

# 2023 BIG GAME LICENSE RECOMMENDATION SUMMARY BY SPECIES

April 20, 2023



## SUMMARY

- CPW is recommending a total of 236,600 limited licenses for deer, elk, pronghorn, moose, and bear. These recommendations include a reduction of 32,000 (-12%) limited licenses from last year.
- The winter of 2022-2023 was above average in severity on the entire Western Slope.
- The severity of the winter was historic from Rangely to Steamboat Springs and the Wyoming state line. We are recommending unprecedented license reductions in this severe winter zone.
- In the severe winter zone, male and either-sex deer license recommendations are reduced by 5,000 (-48%) combined in D-2 (Bears Ears), D-6 (Rangely), and D-7 (White River). Female licenses are reduced by 2,900 (-94%) combined and to the minimum of 10 licenses per hunt code in D-2 (Bears Ears) and D-7 (White River).
- In the severe winter zone, antlerless elk license recommendations are reduced in E-2 (Bears Ears) by 5,600 (-89%) with all public cow hunts reduced to the minimum of 10 licenses per hunt code. For E-6 (White River) we're recommending a reduction of 8,700 (-63%) antlerless licenses. For E-21 (Rangely) the reduction is 400 (-60%) antlerless licenses.
- In the severe winter zone, pronghorn male and female license quotas are reduced to the minimum of 10 per hunt code. Male licenses are reduced by 1,100 (-74%) and female licenses are reduced by 700 (-83%) combined for all DAUs. Affected DAUs include PH-9 (Great Divide), PH-10 (Maybell), PH-11 (Sand Wash), and PH-34 (Axial Basin).
- A minimum of 10 licenses per hunt code is necessary in order to populate statutory and regulatory license bins such as Landowner Preference Program (20% or 25% of total quota), youth license quotas (15% of all female license quotas), and nonresident license allocations.

## DEER

- Statewide, CPW is recommending 12,600 (-12%) fewer deer licenses than last year.
- For the Northwest Region, we are recommending a reduction of 12,800 (-33%) deer licenses.
- For all rifle seasons, we are recommending statewide total reductions of 4,500 (-9%) buck, 2,000 (-28%) either-sex, and 5,000 (-26%) antlerless licenses.
- Buck license recommendations were reduced in herds that are now within or below HMP sex ratio objective ranges (examples include D-8 State Bridge, D-9 Middle Park, D-13 Maroon Bells, D-40 Cimarron, and D-41 Logan Mountain).
- Buck license recommendations were increased in herds that are above HMP sex ratio objectives. Examples include D-21 West Elks (+10 licenses), D-22 Taylor River (+25 licenses), D-25 Powderhorn (+10 licenses), and D-49 Bijou Creek (+120 licenses).
- In DAUs where CWD prevalence is greater than 5%, management actions were taken to reduce prevalence, including buck license increases for several herds (examples include D-3 North Park (9% prevalence), D-19 Uncompahgre Plateau (14% prevalence), D-23 La Sal (27% prevalence) and D-51 South Grand Mesa (9% prevalence)).
- Antlerless license reductions are recommended in herds that are within or below HMP population objective ranges (examples include D-2 Bears Ears, D-5 Table Lands, D-7 White River, D-9 Middle Park, D-28 Arkansas River, D-42 Rifle Creek, and D-45 Las Animas).
- Antlerless license increases are recommended in herds that are within or above HMP population objective ranges (examples included D-8 State Bridge, D-17 Bailey, D-21 West Elk, and D-25 Powderhorn).

## DEER

in 2023	
# of DAUs	# Hunt Codes
54	994

## ELK

- Statewide, CPW is recommending 107,700 limited elk licenses, down 15,400 (-12%) licenses from last year. The reduction is actually 18,800 (3,450 greater); however, see the next bullet for explanation.
- Archery hunting in elk DAU E-14 (Grand Mesa) was limited starting in 2023. Converting what were previously over-the-counter unlimited licenses to limited licenses results in an increase of 3,450 limited archery licenses, which masks the magnitude of the actual reduction in total limited licenses.
- Continuing with a 19-year trend, antlerless elk license recommendations are reduced from last year by 16,400 (-25%) to 48,300. The statewide total for antlerless elk licenses is now 36% of what it was at its peak in 2004 of 132,500.
- Antlerless license reductions are recommended in herds that are within or below HMP population objective ranges. Examples include E-8 (Troublesome), E-10 (Yellow Creek), E-13 (Williams Fork), and E-33 (Trinchera), and E-35 (Cimarron).
- Antlerless license reductions are the result of a combination mortality from the severe winter of 2022-2023, herds achieving HMP population objectives through antlerless harvest, low calf/cow ratios reducing population productivity, and increases in HMP population objective ranges.

## ELK

in 2023	
# of DAUs	# Hunt Codes
42	1,049

## PRONGHORN

- Statewide, CPW is recommending 18,700 limited pronghorn licenses, down 3,500 (-16%) licenses from last year.
- CPW is recommending reductions in both buck and doe licenses for 8 of 11 (73%) plains DAUs. These reductions are intended to manage populations toward their HMP objectives (examples include PH-1 Escarpment, PH-5 Haswell, PH-6 Hugo, PH-7 Thatcher, PH-13 Tobe).
- Pronghorn license reductions are the result of a combination of mortality from the severe winter of 2022-2023, previously high licenses to intentionally reduce populations, increases in population objective ranges, and lower fawn/doe ratios due to drought reducing population productivity.

## PRONGHORN

in 2023	
# of DAUs	# Hunt Codes
28	336

## MOOSE

- CPW is recommending 644 limited moose licenses, an increase of 52 (+9%) from last year.
- These recommendations include 268 (+17, +7%) bull and either-sex licenses and 376 (+35, +10%) antlerless licenses.
- Antlerless moose license recommendations are designed to manage moose populations toward HMP population objectives and keep moose populations within the capability of their habitat. Additionally, antlerless licenses have considerably lower success rates than antlered licenses.

## MOOSE

in 2023	
# of DAUs	# Hunt Codes
12	156

## BLACK BEAR

- CPW is recommending 20,100 limited black bear licenses, a decrease of 630 (-3%) from last year.
- Similar to last year under the 2020-2024 BGSS, in 2023, ten bear DAUs will have OTC licenses available during archery, muzzleloader and concurrent rifle. All PLO seasons statewide are also OTC.
- Annual license sales increases seen over the previous 3 years seem to have stabilized in 2022 with nearly identical statewide hunter numbers between 2022 and 2021.

