

# **Mountain Lion Harvest History and Season Justification in Northwest Montana (FWP Region 1)**

**Nov 26, 2021**

In northwest Montana, mountain lion harvest has fluctuated in response to harvest restrictions, as well as population status. An abundant road system in many areas and consistent snow during the winter season has enabled hunting with hounds to be an efficient and effective way to harvest lions. Prior to 1986, harvest was unlimited. In response to increasing concerns of overharvest, a quota system was adopted in Region 1 in 1986. Licenses were unlimited, but harvest was managed with a total quota and female subquota through 1994. From 1994 through 1999, a total quota system was employed with no female subquotas. Harvest steadily increased from the late 1980s (66 individuals in 1989) to the late 1990s (243 individuals in 1998). During this time, quotas were increased; however, hunter success increased as well (55% of quota filled in 1986 to 98% filled in 1998). In fact, quotas were exceeded in 1995 and 1997 and some districts with quotas were closed within a day or two from the start of the season. This boom in mountain lion harvest began to dramatically decline in 1999, as did overall success. Strife among hound hunters was common due to rapidly closing quotas and seasons became a race to harvest a lion before quotas were met. In 2000, managers attempted to control overharvest and competition for lions by requiring non-resident houndsmen and houndswomen to hold a limited Hunting Harvest Permit obtained through a drawing (similar to the current Non-resident Hound License), the concern being non-resident hound hunters were driving the overharvest. Non-residents were able to hunt with an outfitter without a Hunting Harvest Permit. Residents and non-residents utilizing an outfitter purchased a General Lion License (valid statewide) to hunt in Region 1. Overall harvest was managed through a quota. This system was abandoned in 2005 because of repeated overharvest in some hunting districts.

From 2006 through 2013, most districts went to limited entry Special Lion Licenses with a female subquota to reduce overharvest. The remaining districts were managed through a General Lion License with an overall quota. For the 2014 season, the Commission passed a male subquota based system for Region 1, which included all districts except for 170. This new male subquota replaced the female subquota in order to restrict harvest of adult males and maintain a stable social structure with an older age class of males on the landscape. Maintaining older age class males within the population was widely supported by local houndsmen and houndswomen in Region 1. Since the initiation of this system in 2006, competition for lions has been managed well and overharvest has not been an issue

From 2014-2019, mountain lion hunting in Region 1 was open to both resident and nonresident hunters by General Lion License or by drawing a limited Special Lion License, depending on hunting district. Hunting of mountain lions was by Special Lion License obtained through a drawing and harvest was limited to an overall quota with a male subquota in hunting districts 100, 101, 102, 103, 104, 109, 110, 120, 121, 122, 123, 124, and 130. In Hunting Districts 132, 140, 141, 150, 151, and 170 hunters could harvest a lion using a General Lion License, and each hunting district maintained an individual quota, except for HD 170, which supported an

unlimited harvest on a general license. Legal animals included adult male and female mountain lions. It was not legal to kill a female mountain lion with kittens or any mountain lion with body spots. Hunting seasons for mountain lions starting in 2014 for all hunting districts, except HDs 150 and 151, were as follows:

- Sept 06-Oct 19: Archery only, without dogs
- Oct 25-Nov 30: Fall season, without dogs
- Dec 01-April 14: Winter season, with dogs

Each hunting district in Region 1 maintained separate harvest quotas; however, in districts with Special Lion Licenses a male subquota was maintained. Once 20% of the available quota was reached during the Archery Only or Fall Season, or a combination of the two, the corresponding season was closed until the winter season. Male lions harvested in the Archery and Fall Seasons were subtracted from the male subquota available in the winter season. This restriction ensured that 80% of the harvest was reserved for the winter season. Once the male subquota was reached in a hunting district, males could no longer be harvested. The season completely closed when the total quota for a hunting district was reached.

In 2020, the Commission adopted distinct male and female licenses for Special Lion License districts and went away from a quota-driven lion season for limited draw districts. Remaining districts were not changed and are managed through a General Lion License. For the Special Lion License districts and similar to other game animals, harvest is managed by the number of licenses issued and is not quota based. A lion hunter with either a male or female license can use this license to harvest a lion of either sex during the archery only and fall season without dogs in any open mountain lion hunting district. Lion hunters holding a General Lion License are also eligible to hunt all open lion districts during the fall archery and general rifle season. The quota for the archery and fall season was eliminated, and lions harvested during the fall archery and general rifle season do not influence the winter season license holder or the winter season harvest. Male and female licenses are available through a random drawing and must be a first choice on the application. Any unsubscribed license becomes available as a surplus, and to date all licenses have been issued either through the drawing and in a few instances through surplus of female licenses.

