

Hoof Disease Public Working Group Meeting Notes

May 21, 2014, 1-4pm

Cowlitz County Museum, Kelso WA

In Attendance: B. Anderson (Rocky Mountain Elk Foundation), D. Carlson (Safari Club Intl), C. Chandler (USFS), D. Cothren (Wahkiakum County Commissioner), B. Johnson (WA DNR), C. Madsen (NW Indian Fisheries Commission), B. Moeller (PTOI), M. Rochelle (Weyerhaeuser), M. Smith (Local resident/business owner), A. Swanson (Clark County Senior Policy Lead), WDFW Staff: S. Bergh, M. Cope, B. Hoenes, E. Holman, S. Jonker, K. Mansfield, J. Nelson, G. Norman, NCASI: J. Cook,

8:30am – 12:00pm

Vegetation exclosure tour with HDPWG

1:00pm – 4:00pm

Meeting with HDPWG

WDFW Hoof Disease Investigations Update
Management Approach

Review of the purpose of the working group

- Share information about HD and WDFW activities regarding HD
- Discuss research and management questions
- Public outreach by working group members

Sandra Jonker (SJ) gave a PowerPoint presentation reviewing HD investigations and results to date. Also pending analyses and additional information (nutrition, timber practices).

- Axel Swanson (AS) asked how similar MSH elk body condition is to other elk in Western WA?
- SJ answered that overall MSH is similar.
- John Cook of NCASI (JC) answered that his body condition data was from a very small sample at MSH and that his data was collected in the winter (autumn is the best time). This late winter data puts MSH elk mid-pack in terms of condition.

SJ continued her PowerPoint presentation on management options and what work has been completed as well as what the current needs are.

- Completed: developed WAC to leave harvest hooves on site, public meetings, game meat safety flyer, developed management approach from multiple inputs.
- Current needs: pursue causative agents, determine prevalence, distribution, effects on population dynamics, where feasible manage the disease.
- Went through management options and which ones we can eliminate from consideration.
- Mark Smith (MS) and AS asked about treating live animals.

- Kristin Mansfield (KM) responded that they did that with bovine digital dermatitis (similar to HD) to demonstrate the cause of the disease, but with early cases and before all of the thorough testing. Live animals might not add a lot in our case.
- Went through concepts of animal disease eradication.
- MS asked if we know the core area?
- SJ responded that we know that from where the disease started and where it has spread.
- Any approaches that have successfully been used in domestic livestock will be experimental when applied to free-ranging elk.
- JC asked about the possibility of a vaccine?
- KM responded that there is a vaccine for dicholobacter in sheep, attempts for treponema vaccine for cattle is being worked on by USDA but not successful yet, and the expert for this will attend next HD TAG meeting.
- Brian Anderson (BA) asked about treponema prevalence in dry areas of the state?
- KM replied that dairies on the dry side of the state are still wet (muddy pens/pastures).
- MS asked about prevalence in local dairies.
- KM replied that she does not have hard prevalence numbers, but it does exist.
- MS stated that there is a need to study a controlled herd.

SJ continued her PowerPoint presentation on current and future funding

- HD coordinator position funding from the 2014 supplemental budget, survival study from Pittman Robertson funds, RMEF grant for sample analyses. Future funding for 15-17 budget in development.
- MS asked about the value of the elk population to the state? Nate Pamplin was supposed to get back to him on this.
- Jerry Nelson (JN) replied if he was asking about a specific area of the state, or just license revenue, or tourism too?
- MS asked if \$388,000 is enough because of impacts to rural parts of the State? He stated that permit sales are down.
- Guy Norman (GN) replied that \$388,000 is what we have on hand and doesn't include future money and reallocated staff time.
- MS asked if HD coordinator will work for WDFW? Why not a contractor?
- SJ responded that it makes sense for the position to be with WDFW because WDFW will be executing the management strategies.

SJ continued her PowerPoint presentation on next steps

- HD coordinator position recruitment, implement prevalence and removal/containment efforts, develop survival study, develop policy to no longer translocate elk outside of SW WA, continue to work with HD PWG/HD TAG, assess monitoring of live animals with HD, reach out to Academy of Science on questions regarding herbicides, landowner/hunter outreach this fall.

