WSF: Political? Definitely;

Scientific? Not So Much

The commentary posted on <u>www.packllamas.org</u> is a thorough examination of the recently released RISK ASSESSMENT ON THE USE OF SOUTH AMERICAN CAMELIDS FOR BACK COUNTRY TREKKING IN BRITISH COLUMBIA (RA). It documents the Wild Sheep Foundation's (WSF) role in orchestrating the assessment and the organization's subsequent reference to it, as a basis for pursuing a ban of llamas in all wild sheep ranges in North America. The commentary is based on the risk assessment document, The Thin Horn Summit II (April 2017), and published position statements by WSF, as well as published and documented research regarding both llamas and wild sheep. The commentary document is 36 pages of analysis and comment that comes to the following summary conclusions:

The Wild Sheep Foundation is a private special interest business organization advancing a private political agenda and as such, lacks the standing and objectivity to be included in science-based policy decisions. The group has demonstrated a lack of understanding of, and respect for, foundational principles of zoology and a disregard for essential scientific method regarding disease research. The organization is a significant patron of wild sheep research and management and has, without merit, morphed into a participant in interpretation and application of research findings. This development is interfering with sound land and wildlife management as well as the optimum protection of wild sheep.

Given that many of WSF's leaders and members are educated in wildlife biology and management or veterinary medicine, it seems reasonable their problems may be rooted more in calculated compromise than ignorance or incompetence. Whatever the origin, the problem needs to be addressed before damage results from their improper participation in policy decisions for land resources, wildlife, and public user groups.

-WSF exhibits a decided lack of discipline in recognizing taxonomic separation of subject species and its influence on disease susceptibility and transmission. Their chaotic network of "research" contributors have insisted on equating llamas with sheep and goats as ruminants. There is remarkable taxonomic separation of those species that is significant and not to be ignored. Sheep and goats are from the suborder "ruminantia" and family "bovidae", while llamas are from the suborder "tylopoda" and family "camelidae." This wide separation creates a natural barrier to the sharing of diseases as historically proven in vivo.

It is of note that the cervidae family is also from the suborder ruminantia and includes all deer, elk, moose, caribou, and reindeer. These species naturally present a greater threat of disease transmission and exchange with wild sheep and goats than do any of the camelid species.

-WSF refers to domestic sheep and goats at the species level and refers to llamas by their general taxonomic family status as "camelids". They attribute disease in sheep and goats to each individual species and erroneously extend the same diseases to camelids and include llamas through their family association. It seemingly creates the mandate to defend all species in the camelid family where consistency requires WSF to address the involvement of each individual camelid species as a separate species originating from a different family.

-WSF also refers to llamas under a general family reference as "South American Camelids". This includes four species: llamas, guanacos, alpacas, and vicunas. They do not make a similar family reference to North American bovids which includes, all sheep and goat species, cattle, bison, antelope, and musk oxen and fail to even reference North American cervids at any level. This inconsistency serves to mask the exponentially larger population of ungulates more likely to share diseases with their target sheep population than are llamas.

-WSF uses the calculated South American Camelid reference for llamas to connote them as a non-native species. Yet, there is no reference made to European Equids when referencing horses. Horses are not even considered as a disease threat to sheep and it seems reasonable for them to be accorded that status based on their taxonomic separation and history. But that is the same separation and history that exonerates llamas.

Even the two families' histories as non-native species is parallel. Both equidae and camelidae were originally native to North America, migrated/relocated, and extincted in their native North America. The two species were then both reintroduced by human importation. WSF's inconsistency results from its willingness to apply scientific principles that support their agenda in the consideration of horses and arbitrarily abandon them to pursue their agenda to ban llamas.

-WSF has attempted to mask the separation of sheep, goats, and llamas by agreeing to reference them as "domestics". This helps blur the taxonomic separation for the lay person or the prejudiced wild sheep advocate. It is an accurate but incomplete description, as those three species are indeed domestic, but horses and cattle are also domestic species and conspicuous by their absence in that labeling. It's one thing to try and manipulate perception, it is another to manipulate the language and lexicon. Science lives in its accuracy and consistency, and this behavior clearly subverts that.

-WSF began their separation advocacy with domestic sheep and began referencing them as "DS" (domestic sheep) as documentation of disease transmission to wild sheep populations began to accrue. With the negative connotation the "DS" representation brought, the initials were expanded to include goats as "DS" (domestic species) and eventually the llamas were added. The original negative connotation of "DS" transferred with undiminished intensity and without cause to llamas. It also sets up a shell game allowing subtle movement of references between domestic sheep and the arbitrary domestic species even in the same discussion. At best this creates confusion and at worst opportunity to mislead.

-WSF's lack of discipline and adherence to scientific principle is apparent in their misguided pursuit of a ban on llamas. It's also evident in their current recommendation to separate domestic sheep from wild sheep ranges and replace them with cattle. Cattle are known reservoirs of Blue Tongue Virus, BVDV, M. avium para TB, M bovis, PI 3, and are highly susceptible to pneumonias caused by Pasturella spp; all lethal pathogens in wild sheep. Cattle are bovids, same family as the wild sheep, and transmission of these pathogens is both possible and likely. This strategy affords no significant protection for wild sheep and may increase the chance of introduction of fatal pathogens.

-WSF has been disingenuous, unresponsive, and secretive in laying the groundwork to ban llamas. Previous ban attempts have been unsuccessful. The veterinary community has disqualified the documentation and reasoning WSF has presented as lacking credibility. Rather than engage their peers or recognize their lack of scientific basis, they have engaged in a behind the scenes political and public relations campaign to build support for their pseudo-science and try to support it with manufactured science (the CCH-RA). This is a common political campaign strategy and is decidedly lacking in honesty.

-WSF lacks the skepticism and long view that is fundamental to practicing good science. Because of variable habitat, weather cycles, species interaction, etc. affecting wildlife populations, it is reality these populations are more observed than known. Attempts to manage wild populations like they are a domestic species typically are counterproductive and do more harm than good. Yet WSF pursues this course regardless of high impact on public lands and associated user groups and questionable effects on wild sheep.

-As the wild sheep populations in North America have experienced a resurgence, WSF has unabashedly taken credit and pushed for an ever-expanding role in, and control of, the management of the wild sheep population. WSF's efforts have undoubtedly contributed to the resurgence, but there are other contributing factors that have played a greater role.

The wilderness/conservation ethic has become pervasive throughout the general citizenry, and the focused preservation of all wildlife species is a priority. Preservation, expansion, and enhancement of habitat is a dominant theme in the management of public lands and is driven by populist encouragement. WSF has added to this momentum, but are a contributor, not the source. To the extent habitat thrives, so also do the wild species within the habitat. Wild sheep accordingly have responded to this fundamental principle.

-The wild sheep do not belong to WSF, they belong to the public. WSF has an inordinate influence on the control of wild sheep management and hunting at the expense of the public's ownership and interest in wild sheep and the lands they occupy. WSF's lack of scientific standing and credibility spawns these questions:

1. Why does WSF have direct representation on agency committees determining management and policy for wild sheep and their ranges?

2. Why are employees of wildlife agencies also members of WSF and involved in determining agency policy while simultaneously representing WSF positions?

3. Why does WSF control the auction of special hunt tags (public assets) and the subsequent distribution of those funds?

4. Why is the expenditure of funds from tag auctions not restricted to sheep research and improving habitat that are in the interest of all the public owners of the sheep? An inordinate amount seems to go to promoting the WSF agenda and lobbying that can work against the interests of the general public.