

FY2022 Predator Management Status Report Appendix

Annual Predator Management Project Reporting Form

Please fill out this form to the best of your ability. If you have questions please contact Predator Management Staff Specialist Pat Jackson at [Pjackson@ndow.org](mailto:Pjackson@ndow.org) or 775-688-1676. If necessary please use additional pages in your responses.

1. Fiscal Year Reporting: 7/1/2021-6/30/2022
2. Date Report Submitted: 7/15/2022
3. Name of Contractor (include name of submitter if different): Brian Jansen
4. Address of Contractor: 3656 E Mocking Bird Ln, Camp Verde, AZ 86322
5. Phone Number of Contractor: 928-925-8189
6. Email of Contractor: bighorns101@yahoo.com
7. Contract Number: 72DOW-S1271
8. Dates of Contract: 12/2021 - 11/2025
9. Dates Worked: 92 days total

Jackson Mts: 12/16-22/2021, 1/13-20, 2/16-22/2022

Calico Mts: 11/11-15, 27-30, 12/17-21/2021, 1/13-19, 3/6-12/2022

Snowstorm Mts: 7/1-5/2021, 5/4-9/2022

Delamar/Clover Mts: 9/19-10/05, 11/29-12-1/2021, 3/16-21, 5/4/9/2022

10. Assessment of Habitat Conditions of Project Area (if applicable): The lower parts of Jacksons seem very poor for forage. Seems like a combination of drought and too many cattle given the annual precipitation the last year or 2. Delamars are continued to be hammered by horses and maverick cattle, except in the dry wilderness area Calicos seem stable in forage with horse numbers being fewer and little cattle grazing of the higher areas. Deer seem to be concentrated in the alfalfa fields and very few away from Ag. Snowstorms seems to be stable in forage conditions.
11. Briefly describe work conducted: Lethal removal of mountain lions within distribution of select bighorn sheep populations. GPS/Satellite collar deployment on mountain lions in conjunction with a predation study of horses by mountain lions in Delamar and Clover Mts. Collar Recaptures for trapped animal survival study. Collar tracking and kill-site visitation for data collection for predation study.
12. List number and species of predators removed.

Mountain lion = 17 total (9 Lethal, 8 Collar)

- Snowstorm Mts. = 1 (1M) Lethally Removed
- Jackson Mts = 1 (1M) Lethally Removed
- Calico Mts = 2 (2F) Lethally Removed
- Delamar / Clover Mts. = 1F lethally removed, 2 (1F, 1M ) GPS Collars Deployed

13. Provide an overall assessment of project. In your opinion should the project continue?

Ungulates reproduce slowly, especially bighorn sheep. It takes multiple years of sustained predation control to create observable changes in bighorn populations. Most of the ranges worked are small in physical size and bighorn population size; small numbers of mountain lions can negatively impact these populations and continued removal of only a few animals annually will result in observable changes to population sizes. The predation on feral horse population study in Delamar and Clover is a very important aspect of feral horse ecology with native ungulates that needs to be continued to understand the larger scale impacts of removing feral horses and necessary wildlife management activities that likely need to occur in conjunction with removals, if sudden impacts to native ungulates are to be mitigated. The study is also yielding powerful insights into the dispersal of mountain lions from a natal range into other ranges and how reproduction in 1 range impacts populations in sometimes disparate ranges. I encourage all of the project work sites to continue until at such time population objectives for bighorn sheep have been reached. I would also encourage the project areas to collar ungulates and include me on the mortality alerts. It is far more effective if we have collars informing us of lion activity along with hunting for lions. However, collars are useless for catching predators if I am not informed immediately of a mortality and that mortality is not investigated immediately. There are only 3 nights that a lion will be feeding on an adult deer, bighorn, or pronghorn and the first is needed to detect the mortality. Thus, mortality alerts need to be responded to immediately not just by myself, but by anyone available to determine cause of death. Waiting 2 nights after an alert will not be useful. I am willing to respond immediately but help is appreciated and adding my contact to the alert notice would be very effective.

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1. Fiscal Year Reporting: 2021-2022
2. Date Report Submitted: 8-15-2022
3. Name of Contractor (include name of submitter if different): University of Montana
4. Address of Contractor: 32 Campus Dr Missoula, MT, 59812
5. Phone Number of Contractor: 406-243-4989
6. Email of Contractor: [joshua.millspaugh@mso.umt.edu](mailto:joshua.millspaugh@mso.umt.edu)
7. Contract Number: Subgrant award SG22-03
8. Dates of Contract: 7/1/2021 thru 6/30/2022
9. Dates Worked: 7/1/2021 thru 6/30/2022
10. Assessment of Habitat Conditions of Project Area (if applicable): NA

11. Briefly describe work conducted: Use remote data collection technologies to estimate mule deer (*Odocoileus hemionus*), mountain lion (*Puma concolor*), feral horse (*Equus ferus*) abundance in Northwest Nevada and estimate drivers of mule deer populations in the region. Continue black bear (*Ursus americanus*) research initiated in 2018 across Nevada Department of Wildlife's (NDOW) current black bear range in Southwest Nevada. The research conducted in 2022 in Northwest Nevada focused on checking camera-traps (to replace batteries and pull memory cards) and weather stations that were installed in the previous fiscal year and initiating analysis of data collected. Additionally, we have continued to finalize analysis of data collected from 2018-2020 in Southwest Nevada in preparation for publication in peer-reviewed journals as well as develop additional research products from those data.
12. List number and species of predators removed (if applicable): NA
13. Provide an overall assessment of project. In your opinion should the project continue?

The project is off a promising start, with camera traps installed and continuously collecting data at 202 sites across Northwest Nevada as well as corresponding weather stations collecting data on the abiotic conditions at 35 of these locations. Both camera traps and weather stations are functioning as expected, giving us broad scale information on wildlife communities and weather patterns across the study area. The target species, including mountain lions, have been detected numerous times on camera traps at multiple sites, which will enable us to evaluate our intended objectives of estimating species abundances and factors related to mule deer decline. However, one year of data is of limited value for understanding drivers of complex ecological systems such as population regulation of large mammals at broad spatial scales. Although we anticipate providing useful preliminary results from data collected in 2021-2022, four more years of data collection will be needed to provide the research-informed management guidance on the factors driving mule deer populations in Northwest Nevada.