- MS asked about check stations for leaving HD hooves where harvested? Hunters in this area know about HD, but what about those coming from Seattle?
- SJ answered that check stations have not been considered because we believe that hunters will want to follow the rule.
- AS stated that we need to adjust tag numbers with knowledge of prevalence because hunters are selecting healthy elk and not HD elk. We can't go back and say that we should not have issued cow tags after the fact.
- SJ answered that yes, we need to be adaptive and that we already did that this year with an extra decrease in permit numbers.
- Dan Cothren (DC) agreed with AS that we need to decrease permits. He is not seeing elk in Wahkiakum County and no one believes him and this year we will be shocked because there are no elk. Where are we looking?
- SJ replied that only in the Grays River elk area have we increased permits. Always had this elk area because of elk damage and some years you have damage (and permits) and some years you don't. Recently heard from agricultural producers that damage has increased and there is a need for long-term, low-level hazing. Besides this elk area, other permit areas have lower permit numbers.
- DC responded that Wahkiakum County has been devastated because timber companies are harvesting timber so there is no food. Also, the limited private land access will put too much pressure on elk. In rural areas people see how it really is and folks in cities don't see it. He already bought his tag for this year, but will hunt out of state next year because he is very frustrated.
- MS talked to WDFW director and governor about this. He believes the HDPWG needs to be opened up to Public Hunters, not just timber company employees because this committee doesn't really represent the public.
- SJ responded that members were put on this committee representing diverse interests (see list of working group members) and that each member represents their respective constituents and the local area.
- Carol Chandler (CC) asked about the budget and cautioned about WDFW staff spending too much time on one thing (HD) and no time on other projects.
- Chris Madsen (CM) asked if we could put together a timeline based on when money is available?
- SJ responded that yes, she is working on that.
- JC asked why this working group couldn't help with outside funding sources?
- Dave Carlson (DaCa) said that the problem is outreach and that there is an opportunity for volunteers to do the work. We need to get correct information out, especially after hearing so much about herbicides at the Longview town hall meeting.
- MS stated that there is a distrust in WDFW being in charge and that people don't want to give the Department funds. Need more public involved to give credibility.
- GN responded that there are plans to solicit volunteers and still involve the public in the future.
- MS stated that people are looking for accountability.
- JC asked if money wasn't a constraint, what would WDFW do?

- SJ responded that HD is a priority for the agency. If we could we would work on it full time but we have responsibility to many wildlife issues.
- JC stated that check stations and a tame elk herd are very expensive.
- AS stated that \$250,000 is not a lot of money when you think about the value of the biggest herd in the state.
- Bob Schlecht (BS) stated that the whole industry of hunting is up in the air right now with access, length of seasons, etc., and that a captive elk herd is a no brainer.
- AS suggested a humane harvest tag for HD elk and acknowledged a trust/ethics/accountability issue with that.
- GN said that was worth discussing and not off the table.
- BA suggested issuing hunters points for harvesting a HD elk.
- DaCa agreed and stated that hunters beyond master hunters need to be utilized.
- AS asked if we receive calls about severe HD elk cases?
- SJ answered that yes, but the number of calls fluctuates.

SJ asked if the group wanted to have another meeting in the fall.

- MS answered that the group needed to meet before fall, mid-summer if possible. If the group meets only every 6 months it is pointless.
- AS wanted to have a meeting after the HD TAG meeting and asked if this group could have a joint meeting with the TAG group to see how they came to their conclusions.
- SJ replied that that could be a possibility.
- CC stated that if anyone knows about outside funding sources then let's work on that and let SJ know because state and feds cannot always be the recipients of funding. Example of the Mt. St. Helens Institute.
- CM stated that the tribes to the north are interested in what is going on and he could bring proposals to individual tribes.
- DaCa asked about a small subgroup to work on funding?
- GN said yes, that was a good idea.
- JC suggested universities, Safari Club International, Murdoch Trust, NWF, etc.
- BA stated that each funding source needs tailoring to their grants.

The final portion of the meeting was set aside for public comments.

- Bruce Barnes: He has done research with Axel and Mark. Why cull the herd if there are no elk to hunt? If collaring animals why not take blood? What is the effect of mixing chemicals? Third party study at Starkey forest in Oregon. Timber companies can fund the study because they are about to make money from permits. The Cooks should do the research because there is too much bias. No decrease in archery hunting and archery kills as many elk as modern firearms. Shouldn't be hunting in areas because we don't know if it is contagious to humans. Columbia River is the most toxic. Hunters would not be opposed to not hunting in this area. We have put ourselves in a bad position for criminal negligence when selling elk permits.

