

## **Ungulate Status in relation to Lion Quotas**

### **June 6, 2023**

In general, the department was unable to detect, based on livestock depredation complaints, any specific areas where targeted lion removals might benefit depredation situations. In some of the eastern regions, quotas have been increased historically so that any landowner that might experience an incident could address it through standard hunting seasons. This is not to indicate that there are not places where depredation events occur or may be focused, but the department has not detected them through routine complaint monitoring.

#### **Region 1**

Ungulate focal areas were developed through the Northwest Lion Ecoregion Population Objective Committee work that included input from department biologists. Ungulate focal areas remain unchanged since the completed analysis occurred about a year and a half ago. Objective was to reduce the entire population within the ecoregion by 12.5% within six years, although there was interest in reducing population density within the focal areas to a greater extent. Focal areas have quotas that may reduce local densities by about 30% in six years.

LMUs 100, 121,122,123, and 124 are the ungulate focal areas within Region 1 that are designed to benefit mule deer, elk, and bighorn sheep.

LMU 100 (Deer-Elk HD 100): Ungulate focal area

**Mule Deer** – Antlered buck harvest below long term average (LTA) objective

**Elk** – Brow-tine bull harvest below LTA

**Bighorn Sheep:** At objective

LMU 101 (West half of Deer-Elk HD 101):

**Mule Deer** – Antlered buck harvest below LTA objective

**Elk** – Brow-tine bull harvest below LTA

**Bighorn Sheep** – Below objective

LMU 102 (East half of Deer-Elk HD 103):

**Mule Deer** – Meeting objective based on HD 103 survey data

**Elk** – Below objective based on HD 103 survey data and Brow-tine bull harvest below LTA

LMU 103 (West half of Deer-Elk HD 103):

**Mule Deer** – Meeting objective based on HD 103 survey data

**Elk** – Below objective based on HD 103 survey data and Brow-tine bull harvest below LTA

LMU 104 (Deer-Elk HD 104):

**Mule Deer** – Antlered buck harvest below LTA objective

**Elk** – Brow-tine bull harvest below LTA

**Bighorn Sheep** – Below objective

LMU 109 (East half of Deer-Elk HD 109):

**Mule Deer** – Antlered buck harvest below LTA objective

**Elk** – Brow-tine bull harvest below LTA

**Bighorn sheep** – Below objective

LMU 110 (Deer- Elk HD 110)

**Mule Deer** – Antlered buck harvest below LTA objective

**Elk** – Brow-tine bull harvest below LTA

LMU 120 (Deer-Elk HD 120)

**Mule Deer** – Antlered buck harvest at LTA objective

**Elk** – Brow-tine bull harvest at LTA

LMU 121 (Deer-Elk HD 121): Ungulate focal area

**Mule Deer** – Antlered buck harvest at LTA objective

**Elk** – At objective based on HD 121 survey data and Brow-tine bull harvest below LTA

**Bighorn Sheep** – Bighorn sheep district 121 and 123 - Below objective

LMU 122 (Deer-Elk HD 122): Ungulate focal area

**Mule Deer** – Antlered buck harvest at LTA objective

**Elk** – Brow-tine bull harvest at LTA

**Bighorn Sheep** - within objective (bottom of objective range).

LMU 123 (Deer-Elk HD 123): Ungulate focal area

**Mule Deer** – Antlered buck harvest below LTA objective

**Elk** – At objective based on HD 123 survey data and Brow-tine bull harvest below LTA

LMU 124 (Deer-Elk HD 124): Ungulate focal area

**Mule Deer** – Antlered buck harvest below LTA objective

**Elk** – Brow-tine bull harvest below LTA

**Bighorn Sheep** – Below objective but increasing. Augmented in 2016 following a die-off.

LMU 130 (Deer-Elk HD 130):

**Mule Deer** – Antlered buck harvest below LTA objective

**Elk** – Brow-tine bull harvest below LTA

LMU 140 (Deer-Elk HD 140):

**Mule Deer** – Antlered buck harvest below LTA objective

**Elk** – Below objective based on HD 140 survey data and Brow-tine bull harvest below LTA

LMU 141 (Deer-Elk HD 140):

**Mule Deer** – Antlered buck harvest below LTA objective

**Elk** – Brow-tine bull harvest below LTA

LMU 150 (Deer-Elk HD 150):

