



MONTANA FISH, WILDLIFE & PARKS

MEMO

Date: January 20th, 2022
To: Montana Fish and Wildlife Commission
From: Brett Dorak – Region 7 Wildlife Manager
Subject: Region 7 Antelope Survey and Management Data

Region 7 Antelope Survey Data

Antelope survey data presented in Figures 1 – 3 show summer survey trends that are observed across the Region's seven antelope Counting Units (CUs). Data from the CUs are presented at a regional scale as well as by a north and south designation where CUs are separated by the Yellowstone River. There are four CUs north of the Yellowstone River and three to the south. There has been a decrease in observed counts over the past few decades with a stabilization, and slightly increasing counts, following the severe winter of 2010 – 2011 (Figure 1). This may be attributed to landscape level changes having occurred and still occurring within the region that may be preventing the population from growing and resulting in a new, potentially lower plateau for the population as license allocations, especially doe/fawn license have remained low since 2011. Throughout time the general trend of bucks: 100 does has remained consistent (Figure 2), and a slight negative trend has been observed with fawns: 100 does (Figure 3). There is currently a multiyear antelope research project occurring in multiple portions of the region to help better understand antelope movements, seasonal habitat use, and demographic rates.

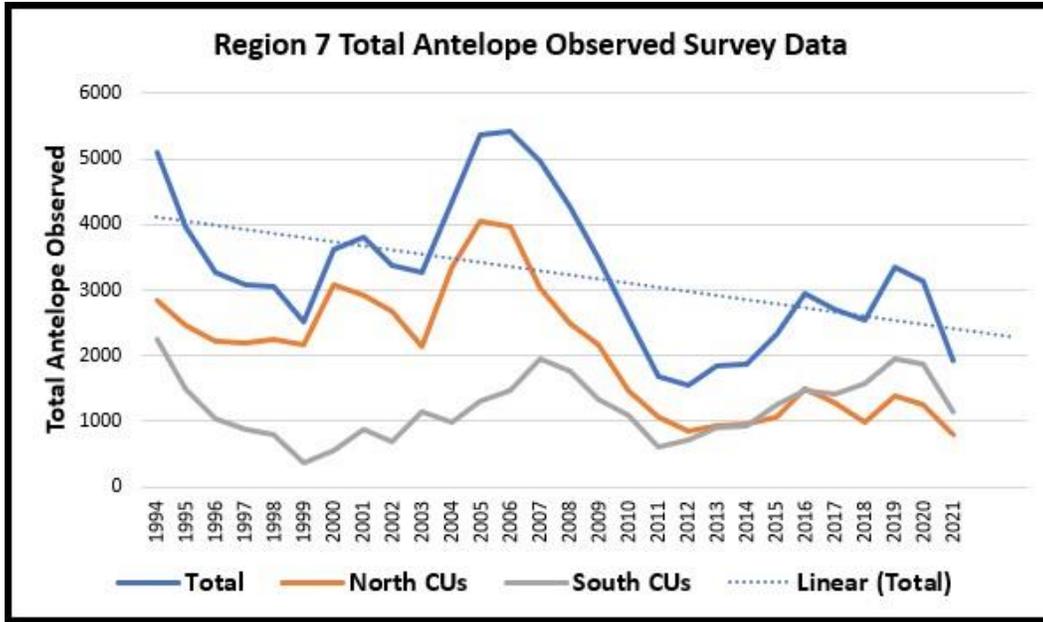


Figure 1. Summer antelope trend data for Region 7 from 1994 – 2021 with a separation of counting units (CUs) represented by north and south designation using the Yellowstone River as the divider.

