



# Big Hole Watershed Committee

Monthly Meeting Minutes

June 21, 2017 – 7:00 pm

Divide Grange – Divide, Montana

## In Attendance

Jennifer Downing, BHWC; Tana Nulph, BHWC; Pedro Marques, BHWC; John Jackson, BVHD County Commissioner, Jim Hagenbarth, BHWC/Rancher; Paul Cleary, resident; Randy Smith, BHWC/Rancher; Jim Dennehy, BHWC/BSB Water Utility; Dean Peterson, BHWC/Rancher; Dave Stone, Anaconda Sportsman Club; Eric Thorson, Sunrise Fly Shop; Kelli Poole, MFWP; Jacqueline Knutson, MFWP; John Reinhardt, BHWC/Rancher; Vanna Boccadori, MFWP; Corey Meier, BLM-Butte; Sarah Ashworth, BHRF; Wade Fellin, Big Hole Lodge; Rob Macioroski, BVHD County Planner; Craig Fager, MFWP; Susan Stone, resident; Sam Stone, resident; Steve Luebeck, BHWC/Sportsman; Scott Reynolds, GGTU; Liz Jones, BHWC/Rancher; Mark Kambich, BHWC/Rancher; Peter Frick, BHWC/Rancher; Andy Suenram, resident; Bill Kempf, resident; Cory Patterson, resident; Chuck Otto, resident; Olga Kreimer, Montana Standard; and Mike Roberts, DNRC.

**Introductions**      *Attendees introduced themselves.*

**Meeting Minutes**      *April 2017 meeting minutes were reviewed, no additions or corrections. There were no May 2014 minutes as the May 2017 meeting was cancelled due to snow.*

## Reports

*Streamflow/Snowpack Report – Mike Roberts, DNRC and Jacqueline Knutson, MFWP*

- **Streamflows:** Streamflows have continued to be well above average for the past month in response to warming weather and precipitation events.
  - *Big Hole River @ Wisdom: 3,800 cfs (inst. Peak = 4,310 cfs) June 14 (84<sup>th</sup> percentile)*
  - *Big Hole River @ Melrose: 8,640 cfs (inst. Peak >9,000 cfs) June 15 (50<sup>th</sup> percentile)*
- **Snowpack:** The Jefferson Basin is currently at 107% snowpack.

<b>Darkhorse Lake SNOTEL</b>	
<i>Year</i>	<i>June 20 SWE (in.)</i>
2011	41.9
2012	11.9
2013	3.9
2014	19.8
2015	0
2016	4.4
2017	14.5

- **Temperatures:** On average, temperatures have been a few degrees cooler this spring than last year.

<b>Average temps (F) Wisdom</b>			
	<i>April</i>	<i>May</i>	<i>June</i>
<i>2016</i>	40.5	43.9	55.1
<i>2017</i>	35.4	44.2	52.1

- **Forecast:** ENSO neutral conditions are favored through the fall. The three-month outlook currently indicates the majority of the country will see above average temperatures through September which may include Southwest Montana as well.

*Drought Management Plan – Jennifer Downing, Executive Director*

- 2017 version Drought Management Plan recently published, distributed. The 2017 version is the same as the 2016 version except it has a new cover.
- We're in great shape right now in terms of water supply; that can change quickly but so far it's looking good.

*Director's Report - Jennifer Downing, Executive Director*

- Spring newsletter published and distributed in early June; available on our website, bhwc.org. Please help us distribute it and get the word out!
- BHRIP: working on landowner contracts.
- Mount Haggin WMA restoration: moving along right on schedule; have a tour planned for September 15, 2017. Please join us to see the great work we've been completing on Mount Haggin!
- Beaverhead Brewing Pint Night: Saturday, June 24, 2017, 6-8pm. *Beaverhead Brewing will donate \$1.00 to BHWC for each pint purchased.*

*Steering Committee – Randy Smith, Chairman; Jim Hagenbarth, Vice-Chairman; and Roy Morris, Secretary*

- Governing Board Members: It's time to review BHWC's 990 form. Board members are not legally required to review the 990, but it's considered a "best practice" for a nonprofit.
  - Are we comfortable having Steve Luebeck review it and send it off, or do we need to have a discussion about it?
    - **Consensus: Group is ok with Steve reviewing and submitting the 990.**
- Governing Board elections: BHWC is holding a mid-year election, which is unusual but is a necessary measure because several board members have recently resigned. We decide based on consensus. Randy's recommendation is to approve the following:

<b>Decisions on Positions or Representation</b>	<b>Name</b>	<b>Consensus</b>
1. Guide/Outfitter	Eric Thorson, Sunrise Fly Shop	<b><i>Elected</i></b>
2. Should we add another board position for a second guide/outfitter seat?	Yes or No?	<b><i>Yes</i></b>
3. Guide/Outfitter – 2 <sup>nd</sup> Seat	Bill Kempf	<b><i>Elected</i></b>
4. Resident	Paul Cleary	<b><i>Elected</i></b>
5. Resident	Andy Suenram	<b><i>Elected</i></b>
6. Rancher – Lower Big Hole	Mark Raffety	<b><i>Elected</i></b>
7. Beaverhead County	John Jackson	<b><i>Elected</i></b>

