

**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 2022**

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

January 5, 2023

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

Summary

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 various staff at the time of this report, CDFW issued 180 mountain lion depredation permits in calendar year 2022. Non-lethal¹ permits made up 90% (162/180) of the depredation permits issued by the CDFW, while 10% of the issued permits (18/180) were authorized for lethal take.

CDFW issued the greatest number of permits in Sept, Oct, and Nov 2022 (Figure 1). The reasons for property owners obtaining mountain lion depredation permits varied. However, goats alone accounted for the highest number of the total reported incidents (47%) followed by sheep (28%) (Figure 2). Necropsied mountain lion stomach contents that could be identified most frequently contained goats (20%) with other contents also observed (Figure 3).

Ten mountain lion carcasses were reported and submitted to CDFW staff for necropsy after they were taken on depredation. Seventy percent of the mountain lions necropsied were male and 30% were female (Table 1). Eighty percent of mountain lions necropsied were aged as adults (24 months or older); 10% were sub-adults (13-24 months of age); 10% were juveniles (12 months or younger, Table 2). The highest number of depredation carcasses came from CDFW's Northern Region (40%; 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. 2018², 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.

¹ 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.

² 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 combined lethal and non-lethal mountain lion depredation permits issued for 2022. The number of depredation permits issued each month and the number of mountain lions taken are shown.

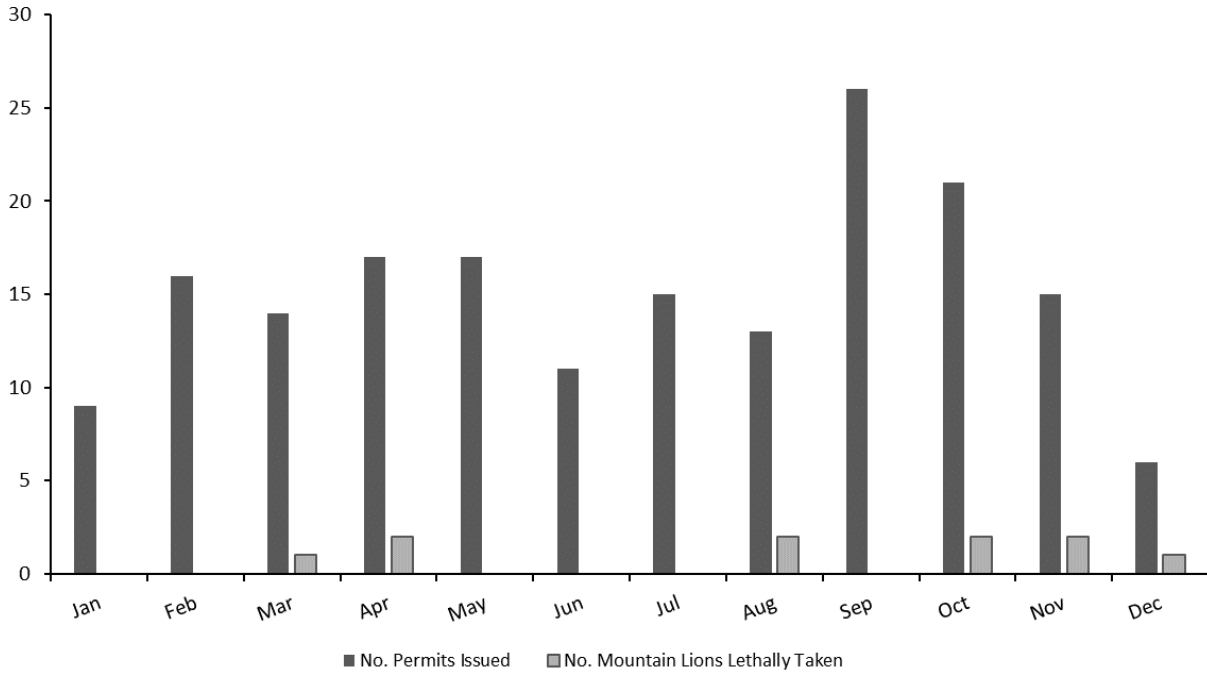


Figure 2. Number of lethal and non-lethal depredation permits issued in 2022 and the type of property damage reported (i.e. species of animal(s) reported to have been taken by a mountain lion). These numbers are based upon the number of incidents and not the total number of animals reported to have been taken in a single incident. Multiple domestic animals of various species are sometimes reported in a single incident.