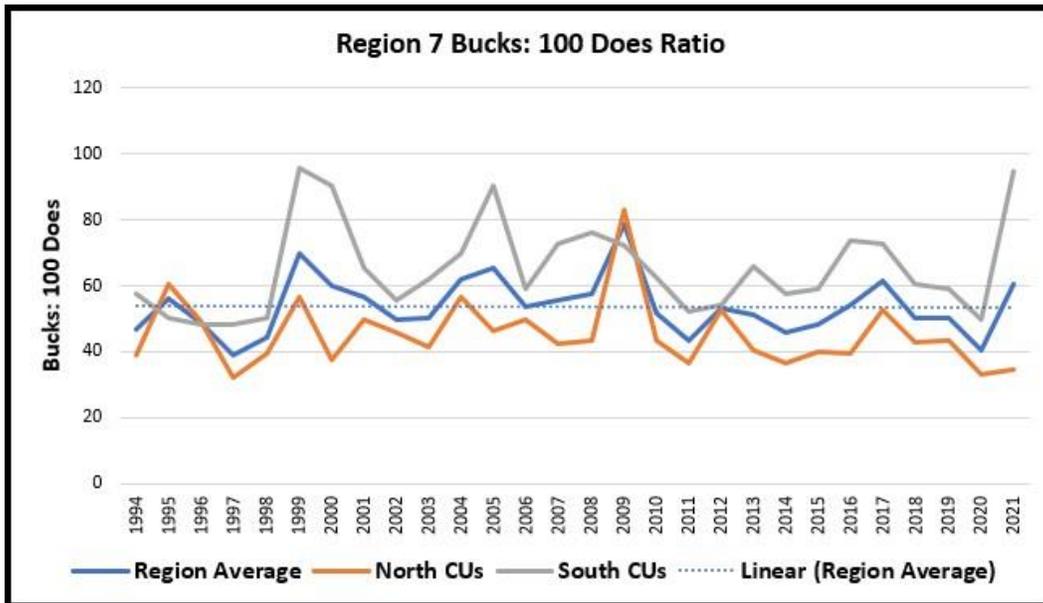


Figure 2. Summer antelope bucks: 100 does trend data for Region 7 from 1994 – 2021 with a separation of counting units (CUs) represented by north and south designation using the Yellowstone River as the divider.

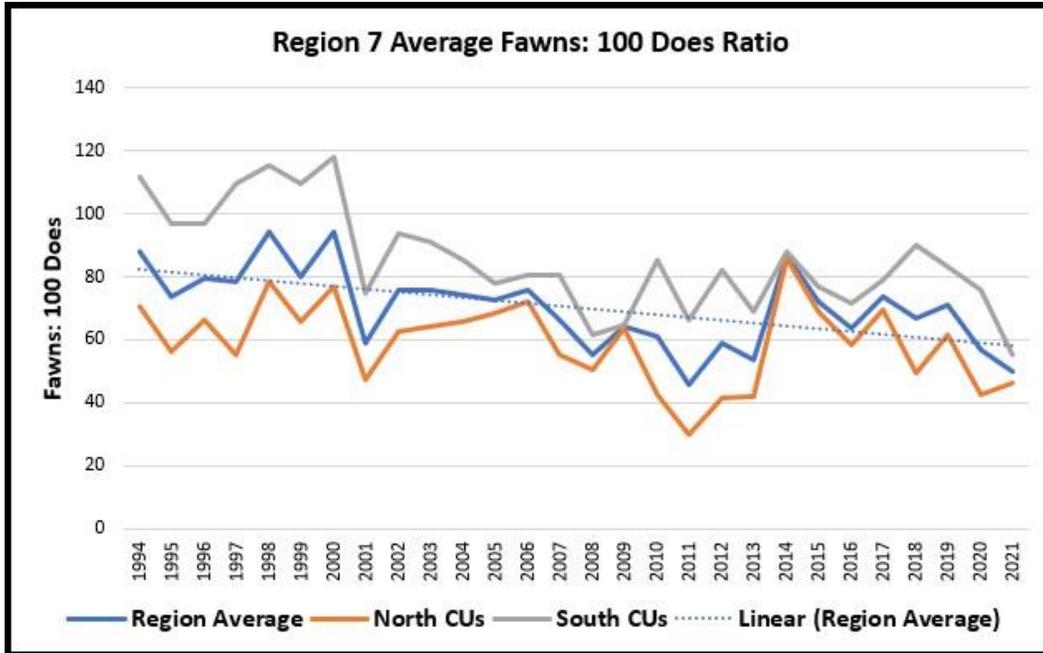


Figure 3. Summer antelope fawns: 100 does trend data for Region 7 from 1994 – 2021 with a separation of counting units (CUs) represented by north and south designation using the Yellowstone River as the divider.