## BLACK BEAR

in 2023	
# of DAUs	# Hunt Codes
17	210

# 2023 BIG GAME LICENSE RECOMMENDATION SUMMARY BY REGION & SPECIES

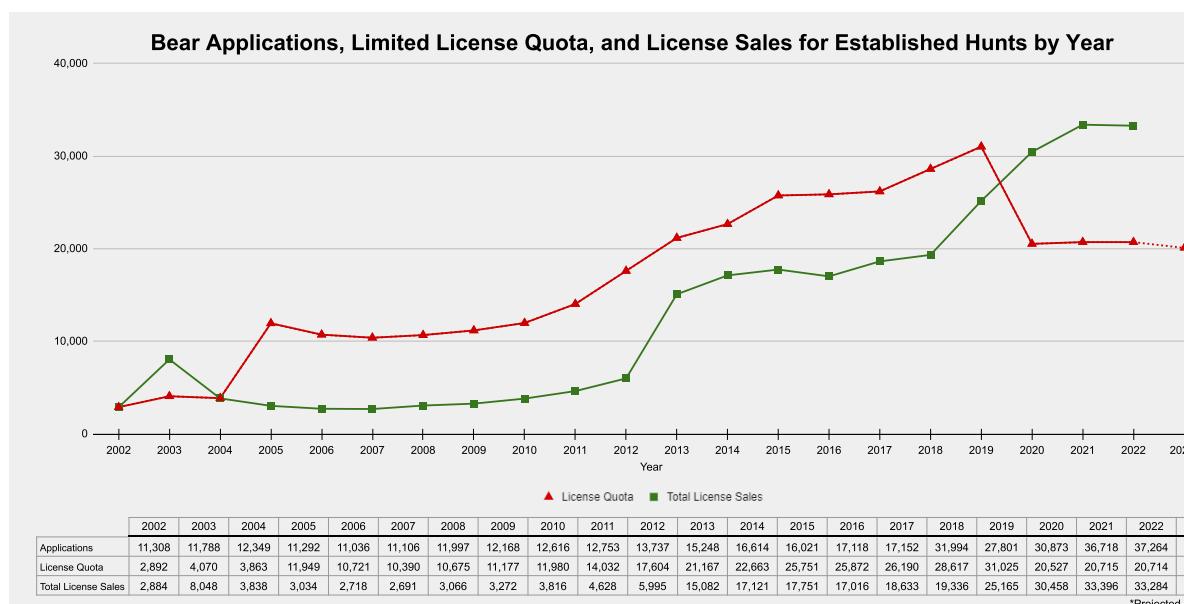
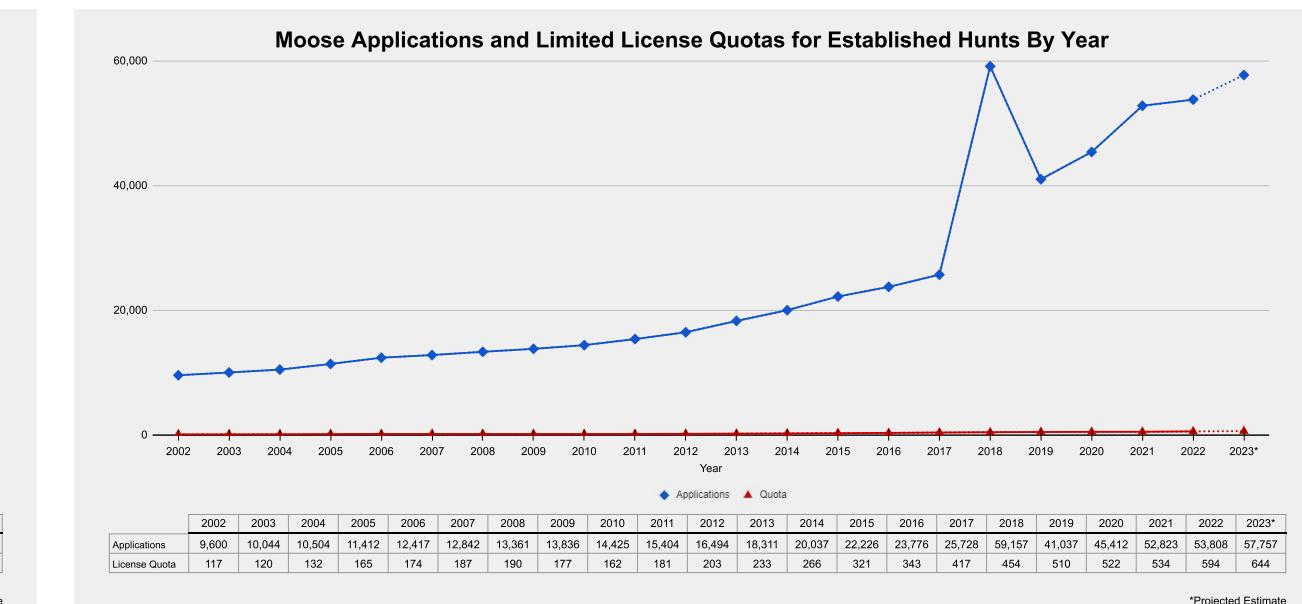
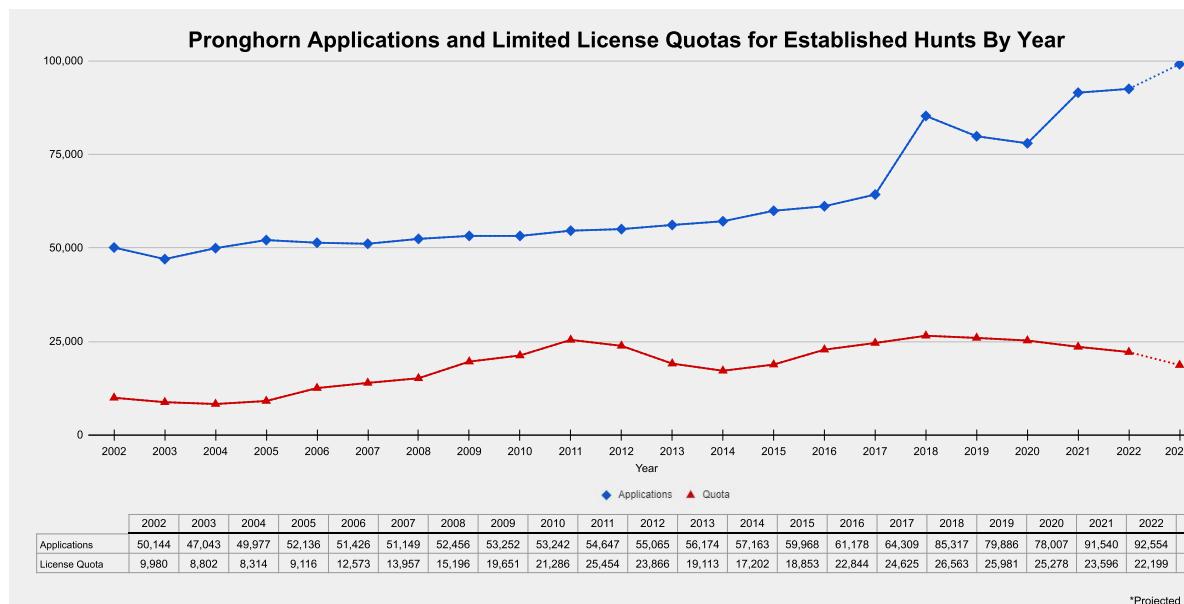
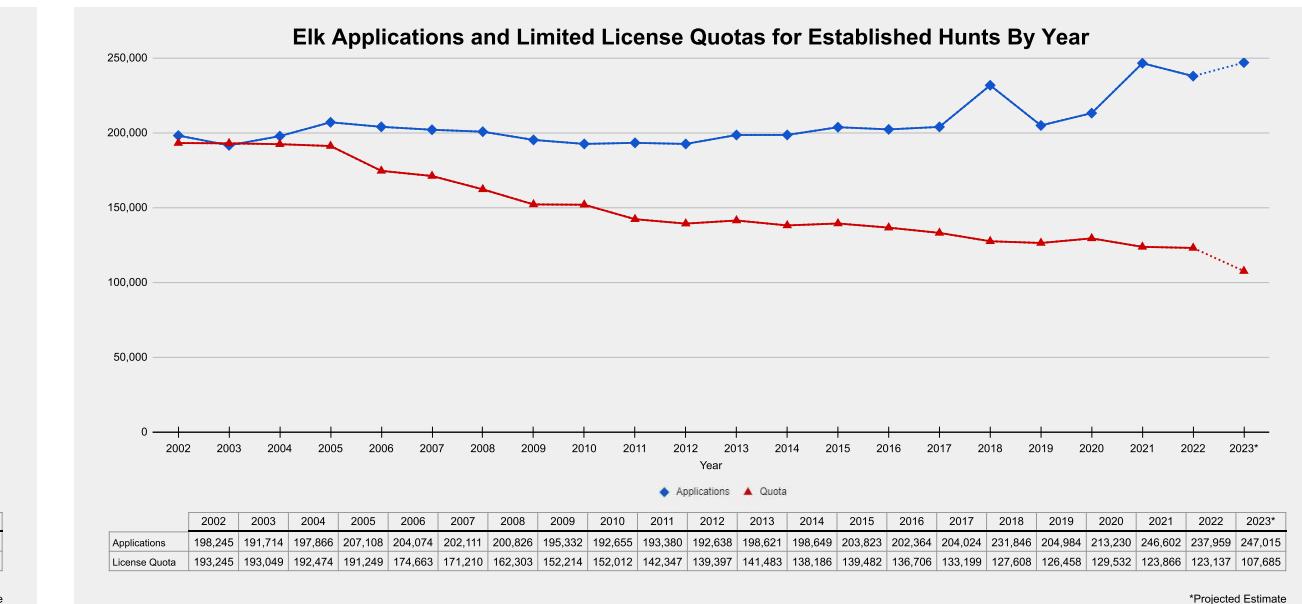
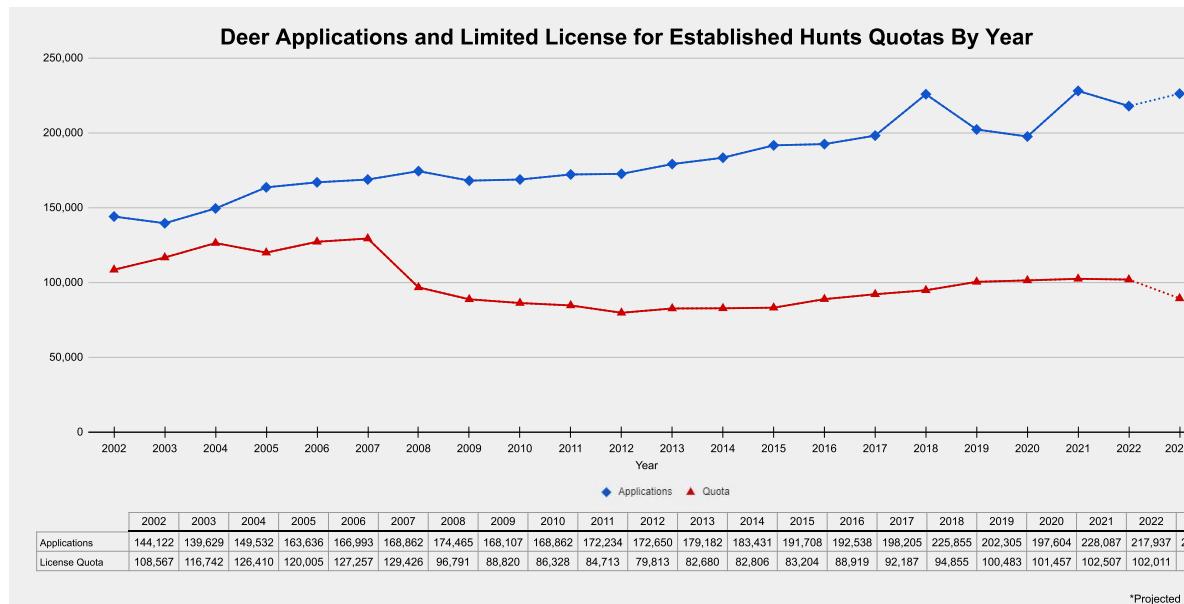
April 20, 2023



