

## WAFWA Wild Sheep Working Group Winter Meeting

1:00 – 5:00 PM February 8, 2011

8:00 AM – Noon February 9, 2011

Reno-Sparks Convention Center, Room #A6

### Tuesday (February 8<sup>th</sup>)

(minutes taken by Elise Goldstein/NMDGF; finalized by Kevin Hurley/WSF)

#### ➤ Introductions/Welcome (Kevin)

Attendees (13 of 22 WAFWA WSWG members present): Becky Schwanke/AK; Bob Henry/AZ; Tom Stephenson/CA; Dale Towell/ID; Todd Nordeen/NE; Mike Cox/NV; Eric Rominger/NM; Brett Wiedmann/ND; Anis Aoude/UT; Doug McWhirter/WY; Melanie Woolever & Eric Tomasik/USFS; Tom Rinkes/BLM; Kevin Hurley/WSF.. Unable to attend: Jim Allen/AB; Helen Schwantje/BC; Janet George/CO; Tom Carlsen/MT; Don Whittaker/OR; Ted Benzon/SD; Froylan Hernandez/TX; Donny Martorello/WA; Troy Hegel/YK.

Guests: Hunter McDonald; Sandra Brewer/BLM; Steven Siegel/NDoW; Leann Murphy/USFS; Darren Bruning/USDA Wildlife Services; Richard Nelson/NEGPC; Glen Contreras/USFS; Amber Munig/AZGFD; Neil Thagard/TRCP; Caleb McAdoo/NDoW; Peri Wolff/NDoW; Colin Gillin/ODFW; Elise Goldstein/NMDGF; Kristine Harman/UC-B; Vern Bleich/CAGFD & UN-R; Kelly Stewart/UN-R; Tony Hillis/ADFG; Wayne Heimer; Brianne Winter; Pattie Soucek/USFS; Chans O'Brien/USFS; Suzanne Rainville/USFS.

Kevin distributed the current WSWG roster, asking for edits/updates to agency rep contact information; **Action Item: Kevin will disseminate an updated roster to the WSWG, and have the WSWG website updated, too.**

#### ➤ WSWG Chair position (Kevin/All)

Kevin Hurley has chaired the WSWG for the past 4 years. For the past 2 years, he has spent 50% of his time with WGFD on Wyoming bighorn sheep issues/management, and the other 50% chairing the WSWG. WAFWA agencies (n=17) have each contributed 2% of the funding toward Kevin's position (and are committed to do so next year), WY put up 20% and 9 wild sheep NGOs have contributed 46% of required funding. Kevin has been frugal with all cooperators' \$, under spending available/projected funds by ~15%. As of January 31, 2011, Kevin has "retired" from WGFD (now working for the Wild Sheep Foundation), therefore a new WSWG chair needs to be found. This opening/opportunity was discussed via WSWG teleconference on 11/9/10, and agency reps were asked to consider stepping into the WSWG chair vacancy. Discussion ensued as to who could possibly serve as new WSWG chair, as well as discussion of different approaches/models for WSWG leadership. Kevin recounted that Clay Brewer (TPWD) and his administration is potentially interested in this opportunity; many details remain to be worked out, including Years 3 & 4 \$ commitments from WAFWA agencies/Directors. The WSWG unanimously agreed to try and secure Clay Brewer as new WSWG Chair; we would like to have Clay in place as WSWG Chair no later than May 1.

UDWR Director (and WSWG Director Sponsor) Jim Karpowitz is a great driving force of support for continued existence of the WSWG. Concern that if Jim should leave, that WSWG won't have a Director Sponsor. Dale T. suggested that we find a group of 3 WAFWA agency directors to sponsor WSWG, in case Jim K. would no longer be able to perform that role; Kevin pointed out the difficulties WAFWA had with securing Director Sponsors for the many WAFWA committees and working groups, and realistically, did not see a trio of WAFWA agency directors functioning as a triumvirate. It was recommended that WSWG agency reps consider which of their respective agency directors might fill that void, in the event Jim K. retires/moves on, so the WSWG doesn't have to start from scratch. **Action Item: WSWG unanimously agreed that Kevin H. should stay on as an NGO representative from the Wild Sheep Foundation to the Wild Sheep Working Group.**

#### ➤ WAFWA Directors January 6-9, 2011 meeting, Tucson, AZ (Kevin)

- USFS & BLM briefing papers on Management of DS & DG in WS Habitats
  - USFS & BLM BHS/DS policy updates? (Eric T., Tom R.)
  - USFS R1 BHS as "Sensitive Species" (Eric T.)
- 1/20/11 ASI DS/BHS Workshop, Reno, NV (Kevin)

Summary of recent meetings:

Kevin reported on his WSWG presentation to the WAFWA Director's mid-winter business meeting in Tucson, AZ on January 8, 2011. Updates were provided to the WAFWA Directors on the final decision/pending appeals on the Payette National Forest (PNF), and on the 10+ BHS pneumonia dieoffs in 5 western states, over the past 18 months.

