



COLORADO

Parks and Wildlife

Department of Natural Resources

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MEMORANDUM

TO: Parks and Wildlife Commissioners

FROM: Dan Prenzlów, Director

DATE: December 30, 2020

SUBJECT: April 2021- March 2022 Mountain Lion Harvest Limit Recommendations

This memo summarizes Colorado Parks and Wildlife (CPW) staff recommendations for mountain lion harvest limits for the April 2021- March 2022 season.

Regular Lion Season

Staff recommends a statewide harvest limit of 654 lions for the April 2021- March 2022 season. This represents a decrease of 10 lions from the 2020-2021 season harvest limit. Staff proposes no change to harvest limits for five of Colorado's six East Slope Data Analysis Units (DAUs, Map 1). Per the recently approved West Slope Lion Management Plan, thirteen West Slope DAUs have been consolidated into two large DAUs (Map 1) for 2021-2022, with a recommendation for a net harvest limit reduction.

April Lion Season

In 2014, an April season was established to provide for additional lion hunting opportunity in DAUs where harvest, total mortality and female composition objectives were not being met or exceeded and where an April season was not in conflict with other local resource priorities including sage-grouse lekking and turkey hunting. For 2021, staff recommends keeping the April 1-30 lion season open in the same East Slope DAUs as in 2020 (status quo), while on the West Slope, April seasons will be closed in all harvest limit groups with the exception of the Glenwood Springs Special Management Area (GMUs 43, 44, 45 and 444). This represents a large reduction in GMU groups with April seasons on the West Slope compared to last year. Lion harvest



limit groups without an April season will open with full harvest limits on November 29, 2021.

Summary of Lion Harvest and Mortality

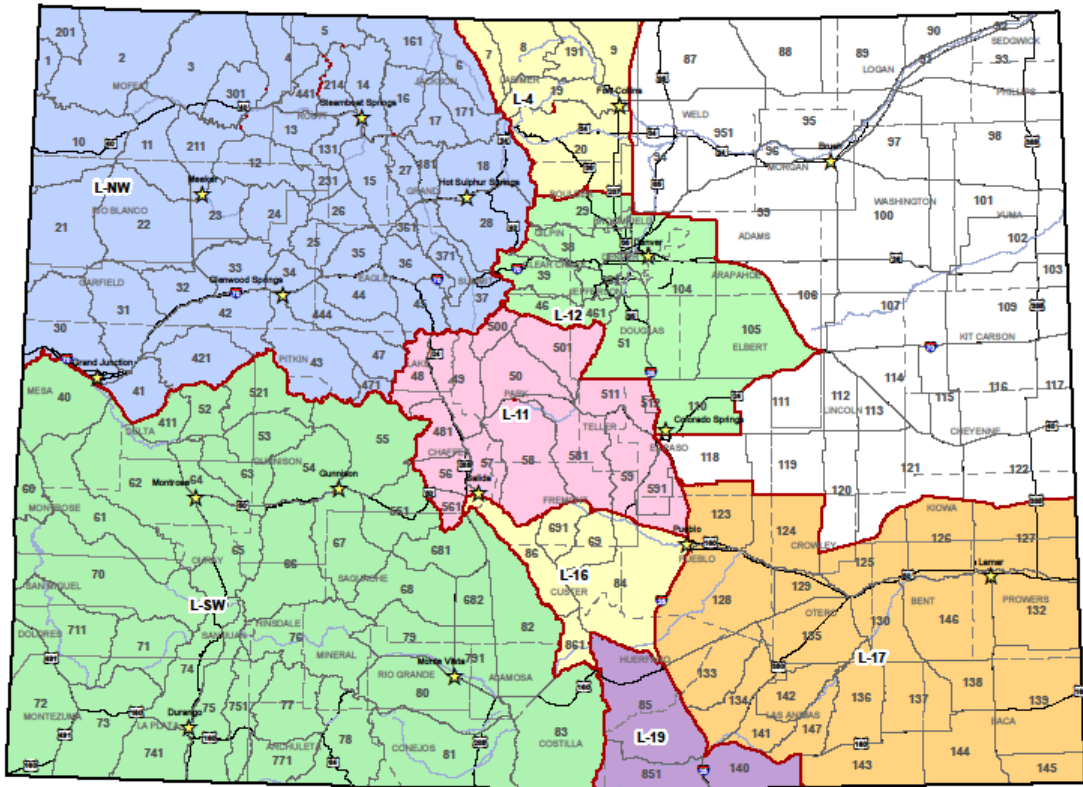
A summary of 3-year averages (2017-2019) for harvest, total mortality and total female or adult female composition is presented below for each 2021-2022 lion DAU (Table 1). These metrics are evaluated annually against the respective DAU objectives and are used as the basis for harvest limit recommendations.