		Post-Hunt Inventory & Objectives																		Region Species													
		All Limited Licenses				All Limited Rifle Licenses				All Limited Female & Either Sex Licenses				All Limited Archery Licenses				All Limited Muzzleloader Licenses				Post Hunt Populations			2023 Population Objective			Number of Animals Classified in 2022**					
		2022		2023		#		Change		2022		2023		#		Change		2022		#		Change		2021 Estimate	2022 Estimate	2023 Projection	Min	Max	Target	Objective Range***	Observed***		
Species	Region	2022	2023	#	%	2022	2023	#	%	2022	2023	#	%	2022	2023	#	%	2022	2023	#	%	Estimate	Projection	Min	Max	Target	Min	Max	2022	3 Yr Avg			
DEER	NW	39,048	26,277	-12,771	-33%	31,376	20,040	-11,336	-36%	10,915	4,236	-6,679	-61%	4,341	3,576	-765	-18%	3,331	2,661	-670	-20%	165,510	135,760	125,350	165,400	208,400	187,900	44,381	23	28	23	27	NW
	SW	20,425	20,920	495	2%	16,070	16,340	270	2%	2,295	2,405	110	5%	2,495	2,595	100	4%	1,860	1,985	125	7%	123,920	127,300	123,350	140,900	166,200	157,950	23,073	29	32	32	31	SW
	NE	14,255	14,180	-75	-1%	10,360	10,265	-95	-1%	3,160	3,170	10	0%	2,380	2,380	0	0%	1,515	1,535	20	1%	40,750	42,090	41,540	37,000	43,900	40,700	3,096	26	32	42	39	NE
	NE Plains	11,055	11,075	20	0%	8,905	8,795	-110	-1%	5,630	5,485	-145	-3%	1,395	1,435	40	3%	755	845	90	12%	18,880	18,880	18,990	17,300	20,200	19,700	7,475					NE Plains
	SE	7,826	7,905	79	1%	5,881	5,950	69	1%	750	742	-8	-1%	1,230	1,230	0	0%	715	725	10	1%	45,200	44,473	42,060	52,600	61,000	56,500	4,292	30	35	31	30	SE
	SE Plains	9,398	9,076	-322	-3%	6,253	5,976	-277	-4%	3,575	3,317	-258	-7%	2,055	2,000	-55	-3%	1,090	1,100	10	1%	22,170	23,416	23,050	17,700	21,200	19,450	4,492					SE Plains
	TOTAL	102,007	89,433	-12,574	-12%	78,845	67,366	-11,479	-15%	26,325	19,355	-6,970	-26%	13,896	13,216	-680	-5%	9,266	8,851	-415	-4%	416,430	391,921	374,340	430,900	520,900	482,200	86,809	26	31	30	30	DEER
ELK	NW	72,503	56,088	-16,415	-23%	64,097	44,367	-19,730	-31%	55,112	36,882	-18,230	-33%	2,652	6,202	3,550	134%	5,754	5,519	-235	-4%	134,980	129,520	113,340	102,270	129,670	116,670	57,162	21	27	23	22	NW
	SW	28,220	28,800	580	2%	17,835	18,450	615	3%	10,240	10,855	615	6%	7,540	7,430	-110	-1%	2,845	2,920	75	3%	124,410	124,360	127,230	110,200	129,700	123,200	38,064	16	22	18	18	SW
	NE	12,247	12,392	145	1%	8,882	8,997	115	1%	4,607	4,772	165	4%	1,870	1,890	20	1%	1,495	1,505	10	1%	17,300	17,680	17,230	12,200	14,400	13,600	5,146	34	39	29	27	NE
	SE	10,083	10,405	322	3%	7,775	8,117	342	4%	5,970	6,297	327	5%	833	833	0	0%	1,475	1,455	-20	-1%	32,220	31,630	32,740	27,450	31,900	30,750	9,142	31	37	24	28	SE
	TOTAL	123,053	107,685	-15,368	-12%	98,589	79,931	-18,658	-19%	75,929	58,806	-17,123	-23%	12,895	16,355	3,460	27%	11,569	11,399	-170	-1%	308,910	303,190	290,540	252,120	305,670	284,220	109,514	21	27	21	21	TOTAL
PRONGHORN	NW	3,583	1,843	-1,740	-49%	2,803	1,133	-1,670	-60%	2,163	710	-1,453	-67%	455	335	-120	-26%	325	375	50	15%	25,050	22,690	17,040	23,000	23,400	23,300	11,264	53	54	49	49	NW
	SW	346	341	-5	-1%	247	232	-15	-6%	242	222	-20	-8%	79	89	10	13%	20	20	0	0%	2,750	2,960	2,960	3,450	4,450	3,700	1,428	29	34	33	30	SW
	NE	4,112	4,037	-75	-2%	3,302	3,227	-75	-2%	2,105	2,005	-100	-5%	350	340	-10	-3%	460	470	10	2%	17,230	16,790	16,460	15,000	17,900	16,400	600	29	34	23	39	NE
	SE	14,151	12,494	-1,657	-12%	12,471	10,969	-1,502	-12%	6,509	6,276	-233	-4%	40	40	0	0%	1,640	1,485	-155	-9%	33,160	31,000	31,920	27,600	34,850	31,050	7,339	29	40	41	39	SE
	TOTAL	22,192	18,715	-3,477	-16%	18,823	15,561	-3,262	-17%	11,019	9,213	-1,806	-16%	924	804	-120	-13%	2,445	2,350	-95	-4%	78,190	73,440	68,380	69,050	80,600	74,450	20,631	39	43	43	45	TOTAL
MOOSE	NW	406	433	27	7%					237	259	22	9%									2,310	2,240	2,160	1,175	1,565	1,430					NW	
	SW	32	35	3	9%					12	12	0	0%									460	480	490	400	500	450					SW	
	NE	143	163	20	14%					96	109	13	14%									580	630	570	575	625	600					NE	
	SE	11	13	2	18%					2	2	0																					

