Dall Sheep Hunting
Full-Curl Identification Guide

Alaska Department of Fish and Game
Division of Wildlife Conservation
2018

Definition of Full Curl-Horn

5 AAC 92.990. Definitions

(30) "full-curl horn" of a male (ram) Dall sheep means that

(A) the tip of at least one horn has grown through 360 degrees of a circle described by the outer surface of the horn, as viewed from the side, or

(B) both horn tips are broken, or

(C) the sheep is at least eight years of age as determined by horn growth annuli;

Notes

Dall Sheep Identification

Why a Guide?

Hunting Dall sheep is challenging. The shooting distance, and/or angle, often creates a challenge for the hunter to properly judge a sheep. Knowing how to judge a legal sheep takes preparation and practice.

The harvest of sublegal rams has been approximately 10 percent over the past decade. This does not account for wounding loss.

We believe that most sublegal ram harvest can be prevented if hunters study this material and understand how to determine age and/or full-curl. Read this guide, check out our website for more resources, and take this guide to the field with you to study and share with your fellow hunters.

Sheep Management

A legal sheep under the full-curl regulation includes full-curl rams, rams with both horns broken, or rams 8 years old or older. There are also some drawing and subsistence hunts that include an any sheep, any ram, or ewe harvest.

After a long period of having no curl regulation the State adopted a 3/4-curl, then 7/8-curl regulation. Finally, in 1992, the Board of Game adopted a full-curl sheep regulation in most of the state.

Once sheep are 8 years old or older, the likelihood of surviving each year beyond that is greatly reduced. Full-curl sheep are older animals and by harvesting older sheep, the younger mature sheep can continue to breed. Harvesting older animals that will likely die soon, protects the younger adults that are in their breeding prime.

Harvesting only full-curl rams is a conservative approach to sheep management. This is important because it is very challenging, if not impossible, to obtain an exact count on sheep populations. The best that biologists can do is get relative abundance numbers and follow population trends. The combined harvest of only full-curl rams each year is a very small percentage of the overall sheep population. Knowing this allows managers to continue to have longer hunts which provide maximum opportunity to all hunters who want the challenge of harvesting a full-curl Dall sheep.

Dall Sheep Hunting

Dall sheep are found in relatively dry mountainous terrain and frequent a special combination of open alpine ridges, meadows, and steep slopes with extremely rugged "escape terrain" in the immediate vicinity. They use ridges, meadows, and steep slopes for feeding and resting. When danger approaches they flee to the rocks and crags to escape pursuers. They are generally high country animals, but are sometimes found below timberline in Alaska. Rain, fog, clouds, snow, and darkness can quickly turn a casual alpine hunt into a struggle just to make it back to your starting point safely. Sheep hunting is unique and demanding.

Consider the following safety tips:

- Make the safety of you and your party a top priority.
- Leave a detailed trip plan with a responsible party.
- Be prepared to deal with severe weather such as heavy rain, thick fog, or snow.
- Study and practice your survival techniques and navigation skills.
- Study topographic maps before your trip.
- Carry a topographic map and compass and know how to use them (even if you carry a GPS). In white-out conditions a GPS allows you to backtrack your route. Don't forget extra batteries.
- Consider carrying a SAT phone, VHF radio, or SPOT in case of emergencies.
- Plan your hunt, set a turn-around-time and stick to it.
- Know your physical limitations and hunt within them.

You are part of wildlife management in Alaska.
Do your best to select a full-curl ram to help provide maximum sheep hunting and viewing opportunity for future years.

If you study all the Dall sheep judging materials in this guide and on the ADF&G website and are still uncertain whether a sheep you are looking at is legal, it's probably not. Don't shoot.

Legal and Ethical

Sublegal Harvest

Most hunters try very hard to harvest a legal ram, but even so, there is an approximately 10 percent annual reported sublegal sheep harvest. Many of these rams were close to full-curl and would have been legal for harvest over the following year or two.

The best way to reduce the harvest of sub-legal rams is to learn proper techniques of determining full curl. If it appears to be too close to determine, it is likely not legal. Don't shoot unless you are absolutely sure.

Wounding Loss

Wounding and losing animals is always a concern to hunters and hunt managers. We don't know the wounding loss for Dall sheep but speculate that it could be high for the following reasons.

- Long shots.
- Rough terrain can dissuade hunters from checking on a potential wounded animal.
- Some sheep show little or no reaction to being shot.
- Lack of follow up shot ability because of terrain and cover.

Make sure there are no sheep hidden behind the sheep you are shooting.

The best way to reduce wounding loss is for hunters to be patient, learn to stalk the animals, get close enough for a well placed shot before shooting, ensure that there is the ability for follow up shots, and walk to the location of every animal that is shot at to verify whether it was struck or not.

Sheep have been observed presenting absolutely no reaction to getting fatally shot. A hunter can't assume a miss if a sheep does not react.

Hunting Tip:

Do not shoot at running or swiftly moving animals or take a skyline shot. It is important to know your target and what is beyond.

Before You Take the Shot

	Consider	*Do NOT shoot if...*
Legal Ram?	Am I confident that the sheep meets the full-curl requirements?	• You are not certain the animal is full curl, has two broken horns, or is 8-years old or older.
Shot Distance	Is the shot too far? Can I retrieve the sheep after I shoot it? Am I willing to go to the spot and check to see if I wounded the animal?	• The shot is beyond your practiced ability. • There are cliffs directly below the animal. • You will need to cross an avalanche zone or scree slope. • You need to cross swift moving water.
Clean Shot	Can I clearly see the target and what is beyond?	• Sheep is obstructed by trees, brush or rocks. • Cannot see beyond the target or the target is sky lined.
Shot Placement	Do I have a clear shot at the vital zones?	• Sheep is running or swiftly moving. • No clear shot of vital zones: heart/lung.
Retrieval	Can I track the animal if I wound it? Are there any dangers that I need to consider? Where will the animal fall or slide?	• Avalanche zone or dangerous cliffs. • Approaching darkness or severe weather. • Your decision puts yourself and/or your hunting party in danger.
Safety	Is darkness or severe weather approaching?	• You cannot safely return to camp. • You will not be able to leave the animal and safely return to it the next day.