In last year's April 2019- March 2020 lion season, hunters in Colorado harvested 481 lions, including 293 males and 188 females. The proportion of total females in statewide harvest declined to 39%, which is below the maximum threshold of 45% used in all "stable" management strategy East Slope DAUs. Additionally, statewide harvest mortality and human-caused mortality totals did not exceed objectives.

West Slope Lion Management Plan

In September 2020, the Commission approved the West Slope Mountain Lion Management Plan. Staff recommendations and regulation changes proposed for the April 2021- March 2022 season incorporate all harvest limit groups and harvest limits as approved in the West Slope plan.

Map 1. Map of Colorado mountain lion management areas (Data Analysis Units- DAUs) applicable beginning April 2021.



COLORADO PARKS AND WILDLIFE - Mtn. Lion DAUs


December 2020 

Table 1. 2021-2022 Mountain Lion Harvest Limit Recommendations by Data Analysis Unit

2021-2022 Colorado mountain lion recommendations, harvest, total human-caused mortality and female proportion data for past completed license year																
			HARVEST LIMIT				HARVEST					TOTAL MORTALITY				APRIL SEASON
			Current Year '20-21	Proposed Apr '21- Mar '22 Rcmmdtn	Change	'21-22 Predicted Harvest	3-Year Harvest Average	DAU Harvest Objective	3-Yr Avg % Female in Harvest	THRESHOLD		3-Year Total Human-Caused Mortality Average	3-Yr Avg % Female in Total Mortality	THRESHOLD		2021 April status recommendation
Region	DAU	DAU Mgmt. Strategy								Proportion of ADULT FEMALES in prior year harvest	Female Harvest Composition Threshold (Adult F in NW, SW, L19)			Total Human-Caused Mortality Threshold	Female Total Human-caused Mortality Composition Threshold	
NW	NW	Stable	293	243	-50	209	211	243	n/a	17.4%	Not to exceed 22% ADULT FEMALE in Harvest in any year	238	n/a	269	n/a	Closed
NW	NW	Glenwood SMA	n/a	33	33	17	16	33	n/a	n/a	n/a	19	n/a	n/a	n/a	Open
SW	SW	Stable	165	185	20	185	132	185	n/a	17.6%	Not to exceed 22% ADULT FEMALE in Harvest in any year	167	n/a	284	n/a	Closed
NE	L-4	Stable	30	30	0	18	20	18	36%	n/a	Not to exceed 45% FEMALES in Harvest	26	38%	20	50%	Open
NE	L-12	Suppress	41	41	0	17	15	23	42%	n/a	n/a	33	46%	30	n/a	Open
SE	L-17	Suppress	25	25	0	15	15	22-28	33%	n/a	n/a	15	33%	28	n/a	Open
SE/NE	L-11	Stable/Research	43	43	0	29	33	40-42	50%	n/a	Not to exceed 45% FEMALES in Harvest	43	47%	45	50%	D16 GMUS (49, 57,58,581) closed per research goals. Others open in April
SE/SW	L-16	Stable/Research	21	15	(0) reduction of 6 shown is due to new DAU	15	19	28 (DAU change to 20)	41%	n/a	Not to exceed 45% FEMALES in Harvest	25	47%	30 (DAU change to 21)	50%	Closed per research goals
SE/SW	L-19	Stable	41	34	(+3) reduction of 10 shown is due to new DAU	34	37	39 (DAU change to 30)	n/a	14.3%	3-yr avg. ADULT FEMALE % in Harvest not to exceed 20%	40	n/a	41 (DAU change to 39)	n/a	Closed
NE/SE	L-99	n/a	5	5	0	2	2	n/a		n/a	n/a	2	29%	n/a	n/a	Open
STATEWIDE TOTALS:			664	654	-10	541	500					608		676		

Justification for Changes in Harvest Limits

L-19 (Trinchera): The new lion management plan and monitoring metrics for L-19 went into effect in 2019. The adult female composition of harvest has remained below 20%, so an **increase of 3 lions** is recommended to the GMU 85, 140 & 851 harvest limit group. Historically, GMU 83 was part of this DAU, but because it is on the West Slope it will now be part of the SW DAU in 2021, as laid out in the approved West Slope plan.

