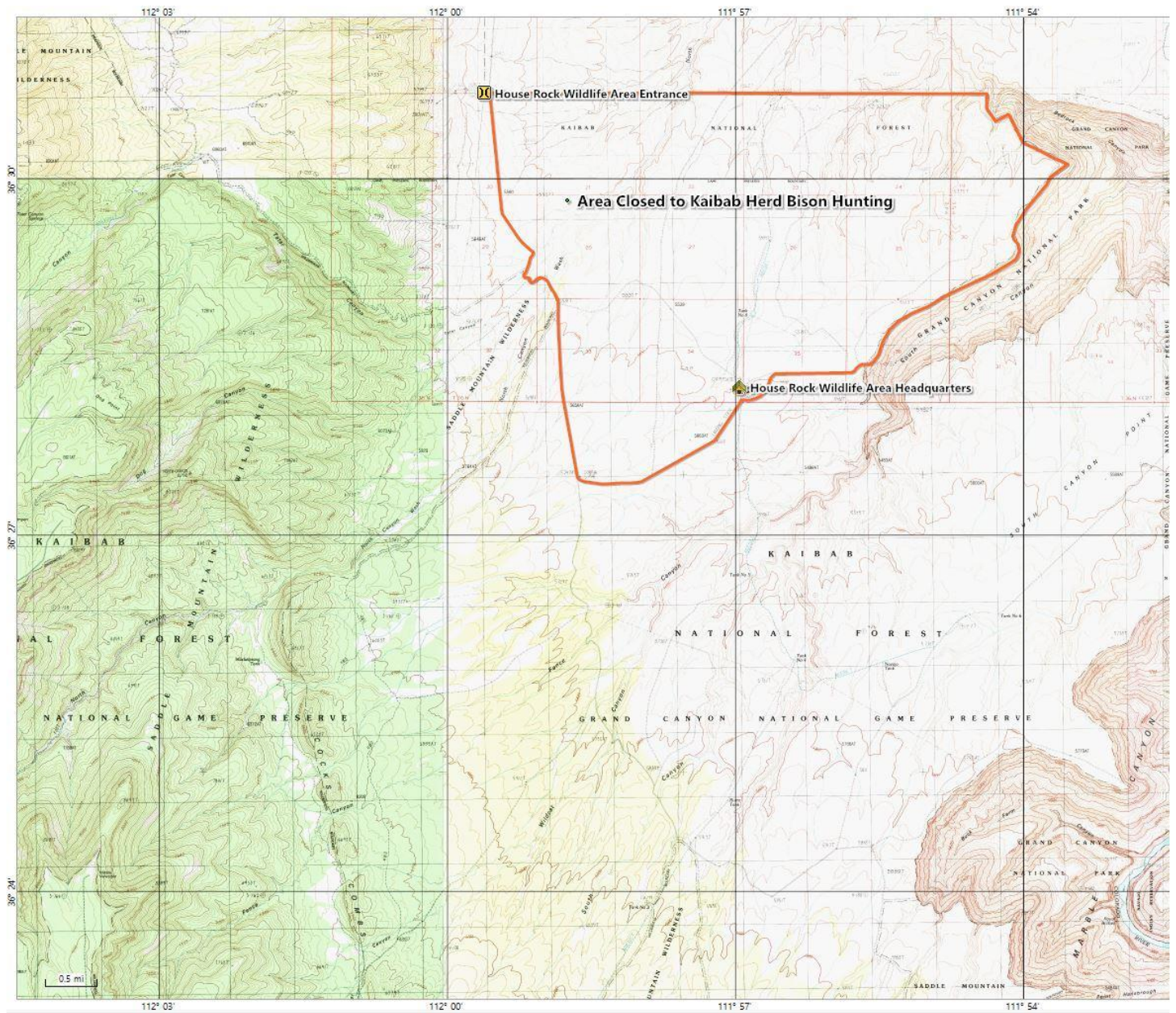
Closed Areas During your Bison Hunt

Portions of House Rock Wildlife Area (HRWA) are closed year-round to Kaibab Plateau bison hunters. This closure begins at the HRWA entrance on the 8910 road, southerly to the 3510 road (wildlife area headquarters road); easterly on the 3510 road to the South Canyon trailhead; north along the rim of South Canyon to the easternmost terminus of the northern HRWA boundary; west along the HRWA boundary fence to the 8910 entrance. Separate bison hunts occur within the closure area on HRWA for the House Rock Bison herd that reside within the closure area. Grand Canyon National Park is also closed to all hunting. Please refer to the maps below for details of both locations.