Hunting Tip:

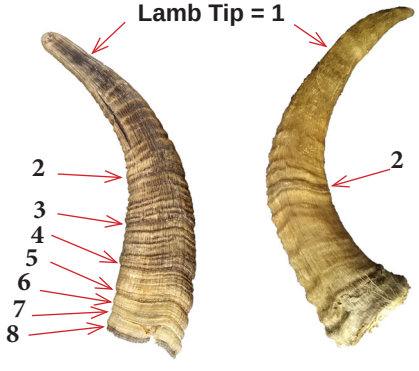
Practice shooting with the same weapon you will use on your hunt at a rifle range as well as in the field, especially during the weeks leading up to your hunt.

Sex Identification

There could be possible confusion about the horns of animals that are 18-months to 2-years old. But after a year, ram horns grow much faster and this will be evident by looking at the size of the horn compared to the annuli.

The picture on the right shows a 7-year-old ewe compared to a 2-year-old ram. These show the distinct difference between the two, with the ewe horns being slender and slightly curved and the 2-year-old ram horns being larger than the 7-year-old ewe horns.

Look closely at the horns to view the annuli. For more details go to the ADF&G Dall sheep website and see the "Aging Horns" section in the manual *Dall Sheep- Guide to Judging Sheep Horns Under the Full-Curl Regulation*.



8-year-old ewe **2-year-old ram**

If there are three or more annuli on horns this size, then it is a ewe.

Some ewe horns spread out like a young rams, so be sure to look for other clues before you shoot!

Sex Identification

Ewes (Females)

Horns:

- Thinner at base
- Shorter
- Slightly curved

Group Size and Composition:

- Often with lambs and in larger groups than rams.

Body Size and Shape:

- Smaller body than rams

Urination Posture:

- Squats, rump near ground

Young Rams (Males)

Horns:

- Thicker at base
- Longer, with age
- Curve out away from bases
- Narrow distance between bases

Group Size and Composition:

- Often solitary or groups of 2-3

Body Size and Shape:

- Stocky body

Urination Posture:

- Stands stretching

Sexual Organs:

- Sometimes organs are visible and sometimes not. Without the perfect view the hair often covers everything making it difficult to see the penis or scrotum.

Determining Full Curl

Ram horns grow in a helix, like the threads of a bolt, out from the head. Horns must be viewed along the axis of the curl (this is not the same as a side view as the head may need to be canted to look down the axis) to see the perfect circle. For a ram to be full curl, the outer surface of the horn, as viewed along the axis of the curl, must complete 360°.

There are **3 methods of looking at the horns** to determine whether a horn grows through 360° of a circle and is full curl. The horns only need to be deemed full curl by ***one*** of the methods!

1. **The Perfect Circle View**
2. **The Stick Test View**
3. **The Horn Base/Horn Tip Angle View**

1. The Perfect Circle View

In the Perfect Circle Test, the sheep head is viewed from the side at such an angle that the outer surface of the horn creates a circle. If the horn tip reaches the horn base, then the sheep passes this test and is legal.

Viewing angle is critical.
Viewing horns at different angles will change the curl's appearance. A sublegal curl can be viewed as having a full curl when observed at an improper angle. If the horn is viewed at an improper angle, it will not fit inside a perfect circle. Instead, it will form a flattened circle or ellipse (like an egg).

Wrong view- Elliptical

Correct view- Circular

This is not a full-curl ram. If it is viewed to make it look full-curl by putting the horn tip up to the base, the circle is flattened out to an egg shape. When the horn is turned to fit inside a true circle, the tip of the horn does not reach the base of the horn.

Viewing angle in the field

Look at these two sheep and notice how the horns appear at different viewing angles. The view will continuously change based on your position relative to the sheep and the way that the sheep is moving its head. To determine if it is full curl by the perfect circle view notice that you must view the ram from the side and **slightly below**, or it may tilt its head upwards to achieve a similar view.
**Only one horn on a sheep must be 360° for it to be legal.*

Sheep 1
Full curl

Sheep 2
Not full curl

From above

From the side

From below

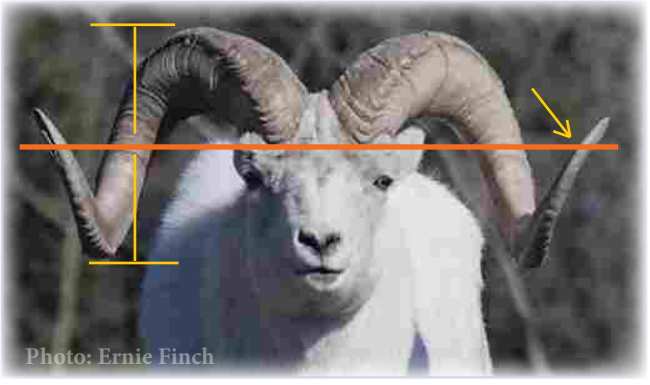
2. The Stick Test *(not the same as the "Canadian Stick Test")*

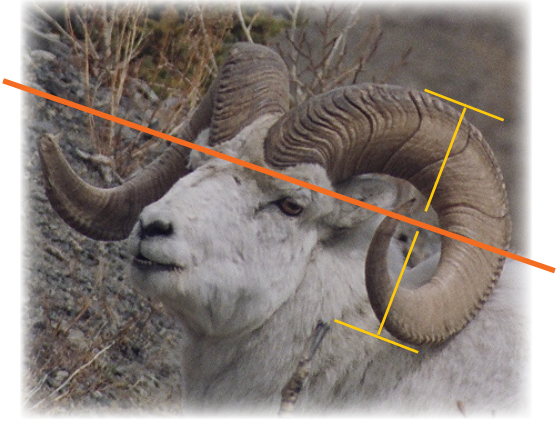
For the stick test with the sheep in hand, a straight stick or dowel is placed beneath and across the front base of both horns and extends out past both sides of the head. **If one of the horn tips reaches or surpasses the plane created by the top of the stick or dowel, then the sheep is full curl**.