Kevin briefed attendees on the USFS and BLM briefing papers presented to WAFWA Directors in Tucson. USFS is proposing clear direction (into USFS Manual) that separation between domestic and wild sheep is imperative; draft policy is awaiting internal USFS review. Draft policy mentions the WSWG GIS mapping effort to display/juxtapose occupied BHS habitat with vacant/active DS grazing allotments and trailing routes. Very tentatively hoping to have this policy revision done and in USFS Manual by end of calendar year 2011. Tom R. reported that the BLM policy will closely mirror the USFS language. BLM has language saying BLM will work with State and Tribal groups, too. Changes through BLM land use planning will provide long term solutions. Dale T. mentioned that ID has a state policy regarding separation.

Kevin asked, and Eric T. clarified that USFS Region 1 was currently evaluating designating bighorn sheep as a sensitive species, region wide. Eric indicated state agency support for this, but said the Regional Forester's letter is not yet signed. It was pointed out that USFS Region 2 made this designation in March 2007; Region 4 in July 2009. Region 3? - not sure (**Action Item: Eric or Melanie check w/ Gail Tunberg on this**). Region 6 OR/WA: BHS were designated as sensitive species, but then that designation was removed (when??). BHS in Region 5 in CA are not designated as such. Designation as sensitive species requires USFS to analyze more data/more closely, and be proactive rather than reactive, in protecting BHS habitat; a more in-depth "viability analysis" is required, as opposed to an "effects analysis". Tom R. stated that BLM has BHS designated on a state-by-state basis; in general, CA BHS are considered sensitive species by BLM, but RM BHS are not.

As several of this WSWG meeting's attendees were present at the American Sheep Industry (ASI) BHS/DS workshop in Reno, NV on January 20, 2011, discussion ensued as to what transpired. About 100 people from diverse backgrounds attended, twice as many as anticipated. Presentations were given by Jeanette Kaiser, USFS Range Program Lead from DC, Dr. Neil Rimbej (U. of ID ag prof), Jason Fearneyhough, Director, WY Dept. of Agriculture. Bryce Reece/WY Woolgrowers & Kevin presented the Wyoming DS/BHS Interaction Working Group history. Dr. Don Knowles/ARS also presented. Good, lively discussions ensued after those presentations. Meeting attendees tried to come up with strategies for domestic sheep and bighorn sheep to coexist on the landscape. Kevin pointed out that this workshop was not well publicized to WAFWA agencies, as invitations to attend were incumbent on individual state woolgrower associations. At their 1/8/11 meeting, Kevin requested WAFWA Directors send either their wild sheep management biologists and/or wildlife veterinarians; at least a dozen WAFWA agency personnel were able to attend/participate/contribute to the workshop discussion. WAFWA Directors wanted Kevin to clearly state the collective WAFWA opinion/recommendation that separation between BHS and DS was imperative, and WAFWA agencies were not interested in further debating the science of, and need for, temporal and spatial separation. Kevin stated that no one at this workshop publicly questioned or condemned the concept of separation. There was some discussion of fence lines providing enough separation to prevent disease transmission, but it was clear that fenceline contact would still allow transmission to occur. Woolgrowers et al. suggested coming up with a new set of BMPs, but it was pointed out that many BMP recommendations have already been compiled (e.g., USAHA, CAST, WAFWA WSWG, IDFG/Idaho Senate Bill 1232a, Sierra Nevada, etc.); emphasis should be on validating/testing which BMPs actually might work/contribute to effective separation. It was proposed to identify gaps in research on the issue of contact/disease transmission, but others pointed out this has already been done at previous workshops/meetings. ASI leadership/facilitator will put together DS/BHS workshop minutes/action items; no future meeting plans for ASI's DS/BHS Task Force were clearly stated.

Kevin reported that, on behalf of the WAFWA WSWG, he had attended/presented at the Native American Fish and Wildlife Society Pacific NW regional conference in Lewiston, ID in late October 2010; Kevin has made preliminary arrangements, and would encourage WSWG presence/presentation at the national NAFWS conference in Custer, SD in early May 2011.

