THINHORN SHEEP MANAGEMENT - Chairman: Dr. D. F. Hatler.

W.E. Heimer - The effects of National Interest Lands with-drawal on Dall sheep Management in Alaska.

Ray Demarchi: You talked about the economic values of sheep hunting in Alaska. What people spend for something is not it's real value, it is what they are willing to spend. And there are two ways of looking at that:

1. what would you pay for access to it? and 2. what you would take if somebody was going to take it away from you.

Wayne Heimer: Two million dollars is a bare-bones conservative estimate.

Bill Wishart: Is this the only park in which hunting is allowed?

Wayne Heimer: There is hunting in Grand Teton National Park.

Bill Wishart: Is that subsistence hunting?

Tom Thorne: Right. Presently, this is the only National Park where - on a limited basis - hunting is allowed.

W.G. Hazelwood - Provincial Parks and Stone Sheep: "Affinity through default".

Brian Horejsi: Are the sheep completely protected in any of the seven areas you talked about? Is native hunting allowed?

Grant Hazelwood: The Ecoreserve in Spatzizi is completely closed to hunting. That area has 82,000 acres of prime sheep and mountain goat range. I believe the area is closed to native hunting as well.

Brain Horejsi: Do you see the day when you will phase hunting out of some of these areas and is there a different policy for northern and southern parks?

Grant Hazlewood: Looking down the road twenty to forty years or more, Parks policy probably will be gradually to phase it out of most of the parks. Generally, we close smaller southern parks when there is heavy public use.

John Elliot - Influence of Range on Horn growth in Stone Sheep in Northern B.C.

Wayne Heimer: I found that sheep from low quality populations are capable of growing horns every bit as long as sheep from high quality ones. But the pattern of growth throughout the life of a sheep will be different if you look at volume rather than length.

John Elliot: If you look at impact force (a function of horn mass), then you are assuming that the genetic change is something which occurs over a series of generations, where the animals with the big horns are doing all the breeding. With the S and T herds, no generations passed with the fire yet there is still larger horn growth.

If one could imagine long term selection for horns, then it makes sense to look at the clash force. But in this case it seemed to me that it was just a direct response to nutrition rather than being reproductively selective.

<u>Tim Baumann</u>: Can you comment on the ability of your sheep to inhabit those burnt ranges? Were these burns adjacent to your climax ranges? How quickly did they colonize them?

John Elliot: These sheep had already been using these areas in the summer prior to burning. Whether they could move with any rapidity into an area that they had not been using either in summer or winter, I do not know.

Bob Jamieson: John, are the Smokies up there serious about cutting down those little trees?

John Elliot: Yes, but there is no timber harvesting in those areas right now.

Bill Wishart: Does it seem conceivable that some rams could locate a burn, live there and grow big horns, then return to the inferior range and lead the sheep to the new-found range? It strikes me as being a pretty good strategy for expanding your range as it occurs.

Don Eastman: Have you given any thought to how much is enough, i.e., do you have to burn the whole slope off? And have you thought about the frequency of fire? How often will you have to reburn areas that have been burned before?

John Elliot: It is pretty hard to generalize. If you are aiming at the winter ranges, you can get away with burning just the west-facing slopes. So your main effort should be concentrated on the areas where the wind will take off snow.

The frequency varies a little bit on the site. It takes usually two to three burns to get rid of all the woody material unless you are really lucky and get a midsummer burn. For the first few years you have to burn quite regularly, perhaps every year for three years. After that, once every 10 years or so is probably adequate.