## BIG GAME HISTORY BY SPECIES

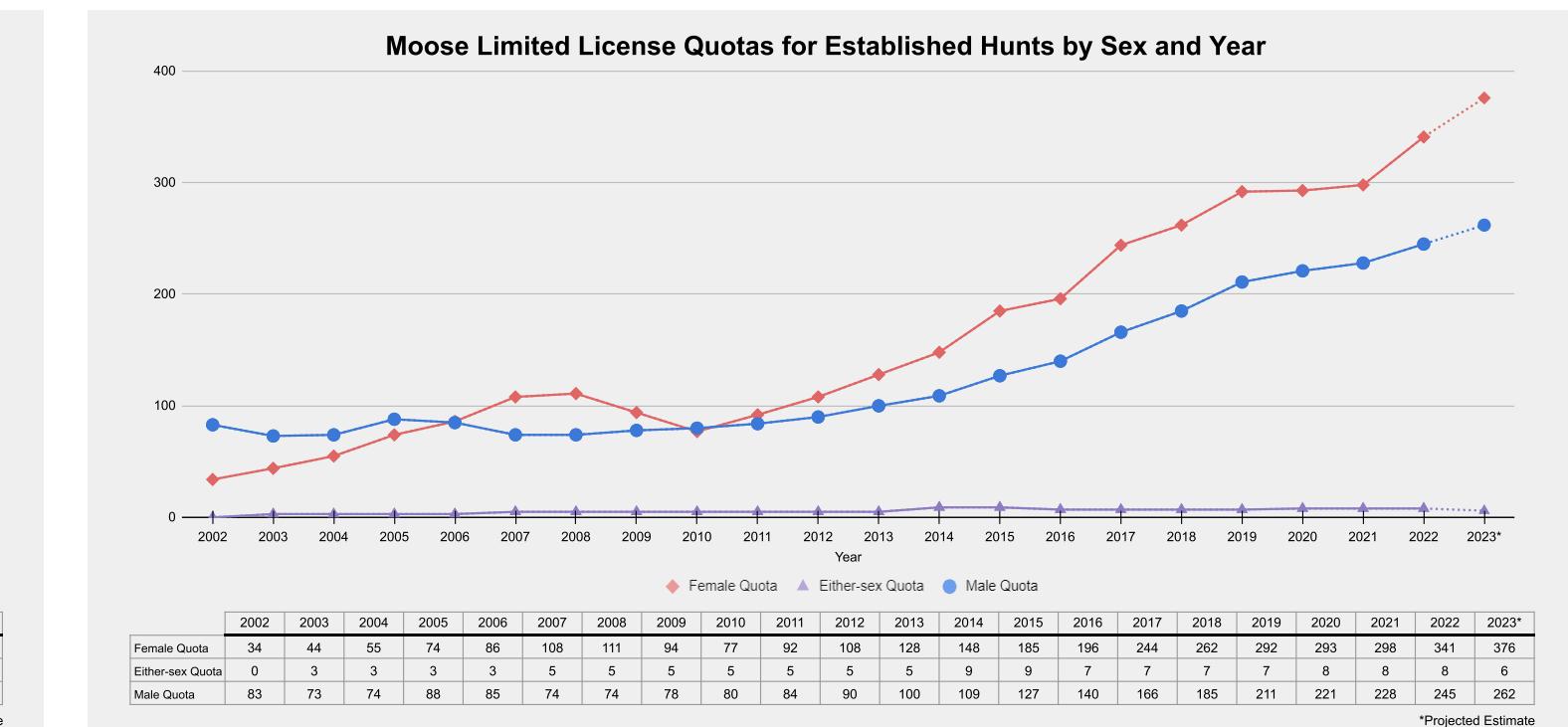
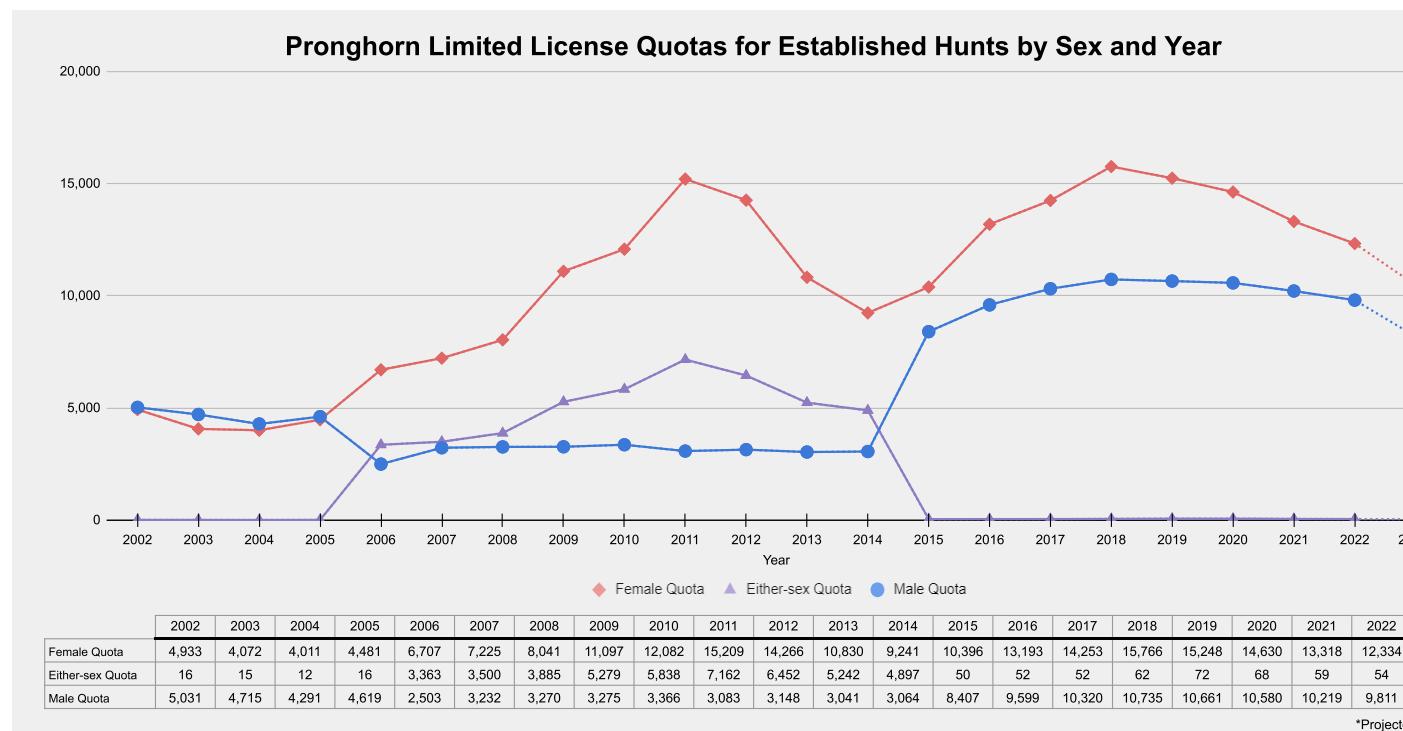
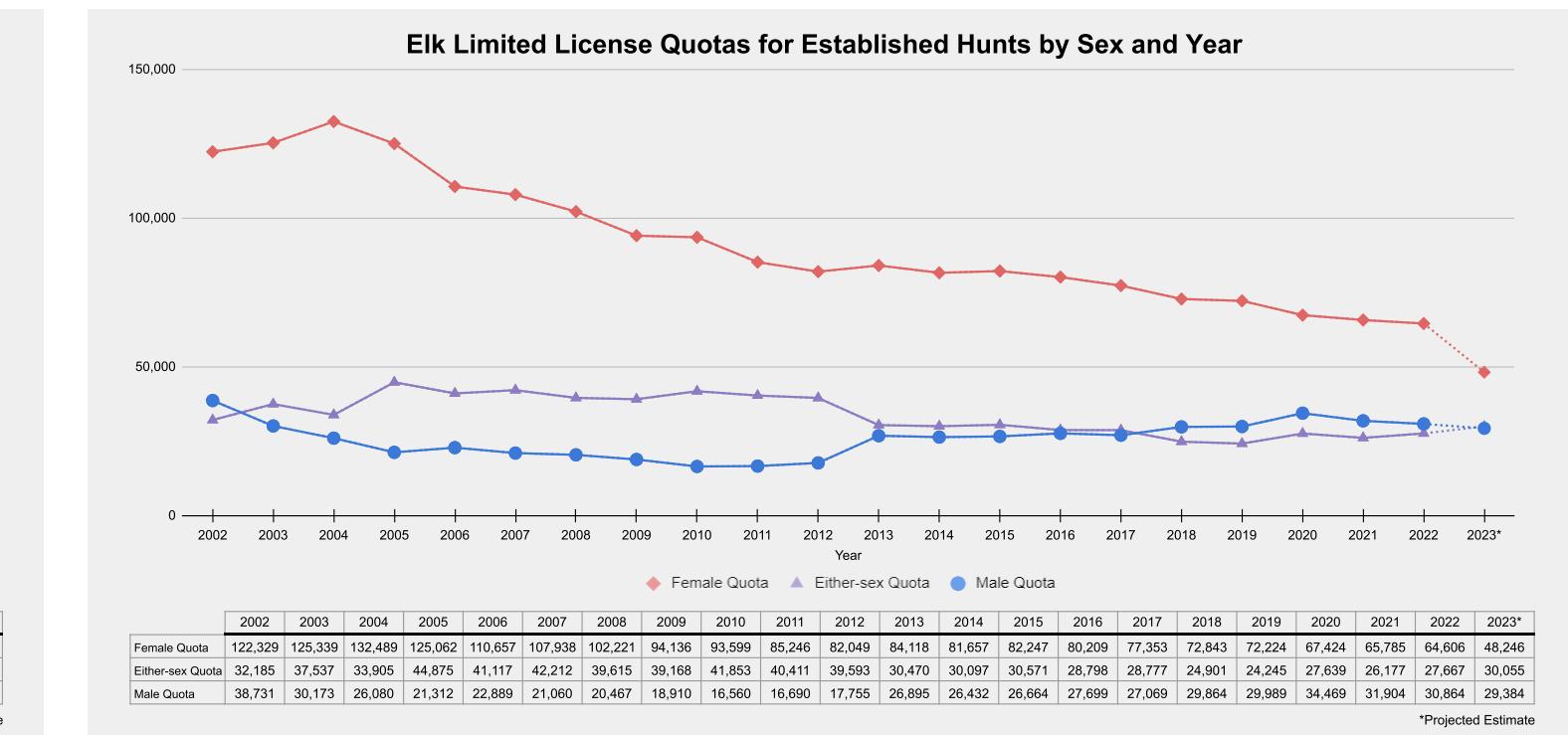
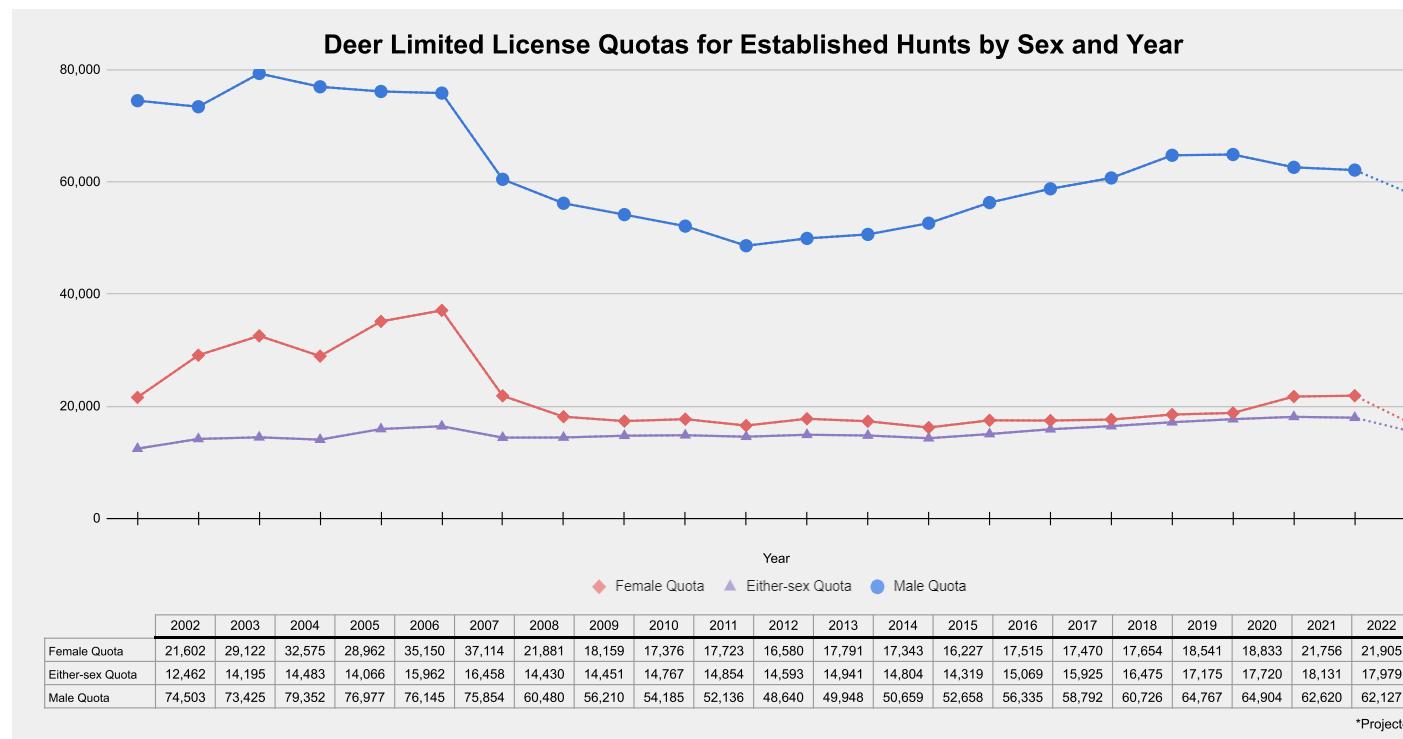
Established Hunts are Ranching for Wildlife and Auction & Raffle hunts or hunts approved annually by PWC.  
April 20, 2023



# BIG GAME QUOTA HISTORY FOR ESTABLISHED HUNTS BY SPECIES

Established Hunts are Ranching for Wildlife and Auction & Raffle hunts or hunts approved annually by PWC.

