

From: [REDACTED]

Sent: Tuesday, July 13, 2021 8:37 PM

To: 'Mike Cox' <mcox@ndow.org>; 'Phil and Linda Nuechterlein' [REDACTED]; 'Scott Woodruff' [REDACTED]

Cc: anne.hubbs@gov.ab.ca; darren.bruning@alaska.gov; tony.kavalok@alaska.gov; eddie.grasser@alaska.gov; amunig@azgfd.gov; helen.schwantje@gov.bc.ca; Bill.jex@gov.bc.ca; scott.gardner@wildlife.ca.gov; andy.holland@state.co.us; hollie.miyasaki@idfg.idaho.gov; bsterling@mt.gov; bwiedmann@nd.gov; todd.nordeen@nebraska.gov; eric.rominger@state.nm.us; heather_sayine-crawford@gov.nt.ca; don.whittaker@state.or.us; colin.m.gillin@state.or.us; chad.lehman@state.sd.us; froylan.hernandez@tpwd.texas.gov; jacetaylor@utah.gov; william.moore@dfw.wa.gov; doug.mcwhirter@wyo.gov; daryl.lutz@wyo.gov; Robert.Perry@gov.yk.ca; fquaman@blm.gov; cbrewer@wildsheepfoundation.org; twasley@ndow.org; blogan@fs.fed.us

Subject: RE: Circling back to Pack Llama/Wild Sheep issue - Request Virtual Meeting on proposed effort

Hi Mike,

It's been nearly a year since we had our last conversation with you. We agreed you would schedule a zoom call in conjunction with the annual WSWG 2020 summer meeting for you to facilitate an exchange between us and the "everybodies" on WSWG that do not share your's and Mike's professional opinion. The purpose of the proposed call was ostensibly to have us inform WSWG about the basics of llamas and their lack of disease threat to wild sheep and we in turn were to hear and address any concerns WSWG members might have regarding llamas in wild sheep ranges. We were looking forward to that opportunity as it would be our first exchange with WSWG and particularly the WSF members on the committee who have been using "fear mongering and misinformation" attempting to eliminate llamas in wild sheep ranges. Now you contact us a year later without that exchange occurring with what seems to be a demand for llamas to undergo testing and ultimately obtain some yet-to-be determined health passport, based on some yet-to-be determined disease(s), using yet-to-be determined testing protocol through yet-to-be determined laboratories, and to be interpreted by yet-to-be named individuals. Really?

It is apparent that before you proceed any further along this path, WSWG needs to decide if it will be a slave to science or if WSWG will be a slave to WSF's desire to control wild sheep hunting and the public lands on which that hunting is conducted.

You state, "you need data, you need testing". You need a lot more data before you ever consider testing. On our previous call you admitted you had scant knowledge about llamas. Gaining basic knowledge and background was the stated intent of the scheduled follow up conversation that never occurred. We subsequently prepared a letter to provide you that background. Since we've only heard from you now a year later we are including it as an

attachment to this message. Please read it. If that promised exchange had taken place, you would not be making this leap to now needing testing. If you had taken the composite data we've aggregated from the natural history and veterinary history of llamas in both North America and South America and combined it with research from the wild sheep community, you would abandon this ill-conceived proposal and shift your focus to cattle and horses. Or more appropriately, you would cease seeking bans on additional species.

The llama as a pack animal in wild sheep ranges is the best alternative available. They require 10% the feed of a horse or mule, their physical impact on forage and trails is less than 10% of horses and mules, they are better adapted to high altitude sheep ranges, can maintain themselves on available forage and water without significant impact, and they have more predictable behavior. But their greatest advantage in wild sheep ranges is their lack of disease and a robust immune system that underwrites their innate health and hardiness. Their antibodies are unique and numerous research labs are exploring these as a template for broad spectrum vaccines, palliative treatments, and pain management in human medicine. Additionally, llamas' general behavior is insular amongst other llamas and even more pronounced with other species. They maintain an individual perimeter and will often retreat from a curious sheep or goat that approaches them while on picket in camp. (*"Transfer of mucus through coughing or sneezing, it is more likely to occur between bighorn sheep and domestic sheep or goats (Dixon and others 2002) that are behaviorally attracted to one another" - Schommer/Woolever 2008.*) This is the optimum animal to have in proximity to wild sheep and their notoriously weak immune system.