Guides and hunters have been using the "stick test" for years by superimposing an imaginary line across the base of the sheep horns and extending it out beyond the tips.

To ensure that you are viewing the sheep at the proper head angle when using the stick method to check for full curl, make sure that there is an equal amount of horn showing above and below your imaginary line. If the sheep's head is tilted too far up or down it will affect the appearance of the tip relative to the horn base.

This is how it looks in the field. With the correct view there is an equal amount of horn above and below the imaginary line.



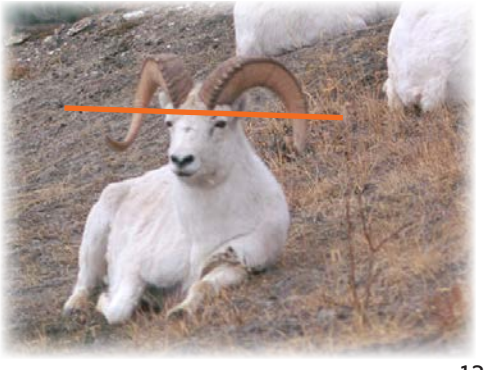


The ram on the left clearly does not meet full curl by the perfect circle test or by the stick test applied to one horn - with the imaginary line passing under the horn base and passing through the 180° point of a circle around the horn.

The ram on the right clearly passes the stick test at a glance and you can imagine if he turned sideways would far surpass 360°.

This ram passes the stick test on at least his right side by a couple of inches. It is difficult to see the left side because the horn is broken off.

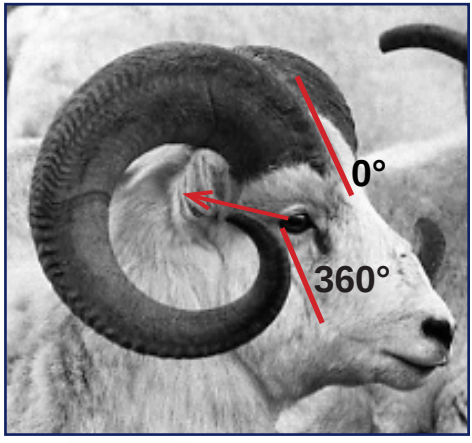
It is possible for a ram to fail the stick test and pass one of the other tests but this ram falls far short of the stick test and with his shallow-curved, forward pointing tips, would not pass any other test for full curl except maybe, but unlikely, on age.



3. The Horn Base/Tip Angle Test

Sheep horns can grow through 360° of a circle without reaching the plane of the horn base. These horns usually drop low and wide and curl tightly as the ram ages.

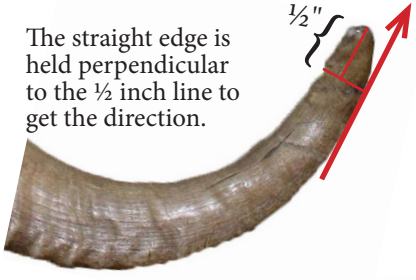
In the example at the right, the horn base angle is assigned a relative starting point of 0°. As you measure the angle around the horn, it is obvious that the tip of the horn on this sheep surpasses the 360° angle required for it to be full curl.



Important:

You are measuring the direction that the tip grows compared to the direction that the base grows.

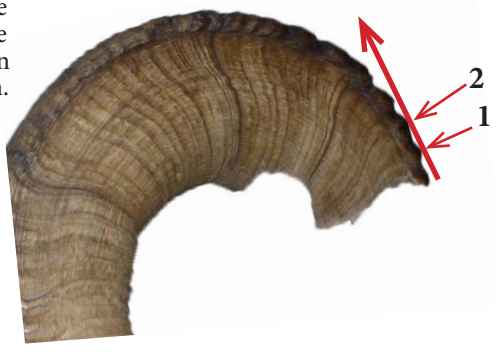
The contact point for the straight edge when determining **horn tip** direction is ½ inch from the tip, measuring down the inside or outside **center** of the horn.



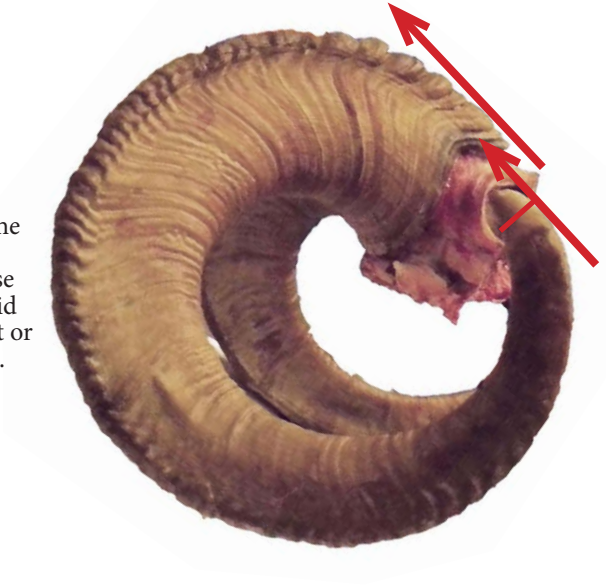
The straight edge is held perpendicular to the ½ inch line to get the direction.

When determining the angle of the **horn base**, your straightedge will have two contact points (the first two ridges up from the horn base) to determine the direction.