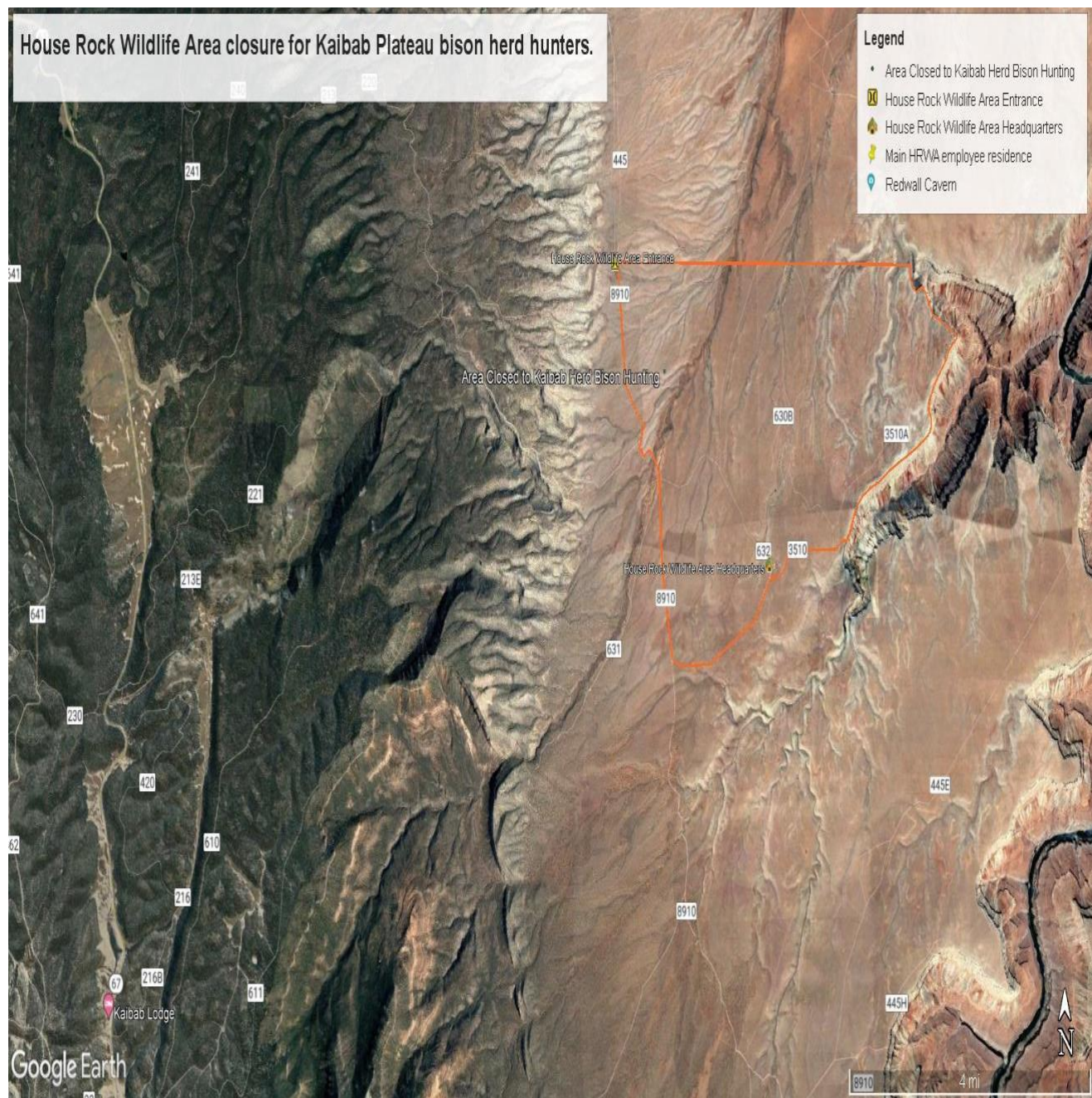
Location of House Rock Wildlife Area and Grand Canyon National Park



Location of Closure Area to Kaibab Plateau Bison Herd Hunters within House Rock Wildlife Area



