



**WAFWA Wild Sheep Working Group Winter Meeting  
@ Wild Sheep Foundation Convention  
January 14, 1 pm – 5 pm & January 15, 8 am – noon  
Reno Sparks Convention Center, Room A-8  
Reno, Nevada**



**Conference Call Info: 888-363-4735, Pass code: 3336782#**

**ACTION ITEMS AND NOTABLE COMMENTS ARE IN RED AND BOLD**

**Tuesday, Jan. 14, 1 pm – 5 pm**

Welcome, WSWG roster update, attendance sign-in, announcements, introductions,

- sign-up sheet via URL or tablet

Members in attendance: Amber, Bill, Helen, Brian, Bruce, Chad, Clay, Don, Frank, Froylan, Hollie, Jace, Eric, Nathan Galloway; Remotely on: Anne and Andy (1<sup>st</sup> day only),

- Kurt Alt introduced guest attendees from Mongolia and Kazakhstan.

- Dinner at Coney Island bar at 6:30, \$26.50 per person, cash only, pickup at 6:00 p.m. Peppermill

- Mike was sporting a ram GPS collar around his neck (no it's not a shock collar!) to bring awareness of we all need to improve on in conjunction with collar companies better fitting collars that can properly adjust to body weight and seasonal hair loss/gain for both males and females – It's "Wild Sheep Welfare Awareness Week"!

**WSWG Apparel – hats and shirts**

**- 48 Ball caps with WSWG and WAFWA logos were shared at the meeting with members and attendees; will try to order more for WSWG members not in attendance**

**Review existing Mission/Charter and WSWG Meeting Structure – sleep on it and discuss Wed**

- Mike read the current WSWG Charter (below) – wants to see if we are still on track or need to adapt

1. Identify priority topics and management challenges to wild sheep in the western U.S. and Canada
2. Collaboratively develop solutions to those challenges; and
3. Foster strong relationships between wild sheep agencies and wild sheep advocates.

WAFWA is placing emphasis on their new strategic plan and evaluating whether their initiatives/groups support it

WAFWA has had some recent changes, personnel wise and moved their offices due to lack of funding,

- Directors and staff have developed a strategic plan
- think about these statements and discuss Wednesday

**Wild Sheep Capture/Handling Guidelines**

Overview of progress to date – Helen and Peri

- Helen update – discussed draft, need more work which have been assigned to others.
- Added things like decontamination  
Section on drugs,  
Photographs included  
Peri and Helen will continue to work on

- Mike – Still appears to be a need for new capture/handling guidelines
- Don – Important for wild sheep and all big game species
- Mike – Nevada now using a capture plan; stole the concept/format from other states. Great idea to ensure we follow through with processes, assignments, and not forget to do tasks and bring critical supplies

#### *Capture Methods: Corral, drop nets helicopter*

- Don – OR still uses corral traps but not that much
- Helen – BC uses corral trap
- Mike – discussion on drop nets, NV hasn't used since 2010
  - Several states still use drop nets
- Bruce – MT still does; highly labor intensive,
- Eric – NM still does; mechanical, magnetic, blasting caps are the different drop mechanisms
- AZ and NM use manual pull cord to drop net
- Tony (WY) – used for years; electromagnetic driven; he mentioned **Wildlife Capture Services LLC, wildlifecapture.com website out of Flagstaff, AZ great source of equipment like dropnets**
- Bruce – what about pre-baiting? Highly mobile though and serve a good purpose
- Todd – what Size of drop nets?
- Kevin - Wyoming uses 4 - 35' x 35' nets clipped together to make a 70' by 70'
- Helen – **Ask States that use dropnets to give a description of their specifics**

**Vern, Amber, Eric, Bruce, Todd, and Tony with WY – volunteered!**

Internationals – question of concern over the weight of net on animals and them overheating

- Don – sometimes issues with center pole.
- Mike – sometimes heating can be an issue
- Eric – have overall low rates of mortality with drop nets