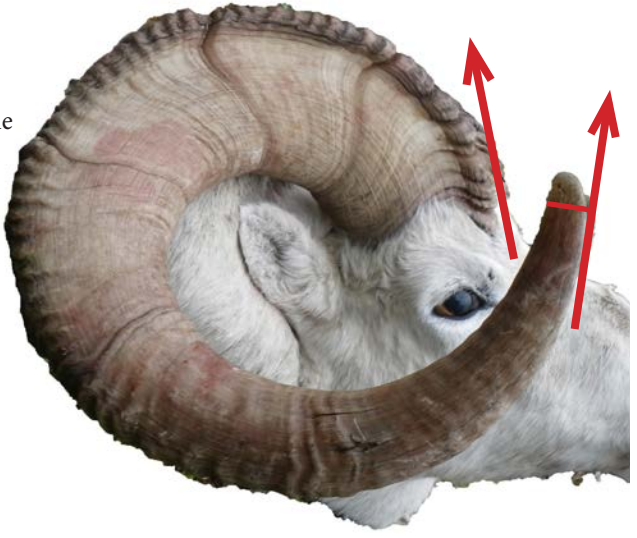
Use the two lowest contact points above the bottom edge of the horn to place a straightedge when determining the horn base angle.



This sheep is legal. The horn tip angle is just equal to the horn base angle. These horns did not pass the stick test or the perfect circle test.



The horn tips of this sheep do not meet or exceed the angle of the horn base, so it fails this test. It is legal, however, as it passes the stick test.



Broken Horns

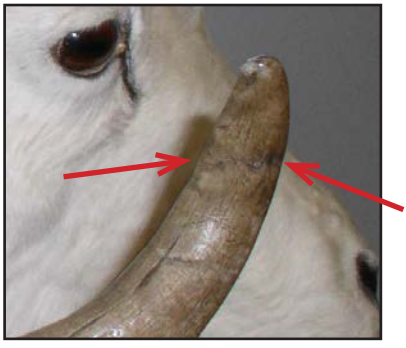
The terms broken and “broomed” have been used synonymously by sheep hunters for years. Broken is the only term used in regulation**.** The term "broomed" is not used in regulation. **Broken, as it applies to the horn tips of male (rams) Dall sheep, means:**

Both horns broken.

> ***The lamb tip is completely absent****; horn tips that are chipped or cracked are not broken if any portion of the lamb tip is present;*

Characteristics of the lamb tip include:

1. a length of less than 4 inches,
2. the inside surface of the lamb tip is often distinctly concave when compared to the remainder of the horn, and
3. the lamb tip is the section of horn that is grown during the first 6 months of a sheep's life and is the section of horn distal of the first annulus, which is the swelling of the horn that forms during the first winter of life.



The first annulus is always present on younger rams and is slowly worn through time as the ram ages, along with the rest of the horn tip. Remnants of the first annulus can still be located and identified on the majority of all sheep (ewes, lambs, and rams), including rams that are 10+ years of age.

Lamb tip may show concavity on the inside if not worn down.

Horns that have broke and been worn smooth are still "broken." These horns obviously broke at some time.

Broken

Obviously broken and jagged.

Worn smooth, but lamb tip is missing.

This horn was either broken and worn, or just worn past lamb tip. Either way it is legal as the lamb tip is gone.

Not Broken

Lots of horn tips are rubbed and worn down. This is not broken.

Rubbed and worn down but not far enough to remove entire lamb tip. This is not broken.

Slightly damaged and worn but lamb tip still present. This is not broken.

Aging Sheep

Dall sheep have reasonably stable periods of seasonal horn growth. Horn growth generally starts in early spring and ends in late fall or early winter. The time between growth periods is usually marked on each end by a well defined groove referred to as a true (primary) **annulus**. By identifying and counting these annuli, the age of an animal can be determined.

- Sheep are born around the end of May.
- Growth is relatively continuous through the first year of life although there is still an annulus formed during the first winter of a sheep's life. The lamb tip represents the first summer of life and is counted as the first annulus.
- Because annuli are formed during winter, they do not actually represent the date of birth of an animal, but the year of life it is in.
- Horn growth normally slows with each consecutive year of the animal's life after age 3; horn growth segments should consecutively get smaller after the third annulus. This is important to know as it will help to detect false annuli.

* *A small percentage of sheep will not follow this general rule.*

Aging sheep by counting annuli in the field, at a distance, through optics is extremely difficult and not recommended. See Guide to Judging Sheep Horns Under the Full-Curl Regulation (ADF&G 2016) for more detailed description.

Strategy for counting annuli

1. Locate lamb tip (it may be missing). This is your first annulus. Designate it as "1".
2. Make sure you don't count the one year "bulge" as an annulus.
3. Locate the second annulus. This is usually the first clear one. Designate it as "2" and continue counting the annuli toward the base of the horn.

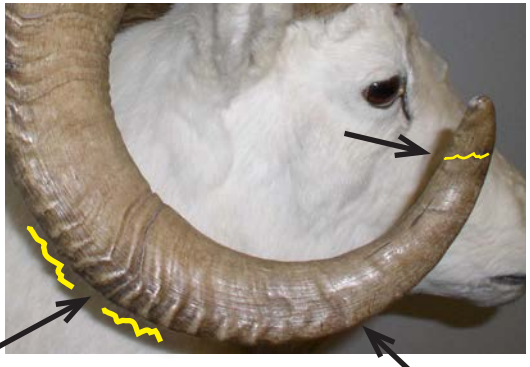
Notes

- There will be a segment of growth below the last annulus for sheep that are harvested in the fall.
- There are no hidden annuli below the hairline of sheep around 8-years old and younger. Old rams that have very little annual horn growth may have annuli beneath the hairline, but an annulus cannot be added to the number that you count, assuming there is one below the hairline.

