

Back Country Sheep Seminar May 28th, 2016

BC Ministry of Forests, Lands and Natural Resource

Operations

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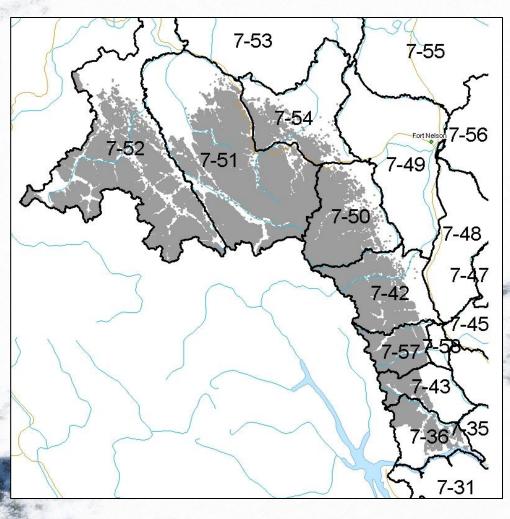




- Population and Harvest Numbers
- Stone's Sheep Management
- How can Hunters Help?
- Ageing Sheep

Stone's Sheep Populations

| MU | Pop. Estimate | Density (sheep per 100 km² of sheep habitat) |
|-------|------------------|--|
| 7-52 | 2566 | 24 |
| 7-51 | 1659 | 11 |
| 7-42 | 1487 | 36 |
| 7-54 | 1172 | 56 |
| 7-50 | 1027 | 21 |
| 7-57 | 216 | 10 |
| 7-36 | 41 | 2.5 |
| 7-43 | 5 | 0.5 |
| Total | 8173 | |



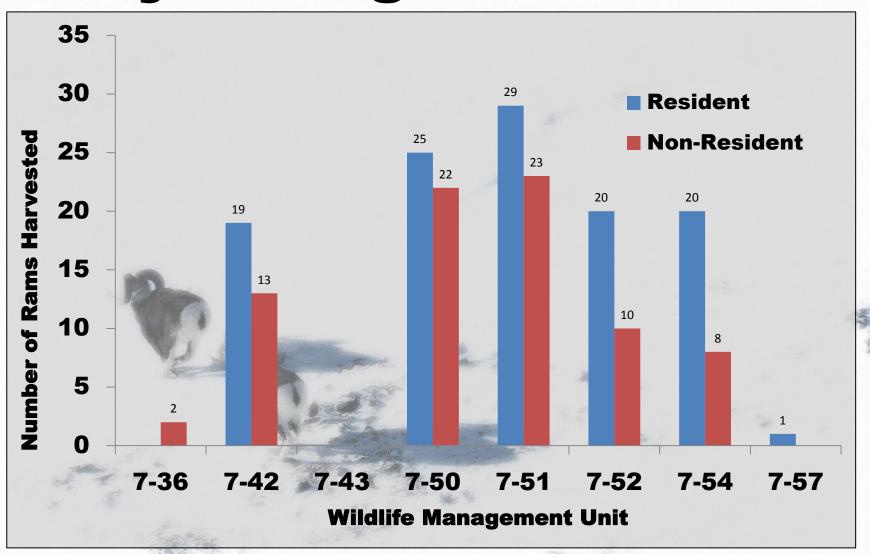
2015 Stone's Sheep Harvest

| | | | | % of | | |
|----------|----|-----|-------|----------|-------|---------------|
| | <8 | 8+ | % 8+ | Age Avg. | Total | harvest |
| | | | | | | |
| Resident | 25 | 89 | 78.1% | 8.9 | 114 | 59.4 % |
| Non-Res | 11 | 67 | 85.9% | 9.2 | 78 | 40.6% |
| Total | 36 | 156 | 81% | 9.0 | 192 | |

