



Meeting Notes

BLUE MOUNTAINS Forest Plan Revision - 2015

Malheur, Umatilla, and Wallowa-Whitman National Forests

Technical Meeting on Pack Goats, Bighorn Sheep and the Blue Mountains Forest Plan Revision Pendleton, Oregon | Nov. 10, 2015

These notes reflect the best efforts of the notetaker to capture the discussion of meeting participants, but in no way are these notes a word-for-word transcript as the notetaker may have unintentionally missed some statements or dialogue. Also, the notes do not attempt to correct or clarify any statements made by participants.

Participants (as they appear on the sign-in sheet): Carl Scheeler, Rich Harris, Nancy Clough, Colin Gillin, Steve Semasko, Donna Semasko, Lawrence Robinson, Kirk Nebeker, Curtis King, Tom Besser, Neil Thagard, Tom Schirm, Taffy Mercer, Scott Peckham, Paul Wik

U.S. Forest Service (USFS) participants: Tom Montoya, Mark Penninger, Sabrina Stadler, Maura Laverty, Marisa Meyer, Peter Fargo (notetaker)

Organizations represented (as they appear on the sign-in sheet): Confederated Tribes of the Umatilla Indian Reservation (CTUIR), Nez Perce Tribe, Oregon Dept. of Fish and Wildlife (ODFW), Washington Dept. of Fish and Wildlife (WDFW), North American Pack Goat Association (NAPGA), Edelweiss Acres and Evergreen Packgoats, Washington State University, USFS

Introduction by Sabrina Stadler, Blue Mtns. Forest Plan Revision Team Leader

- Welcome everyone; thank you for being here, especially those who traveled so far; this is an important issue.
- We can't make any decisions today, but we can have a solution-oriented discussion.
- Tom Montoya is the deciding officer on the Wallowa-Whitman National Forest and representing the Blue Mountains Forest Supervisors; ultimate decisions on the Forest Plans will be made by the Regional Forester.
- We have been having a series of public meetings, including on access, grazing, and the pace and scale of forest restoration. Curtis King brought this issue to our attention at one of our meetings in the Tri-Cities area.
- Let's begin with a round of introductions; please share your interest or concern regarding pack goats on National Forest System lands.

Opening Remarks

- My concern is not being able to go goat packing; pack goats are not domestic goats/sheep; different breed.
- USFS: Wildlife Biologist with Forest Plan; here to get up to speed on the issues surrounding pack goats.
- USFS: Wildlife Biologist and bighorn sheep specialist

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- USFS: Here to listen to issues and work toward solutions; ultimate decision will be made by Regional Forester, and I will be engaging with Regional Forester on this issue.
- USFS: Range Program Manager on the Wallowa-Whitman and Umatilla National Forests.
- Here to represent the Confederated Tribes of the Umatilla Indian Reservation
- I try to protect herds from disease; started a program working with small flocks of goats and sheep, working to reduce disease transmission; precedents could be set with these National Forests for the rest of Region 6; mountain goats are also a concern with disease transmission.
- Have been raising goats for 30 years and pack goats for 26 years; don't want to see pack goats kicked out; understand that 12,000 sheep are out there and meandering into bighorn sheep habitat; we want to do our best due diligence, because we want to make sure bighorn sheep are taken care of; also want to continue enjoying pack goats.
- Want people to understand difference between breeds; we have a clear understanding of FS policy; we get an update from Dr. Besser on diseases; any restrictions should be based on sound, peer-reviewed, scientific data not just studies on domestic sheep.
- Oncology nurse by trade and member of NAPGA; husband has severe arthritis, so pack goats are a big part of our life; want to see an evidence-based, critical review of the science.
- President of NAPGA; I'm in my 70s and use pack goats to access the backcountry; promulgated 13 best-management practices when the Shoshone National Forest looked at closing the Forest to pack goats; want to avoid that here.
- I train pack goats; my biggest fear is that we may lose packs goats on public lands; pack goats are an incredible animal; I love getting into the mountains to do everything, and the pack goats make it possible; I have complete control over these animals; I truly believe we can find solutions to protect wildlife and keep access; through best-management practices and science, we can come up with solutions to be safe and continue recreational use.
- Avid pack goat user; pack goats have gotten us into the outdoors; we have bonded with the animals as a family and surprised by how cool they are.
- ODFW: The State of Oregon has made tremendous investments in all of Oregon's wildlife, including evaluating disease risk and mitigation measures; including evaluating Forest Plans. We serve as the stewards of Oregon's wildlife resource and protect it for all Oregonians and interest groups.
- From Washington State University; love the work I do; combination of service in the animal disease diagnostic laboratory, food-animal clinics, and food-safety research. Got interested in bighorn sheep after Hells Canyon outbreak of pneumonia; started doing research using new tools; understood which bacteria are present and realized different management approaches would be needed. I think we're at the cusp of being able to understand what to do.
- Director of Wildlife Division for the Nez Perce Tribe. Had the privilege to utilize goats on hunting trips with friends; we were careful not to use goats in big-horn habitat; we have to recognize sometimes that not all uses are suitable in all places; it is not about booting people off public lands, but we may need to restrict some areas due to the risks. The bighorn sheep have had a rough go; we have a chance now to right a wrong after over a hundred years of pressure on bighorn sheep.
- Washington Dept. of Fish and Wildlife; assisting the Umatilla with wildlife work.