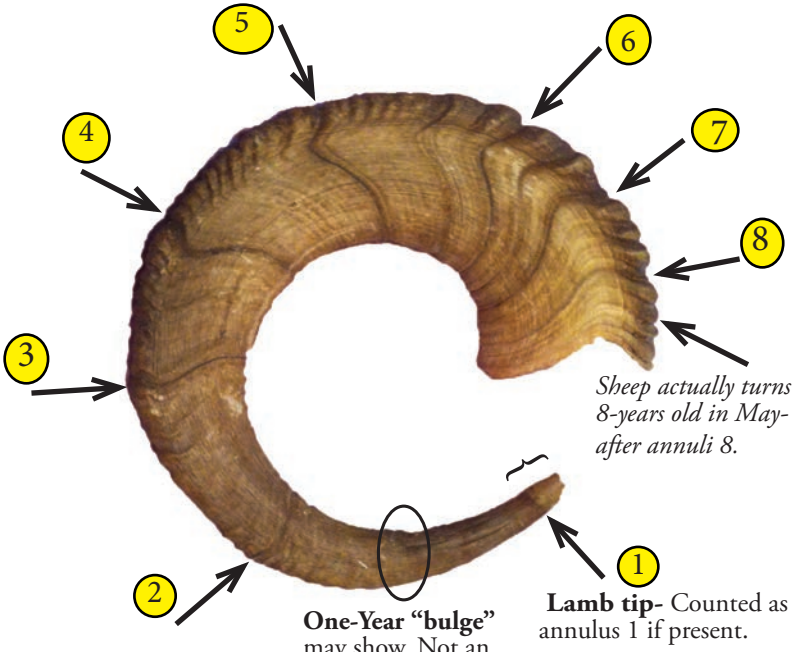
Second annulus

This is usually the first clear annulus and may be the first one visible if the lamb tip is rubbed away.

It is also identifiable as the second annulus as it is located where the outer surface of the horn starts to get ridges and it will have ridges on both sides of the annulus.



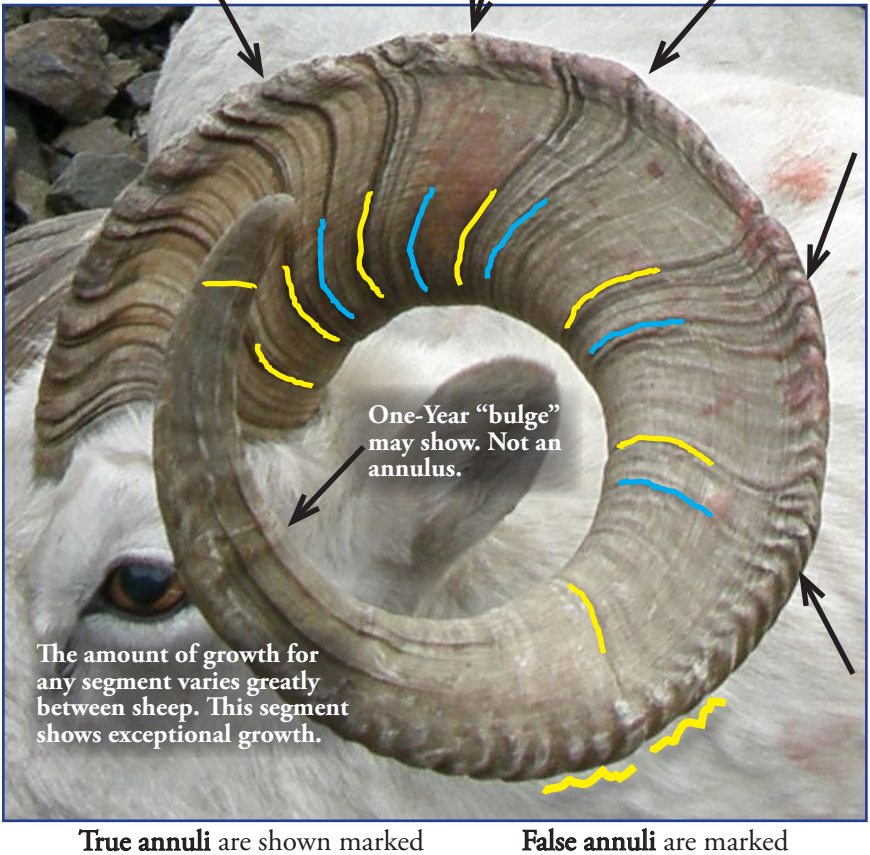
Sometimes you see a bulge created at the 12-month point in an animal's life. It might look like an area where the horn is swollen. **This is not an annulus.**



Ridges and false annuli

A distinct pattern of ridges between true annuli tend to repeat themselves in the middle section of the horn. For example, if there is a false annuli in one section, it tends to repeat itself in the following growth segments. Knowing this will provide you with one more bit of information and help you better identify false annuli. In the sheep horns below the arrows are pointing to a false annuli that repeats itself in each growth segment.

**** See how well defined the false annuli can appear. That is why you need to use all of the clues when making age determinations.***



True annuli are shown marked with yellow.

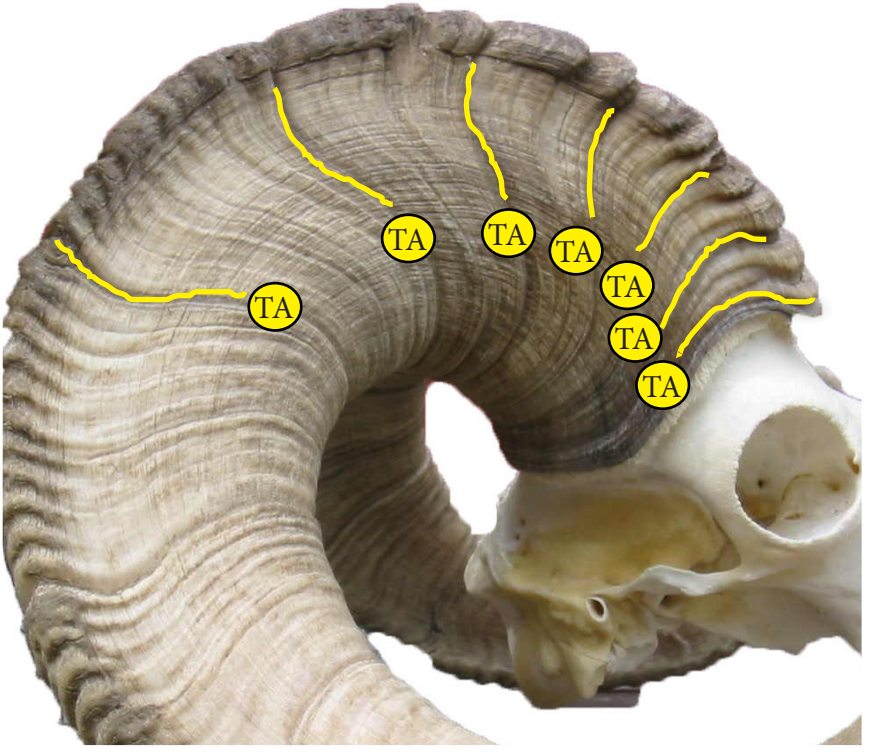
False annuli are marked with **blue**.