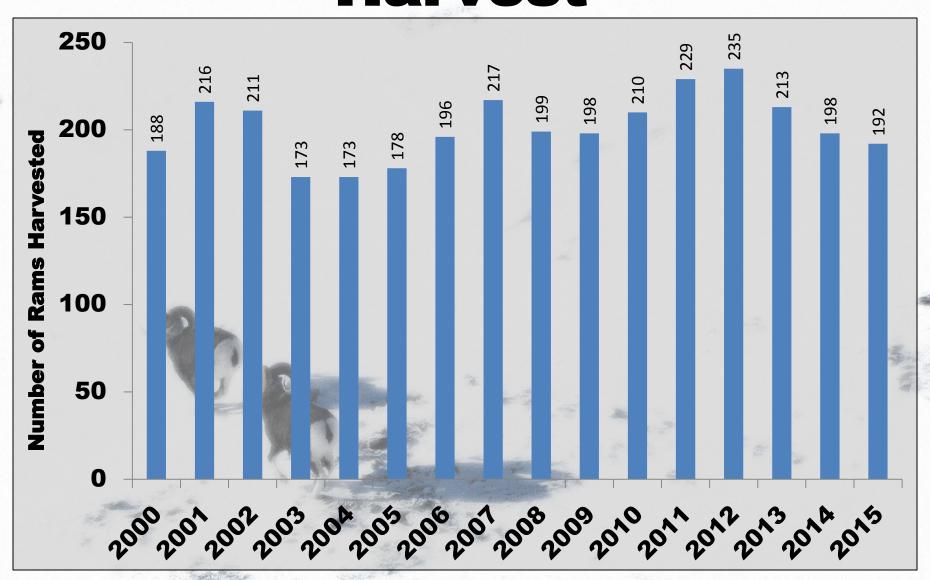


- 6 illegal sheep in 2014

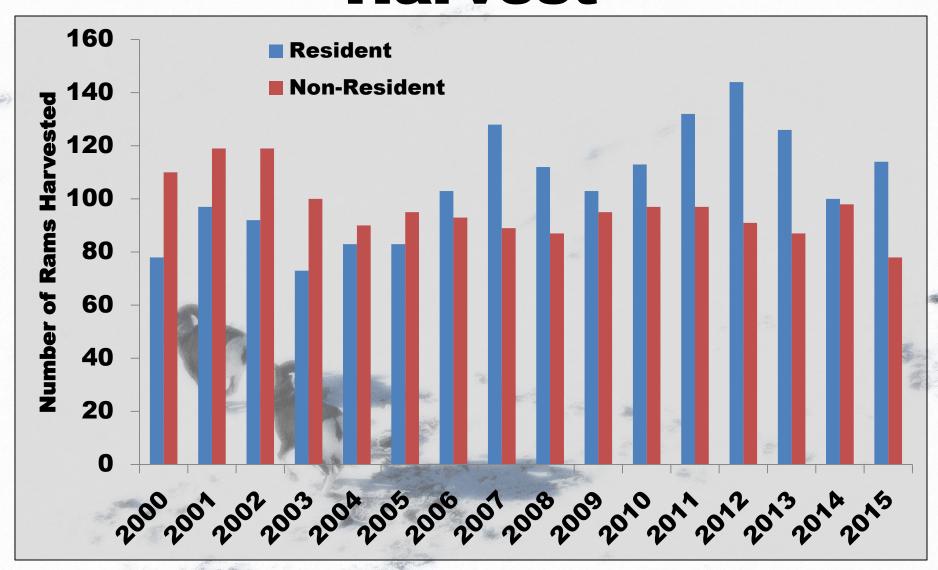
2015 Stone's Sheep Harvest by Management Unit



