Hoof Disease Public Working Group Meeting Notes

December 4th 2013, 2-5pm WDFW Region 5 Office

In Attendance: B. Anderson (Rocky Mountain Elk Foundation), C. Chandler (USFS), D. Cothren (Wahkiakum County Commissioner), B. Johnson (WA DNR), C. Madsen (NW Indian Fisheries Commission), J. Misner (Cowlitz County Commissioner), M. Rochelle (Weyerhaeuser), B. Schlecht (SW Land Access Coalition), M. Smith (Local resident/business owner), A. Swanson (Clark County Senior Policy Lead), WDFW Staff: S. Bergh, M. Cope, E. Holman, S. Jonker, K. Mansfield, P. Miller, N. Pamplin, D. Ware

On Phone: Dr. T. Besser (Washington State University), B. Moeller (PTOI), W. van Zwoll (Safari Club International WA State Chapters)

- Purpose of meeting is to provide the opportunity to: share information about the hoof disease phenomenon, discuss research and management questions with regard to hoof disease, and public outreach.
- Introduction of new members: C. Chandler, B. Johnson, and B. Moeller
- Recap of 23 October 2013 meeting and what was learned and discussed
- Sandra Jonker (SJ) gave a PowerPoint presentation on updates since the October meeting
 - No collections occurred this fall—decided to wait for all results before additional collections.
 - Additional results came back two days ago and what looked like early lesions from the August samples do not appear to be lesions.
 - Spirochete culture continues at Univerifyt of Liverpool.
 - Samples will be submitted to UC Davis and WSU (PCR for viruses will be repeated), slides will be sent to a top bovine hoof disease expert in New Zealand.
 - Funding proposal sent to RMEF.
 - Waiting to hear if WDFW proposal for additional funds will be approved by the governor/legislature.
 - Recap of management options
 - Last meeting we discussed reducing elk density. Cover other options this meeting.
 - Chris Madsen (CM) asked about hunting season reports. Kristin Mansfield (KM) said that the Muckleshoot Tribe's biologist sent her photos and the hooves from that animal were sent to CSU for testing. KM has followed up on leads, but there's no sign of increased reports or spread beyond the case listed above.
 - Axel Swanson (AS) asked SJ if there was an increase in reports during this hunting season. SJ answered no and that call volume was lower this year.

- Mark Smith (MS) said that he only saw one cow this season and it has hoof disease. He also addressed the rumor that WDFW killed 600 elk. He feels that rumors need to be addressed.
- Bob Schlecht (BS) asked if WDFW counts and records observations in the field? Pat Miller (PM) answered that we do our elk surveys in March/April and that we plan to address prevalence.
- AS talked to hunters—they said they didn't see many elk and no one reported harvesting an elk with HD.
- MS said that the 5 elk harvested at his place all had HD.
- Dan Cothren (DC) said that he hasn't seen HD in Pacific County, but Wahkiakum County populations are low and he has seen more HD and carcasses than last year. He wants a reduction in elk harvest because there are so few elk and the ones with HD have the potential to survive.
- MS is concerned that hunters are not being successful and that we may lose tag sales and hunting tourism.
- MS asked about the number of elk still radio-collared? PM that we are still waiting for the report to be finished, but that we have seen a reduction in the number of elk in study GMUs.
- DC brought up the agricultural damage in Wahkiakum County.
- MS asked about decreasing the population when we don't know what the population is.
- Next management option: treatment
 - MS would like to treat and monitor captive elk. Do this in winter months when they are pushed into valley. Use known treatments for cattle.
 - SJ cautioned about needing constant treatment.
 - AS asked if treatments might help with diagnosis? KM said that you could possibly narrow it down (antiobiotics and bacteria), but it wouldn't help with chronic lesions. Tom Besser (TM) would recommend amputation of the claw in cases that he has seen and said that we would need to get early-stage animals, which we haven't found yet.
 - Barb Moeller (MS) said the South Rainier herd should be included because their winter range overlaps with the Mt St Helens herd. Also wants information from GPS-collared elk to see movements and habitat use. Also would like information from WSDOT on road-killed elk to see if those elk have HD. Stated that a Medicine Creek hunter harvested an elk with suspected HD that was in poor condition. Asked if all HD elk that we've seen were in poor condition? PM said that he would follow up with WSDOT.
 - BS asked MS what "captive elk" meant. MS described the 11 elk that live mainly on his property. Also, studies have fenced in elk so it's possible. Now is a good time to bait and capture them (did that with the Nooksack translocation). DC

added that you could do that in a couple of spots that he's thinking of where elk stay in the same spot and have HD.

