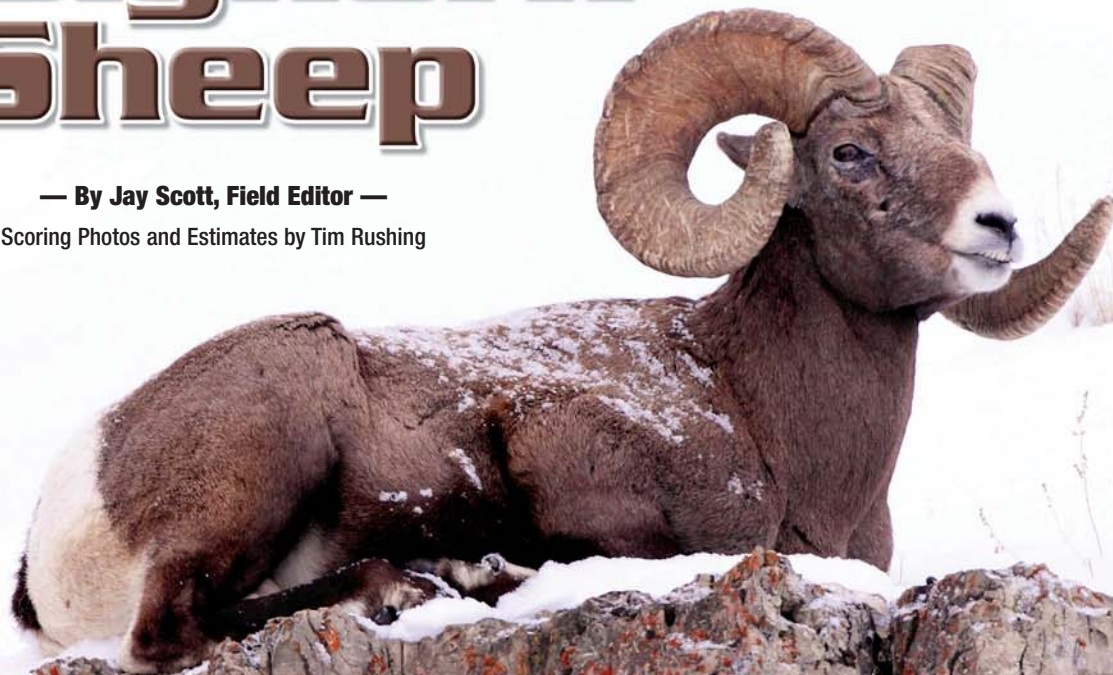


Scoring Rocky Mountain Bighorn Sheep

— By Jay Scott, Field Editor —

Scoring Photos and Estimates by Tim Rushing



mass measurements.

The following questions in regards to field judging were posed to two very experienced sheep hunters and our hope is that you will find their answers to be full of wisdom and will help you become better at field judging sheep.

First, let me introduce our two sheep experts: Tim Rushing from Colorado and Greg Koons from Arizona. Both of them have a lifetime of experience when it comes to Rocky Mountain bighorn sheep. Tim Rushing has been an avid sheep hunter and professional guide for 13 years. He has harvested a B&C ram in Colorado and has guided numerous clients to high quality rams. Tim's passion is hunting for big rams and he typically spends the summer months every year scouting the alpine country in various units throughout the Colorado Rockies. Greg Koons is an Arizona native and has been hunting since he was 10 years old. He is the owner of High Desert Outfitters and has been guiding for 24 years, specializing

Rocky Mountain bighorn sheep can be found in many of the western states including New Mexico, Arizona, Montana, Idaho, Wyoming, Colorado, Washington, and Oregon as well as several provinces in Canada. Judging bighorn sheep is definitely not an easy thing to do and there is certainly a bunch of experience that is necessary to become consistent at field judging these fine animals.

The minimum score for Rocky Mountain bighorn sheep is 180 inches for the Boone and Crockett record book. Typically record book rams have 38-40 inch horns and at least 100 inches of mass. Generally, over 50% of the total score is based around the eight



Tim Rushing

Greg Koons

in bighorn sheep. He has harvested his Grand Slam with a Rocky Mountain bighorn from New Mexico scoring 195 2/8 (which was the state record at the time it was harvested). Greg has been responsible for the harvesting of 48 rams in the state of Arizona.

What is the first thing to determine when looking at a ram for the first time?

TR: Shape and depth of curl. Does the ram make you speak words out loud like “wow” or “whoa?” First impressions are usually correct and I base further scrutiny on that first look.