#### Chemical Immobilization

- Chad – SD has good access to animals to dart at CSP; No overheating, use BAM, dart year round
- Helen – BAM is what BC uses, use other drugs for long distance transport
- Mike – Others should share techniques and insight on chemical immobilization. Aly, Chad, Todd**
- Aly – Mary Wood now at CO, is using MedA, having struggles with access to BAM – controlled drug
- Andy – CO switching to MedA which is similar to BAM
- Helen – has used MedA on bighorn sheep

#### Helicopter Net Gun

- Mike – Open to suggestions from everyone
- Eric – NM is now paying by the hour vs the animal. He feels you have less chance of mortalities; crew can take their time but still get the animals you want; CA and ID pay by the hour
- Froy – pay by animal and TX has low mortality rates
- Don – pay by animal mostly, seems to work for us
- Helen – pay by animal, been good; but they do have biologists doing captures and they are “free”
- Kevin – for Yukon, been shut down due to rotor strike. Yukon will not net gun without snow cover/”cushion” at least the first go round
- Helen – Change in staff in Yukon so they have no experience and unwilling to listen to other agencies
- Bill – every state and staff have a different tolerance with people pulling the trigger
- Kimberlee – Alaska netgunning regardless of snow, considering drugs
- Amber – have own gunners in past but this year started out-sourcing. Had delays with that so now back to using their own gunners
- Don – challenging with few capture contractors out there so have had to be flexible.
- Mike – how does NM incentivize it to by the hour?
- Eric – Honor/pride thing for the crews to capture as many as they can. Old days they made a lot of money flock shooting and get multiple animals in net that tends to cause more injuries and stress on animals

Helen – Kiwis started with capturing red deer and transporting back; that is why cost rate was per head  
Froy – what is capture myopathy rate?  
Tom – around 2%, see more mortality in spring when animals are in poor condition; CA gives small incentive of \$100/animal but not enough to make them speed up  
Francis – Most do not want to just fly around; they want to capture and get job done  
Mike – Question to all on communication with crew and direction you give them?  
Vern – Need to establish who is in charge.  
Don – this is the biggest thing so will write into the contract a specific way, stringent rules  
Eric – have aircraft & ground radios for communication of what they got and if they are hot, etc...  
Tom – Capture plans clearly outlines where crew to capture; we give polygons on I-pad for help  
Vern – don't hire if don't follow rules  
Mike – we're all competing with the capture crews; have to work together with other states,  
How many companies are there?  
Don – Oregon has 2 new ones – Baker Aircraft and Timberland (pretty new)  
Kevin – old ones are Leading Edge, Quicksilver Air, Native Range  
Jace – HeliWild in Utah (Mike Ross?)

**Mike – Lots of expertise in this area – need to have a committee for all aspects of net gun capture – Eric, Vern, Amber, Don volunteered**

**Mike would like a draft for the summer meeting and printed by Jan 1 2021. Sub-committees for the different aspects of the plan? various small groups may be best.**

**Don – need a lead on these committees**

**Melanie – have an overall lead to coordinate the entire effort (Will be Mike Cox)**

**Helen – need an editor, it is a load for anyone with this. (Vern was selected by Mike on Jan. 16 to be the Capture-Handling Guidelines Editor)**

Eric – Hire someone,

Mike – we should seek an editor, provide names to Mike, possibly \$10,000 available

Kevin – Did anyone reach out to Foss?

Vern – had contacted Mike about it, Vern is interested,

Mike - Becky is interested. Don will check with Foss, Mike Keegan possibly.

Kevin – need a timeframe

Mike – would be a contract with a deadline

Tom – Would this person coordinate other contributions?

Mike – Yes, possibly if time and money allow.

Eric – Use Foss document, do not need to reinvent the wheel. Mainly need an editor

Clay – did publications about one a year. Suggests making assignments with one person in charge of each of section then send to an overall person or editor

Helen – have editor delegate or chose subcommittee leads

Don – figure types of committees then get editor

Frank – BLM may be able to commit up to \$10K

Mike – put together 3-4+ major groups – See list

**Basecamp operations/capture plans volunteers – Jace, Don, Froy, Tom, Mike, Lacey**

**Translocation/Transport/Release/Monitoring volunteers – Tom, Helen, Peri, Amber**

Kevin – friends from central Asia have not done this so have some teachable opportunities.