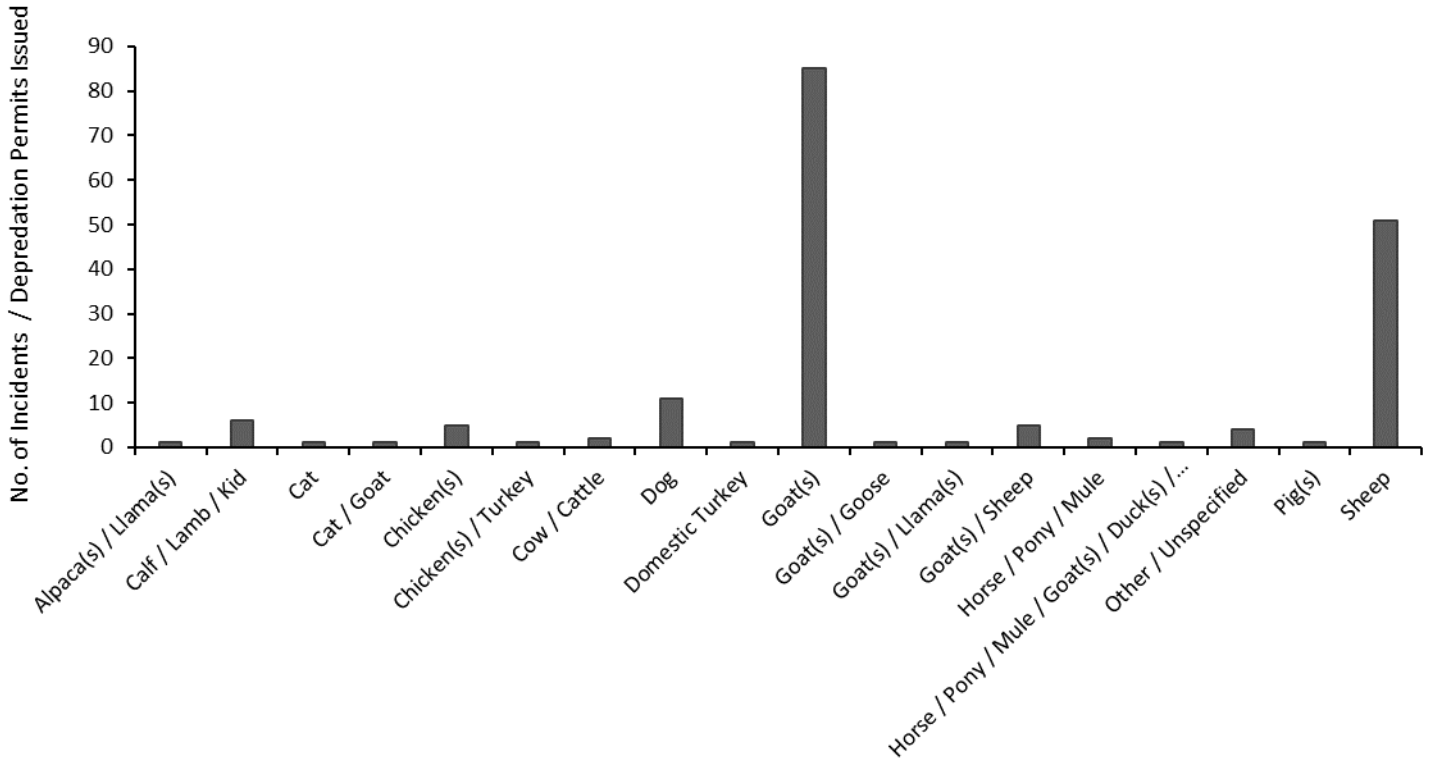


Table 1. Sex of depredated mountain lions necropsied by CDFW in 2022.

Sex	Total by Sex
Male	7
Female	3

Table 2. Ages of depredated mountain lions necropsied by CDFW in 2022.

Age Class	Total by Age Class
Juvenile ¹	1
Sub Adult ²	1
Adult ³	8

¹ Juvenile: 12 months or younger

² Sub Adult: 13-23 months

³ Adult: 24 months or older

Table 3. Geographic distribution of depredated mountain lions necropsied by CDFW in 2022.

CDFW Region	Total by Region
Northern	4
North Central	1
Bay Delta	3
Central	0
South Coast	0
Inland Desert	2

Figure 3. Stomach contents of depredating mountain lions necropsied by CDFW in 2022.

