

RESUME OF BIGHORN MANAGEMENT IN ALBERTA

By
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We've been harvesting in Alberta about 150 rams and 110 ewes annually out of a population of 4-5,000 bighorns. That's in the order of about a 5 percent harvest. We've been gradually cutting down on nonresidents, but I'll talk about that later on this afternoon.

One of the studies we have been doing is on Ram Mountain, an isolated mountain range, testing the survival of orphaned lambs. There's a lot of problems in conducting an experiment like this. You mark lambs and ewes in a trap and then you have quite a time sorting them out afterwards - what lambs belong to what ewes. Sometimes you have to observe the lamb suckling as you try to match them up after trapping.

So far we've had 11 orphaned lambs in the past 2 years and we've had about equal survival of orphans and nonorphans. We have a couple of students, one just wrapping up a study and another just starting a study.

Corm Gates, will you comment on your work?

Corm Gates
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I just came into town after spending 18-19 months in the field in the mountains of Alberta in the Yawhaw Timber Range. I was studying the two herds of sheep involved and I was looking at the relationship between lungworm larval output and the seasonal nutritional cycle between years and between these two herds. I was also counting the eggs of some of the helminths in the feces, the more readily identifiable eggs and coccidia and trying to relate this to seasonal nutritional regimes of both herds.

I've gotten 20 months of forage and fecal samples from the fall of 1972 until this present spring. I was looking at feeding behavior as well as feeding in terms of vegetation types and areas used seasonally for both herds to gather this nutritional business.

The seasonal nutritional values for sheep on native forage species have been presented by Dr. Hebert in some work he did in British Columbia. It has been particularly valuable to my study because I'm able to extrapolate from his values and I can determine fecal nitrogen content and using forage samples collected in the study area I can quantify monthly changes in the nutritional regime of the two herds of sheep that I'm working with. So far I've come up with some interesting data on stress and lungworm larval output in some penned sheep I had, as well as some seasonal differences in larval output between herds and between seasons. Before I get anything down on paper, I probably have another 3 months of laboratory analysis to do.