

WAFWA Wild Sheep Working Group Meeting
January 6-7, 2015
WSF Convention-Reno, NV

(Scribe – Laura McHale, Nebraska Game and Parks Commission)

ATTENDEES (20 Members – 42 Total): Darren Bruning (AK), Amber Munig (AZ), Bill Jex and Helen Schwantje (BC), Tom Stephenson (CA), Andy Holland (CO) Hollie Miyasaki (ID), Bruce Sterling (MT), Laura McHale (NE), Mike Cox (NV), Eric Rominger and Kaitlin Ruhl (NM), Brett Wiedmann (ND) Froylan Hernandez (TX), Dustin Schaible (UT), Doug McWhirter (WY), Melanie Woolever (USFS), Kevin Hurley (WSF), Rick Kahn (NPS), Mara Weisenberger (USFWS), Clay Brewer (Chair)

Tuesday, Jan 6 (1:00-5:00 PM)

Welcome, Announcements, Introductions, Roster Update and Attendance Sign-up Sheet (Brewer)

- Dr. Sri has announced his retirement as of 9/1/2015. He will be receiving the Wild Sheep Biologist Award this year.
- Melanie Woolever to retire from the USFS as of 2/3/2015. She will be recognized with the Statesman Award on Thursday.

Review of Agenda/Additions (Brewer)

Convention Overview (Hurley)

Congressional Activity (Hurley, Woolever, Quamen, Brewer)

WSF update (Hurley)

- WSF is heavily engaged in FY 2015 appropriations language. The language from 2 years ago reappeared and could be problematic. This fall ASI and WSF jointly worked on a one sentence conclusion stating that the FS, BLM, and Ag Service need to cooperate. Greg Schildwachter (WSF lobbyist) is very involved and he will speak on Thursday afternoon during the Chapter and Affiliates meeting.
- **Thinhorn initiative, B.C.:** Contracted with Jeremy Ayotte serve as the sheep separation coordinator. His efforts will be spent in NWT and Yukon to work towards separation between thinhorns and domestics.
- **Western Governors' Drought Forum:** The 5th forum on Jan 28 and 29 in Santa Fe, NM and the topic will be recreation and tourism and the effects of drought. WSF was invited to participate - Kevin Hurley to attend. Kevin is requesting that chapters and affiliates, especially from dry states, send him talking points on drought effects and how to minimize (by 1/20). This is by invite only and a good opportunity to plug in sheep concerns into the Western Governors Association agenda.

Update: Risk Assessments/Next Steps (Woolever): Background on the risk of contact model was provided. The assessment is based on the Payette NF plan/decision. 70% of allotments in Payette NF were closed due to the risk of contact model outcome. FS is trying to move forward with best available science (forest wide, district wide, etc.). Region 4 had some litigation involving categorical exclusions and lost. In settlement agreement, a new NEPA analysis was required and a region-wide risk of contact assessment was required for reauthorization of domestic sheep allotments. One year ago – FS began working with state wildlife agencies to acquire bighorn observations, location information, sex ratios, etc. The effort began with UT. Data has been acquired and

cleaned-up for NV and western WY and the FS is moving forward with modeling data. Maps are completed for CO, WY, UT, and NV. This is a politically charged issue and a barrage of letter writing has occurred since June. FS is moving forward with risk of contact model using this science based process. Governors have also written letters – want to appoint someone to participate in the process to ensure transparency. The modeling outcomes have not been released. WY has some concerns. ID is in progress now. Cox inquired about the possibility of the effort being shelved because of fear. Woolever is hopeful that the effort will continue to move forward. Sage grouse, BHS, and water issues are coming together and people are pointing to federal over-reach. Intention is to move forward but the process has to be defensible. Not sure what the schedule is to release data. No plans for changes to any allotments at this time.

Update: 2014 Bighorn Sheep-Domestic Sheep Allotment Mapping Project Revision (Woolever): Layers are updated with information provided by jurisdictions. They have been uploaded on the WSWG website. Shape files will be posted on “members only” tab. Initial letters from ASI very critical that layers weren’t working group maps and that the scale was too coarse. States need to review their maps for validation purposes. Please notify Melanie if changes are needed so she that can revise accordingly. Definitions of “occupied habitat” are provided on each map.

