
MOOSE DISTRIBUTION AND AGE AND SEX RATIOS IN NORTHWEST MONTANA AS REPORTED BY HUNTERS AT CHECK STATIONS

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We sought to better document moose (*Alces alces*) distribution and age and sex ratios in northwest Montana by asking hunters. During the 2010 hunting season we asked all hunters stopping at six check stations if they had seen moose, and if so, where, how many, and if they saw bulls, cows or calves. During the 13 days that check stations were open 17,564 hunters reported 490 sightings totaling 749 moose (313 bulls, 320 cows, 95 calves and 21 unknown) for an average of 1.5 moose per sighting (range 1 - 5). Across all check stations there was an average of 2.8 sightings and 4.3 moose seen per 100 hunters, but this varied from 0.9 sightings and 1.2 moose per 100 hunters at the Swan Check Station to 6.9 sightings and 10.4 moose per 100 hunters at Canoe Gulch. The bulls per 100 cows ratio averaged 98:100 across all check stations but varied from 67:100 at Canoe Gulch to 225:100 at the Swan. Likewise,

the calves per 100 cows ratio averaged 30:100 but varied from 8:100 at the Swan to 54:100 at Thompson Falls. Hunter-reported sex and age ratios at the North Fork Check Station agreed with those observed during a post-season helicopter survey in the same area (χ^2 $p = 0.83$), but hunter-reported ratios at Olney were significantly higher than those observed by helicopter (χ^2 $p = 0.01$). We discuss the difficulty of monitoring moose populations and the pros and cons of helicopter surveys and hunter-reported moose sightings.