Region 7 Antelope License and Harvest Data

Antelope licenses have varied slightly in their naming metrics over the years but have always been managed as a region-wide license. Either-sex and doe/fawn licenses have been adjusted as needed based on total counts and ratios observed within the survey trend data. Figure 4 presents the total amount of either-sex licenses by year along with their associated estimate of harvest based on hunter harvest surveys. Figure 5 presents the total amount of regional doe/fawn licenses (the 799-30 doe/fawn license is excluded due to it only being valid in HDs 704 & 705) by year along with their associated estimate of harvest based on hunter harvest surveys. 2021 has an “*” as survey data have not been collected at the time of this report. Figure 6 provides a spatial break down of harvest with the north data representing HDs 700, 701, and 703, while the south data represents HDs 702, 704, and 705.

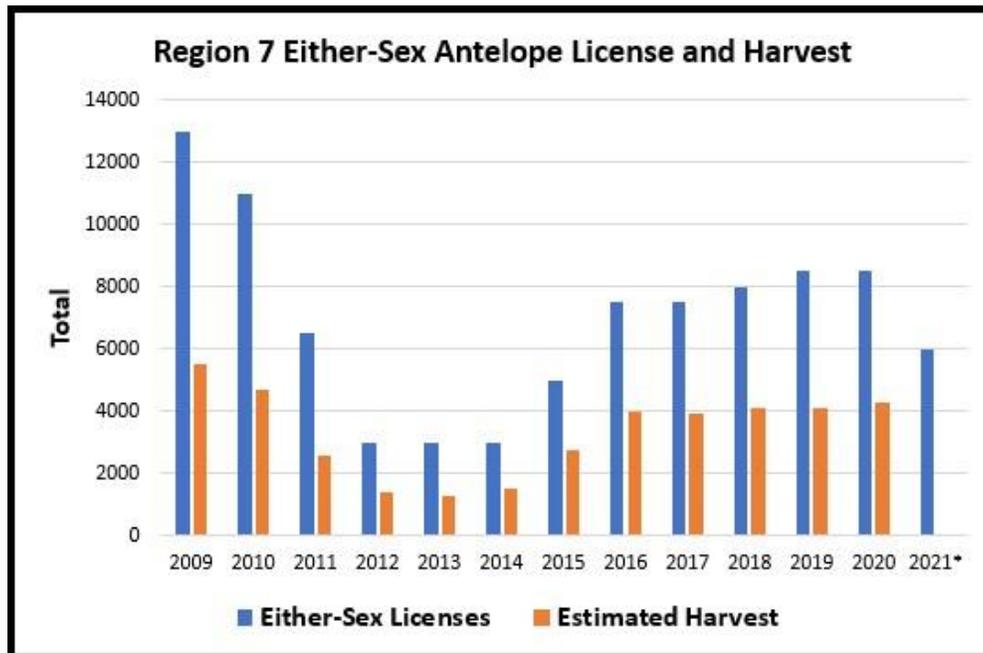


Figure 4. Region 7 either-sex license allocations from 2009 – 2021 and the associated harvest for 2009 – 2020 as gathered from hunter harvest surveys.