April 20, 2023



# 2023 BIG GAME LICENSE RECOMMENDATION DEFINITIONS

April 20, 2023



**Add-on Black Bear License:** Archery and muzzleloader unlimited OTC black bear licenses only available to purchase by hunters who have a deer or elk license for the same manner of take and GMU.

**Age Ratio:** Number of young-of-the-year per 100 females in a herd. Age ratios are observed during big game surveys and provide an estimate of the number of young that were born in summer and survived until the survey. Age ratios are a measure of herd productivity and are used in population modeling.

**Antlered License:** A deer, elk, or moose license that is valid for the take of any animal with an antler or antlers of at least five inches in length.

**Antlerless License:** A deer, elk, or moose license that is valid for the take of any animal without antlers or with antlers of less than five inches in length.

**Black Bear Age and Gender Composition:** Metrics used as indicators of black bear population trajectory in relation to harvest levels. Harvested black bears are divided into 4 age-sex classes (adult male, adult female, subadult male, and subadult female).

**% Adult Male in Harvest:** The adult male segment of a population is the first to be reduced under increasing hunter pressure, therefore proportions of adult males (>5 yr old) in the harvest can indicate stability, increase or decrease in the population.

**% Female in Harvest:** As harvest levels increase and additional adult and sub-adult males are removed, the proportion of females of all ages in the harvest begins to increase. Therefore, proportions of females of all ages in the total harvest can indicate stability, increase or decrease in the population.

**% Adult Females in Female Harvest:** With increasing harvest, younger females are removed and older females (>5 yr old) become more common in the harvest. Thus, the proportion of adult females in the female harvest should rise with increasing harvest rates, indicating stability, increase or decrease in the population.

**Classified Animals:** During big game surveys, animals are categorized by age and sex. That is, animals are identified as adult males, adult females and young-of-the-year. These classifications are then used to calculate sex and age ratios.

**Concurrent Rifle Season:** Limited and unlimited black bear seasons that occur during the regular deer and elk rifle seasons. There are both regular concurrent and PLO concurrent black bear seasons.

**Chronic Wasting Disease (CWD):** A fatal neurological disease that attacks the brains of deer, elk and moose.

**Data Analysis Unit (DAU):** The geographic area that represents the year-round range of a specific big game herd/population. Each DAU is composed of one or more Game Management Units (GMUs). DAUs are used to monitor distinct herds/populations.

**Either-sex License:** A license that is valid for the take of either male or female animals.

**Established Hunts:** Ranching for Wildlife and Auction & Raffle hunts or hunts approved annually by PWC.

**Game Management Unit (GMU):** A defined geographic area that provides a practical framework where management goals can be refined and applied on a finer scale than a DAU, typically through hunting regulations. GMUs are used to monitor hunter distribution.

**Leftover Draw:** Deer and elk applicants unsuccessful in the primary draw have the first chance at the limited licenses that are remaining after the primary draw by selecting Leftover Draw on their application.

**Limited Licenses:** A set (limited) number of licenses are available for specific units and dates for each species, and are initially issued through an application and draw process.

**Manner of Take:** Colorado hunting seasons are based on hunting methods (i.e., archery, muzzleloader and rifle/associated) permissible during each season.

**Modeled Estimates:** Mathematical models that integrate observed data (e.g., sex ratios, age ratios, population estimates, survival estimates, harvest estimates) are used to estimate the population size and demographic composition of each herd. Estimates derived from these models are referred to as modeled estimates.

**Non-Established Hunts:** Hunts and quota not specified in regulation and approved by PWC, or Ranching for Wildlife or Auction & Raffle hunts. Non-Established hunts include game damage, dispersal, youth and novice outreach, etc.

**Over-the-Counter (OTC) Season:** In contrast to limited seasons, licenses in OTC seasons are not available through the draw. They do not require buying/having a qualifying license, do not use preference points and may be purchased any time through the end of the season. Prior to 2020, the number of licenses available in OTC seasons were either unlimited or capped at a predetermined number. Starting in 2020, there are no longer OTC with caps seasons.

**Plains Units:** GMUs east of Interstate I-25 except unit 140.

**Private Land Only (PLO) License:** Licenses that are only valid on private land.

**Population Estimate:** The estimate of the number post-season (winter) animals in a herd. CPW estimates the size of each herd annually based on population models.

**Population Objective:** The target number of animals in a herd. Population objectives are expressed as ranges and are established in the Herd Management Plan (HMP) for each herd. License numbers and hunting strategies are designed to reach or maintain the population objective of each herd.

**Post-hunt:** The period after the hunting seasons. Most big game populations are surveyed post-hunt (in the winter), when they are concentrated at lower elevations in open terrain by snow, in order to estimate winter population levels and demographics.

**Pre-hunt:** The period before the hunting season. Many pronghorn surveys are conducted pre-hunt (in the summer) to estimate summer population levels and demographics.

**Primary Draw:** The first, main big game draw of the year for hunters applying for limited hunting licenses.

**September Rifle Season:** Limited rifle black bear seasons that occur during the month of September (before the regular deer and elk rifle seasons). The majority of black bear harvest occurs during these seasons and, therefore, they have the largest effect on black bear management.

**Sex Ratio:** Number of males per 100 females in a herd. Sex ratios are observed during big game surveys and used in population models. Sex ratio objectives are established for each herd in a Herd Management Plan. Hunting licensing numbers and strategies are established to achieve and maintain these objectives.

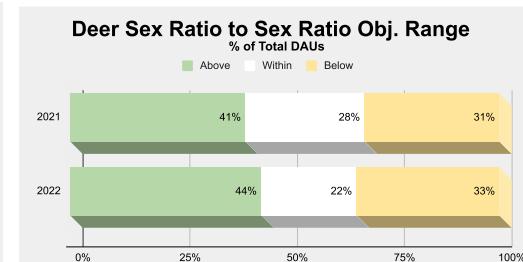
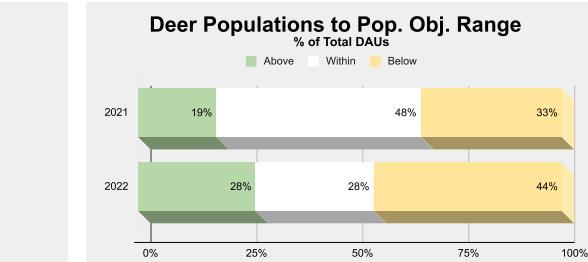
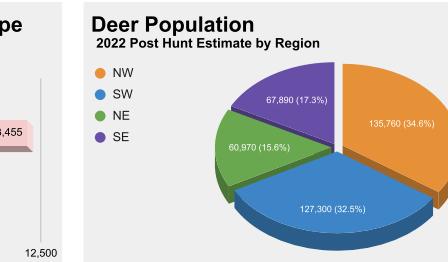
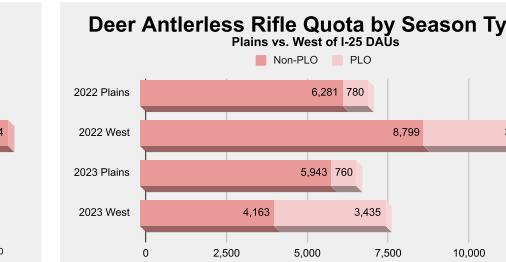
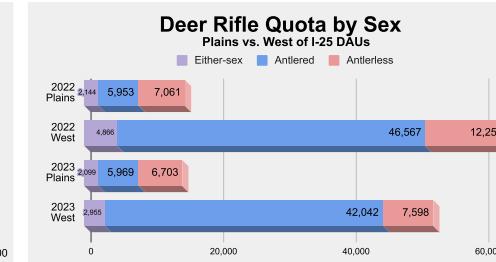
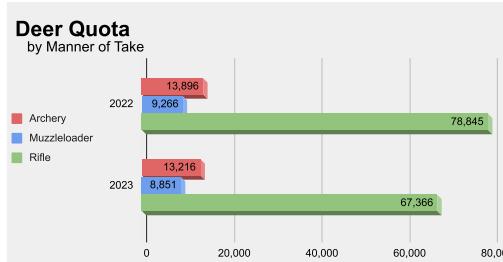
**Unlimited Licenses:** Licenses that are not restricted in number. They are not available through the draw.

**Weighted Average:** An average that is calculated taking population size into account, so that larger populations contribute more to the average than smaller populations (i.e., populations influence the average in proportion to their size).

**West of I-25 Units:** GMUs west of Interstate I-25 and unit 140.

2023 DEER

Colorado Parks and Wildlife  
April 20, 2023



positive % change = increase in I  
negative % change = decrease in I

\* Rifle license numbers include regular rifle, Ranching for Wildlife, PLO, early rifle, late rifle, and Season Choice seasons.