Peri – Concerns with press and increased scrutiny. Have triggers in the plan when to stop, etc...

Froy – Capture orientation with the public, Texas does this.

Peri – cover risk of mortality should have greater consideration with plans

Don and Helen – press management for basecamp committee

Amber – box trailers helped with controlling animals at release

Bill – BC signed a reassertion act, role of indigenous people in all that we do, now more of a co-

management of the resource. Need to consider engagement of indigenous people and their values.

Mike – showed Capture handle guidelines on Screen with original volunteers

**Possible break out groups to be refined from input from WSWG members to address different sections/topics in Guidelines to draft key chapters, subsections, and messages**

- **Herd and Animal Health Assessment, Sampling, Disinfecting, Care for Health Complications/Injuries, Immobilization, and Euthanasia**
- **Capture Methods/Timing, Basecamp Operations, Human and Animal Safety, Capture Plans, Capture Crew Management and Communication**
- **Animal Marking, Purpose, Animal Welfare, Communication/Collaboration with Collar Companies**
- **Translocations, Transport, Post Release Monitoring**

Break – 15 minutes

**Review of Jurisdictional Programs/Processes of Interacting with Domestic Sheep Producers and Dept. of Agriculture**

What are the approaches, relationships, and are they considered effective?

Tony – AK – work with growers but would not agree to wild sheep advocates. Government is now demanding screening of domestics importing in. Division of Agriculture does very little with this topic

Melanie – how about federal agencies.

Tony – looking at restrictions on pack goats, state is not taking a position on it yet.

Mike – Do state Ag Vets partake

Tony – been good to work with

Becky – After working group fell apart, a wildlife health resolution was passed. WSF offered to pay for all testing for 3 years of imports – approval came from Governor down that path

Brian – Proposed guidelines through Chugach plan. Will share with group as it progresses

Amber AZ – state vet not supportive of the issue, stagnant at the moment.

Bill – BC- has recently reengaged with Minister of Ag. They have generally been reluctant to partake. Making progress and will have options with a working group amongst shared entities

Helen – working on the process and mitigation options, fact sheets, etc...

Anne – AB – work with private landowners, can have domestics on Crown land. Stakeholder groups have been difficult but continue to try and have made progress on allotments next to bighorn habitats.

Tom CA – Sierra Nevada bighorns, federally endangered, which has allowed some options, developing risk of contact models. Have gone to federal agencies and provided data on risk of contact. Domestic goats on not permitted in Yosemite National Park, working on that issue with Forest service. Desert bighorns – continue with the outbreak, Jeff - Currently challenges included goat hikes, trying to work with those individuals but is a private land issue as well. Had another outbreak in one of their trophy areas, not convinced it is a Movi outbreak.

Tom – CA is allowed to take feral goats. Can remove bighorns that have interacted can also remove domestics ranging far away.

Andy – CO, Has a working group, hired a consultant which has gone better. Need collective protocols for strays and education

Kevin – several involved with the CO working group. At the June meeting, sub committees were developed to address strays, 15 jurisdictions have a document or unwritten policy related to contact with domestics.

Shared with this working group but there has not been anything done thus far collectively. Do not get into the position WY is where they do not have the authority to remove a stray domestic.

Melanie – Tim and I wrote the publication in this; essential states reach an agreement of separation. Terry – reiterated the paper from Melanie and Tim, but it keeps coming back that the science is not clear.

Becky – Every state seems to deal with producers not wanting to deal with it. It has been a focus however and have made some progress with producers are interested in addressing this issue. Communication has improved and helped with gaining volunteer producers.

Holly – ID – feral animal is up to county sheriff, belong to sheriff if unclaimed. DOA is not really involved. Allotments have been retired for the most part. DOA has not always been supportive of retiring allotments. Private land may be the highest risk, have producers interested in addressing this, working with many folks but also need more people and involvement. Some states have been able to fund a position to work on this.