WAFWA Letter to USDA, Secretary Vilsack - Risk Assessments/Viability Analysis (Brewer): Greg Sheehan (UT) suggested a letter come from WAFWA to USDA Secretary Vilsack to make it clear that states are the stewards of bighorn sheep and are responsible for the continued expansion and restoration. Concerns were expressed with USFS efforts to aggressively eliminate domestic grazing permits in favor of wild sheep and the potential for adversely impacting state internal efforts with stakeholders. Brewer presented a draft letter for review/editing for approval of the Directors at the mid-winter WAFWA meeting. Comments are to be provided to Clay by tomorrow.

Jurisdictional Reports (All)

- WY (McWhirter): Currently working with USFS on risk analysis. WY Working Group meets annually with sheep producers, NGOs, and others to discuss BHS/domestic sheep issues (met 3 times in 2014). McWhirter thanked Melanie for her support and assistance. 166 rams and 2 ewes harvested in 2014 (lower harvest than normal). Last time harvest was this low ~ 10 years ago. A lot of progress in disease surveillance. Sampled 120 sheep out of 9 different herds to determine what pathogens are present. Sampling of 100+ sheep captures is planned for winter of 2014/2015 winter for disease surveillance. A die-off (sheep area 5/Greybull area drainage) associated with severe weather event – 500 to 600 sheep loss, maybe a 30% to 40% population decline. Excited about transplant for later in winter in Seminole Mountains using Devils Canyon sheep herd – a source stock for herds around state. Bob Garrett’s mountain ungulate project – first round of GPS collars in sheep and goats retrieved (captured winter of 2012/13) with more captures planned for this winter. Project continuing with CO and MT involved as well. Hurley reported on a Casper permittee that has had BLM problems for years (trespass cattle grazing/now runs sheep). WSF has done own flights to document sheep grazing. Meeting with BLM was conducted in Worland to discuss continuing efforts. This is not an effort to tell the landowner what to do on private land but to explain the implications of trespass livestock on public land near a large BHS herd. WSF met with wool growers and stock growers to let them know and they were supportive and are putting forward a united front.
- TX (Hernandez): A wildlife vet position has recently been filled. Disease monitoring strategies and protocols will be stepped up. A capture is planned for this winter - 200 sheep to be translocated.
- ND (Weideman): In May 2014, discovered 30 domestic sheep 3 miles from BHS core range. Herd has had very high recruitment last 5 yrs. To date, 20 out of 24 Alberta sheep lost. Aug./Sept. die off has spread into 10 distinct herds with losses between 30 and 40%. Coughing and nasal discharge

observed. Official as of today - no hunting season next year. Samples sent to Dr. Besser at WSU – a unique strain of Movi was identified. Extremely controversial with the domestic sheep industry. Some believe that pathogens were brought in from Alberta. Population of 300 to 350 sheep in ND but now entire population exposed to Movi and future does not look bright. Lesson learned - ND chose to not swab sheep prior to bringing to US because they had been recently sampled by other jurisdictions but should have.

- NE (McHale): A few weeks after the ND die-off, a die-off began in NE. Current losses between 30 and 35%. Possible contact with domestics. Besser and Karen Fox helped identify Movi (a different strain than that found ND and Hells Canyon die-offs). A 2010 sample from a ewe in a neighboring herd showed same strain. Darted approximately 45 sheep with the antibiotic Zuprevo. Some darted twice and others darted with Draxxin. Results still pending. Survival in lambs is better than that observed in adults in both NE and ND.
- UT (Schaible): Implementing state wide management plan. Wanted to look at separation mapping and risk of contact - met with all biologists in Utah and delineated white and black zones where sheep can and cannot be. Have removed 26 sheep mostly Rockies. Several tested positive for mycoplasma. Aggressive sheep removal has occurred which helps with ag community (to show aggressive removal of sheep in certain areas). Finishing unit management plans. Public process for ewe harvest may be recommended for November of this year. Hired a wildlife veterinarian interested in sheep issues. Capture efforts – NV provided 71 desert sheep (split them up and flew them in), a big effort. Continue to work with Zion NP to reduce herd (550 desired but numbers still sitting at 800). Regarding mountain goats introduced in La Salles area close to CO, sheep were desired but too much risk of contact with domestics so mountain goats were used instead. Started with 20 then 15 so up to 35 but strong opposition due to natural area and sensitive plant species present. Continue to work with FS and monitor goats but haven't documented any declines as of yet.
- NM (Rominger): Caitlin Ruhl is the new BHS biologist. Non-resident allocations were discussed (heated issue). Draw tags so went from 82% to 0% last year. New # 5, 11, and 21 in the world for deserts. Transplants - 40 and 45 Rockies into burned area; 2 MS thesis – one using VITS and one looking at BHS with and without cattle.
- MT (Sterling) –115 permits were issued last year (99% hunter success). Many increasing populations across the state. The Commission rejected proposed out of state translocations and are pushing in-state translocation opportunities. Moved 40-45 out of the Breaks into other areas but moved them into areas that have historically had die-offs. A transplant from Madison to a location further north began today with the drop-net capture of 40-50 animals. Working with WY (Bob Garrett) on disease ecology study (180 samples in 6 herds). A die off in upper Yellowstone herd (30 sheep lost), has slowed recently with all lambs lost (unlike NE). Die-off killing a lot of big mature rams. Die-off slowing but probably not over (30% losses). Die off occurring west of river but nothing east of river, most likely the result of contact with domestic sheep. 9 radio collars are active – monitoring will continue.

