

**2024 ANNUAL STATUS REPORT**

# Predator-control measures implemented by the Utah Division of Wildlife Resources

PREPARED BY UTAH'S PREDATOR CONTROL PROGRAM



WILDLIFE RESOURCES

# Predator-control measures

The Utah Division of Wildlife Resources (DWR) has implemented several changes in recent years to increase mule deer survival by reducing the numbers of predators that kill deer. Studies in Utah show that certain predator-control measures can increase mule deer populations. These measures include:

- Reducing coyote densities in areas where mule deer are fawning.
- Reducing cougar densities in areas where adult mule deer mortality is above 7% because of cougar predation.

The DWR has incorporated this science into management efforts, administered Utah's Predator Control Program (informally called the coyote bounty program) and partnered with the Utah Department of Agriculture and Food (UDAF) to manage predator densities in areas where they are impacting mule deer populations.

The relationship between the DWR and the UDAF has been important to the success of predator management in Utah. In 2023, the UDAF ended a partnership with USDA Wildlife Services (WS) and took on the role of predator management exclusively in Utah. The DWR and the UDAF have worked closely to address predator concerns in the following ways.

- Identified areas where coyote removal efforts are most likely to benefit mule deer populations.
- Funded \$100,000 to help the UDAF re-equip after its separation from WS. (This was necessary because WS kept many of the assets and equipment that state trappers need to do their jobs, including truck beds, horse trailers and traps.)
- Began using new tools (like infrared technology) to help locate and remove predators.

In early efforts to reduce predator densities, the DWR increased harvest objectives (via permit numbers) to remove more animals on given units in the state. These changes resulted in an increased overall harvest of predators like cougars. The DWR no longer issues cougar permits because hunters can now harvest cougars while carrying only a hunting license, but there is still a need to focus harvest in struggling deer units that are being suppressed by cougars. Some things the DWR is doing to focus harvest in specific areas include:

- Reaching out to sportsmen's groups with lists of hunting units where increased predator removal can benefit deer the most.
- Working closely with the UDAF to increase removal of predators on specific units, including cougars on units with more than 7% adult doe mortality attributed to cougars.
- Updating the DWR predator management policy to incorporate the most recent data from extensive mule deer data gathering efforts to use resources where predator management will be the most beneficial for deer.

What follows are summaries of predator management efforts by species.

# Cougars

In recent years, several changes to cougar management in Utah have been implemented to benefit mule deer population growth throughout the state. In looking at population trend data, it became apparent that cougar populations were growing as Utah's mule deer population increased throughout the 2000s. When mule deer numbers began to decline in 2016, the DWR began to increase cougar permits within the sideboards of the state's cougar management plan. In 2016, cougar numbers also began decreasing across the state, but mule deer numbers continued to decline.

Then, two key changes occurred that allowed the DWR more flexibility to manage cougar numbers:

- Legislation directed the DWR's director to implement predator management plans on units of concern.
- Changes to cougar hunting began in May 2023. These changes included cougar hunting with only a hunting license (dropping the requirement for a cougar hunting permit), implementing trapping as a method of take and removing annual bag limits on cougars.

In Chart 1 (below), cougar population trends relative to mule deer population trends are graphed.

