



Big Hole Watershed Committee

Monthly Meeting Minutes

September 20, 2023 – 7:00 pm at the Divide Grange
Zoom option also provided

In Attendance

In-person: Pedro Marques, BHWC; Tana Nulph, BHWC; Ben LaPorte, BHWC; Tom Bowler, Resident; Betty Bowler, Resident; John Reinhardt, Rancher/BHWC; Jenna Dohman, MBMG; Jim Hagenbarth, Rancher/BHWC; Alta Miller, Resident/Big Hole Valley Historical Society; Roy Morris, GGTU/BHWC; Matt Lacey, USFS; Dina Huff, USFS; John Jackson, Beaverhead County Commission/BHWC; Jaime Trivette, USFS; Katelin Killoy, MFWP; Cass Kohler, MFWP; Kaitlin Boren, DNRC; JM Peck, Rancher; Liz Jones, Rancher/BHWC; Jacob Smith, Rancher; Cathy Scott, Rancher; Mary Marlin; Vanna Boccadori, MFWP; Craig Fellin, Big Hole Lodge; Diane Hutton, Resident/BHWC; and Randy Smith, Rancher/BHWC.

Zoom: Anthony Marmorella; Eric; and Brian Wheeler, BHRF/BHWC.

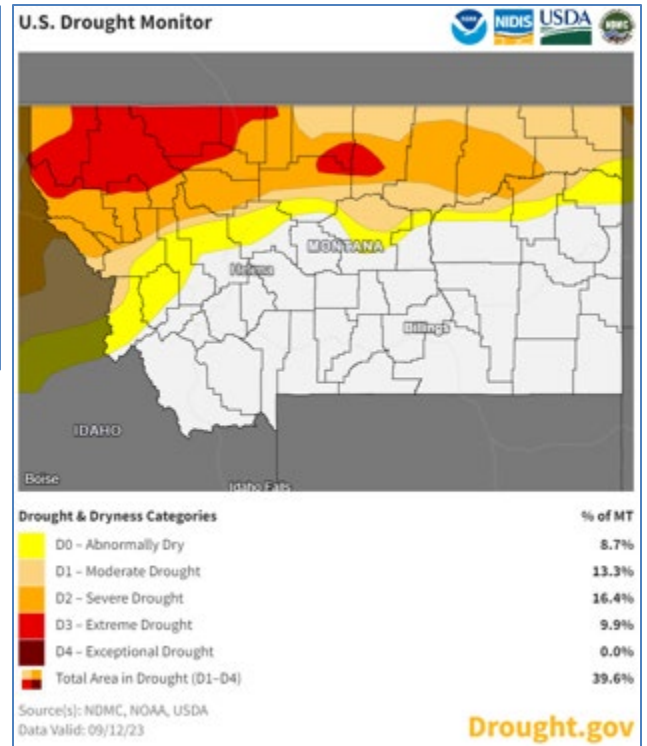
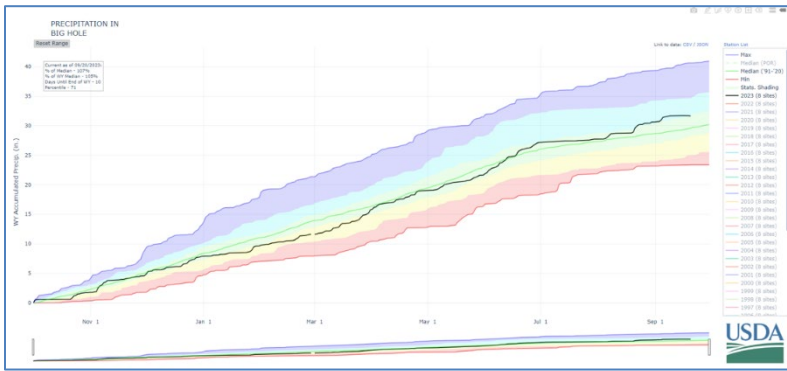
Meeting Minutes

BHWC monthly meetings are held at the Divide Grange with a virtual (Zoom) option provided thanks to Southern Montana Telephone Company, who donated the internet service. Meeting minutes and recordings are available at <https://bhwc.org/monthly-meetings/> (scroll down for meeting minutes archive). Printed copies are available during in-person meetings. Contact Tana Nulph, BHWC Associate Director, at tnulph@bhwc.org or (406) 267-3421 to suggest additions or corrections.