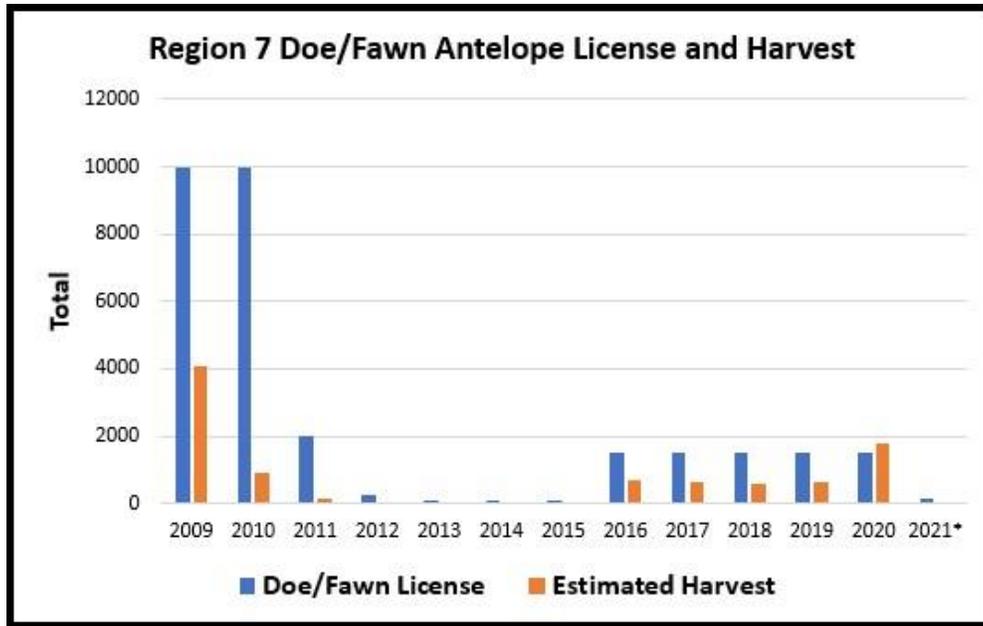


Figure 5. Region 7 doe/fawn license allocations from 2009 – 2021 and the associated harvest for 2009 – 2020 as gathered from hunter harvest surveys.

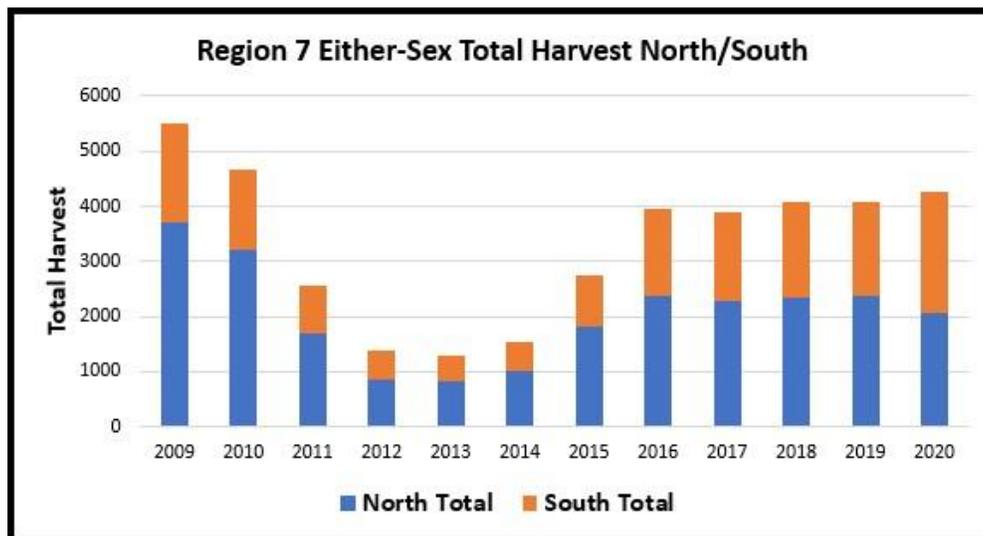


Figure 6. Region 7 harvest data broken down to represent harvests in the northern portion of the Region (HDs 700, 701, and 703) and harvests in the southern portion of the Region (HDs 702, 704, and 705) from 2009 – 2021 as gathered from hunter harvest surveys.

Region 7 Check Station Data – Antelope

Antelope data are gathered annually on the opening and closing weekend of antelope season, as well as opener of General deer/elk season, at check stations operated by Region 7 wildlife staff at Ashland, Broadus, Glendive, Hysham, and Mosby. Figures 7 & 8 provide male and female age data at a regional scale while Figures 9 & 10 provide male age data for a comparison of the northern portion of the Region (HDs 700, 701, and 703) and the southern portion of the Region (HDs 702, 704, and 705)