2015 Disease Workshop (Brewer) – Information concerning the revised Bighorn Herd Health Monitoring recommendations and 2 planned 2015 disease workshops were presented.

TWS position statement (Brewer) - A joint position statement concerning, “Domestic Sheep and Goat Disease Transmission Risk to Wild Sheep,” from The Wildlife Society (TWS) and American Association of Wildlife Veterinarians (AAWV) was requested by WAFWA in a 2014 letter. This request resulted in a TWS fact sheet that was finalized in November. In addition, a joint issue statement is in progress. Clay, Peri and Kevin worked

on the first draft. The statement will ultimately have to be approved by TWS council and AAWV Executive Committee.

Project Updates/Discussion (Brewer)

West-wide adaptive bighorn sheep disease management (Cox/Brewer): Brewer discussed the importance of compiling a disease database to share die-off and disease events (a comprehensive list of jurisdictional attributes such as year, pre-population, loss %, contact, etc.). Concern was expressed by some about misuse of the information. We have multiple needs – share with media and constituents. Also need to be more precise and get a lot more information on each event and not just a snap shot (a true database with needed attributes and variables). The importance of this is not only to make sure the rest of the world is aware of the problem that exists on the landscape, but also to help us figure out commonality of disease events. Some information has been misused by others so we need control the information to ensure accuracy. Cox, indicated that the information is important for several reasons: (1) inherent responsibility and duty to get good information when sheep die (NR agencies, NGOs, media, and domestic sheep/goat owners, etc.), and (2) to better understand the variability or specific conditions to these outbreaks to look for commonality. Lists of variables that need to be collected have been developed. This needs to be a living database and we contribute to it. Definitions and attributes to be collected need to be agreed upon through a big forum or in smaller sub-committee (i.e., proximity to domestic sheep, specific time frames, coordinates, native vs transplanted sheep, etc.). Managers need to get with DVMs and prior to disease outbreaks. It is important to know what we did and what happened post event. It is a constant flow of change for losses and changes so a sub-committee needs to sit down and determine what level of accuracy and detail we need to document variability and commonalities of severe vs non-severe. We need research folks to drill into multiple variables in a multi-factorial analysis of what may be going on. This group has a responsibility to bring all our information together to develop a database sooner rather than later. Strength of group is to bring information together to get a picture of what is occurring and what is a driving disease outbreak. Brewer indicated that we are seeking people to sit on the subcommittee to develop the database. More information will be coming soon on this front.

Thinhorn Sheep: Conservation Challenges/Management Strategies for the 21st Century: A publication similar to the Bighorn Sheep Conservation Challenges publication that was completed last year is underway for thinhorns. Bill Jex, Troy Hegel, Darren Bruning, Helen Schwantje, Nic Larter, Jeremy Ayotte have taken the lead role. The document is based on the outcome of the WSF Thinhorn summit. A solid draft has been completed and Clay and Vern Bleich are currently editing. The goal is to present the publication to the directors at the summer WAFWA meeting.

Records of Wild Sheep Translocations in the US and Canada (Brewer/Hurley): Translocation records for all known transplants from 1922 to the present, continues to be a priority. The document will include an introduction, tables and maps broken down by exports, imports, and within for each jurisdiction. Updates for recent translocation efforts are needed. This document will be submitted to the Directors by the summer WAFWA meeting.

Population estimates, permits and harvest database (Brewer/Hurley): The population estimate spreadsheet has been updated. Updates are still needed for some jurisdictions. Please provide Clay with updates.

Non-Resident Wild Sheep Hunting Permit Allocations (Brewer): The table containing jurisdictional methods for non-resident permit allocations was presented.