There is an extensive archive of testing and documentation regarding a half dozen pathogens present in cattle that are transmissible to, and potentially significant in wild sheep. Yet, we are left to scratch our heads as WSF advocates separation of domestic sheep from wild sheep ranges and replacing them with cattle, possibly a threat equal to that posed by domestic sheep, outside of the lethal M.ovi.

Similarly, there are numerous bacterial and viral pathogens documented as endemic to horses. Several of these diseases/pathogens are transmissible to wild sheep. Many more pathogens are specific to equines but could cross the species barrier to become significant in wild sheep.

Somehow, in the WSF world, it makes perfect sense to by-pass the greater threat posed by horses and cattle and seek elimination of pack llamas because protection of wild sheep from disease is not the real issue. The overriding issue is eliminating the private, self-guided hunter supported by pack llamas from competing for a limited number of tags. The focus of this effort comes from the British Columbia wild sheep community that desires an aristocratic hunt access policy for limited thin horn licenses. Every self-guided hunt by a private citizen eliminates a lucrative guided hunt conducted by a WSF O/G member.

An existential disease threat was demonstrated as an effective tool to ban domestic sheep and goats. Using that strategy, a BC provincial wildlife veterinarian, without any research or documentation from llama researchers, constructed two opinion papers billed as risk assessments (RA's) that hypothetically ascribed the diseases of sheep and goats to llamas.

Schwantje, [et.al.](#) 2003 and Garde, [et.al.](#) 2005. The RA's recommended banning llamas based on the possibility of these diseases and lack of history in the back country. These RA's became the go to reference for all initiatives to ban llamas from that point forward.

<https://www.packllamas.org/pdf/akban/bogus-ra-as-the-basis-for-bans.pdf>

Their credibility came into question when it was pointed out llamas have 500+ years of history comingled with domestic sheep in South America, they have 120 years of North American history as an exhibit/zoo species (often in contact with wild sheep species), and 50 years of history as a high-country pack animal in North America without disease implications as determined by aggressive veterinary research. Noted llama veterinarians pointed out there was no significant presence of these bovid diseases in llamas nor were there identified endemic diseases in llamas, much less any evidence of disease transmission to any wildlife species. They also pointed out that phylogenetic separation of camelids and bovids made the sharing of diseases unlikely.

Undeterred by science, history, and professional rebuke, in collaboration with WSF, that veterinarian, produced a third risk assessment, billed as an update. [RISK ASSESSMENT ON THE USE OF SOUTH AMERICAN CAMELIDS FOR BACK COUNTRY TREKKING IN BRITISH COLUMBIA \(CCH17\)](#) Again using the same list of diseases and again without input from the llama research community the same recommendation was forthcoming. This prompted a rather firm peer rebuke and policy statement from [The American Association of Small Ruminant Practitioners \(AASRP\)](#) that specifically listed the diseases as having no documented significance in llamas and not appropriate as a basis for exclusion of llamas from public lands.

Despite the AASRP rebuke, the veterinarian's admission that llama research was not used and that the RA's should not be used in policy formulation, WSF has continued to cite CCH 17 to advocate banning llamas. Kevin Hurley cited CCH17 in comments to ban llamas on the Arctic National Wildlife Refuge - ANWR and in trying to influence other NGO's, naïve to disease issues, to back the WSF initiative to ban llamas for wild sheep ranges. He misrepresented ADF&G supporting the CCH 17 because they helped fund it where in truth they distanced themselves from it as not having any valid information and actually consulted with WSWG in making that assessment.

https://www.packllamas.org/pdf/akban/alaska_department_fish_game_to_gala_06-11-18.pdf

They regret the funding and placed the responsibility for the RA on BC's doorstep.

All members of WSWG, particularly the WSF members and Mr. Hurley, need to read the attached letter to Mike Cox June 2020 (Attached) that was drafted last year as background for the promised 2020 exchange that never happened. Mr. Hurley and WSF leadership need to abandon their current medieval refusal to consider the truth about llamas and understand that their prejudice and continued drift from science is eroding the integrity of WSF and now WSWG. If aware, the majority of WSF members likely would not approve the appeasement of BC's political goals at the cost of diminishing the WSF reputation as science driven and fair to all stakeholders.