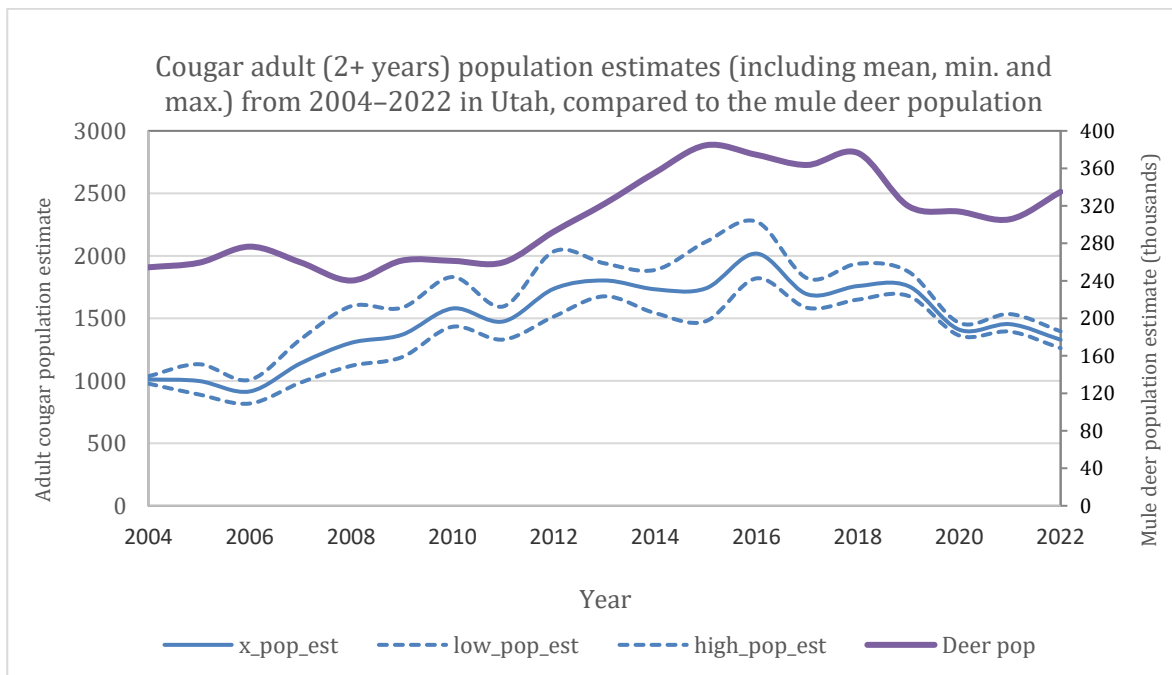


Chart 1. Cougar population estimates relative to mule deer population trends

The results of changes to cougar hunting regulations in 2023 can be seen in Chart 2 (below). Although a similar number of cougars were taken during the same period in the prior year, this shows that a new group of hunters — those without hounds — were able to participate in cougar

hunting. Those new hunters made up the difference lost when hunters with hounds harvested fewer cougars.