- Here are a few key points from our bylaws regarding elections:
  - We are required to have between 16 and 26 directors. We currently have 18 directors. In recent years we have had near 22 directors.
  - Elections are made by consensus. Non-consensus = no, consensus = yes. Election of a position could be delayed until January 2018 as an alternative option.
  - Proxy voting is not allowed. You must be present to participate.
  - We will need to have a quorum in order to complete the election, a minimum of 6 Governing Board directors present.
  - Board must be 50% ranching interest. We currently have 11 Ranching, 7 Non-Ranching represented.
  - These are the positions up for this interim election. There are other people considered, but would wait until the January 2018 election.

*Wildlife Report – Jim Hagenbarth, Vice-Chairman and Tana Nulph, Conservation Programs Coordinator*

- Carcass Management: BHWC offered carcass removal to Big Hole ranchers March-May, 2017. Removed 46 carcasses from 7 ranches; transported them to the new carcass compost facility at the MDT shop

near Wisdom. Funded through the Montana Livestock Loss Board, the Cinnabar Foundation, People and Carnivores, Wildlife Conservation Society, and equipment donations from local ranchers.

- Removing and composting carcasses removes predator attractant to reduce predator-livestock conflict and help manage predator populations by limiting food supply.
- BHWC also provided carcass removal for the Centennial Valley this spring. USFWS provided fuel and the carcass removal dump truck; CVA paid our driver's salary for the Centennial portion of this year's carcass removal.
- Range Riders: BHWC's Upper Big Hole Range Rider season starts July 1 and runs through September 30. We have been working on developing a 2<sup>nd</sup> range rider program to serve the middle watershed (between Wisdom and Wise River), but lack funding to start the program this season.
- Montana Public Radio story: Rachel Cramer with Montana Public Radio met with BHWC and partners in late May at our livestock carcass compost site near Wisdom to conduct an interview about the site and the process (and benefits) of composting livestock. Read and listen here: <http://mtpr.org/post/keep-predators-away-montana-ranchers-compost-dead-cattle>.
- Landowner-led Conflict Reduction: BHWC has been meeting with other conservation groups and landowners to discuss wildlife-livestock conflict issues, potential solutions, funding sources, etc. through a landowner-led conflict resolution group initiated by the Blackfoot Challenge. If you'd like to get involved with that group, please contact Tana.
- Sage Grouse: BHWC applied for funding to coordinate sage grouse conservation efforts and provide sagebrush lands restoration.
- Senate Bill 73 (SB73): bill proposing to extend sunset of Livestock Loss Board (LLB) funding for nonlethal predator management programs and direct reimbursement to producers for livestock loss, has passed through the Montana Legislature and enacted into law.
- 2017 Wildlife Speaker Series event – Big Hole edition: Monday, July 17, 2017 at 6pm @ Great Waters Inn near Melrose. Kris Inman, Wildlife Conservation Society – Community Partnerships Program, will discuss wolverines. Potluck at 6pm, presentation at 7pm. Family friendly, free event!
- Public land issue: Many groups getting upset about public lands being sold and are using the issue to generate revenue.

## New Business

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### Meeting Topic: Big Hole Watershed Wildlife Update

