Friends and Colleagues,

I understand (correctly or not) that comments for the BOG work session on the Dall sheep questionnaire are due today. Here are mine based on my experience:

I was involved in Dall sheep hunter questionnaires in 1971 (the public input solicited by ADF&G as the basis for the still-existing management plans) and in 1981 (the economic value of Dall ram hunting survey). In both of those instances, our decision was to inform hunters of the situation before asking for their input, and response was greater than twice the response on this questionnaire. I think asking for informed responses produces a more relevant result than simply asking hunters for their "gut reaction." Unfortunately, that option was not available to Dr. Brinkman when I discussed his questionnaire with him last summer. His time constraints required he just go for "gut level" reaction. Consequently, whether the same hunters would respond the same way if they knew the facts relating to their opinions and the resulting survey answer choices is unknown. Clearly they didn't know the facts as shown by Part 2 of Dr. Brinkman's survey (discussed below). Hence, I think it wise to look at Dr. Brinkman's survey for what it is, and not make more of it than we should. It was a "gut level" survey, not a referendum.

## I SUGGEST THE MOST RELEVANT QUESTION TO ASK HUNTERS AT THIS POINT IS, "HOW MUCH FUTURE SHEEP HUNTING OPPORTUNITY ARE YOU WILLING TO GIVE UP TO SOLVE THE PERCEIVED PROBLEMS OF TODAY?"

This question is most critical for **future hunters**, not the mean-age-of-50-years hunters who answered the questionnaire. Tomorrow's sheep hunters are the ones who are going to "pay the price" for fixing the perceived problem generated by very few and seemingly "ratified" by the survey which raises more questions each time I look at it. I hope the Board grasps that it is making decisions for future hunters. "There's no free lunch." Somebody is going to have to "pay" (by losing future opportunity) so the minority who will draw permits "today" can feel better about THEIR present sheep hunting opportunities. Offering "open opportunity" after a permit-restricted opportunity looks OK, but is still 25% less total opportunity if you didn't get a permit for the early season. Also, are the "early season" permittees going to have to give up 30 days of hunting opportunity later in the season? Either/both are costs associated with solving a perceived problem that has been poorly backgrounded by data.

If the Board decides to move ahead without a thorough review of sheep management based on what we're told the questionnaire means it will require that the Board place complete confidence in the statistics of the questionnaire's design, sampling, and interpretation. I'm unwilling to go there, and suggest you proceed cautiously as well. The questionnaire is not holding up well for me. Here's why:

Consider that 74% of the 37% of the 700 "uninformed" hunters responding to the questionnaire (from a constructed population of 6,000 total hunters, whose age suggests they're in the twilight of their sheep hunting careers, and have averaged hunting less than twice in the last five years) said there was a problem. That means that each of these "problem defining" hunters represents 37% of 74% of 6,000 or one respondent represents 1,642 hunters. That's a small sampling percentage. I'd have never been allowed to say a sampling intensity of that level represented what was happening in a Dall sheep population. Caribou, maybe; but Dall sheep never.

Next, to get up to 74%, hunter responses agreeing there is a problem (from those without a

clue of what management objectives are in place today) required adding in those unhappy hunters trying to have an "aesthetic" hunt in a "maximum opportunity" area. Proposals for GMU 20 come to mind. Also, to conclude that 74% of hunters say there's a problem, it appears to be necessary to sum those who strongly agree there's a problem (25%), as well as those who simply agree there's a problem (40%), PLUS you have to include the "neither" category to get to 74%. Is it OK to add most of the "neither category" to get 74% defining a problem? Conversely, summing the three categories on the other side of the issue (those who don't think there's a problem, comes to about 25% of the sample...which matches the number of folks who strongly agree there's a problem. This seems less "clear cut" to me than the way it has been represented.

Then, (assuming there is a clear dislike among residents for nonresidents, guides, airplanes not involved in their hunt, and residents who happen to be in "their area"—which I acknowledge has existed "forever'), the question of "Why is there a problem?" was asked in Part 2. Let's look at these responses as data supporting the observation that the uninformed respondents were reacting from their emotional and not their analytical side.

The greatest level of agreement upon cause was "more professional guides." If this is so, the alleged guides are guiding without clients because there has been no increase in nonresident license sales over the last 24 years. Also, there was no notable increase in nonresident hunting (requiring a guide) following the Owischek decision.