Bruce – MT – Department is required to find the owner. If owner, Have 10 days to retrieve animal then department can remove. Kurt - Montana group working on agreeing that both species are in need in respiratory disease research. Besser and others may be involved with this group. Have worked for 3 years to create trust and work towards this research. Bruce – MT has a plan that they would add additional bighorn herds but none has happened so far. WSF MT chapter and MT woolgrowers working together to build trust and find answers to this issue.

Todd – NE – For strays, must go through county sheriff, support varies. Working with SDSU on research with domestics who are, in turn, working with producers to sample domestics. Have sampled 138 so far with further testing in the future along with strain typing.

Mike - NV – Been attending annual Woolgrower meeting; woolgrowers have agreed to simple separation strategy – have bios meet annually with producers, increase communication and vigilance on stray domestics and wild sheep and communicate to each other. Peri – old MOU with DOA that set process of locating owner and lethally removing stray. Mike – have killed many domestics over the years.

Eric - NM – Little going on. Have a signed MOU with Livestock board, which allows them to remove strays in bighorn sheep areas both on public land and private with permission. Have rounded up several domestic strays. Kaytlin – can cull wild sheep from after domestic contacts.

Kevin – NWT – Phase2 of the Wildlife Act – no domestic sheep/goats in Mackenzie and Richardson Mountains. Also want to keep domestics away from Wood Bison.

Chad – SD – Similar to NE and MT on feral or strays. Can go to the Humane Society. Animal Industry oversees livestock. Hobby farms are the largest problem. Staff visit with producers to and utilize fencing. Badlands – has had Movi titers but no losses to date. Strong herd. Badlands herd used to stock Custer and other herds

Don – OR – works with DOA. Have plan to deal with strays – have 10 days and must notify everyone in area. Can go into agreement with County, who can then allow removal.

Jace – UT – kill 5-10 bighorns a year as well as domestic stray. Have a code in regulation but have to go through county sheriff. Have money available to help fund removals. Made headway with bighorn sheep plan and working with DOA and Woolgrowers. Allows bighorns to be removed from areas where interactions have occurred. MOU with DOA. Risk of Contact model ongoing. Funds from permits can be used for strays and domestic issues.

Froylan – TX – Work with DOA and sheriff on strays, have been able to easily remove

Aly – WY – Formal working group to deal with domestic/bighorn interactions. Policy with DOA and producers – have to look for owners before removal. Want to communicate more with DOA and domestic sheep industry but not agreement from all stakeholders that it needs to be done.

Tony – WY - Removed of several rams dues to lack of coordination with private landowners. Also removed 2 domestic goats from Devils Canyon area.

Kevin – Yukon – Control order – One of the most stringent orders. Samples several flocks. They will pay for fencing through government money, Movi is a reportable disease. Have to be able to control your animals and minimize contact. Several interest groups involved. During testing 53% tested positive (domestic sheep), goats (23%) positive. It is now mandatory to quarantine and test before importing. Producers compensated for culled animals. WSF please with how it has gone. Budget was \$750,000 towards this effort.

### **Wednesday, Jan. 15, 8 am – noon**

- *Continuation of Stray Domestic Sheep Processes by agency from yesterday*

Brian- FS – explained of USFS's new Shared Stewardship Strategy to address landscape scale challenges working collaboratively and in partnership with states on key issues. Website URL is <https://www.fs.usda.gov/managing-land/shared-stewardship>– USFS in concert with states develops Shared Stewardship Agreements (SSA) in the form of plans or approaches to addresses like wildfire and watershed management. No SSAs have been developed to address domestic-wild sheep management  
Mike – any actions with domestic sheep producers?

Brian – National leadership well positioned with the issue

Frank – BLM – Multiple use agency. Have staff that deal with grazing, conservation, etc... Leaders are politically appointed. Interactions with State Agriculture Departments – commonly work with state working groups. However, decisions with allotments often get political and often end up with a compromised position. BLM is often in position of referee. The better that State Wildlife and Agriculture Departments are aligned the more effective BLM can be in managing for sheep separation.

Don – Can you discuss options on trespass animals?

