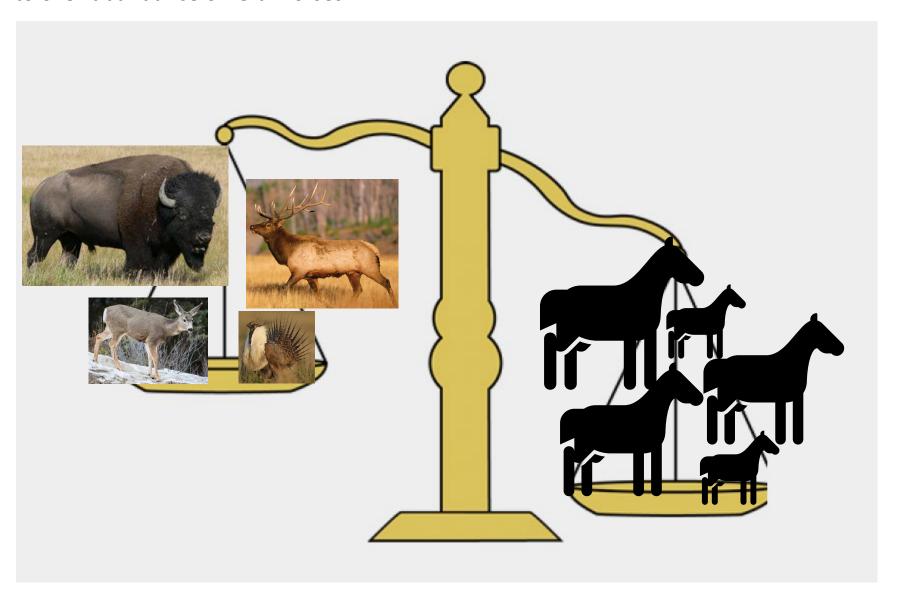


Feral Horse Over-abundance and Ecological Damage on the Wind River Reservation

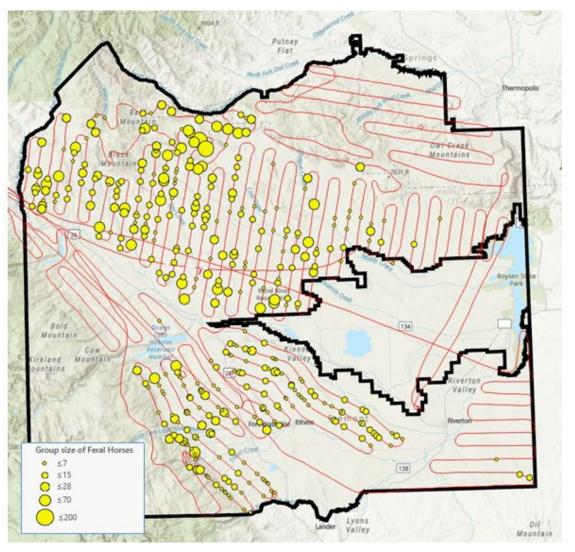
Shoshone & Arapaho Fish & Game, Lander US Fish & Wildlife

September, 2023

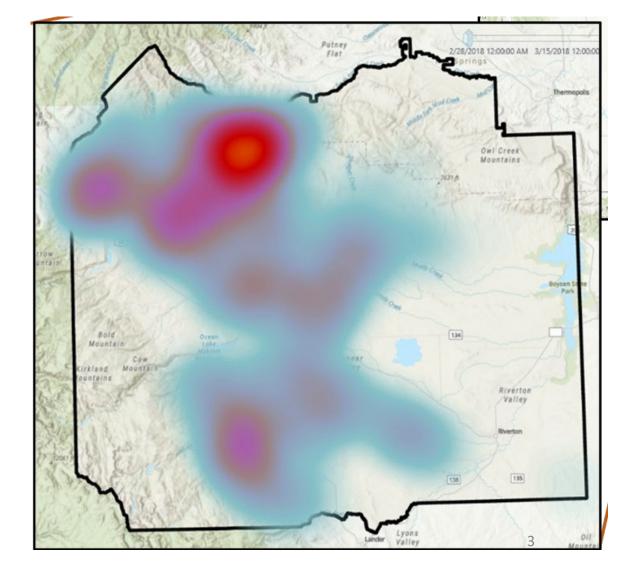
Which is more important to tribal members – native wildlife or feral horses? Can't have both in abundance, habitat will not sustain them. Ecological damage has occurred due to over-abundance of feral horses.



