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Testimony by Dr. Clinton W. Epps, Associate Professor, Department of Fisheries and Wildlife, Oregon State University regarding House Bill 2071

To Whom It May Concern:

I hold a Ph.D. in Environmental Science, Policy, and Management from the University of California, Berkeley. I have studied large mammals since 1999, including mountain sheep, deer, elk, and various African species. I have been an assistant, then associate, professor of Wildlife Science in the Department of Fisheries and Wildlife at Oregon State University since 2008. I have maintained a primary research focus on mountain sheep conservation and management for much of my career.

I support HB2071's proposal to modify eligibility for hunting tags for female mountain sheep (*Ovis canadensis*), also known as bighorn sheep. I am submitting written testimony due to my own academic and personal interest in this matter; the Oregon State University takes no position on this bill. The main value I see in this proposal is that it will allow the Oregon Department of Fish and Wildlife to better manage population density of mountain sheep, which in turn helps prevent disease outbreaks and other problems when populations become too large.

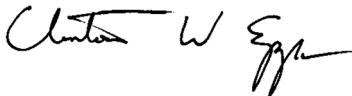
After extirpation by the early 20th century, mountain sheep have been restored in Oregon through translocation since the 1950s. Translocation (movement of live animals to start new populations, or augment small populations) has thus been a primary management tool for mountain sheep conservation (Singer et al. 2000). At this point, however, nearly all suitable habitat in Oregon is occupied by restored populations of mountain sheep. Moreover, with translocation comes the threat of spreading disease. Translocated mountain sheep are likely to make initial exploratory movements which could increase the risk of contact with domestic sheep, which in turn often causes fatal respiratory pneumonia for the mountain sheep (Besser et al. 2012). Moreover, although the risk of mountain sheep contracting respiratory pneumonia after exposure to pathogens carried by domestic sheep has been well understood for decades (Foreyt and Jessup 1982), one of the key pathogens (*Mycoplasma ovipneumoniae*) was only identified in 2008 (Besser et al. 2008). Thus, while still a valuable tool, translocations carry the risk of moving as-yet unrecognized pathogens around the landscape.

Without translocation, however, comes the risk of mountain sheep populations becoming too large. Over-abundant populations may likewise be at greater risk of a

disease outbreak (Sells et al. 2015), due to decreased nutrition, increased contacts, or increased foray-type movements. ODFW (and other states) therefore need to be able to use hunting as a tool to reduce population density. Female removal is the only effective way to reduce population size and growth potential, as has been demonstrated for decades with deer and elk management.

Hunting of female mountain sheep offers an efficient way to manage population density and increase public recreational opportunity at the same time-- if hunters can be convinced to participate. In the 20 and 21st centuries, however, regulated hunting of mountain sheep has been nearly all limited to harvest of males, and trophy quality is an important component of this type of hunting. Thus, if purchasing a female mountain sheep tag made hunters ineligible to later draw a male (ram) tag, many hunters might choose not to apply, resulting in limited ability for ODFW to use this tool for population management. By the same token, people who have previously harvested a ram and would like to hunt mountain sheep again would be unable to participate. Amending regulations to lower the barrier for hunter participation would encourage people to consider hunting female mountain sheep in the event that such tags are offered in the future, despite decades of a hunting culture focused on male-only harvest. In sum, the bill would help enable a valuable new tool for mountain sheep management in Oregon.

Sincerely,



Clinton W. Epps

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