- GIS Mapping project - all Wild Sheep translocations in U.S. and Canada (Kevin/All)

Translocation mapping project still continuing - Richard Jones (contractor) has used up available \$, as of September 2010; Kevin is trying to find add'l \$ to finish this project. Still need translocation data from a few states to finish up. Action Item: please continue to submit wild sheep translocation data to Richard Jones ([rejones@wavecom.net](mailto:rejones@wavecom.net)).

- USDA/APHIS/Veterinary Services 11/15/10 meeting update (Colin G., Peri W., Todd N.)
  - NMDGF update on importation of N=10 desert ♂ from Mexico (Eric R.)

Kevin briefed attendees that back in June 2010 in Hood River, OR, NV and NE had visited w/ Jim Allen about importing BHS from Cadomin Mine/Alberta; Jim A. indicated AB's willingness to provide BHS, but pointed out the current USDA/APHIS/Veterinary Services ban on bringing sheep across the border, so this notion ran into problems. In early October, Kevin made contact with Dr. Peter Merrill and his staff with USDA/APHIS/VS Office of Live Animal Imports, and was able to arrange a face-to-face meeting in Minneapolis, during the annual USAHA meeting. Kevin was unable to attend, but Bruce Trindle/NEGPC and several agency wildlife vets (i.e., Colin Gillin/OR, Peri Wolff/NV, Mark Drew/ID, Leslie McFarlane/UT, Jennifer Ramsey/MT) sat down with Dr. Peter Merrill and Dr. Diane Sutton, to discuss steps necessary to pursue possible importation of BHS from AB, to the states. Colin G. and Peri W. recounted that discussion, recognizing that sheep and goats are currently banned for import (except for slaughter), because of prion diseases, specifically, BSE. USDA/APHIS VS is tentatively planning to address these import restrictions for sheep and goats imported for captive collections (e.g., zoos, etc.). USDA/APHIS VS said they would consider granting a permit to states wishing to import BHS from Canada. This willingness to entertain an exception to the current ban was due to the information provided that there is no published report of scrapie or BSE in BHS, the Cadomin Mine herd has been extensively tested for disease over many years and that importing states would only be putting BHS into areas where there would be minimal to no contact with domestic sheep. To streamline the process for obtaining an import permit, Dr. Merrill encouraged NE and NV to submit a single/joint permit. Mike C. and Todd N. stated that both NV and NE intended to work on this request. To ensure adequate lead time, paperwork should be submitted to Dr. Merrill's office at least 6 months in advance of the importation. This exception/permit waiver by USDA/APHIS VS is for BSE only and there is no other required testing for import, beyond what the recipient states require. Dr. Sutton stated that if states were planning to put BHS in a high-risk situation w/ potential contact/conflict with domestic sheep, that this could potentially impact USDA's decision to grant a permit. The wildlife vets in attendance felt that this statement was inappropriate for this particular discussion, but didn't pursue that debate. Eric R. and Elise G. briefed attendees on NMDGF's efforts to import 10 desert BH rams from CEMEX in Mexico (see NM update, below)

- Sierra Nevada BHS/DS update (Tom Stephenson)

Tom S. – Update on Sierra Nevada BHS situation. SNBHS are federally-listed endangered subspecies in eastern CA; their range was dramatically reduced by the 1970s, when only 2 populations were left. By the 1990s, there were only ~100 animals, and they were emergency listed in 1999, with final listing in 2000. Through translocations and colonization, population increased to the current estimate of ~400. 4 recovery areas –N, central, S, Kearn; Kearn is currently unoccupied. N and central have highest disease risk. Domestic are on USFS and BLM land. Recovery Plan specifies a minimum of 305 adult ♀, distributed among 12 of 16 herd units, for delisting; there are currently ~200 ♀. Recovery Plan identifies disease transmission as a problem, and this must be alleviated for delisting to occur. Some DS grazing allotments were closed in 2001; in 2007, SNBHS task force recommended closing additional high-risk DS allotments.

A Recovery Team subcommittee made up of diverse people was developed to quantify risk. Anticipated working for ~6 months, but it took 2+ years to get results. Risk was based on resource selection and spatial models. Everyone agreed that contact between wild and domestic sheep was bad, but couldn't get all folks to agree that there was a disease issue. They modeled probability of a BHS moving into an area, based on GPS data. Polygons of known movements and possible movements were overlaid with BLM and USFS land status. Also evaluated cumulative multi-year risks. In 2010, all high-risk DS allotments were vacated, but not necessarily closed. BLM is preparing an EA to direct grazing on their lands, and USFS is evaluating closures and need for an EA. USFWS is still working on their formal consultation paperwork.