Frank – have process for stray animals. Act quickly if you can with regional levels. BLM does want separation. Difficult issue and not an easy process

Kevin – will coordination be improving with stakeholders as BLM personnel changes occur

Frank – had mergers with departments and movement of some personnel. Communication may be more difficult. May be a rebuilding year with new personnel filling upcoming vacancies

Melanie – NPS – Unit supervision, working to develop consistency, Have limitations on ability to speak out. Work with BLM, etc... their ability to work with state Dept. of Agriculture depends on the stance the states take. NPS does participate in CO working group.

Nathan – have good communication within. Believes they are working in right direction with other entities

### **Development of a WSWG Position Statement on Health Risks of Camelids and Pack Goats to Wild Sheep**

Brainstorm and assess the science, management, environment, social context, and politics of the risk camelids and pack goats pose to wild sheep on public and crown lands; compare and contrast with risk of domestic sheep on public lands and private farm flocks; develop key points for WSWG position statement; may have breakout groups to focus on different aspects; develop committee



-Mike – should try to come out with a position statement; -visited with Steve Kilpatrick regarding pack goats who took lead to work with USFS on Shoshone NF ROD that came out summer 2019; Kevin, Peri, Tom Besser, Tim Schommer, Steve, and I met with NA pack goat assoc. in August 2018 meeting in Spokane  
Kevin – out of that meeting came about health certificate/passport for pack goats, pack goats are different from camelids, maybe keep issue separate  
-What about camelids? Can we have a consistent message?  
Helen – risk assessments have been done with camelids. They are there for information and not a record of decision. Information is out there that camelids can carry disease that may affect bighorn/thinhorn sheep.  
Eric – can lab data be generated to show what impacts may occur on camelids  
Helen – some information is available, still a lack information of concerned pathogens  
Tom – through his work, he hasn't identified Movi positive yet in any camelids  
Bill – BC has regulations for pack goats and camelids but is limited to hunting. Has concerns about occupied bighorn/thinhorn areas. Has now observed Contagious ecthyma believed to be from other goat species.  
Cautions there are other species that can impact wild sheep herds  
Mike – Can we agree on any mission statement of what we don't have scientific information on  
Helen – Doesn't think we can. It may be by jurisdiction. Higher risk in some areas vs others.  
Don – Act cautiously and it may apply to other pathogens and impacts to wildlife  
Melanie- Risk assessments should include these other pathogens  
Tony – Alaska took Camelids off the table. Have preferred to stay out of the camelid issue, focusing on the goats.  
Eric – NM have llama packer been in bighorn ranges for 20 years. How many states have records of camelids?  
Many do not  
Mike – will federal agencies have different requirements on this?  
Kevin – Shoshone NF has the most bighorns on FS lands. Pack goat association is worried the restrictions on Shoshone will roll over to other forests.  
Steve – Wanted minimum risk in Shoshone NF. Have large numbers of bighorns so needed restrictions to minimize risk. Need consistency.  
Rick Truex, USFS – What happened in Shoshone brought a lot of attention to pack goats. Raised concerns on how this would roll over to other Forests.  
Frank – will likely be dealt with through resource management plan. Will be done on a case by case basis through plan by plan  
Brian – FS is tracking local decisions closely. Will tap all science for these decisions. What does the process look like with WAFWA; He made a good point that we should develop an "Issue" Statement not "Position" Statement  
Mike – Has to take it to Directors if it is a position or issue statement. Develop a committee to explore possible statements.  
Helen – can use other documents to develop a statement and Helen will assist with that  
Kevin – issues statement would include what we don't know and what we know  
Steve – requests Mike reach out to Shoshone NF folks, Andy Pills  
Kevin – more like a two-page document  
Nate – Include a precautionary principle  
**Kevin – Engage with WAFWA Wildlife Health Committee and North American Pack Goat Assoc.**  
**Mike – committee members to draft separate Issue Statement for Pack Goats and Camelids – Helen, Mike, Doug, Kevin, Steve, Kimberlee**  
Peri – various groups have different standards with their respective species of goats, camelids, etc...  
**Reach out to Maggie Highland for pathogen data on pack goats and possibly camelids**

## **Review and Discuss WSWG Mission/Charter and Meeting Structure**

Simple but good edits were made to our Mission statements:

1. **Identify priority topics and management challenges to wild sheep in the western North America U.S. and Canada**
2. **Collaboratively develop solutions to those challenges; and**
3. **Foster strong relationships between state/provincial/territorial, indigenous, federal wild sheep agencies and wild sheep advocates.**

-Mike – is our mission statement still accurate.