*Vanna Boccadori, Montana Fish, Wildlife and Parks (Butte)*

*Craig Fager, Montana Fish, Wildlife and Parks (Dillon)*

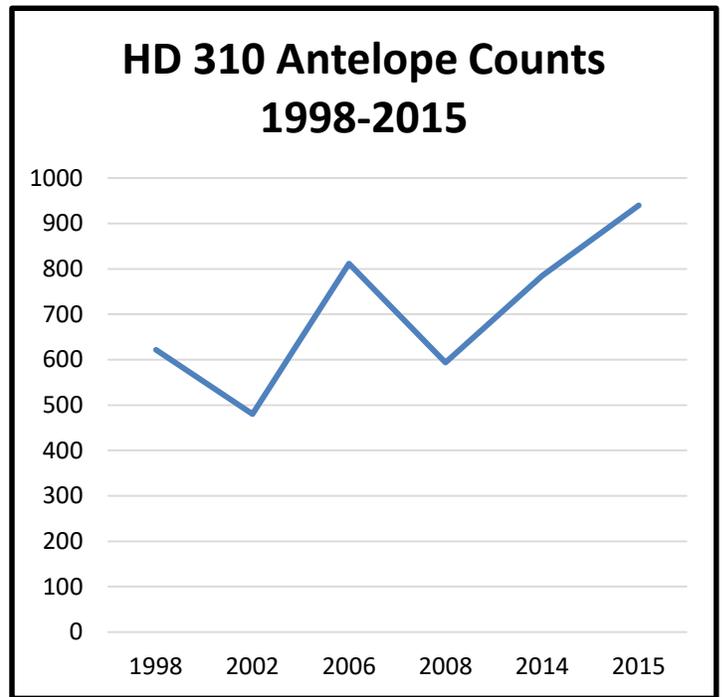
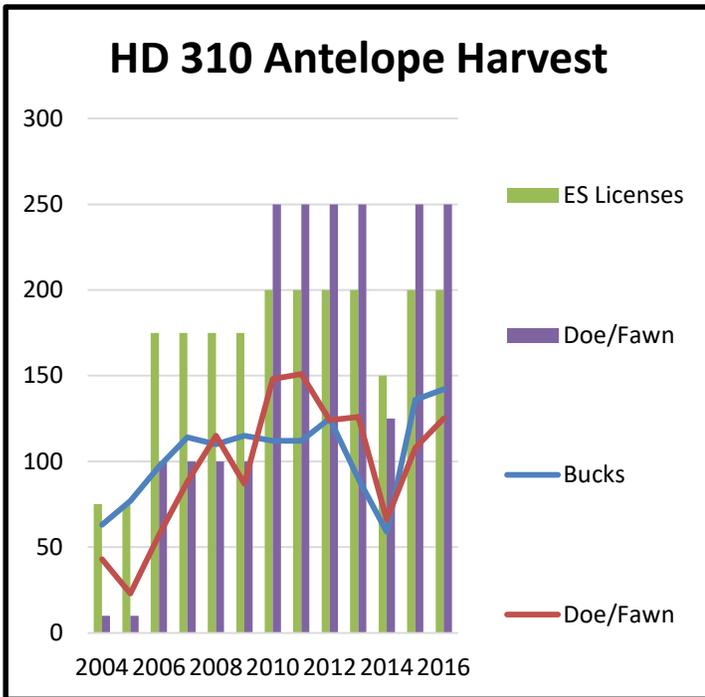
*Background:* MFWP wildlife biologists will present updates on big game populations and research from around the Big Hole area.

#### **Craig Fager, Montana Fish, Wildlife and Parks (Dillon)**

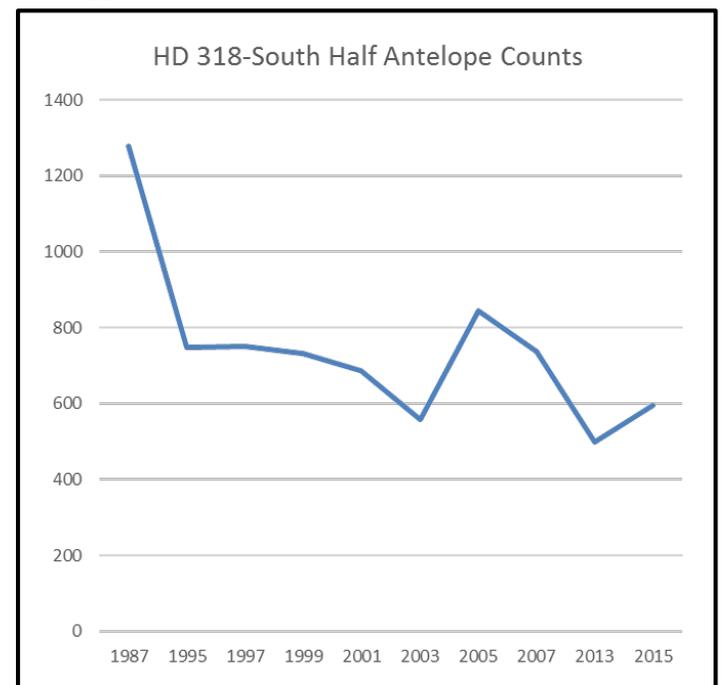
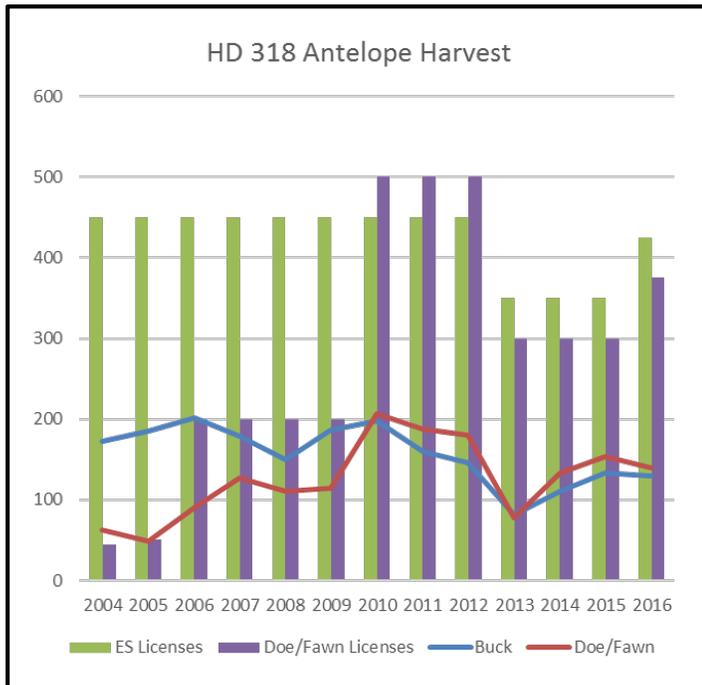
- Craig has an email list that he uses to share information regarding wildlife developments. Contact him at [cfager@mt.gov](mailto:cfager@mt.gov) to be added to the list.
- Elk:
  - 3,047 elk
    - 27 calves:100 cows
    - 15 bulls:100 cows (Detection rate not great for older bulls.)
    - 7 Brow-tined:100 cows
- Elk Harvest
  - 857 elk harvested - fairly low harvest year due to very mild weather conditions last fall.
    - 319 bulls
    - 538 antlerless
    - 24% below 2015
    - 12% below long-term average