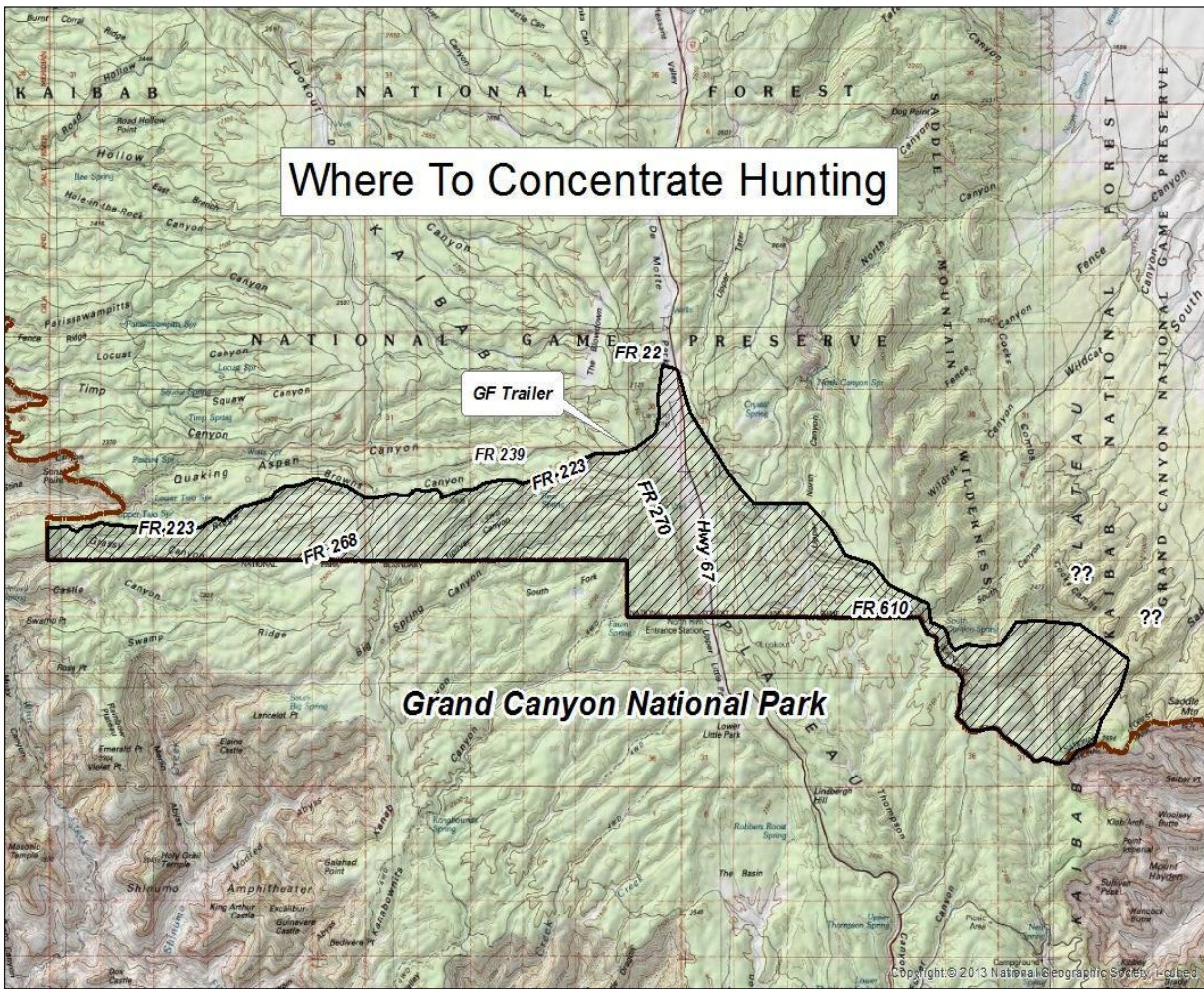
Location of Closure Area to Kaibab Plateau Bison Herd Hunters within House Rock Wildlife Area