Reports

Streamflow and Snowpack Report – Kaitlin Boren, Department of Natural Resources and Conservation

- *Streamflows:* Streamflows in the Big Hole River watershed are at, or above average for this time of year depending on the section.
 - Section I (Saginaw Bridge on Skinner Meadows Road to North Fork Big Hole River mouth) is slightly below the median discharge values at 33.4 ft³/s, but good cfs for this time of year!
 - Section II (North Fork Big Hole River mouth to Dickie Bridge) is flowing at 156.5 ft³/s
 - Section III (Dickie Bridge to MFWP Maiden Rock FAS) is well above average, flowing at 373 ft³/s
 - Section IV (MFWP Maiden Rock FAS to Tony Schoonen FAS) Melrose (406 ft³/s) and Glen (427 ft³/s) gages are above median flow rates.
 - Section V (Tony Schoonen FAS to confluence with the Jefferson River) is above median flows at 270 ft³/s



- **Outlook:** The 8-14 day outlook predicts near normal temperatures and slightly above average precipitation.
- **ENSO Alert System Status (from NOAA):** El Nino Advisory
 - **Synopsis:** El Niño is anticipated to continue through the Northern Hemisphere winter (with greater than 95% chance through December 2023 -February 2024).

Director's Report – Pedro Marques, Executive Director

- Drought management – no need this year!
- Wise River flow and project development
- WOTUS rule
- BLM water use on Seymour Creek
- Deep dives into seeding/fertilization
- For discussion
 - Fisheries crisis?
 - NY Times and PBS national news
 - Time for a counter narrative?
- Proposal to BoR or AtB – where to store/enhance water storage

Steering Committee Report – Randy Smith, Chair; Jim Hagenbarth, Vice-Chair; and Roy Morris, Secretary

- The steering committee had nothing to report at this time.

Communications and Wildlife Report – Tana Nulph, Associate Director

- Outreach and communications
 - YouTube – BHWC channel has reached 1,000 subscribers!
 - Conservation Fund logos/swag
 - Biodegradable seed cards
 - Stickers
 - Magnets
 - Keychains
 - Next up: gear!



- Weekly drought updates
 - Text message AND email
 - To sign up for text messages, text DROUGHT to 26989.
- Wildlife
 - 2023 range rider
 - July 1 – September 30
 - Highlights:
 - Lion, wolves, and (curious) bears
 - No confirmed depredations so far
 - Journalist joining Chet last week of September
 - Livestock Loss Board: secured \$15,000
 - Submitted LOS for AtB, RCCP proposals
 - Heart of the Rockies Initiative



Restoration Report – Ben LaPorte, Program Manager

- *Smith Sage Springs:*
 - Fish shocking and Salvage with MFWP
 - Started construction on August 24 (4th week now)
- *Browns Gulch*
 - YEP installed more structures – 54 total!
- *Upper Oregon Creek/Anaconda Uplands*
 - Gully check dam monitoring/survey
 - MCC and Watershed Restoration Group
 - Weed spraying
 - Cabbage Gulch BDAs (~70 structures)
- *Other Happenings*
 - *Elkhorn Repository Investigation*
 - Fieldwork complete
 - 18 test pits excavated
- *Ally Allen, summary of her summer in the Big Hole*
 - Restoration projects involved with:
 - Anaconda Uplands
 - Upper Oregon Creek
 - California Creek demo area
 - Cabbage Gulch
 - Muddy Gulch
 - Eastern Pioneers
 - Browns Gulch tributary



- Browns Gulch mainstem
 - Trapper Creek tributary
- Trail Creek conifer encroachment
- Smith Sage Springs Restoration
- FFIP monitoring
- Highlights
 - LTPBR structures: Ally loved seeing the water being backed up
 - Various field measurements: Skills she gets to take with her into the future
- Lessons Learned
 - There are many steps to a restoration project that aren't always talked about.
 - Many people from different backgrounds help to create an amazing project.
 - Beavers are hard to get on a trail camera.
 - Ally will never look at a stream the same way again!



New Business

- JM Peck nomination
 - John Jackson made a motion to add JM Peck to BHWC's governing board.
 - Liz Jones seconded the motion.
 - No opposition, no discussion
 - ***Motion passed, JM is now on BHWC's board (Congrats, JM, and welcome!)***
- The Big Hole Valley Historical Society has published 2 books on history of the Big Hole. You can purchase them both directly from Alta Miller or at the bookstore in Dillon. 100% of proceeds stay in the Big Hole Valley and are used for scholarships for local students. If purchased from Alta, the first volume is \$50 and the second is \$65. (Prices are slightly higher at the bookstore.)

