

2020 Objective Review and Recommendations

PR745 – Rattlesnake Pronghorn Herd Unit

Current Management Objective:	Postseason population estimate of 12,000 pronghorn
2015 Management Strategy:	Recreational management for Hunt Area 70; special management for Hunt Areas 71 & 72
2019 Estimate:	10,000 pronghorn, SCJ/SCA spreadsheet model
2020 Recommendation:	Convert all hunt areas to recreational management; maintain population objective of 12,000 pronghorn.

The Rattlesnake Pronghorn Herd Unit (PR 745) contains Hunt Areas 70, 71, & 72 and is located in central Wyoming (Figure 1). The herd unit encompasses an area of approximately 995 square miles from the city of Casper west along Highway 20/26 to Waltman, south along the Gas Hills Road to west end of the Rattlesnake Hills, southeast along the top of Rattlesnake Hills to the North Platte River, and northeast along the river back to the city of Casper. Relative densities of pronghorn vary within the herd unit, with higher densities found in sagebrush habitats within the Poison Spider and Casper Creek drainages. The main land use is traditional ranching and grazing of livestock, with several areas of oil and gas development. Land status within the herd unit is a mosaic of 53% public (Bureau of Land Management and State of Wyoming Lands) and 47% private lands, with larger tracts of public lands in the western and southern portions of the herd unit. Hunt Area 70, which consists mostly of lands converted to agriculture via irrigation, is dominated by private lands.

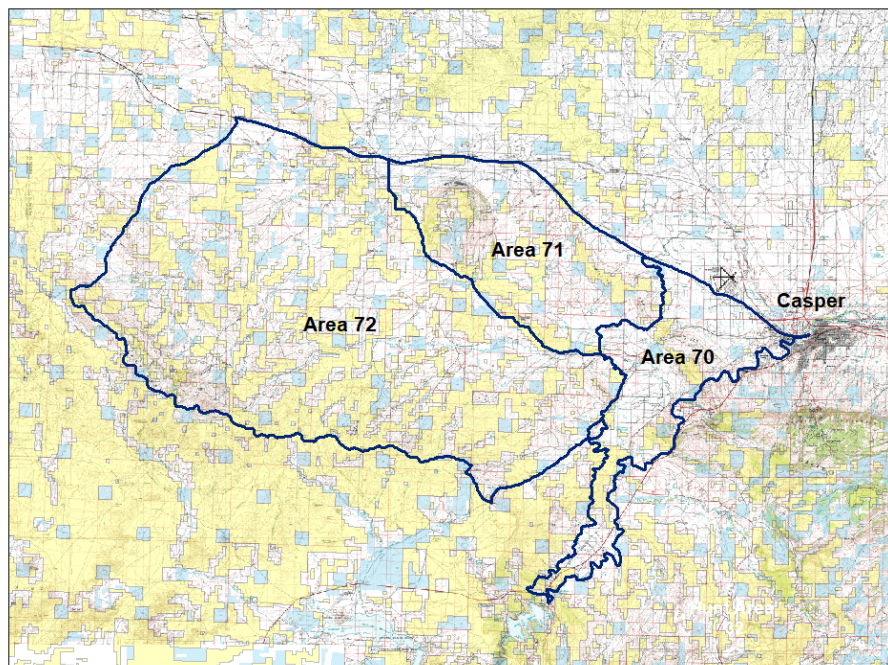


Figure 1. Map of Hunt Areas 70, 71, and 72 within the Rattlesnake Pronghorn Herd Unit, 2020.

Postseason population objectives are developed based on both biological and social factors including but not limited to: winter range carrying capacity, hunter desires, landowner desires and tolerances, land status, and competition for resources with other wildlife and livestock. Postseason population objectives include two components: a goal for population size, and a management strategy based on the desired ratio of males to females in the population. Management strategies can either be “recreational” – providing a higher level of hunting opportunity while maintaining a relatively lower male ratio, or “special” – providing a lower level hunting opportunity while maintaining a relatively higher male ratio. Criteria for recreational pronghorn herds are preseason buck ratios from 30 to 59 bucks per 100 does. Criteria for special management herds are preseason buck ratios from 60 to 70 bucks per 100 does.