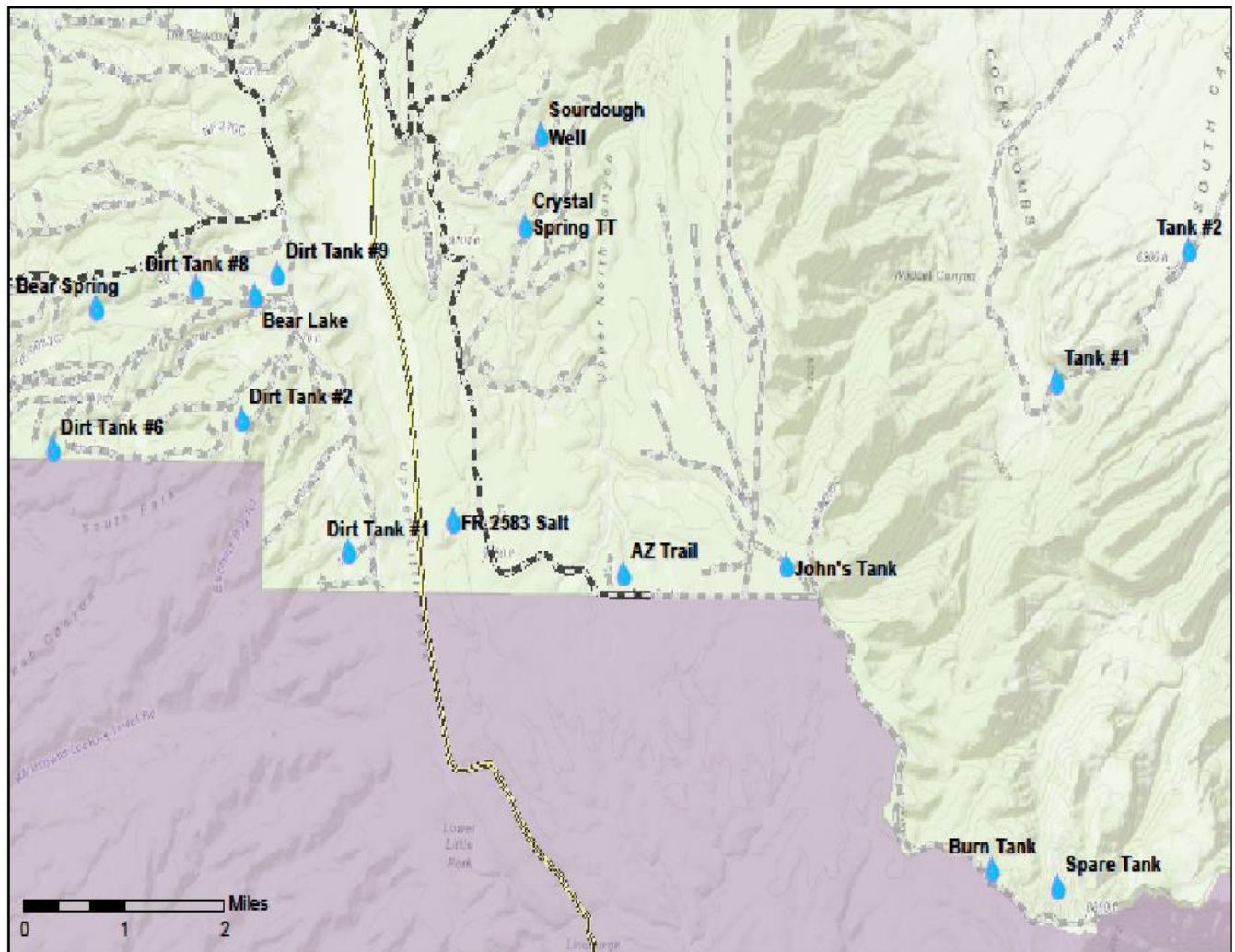
Forest Service Burning

The US Forest Service may conduct controlled burns during any open bison season on the North Kaibab Forest. All controlled burning actions go through an extensive planning process. Once approved, it may take several years for the precise “window” of optimal burning conditions to occur. Once the optimal conditions are available, the Forest Service typically moves quickly to implement burning activities before the burn window closes. It is impossible for the Department to know and coordinate with the Forest Service months in advance on any burn to not impact any particular hunt. For up to date information on planned burning, please contact the Kaibab National Forest directly.

Where to Concentrate Hunting



2018 12A Bison Hunt Reference Map



- Grand Canyon National Park
- Highway 67
- Dirt Road, Suitable for Passenger Car
- Road, Not Maintained for Passenger Car
- Gravel Road, Suitable for Passenger Car
- Paved Road



NAME		GPS		Decimal Degrees		DEG, MIN, SEC	
12A East							
Spare	N 36 18.312	W 112 00.163	36.3052	-112.002717	N36 18 18	W112 00 09	
Burn	N 36 18.429	W 112 00.869	36.30715	-112.014483	N36 18 25	W112 00 52	
Johns	N 36 20.483	W 112 03.102	36.341383	-112.0517	N36 20 28	W112 03 06	
AZ trail	N 36 20.409	W 112 04.849	36.34015	-112.080817	N36 20 24	W112 04 50	
Sourdough Well	N 36 21.226	W 112 16.884	36.353767	-112.2814	N36 21 13	W112 16 53	
Crystal spring	N 36 22.777	W 112 05.937	36.379617	-112.09895	N36 22 46	W112 05 56	
FR 2583 salt	N 36 20.755	W 112 06.676	36.345917	-112.111267	N36 20 45	W112 06 40	
12A West							
270Q	N 36 20.535	W 112 07.798	36.34225	-112.129967	N36 20 32	W112 07 47	
270G	N 36 21.423	W 112 08.954	36.35705	-112.149233	N36 21 25	W112 08 57	
Bear Lake	N 36 22.268	W 112 08.831	36.371133	-112.147183	N36 22 16	W112 08 49	
Dirt Tank #9	N 36 22.426	W 112 08.592	36.373767	-112.1432	N36 22 25	W112 08 35	
Dirt Tank #8	N 36 22.323	W 112 09.459	36.37205	-112.15765	N36 22 19	W112 09 27	
Bear Spring	N 36 22.174	W 112 10.528	36.369567	-112.175467	N36 22 10	W112 10 31	
South Big Spring	N 36 21.203	W 112 10.978	36.353383	-112.182967	N36 21 12	W112 10 58	
Brown's Canyon	N 36 22.350	W 112 11.823	36.3725	-112.19705	N36 22 21	W112 11 49	
268B Dirt Tank	N 36 21.992	W 112 14.126	36.366533	-112.235433	N36 21 59	W112 14 07	
223 Dirt tank	N 36 22.217	W 112 15.183	36.370283	-112.25305	N36 22 13	W112 15 10	
268A East	N 36 21.800	W 112 14.966	36.363333	-112.249433	N36 21 48	W112 14 57	
268A West	N 36 21.547	W 112 15.810	36.359117	-112.2635	N36 21 32	W112 15 48	
Upper Twin Spring TT	N 36 23.018	W 112 17.082	36.383633	-112.2847	N36 23 01	W112 17 04	
Middle Twin Spring TT	N 36 21.216	W 112 16.893	36.3536	-112.28155	N36 21 12	W112 16 53	
Lower Twin Spring TT	N 36 21.219	W 112 19.419	36.35365	-112.32365	N36 21 13	W112 19 25	
Stina point TT	N 36 22.506	W 112 19.614	36.3751	-112.3269	N36 22 30	W112 19 36	
Timp point TT	N 36 23.106	W 112 20.536	36.3851	-112.342267	N36 23 06	W112 20 32	
Locust point TT	N 36 23.882	W 112 20.568	36.398033	-112.3428	N36 23 52	W112 20 34	
FR2694	N 36 22.100	W 112 13.410	36.368333	-112.2235	N36 22 06	W112 13 24	