Presentation by Dr. Tom Besser

(The following is the notetaker's attempt to capture some key points of the presentation, but the notes are incomplete. For details, please see Dr. Besser's handout titled, "Are pack goats a risk for epidemic bighorn sheep pneumonia?")

- I have no expertise in pack goats; to me they are domestic goats.
- I have sampled two pack goat herds—one positive, one negative to Movi (pronounced "em ovee").
- Northern populations in Alaska and Canada have no exposure to Movi. It is an issue in the Lower-48.
- Across all domestic sheep/goats, 90% are positive; in half of individuals, you can detect Movi at any given time; often no detectible disease; other times some disease but not too bad.

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- Domestic sheep have evolved with Movi for eons, but wild sheep in North America are naïve to Movi; it is logical for Movi to cause disease in them.
- Analogy: Susceptibility of Native American populations to diseases during first contact with Europeans.
- When domestic sheep with Movi in their nose contact bighorn sheep, there is a 98% death rate among bighorn sheep. With no Movi, death rate drops dramatically.
- Some studies have shown that domestic goats have a lower risk.
- Goat strains of Movi are unusual; when found in bighorn sheep it had killed a third of the animals and all the lambs; therefore, goat strains of Movi are capable of causing serious outbreaks / die-offs.
- Removing Movi from domestic sheep and goats is possible. A vaccine will be very difficult for this. A good percentage (about a third) of small flocks/herds is already Movi-free. It is possible to segregate Movi-negative animals, and breed them separately.

Questions and Answers with Dr. Tom Besser

- Q: Any other mechanism for Movi transmission without direct contact between animals? A: Movi needs a host; can spread within 30-50 feet in a droplet from a cough or sneeze.
- Q: Stress, nutrition a factor? A: These will always be factors in disease, but are basically insignificant in Movi cases.
- Q: Sometimes they all die, and sometimes they don't. You would think there would be a balance. A: Every time I
 have introduced Movi, I see almost 100% pneumonia.
- Q: Why not just treat Movi? A: Most common anti-biotics don't work on Movi. Also, by the time the bighorn sheep develop pneumonia, they have 10+ different bacteria causing the disease, which makes antibiotic treatment more difficult. There are reasons in the literature to expect that treatment or vaccines will be very difficult.
- Black Butte population of bighorn sheep, where a herd had been exposed for a long time (1995 to 2015) to one strain of Movi; re-exposure to a new strain was a serious problem.
- There are many strains; Movi is a tree with a thousand branches. Goats have braches on the left, and sheep have branches on the right. A single strain can be introduced and still present 20 years later.
- Q: Why don't we see resistance emerging in the bighorn sheep? A: There is an element of chance in who survives an
 outbreak; it is not necessarily resistance. We should look at remnant native herds from 1800s and beyond for signs
 of resistance.
- Q: Movi in mountain goats? A: Yes, signs of spread from bighorn sheep to mountain goats, or from a third party to both. Now similar challenge in herds that have been affected; survivors and lambs died after 2-3 months.
- Q: Testing? A: False positives are rare; false negatives are more common. Tested domestic sheep; a third were "super-shedders" and tested positive all the time; about a third tested negative; about a third intermittent. Three positives in a row (sampling every couple weeks) gives a 90% chance of positive next time.
 - Blood test is pretty reliable for the whole group, but it's no good for the individual animal. Blood test can verify a negative herd.