Break – 10 minutes

Special Topic Presentation

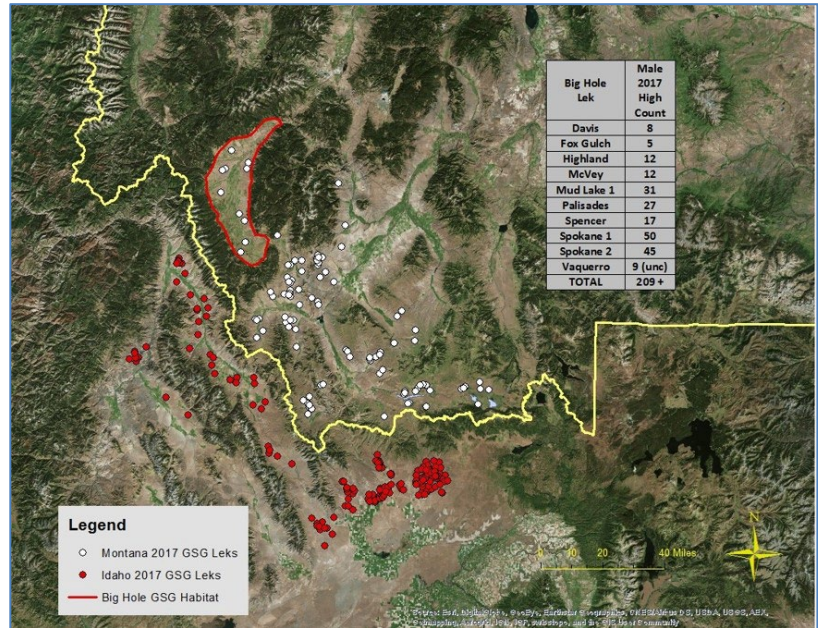
• Big Hole Sage Grouse Study

- Presented by: Vanna Boccadori, Montana Fish, Wildlife and Parks



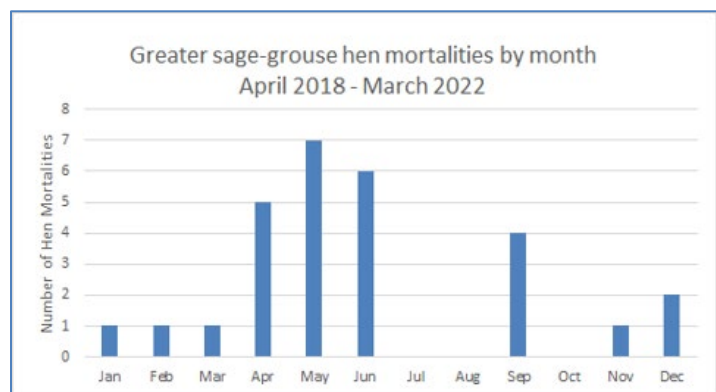
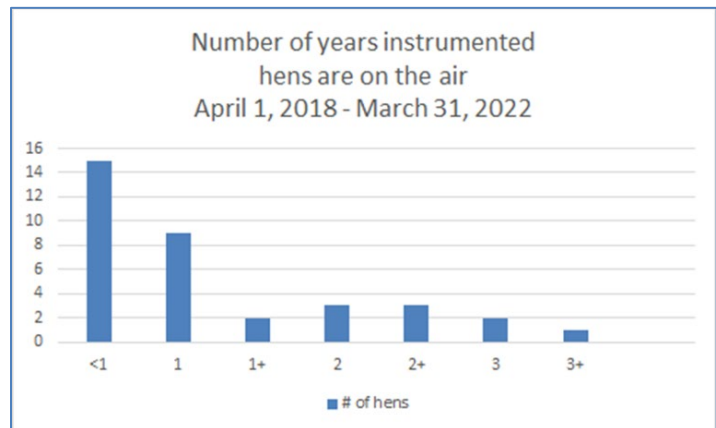
Upper Big Hole Sage Grouse Study

- 2018-2022
- Mission: Proactive collaborative approach to sage grouse conservation in a sustainable working landscape.
- Objectives:
 - Define seasonal habitat use
 - Determine migratory status
 - Identify migration corridors and stop-over locations
 - Determine if Big Hole population contributes to genetic connectivity across SW MT and ID
 - Characterize nesting habitats
- Partners:
 - USFWS
 - BLM
 - FWP
 - Todd Cross
 - USFS
 - TC
 - DNRC
 - Big Hole landowners
 - BHWC
 - Vigilante Electric Cooperative



Study Results

- Probability of surviving the first breeding season post capture = 0.73
- Probability of surviving the first winter post capture = 0.95
- Do hens exhibit nest fidelity? YES
 - Overall, yes averaging 0.4 miles between consecutive nests. Great habitat in the Big Hole!!!
 - Devil in the details: depends on age, nest fate within and across years, years of experience.
 - NOTE: hens display nest fidelity even when habitat has been altered since the hen began nesting there. Time lag can lead to decline in population.