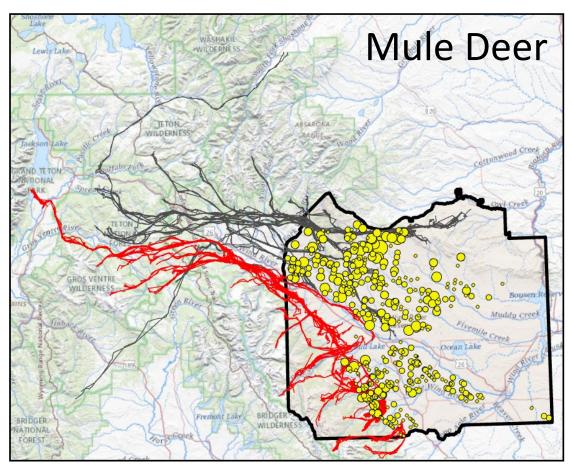
Feral horse groups observed during four airplane survey flights in Jan-Feb 2022 on the Wind River Reservation. A total of 5,004 horses were counted. The larger the symbol, the greater the number of horses at that location. Red lines indicate the flight routes. To account for those feral horses missed, we estimated population at ~8,000.



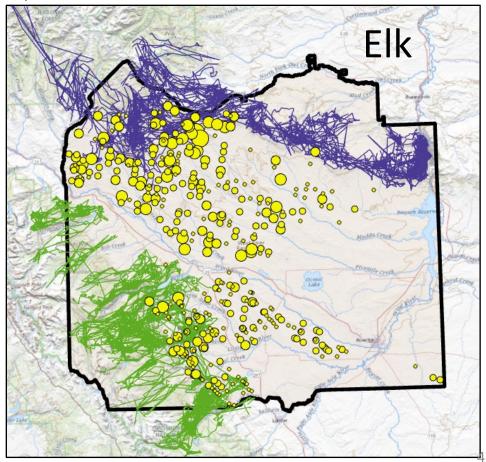
Feral horse densities on the Wind River Reservation. The areas marked by red are the highest density areas.



Lines indicate daily movements of 68 GPS-collared mule deer during spring and fall migration periods between 2018-2021 on the Wind River Reservation in relation to locations of feral horse groups observed during Jan-Feb 2022 airplane survey (yellow dots). Black lines represent 20 Owl Creek Mountain deer and red lines represent 48 Wind River Mountain deer.

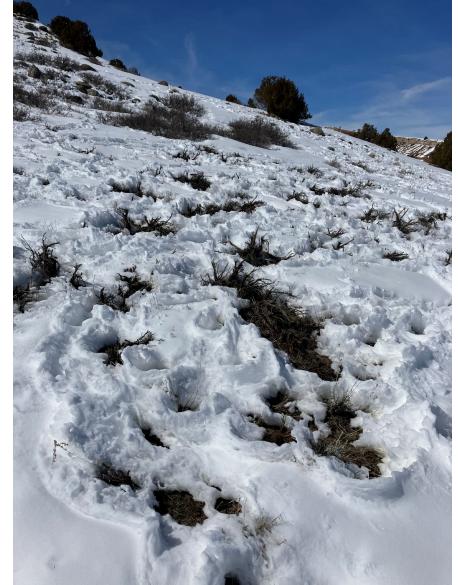


Lines indicate daily movements of 74 GPS-collared elk during spring and fall migration periods between 2018-2021 on the Wind River Reservation in relation to locations of feral horse groups observed during Jan-Feb 2022 airplane survey (yellow dots). Blue lines represent 35 Owl Creek Mountain elk and green lines represent 39 Wind River Mountain elk.