**Mule Deer** – Antlered buck harvest below LTA objective

**Elk** – Below objective based on HD 150 survey data and Brow-tine bull harvest below LTA

LMU 170 (Deer-Elk HD 170):

**Mule Deer** – Antlered buck harvest at LTA objective

**Elk** – Brow-tine bull harvest above LTA

## **Region 2**

LMU 201: (deer-elk HDs 200 and portion of 201)

**Mule deer** are within objective

**Elk** are within (HD 200) or above (HD 201) objective

LMU 202:

**Mule deer** in Special Management Area within objective

**Elk** are within objective

LMU 204: (deer-elk HDs 204, 261, 262, portion of 260)

**Mule deer** are below in HD 204, but within Special Management Area (HD 261) and remaining HD 260 and 261

**Bighorn sheep** (Skalkaho) are below objective

**Elk** are within objective

**LMU 210:**

**Mule Deer** are within objective in Special Management District

**Bighorn sheep** (Lower Rock Creek and Upper Rock Creek) are below objective

**Elk** are above objective

LMU 211: (deer-elk HDs 211 & 216)

**Mule deer** are within objective

**Bighorn sheep** are below objective

**Elk** are above objective

LMU 213: (deer-elk HDs 212, 213, and 217)

**Mule deer** are below objective

**Bighorn sheep** (Garrison) are below objective

**Bighorn sheep** (Anaconda) are below objective

**Elk** are over objective (213, 217)

LMU 214:

**Mule Deer** are below objective

**Elk** are below objective

LMU 215:

**Mule Deer** are below objective

**Elk** are above objective

LMU 240: (deer-elk HDs 240 and portion of 201)

**Mule deer** are below objective

**Elk** are within objective (for old boundary 2021)

LMU 250:

**Mule Deer** are below objective

**Elk** are below objective

**Bighorn sheep** are below objective

LMU 270:

**Mule deer** are within objective in a Special Management Area

**Bighorn sheep** are within objective

**Elk** are within objective

LMU 280: (deer-elk HDs 280, 281, 284 and 293)

**Mule deer** are below objective

**Elk** are below objective in HD 280, although they are above in HDs 284 and 293

LMU 285:

**Mule deer** are below objective

**Elk** are below objective

LMU 290: (deer-elk HDs 290, 291, 292, and 298)

**Mule deer** are within objective in the Special Management Area (HD 291), but they are below objective in HDs 290, 292, and 298

**Elk** are above objective in HDs 290 and 298, within objective in HD 291, and below objective in HD 292

LMU 299: (portions of HDs 201, 204 & 292)

This district boundary is specially designed to include the urban interface around the Missoula Valley. Formally called the "Missoula Special Management Area"

**Elk and mule deer:** N/A.

**Bighorn sheep** (Petty Creek): Within population objective, below recruitment objective

**Bighorn sheep** (Bonner): Below objective

### Region 3

LMUs 301, 304, 310, 312, 313, 314, 317, 319, 335, 339, 340, 343, 350, 361, 391, and 392

**Mule deer** in these units are all below objective

**Elk** in these units are all at or above objective

The sheep populations are seemingly doing well. The Paradise Valley sheep population unlimited sheep districts appear to be stable, and we are looking to open a new sheep hunt in the Gardiner area during biennial season setting, the Absaroka sheep population appears to be growing. The Madison range sheep populations are doing well although there appears to be a lot of potential uninhabited habitat within the range. We are planning reintroductions soon. The southern Madison population took a significant hit from this winter but was doing very well up until then. The Tendoy sheep re-introduction is now in its second year and appears to be doing well with good survival and good lambing to date. The highland sheep population south of Butte appears to be doing well and is being closely monitored and studied by a ongoing research project. Lion predation is a concern in potential reintroduction sites that we're thinking about within the Madison range, and potentially the Lewis and Clark Caverns Area down the road. The Elkhorn sheep population has never recovered from pneumonia that devastated the population a few

years back. We are looking to re-open the sheep hunt in the sleeping giant area. That area was devastated by pneumonia years back, and is slowly recovering.

#### **Region 4**

Specifically, in Region 4, only 8 lions have been lethally removed (by USDA WS, FWP, or landowners) during the last 10 years in response to livestock depredation; we have no records of a lion depredating livestock since 2019.

LMU 404 - Quota 4, Harvest 0.

Very few **elk**.