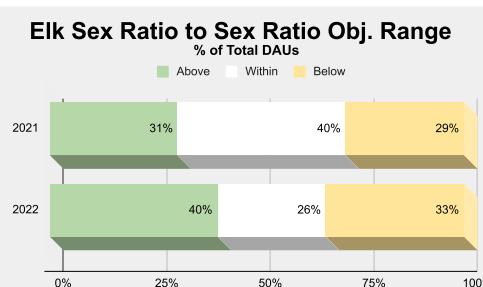
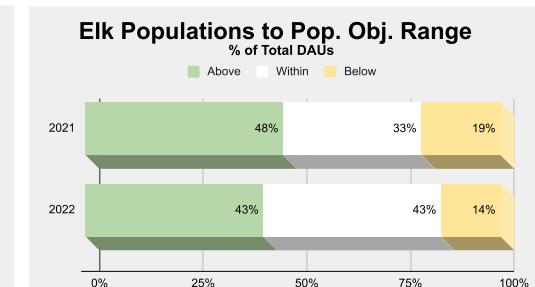
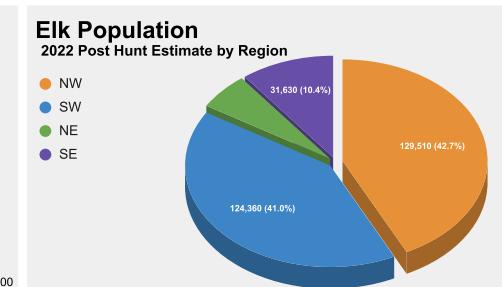
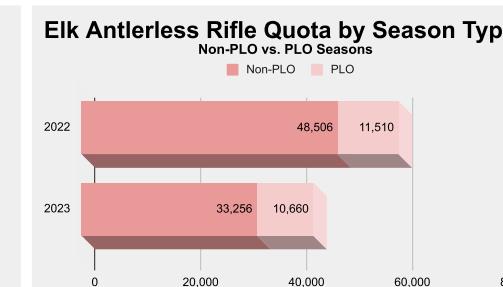
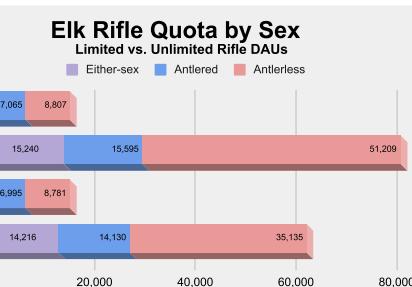
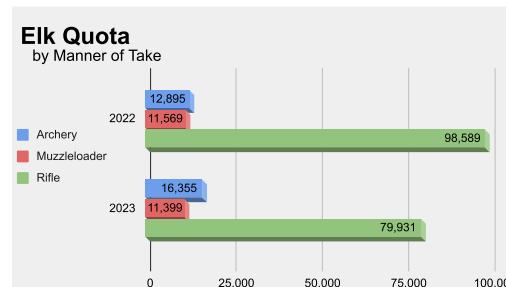
**\*\* Includes PLO Antle**

\*\*\* Number of Animals Classified includes both flight & ground su

# 2023 ELK

Colorado Parks and Wildlife

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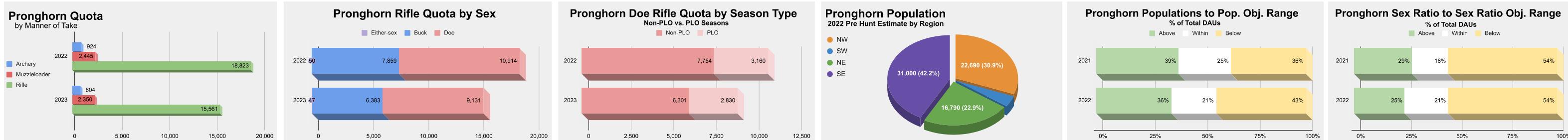
positive % change = increase in licenses  
negative % change = decrease in licenses

Region	DAU	Units Involved	LIMITED ARCHERY SEASONS			LIMITED MUZZLELOADER SEASONS			LIMITED RIFLE SEASONS*												POPULATION OBJECTIVES			MODELED POST-HUNT POPULATIONS			SEX RATIO OBJECTIVES			MODELED POST-HUNT SEX RATIOS			Number of Animals Classified in 2022***	DAU	Region						
			2022-2023			2022-2023			2022-2023			2022-2023			2022-2023			2022-2023			2022-2023			2022-2023			2022-2023														
			2022 LICENSES	2023 LICENSES	PERCENT CHANGE	2022 LICENSES	2023 LICENSES	PERCENT CHANGE	2022 LICENSES	2023 LICENSES	PERCENT CHANGE	2022 LICENSES	2023 LICENSES	PERCENT CHANGE	2022 LICENSES	2023 LICENSES	PERCENT CHANGE	2022 LICENSES	2023 LICENSES	PERCENT CHANGE	2022 LICENSES	2023 LICENSES	PERCENT CHANGE	2022 LICENSES	2023 LICENSES	PERCENT CHANGE	2022 LICENSES	2023 LICENSES	PERCENT CHANGE												
NW	01	2,201	20	20	0%	30	30	0%	355	340	-4%	60	60	0%	0	0	0%	295	280	-5%	0	0	0%	01	Within	700	1,700	1,200	1,500	1,500	1,676	Above	40	40	40	3,574	01	NW			
NW	02	3,301,4,441,5,14,214	500	500	0%	620	470	-24%	10,204	3,818	-63%	3,364	2,844	-15%	335	335	0%	6,505	639	-90%	850	150	-82%	02	Within	15,000	18,000	15,000	24,060	15,359	9,454	Within	20	25	22	25	23	2	5,437	02	NW
NW	03	6,16,161,17,171	0	0	0%	550	550	0%	6,358	6,068	-5%	1,264	1,234	-2%	0	0	0%	5,094	4,834	-5%	400	430	8%	03	Above	4,000	4,500	4,500	4,715	7,342	6,720	Within	20	23	23	21	21	18	3,522	03	NW
NE	04	7,8,9,19,191	1,110	1,110	0%	750	750	0%	4,400	4,310	-2%	0	0	0%	2,935	2,935	-3%	1,465	1,475	1%	605	655	8%	04	Above	3,600	4,200	4,200	6,440	5,915	5,469	Below	30	35	33	31	22	23	1,057	04	NE
SW	05	53,54,63	200	200	0%	250	250	0%	1,600	1,600	0%	150	150	0%	595	595	0%	855	855	0%	360	360	0%	05	Within	7,800	8,800	8,800	8,476	8,773	8,846	Below	23	28	25	20	17	13	2,668	05	SW
NW	06	11,12,13,23,24,25,26,33,34,131,211,231	1,350	1,350	0%	1,050	1,050	0%	20,979	10,525	-50%	1,168	1,073	-8%	6,330	4,830	-24%	13,481	4,622	-66%	1,910	1,260	-34%	06	Within	32,000	39,000	39,000	40,581	38,891	26,679	Below	22	27	22	13	22	8	16,278	06	NW
NW	07	15,27	0	0	0%	425	425	0%	3,765	3,510	-7%	1,100	1,130	3%	0	0	0%	2,665	2,380	-11%	425	425	0%	07	Within	4,000	5,000	5,000	4,868	4,794	5,135	Above	24	28	28	35	38	41	1,180	07	NW
NW	08	18,181	0	0	0%	565	565	0%	6,025	5,645	-6%	2,400	2,400	0%	0	0	0%	3,625	3,245	-10%	500	400	-20%	08	Within	3,600	4,300	4,000	4,145	4,041	4,197	Above	21	26	24	42	36	39	3,112	08	NW
NE	09	20	125	125	0%	40	40	0%	940	885	-6%	0	0	0%	190	210	11%	750	675	-10%	350	375	7%	09	Within	2,200	2,600	2,400	2,107	2,249	2,253	Above	40	45	45	48	47	46	1,575	09	NE
NW	10	21,22,30,31,32	0	0	0%	325	325	0%	3,710	2,585	-30%	125	75	-40%	860	860	0%	2,725	1,650	-39%	350	350	0%	10	Above	7,000	9,000	8,000	14,930	15,574	15,856	Above	18	22	20	22	28	26	5,529	10	NW
SW	11	82	0	0	0%	125	125	0%	925	925	0%	400	400	0%	0	0	0%	525	525	0%	0	0	0%	11	Above	3,000	4,000	3,500	5,783	5,940	5,877	Above	17	23	23	35	31	30	2,022	11	SW
NW	12	35,36	0	0	0%	285	285	0%	855	855	0%	295	295	0%	0	0	0%	560	560	0%	140	140	0%	12	Within	3,000	4,600	3,800	4,092	3,780	4,110	Within	22	44	33	21	24	26	1,856	12	NW
NW	13	28,37,371	0	0	0%	540	485	-10%	4,085	3,430	-16%	1,685	1,400																												

2023 PRONGHORN

Colorado Parks and Wildlife

April 20, 2023



positive % change = increase in licenses  
negative % change = decrease in license

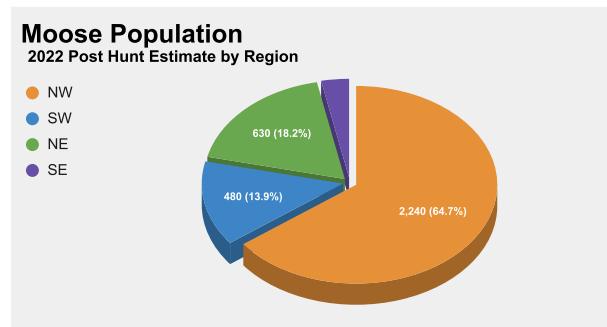
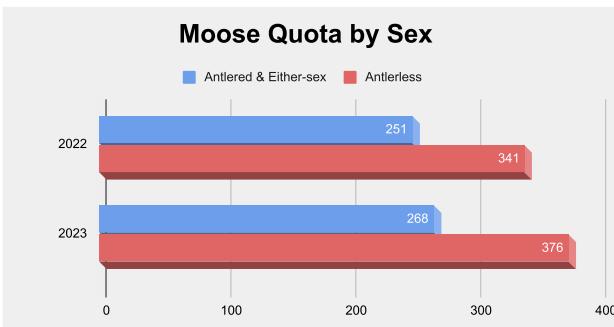
\* Rifle license numbers include regular rifle, Ranching for Wildlife, P.L.O., early rifle, late rifle, and Season Cheque sale.