Kevin – could add Mexico? Could add Native American; -3<sup>rd</sup> bullet could be to include other stakeholders. Add indigenous to #3. Add state/provincial, territorial to #3

Mike – Mule Deer WG does not have any outside participants

Don/Kevin – could add western North America to #1

Mike – New directors with WAFWA. Want more summer participation.

- need to be more visible with our efforts

- WAFWA would like more diversity in our groups

**Mike will ask if directors through our Director Sponsor (Tony Wasley, NV) to support funding staff to go to summer meeting**

Don – can various meeting times be adjusted to not overlap?

Mike – Do we feel we need to meet twice a year?

Don – likes the conference calls, possibly more frequently

Mike – We need director's support to get members to summer meeting. Will be in Park City, UT this year

Kevin – Mid winter meetings are set in advance. Feels it is important for Mike to go to each meeting and meet with Directors

Mike – Can only speak to directors if you have actions items

Tony – advocates for conference calls and try to explain that to WAFWA leadership

Melanie – face to face is important, maybe extend the winter meeting

#### *How we make decisions*

Mike – are we comfortable as it now or should we focus on other process

Don – thinks its good as is but perhaps capture action items more clearly

Bill – What about Mike's roll and how we message up the channels and do you see a need to expand what we deliver?

Mike – thinks we are doing well and spreading our message but also sees more help from WAFWA in this

Kevin – WSWG members expected to take message back

#### **Wild Sheep Disease Management Venture (DMV)**

- West-wide Disease Event dataset

**-Mike will put out link for members to access and keep up-to-date**

-Kezia – may have some help coming on board who can help if needed.

- Mycoplasma ovipneumoniae West-wide Strain Virulence Project Committee – Kezia Manlove

-See presentation. Kezia will be contacting states more about data sharing. Will share presentation.

Mike – states need to get M.ovi strain data filled out.

Kezia – can go through it on phone, by email or however works for each state to share the data

Helen – is WADDL the only lab strain-typing.

Kezia – WADDL needs documentation that data can be shared.

Francis – genomics research – want more samples of Movi. Please consider this if states are going to sample to provide additional samples for Francis. Hoping to finish in June

Brett – Can strain-typing be done on older samples

Tom – yes, they can be strain-typed; - WADDL is now doing this for a fee



Kezia – May be able to help with funding, especially those with consistent monitoring and good data

Brett – North Dakota has lots of good data and could also find funding

Peri – Can we use banked genetic samples and use for Kezia’s work?

Tom – yes, if samples were cared for and still good

Mike – Have people work on what you want and send out – Kezia, Tom, Francis

Tricia – Will provide media of some states who can’t get their own.

- Mycoplasma ovipneumoniae outreach –FAQ doc to overview testing protocols, interpretation of diagnostic results and what the research actually says.

**-Helen – Movi outreach document will be coming.**

- Pathogen Surveillance and Detection in Alaska Dall Sheep and other native ungulates -Presentation by Dr. Kimberlee Beckmen, Alaska Dept. of Fish and Game (remote)

-See presentation

Becky – asked for update on samples Alaska wildlife and domestics

Kimberlee – currently strain-typing those samples, would like to get full genome sequencing as well

Catlin – more specifics on hunter harvest samples

- Mandatory check in so were able to collect samples through this requirement. Worked with hunters to make aware of the needs for heads to test those harvested within a week’s timeframe. Alaska staff collected samples; outreach was good to educate hunters on this

Tom – WADDL procedures do not recommend the LM40 method of testing. Not as sensitive

- Can conduct the Real-time test at WADDL

Kimberlee – All samples were run on the Real time PCR with no other detections

Nathan – What is the take home in difficult detections?

Tom – Real time is most sensitive and best available

Kimberlee – Have to be careful that even a negative test does not mean it is necessarily clear.