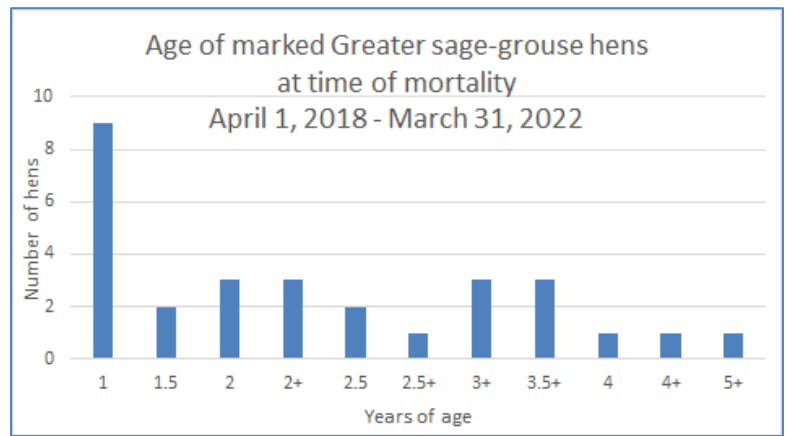


- Nesting
 - Incubation: 27 days
 - Clutch size: 7 eggs
 - Likelihood of a hen nesting: 94%
 - Nest success: 33%
 - Annual reproductive success (probability of a female hatching ≥ 1 egg in a season): 37%

