



FACT SHEET

WYOMING LEGISLATIVE SERVICE OFFICE

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SPRING 2005 BIG GAME OUTLOOK AND ESTIMATED ECONOMIC IMPACT FROM SPORTSMEN

Big Game Estimates and Objectives

- Based on Wyoming Game and Fish (G&F) Department proposals, there will be more hunting opportunities (statewide hunting licenses and estimated hunters) for mule deer, pronghorn antelope, and mountain goats. There are estimated to be fewer hunters for white-tailed deer, moose, and bighorn sheep. The harvest and number of elk hunters is also projected to increase in 2005.
- The latest, preliminary *known* statewide population estimates of mule deer, white-tailed deer, pronghorn antelope, and elk are all within 10 percent of the statewide population objectives, with the number of pronghorn antelope somewhat higher than objective and the number of mule deer somewhat lower than objective.
- The latest, preliminary *known* statewide population estimates for bighorn sheep reveal a countable population that is nearly one-third below objective. Countable populations of moose are about 24 percent below objective; and mountain goat numbers are trending higher, with an estimated population almost 25 percent higher than the statewide objective. *[Note: As shown in Table 1, page 2, not all herds of all species have estimated population counts. In those instances, for example bighorn sheep, the G&F Department excludes population estimates for six of the 14 herds, yet includes population objective levels of four of those same six herds. As a result, the known population estimate would be expected to be lower than the statewide population objective, assuming the objective incorporates counts for some, or all, of the missing herds. The bottom line is the G&F objective is regularly based on more herds than the number of herds for which there is an estimated population, confusing the relationship between population objectives and population estimates.]*
- Quick facts:
 - ✓ The estimated population of antelope in Wyoming has risen (relatively steadily) over the past six years. However, based upon recent census population estimates, the human population of Wyoming slightly exceeds the estimated population of antelope in 2005 – a measure that has occasionally been cited.
 - ✓ Statewide mule deer estimated populations have declined from a near term high in 2000, although annual harvest and success rates have remained fairly stable since 2001. The success rate for mule deer hunters is just over 50 percent.
 - ✓ The statewide population of elk has trended down over the last six years, dropping by well over 10,000. The 2004 G&F Annual Report acknowledges the "management strategies will continue to be focused on decreasing the population" of elk. Consistent with that direction, the Game and Fish Department proposed a slight increase in statewide elk hunters for 2005 over the 2004 season combined with improved projected harvests. Success rates for elk hunters hover at just over one in three, or roughly 36 percent.
 - ✓ The number of moose hunters has steadily declined over the past three years – a trend that is projected to continue for 2005. Nonetheless, hunter success rates for moose have approached 90 percent.

Table 1. Summary of Big Game Population Estimates, Objectives, and Hunters, 1999 – 2005.

	Population Estimate			Population Objective, 2005	Hunters	
	1999-2003 Average	2004	Proposed 2005		2004	Proposed 2005
Mule Deer	506,213	486,618 ¹	500,700 ¹	564,650 ²	70,031	73,536
White-tailed Deer	NA	54,331 ³	56,000 ³	52,000 ⁴	20,546	18,080
Pronghorn	439,470	489,914 ⁵	496,600 ⁵	461,500 ⁶	38,150	44,986
Elk	98,935	87,925 ⁷	82,500 ⁷	83,153 ⁸	57,138	59,282
Moose	12,578	10,838 ⁹	11,100 ⁹	14,530	891	770
Bighorn Sheep	5,997	5,207 ¹⁰	5,200 ¹⁰	7,685 ¹¹	259	239
Mountain Goat	262	326	310	250	15	25

Source: LSO summary of *2005 Big Game Hunting Season Recommendation Summary*, April 6, 2005, Wyoming Game and Fish Department. [Notes: According to G&F, Commission officials made "little change" to the staff recommendations this year. Nonetheless, LSO Research staff has rounded proposed 2005 populations and hunter estimates to attempt to avoid any confusion. Further, note that the complete population estimates are still being compiled for 2005 and will not be released until mid summer 2005. The estimates summarized above reflect the best preliminary estimates available, notwithstanding unforeseen events.]

Notes: Several population estimates (and even objectives) do not account for all herds. The notes correlate as follows:

1) Mule Deer: 35 of 39 herds reported; 2) Mule Deer: 37 of 39 herds reported; 3) White-tailed Deer: 2 of 5 herds reported; 4) White-tailed Deer: 3 of 5 herds reported; 5) Pronghorn: 41 of 44 herds reported; 6) Pronghorn: 42 of 44 herds reported; 7) Elk: 29 of 35 herds reported; 8) Elk: 34 of 35 herds reported; 9) Moose: 8 of 10 herds reported; 10) Bighorn Sheep: 8 of 14 herds reported; 11) Bighorn Sheep: 12 of 14 herds reported.

Sportsmen Economic Contribution

- Resident and nonresident hunters contribute between an estimated \$120 and \$130 million annually to Wyoming's economy. Hunters of big game account for approximately two-thirds of this total economic impact.
- Resident and nonresident anglers contribute an estimated \$212 million to Wyoming's economy, according to the U.S. Fish and Wildlife Service (USFWS). About 45 percent of these expenditures are attributed to trip-related expenditures and 55 percent are attributed to equipment and other purchases. This brings the total estimated contribution of hunting and fishing to Wyoming's economy to approximately \$330 to \$340 million annually.
- In addition to hunting and fishing, USFWS estimates total economic contributions by "wildlife watching" participants total nearly \$265 million annually.

Table 2. Estimated Economic Impact of Big Game Hunting in Wyoming, by Species.

	G&F License Revenue	Total Agency Revenue*	Estimated Hunter Expenditures
Mule & White-tail Deer	\$8,021,018	\$10,763,778	\$37,286,799
Pronghorn	\$3,829,118	\$5,335,731	\$11,441,887
Elk	\$7,415,739	\$10,117,083	\$33,213,218
Moose	\$252,323	\$423,302	\$939,520
Bighorn Sheep	\$142,949	\$263,765	\$562,978
Mountain Goat	\$8,381	\$23,647	\$14,665
Bison	\$21,815	\$47,028	\$36,364
TOTALS	\$19,691,343	\$26,974,334	\$83,495,431

Source: 2004 Game and Fish Annual Report, as derived from *Wyoming Resident and Nonresident Deer, Elk, and Antelope Hunter Expenditure Survey*.

Notes: * Total agency revenue includes all hunter license fees, and allocation "application fees, conservation stamp revenue, federal/other grants and interest earned on Game and Fish cash balances."

[Final Notes: Sources for all of the above information come from the same documents cited as the sources for Tables 1 and 2 as well as clarifying discussions with Game and Fish Department personnel and 2001 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, U.S. Fish & Wildlife Service. LSO Research staff has summarized the above information from the cited documents but have not independently verified the information. Nor are the economic estimates products of LSO.]