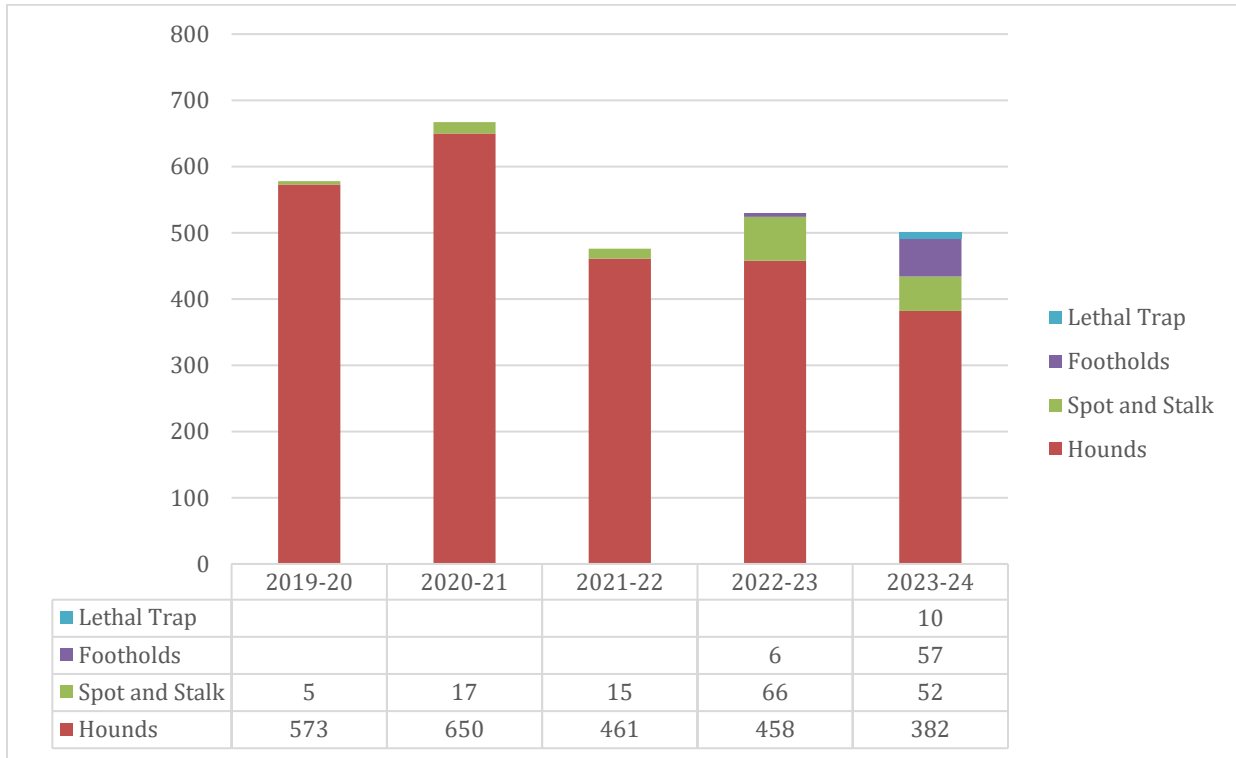


Chart 2. Cougar harvest by method

There is additional information about cougar mortality from all causes (from Nov. 1 to Oct. 31 each year) in the supplemental information section at the end of this document (see page 8).

One final data point to look at for cougar management is the number of females in the harvest. Generally, if the percentage of female harvest is above 40%, the cougar population will decline. Chart 3 (page 5) shows the percentage of female harvest from 1990 to 2024. It indicates increasing downward pressure on the cougar population in Utah since 2021.

