

**State of California  
NATURAL RESOURCES AGENCY  
Department of Fish and Wildlife**

**Report to the Fish and Game Commission  
Regarding Findings of Necropsies on Mountain Lions**

**Taken Under Depredation Permits in 2023**

**Prepared by the Wildlife Health Laboratory  
Wildlife Branch, Wildlife and Fisheries Division**

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**Submitted in compliance with Section 4807 of the Fish and Game Code**

## Introduction

Mountain lions causing property damage can be lethally taken under a depredation permit pursuant to California Fish and Game Code (FGC). FGC Sections 4802-4805 provide the process for a livestock owner to report a mountain lion depredation incident, request a depredation permit from the Department, and the process for issuing a depredation permit. A depredation permit may authorize either lethal take of an animal or non-lethal take (hazing).

In the case where a depredation permit authorizes lethal take, and a property owner or their agent lethally takes a lion, FGC Section 4806 states: "Any person issued a permit pursuant to Section 4803 or 4805 shall report, by telephone within 24 hours, the capturing, injuring, or killing of any mountain lion to an office of the department or, if telephoning is not practicable, in writing within five days after the capturing, injuring, or killing of the mountain lion. At the time of making the report of the capturing, injuring, or killing, the holder of the permit shall make arrangements to turn over the mountain lion or the entire carcass of the mountain lion which has been recovered to a representative of the department and shall do so in a timely manner."

In cases where a livestock owner, or their agent, encounters a mountain lion in the act of injuring or killing livestock, FGC Section 4807(a) states: "Any mountain lion that is encountered while in the act of pursuing, inflicting injury to, or killing livestock, or domestic animals, may be taken immediately by the owner of the property or the owner's employee or agent. The taking shall be reported within 72 hours to the department. The department shall investigate the depredation, and, if the mountain lion was captured, injured, or killed, the mountain lion or the entire carcass of the mountain lion which has been recovered shall be turned over to the department. Upon satisfactorily completing the investigation and receiving the mountain lion or the carcass, if recovered, the department shall issue a permit confirming that the requirements of this section have been met with respect to the particular mountain lion taken under these circumstances."

Regardless of whether the mountain lion is taken pursuant to FGC Section 4806 or 4807, the carcass should be returned to the Department to perform a necropsy on the animal. FGC Section 4807(b) requires the results of these necropsies to be presented in a report submitted to the Legislature.

The following report contains the necropsy findings for mountain lions taken under the provisions of FGC Sections 4806 and 4807(a) and submitted to the Department during the 2023 calendar year.

## Findings

Based on the California Department of Fish and Wildlife (CDFW) records received from the Wildlife Incident Reporting (WIR) System, the primary reporting tool for issuing depredation permits, and staff at the time of this report, CDFW received 515 reports of mountain lion depredation in 2023. As required by FGC, Department staff investigated each reported depredation incident to confirm damages and to confirm that the depredating animal was a mountain lion (as opposed to a different carnivore species). In some of these incidents, it was not possible to confirm damages or that a mountain lion caused the depredation. As part of this investigation, CDFW staff has a conversation with the property owner about the depredation incident and explains the codes, regulations, and policies associated with the depredation permit process. Department staff will also provide advice and feedback on how to prevent future depredation incidents. If the CDFW investigator confirms the property damages were caused by a mountain lion, and the property owner requests a depredation permit, the Department shall issue a depredation permit authorizing either a non-lethal take, or lethal take, per Department policies.

According to the data collected by the WIR, CDFW issued 204 mountain lion depredation permits in calendar year 2023. Non-lethal<sup>1</sup> Permits authorizing non-lethal<sup>1</sup> take made up 81% (165/204) of the depredation permits issued by the CDFW, while 19% of the issued permits (39/204) were authorized for lethal take.

CDFW issued the greatest number of permits in September 2023 (Figure 1). The reasons for property owners obtaining mountain lion depredation permits varied. Half (50%) of the depredation permits issued were for loss of goats while (25%) were for loss of sheep (Figure 2). Necropsied mountain lion stomach contents that could be identified (8 mountain lions) most frequently contained goats (3) with other contents also observed (Figure 3).