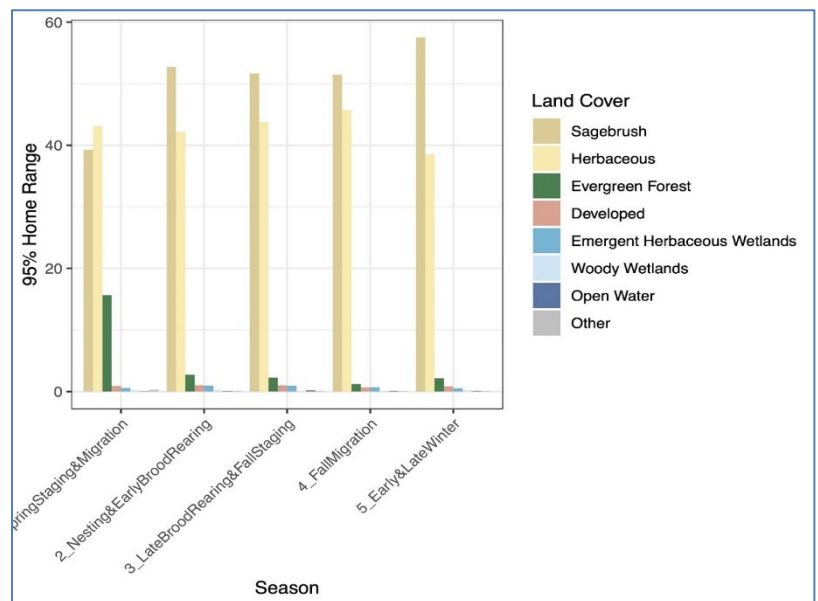
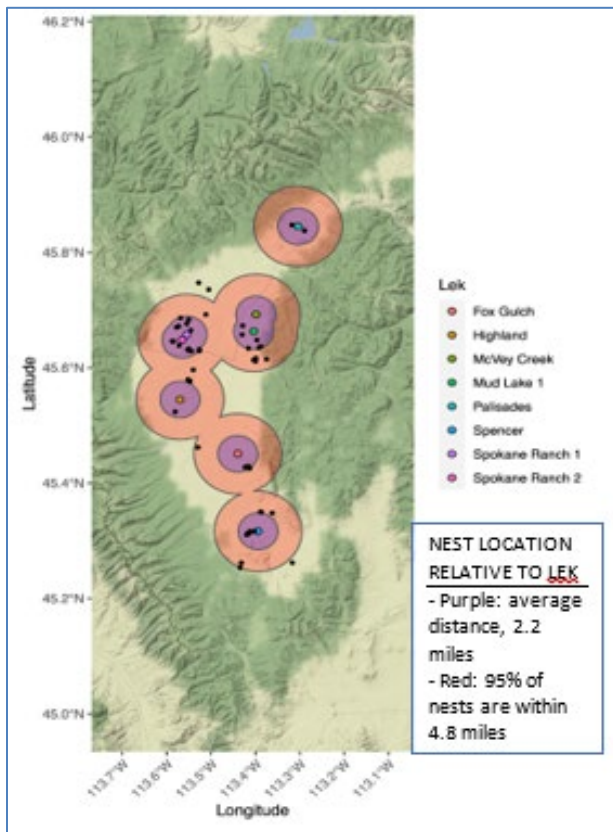
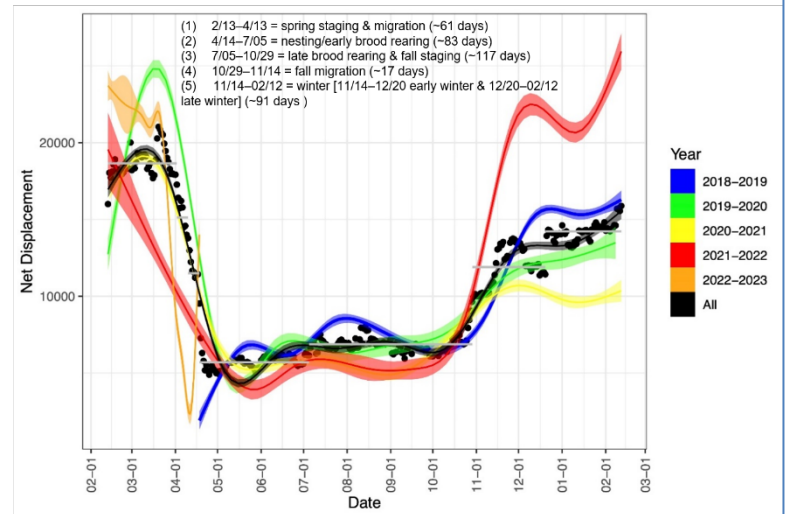
Greater Sage Grouse Hen Cause of Mortality in the Upper Big Hole Valley 2018-2022