Wednesday, Jan 7 (8:00 AM-12:00)

Jurisdictional Reports continued (All)

- NV (Cox) – Total harvest of 300 rams for all subspecies was reported including 242 desert rams. Slightly below normal hunter success. First ewe hunts: 100 tags issued with 75 harvested. Aggressive disease surveillance efforts underway (approximately 250 animals captured and sampled). 5% of animals will be sampled for potential translocations. Research is in progress concerning Movi (detection, strain typing and lamb recruitment and population growth rates with Movi). Peri Wolfe (NV) presented information concerning strain typing efforts. Strain types were different between NV and CA. Have worked with taxidermists to collect samples from herds in northern areas. Movi results and lamb recruitment results have been compared. Also using archived tissue samples from Santa Rosa's for Movi/PCR from a recent transplant. Results indicated a strain match from a 2003/2004 die off so could confirm the presence of Movi 10 years prior. Cox indicated that documentation is needed for movement of sheep into CA. Wolf reported on the aftermath of a 2011 die off and indicated that there are now some areas with lamb recruitment and some not. Samples from 10 ewes and 1 ram were sent to the "super shedder" project. East Humboldts 2009 2010 die off-cleared out survivors but mountain goat population had same pathogen profile as the BHS and poor kid recruitment. Brought in 20 Alberta sheep into East Humboldts and now investigating whether goats will transmit disease to BHS. Recovered 3 dead kids and had severe pneumonia and same suite of pathogens as in some BHS populations. Appears that goats have same response to pathogens.
- ID (Miyasaki) - Working with USFS on risk assessment. Almost done with data clean up and will meet in February to talk about data and initial runs of model and source habitat. Working with OR to potentially remove a remnant population of toxic ewes - hope to capture and include with Frances Cassirer's project. Surveying Lost River Range (fastest growing population – 240+ animals) that may be used as an in-state source population. Working with attorney general regarding transplanting sheep within state – many steps required for translocations (i.e.-commission, permittees and private landowners, public hearings desired, must notify senate pro tem and house leaders, and acquire letters from land mgmt. agencies, etc.). Hebdon (ID) - Met with county 4H leaders to introduce the healthy livestock/healthy wildlife concept. Plans to visit with 4H kids about fencing as a way to separate 4H sheep and wild sheep. Planning creative brochures for dialogue but plans to do it in a way that is friendly and not aggressive (to enhance community and parental support). Working at county level now but two leaders in Idaho are interested and trying to take it to the state level. National level may be of interest. Needs to be a safe conversation or it will be shut down.
- CO (Holland) – Rocky Mountain Bighorns in CO stable. 2015 harvest recommendations will be up slightly. Added several new units this year. The remainder of Gribbles Park herd was culled and restocked through 2 transplants of healthy sheep. Domestic sheep risk assessments: BLM has finally started moving in direction of using the national risk assessment model. Many BLM allotments near some native, high population sheep herds so there is concern. Adding GPS collar data to preempt some of the analysis. Silverton and Durango area domestic grazing EA: A joint letter with Department of Agriculture was submitted. Hoping this request for a joint letter was not a precedent. In the end, due to controversy the USFS pulled back and will do full EIS. The preferred action was to close vacant allotment which would have been a big win but it is back on table. Desert sheep in CO: Stable at 515. Twelve licenses this year slightly up last couple of years. Mtn goats: 1400 total goat population. Declining mostly intentionally with liberal and aggressive harvests. Have new unit

opening. All goat herds hutable except 1 with only 5 individuals. 10-11% harvest in goats; BLM risk models have not been ran yet. Fox (CO) reported on a coccidia outbreak in mountain goats near Mt. Evans 2 yrs. Ago (diarrhea on hocks of young). Aggressive culling for disease testing was performed but it appears to be cleared up now.