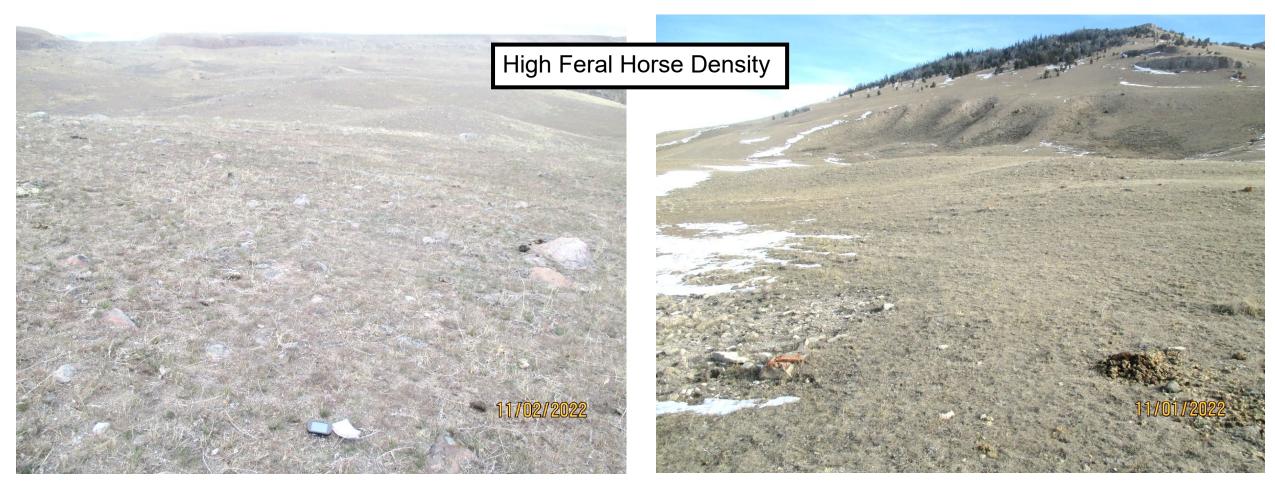


Sage and rabittbrush, very important winter food for 100s of wintering mule deer in the Washakie Breaks area, annihilated by feral horse overbrowsing. Photos taken winter of 2022-23.





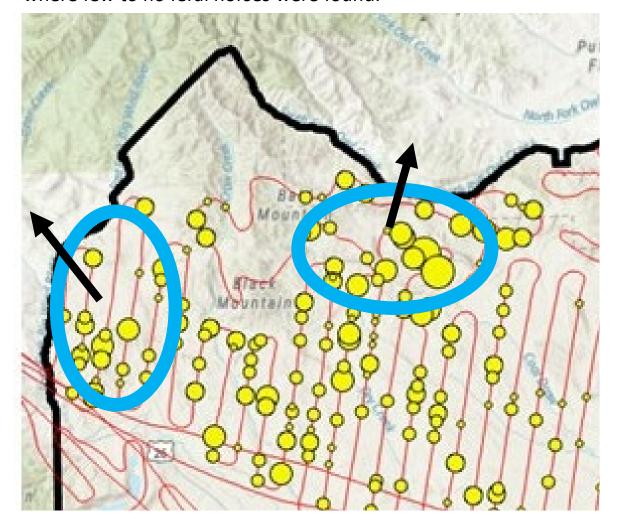
Heavy forage utilization by feral horses in the Timmoco Creek area of the Wind River Mountain foothills (left), and hills east of Red Peak in the Owl Creek Mountains (right), Wind River Reservation. Photos taken in November 2022 prior to larger gather in winter 2022-23 and summer 2023. Many 10s of thousands of acres looked similar. Both areas provide important ranges for wintering elk and mule deer. Notice the near complete absence of forage available for wildlife during the upcoming winter of 2022-23.