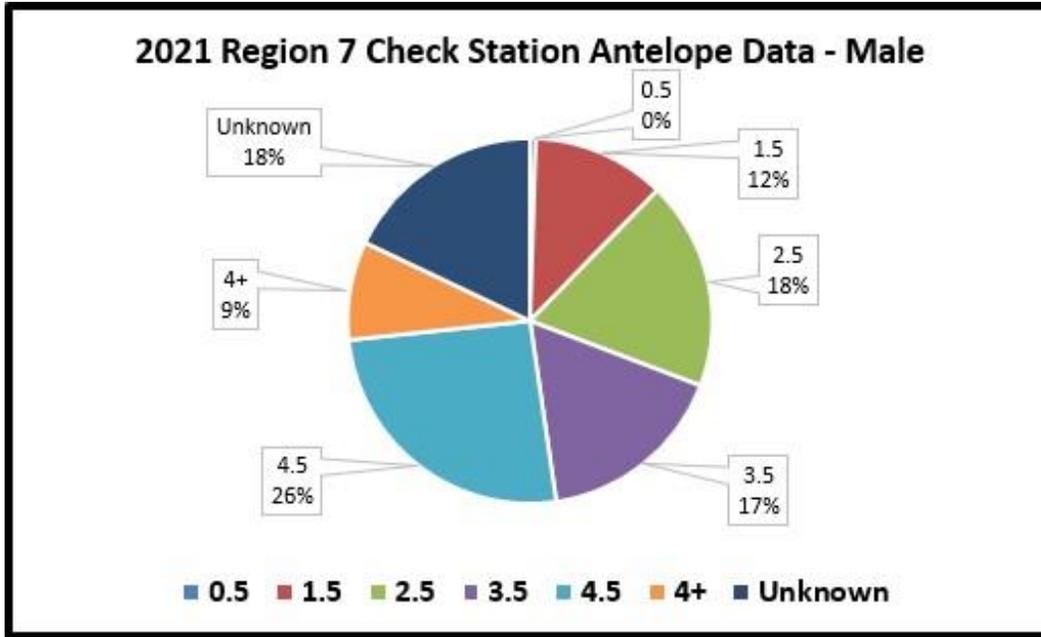


Figure 7. Region 7 check station data for the 2021 antelope season displaying estimated age of male antelope.

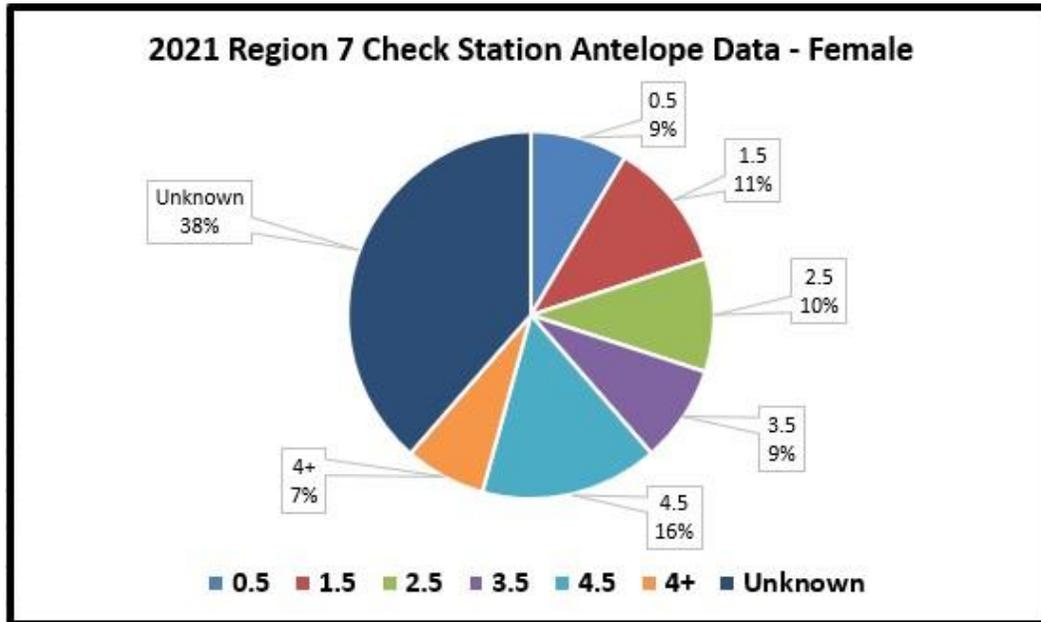


Figure 8. Region 7 check station data for the 2021 antelope season displaying estimated age of female antelope.