- January 2018 – there will be a public hearing on a proposal to adjust hunting regulations for elk for 2018-2019. It will propose a general brow-tined bull/antlerless hunting regulation on HD331 and HD332 (both sides of the Scenic Byway).
  - A general antlerless season would be a good thing to keep bulls on the landscape.
- Mule Deer:
  - Manage mule deer within modern and declining winter browse capacities.
  - Improve buck survival to adulthood through antlerless harvest being in replacement of, rather than in addition to, buck harvest:
    - Changed 11 districts to either-sex mule deer. Something that hasn't been done since 1975 in Southwest Montana.
      - Committed to evaluating this change over time and improving mule deer management.
      - Working on conifer encroachment in several areas; it's a process but FWP believes it will pay dividends over time for browsing animals, especially mule deer.
      - People want to go back to the "good old days" in terms of mule deer (like it was in the 60s and 70s), but that's not feasible because of fire suppression, grazing, etc. Mule deer need to be managed to account for modern conditions.
      - FWP thinks the either-sex hunting season will be positive in terms of mule deer populations and age structure. It will provide sustainable harvest opportunities and provide landowners with an unlimited tool to manage deer within individual tolerances.
      - Includes the Tobacco Roots, the Gravelles, the Ruby Range, Sage Creek, Greenhorns, East Pioneers, Lima Peaks, Big Hole Divide and Tendoyes.
      - Hunter check stations and population counts allow FWP to assess outcomes of this change in hunting regulations.
      - Craig and Dean Waltee put together a 12-page report on this topic – if you're interested in reading it, contact Craig.
  - Buck harvest:
    - 26% increase over 2015
    - 2% below 1986-2016 average
    - Comparison districts: up 14% from 2015 and 28% above long-term average.
  - Antlerless harvest:
    - 9X 2015 antlerless harvest
    - 28% below long-term average
    - 29% of mule deer harvest
    - Comparison districts: 122% increase in antlerless harvest over 2015
    - 28% below long-term average
  - Population trend:
    - 20% growth in either-sex districts
      - Range from 0-42% in individual survey areas
    - Comparison areas:
      - 3% growth in mule deer
    - Nature/winter conditions more of a factor in population trends than hunting.
  - Bucks by age class:
    - Maintained adult age ratios
    - Yearlings declined from 2015 and exceeded long-term average
    - Comparison areas:
      - Adult bucks fell from 2015 and long-term average
      - Yearlings declined from 2015 and met long-term average
- HD310 Antelope:
  - Will be surveyed in July
  - Harvest

- Population: mule deer populations have been increasing since 2008.

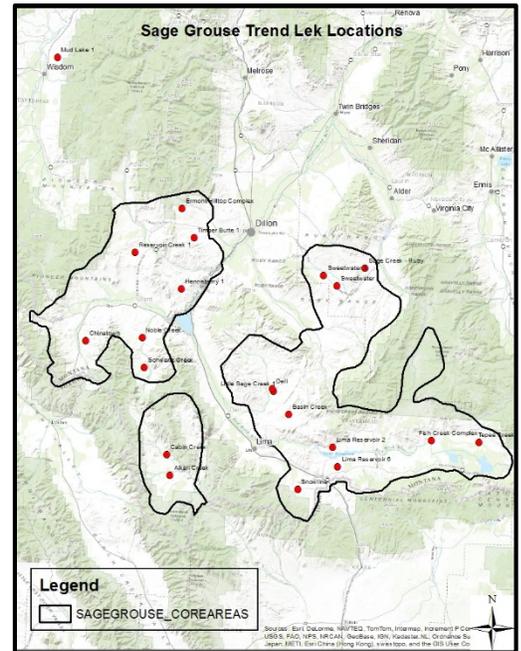


- HD318 Antelope:
  - Will be surveyed again in July.
  - These elk move from Anaconda through Mt. Haggin and overwinter near Bannack.