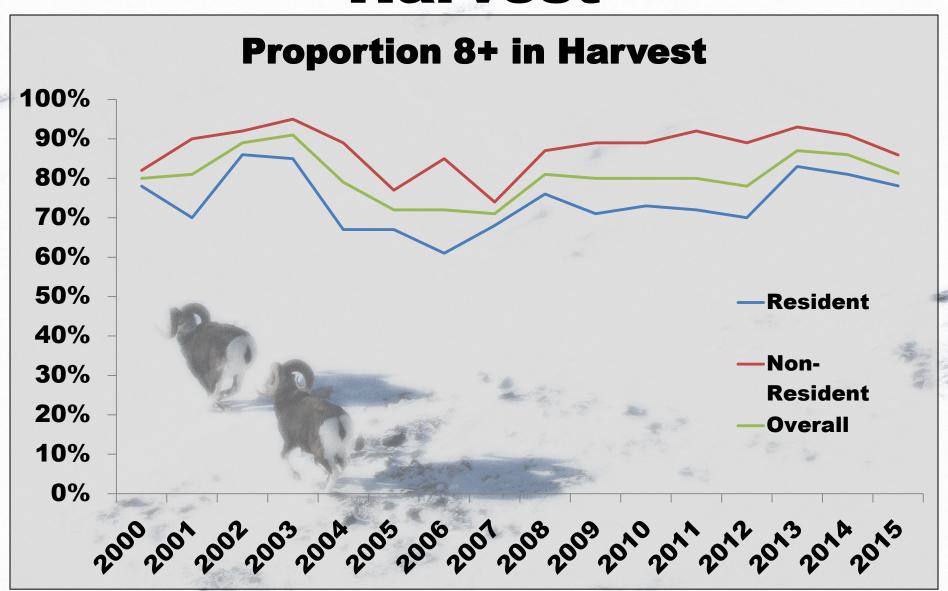
Stone's Sheep Historic Harvest



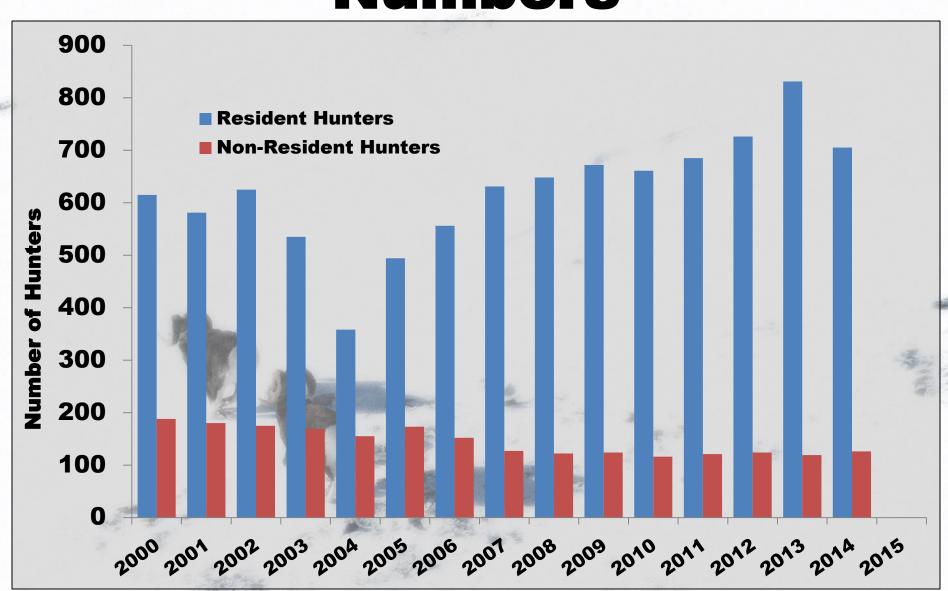
Stone's Sheep Historic Harvest



Stone's Sheep Age of Harvest

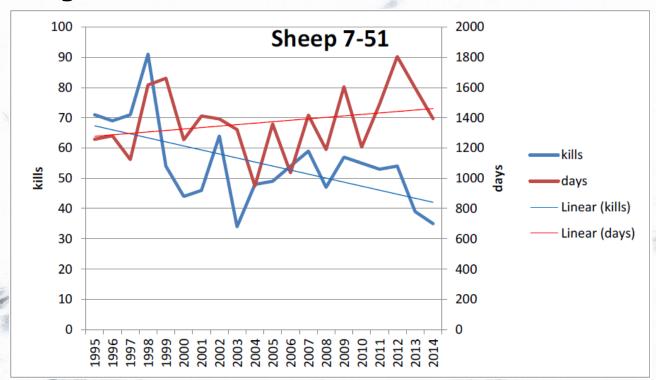


Stone's Sheep Hunter Numbers



Inventory Plans

- MU 7-50, 7-51, and 7-52 are priorities for Stone's
 - 7-50 harvest rate looks high compared to other MUs, may reflect an increase in 7-50 sheep population
 - 7-52 has areas which have never been surveyed