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- Nose swab is best for individuals. You can use it to separate goats; within a generation, you can have an Movi-free herd.
 - You have to go to a DNA-based test. Just a few locations who do this in the country. \$40 per swab and \$10 blood test.
- How to certify your goats as Movi-free? How recently do they need to be tested? Who needs to certify that one swab is from one animal.
- If you go to a pack-goat rendezvous with a Movi-free flock, then you may lose your investment.
- There is a similar Mycoplasma in swine that causes \$hundreds-of-millions in damage every year. They have been working on a vaccine for over 40 years, and they have not been fully successful (only reduced mortality but not morbidity).
- Movi is not the only pathogen in the world; there are other pathogens and risks that would remain, and how to balance those would be another discussion. Horses, cattle, lamas, and alpacas do not carry Movi.
- Experiment with separating Movi negatives and positives from the same population:
 - Negatives from same population: Lambs did not die.
 - Positives from same population: Lambs did die.
 - Tried again next year, and we got cross-strain transmission over a significant distance due to aerosols. Lambs were immune to one strain but susceptible to another.
 - 100% transmission over a 30-foot gap
 - Same over 60-foot gap
- CTUIR rep: Reducing the risk is not enough. Even 1% risk to bighorn sheep is not acceptable.
- Risk is part of life.
- There are places in the forests where we don't have bighorn sheep and can allow pack goats. We have alternatives with where we take pack goats, and we have alternatives to using pack goats. However, the bighorn sheep do not have alternatives when it comes to Movi.
- If you want less risk, then you have to say no to sheep grazing.
- We take many measures to ensure separation between domestic sheep and bighorn sheep.
- If we have an opportunity to eliminate risk, no matter how small, should we not do it?
- Is there not a way that you can continue to use pack goats in areas where there is no risk?
- You (USFS) have bigger fish to fry than pack goats.
- That is true. Best practices have not worked in the past.
- But we have never had an opportunity to test our best management practices from the NAPGA.
- What about folks that are not part of NAPGA?

Discussion about NAPGA best-management practices (BMPs)

(See the list of BMPs beginning on page 5 of "PackGoats! A clear and present danger to bighorn sheep? Or is this 'danger' simply a clear and present misconception?")

- There is zero risk they will wander away; if they are not high-lined, they will stay with you. Behaviorally imprinted to stay with their leader/owner. Will not scare and run away like a horse can.

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- Shoshone National Forest found examples of goats that disappeared, which is rare. When they get lost, they go looking for humans. Not prone to go looking for another herd; look for other humans. Creatures of habit; go with what they have learned.
- Best management practices:
 - Testing / swabbing
 - Camping areas outside of bighorn sheep habitat; high-lining in camp
 - Limiting number of pack goats
 - Use of GPS tracker on a lead goat, so you always know where the herd is
 - Bells on goats
 - NAPGA can provide education
- How do we control people who have no interest in NAPGA? Land manager needs to have a permit system.
- If a pack goat were to come in contact with a bighorn sheep, we have a BMP to document that.
- Pack goats are castrated males and have no interest in mating with females.
- We follow leave no trace ethics
- Specific concerns as to land-management decisions:
 - No pack goat contact with bighorn sheep has been known to happen, but domestic sheep have been known to graze in bighorn sheep habitat without testing for disease.
- The primary concern is around source habitat / critical habitat for bighorn sheep.
- There will always be risk. We are willing to do our due-diligence. We want to look at testing and permitting. We want to work with you rather than an outright ban. Do some testing; have a trial period; see if these work for the Forest Service.
- The BMPs are not perfect and can be fine-tuned. We can help educate pack goat users. I would like a trial period and think we need a fair chance to prove we can be responsible. Let's give this some more time.
- Some mentioned there are other alternatives. Pack goats are our choice; we may not have the facilities to keep larger animals. Pack goats allow us to hike in places that we can't go with other animals. These are soft-hoofed animals that are allowed in spring and fall allowed in places that horses or mules are not.