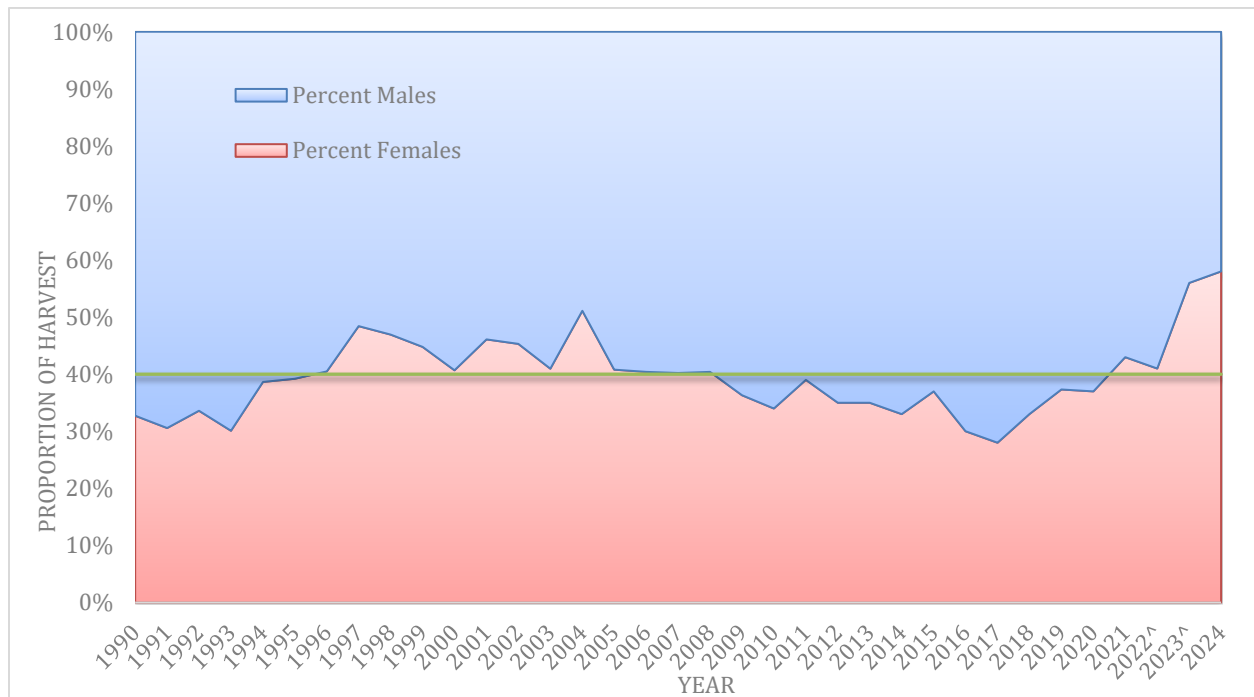


Chart 3. Percentage of female cougars in the harvest. Having a female harvest percentage above 40% should indicate a decline in cougar population numbers.

## Coyotes

The DWR continues to administer two programs meant to reduce the impacts of coyotes on mule deer populations, both statewide and within targeted mule deer fawning areas.

The first program provides an incentive payment of \$50 to hunters and trappers who turn in coyotes they have killed to the DWR. Chart 4 (page 6) shows the amount of incentive payments paid to program participants from 2013 through June 2024.

The DWR is reviewing changes to the program that would further incentivize coyote removal in areas where mule deer give birth to fawns and raise them. In January 2025, the DWR plans to recommend to the Utah Wildlife Board an increase in incentive payments in those critical mule deer areas, while still providing incentive payments for *all* coyotes turned in under the program.

One piece of feedback the DWR is receiving from the field, when asked why the number of coyotes submitted for bounties appears to have dropped in recent years, is that there seems to be a decline in the number of coyotes that hunters are seeing. This may be due to declines in the populations of small mammals that coyotes depend on primarily for food. These cycles are normal, and coyote numbers will likely increase again when small mammal populations rebound without continued management efforts.

Another point raised by regional personnel is that measures put in place to reduce fraud — for example, out-of-state coyotes being turned in for payment — as well as requirements necessary in order to legally pay participants have discouraged some people from participating in the program. The DWR has worked to streamline this process as much as possible over the years, but certain amounts of paperwork and reporting are necessary to administer the program.

In addition to the incentive program, the DWR has partnered with the UDAF to conduct targeted removal of coyotes in areas that will benefit mule deer fawns as they are born each spring. In FY 2024, this targeted program removed 698 coyotes from core areas identified by the DWR as crucial fawning areas. The DWR also provides support for county match programs that remove coyotes from areas where both livestock and mule deer can benefit.

The DWR and the UDAF continue to work closely to address concerns about predator impacts on mule deer population growth.