Stone's Sheep Horn Size

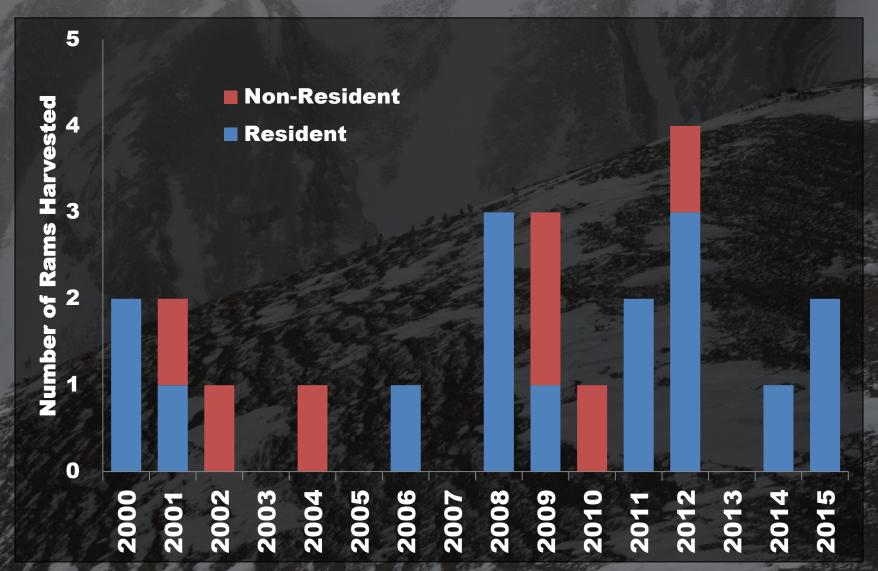
- Recent research on horn size selectivity
- · 2015:
 - 9 rams over 40" (4.7% of harvest)
 - Longest ram: 43 1/8"
 - 50 rams over 14" bases (26.0% of harvest)
 - Heaviest ram: 15 1/4" bases







Bighorn Historic Harvest MU 7-19



Stone's Sheep Management

- Threats to Sheep Populations
 - Disease and domestic sheep and goats
 - Predation
 - Habitat Loss/Industry/Access
 - Competition with other species
 - Harvest?
- Provincial Thinhorn Sheep Management Plan
- Inventories Aerial Surveys
- Habitat Enhancement
 - Prescribed burning
- Harvest Management
 - Age of harvest, harvest rate, harvest success
- Research Opportunities?
 - Cause of mortality
 - Contributions of males to breeding
 - Habitat use/ Competition with other ungulates

How can Hunter's Help?

- Reduce / Eliminate Illegal Harvest
- Harvest Mature Rams
- Membership to Clubs and Foundations
- Eyes and Ears on the Landscape
 - Keep a journal
 - Lambs, ewes, young rams, old rams, predators, etc.
 - Unusual observations
 - Provide anecdotal information to Wildlife Branch
- Harvest Predators
- Mentor a New or Young Sheep Hunter
- Domestic Sheep and Goats!

A Guide to Understanding Sheep Ageing

Material adapted and presented by: Andrew Walker, Msc, RPBio

Ministry of Forest Lands and Natural Resource Operations-Okanagan

Presentation originally developed by: Bill Jex, RPBio

Ministry of Forest Lands and Natural Resource Operations-Skeena



Outline Biology of Horn Growth **Provincial Regulations** Assessing Age Examples Recommendations for Hunters References

- Annuli are formed during winter
- False-annuli occur whenever a ram's horn growth changes
- There is proportionalsymmetry in the distances between each annulus
- Greatest growth during the 2nd year.



Thinhorn Sheep

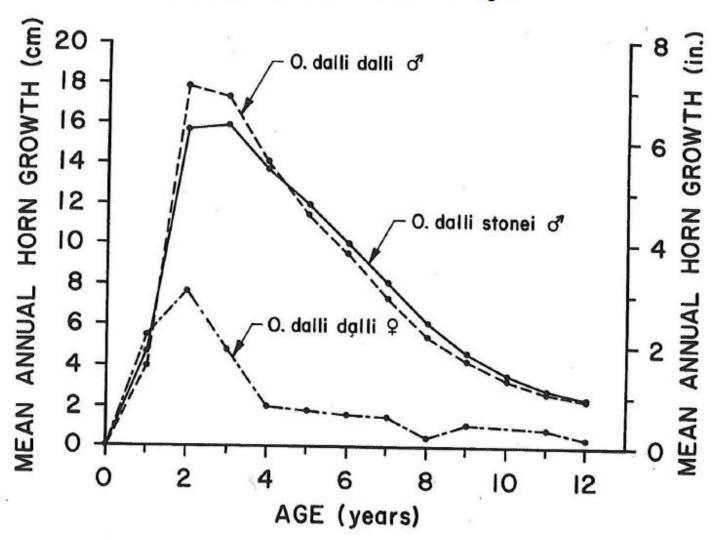


Figure 2.7. Mean annual horn growth of Dall's and Stone's sheep rams and Dall's sheep ewes (from W. E. Heimer, unpubl. data; J. P. Elliott; unpubl. data).