- CA (Stephenson)-Sierra Nevada bighorns has been an aggressive recovery program with the current population estimated at 600 animals. BHS occur in all units now but may not all be breeding herds. Getting closer to figuring out what is needed for down-listing. Engaged in disease risk issues for Sierra Nevada sheep and risk of contact on federal lands. Some hotspots where grazing is continuing. With a fully functioning meta-population, staff are now trying to determine what management options should go into a disease management plan. Hoping to radio-collar (GPS) 1/3 of ewes. Highest disease risk areas will have 100% of rams collared if possible. Trying to get a good handle on animal movements and sample every year. Desert sheep: 1,000 animals reported. Mohave: detected an outbreak summer before last so there was a large collaring effort the following fall. Monitoring has been less than optimal in last few years because of no surveying contract in place. A contract will hopefully be in place by next fall. No surveying or collaring is occurring at this time. Sampling has indicated: Movi in south and none detected in north but still not certain that Movi isn't present. Animals collared in 2013 have indicated an adult-female survival of 92-95%. Lamb:ewe ratios weren't bad with 25 to 40 lambs per 100 ewes reported. Solar array: A corridor between 2 ranges that is heavily used by sheep is the potential location for a solar power plan. An internal draft EIS between NPS and BLM is in progress. The power plant would essentially preclude animal movement so the WSF, WSF-CA and the public provided input to Secretary of Interior. Mohave NPS are standing on their authority to actively oppose this project.
- BC (Jex) – Thinhorn populations are stable. Year 2 of genetic study with University of Alberta is in progress, which should narrow down the geographic boundaries for thinhorns. Harvest is on target with 340 per year in BC. This spring, cross border surveys will be conducted to evaluate areas lacking sheep. Icing may be the issue in these areas. Allocation policy in BC has been tweaked again this fall for residents and non-residents. Disease: Trying to define the northern thinhorn sheep range thru “government action” in an effort to achieve separation. Schwantje (BC) reported that 2 transplants are under review. The first is intended to reduce numbers and to supplement another herd, and the second is a Rocky Mountain bighorn relocation. Two telemetry projects are planned for this winter with the first associated with an infected Rocky Mountain herd shared with WA and the second on a northerly herd shared with with Alberta. Jeremy Ayotte (BHS separation program coordinator) is actively trying to find funding for fencing projects. There are 2 to 3 high priority mitigation properties. Funding has been provided by Ag sources and WSF, which is intended to protect winter range. Landowner agreements have been problem and legislation is clearly needed. Separation program has a logo and motto – “Healthy wild sheep, healthy domestic sheep” and using social marketing to bring out the message. Also, local political pressure on the agricultural sector. Now looking at legislative options to promote separation. A die-off database would be a tremendous help. Jex reported on mountain goats: Populations in north are strong, with harvest about the same as in the past. Off road vehicle use continues to be a significant management issue (trails thru goat and sheep areas in north). Working now to get access legislation. In the south, numbers are slightly down with recreation as one potential impact. Harvest rate is low.
- AZ (Munig) - 107 permits issued with 95% harvest success. Overall, numbers are up so permit numbers should be up this year. Three translocations are planned this year. Hwy 93 overpass monitoring: Had >5,000 crossings on overpass. Underpasses not successful with only 32 crossings in last 2 years on 3 underpasses. The Tonto NF EA for helicopter landings: December 15th was the deadline for formal objection period for EA. During the 45 day period for FS review had >100

objections with 12 of those being significant. The 45 day period will be up at the end of January. It will probably be approved but an appeal from various opposition groups is anticipated. Ben Brochu reported on the Santa Catalina project: 31 sheep released with only 14 surviving (almost all mountain lion predation, 1 bobcat predation, 1 myopathy and 1 with a liver issue). Three lions were removed which was controversial. A predator management plan was required and an advisory committee consisting of 8 people from NGOs, sportsman groups, etc. was developed. The biggest hurdle was developing the mountain lion management plan. Advisory committee recommendations to the agency resulted in candid discussions and although heated, the end product was good. The effort was especially good when it hit the media. Kevin stated that the EA, developed by the USFS and AZGFD was well written and a good example if one was needed.

- AK (Bruning) – Mortality event in western Brooks Range has occurred over the last 2 years (2013/2014), with a 50-80% decrease since 2011. One range went from 200 to 8 sheep. The 2014 hunt was closed by emergency order. One area went from 33 lambs:100 ewes in 2011 to 2 lambs:100 ewes in 2014. Mortalities are due to weather events with late winter snows and icing denying access to forage. The ADFG report for Board of Game that oversees the agency was completed in December to address concerns by public about sheep hunting regulations. May be some proposed changes to sheep hunting regulations coming. Dalls sheep population estimate as of 2010 – 45,000 sheep. Three year study began last year to compare road based and aerial survey of Dalls sheep on military lands. Thinhorn summit was a good catalyst for change. Currently seeking legislation for separation and people are now thinking about planning processes (good catalyst).

2015 Bighorn Disease Overview/Preview Workshop (Dr. Peregrine Wolff):

Upcoming Meetings (All)

- Desert Bighorn Council-April 2015, Borrego Springs, CA
- Disease workshop-Scheduled for summer 2015, Ft. Collins, CO

Next WSWG meeting: Teleconference, April 2015

Meeting adjourned