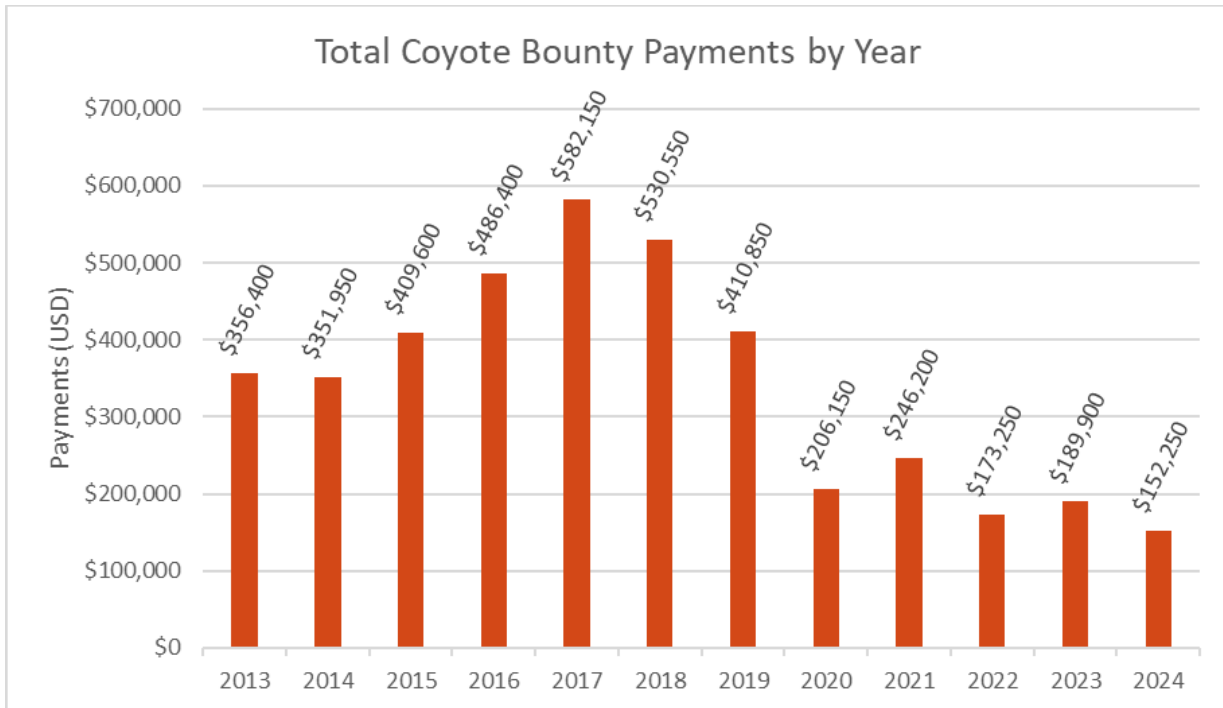


Chart 4. Total coyote payments by year under Utah’s incentive program

## Bears

The Utah Black Bear Management Plan was reviewed and updated in 2023. Changes include providing more flexibility to managers when recommending hunt-strategy changes to units that require them. Season structure was also addressed to try to eliminate conflicts between different user groups in the backcountry.

Bear permit numbers will be reviewed, and recommendations will be submitted to the Utah Wildlife Board in January 2025, with an emphasis on identifying any areas where black bears may be having a negative impact on mule deer populations and ranching operations.

Typically, black bears are not a major contributor to mule deer population declines, but when poor fawn recruitment is observed, it could be due to black bears killing and eating them in the first couple of weeks of life. The DWR recently updated its predator management policy and when black bears are identified as a factor in poor mule deer population growth, efforts will be focused on black bear harvest on those units.

Some strategies that could be used include raising permit numbers by changing hunt strategies or by implementing harvest-objective hunts (with over-the-counter permits) on certain units, and at certain times (when more bears are likely to be harvested), to reduce bear densities on units of concern. These are also the types of changes the DWR will be recommending to the Utah Wildlife Board in January 2025.