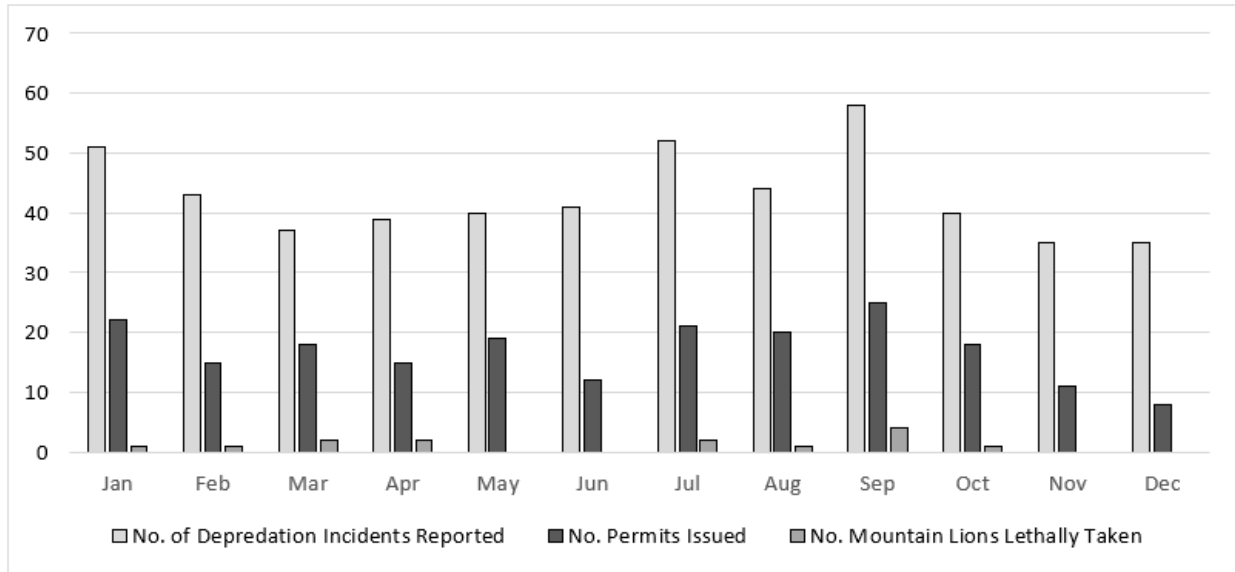
Fifteen (15) mountain lion carcasses were reported and submitted to CDFW staff for necropsy after they were taken on depredation. Slightly over-half (53%) of the mountain lions necropsied were male and 40% were female and the sex of one lion could not be determined (Table 1). Eighty-seven percent (87%) of mountain lions necropsied were aged as adults (24 months or older); 7% were sub-adults (13-24 months of age); 7% were juveniles (12 months or younger, Table 2). The highest number of depredation carcasses came from CDFW's North Central Region (73%; Table 3).

Note that the CDFW amended its mountain lion depredation, public safety, and animal welfare policy in December 2017. The purpose of the amendment was to avoid, where possible, mountain lion mortalities resulting from the issuance of lethal depredation permits. Further amendments to mountain lion depredation were issued in February 2020 to reflect the special protections given to mountain lions during the CESA listing evaluation. Mountain lions within specific geographically and genetically isolated mountain lion populations in Southern California (implementation area) as defined by Gustafson et al. 2018<sup>2</sup>, would require a stepwise process to first issue non-lethal depredation permits prior to the issuance of a lethal depredation permit within the implementation areas.