They also modeled demographic effects of respiratory disease. They used conservative estimates of mortality, and ran the model using medium impact (lamb mortality only) and severe impact (65% adult mortality) that lasted for a few years. Bottom line, the longer the population has to grow before a disease outbreak, the higher the odds of recovery in the future. Model was not density dependent. There has not been an outbreak since SNBHS were listed, because at that time, there were very few SNBHS in the northern area where they would have been most susceptible.

➤ USFS/BLM GIS mapping project on DS allotments & trailing routes vs. occupied WS ranges (Kevin, Melanie/Eric T./All)

Brief history on this mapping project was given by Melanie and Kevin. Discussion turned to unoccupied, but suitable BHS habitat – is there a way to protect it from DS grazing? Not really. If there is a management plan in place, it can help. From the DS viewpoint, what is protected if the bighorn population expands? Where does it end? This could be a good topic for WAFWA WSWG to discuss. It was pointed out that WY has a plan in place that addresses it. In ID, there are tribal considerations there, and tribal treaty rights supersede other, more contemporary agreements/land use plans/regulations. What happens if a rancher wants a conversion from cattle to sheep? Where is it ok? In UT, they would only designate potential BHS habitat in areas they know there are no DS, and probability is low that DS would occur there in the future. In WY, their statewide DS/BHS Interaction Working Group agreement has 4 signatories (WY Game & Fish Commission, WY Dept. of Ag, WY Woolgrowers, WY Wild Sheep Foundation), but neither USFS nor BLM could/would sign the Wyoming final report.

WSWG could provide Melanie info on unoccupied but still suitable BHS bighorn habitat, but we first need to complete the current mapping project showing occupied BHS habitat. Several state agencies are still working on “edge-matching” resolution; **Action Item: States should send any revisions to existing draft state maps to Melanie/Janice Wilson no later than March 8, 2011.**

How do you find alternative allotments for displaced domestic sheep without creating additional resource conflicts? Some livestock grazing allotments/areas are retired (not just vacated) because of other resource issues/concerns (e.g., sedimentation and anadromous fish spawning beds). The recommendation was made to look at vacant allotments as possibilities for domestic sheep to move to, not closed allotments. However, there have been many cases of offering a vacant allotment as an alternative and having permittees turn them down, over and over. Agencies need to compile this information to let DS permittees/industry know if there are realistic, viable alternative allotments out there. It was pointed out that if there are not alternate allotments available, collectively we should stop telling folks that we are going to try and find alternatives for them to relocate their operations to.

Melanie stated that ~\$1.5 million has been spent on litigation and EAs regarding wild/domestic sheep interaction. Risk assessment models can help USFS be more consistent with how USFS implements on-the-ground management strategies. It was stated that there are concerns that each state/each national forest will be held to the same standard of analysis and data as the Payette situation had; we don't all have those available data. NEPA decisions are very different, depending on how much risk different national forests are willing to incur. USFS going to start working with UC-Davis landscape modelers and disease epidemiologists to see if USFS can make/adapt a more general model, that isn't as data intensive as for the PNF. **Action Item: By March 8<sup>th</sup>, Melanie is going to e-mail specific BHS demographic data needs (e.g., population size, trend; ♀:♂ ratios, lamb:ewe ratios, etc.), by herd, to Kevin, for dissemination to WSWG reps for each state, to help USFS develop a design/analysis that will be science-based,**

**with some consistency. As DS allotments are closed, things will get more politically charged; USFS needs these data and recommendations, to be consistent. Data due for population information to Melanie is April 1.**

➤ Update on BHS dieoffs in MT, WA, NV, UT, WY, elsewhere (All) deferred to Wednesday 2/9/11

Adjourned for the day 5:00 PM

### **Wednesday (February 9<sup>th</sup>) 0800 start time**

➤ Round Robin Discussion: major/recent WS happenings in each jurisdiction (All)

### **Jurisdictional Wild Sheep Updates/Summaries**

AK (Becky) 5 mountain ranges with wild sheep. In South/Central, ADF&G changed harvest from open to limited-draw hunt because there were sharp population declines after 2003, but they didn't know why. Tom Louhis has been looking at Dall sheep demographics/disease, and found a few sporadic pneumonia deaths. Since the hunt has been limited, Dall sheep ♂ #s are rebounding. Statewide, 800-100 Dall ♂ are harvested each year; AK residents want to hunt each year, so they are not necessarily happy about the limited drawing, and hunter pressure may be shifting to other general/open mountain ranges. ADF&G is looking into if the overflow issue is a problem. Statewide, ~ 70% open hunt, 30% draw.