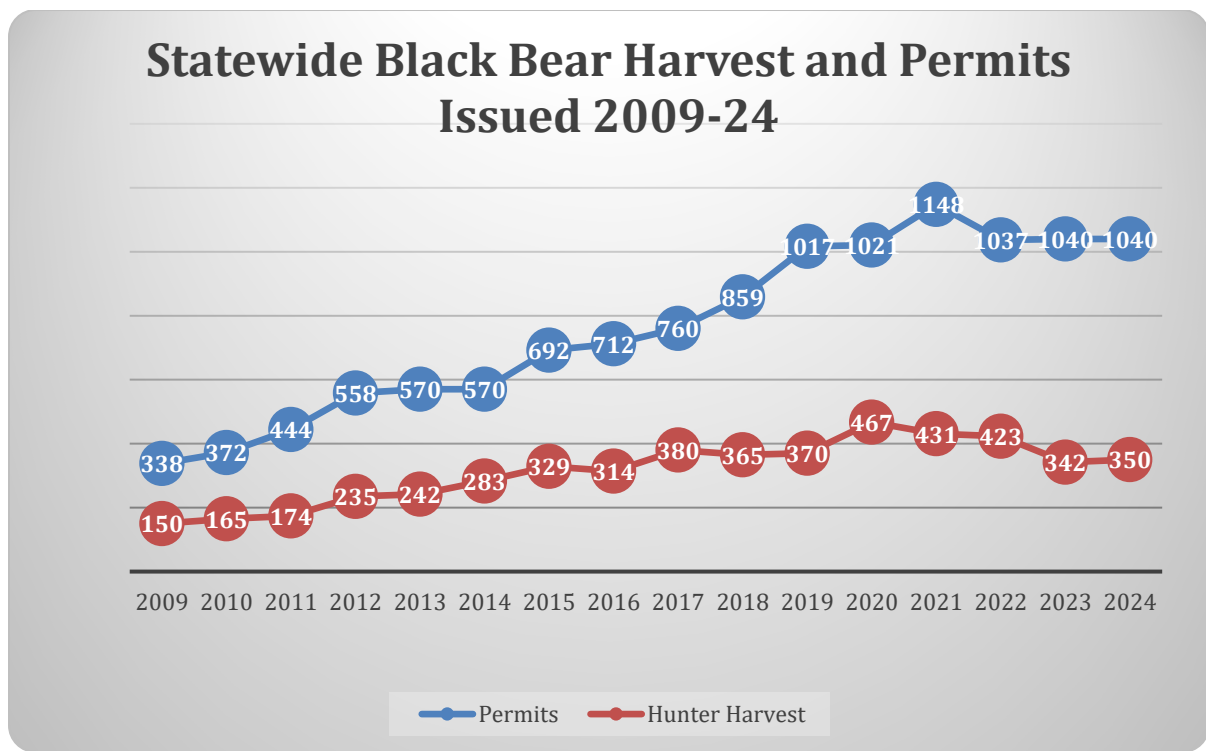


Chart 5. Statewide black bear hunter harvest and permits issued since 2009

Estimates of bear population trends indicate that numbers have declined since 2018, probably due largely to drought conditions in large parts of their range. Trends in depredation incidents seem to indicate a decline as well. It is worth noting that this year, probably due to a berry crop failure, bear conflict incidents have been up, despite the trend in population numbers.



## Supplemental information

SUMMARY OF HUNTER HARVEST OF COUGARS FROM 2020 TO 2024									
Unit	Region	Unit name	Hunter harvest					Trap harvest from totals for 2023 and 2024	
			2020	2021	2022	2023	2024	2023 trap	2024 trap
22b	SRO	Beaver, East	22	21	24	16	14	0	0
22a	SRO	Beaver, West	17	10	4	7	0	0	0
10a	NERO	Book Cliffs, East	22	20	15	17	13	0	3
10b/11c	SERO	Book Cliffs, Rattlesnake Canyon/Nine Mile, South	2	0	0	2	5	0	0
1b	NRO	Box Elder, Desert	15	19	7	9	12	0	1
1c	NRO	Box Elder, Pilot Mtn	0	0	0	0	1	0	0
1a	NRO	Box Elder, Raft River	5	5	5	5	11	0	0
2	NRO	Cache	28	36	17	29	19	0	2
16a	CRO	Central Mtns, Nebo	14	8	12	16	18	0	6
16a1	CRO	Central Mtns, Nebo-West Face	9	4	8	3	9	0	4
16b2	SERO	Central Mtns, Northeast Manti	9	18	8	6	8	0	1
16b1	SERO	Central Mtns, Northwest Manti	8	14	7	8	9	0	0
16c2	SERO	Central Mtns, Southeast Manti	12	27	8	10	13	0	1
16c1	SERO	Central Mtns, Southwest Manti	18	18	8	16	11	0	1
6	NRO	Chalk Creek	27	29	25	14	13	0	0
5	NRO	East Canyon	13	12	7	11	12	0	0
5a	NRO	East Canyon, Davis	6	5	3	4	3	1	2
21a	SRO	Fillmore, Oak Creek	2	2	3	2	3	0	0
21b	SRO	Fillmore, Pahvant	16	26	15	14	6	0	0
15	SERO	Henry Mtns	8	4	3	5	7	0	1
26	SRO	Kaiparowits	1	1	1	1	1	0	1
7	NRO	Kamas	4	7	3	4	2	0	0
13	SERO	La Sal	4	5	5	10	10	0	0
23	SRO	Monroe	13	11	5	8	13	0	1