Based on WSF's history of deception and dishonesty regarding llamas, the llama industry has no interest in working with them to develop an unwarranted health passport that will effectively eliminate the llama user group from wild sheep ranges. Wild sheep and the public lands they occupy are not the purview of WSF and this request is correspondingly inappropriate. This attempt to control public lands is not going to set well with the general U.S. population who is increasingly hostile toward ceding their right of access in favor of special interests. There will be strong reaction, especially from private hunters or public lands users outside the hunting community increasingly dependent on llamas, when they face potential elimination as a user group in a significant portion of the U.S. high country. Even more significant will be the reaction to learning this effort is coming from BC/Canadian interests trying to impose their aristocratic hunting bureaucracy on sovereign lands in the U.S. by co-opting the WSWG.

No, we will not participate in your testing proposal and will openly advocate against llama owners participating in any such initiative. We are an ad hoc committee and serve as a reference resource for the industry and as such influence opinion and action among the various entities. It is our stated intent to correct misinformation and false science regarding the perceived llama disease threat to wild sheep. Our opposition to this proposal is absolutely required to realize this goal. We strongly advocate WSWG drop this initiative as an agenda item.

Ad Hoc Committee for Llama Access to Public Lands.

Stan Ebel-CO

Scott Woodruff-WY

Phil Nuechterlein-AK

From: Mike Cox <mcox@ndow.org>

Sent: Friday, July 02, 2021 1:33 PM

To: buckhorn@llamapack.com; 'Phil and Linda Nuechterlein' <knik07@gmail.com>; 'Scott Woodruff' <Scott@wyominghiking.com>

Subject: Circling back to Pack Llama/Wild Sheep issue - Request Virtual Meeting on proposed effort

Stan, Scott, and Phil,

Been almost a year now since I last communicated with you. There seems to never be a shortage in my world of priorities that I'm asked to deal with that are not my priorities. Apologize for being silent. The WAFWA Wild Sheep Working Group that I'm still chair, though trying to change that, shelved our efforts to develop a process to evaluate pathogen transmission risk of pack llamas to wild sheep. I want to resurrect that effort. Had a great call with Dr. Mike Miller with CPW today. He and I are on the same page and have been for

some time. That is: we wild sheep managers have bigger fish to fry with regards to higher disease risks from domestic sheep/goats and cattle, and pack llamas are not on that list. That professional opinion is not shared by everyone. In order for us to promote that opinion, we need data, we need test results from llamas to show they, in combination with animal husbandry, lack of interspecies attraction, and few other key factors, and the likely facts that llamas also do not harbor key pathogens that are a threat to mortality events in wild sheep. Mike Miller and I came up with some steps involving list of pathogens, cost sharing, working with local wildlife vets/agencies in western states, anonymous samples tested at credible labs, and spreading the word to llama owners to ask their participation in developing a dataset that can be the foundation for mgmt guidelines of pack llama use on public lands that would allow pack llama use near bighorn that would be based on real science and not fear mongering or misinformation. Will admit that thornhorn sheep managers will be a bigger challenge to have them accept the same guidelines as for bighorn sheep, but I am positive that with solid data/test results, we can refute false claims that would be unwarranted based on data. Could there be a component of future testing and health screening/documentation - maybe, but we need to start with the testing and go from there.

So I would like to have a call or virtual Zoom meeting with you all before July 19, our next summer 2021 Wild Sheep Working Group meeting.

Let me know of your thoughts, willingness and availability,

Mike



Mike Cox

WAFWA Wild Sheep Working Group Chair

Statewide Bighorn/Mountain Goat Staff Biologist

Nevada Department of Wildlife

775 688-1556 office

775 240-1335 cell

mcox@ndow.org

Hi Mike,

We are looking ahead to the session you indicated would be forth coming later this year regarding the llama position statement that we requested from the WSWG committee. We are currently involved in the promulgation of regulation process with USFWS regarding their prohibition proposal to eliminate the use of llamas on the Arctic National Wildlife Refuge (ANWR). A letter entered on the USFWS-ANWR public comment board from the WSF, written by Kevin Hurley, was quite disturbing to us and we responded through our committee addressing the WSF position and more importantly their attitude projected in their comments. It's important to note that of the 70 comments regarding banning sheep, goats, and llamas, the comments directed specifically at llamas were all supportive of llamas continued historical presence on the refuge except for the WSF comments from Hurley and another from Kevin Kehoe of the AK chapter of WSF.