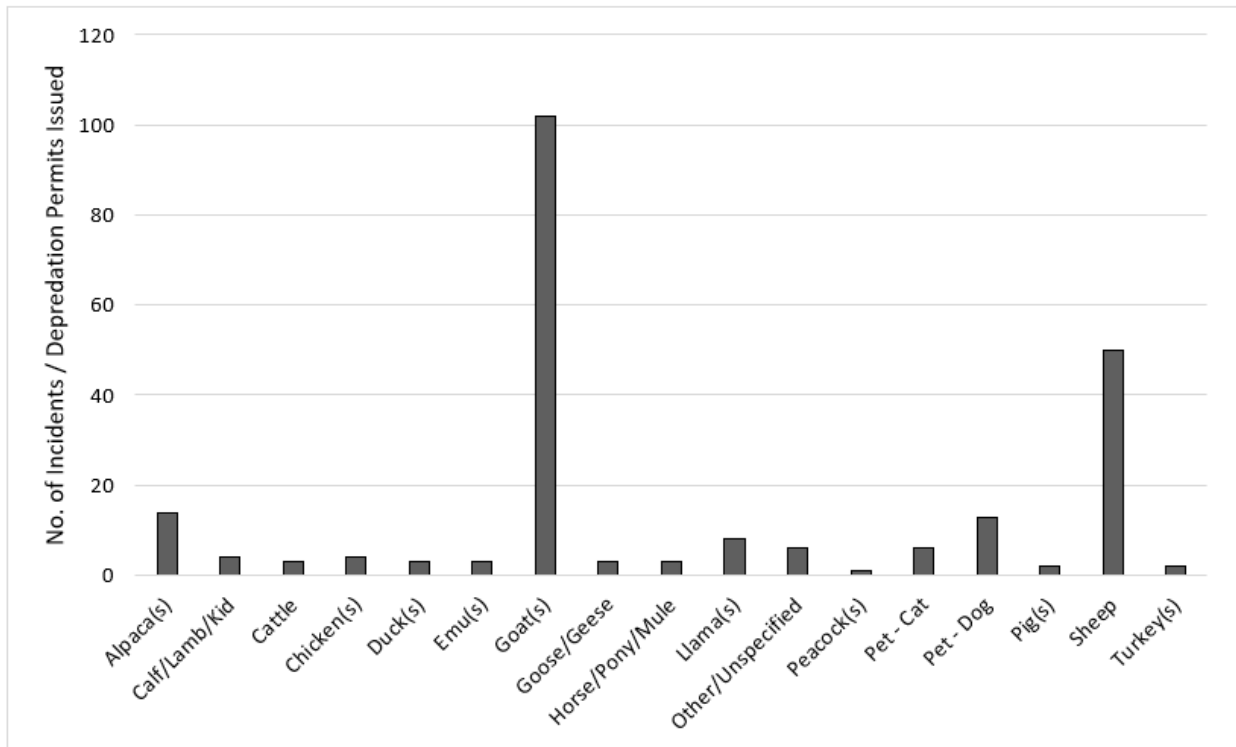
<sup>1</sup> Non-lethal methods are to be used to discourage further depredation by mountain lion(s) and includes aggressive hazing that does NOT injure or kill the mountain lion. The use of less than lethal ammunition (beanbags, rubber bullets, cracker shells, rock-salt, paintballs), noise making devices, pursuit with ATV, and/or pursuit with dogs may be authorized.

<sup>2</sup> Gustafson, K.D., R.B. Gagne, T.W. Vickers, S.P.D. Riley, C.C. Wilmers, V.C. Bleich, B.M. Pierce, M. Kenyon, T.L. Drazenovich, J.A. Sikich, W.M. Boyce, and H.B. Ernest. 2018. Genetic source-sink dynamics among naturally structured and anthropogenically fragmented puma populations. *Conservation Genetics* 20:215-227.

**Figure 1. Monthly summary of the number of mountain lion depredation incidents reported in the WIR system, the number of lethal and non-lethal mountain lion depredation permits issued, and the number of mountain lions lethally taken on depredation permits in 2023.**



**Figure 2. Type of property damage reported in 2023 (i.e. species of animal(s) to have been taken by a mountain lion). These numbers are based upon the number of occurrences and not the total number of animals reported to have been taken in a single incident. Multiple domestic animals of various species are sometimes reported in a single incident. The type of damages is only confirmed by CDFW for incidents that receive a depredation permit.**



**Table 1. Sex of 15 depredated mountain lions necropsied by CDFW in 2023.**

Sex	Total by Sex
Male	8
Female	6
Undetermined	1

**Table 2. Ages of 15 depredated mountain lions necropsied by CDFW in 2023**

Age Class	Total by Age Class
Juvenile <sup>1</sup>	1
Sub Adult <sup>2</sup>	1
Adult <sup>3</sup>	13

<sup>1</sup> Juvenile: 12 months or younger

<sup>2</sup> Sub Adult: 13-23 months

<sup>3</sup> Adult: 24 months or older

**Table 3. Geographic distribution of 15 depredated mountain lions necropsied by CDFW in 2023.**

CDFW Region	Total by Region
Northern	2
North Central	11
Bay Delta	0
Central	1
South Coast	0
Inland Desert	1

**Figure 3. Stomach contents of 15 depredated mountain lions necropsied by CDFW in 2023.**