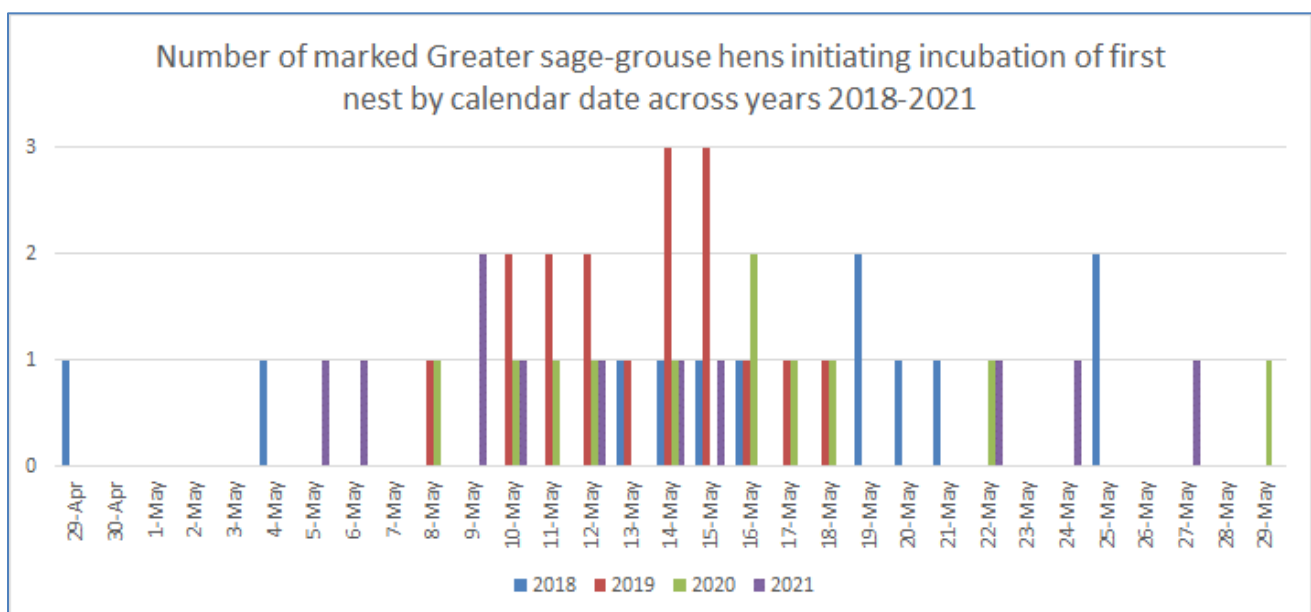
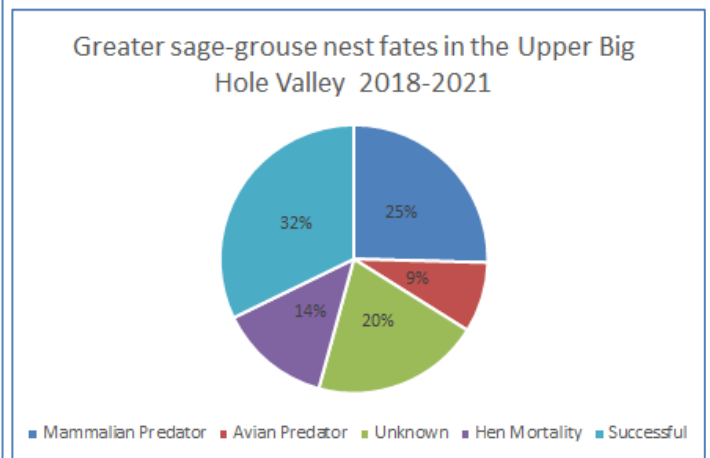
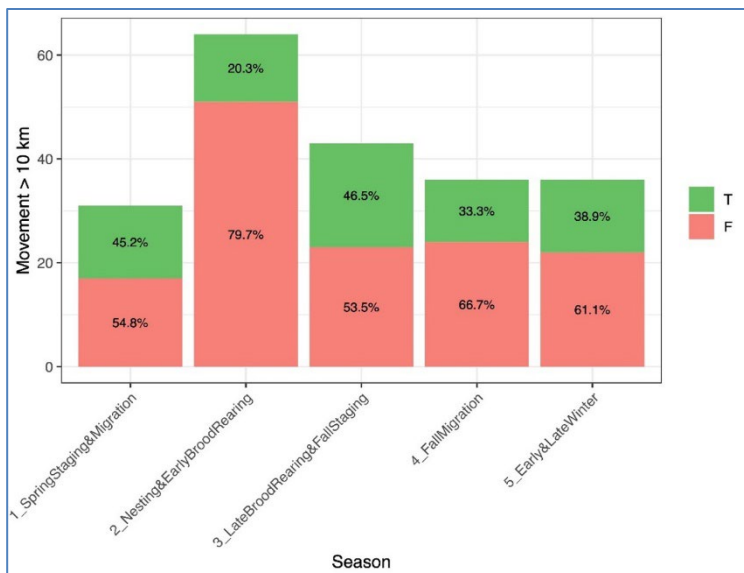
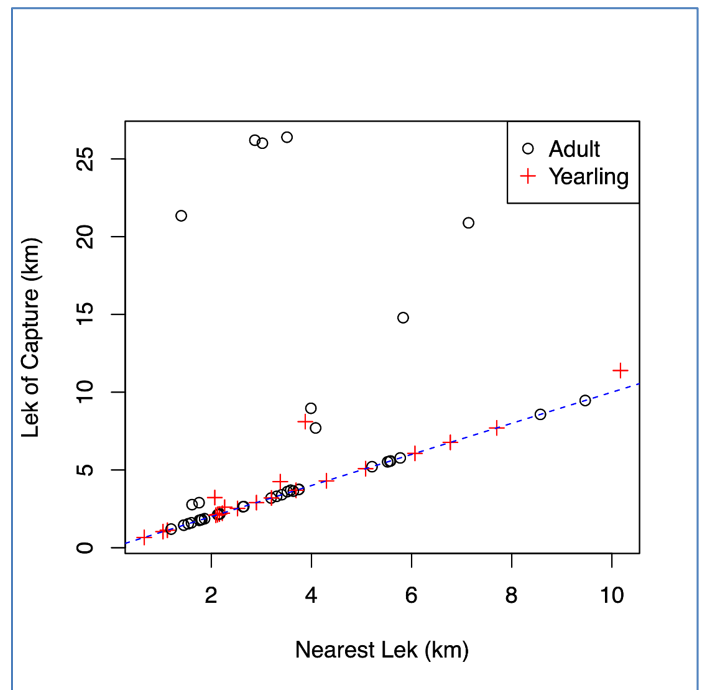
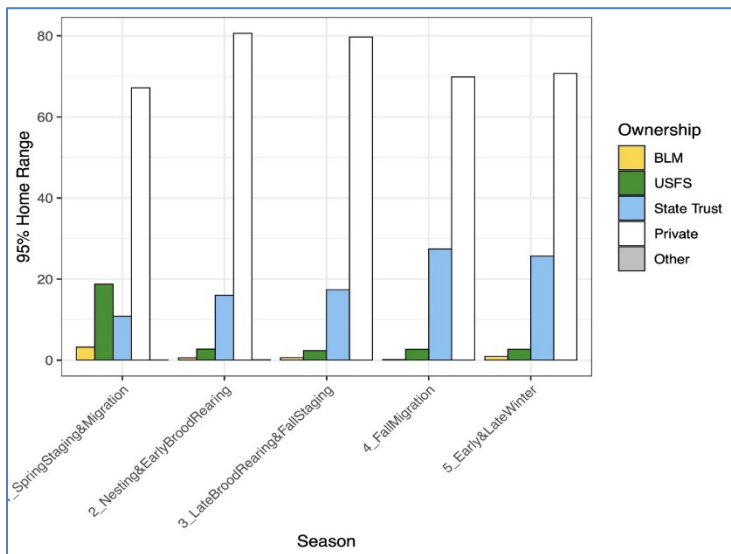