Decreasing segment size

As a sheep ages, annual horn growth slows. This causes the growth segment between annuli to successively get shorter. The growth segments near the base of the horns are usually closer together than the segments further out near the tip. If you are not seeing this pattern, you may be looking at false annuli.

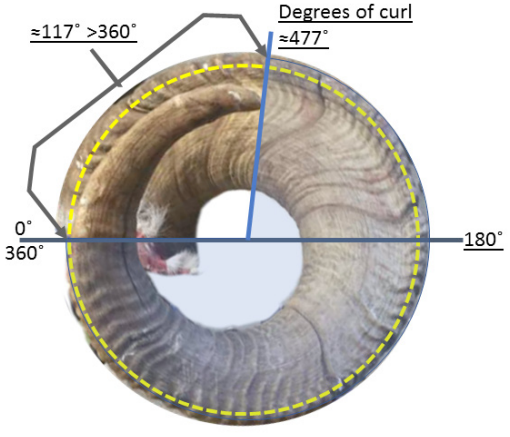
** There is a small percentage of sheep that will not fit this description. Use as many clues as possible to determine true and false annuli.*

TA = True annulus



Degrees of curl

Many hunters talk about sheep horn curl using fractions; a sheep is 7/8th's or 15/16th's, etc. But this terminology can be deceiving. A 15/16th curl, for example, is really not close to full. It is not 15/16th's of an inch, it is 15/16th's of a circle that may be in the realm of 36 inches. On a ram with 36-inch horns, 10° = 1 inch of horn. A sheep that is 15/16th's is actually only about 340° of curl and 2 inches short of full curl.



Sheep researchers are now collecting data on hunter harvested sheep horns. They are measuring the segment growth lengths and degrees of curl of the horns.

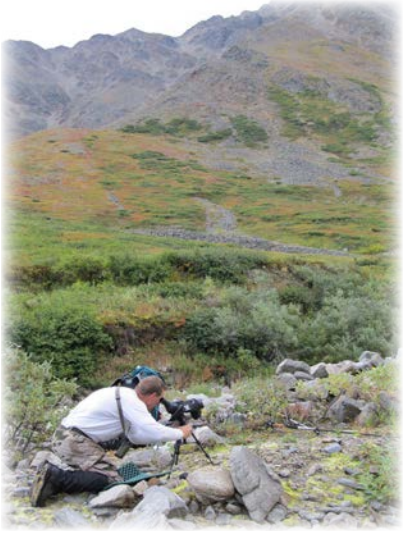
Give yourself a buffer!

Hunters tend to get in trouble and shoot sublegal sheep when they are trying to judge a sheep that is very close to 360°. Don't do this. Give yourself a buffer; some amount of degrees over 360° that you will know for sure that the animal is a legal ram. Two inches over 360° on a 36-inch sheep will give you 380° and should be easy to see the horn overlap when you have the proper viewing angle.

When viewing a ram, if you can clearly see that the curve of the tip of the horn will match the curve of the base of the horn if they were overlapped, then the ram is more than full curl.

In the field

Glassing



The importance of stopping and searching for sheep through binoculars cannot be overstated while sheep hunting. While there is no exact formula for how long you need to glass, one successful, former guide recommends a ratio of a least 1 hour of glassing for every hour of travel.

Just because you don't see them now, doesn't mean you won't see them later. Sheep usually don't move much throughout the day. You may or may not spot them bedded down. If they are bedded in an area you may not see them until they stand and start feeding in the early evening.

You can only walk so far to look for sheep. Be strategic about walking and positioning yourself in areas where you can see maximum landscape and glass.

Once you spot sheep, then you can use your spotting scope to get a better look and start to figure out if they are rams worth approaching.

Binoculars and spotting scopes

There may be no other animal where carrying great optics is of paramount importance. In your hunt for a legal ram you will spend a lot of time looking for, and at sheep from long distances through binoculars and a spotting scope. If your optics are dark or fog up and limit viewing, you are putting yourself at a disadvantage.

Hunting Tip:
You may have to look at one sheep for an hour or more in order to get the best view to determine if it is full curl. Use as many methods as possible to help yourself make a confident decision.

One step at a time

You see sheep from a distance:

1. Are they rams?

When you see a group of sheep on the side of a mountain and want to determine if they are rams you obviously want to look for large horns, but you may not see that from a distance so other clues can help.

- **Size differences** - rams are larger bodied.
- **Build** - male vs. female - rams are more stout than ewes and they are 'blockey' looking. Even smaller rams are stout compared to slender looking ewes.

Slender ewe with thin neck

Stocky body, thick neck, ram

- **Spacing** -

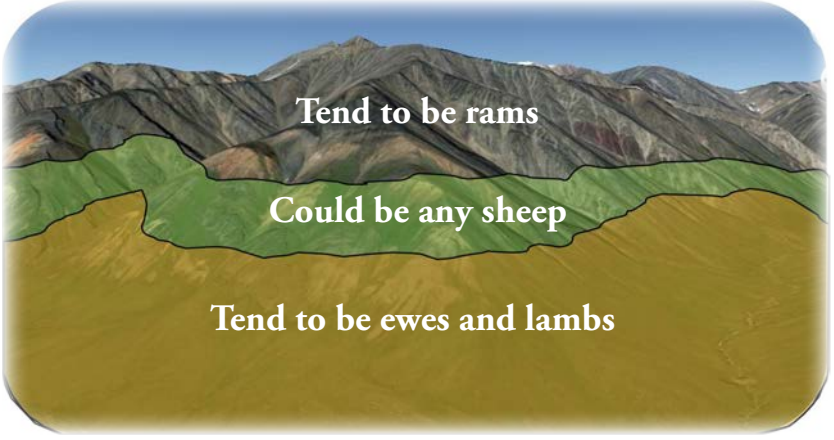
  Rams tend to be randomly spaced as opposed to ewes and lambs which tend to be paired.