<https://www.federalregister.gov/documents/2020/04/09/2020-06258/2020-2021-station-specific-hunting-and-sport-fishing-regulations> I've attached both Hurley's/WSF comments and our response. I would encourage you to read their comments and our response. Given the presence of WSF members on your committee and their historic WSF advocacy of banning llamas from wild sheep ranges, I felt it would be important for you to understand our current position and our vision of what needs to happen to clarify and put this issue to rest.

Valid scientific documentation:

The Schwantje, Garde, WSF RA's '03, '05, and CCH'17 have no scientifically supported information regarding diseases present in llamas or the possibility of transmission to wildlife, specifically wild sheep species. Yet these are consistently and singularly referenced as defining evidence of a disease threat posed by llamas to wild sheep. Our March email to you as the chair of the WSWG discussed this consistent occurrence. The RA's were presented as hypothetical and that is a serious understatement of their lack of merit.

<https://www.packllamas.org/pdf/akban/bogus-ra-as-the-basis-for-bans.pdf> There was no identified disease(s) giving rise to a need for a risk assessment to begin with even after Dr Schwantje conducted a misrepresented study with BC llama owners. It was irresponsible for Dr. Schwantje to proceed to arbitrarily manufacturing a risk assessment at that point. She was forced to depart from any adherence to the general protocol for writing a risk assessment to continue her misguided mission of creating a disease risk associated with llamas. She did not solicit input from any of the many stakeholders outside of the wild sheep community, she did not take documentation from the llama research community, and she proceeded to recommend banning llamas from sheep ranges rather than putting forth her risk assessment and allowing managers to draw their own conclusions. She did not acknowledge the criticisms of her work by peers of significant standing in the llama research community and each succeeding RA exhibited no accountability regarding their concerns. Subsequently, these RA's individually and collectively have no credibility. Should ban advocates insist on using these assessments, they should prepare to defend the RA's methodology, their results, their interpretation, and the role WSF played in their ultimate structure, publication, and distribution.

If you haven't read the commentary on the following link, it would be good for you to read it in depth to understand the hand WSF and Dr. Schwantje had in collaborating on the CCH RA'17.

https://www.packllamas.org/pdf/akban/commentary_on_risk_assessment-final-5.pdf

CCH '17 is the document Hurley cites as support for his comments regarding disease in llamas. It is dishonest for WSF, Hurley, or Dr. Schwantje to reference that document as support for their stated position of banning llamas. Their first-person documentation in the 2017 Thinhorn Summit II Synthesis and Summary regarding the fabrication of the CCH '17 destroys any claim to scientific objectivity for the

RA. It appears Dr. Schwantje has diminished the significance of the RA admitting that few if any llama researchers were consulted for the RA and stating to colleagues the RA's were not intended for Records of Decision. Her CCH17 states *M. ovi* has never been identified in llamas. Furthermore, the February 2020 policy statement from The American Association of Small Ruminant Practitioners (AASRP), specifically disqualifies each disease the RA hypothetically projects as present in llamas and a threat to wild sheep.

https://www.packllamas.org/pdf/akban/Llama_Ban_rev2020.pdf

This quote from page 3 of a paper that appeared in The Journal of Wildlife Disease Management and whose list of authors includes a number of WSWG members past and present, offers definite proscriptions of *Mycoplasma ovipneumoniae* infections to caprinae species specifically eliminating llamas.

"A host-specific pathogen commonly carried by domestic sheep and goats is consistent with the high mortality observed in captive bighorn sheep when commingled with domestic sheep but not when commingled with non-Caprinae livestock including cattle, horses, and llamas (Foreyt 1992, Foreyt and Lagerquist 1996, Besser et al. 2012a)."