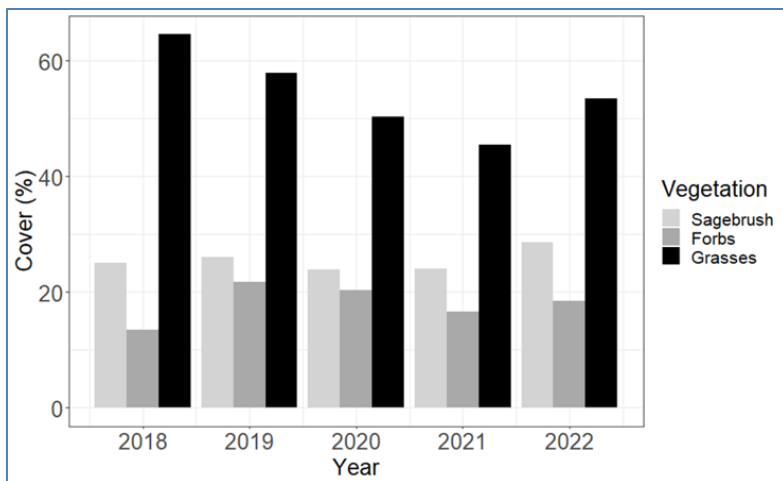
■ Capture related
 ■ Avian predation
 ■ Unknown cause of mortality
 ■ Mammal predation
 ■ Unknown predation