The second reason given was, "more nonresident hunters." This doesn't hold water either. There aren't more nonresident hunters. One has to look back decades to find as few nonresident sheep licenses as last year.

The next most popular "cause" of the problem was "fewer legal rams." That may be true in 'the absolute' because there are fewer sheep than formerly. However, overall hunter success has not declined, and mean horn size is at all-time highs and seems slightly increasing. Additionally, the number of extremely large rams harvested in the last several years falls within the "normal" range. Hence, it's hard to agree there are fewer legal rams per hunter or that there are fewer large rams available. AND the harvest rate of legal rams across the state is low (at about half of what we know for certain is there thanks to Joe Want).

**Next (at "cause #4) comes "more transporters and air taxis."** I have no data on this one, but it would be relatively easy to check. Have we checked on the truth of this suggested cause?

At #5, is the "cause" of "hunters displaced by new permit systems." The newest of these is the Chugach permit system which did displace 200 hunters (approximately 10% of the existing total) when it went into effect. Subsequently more hunters showed up in the Brooks Range. Did ADF&G cause this problem by failure to consider the results of its permit system justified on "genetic conservation," and "experimental" grounds? Perhaps. What that action has in common with the proposals before you today is that both were ad hoc allocation adjustments suggested without consideration of unanticipated consequences. A systematic approach would have been more desirable, it seems.

**Then,** (at #6) comes "more resident hunters." Clearly this is not a credible "cause" because resident hunter participation has been going steadily downward for the last 20 years...most of which have been in the post-ANILCA era.

At #7 is "decline in sheep distribution." This one is valid as an observation, sheep are

absent from some habitats where they formerly lived. Harvest of full curl rams is not the cause. Morel likely it is weather and predation.

Then at #8 we have "more Alaskans with planes." I doubt this one. My impression is that general aviation is on the decline throughout Alaska. That one is easy to check.

**Finally, "cause #9" is "decline in hunter ethics."** I really don't have a feeling about this. I do note that Joe Want says that 10% of full curl rams presented for sealing are sent over to "protection" as marginally too small. I guess the ethics of that 10% are holding nicely because they're "turning themselves in" as violators.

I presume that Dr. Brinkman did not make these 'causes' up himself, and that they were given to him as possibilities through his focus groups. Still, these 'causes' are simply not credible; the data are contrary to virtually all of them. I infer that defining "crowding" as the problem to be solved must have required some sort of response-melding statistical process. While this may be good social science interpretation technique, the presumed causes of what has come to be lumped as "crowding" show that the focus groups were responding out of emotion, and were not in touch with what was actually happening in the field. Consequently, they gave Dr. Brinkman erroneous premises upon which to work. I suggest caution in moving forward on the results of this questionnaire. If I am correct, the balance of the questionnaire relies on these two base line issues: "Is there a problem, and what's causing it." So, what we have here is a construct based on mistaken impressions treated as though they were fact. They aren't.

This is what you get when folks who don't really know what is happening "define a problem" for you. There may certainly be problems, particularly where "aesthetics-desiring" hunters or guides are hunting in a readily accessible "maximum opportunity" are like 20A, and haven't been informed of what to expect there, particularly in the early part of the season. However, the systematic approach to this sort of problem would be to set the questionnaire aside because it was based on disprovable assertions of cause. The better way forward would be to focus on a planned management system. This will require ADF&G taking the lead in reviewing existing management plans, updating them in the face of changes since they were adopted, and THEN offering regulatory proposals to meet new Board-approved goals.

If you don't think that's a viable option, having heard from the orchestrated opinion of the uninformed, it seems likely the next step would be to hear from the "informed," which may represent the "silent or un-sampled majority." The only way I can propose to do that is to ask them (all 2,000 of last year's sheep hunters would be my suggestion) AFTER you tell them what the real situation is. Then it would be appropriate to ask them if they think a problem exists, and "if yes," **How much future sheep hunting opportunity would you give up to solve today's problem?**" If the majority were to say "25%," I'd be quite surprised.

Thank you for your consideration, Wayne E. Heimer Dall Sheep Biologist ADF&G 1971-1997 1098 Chena Pump Road Fairbanks, Alaska 99709