These rams demonstrate individual and random spacing.

- **Visible horns?** Are horns visible from a distance? If horns are not visible using a spotting scope from several miles, they are likely ewes and lambs-or at least they are not large rams.

- **Zones** - Sheep tend to spend time in certain zones on a mountain differentiated by altitude. Rams tend to be the highest on the mountain, any sheep can spend time in the middle zone, and ewes and lambs tend to spend more time on the lower parts of the mountains.

These are tendencies, not rules, but along with other clues, they will help in locating rams and not waste time chasing after sub-legal sheep.



2. Are they large rams?

You know you are looking at large rams in the field when you see a lot of horn. One interesting description is that from a distance, really large rams look like their head is detached from their body. This is because the thick horn covers up such a large piece of their neck.

3. Are they legal rams?

To determine if they are legal or not, apply the information and techniques demonstrated throughout this guide.

Don't waste your time on marginal rams.

Don't waste hours trying to determine if one marginal sheep is legal. If it is so close that you are having difficulty determining whether it is 360° or more than it is likely a risky sheep. Those hours would be much better spent glassing for another ram that may be legal.

There are more rams out there.

The majority of sheep harvested in Alaska are taken in the first 10 days of the season. Many hunters also believe that most of the legal rams (full curl/ or 8-years old) are harvested each hunting season. A horn characteristic study initiated in 2016 collected detailed measurements from 474 of the 783 rams harvested that year. Results demonstrated that greater than 50 percent of those rams were available for harvest (based on 360° of curl) for at least one or more previous hunting seasons. This research is ongoing, but demonstrates there are many more legal rams roaming the mountains. Keep looking for a clearly legal ram.

4. Can I get to them?

Once you think you have identified one or more legal sheep the next step is determining if you can get to them. There are several factors to consider when making this decision.

- Is there a safe path to take to get to the sheep?
- If I shoot the sheep will I be able to retrieve it?
- Do I have enough daylight to shoot and retrieve the animal before dark?
- What is my stalking strategy?
- Is the wind favorable for my approach?

Stalking tips

When planning the stalk consider:

- What direction the sheep are traveling.
- Since sheep will often try to retrace their route when stressed, by shooting from their back-trail the shooting distance may be shortened as they try to return.
- Is there enough visible area around the animal when shooting starts to see where the animal goes after the shot.

******It is important to be able to observe the animals action regardless of the direction it chooses to travel after being shot.*

To shoot from above or below the sheep?

There are advantages and disadvantages to each scenario and it also depends on the location of the rams and potential pathways to access them. It is interesting to note that sheep stressed from above tend to move much further than animals stressed from below.

If stalking from below fails, the animals will often bed down once they pass over the crest of the mountain. Provided there is sufficient time to reach the top, the hunter may have a second opportunity to harvest a ram. If the animals are located on the crest of a ridge, shooting from above may provide a better opportunity to monitor the animal's activities after being shot.

Hunting Tip:
If a hunter stops all movement quickly after a sheep becomes aware of his or her presence, either by sight or hearing, the sheep usually will resume its previous activity.

Signs of stress

When sheep suspect a threat they will often:

- Stop chewing cud if bedded.
- Stand and focus attention on a specific point of concern.
- If feeding they will lift head and focus on the suspected object.
- They will form a tighter group often looking in different directions.
- Slowly walk stiff-legged away from the threat then run for a short distance, stop and look back
- Form a line and walk away from the threat with the largest or older ram leading.

This is a great situation of when to freeze during a stalk. Two sheep are alerted but the others are still feeding. If you freeze and hold for several minutes, the alerted sheep will return to feeding.

In this image the group of sheep is stressed enough that they are leaving an area. When rams are stressed and departing they often form a line with the largest ram in the front and subsequent smaller rams trailing behind. Don't shoot at running rams.

Hunting Tip:
When stressed, sheep tend to leave an area in the direction they came. When planning the stalk this trait can be used to the hunter's advantage by shooting from a position already traveled by the animals.

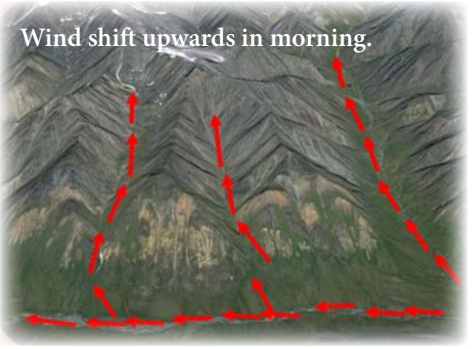
Wind direction

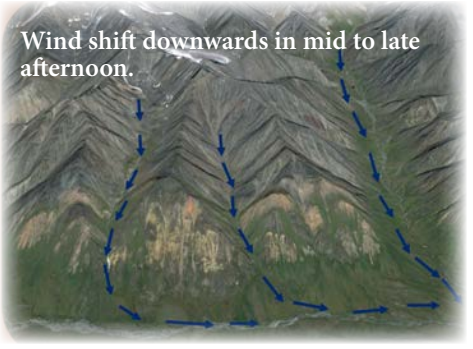
Winds tend to blow up drainages during the daytime hours and down drainages during the cool evenings and mornings. At the top of mountains, higher crosswinds will cause vortexes and swirling air currents that may come from any direction.

As you glass for rams - and especially when you stalk - you should constantly be aware of the wind direction.

Pay attention to where the wind is felt on your skin. Pick up fine bits or dry grass and let them go to test out slight breeze directions. Look up at the mountains tops and observe which way the clouds are blowing.

If you get it wrong and the sheep catch your scent, they may depart the area.