[https://www.packllamas.org/pdf/akban/Cassirer_et_al-2017%20Pneumonia%20in%20bighorn%20review%20\(002\).pdf](https://www.packllamas.org/pdf/akban/Cassirer_et_al-2017%20Pneumonia%20in%20bighorn%20review%20(002).pdf)

The Alaska Department of Fish and Game (ADF&G) specifically notes their withdrawal of support for the RA, their refusal to pursue the llama disease issue further, and their intentions of moving forward on substantive disease issues in a letter from then director Bruce Dale to the Greater Appalachian Llama and Alpaca Association. https://www.packllamas.org/pdf/akban/alaska_department_fish_game_to_gala_06-11-18.pdf

Hurley misrepresents ADF&G's financial contribution as endorsing the RA when in fact ADF&G views the RA as a bad investment and waste of money and determined this in consultation with WSWG. Hurley and WSF make a habit of self-serving and postured presentation of other's positions just as Dr Schwantje did with the science involved.

Hurley represents the current agreement with the North American Pack Goat Assn as an amicable mutual agreement. We know the agreement is anything but amicable. The goat packers feel like they were strong-armed into the agreement, hoping they would be treated fairly while the agreement actually signed away their access to a large portion of wilderness. This representation in his comments is simply an invitation for llama packers to participate in a rerun of the same shenanigan.

Hurley has the audacity to represent the llama community as unwilling to come forward as stakeholders and to enter into responsible use of the wilderness. This is offensive for a couple of reasons. The last 20 years WSF has worked behind the scenes on building their case against llamas in the wilderness without any engagement with the llama community or those using public lands. We learned of this effort and contacted you as the WSWG committee chair after the release of the CCH '17, regarding its posting on the WSWG website wondering if you were supporting the CCH '17. You assured us the posting was not an endorsement and after consultation with Dr. Wolff, took the document down. Now WSF comes forward with the suggestion/demand for the llama community to participate in a WSF passport/packing program structured and designed by them. Are they unaware of our communication with you and the WSWG committee? I assumed you made the committee aware of our position and concerns and WSF would reassess their lack of basis for making such a demand.

Include us out of any testing or provisional access requirements for llamas. WSF never contacted the llama community about concerns, most likely because they couldn't identify any credible basis other

than competition for tags from private hunters. Hurley proposes a testing/certification/passport for llamas and implies it's time for the llama community to be responsible. WSF's invitation to llama packers to enter into the same treachery experienced by goat packers shows a lack of self-awareness, a marked lack of understanding of the criteria for valid testing, and a really misguided arrogance and presumption that WSF is the gate keeper to the wilderness and that all wilderness use revolves around their conflicted concern for wild sheep.

The suggestion to enter a testing program for wilderness access, as Hurley proposes, shows a profound lack of understanding of the epidemiology specific to llamas. The llama's immune system is unique in its strength and protective capability. Their dynamic and unique heavy chain nanobodies makes them particularly effective in directly destroying disease pathogens. There has been an awareness of this phenomenon for some time in the epidemiology research community and there are numerous projects attempting to incorporate these superior antibodies in producing broad spectrum flu vaccines (Covid 19 included), cancer treatment, and even pain management. <https://www.nytimes.com/2020/05/06/science/llama-coronavirus-antibodies.html>

These antibodies are likely the reason llamas have no endemic diseases, there are no routine vaccination programs recommended for llama herd management outside of environmental pathogens, and there are no llama specific vaccines or disease tests. There is simply not sufficient need to underwrite the associated costs of developing assets that have no demonstrated need.

WSF has unwittingly and unadvisedly chosen to use the strength of llamas as their point of attack. It's testimony to WSF lack of scientific awareness in equating llamas to domestic sheep and goats and advancing their campaign against llamas on the mistaken association of the epidemiologic vulnerabilities of those unrelated bovid species. WSF has focused on the potential for llamas to harbor *Mycoplasma ovipneumoniae* (*M. ovi*) which they do not. *M. ovi* is the pathogen of greatest impact in wild sheep and it has not been isolated or identified either as present or contributing to a disease syndrome in llamas. The *Pasturella* spp. that are often the actual infectious pathogens working in concert with *M. ovi* to cause polymicrobial pneumonia, are rarely present in llamas. 25+ years of pen studies and the associated nasal/pharyngeal swabbing of llamas comingled with wild sheep has proven that in llamas the *Pasturella* spp. are a rare occurrence. Pneumonia is extremely rare in llamas and typically occurs as secondary infection in dying animals compromised by other primary disease.