- JR Robertson: Has the meat been tested for toxins? You say it's been tested and it hasn't.
- KM responded that there is no such screen for all toxins. Chemicals are metabolized and turn into something unrecognizable. If chemicals are there then do they even cause disease? They did this with human breast milk and babies and saw chemicals, but cannot relate those to specific health issues. Testing is done before bringing chemicals to the market. The chemical used in herbicides are considered practically nontoxic to mammals and research on the synergistic effects has been done and none found.
- Boone Mora: He is not in the herbicide/pesticide camp, but as a scientist has faith that someone will investigate this. Still believes that leptospirosis is the cause. He is not aware of efforts to use the special stain for lepto and not aware of efforts to try to treat HD with lepto treatments. There are 200 lepto serovares. Does anyone here subscribe to Science? There is an article from 4/11/14 on a disease that they didn't know the cause of and he thought it looked like lepto so he called the author and the author said that lepto is what they thought it was. Asked if coordinator position would have freedom to work? Need to change laws so that those that want to do research can. He wants to culture lepto. Lepto is ubiquitous in Western WA because it is wet here. He sent a letter to a scientist who said it couldn't be lepto because it's too common.
- AS asked about deformed horns?
- KM answered that she has not received reports or seen this outside of the town hall meeting.
- Vern Gosch: Yielded his 3 minutes to Dr. Mora.
- Boone Mora: Needs a culture from a live elk to look at in the lab. There have been no attempts to repair the damage the elk have or no attempts to vaccinate. Did see that there was a treponeme vaccine in the U.S. and wants to treat elk with this vaccine with a veterinarian. He is affected by alzheimers and double vision. He wants to put together a team to try to treat it and he doesn't have permission. He is not going to go through everything needed to get the permission.
- Jon Gosch: Has written popular articles on this and was disappointed that people from the WA Forest Law Center weren't allowed to go on the field trip. NCASI is not objective because they are funded by timber companies. Quoted University of Alberta report that stated that MSH elk are in poor condition in relation to other Washington elk. Control areas in Pacific County, but there are reports of HD from there. Need an independent third party study. Herbicides and HD started at the same time. Atrazine and its effects. We cannot say that we have had an honest investigation without investigating herbicides.
- John Wallace: He is a master hunter and will not apply for permits. What about the Gray's River permits? Asked if the Department has considered Dr. Mora's request? How do we know the meat is safe if we don't know what causes HD? Lepto is transferred from elk to humans, so it's a huge public health issue. What is the common denominator between Willapa and MSH herds? It is not up north, etc.
- SJ responded that Dr. Mora has been invited to the HD TAG meeting to present his theory.
- Krystal Davies: She believes that they elk are suffering from laminitis, specifically chemically induced endocrinopathic laminitis because the symptoms are the same. When they have this we

see a rise in hormone ACTH, which raises a GC class of hormone. The longterm effects are hoof slough. Causes include eating increased nitrogen and/or toxins. See a spike in adrenal hormones, cortisol, and causes restrictions in blood capsules. Herbicides are indirectly causing HD. Test for hormone imbalances and test all herbicides. She has credible evidence and sources.

- AS stated that he has talked to Kristin about laminitis and she can explain further because we did test for it.
- KM responded that laminitis is not a disease, it is a secondary process.
- AS asked who the laminitis expert is on the HD TAG?
- KM answered that there are 3 large animal vets on the group. If someone wants to look at our slides they can, but they will only find secondary laminitis.
- Tim Gosch: It is known that plants being sprayed are essential to elk. MSDS says that they are toxic to animals. Has anyone asked that the timber companies stop spraying while we research HD? Toxins haven't been tested for. Doesn't trust WDFW and will not buy tags or spend money here. This meeting wasn't advertised to the public.
- SJ responded that this meeting was announced on the HD PWG website.
- Edward Barnes: Nothing has been said about a spraying moratorium. 99% of the people at the Longview public meeting thought it was herbicides. Need the governor to send a letter to timber companies. Need a 5 year moratorium. State legislators need to stand up for the moratorium. Gave example of veterans who had deformed babies. Fix sick elk so they don't have babies. Legislators and agency should stand up to timber companies. Has heard that people purposely shoot collared animals because tribes put collars on elk to hunt bulls. Bow hunting needs to stop because they get their animals right away.
- Kara Whittaker: First, I'd like to voice my support for the hard work and dedication of resources by this Working Group towards the identification and management of this terrible disease. Second, I want to emphasize the importance of WDFW's intended next steps to look at questions regarding the role of herbicides. I had the opportunity to review a preliminary report by Krystal Davies that provided a compelling line of reasoning linking herbicide ingestion with hoof disease. Ms. Davies has developed a set of practical management and treatment solutions that should be tested immediately. For example, ceasing herbicide spraying in areas of high elk density should aid in elk population recovery by simultaneously reducing their toxic load and improving their nutrition as their preferred forage becomes more abundant. Pursuing a rigorous study of the link between herbicides and hoof disease would ensure compliance with the intent of the Forest Practices regulations, namely "to regulate the handling, storage and application of chemicals in such a way that the public health, lands, fish, wildlife, aquatic habitat, wetland and riparian management zone vegetation will not be significantly damaged...Significant damage for purposes of this section includes any damage that would inhibit or preclude the existing vegetation from protecting public resources." WAC 222-38-010(1). In this interest, please provide ample time during the next Working Group meeting for Ms. Davies to give a detailed presentation of her findings and recommendations. Finally, I urge WDFW to conduct toxicology tests of elk that are designed specifically to detect the active

ingredients and metabolites of the herbicides being sprayed within the elks' range. Thank you for your consideration.

- Shawn Nyman: Must be cautious on Carol's comments about finding time and money for HD. Challenged timber companies to study the link to herbicides so they can at least say that they were right.