4	NRO	Morgan-South Rich	23	25	22	29	18	0	0
24	SRO	Mt Dutton	6	7	12	8	9	0	0
11	SERO	Nine Mile, North	23	13	17	15	8	0	0
8ab	NERO	North Slope, Summit/West Daggett	4	12	8	7	8	0	1
8c	NERO	North Slope, Three Corners	3	2	3	2	2	0	0
3	NRO	Ogden	23	23	13	6	11	0	3
18a	CRO	Oquirrh-Stansbury, East	8	8	5	8	5	0	1
18b	CRO	Oquirrh-Stansbury, West	11	4	1	4	4	0	1
28	SRO	Panguitch Lake	13	20	24	20	21	0	1
27	SRO	Paunsaugunt	10	14	12	8	6	0	3
30a	SRO	Pine Valley, North	16	19	23	15	9	1	4
30b	SRO	Pine Valley, South	7	10	9	5	0	0	0
25c	SRO	Plateau, Boulder	13	37	21	16	19	0	2
25a	SRO	Plateau, Fishlake	13	12	22	15	11	0	2
25b	SRO	Plateau, Thousand Lakes	1	3	1	0	4	0	1
14b	SERO	San Juan, Desert	0	0	0	0	0	0	0
14a	SERO	San Juan, Mountains	7	22	17	21	18	0	6
12	SERO	San Rafael	1	2	0	0	0	0	0
9bcd	NERO	South Slope, Bonanza/Diamond Mtn/Vernal	22	17	15	13	19	0	0
9a	NERO	South Slope, Yellowstone	7	14	1	15	3	0	1
20	SRO	Southwest Desert	8	7	4	9	7	0	0
17bc	NERO	Wasatch Mtns, Avintaquin-Currant Creek	21	31	10	24	16	0	1
17a2	CRO	Wasatch Mtns, Cascade	7	9	8	18	11	0	1
17a4	CRO	Wasatch Mtns, Salt Lake	0	0	0	1	2	1	0
17a1	CRO	Wasatch Mtns, Timpanogos	5	8	1	5	12	0	5
17a3	CRO	Wasatch Mtns, West-Strawberry	12	11	11	26	31	1	3
19a	CRO	West Desert, Mountain Ranges	5	3	0	1	3	0	0
19b	CRO	West Desert, Tintic-Vernon	7	6	6	5	7	2	3
29	SRO	Zion	27	26	17	17	24	0	4
		<b>STATEWIDE</b>	<b>578</b>	<b>667</b>	<b>476</b>	<b>530</b>	<b>501</b>	<b>6</b>	<b>67</b>

These numbers are calculated from Nov. 1 of the previous year to Oct. 31 in the listed year. So, for 2020, the total is the number of cougars taken from November 2019 through October 2020. The 2024 numbers are for November 2023 through September 2024. They should represent the bulk of the cougars harvested in 2024; however, some additional cougars will likely be harvested through October.

<b>COUGARS TRAPPED IN UTAH SINCE MAY 3, 2023</b>		
<b>Land ownership</b>	<b>Number of cougars</b>	<b>Percent of total</b>
Federal	45	62%
State	7	10%
Private	21	28%
<b>TOTAL</b>	<b>73</b>	<b>100%</b>