\*\* Includes PIQ Antlerless license

\*\*\* Number of Animals Classified includes both flight & ground species

# 2023 MOOSE

Colorado Parks and Wildlife  
April 20, 2023



positive % change = increase in licenses  
negative % change = decrease in licenses

Region	DAU	Units Involved	ANTLERED & EITHER-SEX SEASONS			ANTLERLESS SEASONS			TOTAL LICENSES FOR ALL SEASONS						POPULATION OBJECTIVES			MODELED POST-HUNT POPULATIONS			POST-HUNT SEX RATIO OBJECTIVES			MODELED POST-HUNT SEX RATIOS		Number of Animals Classified in 2022**										
			Nonresident Licenses			Resident Licenses*			Nonresident Licenses			Resident Licenses*			Antlered & Either-sex		Antlerless		2022 Pop. Relative to Pop. Obj. Range			2022 Sex Ratio Relative to Obj. Range			2022 Post-hunt Sex Ratio			2021 Est. 2022 Est.								
			2022 Licenses		Percent Change	2023 Licenses			2022 Licenses		Percent Change	2023 Licenses		Percent Change	2022 Licenses		Percent Change	2023 Licenses		Percent Change	2021 Estimate		2022 Estimate		2023 Projection		Minimum	Maximum	Target	Minimum	Maximum	Target	Estimate	Estimate		
			2022 Licenses	2023 Licenses		2022 Licenses	2023 Licenses	2022 Licenses	2023 Licenses	2022 Licenses		2023 Licenses	2022 Licenses		2023 Licenses	2022 Licenses		2023 Licenses	DAU		2022 Pop. Relative to Pop. Obj. Range	2021 Estimate	2022 Estimate	2023 Projection	Minimum	Maximum	Target	2021 Est.	2022 Est.							
NW	01	6,16,17,161,171	5	5	0%	61	64	5%	9	12	33%	93	100	8%	66	69	5%	102	112	10%	01	Above	500	600	550	820	690	680	Above	60	70	65	81	76	399	01 NW
NE	02	7,8,19,191	3	3	0%	20	20	0%	5	6	20%	45	44	-2%	23	23	0%	50	50	0%	02	Above	200	250	225	330	250	200	Above	70	85	75	135	154	164	02 NE
NW	03	15,18,27,28,36,37,181,361,371	8	7	-13%	50	51	2%	8	9	13%	60	65	8%	58	58	0%	68	74	9%	03	Above	190	190	190	310	360	350	Below	65	65	65	74	29	164	03 NW
SW	04	65,66,67,68,70,71,72,73,74,75,76,77,78,79,80,81,681,682,711,741,751,771,791	2	3	50%	19	21	11%	0	0	0%	11	11	0%	21	24	14%	11	11	0%	04	Within	400	500	450	460	480	490	Below	55	65	60	50	50	105	04 SW
NW	05	41,42,43,52,53,54,63,64,411,421,521	2	2	0%	15	15	0%	3	3	0%	29	29	0%	17	17	0%	32	32	0%	05	Above	300	400	400	840	840	810	Within	55	65	60	79	57	105	05 NW
NW	06	12,13,23,24,25,26,33,34,35,131,231	1	1	0%	10	8	-20%	1	1	0%	15	17	13%	11	9	-18%	16	18	13%	06	Within	100	200	150	150	150	140	Within	50	50	50	50	50	48	06 NW
NE	07	20,29,38	0	0	0%	7	9	29%	3	2	-33%	17	23	35%	7	9	29%	20	25	25%	07	Within	150	150	150	100	150	150	Above	80	80	80	80	100	07 NE	
NE	08	39,46,49,60,51,391,500,501	1	2	100%	16	20	25%	2	2	0%	24	32	33%	17	22	29%	26	34	31%	08	Within	225	225	225	150	230	230	Above	65	65	65	82	100	08 NE	
NW	09	4,5,14,214,441	2	2	0%	14	18	29%	2	2	0%	11	13	18%	16	20	25%	13	15	15%	09	Above	40	100	80	150	150	140	Within	50	80	70	80	74	28	09 NW
NW	10	1,201	0	0	0%	1	1	0%	0	0	0%	0	0	0%	1	1	0%	0	0	0%	10	Within	15	15	15	20	20	10	Below	100	100	100	75	50	10	0 NW
NW	11	44,45,47,444,471	0	1	100%	5	4	-20%	0	0	0%	1	3	200%	5	5	0%	1	3	200%	11	Within	30	60	45	40	40	30	Above	0	100	65	100	109	26	11 NW
SE/SW	12	48,55,56,471,481,551,561	0	0	0%	9	11	22%	0	0	0%	2	2	0%	9	11	22%	2	2	0%	12	Within	110	110	110	150	110	100	Within	50	50	50	50	50	12 SE/SW	
<b>STATEWIDE TOTALS</b>			24	26	8%	227	242	7%	33	37	12%	308	339	10%	251	268	7%	341	376	10%			2,260	2,800	2,590	3,500	3,460	3,320		68	63	64	78	69	770	

\*Ranching for Wildlife quota are included in resident licenses

\*\*Number of Animals Classified includes both flight & ground surveys

Region	DAU	Units Involved	ANTLERED & EITHER-SEX SEASONS			ANTLERLESS SEASONS		
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# 2023 BEAR

Colorado Parks and Wildlife

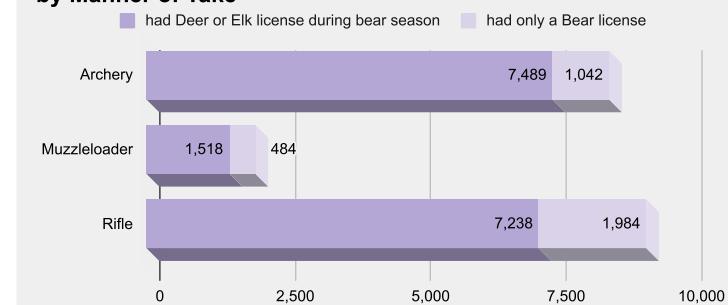
April 20, 2023



## Black Bear Limited Quota by Manner of Take



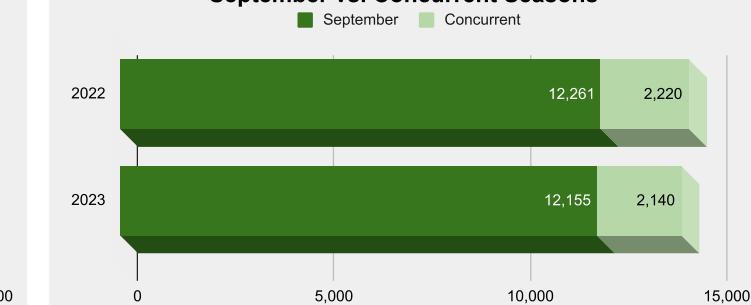
## 2022 Black Bear vs. Other Licenses Held by Manner of Take



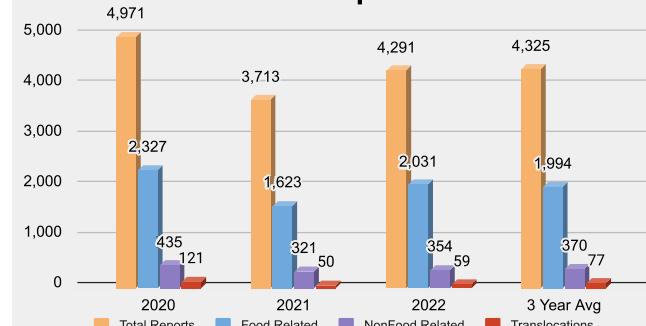
\*The 2020-2024 Big Game Season Structure created unlimited OTC black bear licenses in DAUs which have a management strategy of reducing bear populations and where harvest objectives are not being met.

positive % change = increase in licenses  
negative % change = decrease in licenses

## Black Bear Rifle Quota September vs. Concurrent Seasons



## Black Bear Incident Reports\*

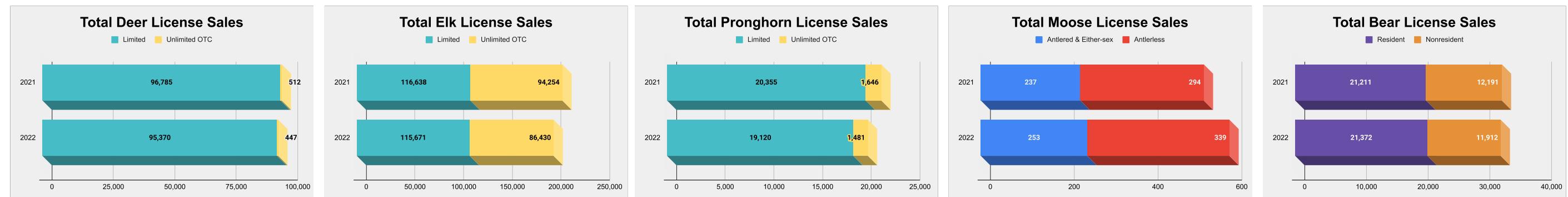


\* Each incident report may be counted in more than one category.