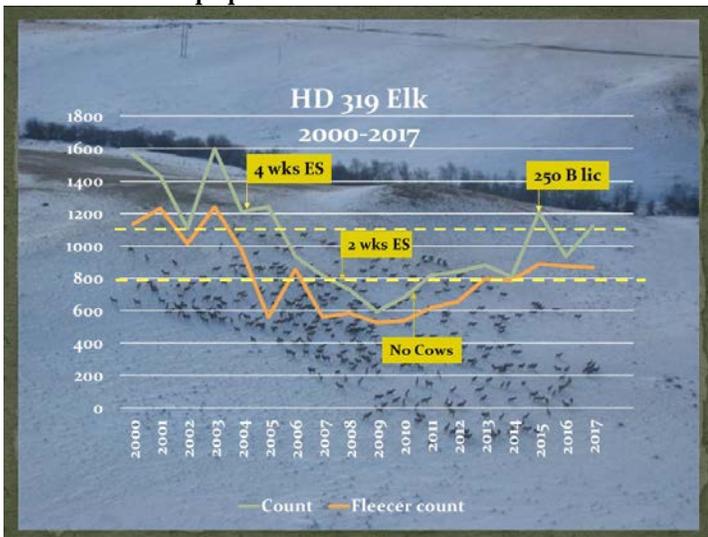
- Mountain Goats:
  - 36 goats counted total (additional goats uncounted based on tracks)
  - 33 kids:100 nannies
  - Flew early April and early May to count Mountain Goats.
- Sage Grouse:
  - 548 males in 2017

- 1% decrease from 2016
- 12 new leks confirmed in 2017
- Several new prospects identified
- Month of April dedicated to sage grouse lek surveys; have a large group of volunteers (including BHWC staff and board members) that assist with the surveys.
- This fall, will collect sage grouse wings for aging purposes. This gives an idea of chick production.
- Over 80 known leks in the survey areas.



**Vanna Boccadori, Montana Fish, Wildlife and Parks (Butte)**

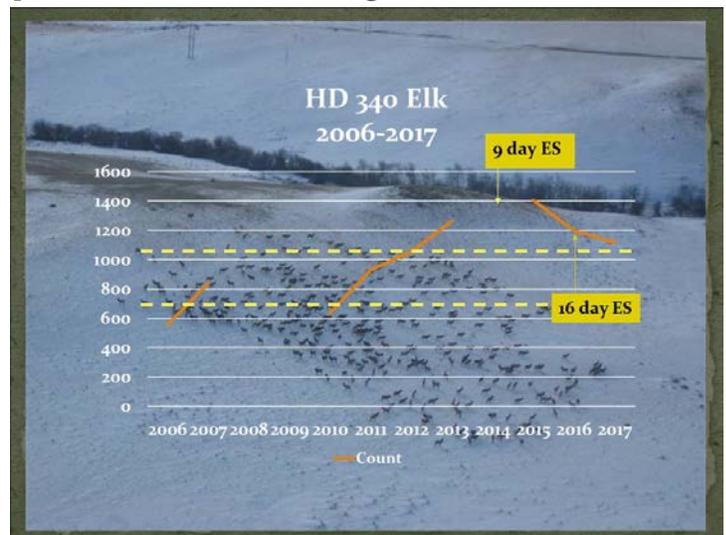
- HD319 (Fleecer) Elk:
  - Population objective: 800-1,100 elk
  - 2004-2009: had an either-sex season for elk in this district. Population decreased dramatically. As a result, stricter regulations were enforced (no cows, no antlerless harvest). Population has increased and has been within the population objective range. Trying to implement 400 additional B licenses as a result of the population increase.



- Discussion:
  - What is the population objective/carrying capacity on the Fleecer game range?
  - As a sub-objective, 800 elk is probably the ideal population for Fleecer based on social carrying capacity and range conditions.
    - Do you think the B licenses will help you manage the population to keep it near 800 elk?
    - Are these the elk that are causing problems with game damage to fences/stackyards in the Divide area?
  - Yes, from 319, 340, 321. This was really bad 2 years ago when there was a crust on top of the snow that pushed elk down lower. If they're not finding what they need, they keep pushing down.
    - You say you got 20% success on B licenses. Do you know how that compares to A licenses?

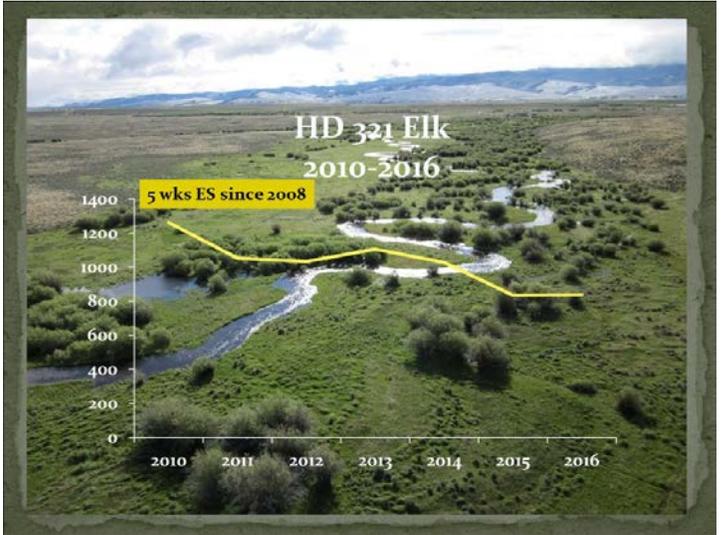
- With a permit system, people are dedicated to hunting in that district and they're meat hunters, so they're generally going to have higher success rates.