Harvesting strategy

Rams are often found in groups of two or more with varying numbers of legal rams. To avoid killing the wrong animal or too many, it is important to select a specific animal for harvest. Once an animal is selected, and shot at, no attempt should be made to harvest another until the selected animal is secured.

In some circumstances a sheep will show no immediate signs of being wounded. Possible problems of shooting the wrong animal or too many can be avoided by

- Carefully identifying the animal to be harvested by horn characteristics (i.e., broken on one side and distinguishing body markings).
- Waiting for animals to stop before firing a second time.
- Making certain that if the bullet passes though the animal another sheep will not be wounded.
- Shooting one shot then reidentifying targeted animal before firing next shot.

What is your evaluation of this sheep? Two views.

This sheep is not legal. With just a slight movement of his head you can see that he almost presents the perfect circle view. He may inch a bit closer but will still come up short of full curl.

This is the type of sheep that hunters may watch for hours trying to make it into full curl. Don't convince yourself or your hunting partner that a sheep is full curl. Be confident that it is.

Hunting Tip:

The horns of all Dall sheep must be salvaged. Alaska State Regulations mandate that horns may be taken out of the field ONLY after the meat is packed out or with the final load of meat.

What is your evaluation of these sheep? Two views.

1. This sheep clearly surpasses 360°. It passes the stick test.

2. This is a marginal ram but in the second image he is turning to a perfect circle view and looks like he is just over full curl.

3. This ram is not quite showing a perfect circle view but does not look like he will make full curl. It is obvious however that his horn tip angle does not equal the angle of the horn base so he will not pass the angle test either.

What is your evaluation of these sheep?

1. This sheep clearly surpasses 360°. It passes the stick test and would also pass the perfect circle test and the angle test.
2. This is a marginal ram and would require looking at some more head angles but it looks like it is short of full curl.

*Don't mistake the horn shadow for the actual horn.

What is your evaluation of these sheep?

3. This ram clearly surpasses full curl. He passes the perfect circle test and the angle test and would pass the stick test with the proper view.
4. You cannot see this ram well enough to determine curl size.
5. This ram clearly does not pass the stick test and the tips do not curl back. It is not legal.

Hunting Tip:
Use a weapon that has been carefully sighted in and practice using a range finder to increase your distance judging skills.

What is your evaluation of this sheep?

This sheep is well over 360°. This is easy to see because his horn tips curl back matching the angle of his horn bases. Another way to look at this is to imagine tilting his head up a bit until the curve of the horn tip matches the curve of the horn base and form a perfect circle. His horn tip will be at least a few inches past the base.

Hunting Tip:
Sheep that are stressed from above react more strongly than sheep that are stressed from below.

What is your evaluation of these sheep?

1. This sheep clearly surpasses 360°. It passes the stick test and the angle test. Notice how the horn tip is pointing backwards beyond the angle of the horn base. If the sheep moved its head to show a perfect circle with the horn, the tip would be inches beyond 360°.

2. This is a marginal ram. If he tilts his head to create a perfect circle with his horn it will likely be shy of, or right at 360°. Too close for comfort.
3. This ram is not legal by the stick test. You would have to see his horns from the side to determine if he reaches 360° by another method.

4. You cannot determine the legality of this sheep from this view.

Hunting Tip:
Be aware of avalanche danger. Consider if the sheep is retrievable before taking your shot.

What is your evaluation of these sheep?

1. From this view you can see that this ram passes the stick test so his horns have grown through 360°.

2. You cannot determine the horn configuration of this ram from this view. Wait until he turns.

3. The right horn on this ram is broken and the left horn clearly passes the stick test and far exceeds the angle and perfect circle tests.

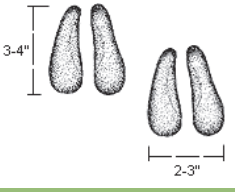
Hunting Tip:
Wait until the animal stands or turns and exposes a clear heart/lung shot. Head and spine shots are not recommended because they often result in a wounded animal.

What is your evaluation of these sheep?

1. This ram's horn tips point forward indicating that he is far less than full curl.
2. The right horn on this sheep is broken. The left horn may barely pass the stick test. His left horn has curled through 360° and would pass the angle test but wait for a side view to be certain.
3. This ram is similar to number one with wider horns that drop and still point forward. He is not legal.

What is your evaluation of this sheep?

This is a legal ram because both horn tips are broken off so that both lamb tips have been completely removed from the horns.



Hunting Tip:
Large ram tracks should be about 3.5- 4 inches long for the front track length. This may help you determine if there are large rams in the area.

What is your evaluation of these sheep?

1. From this view you can see that the ram on the left has horns that have grown through 360°. The angle of the tip of his horn far exceeds the angle of the base.

2. The three rams on the right are all close to the same size and you can tell from either the front or the side that they do not come close to passing the stick test or forming a perfect circle over 360°.

* This is a great scenario for a shot. The legal ram is standing by himself spaced far enough from the other rams and there are good views for follow up shots and to see where the ram goes after he is shot.

Hunting Tip:
If you glass a group of sheep once, glass it again later to make sure it is the same group. Other animals that you could not see before may now be visible.

Keep in mind...

Darkness or severe weather approaching…

- Can I track the animal if I wound it?
- Can I safely get back to camp with the sheep?
- Am I prepared to sleep on the mountain?
- Am I prepared for heavy rain, thick fog, or deep snow?

If I leave the animal overnight…

- Can I gut the animal and move the carcass far away to prevent bears from moving in on the meat?
- Meat salvage takes precedence, but skull must come out with final load.
- Can I find my route back to the animal?
- Am I prepared to deal with bears on the carcass in the morning?

Where will sheep fall, slide, or run when I shoot?

- Are there cliffs directly below the animal?
- Will I need to cross an avalanche zone?
- Do I need to cross swift moving water?

Want more?

Visit the ADF&G website, Hunting Dall Sheep, for more information and education materials.

http://www.adfg.alaska.gov/index.cfm?adfg=sheephunting.main

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To learn more about hunting and general Dall sheep information, go to **www.hunt.alaska.gov/**. For more information about this publication, please contact your local ADF&G office.

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