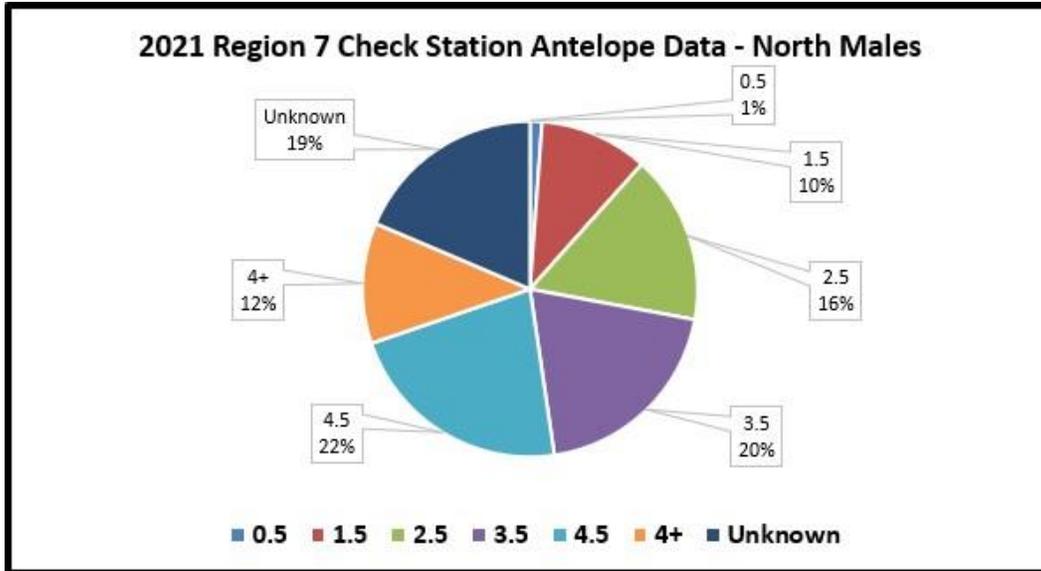


Figure 9. Region 7 check station data for the 2021 antelope season displaying estimated age of male antelope for the northern portion of the region (HDs 700, 701, and 703).

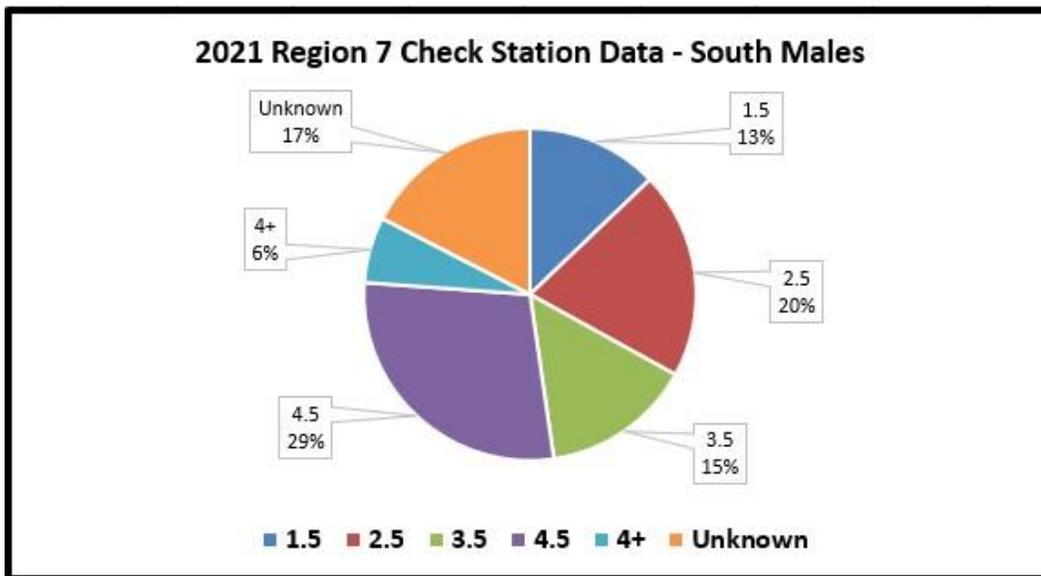


Figure 10. Region 7 check station data for the 2021 antelope season displaying estimated age of female antelope for the southern portion of the region (HDs 702, 704, and 705).