Mountain Goat Gender Identification Guide
Overview

This guide is intended to help mountain goat hunters identify male and female mountain goats. Hunters holding “female-only” mountain goat licenses must become familiar with the identification of mountain goats to ensure proper harvest. Mountain goat hunters will find this information useful.

Mountain goats are relative newcomers to Colorado - they were introduced during six transplant operations between 1948 and 1972. The 55 - 60 original transplant animals grew to a statewide population estimate of almost 2,000 by 2005. As populations have increased, hunting has become more important for keeping mountain goat numbers in balance with available habitat. Either sex licenses have been issued for several years, however in a few units it has been difficult to meet population objectives without overharvesting males. Consequently, female-only mountain goat licenses may be issued at times in selected hunting units.

Why Harvest Female Mountain Goats?

Mountain goats have done well in Colorado with several populations exhibiting high productivity. In some cases, populations have increased rapidly causing concern about overuse of fragile alpine habitats and negative impacts to other wildlife species. As with other big game species, adequate female harvest is the key to maintaining mountain goat populations at sustainable levels. The Colorado Division of Wildlife closely monitors mountain goat populations and the number of males and females harvested each year. Consequently, hunters with either sex licenses are encouraged to harvest females or nannies if they so choose, even in units where female only licenses are also issued.

Hunting Tips

Whether you are hunting with an either sex or a female-only license, patience and good optics are essential. Mountain goats generally live in open country and are not difficult to observe from vantage points. Mountain goats use cliffs and other precipitous terrain for security. A hasty shot may result in losing an animal that you cannot retrieve from a ledge or in shooting a goat of the wrong sex for your license. Wait until the goat travels some distance from dangerous terrain and you have correctly identified it as a legal animal. Get close if you are not sure whether the animal is a male or female. While you are watching and waiting, other goats may appear, offering a better shot opportunity.
Horn Conformation

There are differences in the general conformation or appearance of male and female mountain goat horns. Here's what to look for:

**Males:**
- Large bases, larger than eye
- Bases closer together
- Horn heavy throughout most of length
- Horns are base heavy with more taper from base to tip
- More curvature throughout length

**Females:**
- Smaller bases, smaller than or equal to eye size
- Wide space between horn bases
- Thin horns for entire length
- Straight horns with most curve near ends of horn
Horn Conformation

**Male**
- Heavy throughout length
- Gradual Curve
- Larger Base

**Female**
- Hooked ends
- Thin throughout length
- Less curve
- Smaller base
Urination Posture

Mountain goats often urinate soon after standing up from a bedded position. Hunters can use the urination posture as a way to tell males from females. This is another example of why patience is so important when hunting mountain goats.

**Males:**
- Stands up and stretches hind legs backward
- Splays back legs slightly to the side
- Slightly arches back

**Females:**
- Squats with rump near ground

**External Genitalia:**
- Scrotum may be visible from rear when goat is in short summer coat.

**External Genitalia:**
- Dark vulva patch may be visible from rear when tail is raised.
Mountain goats can be found in small groups consisting of males or groups of females with kids and yearlings, or in larger, mixed groups. Males may even be found alone. When observing a group of mountain goats, hunters should be patient and watch for indicators to help tell males from females. If young are present, watch for female/young association. Groups of mountain goats also allow hunters the opportunity to compare horn shape and size, and watch for urination posture. However, comparing body sizes can be unreliable for gender identification, as young males are similar in size to adult females. Here are some examples:
Mountain Goat Age Estimation and Horn Length

- Horn length is not useful to tell males from females.

- In mountain goats, **94% of horn growth occurs in the first 3 years**, so fairly young goats may have long horns.

- Age can be determined by counting horn rings or annuli.

- The first year ring or annuli is not visible, start counting at “2”.

- This goat is at least 6 years old, and there may still be another annuli hidden by the hair.
Identification Checklist

Positive Gender Identification Criteria:
• Urination Posture
• External Genitalia

Probable Gender Identification Criteria:
• Horn Base Mass
• Overall Horn Mass
• Distance Between Horn Bases
• Horn Curvature

Female with young

Female

Male

Male on left-Female on right
Shot Selection

Mountain goats are adapted to living in rugged country. Mountain goats rely on steep outcroppings and cliffs for escape routes. Hunters need to be patient and to not rush the shot. Taking poor shots can result in the animal tumbling off cliffs or skidding and bouncing down a boulder field which can make retrieval difficult and dangerous. Taking rushed or hasty shots can result in a wounded animal in precipitous terrain - take your time. Be sure to have a safe backstop before attempting a shot. Be patient and positively identify your target. Experienced goat hunters wait until the animal is away from dangerous terrain before taking the shot. Broadside shots are preferred.

Mountain Goat Hunting

Please take the time to become proficient at mountain goat gender identification. Use this guide as a reference, take it into the field while scouting prior to hunting, and practice with it until you are certain you can tell males from females. When you go hunting, the most important thing to do is to take the time necessary to positively identify a mountain goat before attempting to harvest the animal.

Let's look at some more mountain goat hunting tips:

• Any goat, male or female, may be harvested with an either-sex license
• Only female goats, or nannies, may be harvested on a female-only license.
• Be patient and wait for enough clues and characteristics to positively identify that a goat is a female when hunting with a female-only license.
• If you mistakenly harvest a male or billy while hunting on a female-only license:
  • You must report big game accidentally killed to the DOW before continuing to hunt and as soon as practical.
  • Before contacting the DOW, field dress the animal to avoid spoiling the meat.
  • The DOW evaluates the circumstances of each incident on its own merits.