AZ (Bob) Black and Kofa Mountain populations still at low levels, so AZGFD not doing many transplants. They moved 30 desert BHS from a re-established herd outside of Phoenix. Still lots of lion predation problems on the Kofa NWR. Looking at BHS disease profiles, but don't see evidence of disease causing die-offs, except for finding a high rate of *Mycoplasma*, but this is confounded with lion predation. FWS has been sued over maintaining water sources in Kofa NWR Wilderness area; lower court upheld FWS actions, but appeals court overturned it. FWS doesn't want to go back to court, so don't know what will happen. FWS didn't make a strong enough case that the waters were necessary. Have lots of problems, from activists over FWS Wilderness, but not as much with BLM. FWS doesn't seem to want to actively manage very much; more interested in observing. If there are BHS declines, then they don't really want to get involved. EA/Decision Notice for domestic sheep trailing routes in the Tonto NF supposed to be issued later this month. Energy development – mostly solar, and not impacting BHS habitat much; if wind development increases, could be a problem for AZ BHS habitat.

CA(TomS.) Inyo NF: Wilderness/wildlife management issues – wilderness groups putting pressure on USFS, and EAs are being written to address the various issues (e.g., BHS capture operations). There are wildlife management needs, but wilderness restrictions leave CADFG unable to manage. Sierra Nevada – increase in lion predation in 1 portion of the range. Peninsular – endangered segment in the portion by Palm Springs, contracted out for a management alternatives analysis. Focus is moving some from the captive population at the Bighorn Institute to repopulate this subpopulation. Rest of BHS populations in the state are doing generally well, with some repopulation efforts underway. CADFG concentrating on additional BHS surveys. There are ~30 BHS hunting permits statewide. Statewide desert population estimate is ~4000 BHS, but many are on/in Nat'l Parks. A new bighorn biologist was recently hired-Regina Abella. Solar energy development – more time being spent on it agency-wide, but with hiring restrictions, don't have enough folks to work on it. Impacts to BHS are a concern.

ID (Dale) Payette starting to wrap up. IDFG was sued by the ID Woolgrowers because the agency had not done enough to help the displaced allottees; that lawsuit was just thrown out. BHS plan was just completed, and it included a lot of demographic data. Took a RMBS 197 4/8, and a new record CA 185 4/8. Interstate focus is on corridors, with a pilot project looking a variety of species especially on ID/MT border. The Centennials and the area outside Henry's Lake are focal points because BHS are often affected by domestic sheep here. **Action Item: Kevin will check with Tom Carlsen/MTFWP on potential DS grazing issues/concerns in the Centennial Mountains.** Some interests are

trying to get approval for an additional BHS enhancement tag, with \$ to go to general IDFG fund, not specific to ID BHS program; IDFG concerned that it could replace some of the other tags.

NE (Todd) NE has population of ~300 BHS, as a result of 4 reintroductions, with most occurring since 2001. Still some disease issues; some herds have low recruitment. 4 suitable habitat sites for reintroduction have been identified. Domestic sheep industry has declined in NE, but there are still pockets on private land. Harvested 15 ♂ total since 1998. Built a double fence for two landowners with domestics, both 7' tall woven-wire fence on 1-acre and 3-acre properties.

NM (Eric & Elise) Huge issue working with USDA/Vet Services to transplant 10 desert BHS ♂ from the Pilares facility in Mexico to New Mexico's Red Rocks captive breeding facility. Health testing requirements have been unreasonable, and large changes to protocols have been repeatedly made by USDA/VS without pointing them out to NMDGF; that has made it almost impossible to follow the rules. NMDGF downlisted desert BHS to threatened in 2008, proposed complete delisting in June 2010, hoped to get done by now, but administrative delays have prevented it. NMDGF trying hard to open the 1st statewide desert BHS hunt next season. USFWS is resistant to allowing a desert BHS hunt on their lands (i.e., San Andres NWR). Impression of anti-hunting bent from USFWS. NMDGF would like to have 1<sup>st</sup> wild-caught transplant this fall if Ted Turner (landowner) folks are agreeable. Current population estimate is 550-600. Looked at efficacy of offending-lion culling only; essentially not very effective because of low success rate. Bills were proposed to combine NMDGF with other agencies and abolish State Game Commission; all tabled for a year. Another bill was proposed to change the 78% in-state/22% out of state hunter license allocation to a 90 -10% split, with 8% NR outfitted and 2% NR non-outfitted. Rates are varied in other states, but 90-10% seems to be most common. Anis pointed out that UT combines units where there are not enough tags, so that they can offer some out of state BHS tags.