GK: Is it the age class or size of ram that warrants a closer look? If it is a half-curl ram then you do not need to waste any more time looking at him. I am trying to determine if the ram I am looking at has great mass down low in his third quarter circumference area and good length of horn.

How do you determine the mass at the bases?

TR: From a slightly quartering angle, I look for any signs of extra space between the middle of the ears and the horn. Big-based rams show very little space and small-based or average rams will show a lot of space. I have found the space between the horns at the top of the head to be a very poor predictor of base size due to the fact that rams have greatly varying sized skulls. I’ve seen several

big-based rams with a large space between the horns. Base size in Colorado sheep is best judged by studying the harvest statistics by unit. Knowing the historical data by unit will always be one of the best strategies for judging base size. Sure, the odd big-based ram will appear sometimes in a unit that typically produces small-based rams, but they are the exception and not the rule.

GK: I typically research the history of the unit and the rams that have been taken in the area by the record book and the past successful hunters. This list can be obtained from the Game and Fish Department for each unit. It will give you the base circumference, the horn length, and age of each ram that has been harvested in that unit. This will give you an average of bases that are typical of that unit/gene pool. Let’s say the data says average rams that have been harvested have 14-1/2 inch bases. I use that when I am guessing a ram and if he is bigger than that then it is just a bonus.

How do you determine the length of horn?

TR: Overall shape:

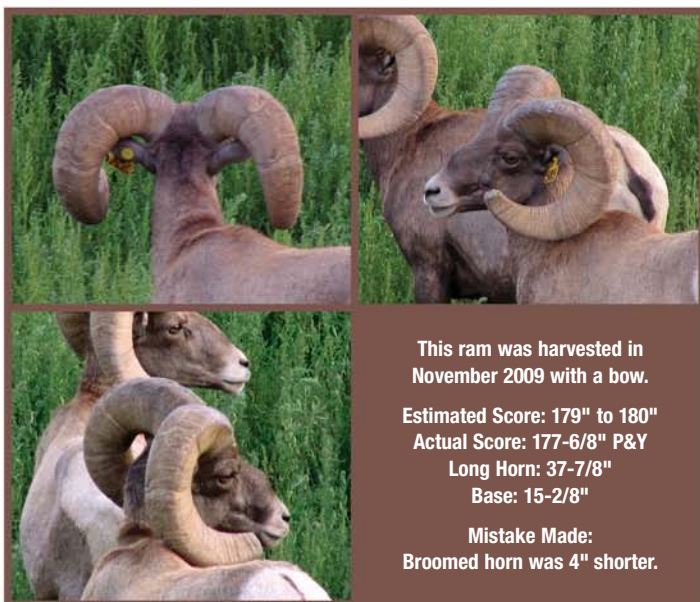
- Flat out-of-the-head appearance – makes for shorter horns
- High out-of-the head appearance – makes for longer horns
- Squashed or egg-shaped look front-to-back where the horn may curl upward at or just beyond the eye (from a side view) – makes for shorter horns
- Extra wide – makes for longer horns

Depth of drop and circular overall shape on a full curl ram:

- Above jaw line – 30-33" length
- Equal to jaw line – 34-36" length
- Below jaw line – 37-40"+ length

Amount of outward flare:

Typical flare on average shaped/average depth of curl Colorado rams happens 32-33" from the base. The best angle to judge this from is the quartering away look. Add the amount of flare to get an approximate horn length: four inches of flare makes a 36-37" long horn.



This ram was harvested in November 2009 with a bow.

Estimated Score: 179" to 180"
Actual Score: 177-6/8" P&Y
Long Horn: 37-7/8"
Base: 15-2/8"

Mistake Made:
Broomed horn was 4" shorter.



This ram was harvested in December 2007.

Estimated Score: 180" to 182"
Actual Score: 180-6/8"
Long Horn: 39-2/8"
Base: 14-6/8"



Here is an example of using the space between the middle of the ears and the horn for judging base size.

Even though the rams' heads are at slightly different angles, the top photo shows a little more space above the middle part of the ear and the horn.

He has smaller bases than the ram in the bottom photo.