Region	DAU	Units Involved	DAU Management Goal	HAS UNLIMITED OTC SEASONS		LIMITED ARCHERY SEASONS		LIMITED MUZZLELOADER SEASONS		LIMITED RIFLE SEASONS				2023 PREDICTED		3 YEAR (2020-2022) AVERAGE		2020-2022 AGE/GENDER COMPOSITION															
				ARCHERY, MUZZLELOADER, & CONCURRENT RIFLE		PRIVATE LAND ONLY (PLO)		2022 LICENSES		2023 LICENSES		2022 LICENSES		2023 LICENSES		2022 LICENSES		2023 LICENSES		2022-2023 CHANGE		2022 LICENSES		2023 LICENSES		2022-2023 CHANGE		2022 LICENSES		2023 LICENSES		2022-2023 CHANGE	
								2022 LICENSES	2023 LICENSES	2022 LICENSES	2023 LICENSES	2022 LICENSES	2023 LICENSES	2022-2023 CHANGE	2022 LICENSES	2023 LICENSES	2022-2023 CHANGE	2022 LICENSES	2023 LICENSES	2022-2023 CHANGE	2022 HARVEST	2023 HARVEST	TOTAL MORTALITY	HARVEST	TOTAL MORTALITY	ADULT MALE	FEMALES	ADULT FEMALES IN FEMALE HARVEST	DAU	Region			
NW	01	21, 22, 30, 31, 32	Slight Decrease	YES	YES	YES	YES	175	175	0%	60	60	0%	775	775	0%	0	0	0%	87	105	69	87	25%	37%	43%	01	NW					
SE	02	58, 59, 511, 512, 581, 591	Stable following Decrease	no	no	YES	YES	175	175	0%	70	70	0%	170	170	0%	175	175	0%	24	53	25	53	21%	50%	58%	02	SE					
NE	03	7, 8, 9, 19, 20, 29, 38, 191	Stable	no	no	YES	YES	130	130	0%	55	55	0%	225	225	0%	320	320	0%	28	53	29	53	24%	38%	45%	03	NE					
NW	04	4, 5, 6, 14, 16, 17, 161, 171, 214, 441	Decrease	YES	YES	YES	YES	300	300	0%	100	100	0%	1,200	1,200	0%	0	0	0%	95	138	98	139	15%	45%	49%	04	NW					
SW	05	40, 60, 61, 62, 64, 65, 70	Decrease	mixed	mixed	YES	YES	630	430	-32%	140	140	0%	1,360	1,310	-4%	10	10	0%	204	248	209	252	32%	38%	63%	05	SW					
SW	06	71, 72, 73, 74, 711, 741	Decrease	YES	YES	YES	YES	120	120	0%	35	35	0%	780	780	0%	0	0	0%	120	145	114	139	33%	38%	64%	06	SW					
SE	07	69, 82, 83, 84, 85, 86, 140, 691, 851, 861	Stable following Decrease	no	no	YES	YES	154	154	0%	69	69	0%	329	323	-2%	260	260	0%	131	180	132	182	24%	38%	53%	07	SE					
NW	10	12, 13, 23, 24, 25, 26, 33, 34, 131, 231	Slight Decrease	YES	YES	YES	YES	510	510	0%	250	150	-40%	1,240	1,340	8%	0	0	0%	178	303	150	272	15%	37%	46%	10	NW					
NW	11	35, 36, 43, 44, 45, 47, 444, 471	Stable	no	no	YES	YES	630	570	-10%	300	270	-10%	1,520	1,370	-10%	800	720	-10%	113	163	111	161	23%	41%	59%	11	NW					
SW	12	54, 55, 66, 67, 551	Stable	no	no	no	no	160	160	0%	120	120	0%	190	190	0%	130	130	0%	19	24	19	24	40%	35%	71%	12	SW					
SW	13	68, 76, 79, 80, 81, 681, 682, 791	Stable	no	no	no	no	140	140	0%	60	60	0%	250	250	0%	110	110	0%	21	29	20	28	38%	29%	67%	13	SW					
SE	14	48, 49, 56, 57, 481, 561	Stable	no	no	YES	YES	110	110	0%	45	45	0%	250	250	0%	240	240	0%	8	13	10	15	33%	33%	67%	14	SE					
NW	15	1, 2, 3, 10, 11, 201, 211, 301	Stable	no	no	no	no	95	95	0%	40	40	0%	177	177	0%	175	175	0%	15	19	15	19	14%	43%	33%	15	NW					
NW	16	15, 18, 27, 28, 37, 181, 371	Slight Decrease	YES	YES	YES	YES	150	150	0%	50	50	0%	200	200	0%	0	0	0%	68	90	69	90	24%	39%	58%	16	NW					
NW	17	41, 42, 52, 53, 63, 411, 421, 521	Decrease	YES	YES	YES	YES	700	700	0%	250	200	-20%	2,500	2,500	0%	0	0	0%	336	406	298	368	19%	38%	52%	17	NW					
SW	18	75, 77, 78, 751, 771	Decrease	YES	YES	YES	YES	125	125	0%	45	45	0%	700	700	0%	0	0	0%	127	148	125	145	27%	34%	66%	18	SW					
NE	19	39, 46, 50, 51, 104, 391, 461, 500, 501	Decrease	YES	YES	YES	YES	150	150	0%	90	90	0%	395																			

# 2021-2022 BIG GAME LICENSE SALES COMPARISON BY LICENSE TYPE\*

\* Includes license sales for both established and non-established hunts  
April 20, 2023



## DEER

License Type	TOTAL Licenses Sold		ARCHERY SEASONS Licenses Sold		MUZZLELOADER SEASONS Licenses Sold		ALL RIFLE SEASONS * Licenses Sold								LIMITED LICENSE DRAWS Applications Submitted							
	2021	2022	2021-2022 PERCENT CHANGE	2021	2022	2021-2022 PERCENT CHANGE	2021	2022	2021-2022 PERCENT CHANGE	2021	2022	2021-2022 PERCENT CHANGE	2021	2022	2021-2022 PERCENT CHANGE	2021	2022	2021-2022 PERCENT CHANGE				
	Limited *	96,785	95,370	0.0	13,040	12,788	-2%	8,385	8,174	-3%	75,360	74,408	-1%	6,248	6,014	-4%	50,515	50,066	-1%	18,597	18,328	-1%
Unlimited	512	447	-13%	0	0	0%	0	0	0%	512	447	-13%	512	447	-13%	0	0	0%	0	0	0%	
Total	97,297	95,817	-2%	13,040	12,788	-2%	8,385	8,174	-3%	75,872	74,855	-1%	6,760	6,461	-4%	50,515	50,066	-1%	18,597	18,328	-1%	
	228,087	217,937	-4%	21,744	21,076	-3%	228,087	217,937	-4%	228,087	217,937	-4%	228,087	217,937	-4%	21,744	21,076	-3%	Total	21,744	21,076	-3%

\*Rifle license numbers include all rifle and Season Choice seasons

## ELK

License Type	TOTAL Licenses Sold		ARCHERY SEASONS Licenses Sold		MUZZLELOADER SEASONS Licenses Sold		ALL RIFLE SEASONS * Licenses Sold								LIMITED LICENSE DRAWS Applications Submitted							
	2021	2022	2021-2022 PERCENT CHANGE	2021	2022	2021-2022 PERCENT CHANGE	2021	2022	2021-2022 PERCENT CHANGE	2021	2022	2021-2022 PERCENT CHANGE	2021	2022	2021-2022 PERCENT CHANGE	2021	2022	2021-2022 PERCENT CHANGE				
	Limited *	116,638	115,671	-1%	11,850	12,825	8%	11,233	11,268	0.3%	93,555	91,578	-2%	13,844	13,654	-1%	22,049	21,656	-2%	57,662	56,268	-2%
Unlimited	94,254	86,430	-8%	35,283	31,997	-9%	0	0	0%	58,971	54,433	-8%	1,841	1,780	-3%	57,130	52,653	-8%	0	0	0%	
Total	210,892	202,101	-4%	47,133	44,822	-5%	11,233	11,268	0%	152,526	146,011	0	15,685	15,434	0.0	79,179	74,309	-6%	57,662	56,268	-2%	
	246,602	237,959	-4%	23,389	23,325	-0.3%	246,602	237,959	-4%	246,602	237,959	-4%	246,602	237,959	-4%	23,389	23,325	0%	Total	23,389	23,325	0%

\*Rifle license numbers include all rifle and Season Choice seasons

## DEER

## PRONGHORN

License Type	TOTAL Licenses Sold		ARCHERY SEASONS Licenses Sold		MUZZLELOADER SEASONS Licenses Sold		ALL RIFLE SEASONS * Licenses Sold								LIMITED LICENSE DRAWS Applications Submitted							
	2021	2022	2021-2022 PERCENT CHANGE	2021	2022	2021-2022 PERCENT CHANGE	2021	2022	2021-2022 PERCENT CHANGE	2021	2022	2021-2022 PERCENT CHANGE	2021	2022	2021-2022 PERCENT CHANGE	2021	2022	2021-2022 PERCENT CHANGE				
	Limited *	20,355	19,120	-6%	879	859	-2%	1,953	1,944	-0.5%	17,523	16,317	-7%	70	80	14%	7,664	7,266	-5%	9,789	8,971	-8%
Unlimited	1,646	1,481	-10%	1,646	1,481	-10%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	0	0	0%	
Total	22,001	20,601	-6%	2,525	2,340	-7%	1,953	1,944	0.0	17,523	16,317	-7%	70	80	14%	7,664	7,266	-5%	9,789	8,971	-8%	
	91,540	92,554	1%	5,895	5,863	-1%	91,540	92,554	1%	5,895	5,863	-1%	91,540	92,554	1%	5,895	5,863	-1%	Total	5,895	5,863	-1%

\*Rifle license numbers include all rifle and Season Choice seasons

## ELK

## MOOSE

License Type	TOTAL Licenses Sold		ANTLERED & EITHER-SEX SEASONS \*\* Licenses Sold		ANTLERLESS SEASONS Licenses Sold		ALL RIFLE SEASONS \* Licenses Sold								LIMITED LICENSE DRAWS Applications Submitted			
2021	2022	2021-2022 PERCENT CHANGE																
Resident	482	533	11%	212	227	7%	270	306	13%	70	80	14%	7,664	7,266	-5%	9,789	8,971	-8%

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