The West Slope plan initiates a net decrease in harvest limits for the 2021-2022 season. The NW DAU reduces the total NW harvest limit by 50 lions, but creates a new harvest limit of 33 lions for the Glenwood Special Management Area. This results in a **net reduction of 17** in the proposed NW harvest limit. In the new SW DAU, the addition of GMUs 82 and 83, which had previously been in the Southeast Region, added 16 lions to the harvest limit (status quo numbers from last year, just a regional shift). The recommendation is to **add 4 lions** for 2021-2022 to the SW DAU harvest limit.

The staff recommendation is for **a net decrease of 10 lions** in the statewide 2021-2022 harvest limits, along with a large reduction in the proportion of the state that has April seasons.

Two figures have been included for your information and review as part of this memo:

Figure 1. Annual historic female composition in harvest and total mortality. Outreach efforts to voluntarily reduce female harvest began in late 2005.

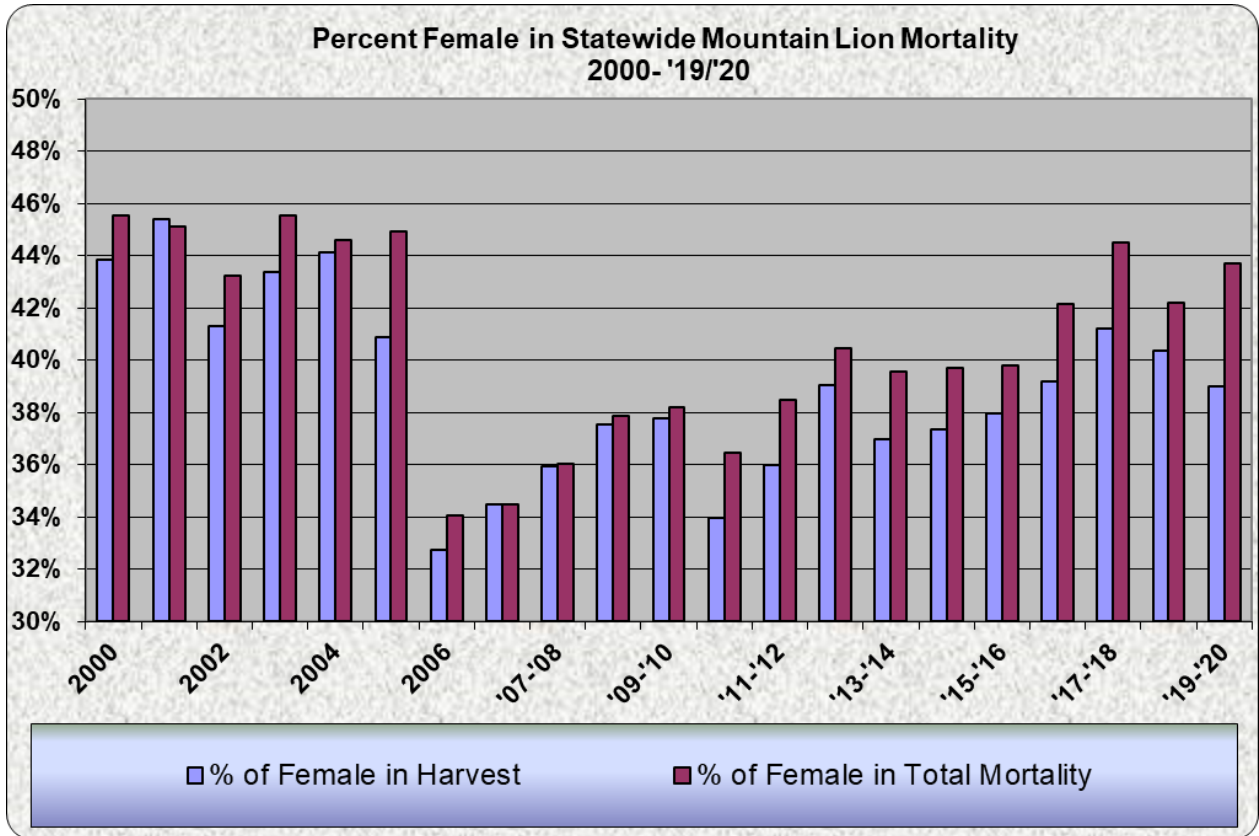


Figure 2. Historic mountain lion harvest limits and reported mortality (1980-present). Lion Management Plan (LMP) revisions completed in 2004 affected harvest limit levels from 2005-present.