ND (Brett) Since the 1990s, the population has tripled, but 3 bad winters have stabilized the populations at ~300. Had a record # (12,000) applications for 5 BHS tags. In 1956, NDGFD brought in CA BHS from BC. In 2006-7, brought in Rockies from MT (Missouri Breaks). One group went to unoccupied habitat, the other to augment the CA BHS, and the "hybrid" population doubled its recruitment rate. Oil development has taken off, and NDGFD is trying to keep it away from BHS lambing areas. USFS recreation programs are expanding hiking trails through lambing areas. NDGFD has documented lambing grounds that the bighorn abandoned after the USFS routed trails there. USFS has subsequently closed the trail, but it is still physically there, and folks are still using it. Collars are maintained on the herds, so NDGFD has good movement data. BHS seem to acclimate to trucks, but not to hikers. WSWG members encouraged Brett to publish these data/conclusions. NDGFD and USFS will be doing a major burn for p-j reduction; USFS working on a programmatic EA for this. Brett acknowledged Kevin's assistance with this effort.

OR(Colin & Vic) ~3,700 bighorn in the state, mostly CA BHS. Relocated 60 CA BHS in Dec.; 20 sent to augment Seminoe Mtns in Wyoming, some to BLM lands near John Day Fossil Bed National Monument on mainstem John Day River. Craig Foster and others are looking at nutrition and low recruitment issues assumed to be caused by feral horse use in the Diablo herd. RMBS in NE part of the state have poor lamb survival from pneumonia; populations are stagnant. One geographically isolated herd seems to be doing well at ~180 BHS. Lostines had 3 surviving lambs and this is the 5<sup>th</sup> year of poor survival. High prevalence of *Mycosplasma*. Statewide estimate of ~600 RMBS; ODFW had to reduce hunting licenses. Hart Mtn population went from 600 in 1996 to 130 at present; research indicates primary cause is cougar predation.

TX (Kevin) Statewide estimate of 1400+. A transplant was conducted of 46 desert BHS to Big Bend State Park, and a transplant on the Mexico side of the border, too. Froylan Hernandez is the new bighorn biologist for TPWD. TPWD have removed ~1000 Barbary sheep in some areas over the last 3 years. Diseases are not much of an issue, it is the rut disruption.

UT (Anis) Populations are fairly stable, with the exception of a few pneumonia die-offs, declines in the N San Rafael and Escalante. UDWR going to start a study to identify causes, and do some lion control; there is low recruitment. RMBHS are doing well. Pneumonia does not seem to have spread from the Goslin Unit (N slope Uintas). 45 Rocky and 33 desert tags issued last year; this is an increase in desert tags. A desert BHS population near Zion NP that was put there in the 80s has recently grown; there are domestics in that area that are of concern. Antelope Island had a population decline (not an all age die-off), and UDWR was trying to start a research project but with legislature in session, they cancelled it to save \$. Now, they are having good recruitment, so that might have just been an isolated incident. After many years of trying to get hunting authorized on Antelope Island, there will be 2 ram permits there this year (1 public, 1 auction).

WY (Doug & Kevin) Going pretty well, with population estimate of 6,000+ state wide. Whiskey Basin had a pneumonia outbreak, and is struggling, not sure of the cause. Jackson herd had a die-off ~7 years ago, some recovery, but still issues. A BHS/Mtn Goat collaborative study in the Greater Yellowstone Area is being started with Bob Garrott at MSU, with MTFWP, IDFG, WGFD, YNP. WGFD is encountering problems with USFS Wilderness restrictions for captures; Melanie encouraged Doug to work with Shoshone NF/USFS to do Minimum Tool Analysis or EA to get it done, as per the FS Manual. Kevin sent out a 2008 WAFWA/USFS/BLM document that deals with wildlife management in Wilderness. WGFD looking to implement ewe season(s) in some hunt areas. Statewide DS/BHS Interaction Working Group still ongoing. Domestic sheep industry wants to look at an intentional free-range exposure/contact experiment; that will be further discussed on 2/23/11.