- HD340 Elk (Highlands):
  - Graph to right.
- HD334 Elk:
  - Graph below
  - Do summer surveys on these districts because the elk are not there in the winter.
  - Split HD334 from HD321 in 2010.
  - Bitterroot Elk Study: a lot of collar information available, explains some of the disparity in numbers (a lot of

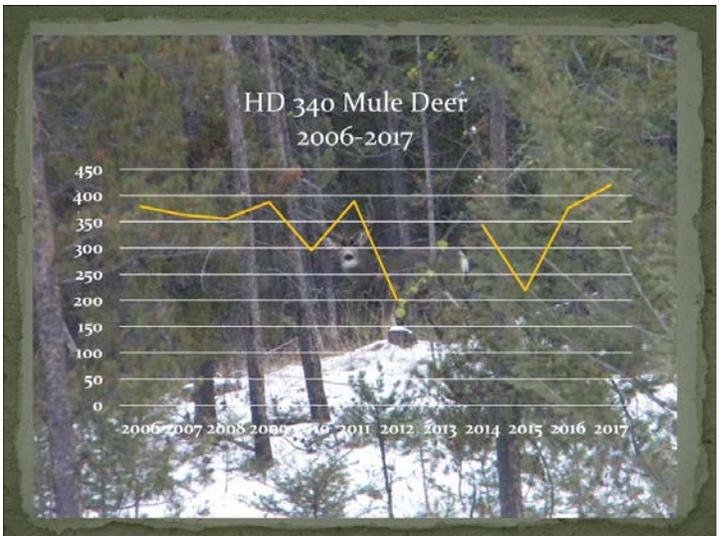
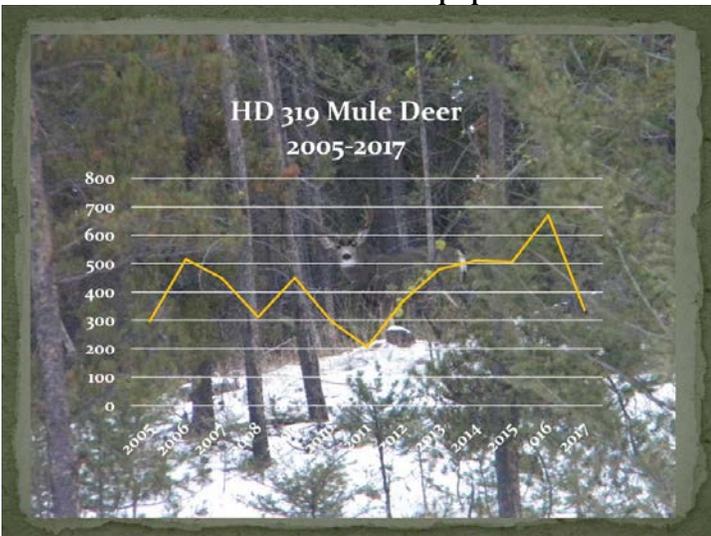


back and forth movement between the Big Hole and the Bitterroot).

- Somewhere between 700 and 1,000 elk is the informal objective for this district.
- Fly this district toward the end of July.
- Harvest on B licenses generally 23-30%.



- HD321 Elk:
  - Graph above, right.
  - 5 week either-sex season since 2008. Majority of harvest happens during opening weekend. No formal population objective range, but somewhere between 800 and 1,000 seems to be ideal.
- HD319 Mule Deer:
  - Graph below, left.
  - Survey in spring.
  - 2017 seems to show a significant population decreased, but it's likely due to FWP surveying this district too early in the year.
- HD340 Mule Deer:
  - Graph below, right.
  - Considering going to more liberal either-sex license on the general A tag (currently bucks only).
    - Would allow landowners to do some harvesting and would improve buck conditions/populations.