- MS proposed a food supplement or diet change as treatment. DC replied that a feeding station is a good idea. SJ responded that feeding involves other factors like attracting and concentrating animals with a potentially infectious disease. Nate Pamplin (NP) also cautioned that it would be difficult to interpret results and you need a proper study design to isolate variables. He wanted the group to consider how we do that at multiple scales/years. AS cautioned about outside variables at MS's place. NP asked if we were trying to find a cause or treatment here. Bob Johnson (BJ) said that we need to take it one step at a time. MS emphasized that nutrition is key as well as carrying capacity. Dave Ware (DW) emphasized planning the questions first then setting up a study. He doesn't think we are at the point of a treatment study since we don't know the cause.
- James Misner (JM) asked if we know if the livestock HDs are contagious. KM answered that some are and some are not. Also some are still contagious while being treated.
- AS asked KM what spirochetes are? KM answered that they are a type of bacteria.
- MS asked how long we will wait for results before doing anything. SJ answered that we all want to know the results as soon as possible and that the many entities involved want to know as well. KM added that the scientists are meticulous and do not want put out false results.
- CM asked if it is possible that we do not get an answer. It is frustrating not knowing how much money and resources will be thrown at it before we stop. DW said that there are other questions like prevalence that we can address in the meantime.
- MS asked if there is any study on chemicals used in forest practices and their effects on soft tissue. KM said that finding an early lesion will help answer that question because we can see better what caused the lesions. So far we don't see any chemical reactions—only an inflammatory reaction. TB cautioned about jumping to conclusions. He gave the example of bighorn sheep pneumonia where they had the wrong cause for 20 years. There is value in trying other things out, but we still need to know the cause.
- NP said that our current best guess is that it's a bacteria (infectious). AS asked why that was our best guess? KM said that it was the spread and also the fact that most major domestic HDs are bacterial.
- AS asked why that bacteria occurs in the Cowlitz River Valley and not the Skagit River Valley? KM answered that it is likely a novel bacteria.
- MS asked why domestic livestock in the area do not have it. KM answered that domestic animals get treated or slaughtered. MS asked if KM had talked to local

vets. KM answered that yes, she had and that there are two local vets on the technical committee. She is also working with WSU extension. She emphasized that different species respond differently to the same bacteria. SJ also added that we do not see the disease in deer.

- BS asked about elk farms and the feeding grounds in Yakima? The difference between now and 10-15 years ago? He feels that we need to be proactive while we wait.
- DC stated that he had hoped to know what was going on by the time of this meeting. He thinks that we have too many seasons and that they are too long. He also stated that he thinks the elk are being depleted and that we need to cut the number of days and number of permits. He also stated that the elk are pushed into the farmlands of Wahkiakum County because of forest practices.
- Next management option: let the disease run its course
 - DC said that WDFW did that with hairslip and the deer have never recovered.
 - AS asked about reports of deer with HD? KM has not ever received reports. PM added that overgrown hooves are a common condition because of wet soils.
 - MS said that this decision is premature because we don't know the cause. If we do let it run its course how do you know if you should?
 - BM suggested that we set a timeline for results.
 - CM asked if WDFW is prepared to do any of the management options before the results are in. SJ said that we are doing our homework now so that we are prepared once we know the results.
 - Carol Chandler (CC) asked if we know the results timeline.
 - TB said that we need early-stage diseased animals to analyze and that is what is slowing the results.
 - MS asked if we could hold an animal in the diseased area and watch it.
 - AS asked why a calf and not a limping 5-year old bull? TB answered that we found that half of the calves in the March collection were affected, so half are developing it right now. There is a good likelihood in the calf age class to identify it.
 - AS suggested that we use hunter-harvested hooves.
 - MS asked TB what we should do. TB answered that we should get samples now (calves or hunter harvested).
 - BM stated that she posted a notice in her tribal newspaper for people NOT to turn in hooves and instead to report to the WDFW website. Are we changing that? SJ answered no because the samples need to be properly processed and that we want the correct age class animal. KM also explained that we do not want chronic hooves and that we only found out 2 days ago that the 3 month old calves did not have early lesions. She also emphasized that we need to properly handle the samples.