For the 2020 season, the Commission also approved eliminating HD 132 and splitting it among HDs 130, 140 and 170. The private property, nearly half of HD 132, was placed in HD 170. Lion hunting in HD 170 is on a General Lion License and harvest is unlimited with no subquotas. The remainder of HD 132 was split between HD 130 and HD 140. Lion hunting in HD 140 is through a General Lion License and the quota was increased from 6 to 10 with no subquota. HD 130 is a Special Lion License district and subject to the changes described above.

The objective of the individual sex-based licenses was to simplify license structure for lions in Region 1, eliminate a quota-based system, increase control over the effects of harvest on population numbers, create a quality lion hunt and chase season by maintaining large adult males in the population, and to increase hunter satisfaction with the lion season. Lion hunters in Special Lion License districts no longer have a quota to track or a season that closes early. Hunters applying for sex-specific Special Lion Licenses may not purchase a General Lion

License, encouraging people to commit to a specific hunting district if they want to hunt in a Special Lion License district. Lions harvested during the archery and fall season do not affect the winter season. By having separate female and male licenses, biologists have more control over mountain lion harvest and the impact on the population in the region. Adult female mountain lion harvest is additive to total female mortality within a population and therefore drives the overall population status. Controlling the number of females harvested allows biologist to better achieve management goals, such as increasing, decreasing, or holding population numbers stable. Furthermore, this system creates a quality hunt and has increased hunter satisfaction for those that draw a Special Lion License. Under the previous male subquota, the male subquota would fill before some hunters had the opportunity to lion hunt, resulting in dissatisfaction. Special Lion License districts were also viewed as “trophy lion” districts and some hunters only interested in male lions would not shoot a female. Under the sex-specific Special Lion License system, hunters who apply for a female license are willing to harvest a female lion as they applied for that specific license.

### **Justification for staying with current lion license system:**

Lion seasons and season structure has proven to be quite contentious in Region 1 and is exemplified by the number of different season types implemented in efforts to achieve management goals since the mid-1980s. The current season structure was initiated in 2020 and has only been in place for one full season. We have received comments expressing a desire to maintain the current lion season structure by local houndsmen and houndswomen. We have also received comments asking for a change by outfitters and lion hunters who do not like the limited draw system. Region 1 did not propose a change to the current lion season structure as it has not been in place long enough to evaluate its ability to meet stated goals, and any proposed change is expected to be contentious and needs to be well vetted with the public. During communications, Commissioner Tabor suggested holding a lion summit or lion season meetings in the region. We believe this would be a good approach to identify if changes in the season are supported and come up with a season structure that would satisfy lion hunters and the general public. These types of meetings need to be well-planned, well-advertised and will likely require a professional facilitator to conduct properly. Directions to staff for this season-setting cycle were to prioritize simplification of elk and deer season structures. The numerous changes being proposed to elk and deer seasons has taken much public engagement and staff time, limiting our ability to holding meaningful in-person meetings regarding lion season structure in Region 1. Holding in-person meetings has also been challenging due to the current pandemic and high rates of Covid-19 transmission in local communities, hence the cancelling of regional open house meetings for elk and deer simplification proposals. Regional staff also did not want to get ahead of the Northwest Lion Ecoregional Population Committee. Although the goal of this committee is to recommend numerical population goals to the Fish and Wildlife Commission, and given the challenges of holding season structure meetings, we felt it best to address season structure after a population goal was obtained so we can discuss harvest distribution with lion hunters as well.

One of the goals of implementing sex-specific special licenses was to improve ability to control harvest, particularly of females. A criticism of previous season structures was hunters would target males and not enough females were being harvested to effectively manage the population. The current lion season structure in Region 1 has only been in place for one year and not long

enough to thoroughly evaluate its effectiveness; however, based on 2020 data, female harvest increased considerably over previous years (Figure 1). Although only based on one year, the data suggest the current season structure has the potential to achieve the goal of managing female harvest to meet population goals as they will be determined by the Northwest Ecoregion Citizens Lion Committee. Additional years of data is needed to effectively assess this season structure in meeting all the stated goals.

**Figure 1.** Male, female and total harvest in Region 1, 2010-2020.

<b>License Year</b>	<b>Female Harvest</b>	<b>Male Harvest</b>	<b>Total Harvest</b>
2010	42	84	126
2011	53	89	142
2012	46	78	124
2013	50	79	129
2014	43	57	100
2015	41	68	109
2016	49	56	105
2017	55	70	125
2018	43	70	113
2019	52	66	118
2020	71	48	119