Scott Woodruff participated in the collaborative Whiskey Mountain Bighorn Sheep Planning process on behalf of himself as a commercial llama packer in the Shoshone NF and Whiskey Mountain Bighorn Sheep range as well as the llama packing community. He participated in the discussion of disease transference to wild sheep by llamas and based on research, llamas were not considered a risk. Page 12 of the plan states: "Experiments have been conducted to evaluate the potential for respiratory pathogen transference from elk, white-tailed deer, mule deer, horses, llamas, and cattle. There was little indication any of these animals posed a risk to bighorn sheep (Schommer and Woolever 2008, Besser et al. 2012a, and Besser et al. 2012b)."
<https://www.packllamas.org/pdf/akban/wmbhis-final-plan-2019.pdf> It seems odd WSF would not be aware of Scott's participation and engagement of the area managers. The WY-Wild Sheep Foundation representative, Steve Fitzpatrick, told Scott, "as far as they were concerned, "llamas were like horses", and not a concern to them here (WY)." They should also be cognizant of the plan's lack of concern regarding the presence of llamas in the range as pack stock.

The Wild Sheep Foundation is a special interest advocacy 501 (C) (3) non-profit, advancing a private industry 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 phylogenetic influence on disease susceptibility and transmission. Many of 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 (domestic and wild) 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. The respiratory disease pathogens of concern to wild sheep advocates are present in these 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 the camelid 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. Portions of the two families 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 (even in the face of their rather expansive list of documented disease pathogens) and arbitrarily exempt 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. Blue Tongue Virus, BVDV, M. avium para TB, M bovis, PI 3, and pneumonias caused by Pasturella spp; are endemic in cattle. These are the same diseases falsely attributed to llamas in the risk assessments and disqualified by AASRP. 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 and the RA’s they participated in manufacturing, refer to llamas as probable asymptomatic carriers of diseases common to bovids. They intimate that even though llamas don’t exhibit clinical disease, it is likely llamas are reservoirs of these disease pathogens. They make unsupported assertions regarding “pathogens commonly carried by llamas”, which they do not carry. WSF fails to acknowledge that in addition to not showing clinical disease, they have been shown to not carry the pathogens through swabbing and other diagnostic techniques. They do not carry the diseases, period. They refer to llama blood titers showing antibodies to disease pathogens as indicators of infections that are asymptomatic. The reality is, the titers indicate exposure to disease pathogens and a healthy antigenic response that indicates immunity, not disease or presence of disease pathogens. This is

borne out by the fact that llamas are widely considered disease free and extremely healthy compared to other domestic species.

-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). On page 6 of the CCH'17 RA, explaining the need for the assessment, Dr Schwantje states, "The need for an updated risk assessment has become even more apparent in recent years, with public pushback causing the BC government to replace a proposed province-wide ban on SACs in backcountry areas with a reduced ban restricted to Thinhorn Sheep and Mountain Goat ranges in the northern half of the province." Dr Schwantje is acknowledging the need for the RA is not based on any real possibility of llamas posing a disease risk to wild sheep, but rather on the "push back from the public" eroding her unsupported basis to ban them. A properly structured RA would be engaging those producers and the public pushing back rather than trying to avoid or over-ride their input.

-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 is 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 regarding llamas 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.

In summary, our committee and the llama community fail to see the existence of "the camelid question" as posed by WSF. Rather we see there is a cattle question, a horse question, and even a human question that preempt any llama question. The biggest question is why is the WSF's self-serving, private agenda allowed to be a part of this discussion setting public lands policy?

Please contact us with any questions, but definitely contact us on any discussions regarding policy statements or determinations. The llama community and the public using our animals are significant stakeholders and require inclusion in any process. We have a deep concern about our access to our public lands as well as a concern for proper management of wild sheep extending beyond the hunting interests of WSF. Thank you for your consideration of our concerns and positions.

Ad Hoc Committee for Llama Access to Public Lands.

Stan Ebel-CO

Scott Woodruff-WY

Phil Nuechterlein-AK