Bulls: broad blocky head generally covered with a thick and curly “mop” on top. Horns are heavy at the base with less inward curve of the horns than cows. A penile sheath should be visible along the underside of the animal.

Adult cow (right) and young bull bison (behind and left). Note the thinner and more curved horn on the cow.

This is a yearling bull. The horns are heavier and not curved. However, there is no evidence of a penile sheath.

Know the difference

Profile views are not the best for determining sex or age class of bison.

This is a cow, note the narrower head, the thinner and curved horns. A tuft of belly hair, not a penile sheath, is visible on the underside of the animal.

Cow: Head is narrow and appears long and linear, horns are thinner and generally curved inward.

A mature bull. A more massive, blocky head, heavier horns and penile sheath are relevant clues here. It is hard to tell from the profile that the horns do not curve inward.
KNOW THE DIFFERENCE

If your license is valid for a specific sex of animal (i.e. Type 4 female/calf wild bison) it is important that you be able to differentiate between bulls and cows. A one to two year-old bull and a mature cow are difficult to distinguish. Additional information and an interactive bison ID exam are available on the WGFD website at https://wgfapps.wyo.gov/bisonid/default. If you have a cow license, pay particular attention to the animal’s head. Generally, bulls are a considerably larger animal, with more massive horns and a ‘blocky’ head. Yearling bulls have horns that with a larger diameter base and grow outward more than female bison. Cows have similar shaped horns but are typically much thinner and curve inward at the tips. A penile sheath is typically evident on older bulls, but not on younger bulls. A profile view is not always the best identifying the sex of the bison.

Remember to identify the sex and age class of the animal you are stalking. An important identifying feature for young bulls is the heavy based horns along with the ‘blocky’ head. Cows have thinner horns that curve inward as they grow older. There are two young bulls in the photo below identified by arrows.

SHOT PLACEMENT

When shooting a bison there are two recommended shot placements for achieving a clean kill, refer to the following diagrams for more information. The first recommended lethal shot is the traditional shot in the heart/lung area. This shot is used by most hunters and can be placed by locating the area slightly above the animal’s knee. The advantage to this shot is the lethal area is larger and easier to hit. The disadvantage is a bison can often take several shots in this area before going down, particularly bulls. The second recommended shot is in the neck vertebrae. This shot should be made approximately six inches straight back from the bottom/base of the horn however, this is a difficult shot to make. In either case, it is recommended you take your time, use a solid rest to steady your gun and take a shot you are comfortable with.

A view of the skeleton and vital organ location in a wild bison.

Bison shot placement for clean kill. Note the traditional heart/lung area provides the largest target.