Provincial Regulations

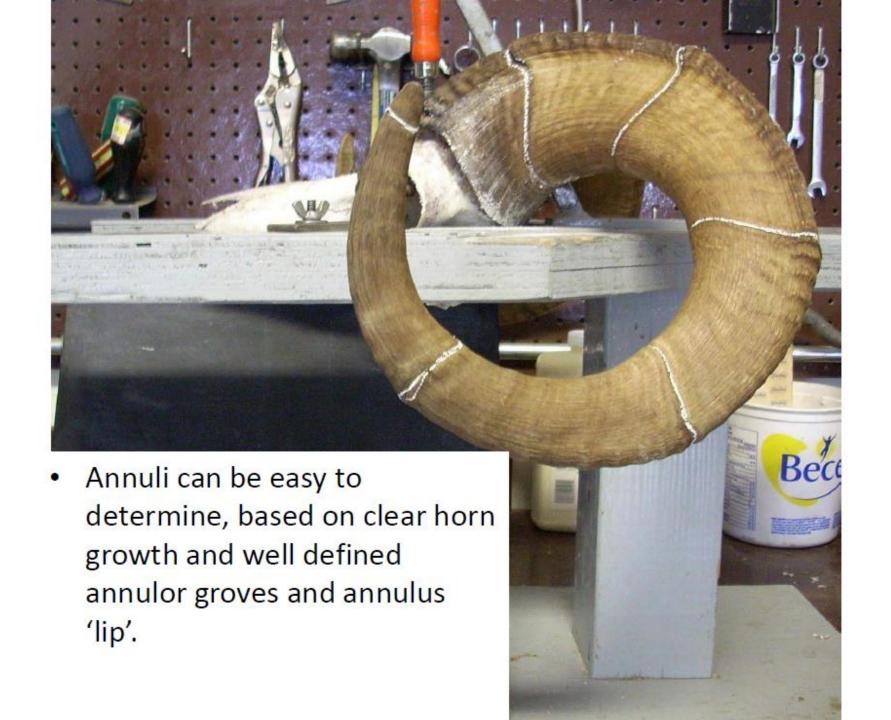
"full curl thinhorn ram mountain sheep" means any thinhorn ram mountain sheep that has attained the age of 8 years as evidenced by true horn annuli as determined by the regional manager or his designate, or whose horn tip, when viewed squarely from the side at right angles to the sagittal plane of the skull, extends dorsally beyond the nose bridge plane;