Rationale

The spreadsheet model for this herd produces plausible population trends and reasonable population estimates. This herd was under special management for bucks until the 2015 objective review. Since then, Hunt Area 70 has been under recreational management, as agricultural lands dominate the area and a low density of pronghorn is desired. Hunt Areas 71 and 72 were left under special management strategy. Despite conservative license issuance, buck ratios have fluctuated between both recreational and special thresholds from year to year (Figure 2). Managers have reconsidered the viability of maintaining special management buck ratios in a herd with good hunting access and characteristically good production. Managers feel providing a higher level of hunting opportunity using a recreational management strategy is warranted for all hunt areas within this herd unit. Maintaining buck ratios at recreational management levels may also improve buck quality by reducing resource competition, provided overall population size is managed close to objective. We recommend maintaining the population objective of 12,000 for the Rattlesnake Pronghorn Herd Unit, while converting all hunt areas within the herd to a recreational management strategy. District managers will collect feedback from landowners and the public via online survey. A public meeting is not feasible in 2020 due to public safety issues related to the coronavirus pandemic.

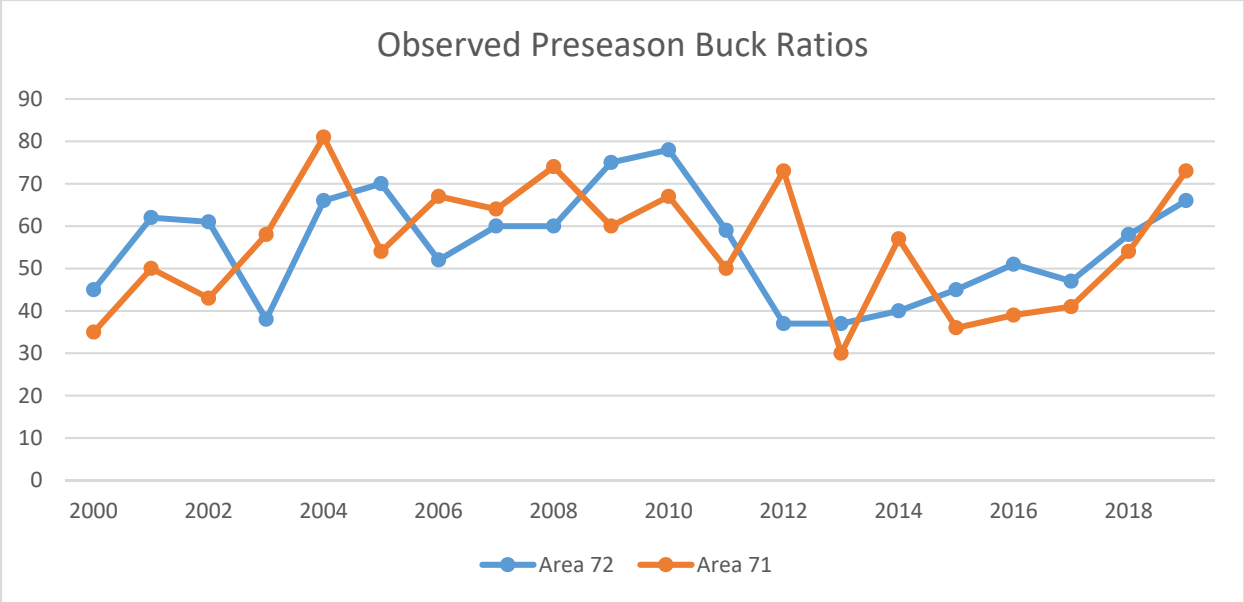


Figure 2. Observed preseason buck ratios for Hunt Areas 71 & 72 in the Rattlesnake Pronghorn Herd Unit, 2000-2019.