**Mule deer and white-tailed deer** at or above objective.

Lion quota never fills. Very little lion habitat, prairie and agriculture with river drainages.

LMU 410 – MR Breaks. Quota 13, Harvest 9. Male quota sometimes fills, but female quota rarely fills. **Mule deer** down in recent years.

**Elk** above objective in HD 417, at objective in 410 this year but been above objective until 2022.

**Bighorn sheep** at objective.

Lion quotas increased recently.

LMU 411 - North Snowies. Quota 13, Harvest 13. Male quotas most times fills, females fill some years.

**Mule deer** are not surveyed, but harvest slowly declining.

**White-tailed deer** numbers high

**Elk** over objective.

LMU 413 - North Little Belts. Quota 10, Harvest 8. This LMU male quotas typically fill, female quotas some years.

**Mule deer** stable to just below objective.

**Elk** at or just above objective.

LMU 416 - South Little Belts. Quota 13, Harvest 6. Typically fill male quota. Female quota fills at times.

**Elk** above objective.

**Mule deer** are not surveyed in this area, but long-term harvest stable to increasing.

LMU 421- Birdtails. Quota 5, Harvest 3. Male and female quota rarely fills.

**Mule deer** stable.

**Elk** above objective.

LMU 422- South Rocky Mountain Front. Quota 7, Harvest 3. Male quota sometimes fills, female quota often fills.

**Mule deer** numbers slightly lower in recent years but remains within objective.

**Elk** above objective.

LMU 441 - North Rocky Mountain Front. Quota 3, Harvest 2. Lion quota rarely if ever fills.

**Mule deer** numbers slightly lower in recent years but remains within objective.

**Elk** at objective.

LMU 445 - Devil's Kitchen Big Belts. Quota 14, Harvest 10. Male quota fills at times, female quota rarely fills.

**Mule deer** below objective but increasing.

**White-tailed deer** increasing.

**Elk** over objective.

LMU 447- Highwoods. Quota 8, Harvest 4. LMU M/F quotas have filled in recent years, lion quotas also increased accordingly.

**Mule deer** stable to increasing.

**Elk** over objective.

**White-tailed deer** increasing.

**Mountain goat** population down.

LMU 448 - East little belts - Quota 12, Harvest 4. Male quota rarely fills, female quota rarely fills. Lion quota increased recently. Remote terrain and snow conditions dictate harvest fill rates. LMU quota increased in recent years.

**Mule deer** population is stable to increasing.

**Elk** population stable to increasing.

## Region 5

LMU 502

Quota: 25      2022 Harvest: 20

**Mule deer** are well below long-term average in portions of LMU 502.

**Elk** are over objective in HDs within LMU 502.

Note: the lion quota has not been reached during the last 3 seasons.

LMU 525

Quota: 6M 9F    2022 Harvest: 6M 3F

**Mule deer** are well below long-term average in portions of LMU 525. But CWD management strategies are underway in portions of LMU 525 that call for a decrease in mule deer population density, so this lower number is not undesired.

**Elk** are over objective for the HDs within LMU 525.

Lion quotas have not been fully reached during the last three seasons due to low harvest in what was HD 510 on the eastern side of LMU 525.

LMU 540

Quota: 5      2022 Harvest: 2

**Mule deer** are below long-term average.

**Elk** are over objective in LMU 540.

Note the lion quota has not been reached during the last two seasons.

LMU 580

Quota: 5      2022 Harvest: 1

**Mule deer** are below long-term average.

**Elk** are over objective in LMU 580.

Note the lion quota has not been reached during the last two seasons.

## Region 6

LMU 620

Quota: 5; 2 females      2022 Harvest: 5 (exceeded female quota)

**Mule deer** are below objective in two hunting districts

**Bighorn sheep** are below objective in one hunting district

**Elk** are below objective in all hunting districts

LMU 690

Quota: 9; 3 females      2022 Harvest 9

**Bighorn sheep** are below objective

**Elk** are above objective

**Mule deer** are at objective

## Region 7

LMU 700

**Quota:** 45      2022 harvest: 18 (we have never hit our 45 lion quota since it was raised for the 2014-15 season)

**Mule deer** – below long-term average (a product of drought and winter conditions that impacted habitat and deer survival. Low deer numbers are not related to predators and no correlation has been made between the two with surveys and/or research within the region)

**Pronghorn** – slightly below long-term average

**Elk** – above the population objectives, although these are outdated and being updated in elk plan