GK: Getting a good side view of the ram so that you can determine how the horn comes off the top of the head, how far back the horn comes, how low the horn drops in relation to the bottom of the jaw, and how far it comes up in relation to the eye or the bridge of the nose. Another thing to look for is the tightness of the curl – can you fit a softball through it or a soccer ball? If it is a softball-sized hole it is a tighter curl and shorter horn whereas a soccer ball-sized hole means it is a lower-dropped and longer-length horn. There is a lot of experience that goes into judging the size of the curl. Hands-on measuring of sheep horns has really helped me in field judging.

If you only had one look at a ram, which would you prefer?

TR: Quartering toward me provides the best picture of horn shape, mass, and length.

GK: In my opinion you can't judge a ram with one angle/view. You need to look at all four sides (*front, right & left sides, and rear view*). Typically all rams look big from the rear look or angle. You need all angles.

Are there some "rule of thumb" measuring tricks that you use?

TR: Not really. I depend heavily on studying photos of previous ram kills and I use those for comparison. If a ram looks really big from any view, he probably is and if I try to talk myself into any other judgment, he probably is smaller than I think.

GK: For Rocky Mountain bighorns there are a couple measurements that seem to be helpful. From the tip of the nose to the base of the horn is typically 10 inches, so this will give you a good reference point to help judge the length of the horn. Try and lay that measurement around the horn to determine the length of horn. Another measurement is nose to eye, which is typically nine inches. The length of the ear from the opening to the tip of the ear is typically four inches. Compare the ear measurement to the width of the horn from the side view to determine the mass. I like to see a ram with horns that drop really low. This usually means good length. By using these measurements as reference points, this should help you judge the length and the mass of the horn.

What is your biggest fear when scoring a ram?

TR: My biggest fear is that he might be a dwarf or less than average sized ram. Lone rams are dangerous business to score accurately because there's nothing available for comparison. While guiding a few years ago, we harvested a ram that looked to score in the mid 180's. He only had a half-curl ram with him so comparing body size/horn bases was impossible. He turned out to be a dwarf ram in both body size and overall horn size. It was still a magnificent looking ram with great appeal, but he scored a full five inches lower than we estimated.

GK: Scoring a ram bigger than it really is. Keep in mind that in all species there are smaller framed rams and if they are off by themselves it is easy to misjudge. If there are several rams together then you can compare body sizes to make sure that they are all equally sized. Anyone that has been on a number of sheep hunts at some point will make a mistake and misjudge a ram.



This ram was not harvested and these photographs were taken in December 2009.

Estimated Score: 177" to 179"
Estimated Long Horn: 36-4/8"
Estimated Base: 14-6/8"



This ram has about 11" of "flared" horn.

He has about 33" of normal horn + 11" of flared horn for a total of 44" in length.

The red line is drawn to illustrate where the flared horn starts and the angle by which you can see it best.





Photos Showing Various Horn Traits

Top Photo:
Super tight curl way above the jaw – even at full curl this ram would be lucky to break 32" in length.



Middle Photo:
Average curl depth on both rams to the bottom of the jawline. This is the most typical drop for bighorns.



Bottom Photo:
Super deep curl that drops way below the jaw – this ram was harvested and had a 38-6/8" long horn as a 7/8 curl. The ram scored 186-2/8".

Often, the anterior side of the horn is the best place to find growth rings and can be best viewed as the ram faces away from the viewer. It is well known that trophy rams in Colorado are 8-10 years old although a few grow massive horns at earlier ages. Seldom are rams seen that are over 12 years old. Judging body size is fairly easy if other rams are present for comparison. Beware of the lone ram and judging body size/horn size without comparable rams present. Rams are typically mature in body size at age five.

GK: A big ram's butt will discolor and have a dingy look, especially the white patch. They will usually have a big pot belly and will also have a swayed back. I try to judge the fourth-year ring, which is the most prominent ring on the horn. You want that about halfway down the horn/curl and you want to be near its ear and horizontal to its back line. That means the ram is getting some age. If the fourth-year ring is above the ear then it's a young ram and if it is even or below the ear then it's an older ram. It is just a measuring tool, but not always accurate because some rams can have 5-6 inches between rings.

Other Helpful Tips

1. Watch for chips or dents in the horn where quarter measurements are going to fall. If you get a bad chip in the horn and it falls right in a quarter measurement spot you will lose score.
2. Try to picture where each quarter measurement is going to be on the horn. Does it look bigger or smaller in that area?
3. A ram scoring over 170 usually has at least 100 inches of mass. If the ram looks extra heavy then add inches; if a ram looks light then subtract inches.
4. A good rule of thumb is 100 inches of mass and then determine each horn length and then total ($100+37+38=175$ Gross).