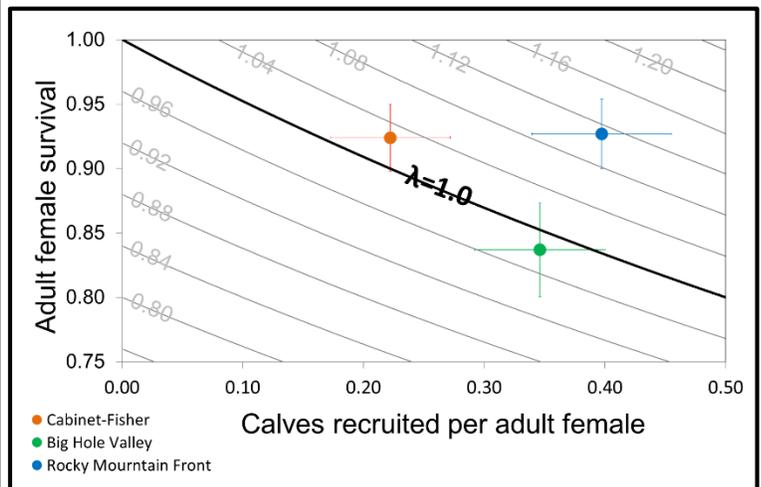
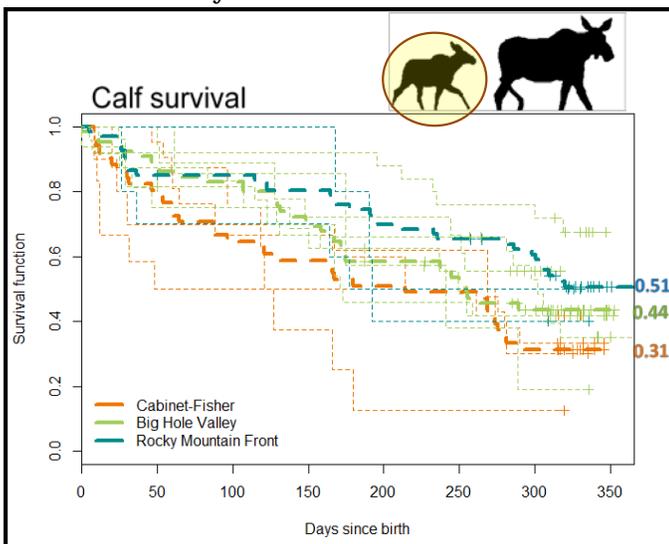
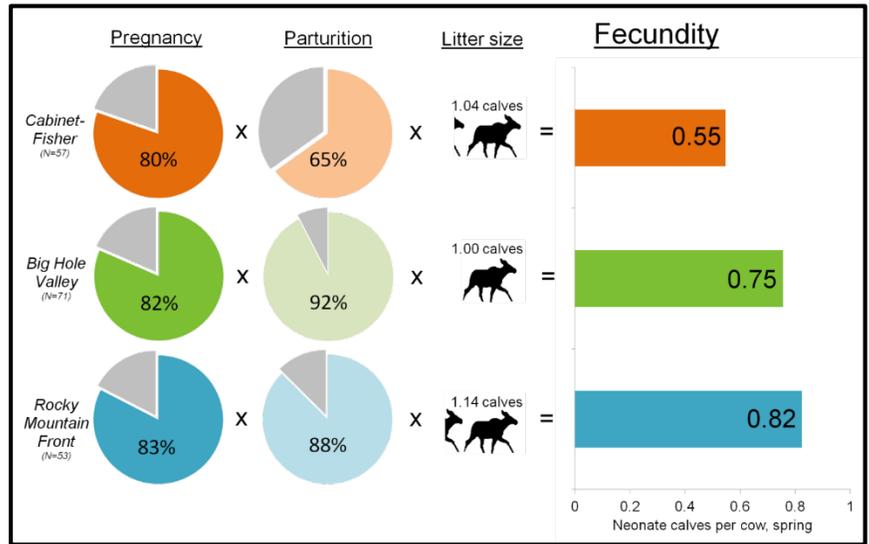
- Highlands Big Horn Sheep:
  - Observing production and lamb survival.
  - About 100 sheep in this population.

- Impacted significantly by a pneumonia die-off in 1994/1995.
- Sub-herds at Maiden Rock, Notch Bottom, and Soap Gulch.
- ¾ of these herds have fairly decent lamb survival. Disease studies have shown that they don't experience as much pneumonia in these herds. Adults seem to be immune to the disease, but it kills the lamb herd each year. Often at weaning, because lambs are no longer getting their mothers' antibodies. Rams move between sub-herds, probably spreading the pneumonia back and forth.
  - *Mycoplasma ovipneumonia* attacks the cilia lining the lungs and makes it ineffective in filtering debris, thereby setting the stage for pneumonia to enter the lungs.
- This is the 4<sup>th</sup> year that the season has been open for these sheep. 1-2 tags each year. Hunters are finding a nice selection of quality sheep. Removing 1-2 rams/year is sustainable because rams will come in from other herds.
- Grizzly Bears: Please report any potential Grizzly Bear sightings to your local FWP Wildlife Biologist ASAP. Confirmed sightings of Grizzlies in this area (where they're not expected to be) supports the argument that these bears have expanded to the point that it's time for State management of the species. Please also let FWP know if you see tracks or scat that you think are from a grizzly so FWP can set up hair snares and do genetic analysis – that will tell them where the bear came from.
- Sage Grouse:
  - Monitored 5 active leks, confirmed 1 new lek, found 4 more leks
  - High count: 205+ males
  - Working with BHWC Wildlife Subcommittee – hoping to get some funding to do additional studies next year, including collars to assess movement. Goal is to assess what role Big Hole habitat is playing for sage grouse moving between Idaho and Montana.
- Habitat improvement:
  - Pintler Face Timber Harvest Opportunity
    - Conifer removal, aspen regeneration, sagebrush restoration, etc.
  - Mount Haggin Wildlife Management Area: hoping to implement project next year.
- *Discussion: Have you seen any aspen recovery where you've done your habitat improvement projects?*
  - *Yes, we've seen really good recovery – a whole new generation of aspen coming in. It seems to be working pretty well.*
- *Neither one of you (Vanna or Craig) have talked about the white tail population. Are you seeing them starting to take over mule deer range?*
  - *Vanna: I've been seeing a growing number on Mt. Haggin and in other areas, but so far it doesn't seem to be a problem. That's getting to the upper ends of where they can subsist; you tend to see them around the river. I'm not seeing significant population growth, but I'm seeing a slow expansion.*
  - *Craig: In the Beaverhead, Jefferson, some other areas – whitetail have started to replace mule deer in certain areas. There are thousands of whitetail there – it comes back to opportunity and land access.*