AGE AND SEX IDENTIFICATION



Bull left, cow right. Notice the difference in horn thickness and the wooly face on the bull

Do not rely on a single identification characteristic when aging or sexing bison. Instead, use multiple identifiers. The longer you are able to watch a particular bison the better your chances of gathering enough clues to properly determine sex and age. Be sure you have a clear unobstructed shot of the animal and ensure no other animals are behind it before shooting. Presented here are typical sex and age characteristics. As in any rule, there are exceptions. Some cows have individual characteristics usually seen on bulls and vice versa.

Typical Sex and Age Characteristics in Bison

Cow

Penile sheath-missing

Horns at base-thin

Horns curve inward

Head-narrow & thin
dark

Body smaller w/ less
muscle

Neck noticeable

Mature Bull

Penile sheath present

Horns at base heavy

Horns typically don't have
inward curve (like goal posts)

Head-broad, triangular

Body large, stocky and
muscular

Shoulder and head seem
to merge, no neck

Yearling Bull

Penile sheath may not be visible

Horn at base medium

Horns jut out at an angle (like ice
cream cones)

Head-intermediate

Body smaller much less muscular
than adult bulls

Neck noticeable

Very important to remember there are exceptions to every characteristic, so use several characteristics to make your determination.



Foreground left to right: Cow, Calf, young cow, Cow. Notice the difference in horn curvature/ thickness; narrow face & lack of wooly appearance on face between cows in front and bulls in back.

Cow identifiers:

- Absence of a penile sheath
- Horns thin at the base
- Horns curving inward (some bulls have highly curved horns too)
- Narrow face and neck (lacking the wooly appearance compared to bulls)



Cow-Notice the narrow face, thin horn & lack of woolly hair on face



Cows- thin horns curve inward, no penile sheath, narrow face, lack of wooly appearance on head

Bull identifiers:

- Penile sheath usually obvious
- Horns at base are heavy or thick
- Horns with little or no inward curve, typical shape like goal posts
- Wooly hair appearance on face
- Broad triangular looking head

Young bulls and cows are the most difficult to identify correctly, so look for all identifiers. Young bull's horns are beginning to curve upward, the horn base circumference is similar to that of older cows, but the tips usually don't swing inward toward each other.



Bull-Notice wooly face, thick neck, broad head and penile sheath and overall shape



Young bull- wooly head, goal post horns, thicker at base & broader face

Mature cow- narrow face, horns point inward toward each other, thinner base of horn



Yearling Bull- Notice horn shape similar to a sideways ice cream cone, start of wooly appearance of head





Young Cow- Notice how thin the horns are at the bases & lack of wooly appearance

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 progresses.

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.

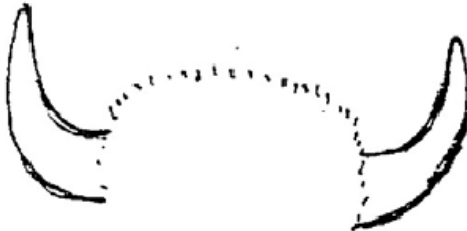
As the animals become older, the horns show a wrinkling and roughening near the horn base in a growth ring fashion. Old bulls horns will often be worn and split as a result of years of doing the things that a bull buffalo can do with these very effective tools.



CALF



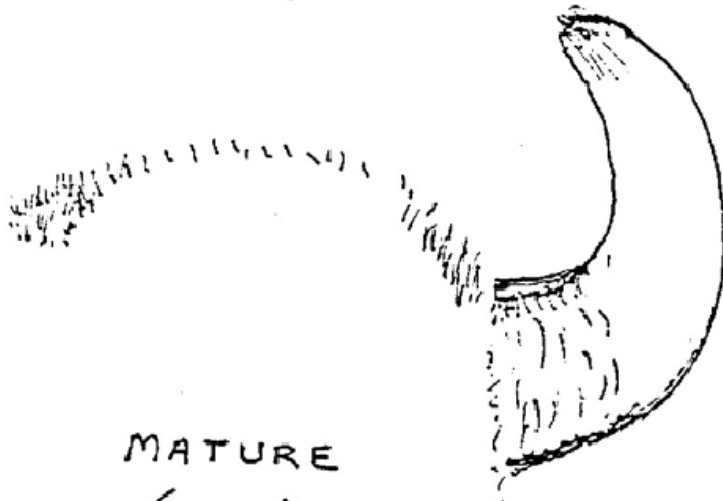
YEARLING



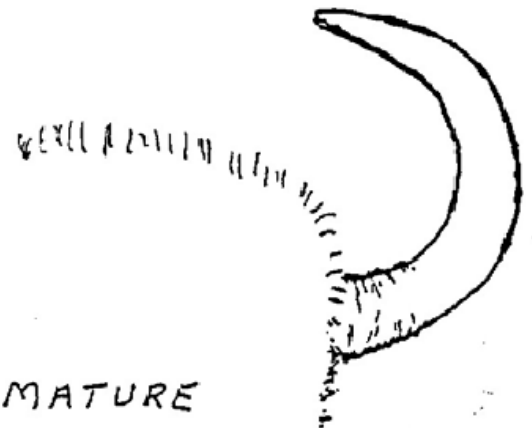
2 YEARS



PRIME



MATURE
(BULL)



MATURE
(COW)

Sex? Mature or immature? Good Shot?