Important with import regulations

Francis – Some results appeared to be picked up by LM40 method and negative on others.

Becky – continue to work with others on the sequencing and consistency; have seen domestic samples missed up to 3 times,

Kimberlee – May not be anyway of complete confirmation that domestic is disease free with all the various pathogens. Still need to encourage separation.

Kimberlee – will check if she can share the presentation. Will get back to Mike

- **Test and Removal Project Updates**

**-Francis – see presentation. Hells Canyon**

Francis – both young (lambs, yearlings) and old (14+) were more likely to be positive

Tom – how large were these populations and what portion did you sample

Francis – tried with small populations (40 - 60 sheep), wasn’t able to sample quite all

Tom – Has lamb recruitment aligned with removing these carriers?

Francis – Yes

Tony – WY – high rate of sinus tumors in rams in one of their populations (30%); it is a Movi positive herd also

Peri – *P. multocida* is an indicator of sinus tumors

**Chad – Custer state Park herd and Rapid City (control) herd**

Removed shedders from CSP herd, tested all animals

- compared lamb and ewe survival in both populations

- Significant increase in lamb population in CSP herd

- Now working on removing shedders from Rapid herd
- Brought in 12 collared ewes from Badlands herd to augment
- had some losses from lions, no lambs born the first year but now seeing lamb production.
- test ewes twice, about 6 months apart

### **Peri – Snowstorm Mountains California Bighorn Herd**

- No lamb production for several years
  - Started the test and remove method focusing on ewes
  - By 2017 had tested 3 times
  - 6 ewes positive on third testing cycle
  - Heavy rates of nasal discharge
  - All ewes that died either in transit to SDSU for research or killed on the mountain were positive with sinus tumors
  - One ewe that tested PCR negative died a few months later; upon necropsy she had several sinus tumor to the point of much of her sinuses were filled in with bone; she was still PCR negative
  - have an increase in lamb recruitment
  - One yearling ram that died during the Nov 2019 capture event died of pneumonia complications and was M. ovi PCR positive; its M. ovi. strain was the same one the Snowstorm herd has had
  - Throughout the years of tonsillar swabbing and testing for bacteria, P. multocida was consistently found in those animals that were PCR positive for M. ovi.
  - In the recent testing, sheep that were M. ovi PCR negative were also negative for P. multocida; interesting!
  - Still have a few others ewes to test again
  - have seen consistent sinus tumors
- Other Tools/Methods to consider (domestic sheep flock management?)

**Wild Sheep Genomics Group** – Initiating California Bighorn Taxonomy Project and in the process develop genome and range-wide genetic dataset to answer future questions. – Clint Epps

-See presentation

Clint and Josh Jahner have been busy reaching out to all the jurisdictions to acquire samples. **But looking at the attributes of all the bighorn polygons, very few of them list the lineage of the herd, a critical piece of information we all need to help fill in the blanks along with a few other key attributes.**

Brett – Rockies and Californias mixed if interested in these samples

Don – what results will help us with management, need more information on that.

**Use of WAFWA’s new cloud-based server for all our data and development of ESRI Story Maps to share WSWG stories/messages/successes**

- Chanda- New data manager for WAFWA, Working on information storage so will not have to use Google Folders. Chanda also has expertise in ESRI and will develop “Story” maps,
- **Mike will reach out to everyone on major topics to showcase – translocation success, test and remove, etc....**

**West-wide GPS Collar Failure/Performance Survey in cooperation with MDWG**

Skipped over

## **License/Tags, Harvest, Demand, Population Estimates Draft Publication**

Skipped over

**Production of new documentary film on Bighorn/Domestic Sheep Issue** – Film Producer Adam Foss  
-Adam – trying to tell the story with this film about the issue and help reach a broader audience  
- 2.5 minute trailer shown to group. Full-length film is 25 min. Will be distributed online.

### **Upcoming Wild Sheep related events and meetings:**

- Northern Wild Sheep and Goat Council Symposium – Canmore, Alberta 20-23 April 2020
- Others?

**-Mike will send out reminders next week for committees and action items. (that deadline was missed!)**

**Adjourn**