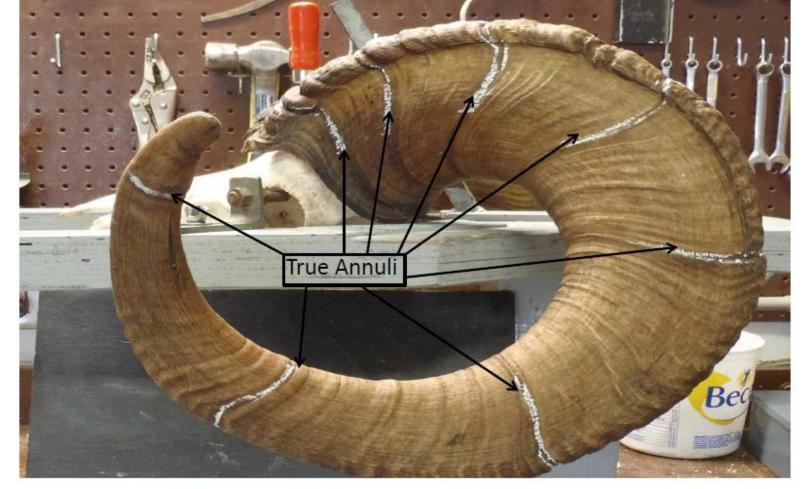


Assessing Age

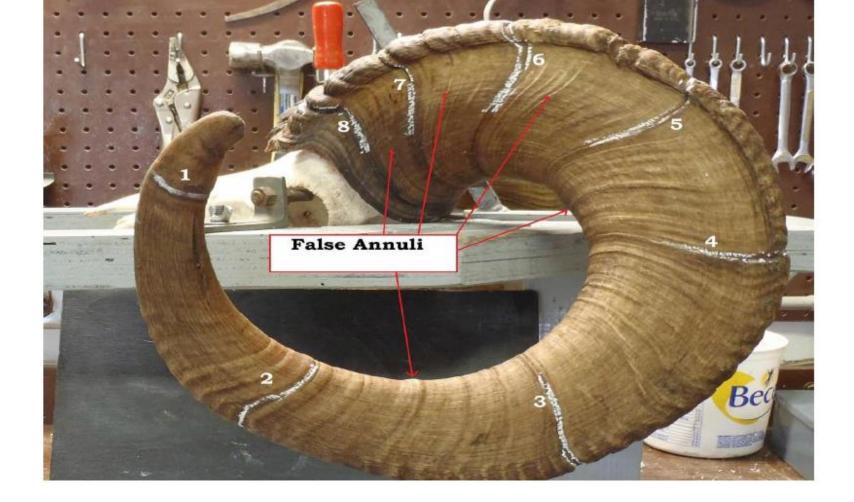
When considering the age of a ram there are clues to whether the ram is young and possibly not legal:

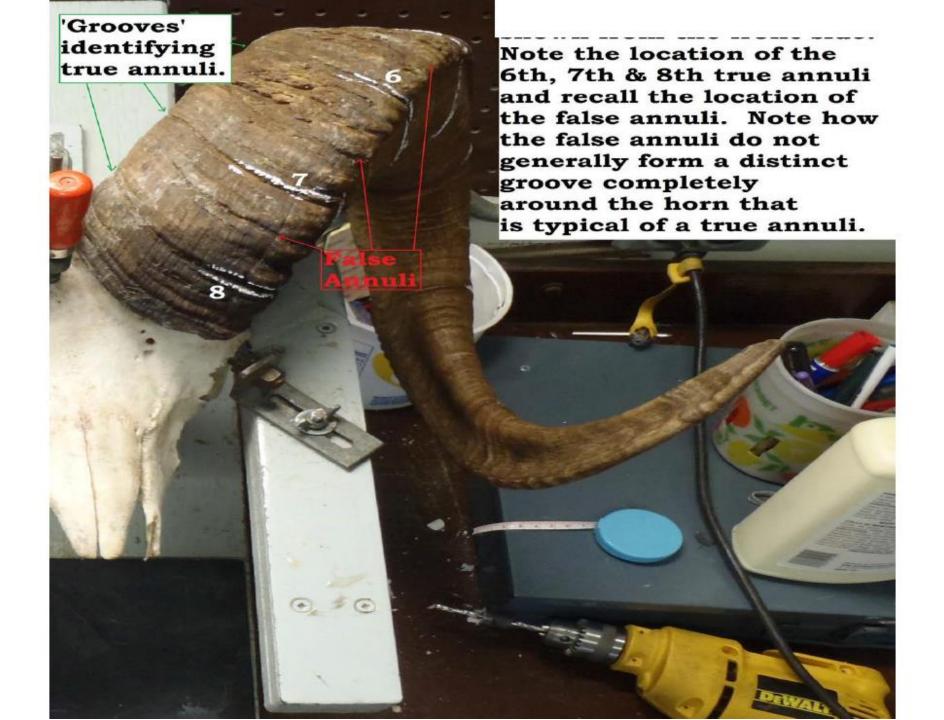
- Large spacing between annuli near base
- Smooth horns especially around the bases
- Lots of dark horn near the base (black horn generally indicates current years growth)
- Not full curl
- Not broomed
- Nose does not have the rounded or "roman nose" appearance
- Horns have little or no outward flare





- True annuli form a dark groove that is accentuated on the outer curve of the horn.
- The inter-annuli distance gets proportionally smaller after the second annuli.
- False annuli are often bulges and the grove does not extend around the back of the horn.