NV (Mike) There are many BLM Wilderness areas in NV, so NDoW is required to submit projects annually to the BLM for their approval. Desert BHS herds in general doing well, with 216 tags. CA BHS herds are ok, 15 tags. NDoW recommended ewe tags, but they were not approved. Restoration program has been hit hard, and NDoW not moving forward with it, because their Commission won't allow it. NDoW working on increasing coordination and communication with the Feds and ~12 domestic sheep permittees, to watch for wandering rams. NDoW put GPS collars on 3 at-risk herds where animals were dispersing further than anticipated to look at pathogen exposure and if there is a link to genetics. NDoW biologists have met with DS permittees and BLM to look at trailing routes in time and space. S of Las Vegas, there are big playas where they are looking at solar development, and some ridges in BHS habitat for wind power that could have impacts (but not yet).

➤ Sec'y of Interior Order 3310/BLM "Wild Lands" Policy/Implementation: Effects on WS Habitat Management? (Tom R.)

BLM –Protection measures for Wildlands are different from Wilderness or WSAs. BLM needs to make changes, to provide for certain activities through land use plan amendments and revisions. State agency biologists need to get involved on the local level to make sure the language gets in there to manage for BHS habitat. There will be issues with initial implementation, with differing interpretations by disparate BLM offices. Issue with implementation, given federal agency budget cuts.

➤ BLM Feral Horse & Burro update (specific to wild sheep habitat) (Tom R.)

Feral Horses and Burros – \$64Mil budget, asking for an increase to \$74 mil. Most of the funds are used to take care of horses in holding facilities. The # of horses in captivity increases each year, and with the bad economy, no one is adopting them. Folks are still dumping horses out on public lands. Looking to purchase a wild horse preserve in western states – Madeline Pickens, but BLM doesn't want that. Looking at PZP fertility treatments, but with declining budgets, it is a problem. WY sued BLM over horse numbers, and prevailed. With a Consent Decree in place, BLM is actively removing feral horses, trying to achieve AML. NV has big problems with feral H&B in BHS habitat; conflict with BHS in some herds, some herds not doing well but other are. Big push by wild horse advocates to not remove horses from the range. Estimate ~38,000 feral horses in the west, at least 12,000 over AMLs, and another 38,000 in captivity. In AZ, Bob pointed out that burros are the problem, 2000 out there, every few years they round some up. Issues with water because they can use wildlife waters, but since they are not considered wildlife, they are not

planned for. Enclosures have to be built to keep burros out. Idea to do video as a PR effort to get information out to the public about the problem. BLM has authority for feral horses and burros.

➤ Shoshone National Forest Domestic Goats closure order (Kevin)

Kevin briefed attendees on a pending private-use recreational Domestic Pack Goat Closure on the Shoshone National Forest (SNF has more BHS than any other NF). Went through scoping, and got mostly positive feedback. N.A.Pack Goat Association expressed concern with a closure, but enough other folks want the closure that it looks like it is going to happen. Other forests are starting to look at goat use for recreational pack use and weed control. Have had precedent DG closures in Inyo NF in CA, Pecos NF in NM. Becky stated that ADF&G is drafting a proposal to eliminate use of pack goats during all Dall sheep hunts in AK.

Melanie acknowledged all of the work and dedication that Kevin has provided through the years. The USFS appreciates all the work he has done to pull together the states, identify data needs, look at how \$ is shared, setting priorities, providing support for each other, etc. A bighorn bronze was presented to Kevin on behalf of the USFS for all of his hard work and contribution; Kevin graciously accepted this gift, and stated that he was going to continue working as hard as ever, now that he was working for the Wild Sheep Foundation, and the Wyoming Chapter WSF.

- Payette National Forest update/Q&A (Suzanne Rainville, Pattie Soucek, Chans O'Brien) [10:30-11:30 AM]  
○ PNF analysis "portability" to other USFS Regions? BLM? (Melanie, Pattie, Chans, Tom R.) [11:30-11:45 AM]

Chief of USFS reversed part of the 2003 PNF Forest Plan regarding BHS habitat, and required the Regional Forester to do a BHS viability analysis as a supplement to the original PNF EIS. PNF received ~ 26,000 public comments, with about 500 substantive ones, many from tribal members. New comments focused on doing a cumulative effects analysis (PNF did), and complying with the Multiple Use Sustained Yield Act. BHS were listed as a sensitive species throughout USFS Region 4, so there were additional criteria to weigh in the PNF decision. PNF developed a risk analysis to determine the risk of BHS contacting domestic sheep, and population viability at different severities of outbreaks. PNF used distribution data from Hell's Canyon Initiative radiocollared BHS to determine core habitat, important habitat features, and how far they foray from main core home ranges. These relocation/foray data were overlaid with the location of DS allotments, season of grazing, and when/where DS are trailed. PNF looked at impacts to domestic sheep permittees, socio-economic analyses, tribal issues. Assembled data from different agencies, and collected new data, and had 54,000 observation points over 12 years. Generated core herd home ranges using fixed-kernel home range analysis, and looked at how far (max of 36 km) and how often BHS forays occurred. Then, PNF assigned a probability that a ♂ would move up to 36 km, at 1 km band intervals, based on habitat connectivity and characteristics. This was overlaid with DS distribution, to get probability of contact. PNF used these results in a disease model – what is the probability that a foray/contact would lead to a disease event, and probability that the BHS population would persist over time.