This is a mature cow, but notice the calf behind her- No shot

Typical herd you might encounter



Be patient, wait for legal animal to clear and study identifiers on individual animals.

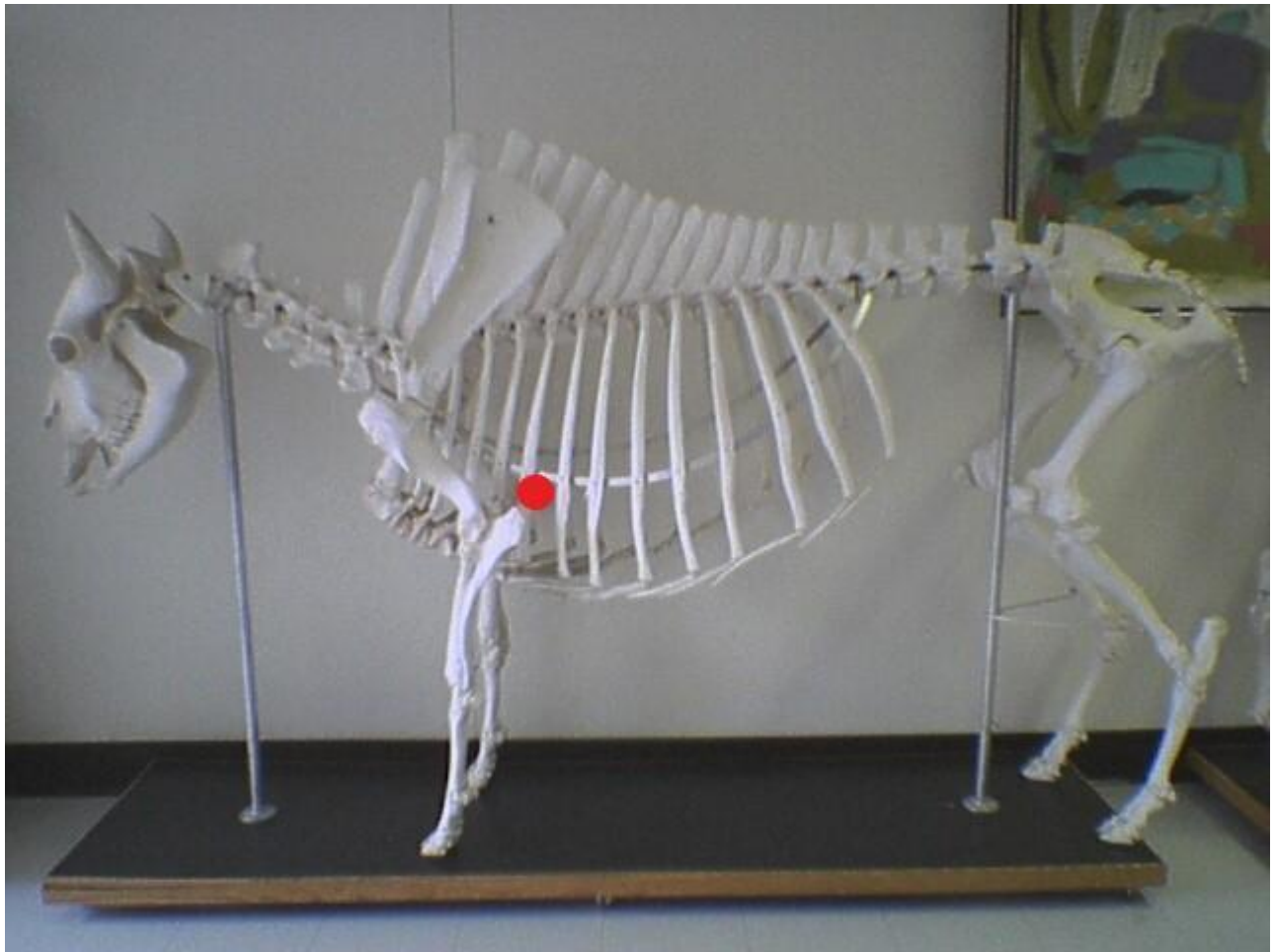
Shot Placement

The best shot to quickly and humanely put a bison down is to hit it in the heart. Compared to other big game animals, the bison heart sits low in the chest. The “hump” takes up a large part of space between the top of the back and the top of the lungs. **The best aim point is about 1-2 o’clock from the front elbow (within 1”), but it depends on the angle of the front leg (forward, neutral or backward) facing you and if the shot is uphill/downhill.** When the front facing leg is forward, more of the vitals are exposed. Conversely, when the front facing leg is back, more of the vitals are shielded by the front shoulder/leg. If possible, wait till the front leg is forward for better penetration and shock power to the heart/lungs area. To recap:

- The heart shot is best and will quickly put an animal down. A double lung shot is also lethal, but typically will not put a bison down as quickly, but still is a good shot. A poor hit will mean the difference between retrieving on the forest with a motor vehicle, cutting an animal up and packing it out of GCNP on your back, or going home empty handed!
- The heart in a bison sits low in the chest and is about the size of a football. Aim for the 1-2 o’clock position of the elbow on an animal facing to the left (which might be hard to see due to all the hair-see below) or another way to visualize it is about 8” up from the bottom of the chest and on the hairline.
- If a wounded bison rejoins the herd, do not shoot again until you are absolutely sure which animal you hit. Then, shoot only when there is no chance of hitting another animal. There may be no visible blood from the hit or only a small amount visible.

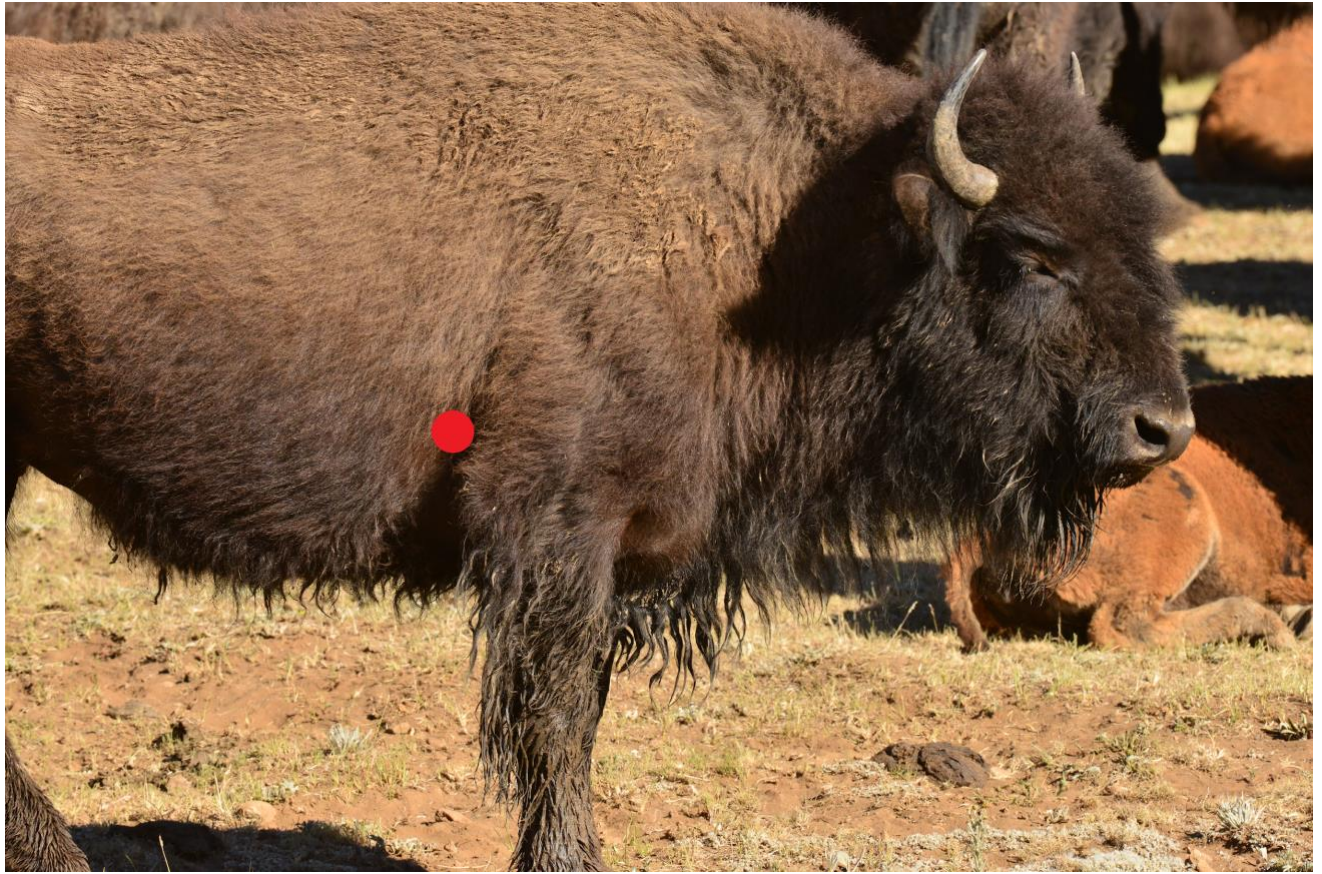
WHERE TO SHOOT-Bull





Bison skeleton showing “high hump” vertebra and red dot of where to shoot.