- USFS:

- Abundant peer-reviewed literature is not always available. As managers we are constantly forced to make decisions based on limited information. We have to do the best we can.
- There are three components I think about in management: Engineering, Education, and Enforcement
 - Let's go into depth on BMPs (Engineering and Education). Is it practical or possible to administer?
 - We can put a polygon on a map and say this is critical habitat for bighorn sheep. Can we post the rules? What is the cost to permitting systems?
 - We would need terms and conditions in a permit.
 - Risk: I can't think of a situation in our agency (USFS) where we have zero risk. I don't know what our Regional Forester will be comfortable with?
- Most important BMPs: High-lining at night with bells. There is a risk with non-highlined goats. High-lining means they can lay down together.
- Do BMPs really address the risk of being in bighorn sheep habitat? How would you prevent a bighorn sheep from entering camp at 2 a.m. in the morning?
 - On the landscape scale, there are areas where pack goats, or any domestic goats, just are not appropriate.

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- Lambing season. Maybe there could be closures during this time; that would be an administrative cost to open/close and issue permits.
- Elkhorn Mts. have a large mountain goat habitat, especially along the Elkhorn Crest Trail. In the Eagle Cap Mountains, the populations are blended.
- "Source habitat" is the term we need to focus on in the Forest Plan; where most bighorn sheep are when they are not doing forays.
- Alternatives in draft Forest Plan:
 - The current draft does not have a range of alternatives on this issue, but those alternatives can grow out of this discussion.
 - One alternative could be to map source habitat and develop a permit system.
- Goats imprint on their owners within months. How do we deal with commercial goat operators who want to lease goats to inexperienced users? A: Few people lease the goats. An alternative could be, "no commercially leased goats."
- What is the risk? Is it 1 in a million? If we go with BMPs, we want to make sure they are tested and proven and not on wild bighorn sheep or goats. We're not trying to shut anyone out of the forests; there are just some places that are not appropriate.
- The people I work for (CTUIR) have a reserved right to their "First Foods" and they didn't get that right from the federal government. Bighorn sheep are one of the few animals I need to carefully permit for hunting. The request here is from a small group of people who have a desire to do something; it is not even on the same page as the protection of our priceless wildlife and upholding the reserved rights of the CTUIR. We can keep the alternatives simple. Here are the areas you can enter, and here are those you cannot. If we dice it up and get into permitting systems and BMPs, the cost could quickly be greater than the benefit.
- It is possible to development BMPs, provide education, and develop a solution that works for all parties; it just takes cooperation on both sides.
- A lot of Forest Plan Revisions are coming due; if they see extreme decisions in early plans, there could be a cascade effect that leaves us out of the National Forests.

Closing Comments

- If you have testing and certification of a negative herd, how can you assure that your animals have not come in contact with other animals since the testing?
 - If we have Movi-positive animals, we would not bring them to the Rendezvous.
 - Q: How would the Forest Service verify that your goat would be disease-free before it enters the National Forest?
- We're not worried about NAPGA; it is the others who will bend/break the rules that we need to plan for.
- The onus comes back on the agency to figure out how to manage this. Every time you do a regulation, you could have new loopholes. If a ram visits a campsite and interacts with pack goats, standard procedure is to remove (kill) the rams to prevent disease transmission.
- We need to get rid of every risk that we can control, because we can't control the rogues.
 - The rogues will always be there anyway.

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- That is why we need to address risks that we can control.
- I have had no contact with bighorn sheep, and I think we can educate others to ensure that.

Next Steps: Sabrina Stadler, USFS

- We have had time to talk this out; now our specialists will need to weigh in; Tom will consult with them and offer his recommendation to the Regional Forester.
- At this point, we are beyond developing a range of alternatives. You can provide additional information and revise your BMPs, and we will consider it.
- We will prepare the final Environmental Impact Statement, and there will be an objection process that follows.
- Thank you all for taking the time to be here and share your input on this important topic.