When trying to determine age and body size on a ram what do you look for?

TR: Old rams typically have swayed backlines and a big protruding belly when viewed from the side. Depending on the particular ram, horn growth rings may or may not be visible in a spotting scope.

Sheep Scoring Practice Test

Tim Rushing's son Cody drew a tag in Colorado for September of 2010. After reading this article you should now understand how important historical data is to predicting the mass measurement of a bighorn sheep, but the unit Cody drew had never been hunted so there was no historical data available. After an exciting summer of scouting, learning new country, and evaluating sheep, Cody harvested a gorgeous ram. While scouting they were able to capture some live photos of the ram, offering us a unique chance to estimate his score before actually putting a measuring tape on him.

– Chris Denham, Editor

Scouting Estimate			Actual Score		
	Right Horn	Left Horn		Right Horn	Left Horn
Length	38-4/8	35-0/8	Length	37-2/8	34-4/8
Base	15-2/8	15-2/8	Base	14-5/8	14-5/8
1st Qtr.	15-0/8	15-0/8	1st Qtr.	14-2/8	14-3/8
2nd Qtr.	14-0/8	14-0/8	2nd Qtr.	14-0/8	13-7/8
3rd Qtr.	10-2/8	10-2/8	3rd Qtr.	9-7/8	10-0/8
Score	93-0/8	89-4/8	Score	90-0/8	87-3/8
Gross Score	182-4/8		Gross Score	177-3/8	
Net Score	182-4/8		Net Score	177-0/8	



5. Spread is not a factor that is measured for the gross score of a ram.
6. Boxy looking rams are often the bigger scoring rams.
7. Big rams look big. If you ever look at a ram and you think from some angle, "Oh, he's not that big," then he probably is weaker than what you thought. Giants look big from all angles.
8. When looking for signs of an older ram look for swayed backs and pot bellies.
9. Look for horns to go back out of the head and then drop really low for maximum length.
10. The third quarter measurement should look heavy, not thin. You want the whole horn to carry the mass all the way out.

Anatomical Measurements

(Courtesy of Clay Goldman, Mogollon Taxidermy)

- Ear to ear length: 13-14"
- Front of eye to front of eye: 5 1/2-5 3/4"
- Base of horn to nose: 8-9"
- Shoulder to shoulder: 13-14"
(but can vary quite a bit)
- Top of shoulder to hoof: 38-40"
- Front of eye to tip of nose: 8-8 1/4"
- Length of the ear from the opening to the tip: 4"



Example Scoring Estimates

Top Photo:
 Length: 40-4/8"
 Base: 14-6/8"
 1st Qtr: 14-2/8"
 2nd Qtr: 13-2/8"
 3rd Qtr: 9-7/8"
 Total = 92-5/8" x 2 = 185-1/8"

Middle Photo:
 Length: 43-0/8"
 Base: 15-0/8"
 1st Qtr: 15-0/8"
 2nd Qtr: 14-0/8"
 3rd Qtr: 10-4/8"
 Total = 97-4/8" x 2 = 195"

Bottom Photo Left Ram:
 Length: 39-4/8"
 Base: 15-0/8"
 1st Qtr: 14-2/8"
 2nd Qtr: 13-2/8"
 3rd Qtr: 10-0/8"
 Total = 92" x 2 = 184"

Bottom Photo Right Ram:
 Length: 39-0/8"
 Base: 14-6/8"
 1st Qtr: 14-0/8"
 2nd Qtr: 13-0/8"
 3rd Qtr: 9-0/8"
 Total = 89-6/8" x 2 = 179-4/8"



Post Hunt Thoughts

I slightly overestimated this ram in every category. Since the hunting unit was brand new and there was no historical data to use as a predictor of base size, I went off of previous kill pictures from across the state for comparison. I maintain that knowing historical data of previous ram kills to be one of the best predictors of base size per hunting unit. Base size is typically the critical element for higher scoring trophies. Judging horn length is usually the easiest part of the horn to estimate and as I look at scouting photos on this ram, I see my errors. About 80% of the photos I have make this ram look around 38"+ long. The other 20% of the photos make the ram look smaller than 38". In the future, I will let that conservative looking 20% define the length and overall score. Photos don't lie and they can provide an accurate synopsis of all the different views necessary for accurate judging.

— Tim Rushing

— Summary —

Score should never define a trophy.
 All wild rams have inherent beauty and uniqueness.
 The big ones still always look big!