WHERE TO SHOOT-Cow

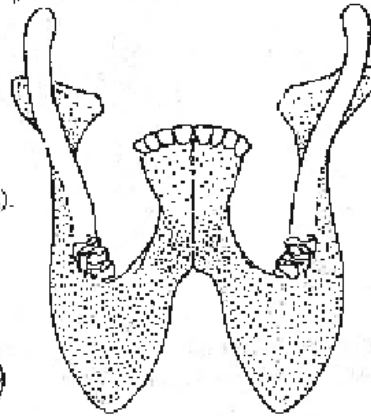


BISON

Bison have the same number of teeth in the lower jaw as deer; 3 incisors, 1 incisor-like canine, 3 premolars, and 3 molars on each side. Bison can be aged by the eruption of the 8 lower, incisor-like (incisiform) teeth ($I_{1,2,3}, C_1$) until they are 5 years old. The small, deciduous incisiform teeth are replaced by large adult teeth from the middle (I_1) toward the sides (C_1).

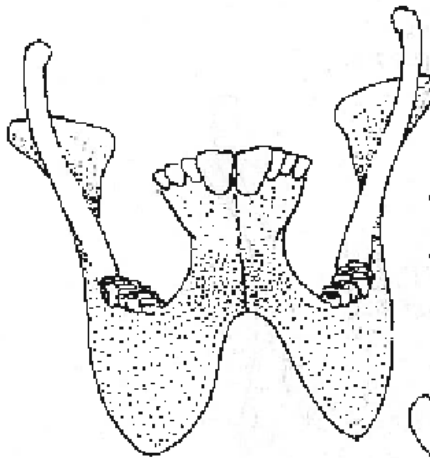
1 YEAR OLD

- All 8 lower incisiform teeth ($I_{1,2,3}, C_1$) deciduous (small).
- Only 5 molariform teeth erupted ($P_{2,3,4}, M_{1,2}$).



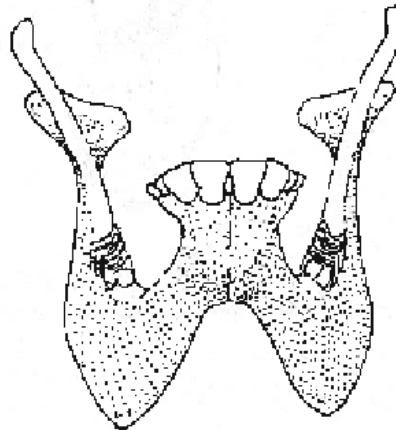
2 YEARS OLD

- Only the middle pair of incisors (I_1) permanent (large).
- The second pair of incisors (I_2) and the first premolar (P_1) may be erupting but the second premolar (P_2) will always be deciduous and well worn at this age.

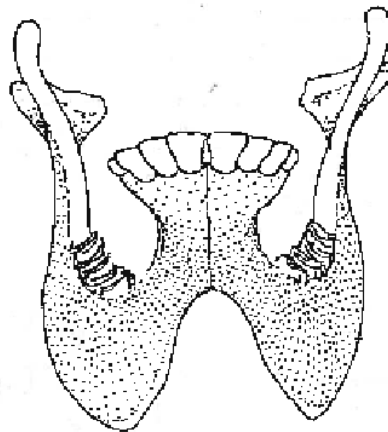


3 YEARS OLD

- Only the middle 4 incisors ($I_{1,2}$) permanent (large).
- The second premolar (P_2) is permanent (very little wear).

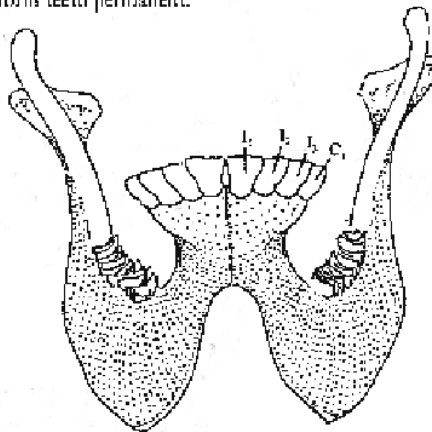


BISON



4 YEARS OLD

- Only the middle 6 incisors (I_{1-3}) permanent (large).
- All 6 molariform teeth permanent.



5+ YEARS OLD

- All 8 lower incisiform teeth (I_{1-4} , C_1) permanent (large).

To further sharpen and improve your bison age and sex identification please visit the following websites:

Wyoming Game and Fish Department- Bison identification and test page

https://wgfd.wyo.gov/WGFD/media/content/PDF/Hunting/Bison/BISON_KNOWDIFFERENCE.pdf

Utah Division of Wildlife Resources- Bison Cow Hunt Orientation

https://wildlife.utah.gov/pdf/bg/bison_orientation.pdf

Also, visit Raymond Wildlife Area (RWA) to see the Raymond Bison Conservation Herd to study age/sex on live bison. Note though RWA is closed from May 1-July 29 annually during calving season.