**Montana Moose Study – research from Nick DeCesare, Montana Fish, Wildlife and Parks. Presented by Vanna Boccadori, Montana Fish, Wildlife and Parks.**

- 3 study areas: Big Hole, Rocky Mountain Front, Cabinet-Fisher
  - Big Hole has lowest survival rates. Over 4 years, annual adult survival rate has been lowest in Big Hole (84%) relative to other 2 study areas, though this year survival was better than average in the Big Hole, at 89%.
- Study assessed mortality causes, which are typically health-related. In 2016, a cow moose carcass was found with 68 arterial worms – seemed to be in good conditions otherwise. The worms are not a direct cause of mortality but can cause things like starvations and blindness which can result in mortality.
  - If you see any moose that are acting strange, seem sick, etc. please notify Vanna.

- **Pregnancy:** doesn't seem to vary too much by study area and on average is low relative to more northern North American populations.
- **(Apparent) Parturition:** is the percentage of pregnant cows we see with calves in the spring. It is best in Big Hole and lowest in Cabinet-Fisher (which we suspect may be due to early mortality of calves due to predation).
- **Litter size:** is the average number of calves born per litter. Twinning occurs but is rare in the Big Hole, while more common in the RM Front study area and is thought to reflect nutritional condition.
- **Calf survival:** Over 4 years of study, annual calf survival has been estimated at 44% in the Big Hole, which is fairly average relative to other parts of North America, and in the middle relative to other 2 study areas. Survival of this year's calves was similar to previous years (42%).
- **Fecundity:** calves that survive into their first year



- **Population growth rate:**
  - Over last 4 years, estimated to be lowest in Big Hole at roughly a 2% decline per year.
  - It is highest on the Rocky Mountain Front, where we have seen both high adult survival and recruitment of calves.
  - Cabinet-Fisher is in the middle, where adult survival is also high but recruitment is lower.
- *Note: all numbers provided are preliminary.*
- Information provided through Nick's study is very helpful to Vanna in terms of managing populations and hunting quotas.
- Other ongoing components of the moose study:
  - Continue studying collared cows (captured 7 moose in Big Hole this past winter to maintain sample size). Thanks to all who allowed access!
  - Using trail cameras to estimate density of predators at each study area.
  - Using sightings of moose by deer/elk hunters to monitor moose statewide.
  - Plans to measure summer and winter forage quality in upcoming years.
- *Discussion:*

- *Has anyone looked at using something to treat the deer flies/arterial worms?*
  - *I don't think anyone has looked into that, but that's a good idea.*
- *Another study is underway comparing moose and elk pellets on Mt. Haggin. Haven't seen any correlation between elk and moose populations.*
- *In the moose study, did you correspond with landowners at all?*
  - *I think Nick has been keeping people in the loop (sending updates). I've been updating people at Anaconda Sportsman meetings and BHWC meetings. Landowners are certainly a viable source of information if it can be collected in a way that it can be used in the study. I do take landowner reports into consideration, but probably not in a formalized way.*

### **Upcoming Meetings**

- *June 24, 2017, 6-8pm @ Beaverhead Brewing – Dillon, MT. Pint night fundraiser/drought workshop. For each pint purchased, Beaverhead Brewing will donate \$1 to BHWC.*
- *July 17, 2017, 6pm @ Great Waters Inn – Melrose, Montana. Wildlife Speaker Series Event. Topic: Wolverines. Potluck at 6pm, presentation at 7pm.*
- *August 16, 2017, 7pm @ the Wise River Community Building. BHWC Monthly Meeting. Topic: Sandhill Cranes in the Big Hole watershed.*
- *August 31, 2017, 5-8pm @ Quarry Brewing – Butte, MT. Pint night fundraiser/drought workshop. For each pint purchased, Quarry Brewing will donate \$0.50 to BHWC.*
- *September 15, 2017, time TBA @ Sugar Loaf Lodge, Mount Haggin Wildlife Management Area. French Gulch and Moose Creek Restoration Project Tour.*

### **Adjourn**