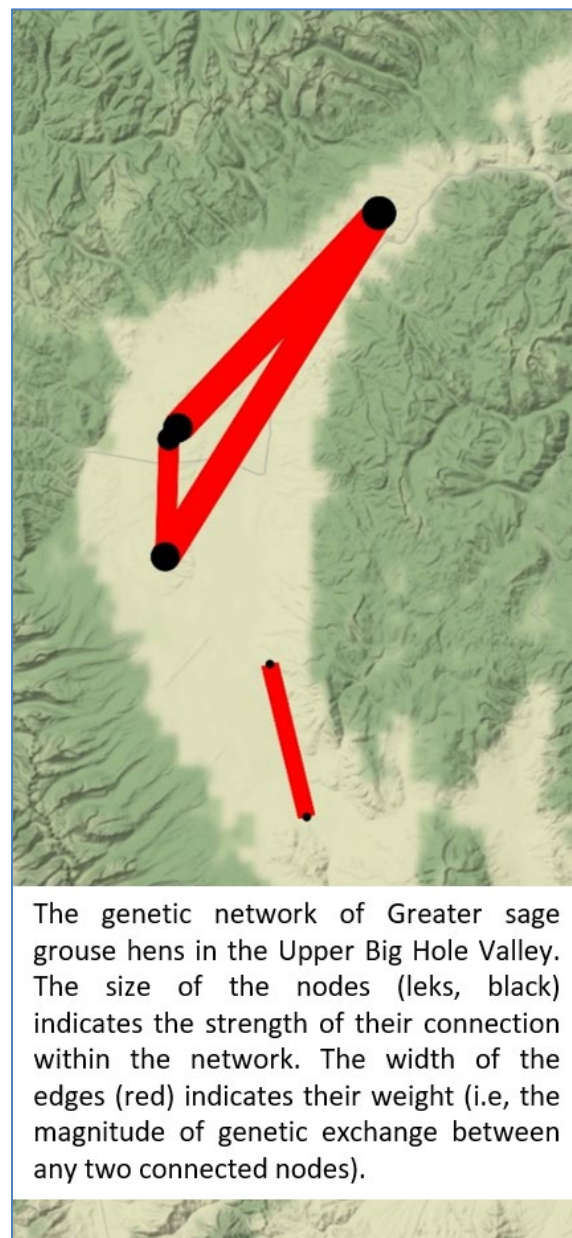
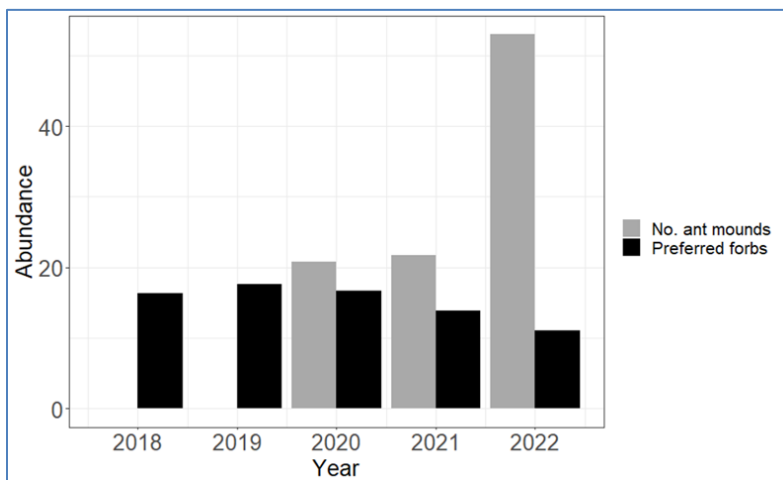
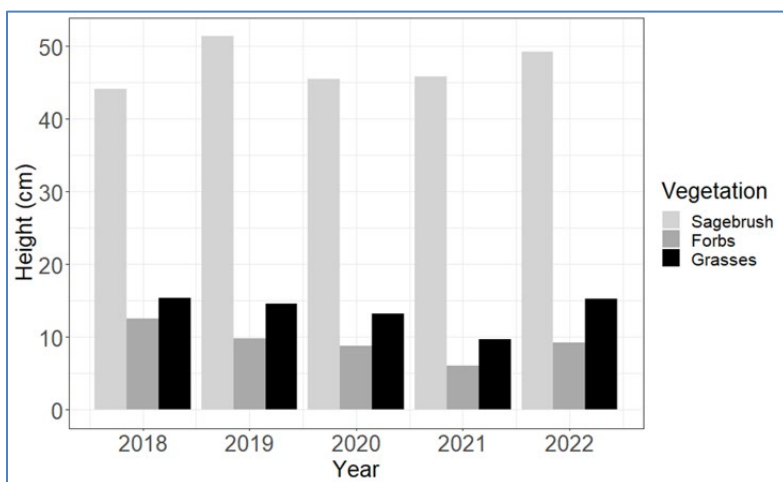
LETTING THE BIRDS DEFINE THEIR SEASONS







Nest Shrub Characteristics	Average	Range
Shrub height (cm)	61	35-97
Shrub width @ widest (cm)	100	59-158
Shrub width @ 90° (cm)	78	50-122
Nest branch height (cm)	30	17-56
Nest branch length (cm)	32	10-74
% Aerial nest cover – ARTRV Live	73%	5-100
% Aerial nest cover – ARTRV Dead	27%	5-85
% Lateral nest cover	66%	25-95



Upcoming Meetings

- October 18, 2023: **Wildlife Update (MFWP)**
 - 7:00 pm at the Divide Grange/Zoom
- November 15, 2023: **Deep Aquifer Pumping (MBMG)**
 - 6:00* pm at the Divide Grange/Zoom
 - Please note the time change to 6 pm to account for the shorter winter days.

Adjourn