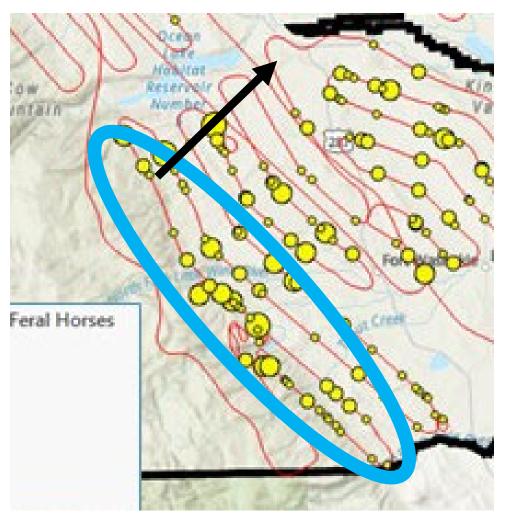


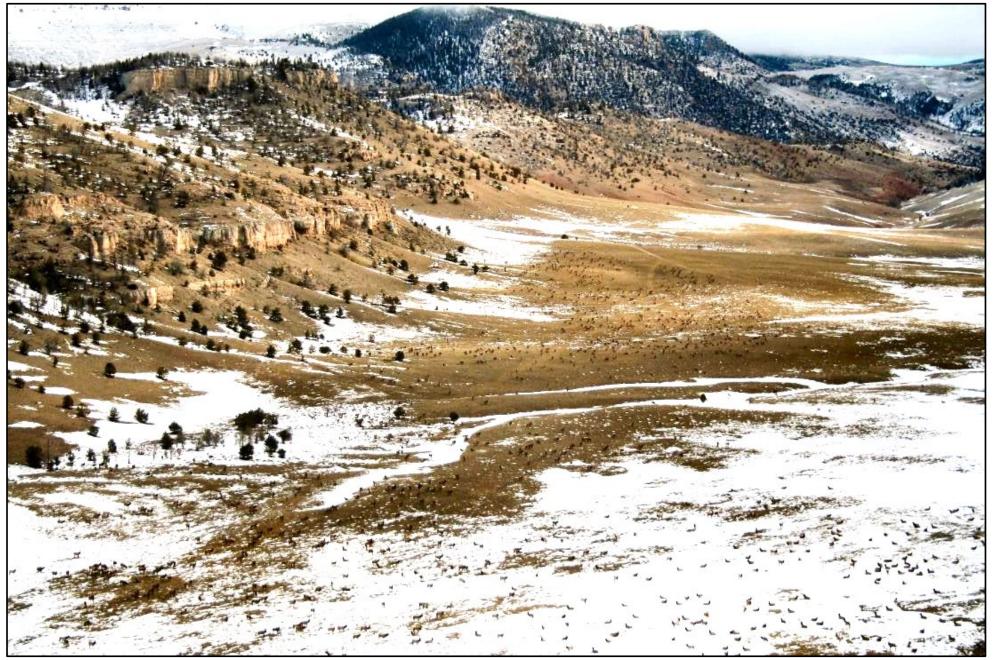
In contrast to previous page, the images below represent areas devoid of feral horses. Notice much greater abundance of forage left for wintering wildlife. Image on left is located on Crow Mountain in the Wind River Mountains, and right is located in the Willow Creek area. Similar levels of elk, mule deer, and permitted livestock occur in the areas shown on this page and previous page.



Compared to previous years, large groups of elk were <u>not</u> wintering in the East Fork or Spring Mtn areas, nor along the faces of the Wind River Mtns during winter 2022-23 (shown by blue polygons, these areas had an over-abundance of feral horses, yellow dots are feral horse groups from 2022 survey). Large groups of elk were found where arrows are pointing, areas where few to no feral horses were found.







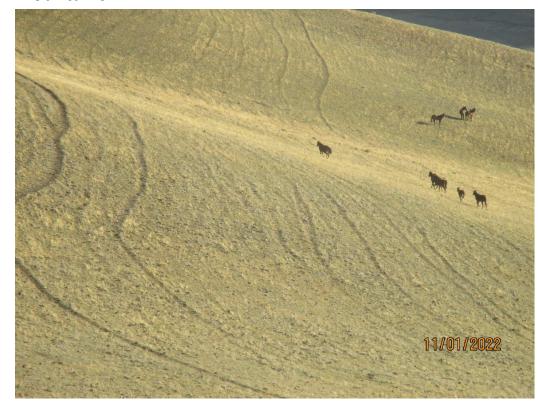
Owl Creek Elk Herd

- Spring Mtn.
Image was taken 12
years ago and
shows ~2,000
wintering elk. Elk in
this large of group
have not been seen
since, due to
competition from
feal horses for
space and forage.

Feral horses competing with a small group of bighorn sheep on Washakie Rim during spring green-up. Area provides both crucial winter and yearlong range for bighorn sheep as well as crucial winter range for elk.



Trailing by feral horses north of Red Basin in the Owl Creek Mountains.

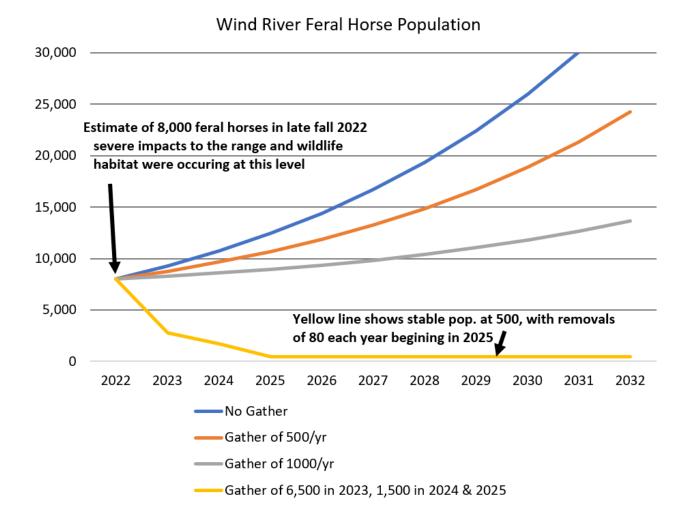


Feral horse impacts to an aspen stand (stripping of bark) and Ranger Spring in the Crow Creek Basin area of the Owl Creek Mountains. Photos courtesy of the Wind River Agency BIA.





Projections of what Wind River's feral horse population would do under different amounts of removal



Rate of change lines are based on an annual adult survival of 95%, an annual weanling proportion of the population of 0.23 (from Jan-Feb 2023 composition of the 2,001 feral horses gathered), and an annual weanling survival of 90% after Feb.