Of all the alternatives in the analysis, only 4 resulted in BHS remaining on the landscape; these were the alternatives considered by Forest Supervisor Rainville. All alternatives analyzed eliminated domestic sheep in core BHS habitats, and left varying levels of domestic sheep outside core BHS ranges. Depending on the alternative, probability of contact in different areas goes from 5% - 0% to 12% - 0% . Cumulative effects analysis includes direct effects from Payette NF, also indirect effects from grazing on surrounding non-FS lands, so includes Nez Perce NF and BLM lands, too. PNF looked at effects if all federal ground outside PNF was grazed, and if none was, and found that other landowners were major contributors to the contact/disease problem, bigger than the Payette.

The July 2010 decision was that habitat needed to be provided to ensure a viable population of BHS, to restore the BHS population over time, to provide for Tribal treaty rights, to maintain some domestic sheep grazing where contact could be avoided, and to comply with other acts. The USFS approved Alternative 7O, modified. Grazing was normal

for the 2010 grazing season. Domestic sheep grazing will taper off gradually until 2013, when Alt. 70 is fully implemented.

The decision was based on scientific literature supporting the potential for disease transmission, although opposing arguments were also considered. There was a rich telemetry data set, with a limited number of assumptions. In the end, 94% of BHS habitat would be protected, which equals 347,000 acres. There will be a 31% reduction of rangeland suited for domestic sheep grazing, at the end of the third year. 28 regional jobs will be lost, but employment opportunities in recreation and hunting will increase, and tribal sustenance and traditional uses can increase. Alternatives P and N were prohibitively expensive to implement in the long term. Mean disease outbreak intervals were 230-46 years for Alt. O, 150-31 years for Alt. N, and 94 to 19 years (based on 5% and 25% probability of outbreak), with the goal to have more than a 50 year interval. In order to implement the Forest Plan direction, separation will have to be maintained, and if this is not possible, the USFS won't graze domestics. PNF is currently working on an implementation guide to look at rationale behind everything, so implementation is standard across the forest, and not subject to varying interpretation by USFS personnel.

The final PNF decision was made on July 20, 2010; implementation started August 20, 2010. PNF received 9 appeals, with 46 appellants. A resolution meeting occurred December 14, 2010. The Regional office in Ogden, UT is looking at the appeals, and a decision from the Regional office is expected by ~ February 15<sup>th</sup>. USFS Washington, DC office can review the decision (discretionary review) and has 2 weeks to let Payette know if they are going to do it, so by April, the final decision should be known. PNF working on DS allotment permit modifications, and have meetings planned with the DS permittees.

If some die-offs occur, the USFS will continue to evaluate if they should change anything. If separation is maintained and the problem is with domestic sheep off the PNF, they probably would not change anything. BLM and Nez Perce NF lands that have DS allotments in the area have injunctions filed, or in process. There is some opportunity for conversion from domestic sheep to cattle allotments. Western Watersheds Project has spearheaded a lot of the temporary restraining orders/injunctions, and will probably target other national forests, once a decision on the Payette appeals has been made.

- Desert Bighorn Council, April 6-8, 2011, Laughlin, NV (Kevin)
  - Call for Papers, Registration Information, etc.

Kevin reminded the WSWG that the 2011 DBC meeting will be held in Laughlin, NV April 6-8; 1<sup>st</sup> call for papers is out. Next NWSGC Symposium will be held March 12-15, 2012 in Kamloops BC. Proceedings from Hood River are in process (Vern Bleich, editor). Through Kevin's donation, WSF *Wild Sheep* Magazine has a Biologist's Corner column each issue; Kevin writes the column, but it is an open forum to share something about wild sheep biology and management, and we are all welcome to write a column, if interested.

- Miscellaneous (Kevin/All)
  - Summer WAFWA meeting, July 17, 2011 (MT)
  - WSWG Chair reports to WAFWA Directors @ Business Meeting on 7/20/11

Summer WAFWA meeting is in Big Sky MT July 15-20 2011. The WSWG will likely will meet on Sunday the 17<sup>th</sup>.

WSWG meeting adjourned 11:50 am.