Upper Powder River Mule Deer Herd (Hunt Areas 30, 32, 33, 163 and 169)

Harvest Age and Antler Spread

Due to public concerns about a lack of quality bucks, incisors from field checked adult bucks were collected from 2015 - 2017 to determine harvested buck ages via cementum annuli techniques at the Wyoming Game and Fish Lab. Lab ages provide insight into the distribution of the age cohorts in the harvest as well as corresponding antler sizes. Despite inter-annual variation in the data, two general trends became apparent. The first observation is that 3.5-year-old deer are the most highly represented cohort of harvested deer, and the harvest rate decreases with increasing age cohort. The second trend is that antler size increases steadily from an average of 13.7 inches in 2.5 year old deer to an average of 19.8 inches in 5.5 year old deer and increases at a slower rate after that, resulting in an average of 21.8 inches in 7.5 year old deer. The limited sample size of deer over 5.5 years old makes it difficult to draw too many conclusions from the older deer cohort, other than there being fewer deer of that age that are available in the population for harvest (Figure 1).

Figure 1. Cementum age of harvested deer with corresponding antler spread and sample sizes from 436 mule deer sampled from 2015 to 2018.