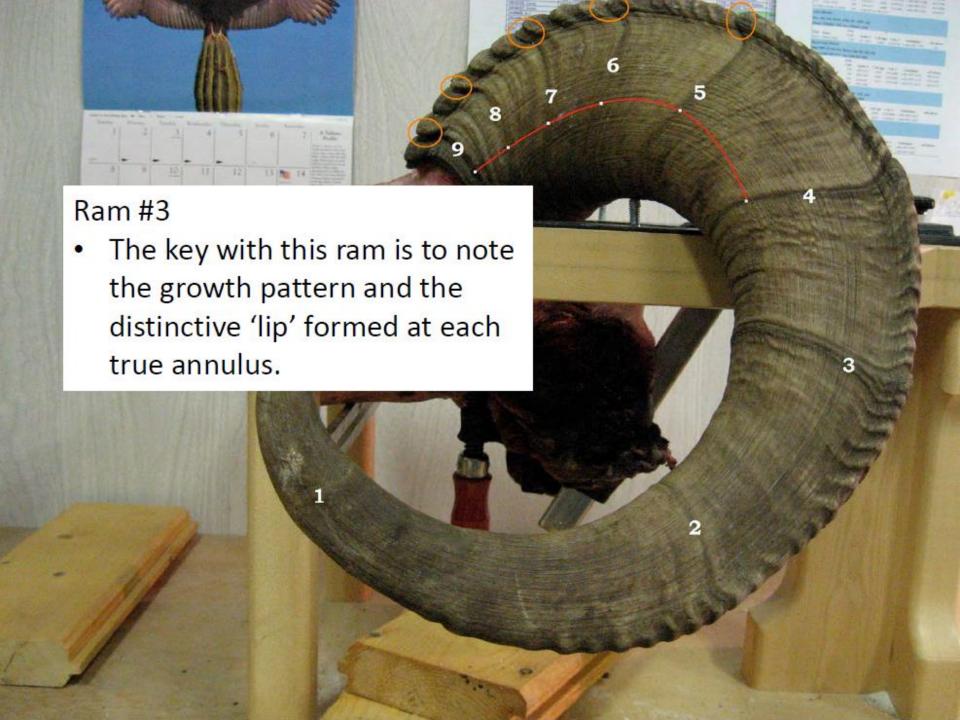




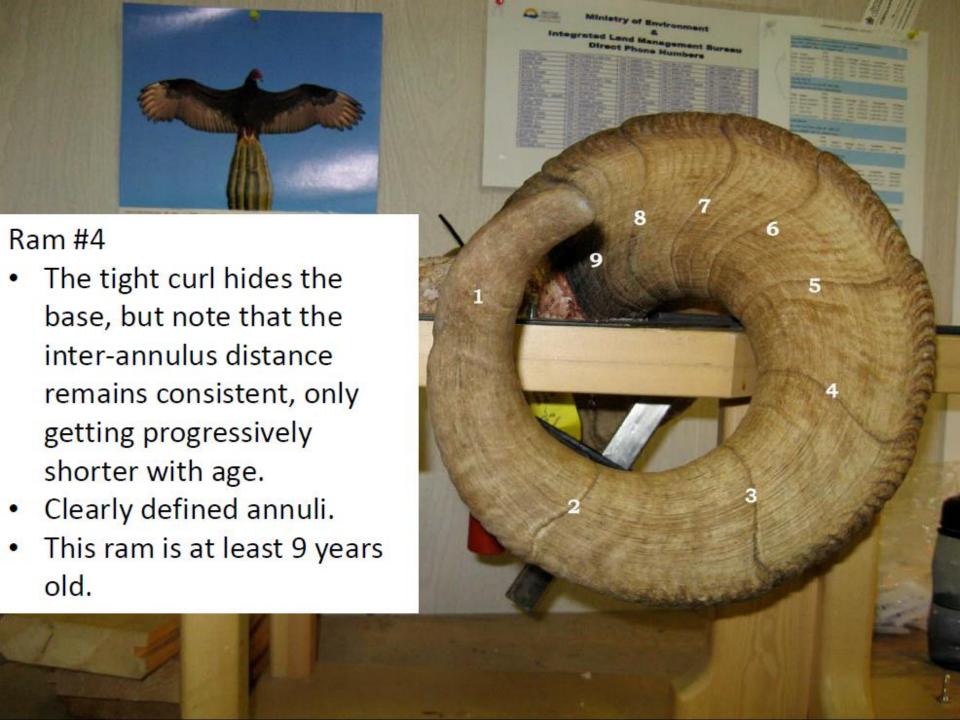




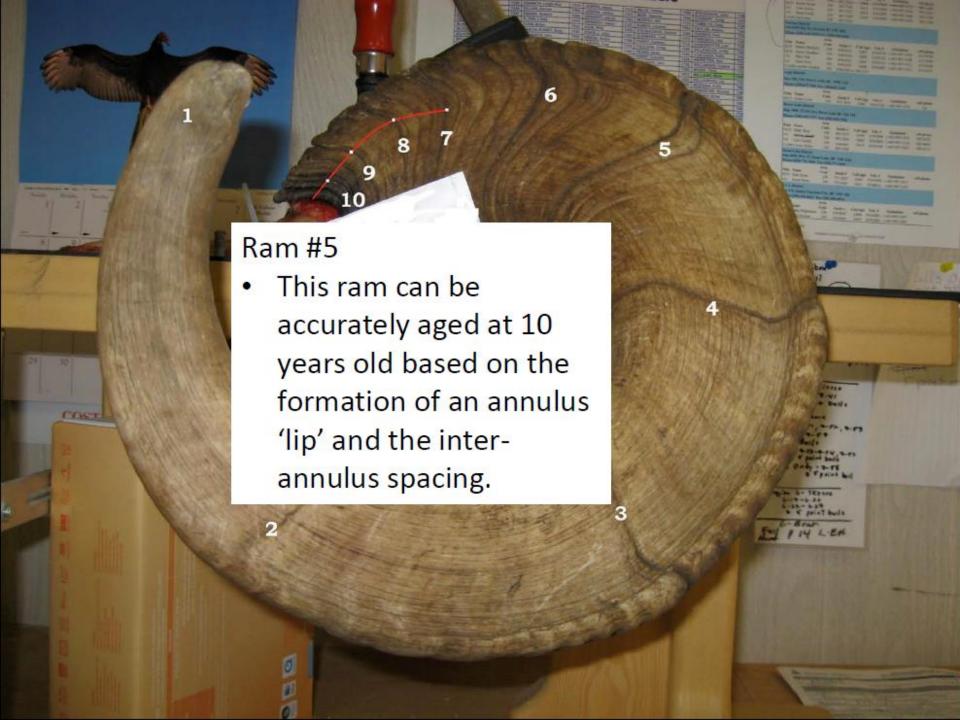




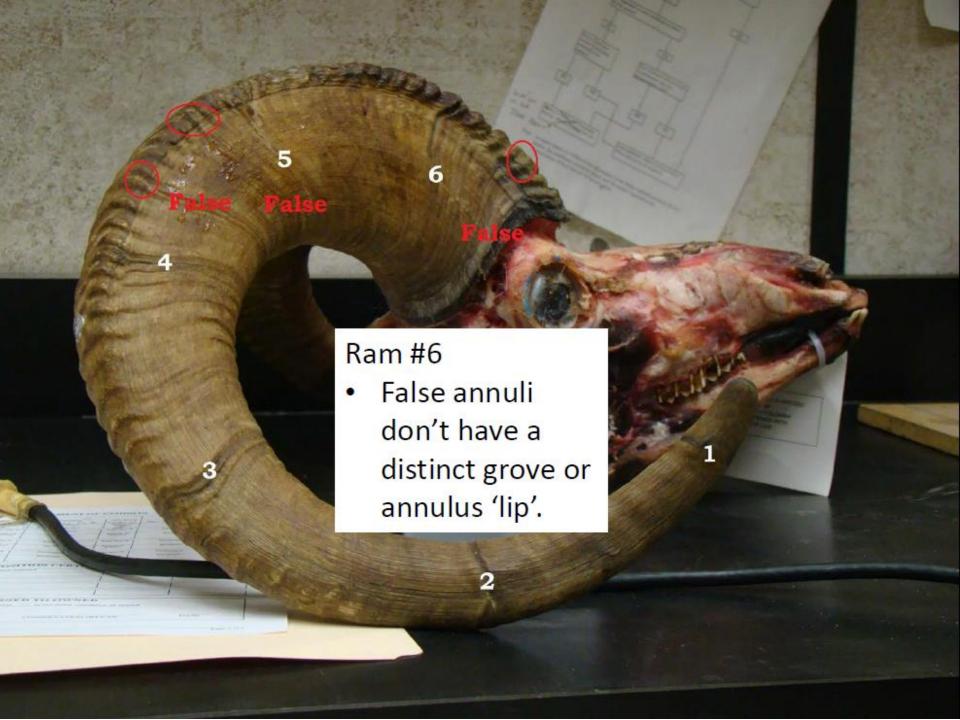












Recommendations:

- Get the best optics, that you can afford.
- Get as close as possible.
- Take your time and be patient.
- Get as many angles and profiles of the horns as possible.
- Be confident in your decision.