- MS asked if the elk need to be dead to get the samples. KM answered yes. MS stated that he felt we needed to watch the animals this winter.
- SJ steered the discussion back to the management option of letting the disease run its course.
- JM asked KM and TB if it goes away in cases of domestic HD. KM answered no in domestic HD, but that yes, it can, in wildlife disease in general.
- AS asked about culling an entire disease herd to get the samples we need?
- MS stated that the consensus of the group is that letting the disease run its course is not a viable option.
- BS asked about strategies to deal with chronic wasting disease? TB stated that culling has not proven effective.
- DW talked about bighorn sheep and culling for the disease. KM added that there
 is no treatment—only keeping wild and domestic sheep separate. WDFW
 removed all of the sick looking sheep, but it came back 2 years later. This year
 WDFW removed the entire Tietan herd to protect a neighboring herd and we
 won't know the results of that action until next year. Other states have tried
 different options.
- MS wanted to revisit the reduction of density option and if that is something we want to do right now?
- Next management option: containment areas.
 - CC asked what we mean by containment areas. SJ answered: keeping HD out of new areas, fencing, etc.
 - CM asked about keeping tabs on Oregon? KM said that she is in contact with their state wildlife vet and there are 1 or 2 possible cases.
 - CC stated that fencing does not sound very economical. DW responded that we do currently have 140 miles of elk fence in WA right now, so that it can have its place.
 - DC advocated isolating Pacific County from Wahkiakum County.
 - AS said that we don't have enough info to know if containment is appropriate.
 - SJ made the point that the management options are not mutually exclusive.
 - CC asked about places in southwest WA where there are no cases of HD? AS responded that USFS areas are not affected.
 - CM made the point that we want to prevent the spread north to the rest of the state. He's not sure how feasible this is.
 - BM asked about prioritizing management without knowing what the disease is? SJ answered that we will work through options anyway and we are not ranking options yet.
 - BA asked about specific migration patterns? Do we have that data? What about corridors? BM answered that the South Rainier herd overlaps with the MSH herd

in the Randle GMU. SJ answered that the information from the WDFW collars at MSH was not meant for HD specifically.

- AS stated that collaring animals was a great idea and that it should not be too expensive.
- PM stated that the Willapa Hills herd is not migratory and that the MSH herd moves a little bit seasonally. BM also added that she collared elk in the Cispus in summer that moved into MSH.
- AS asked about population estimation? DW said that it's too difficult of a topic to get into now. PM talked about sightability and mark-resight and how we are more confident in our population estimation abilities now. We are still awaiting results from that study though. BM offered to share the results of the tribe's study.
- Any additions to research questions?
 - AS said to add BAs question about migration. BA added the question of whether or not we should be scared about spread to the east side. BS stated that east side people should be worried and may want us to cull west side elk.
 - MS stated that HD is multifactorial and KM said that, yes, most diseases are.
 - CC brought up whirling disease and taking diseased soil to a non-diseased area. Do we need to isolate our soil from eastside as prevention?
 - DW suggested that we add soil to the research questions.
- The final portion of the meeting was set aside for public comments.
 - Bruce Barnes: Chemicals need to be studies. Right now elk are being
 overharvested and people are not seeing any elk. He talked to timber companies
 and DNR and no one has seen elk. He stated that GPS collars were used for
 hunters to harvest elk. The disease has spread all the way to Dubois Rd. We need
 to fly the experts here because there is a problem with the cultures and that is why
 we do not have the results yet. We need to look at the MSDS of chemicals on tree
 farms. We need to figure this out before all the elk are gone.
 - Edward Barnes: He killed his first deer when he was 8 and now he is 80. He stated that we need a lower number of tags and tags that are good for the whole state. When harvest numbers are published people from out of state come to MSH to hunt and put too much pressure on the elk. He is concerned about quarantine of the disease. He has heard all of the same things during this meeting and the last meeting and suggests we take a small group of elk and tag them with a small and inexpensive tag to track them and use domestic livestock treatments for one year. He does not want to wait for people from France or Germany 10 years from now. We cannot wait to try something and need to act now. Gave the example of being a guinea pig for vaccines. He stated that the effects of Agent Orange on people are the same as the effect of timber companies and DNR spraying on the forests.
- After public comments were finished AS asked about the proper forum to ask about changing hunting seasons.

- NP responded that during the March/April Commission meeting this coming season will be finalized. Also, input on the next 3 year package starts in summer 2014, which would be the appropriate forum.
- DW said that input to the Game Management Plan starts now and it will be completed by 2014. Rationale is needed for changes.
- CM asked about the plan to capture additional calves as needed?
 - KM answered that that will be discussed with technical team and that it is not an easy thing to do.
 - CC offered to help with calf collections.
- NP made the closing comment that we will try to capture the group's comments. We are in an adaptive management phase where things change. Eventually the group will come up with recommendations for WDFW.
- A doodle poll will be sent to find a date and time for the next meeting.