



# COLORADO

## Parks and Wildlife

Department of Natural Resources

1313 Sherman St, Room 111  
Denver, CO 80203  
P 303.866.3203

**TO:** Members of the Colorado Parks and Wildlife Commission  
**FROM:** Krista Heiner, Regulations Manager  
**RE:** Issue Paper from November 2019 on Limiting Archery Elk Licenses in E-16, E-24, E-30 and E-31 for Reference  
**DATE:** January 8, 2020 UPDATE

Commissioners,

For your reference, please find attached the issue paper presented at the November 2019 Commission Meeting in Wray (Step 1 of 2) describing alternatives for limiting archery elk licenses in E-16, E-24, E-30 and E-31. At that time, the Commission advised bringing forward alternative 1, creating limited, sex-specific (limited cow/limited bull) licenses in E-16, E-24, E-30 and E-31, for final consideration. These proposed regulatory changes will be presented for final consideration (Step 2 of 2) at the January 2020 Commission Meeting in Denver (Agenda Item 12). The draft redline versions of these regulations can be found on pages 116-118 in the attached version of Chapter W-2.

We are providing this information because it has come to our attention that several of you are receiving emails that reference the three alternatives you considered during your November meeting. We thought it would be more convenient to share them again with you so you do not have to refer to the November meeting materials.



## ISSUES SUBMITTAL FORM

Date: October 28, 2019

|               |  |
|---------------|--|
| <b>ISSUE:</b> | <b>Should archery licenses in GMUs 70, 71, 72, 73, 74, 75, 77, 78, 711, 741, 751, &amp; 771 be limited and should they be specified as limited bull/limited cow, limited either-sex, or limited cow/over-the-counter (OTC) bull? Units in E16 are included in alternative 1 (limited bull/limited cow) only.</b> |
|---------------|--|

**DISCUSSION (FACTS AND FIGURES, EXPLANATION OF ISSUE):**

Populations of elk herds in Southwest Colorado (E-24 Disappointment, E-30 Hermosa, and E-31 San Juan) reached a high around 2000 and were over management objectives. Wildlife managers began increasing cow harvest at that time through liberal antlerless licenses, either-sex licenses, and late seasons to bring populations down to management objective. After several years of aggressive harvest, populations were successfully decreased. But as elk numbers reached the lower targets, many people both within the agency and in the public started expressing concerns that populations were decreased too much. Around 2011 the number of limited antlerless and either-sex licenses, all of them being rifle or muzzleloader, began to be reduced in attempts to stabilize populations. List B-antlerless-only archery tags were not allowed beginning in 2010. Either-sex elk licenses during rifle and muzzleloader seasons were changed to bull and cow in 2018 to further reduce cow harvest. Limited antlerless licenses have continued to be reduced to date.

Although cow elk harvest has been decreased through license reductions, elk populations haven't rebounded. Part of this is due to low calf recruitment. Around 2006, a decrease in the calf to cow ratio began to be observed and has continued to trend downward since then. In E31 for example, the calf to cow ratio has historically averaged 41:100, but that number has averaged 30.5 over the last 5 years. E-24 has even worse calf recruitment with sub-30 ratios since 2012. The cause of the poor recruitment is unknown, but has been experienced across southern Colorado. It is currently being researched by CPW to try to determine the cause and how to address it. In the meantime, the only tool available to wildlife managers to try to increase elk numbers is through harvest management.

Despite the aggressive reductions to antlerless licenses (40-78%), these herds are either below or at the lower end of the objective range. These herd plans are all nearly ten years old and the informal public input that has been received indicate that the population objectives should be increased when they are revised. Although the license cuts have been necessary to stabilize the population, they have come with the cost of significant loss of opportunity for rifle and muzzleloader cow hunters. Most antlerless licenses in this area now require 1-2 preference points in order to draw.

Another factor that complicates the issue is the increase in OTC either sex archery participation that is occurring within these units. The number of archery hunters with either sex tags has increased significantly in most of these units since 2008. Although not all archery hunters are interested in taking cows, the trend has been an overall increase in the number of cows taken by archery hunters. As rifle and muzzleloader licenses have been reduced, the proportion of cows taken by archers becomes more significant.

**E24- Disappointment Elk Herd- GMU's 70,71,711,72,73**

- Population estimate below plan objective
- Calf:cow ratios below 30 since 2014
- From a high in 2010, a 43% reduction in muzzleloader/rifle antlerless licenses
- Increasing archery participation, approximately 20% since 2008
- Archery cow harvest accounted for 20% of the total harvest in 2018

**E30- Hermosa Elk Herd- GMU's 74, 741**

- Population estimate consistently below plan objective
- Calf:cow ratios at or below 30- six times since 2008
- From a high in 2010, a 77% reduction in muzzleloader/rifle antlerless licenses

- Increasing archery participation, approximately 28% since 2008
- Archery cow harvest accounted for 29% of the total harvest in 2018

#### E31- San Juan Elk Herd- GMU's 75, 751, 77, 78, 771

- Population estimate within current plan objective, although public wants more elk
- Calf:cow ratios at or below 30- three times since 2008
- From a high in 2008, a 68% reduction in muzzleloader/rifle antlerless licenses
- Increasing archery participation, approximately 36% since 2008
- Archery cow harvest accounted for 26% of the total harvest in 2018

Wildlife managers have made major reductions in antlerless license numbers since 2010, yet populations are not rebounding. In the NW Region, similar circumstances led to conversion of either-sex archery elk licenses to bull-only archery licenses in DAU E16 beginning with the 2019 season. Archery opportunity for antlerless elk was eliminated, also beginning with the 2019 season. Because archery harvest has become an increasing and meaningful percentage of overall antlerless harvest, Area 15 managers submitted an issue paper in 2017 that proposed limiting archery participation. That issue paper did not move beyond Regulation Review as it was determined that it should be considered during the regular Big Game Season Structure process.

Another aspect to consider in this discussion are concerns about crowding during the archery seasons. Although the perception of crowding is highly subjective and difficult to measure, wildlife managers feel that the amount of concern about archery crowding is increasing. Due to the short timeline for completion of this issue paper, staff was unable to obtain information from the hunter surveys that are performed each year. However, the recent BGSS meeting held last winter in Durango does provide some insight into public perceptions about hunting in the area. The Durango meeting was one of the better attended meetings held during the process. While the data is not an exhaustive sample of all hunters that use the area, it does show the perceptions of hunters who engaged in the BGSS process and took the time to make their views known:

It appears that there are biological as well as social/crowding reasons to limit archery participation in some fashion in these units. Area 15 and terrestrial staff considered various management strategies that would help to address both issues. Various alternatives were compared for their ability to control cow harvest, obtain more accurate harvest data, and control overall hunter numbers. Also considered were impacts to hunters, such as predictability of obtaining a license, amount of confusion created by each system and ability to plan a hunt.

Alternative 1: Limited Bull/Limited Cow The following are key points:

- Total limitation gives managers the best ability to control cow harvest.
- Total limitation gives managers the best ability to control archery hunter numbers.
- Sex specific licenses give devoted archery cow hunters that opportunity without competing against bull hunters for limited tags.
- From an overall equity standpoint, sex-specific licenses are consistent with muzzleloader and rifle licenses and would allow managers to distribute cow license changes among all methods of take.
- Offering licenses through the draw, compared to OTC with caps, gives hunters greater predictability for getting a license and more fairly awards licenses if demand is higher than availability. It also makes planning easier since hunters will know if they are successful in June instead of having to wait for the OTC w/cap licenses to go on sale later in the summer.
- Could require preference points to draw.
- Going from OTC either-sex (E/S) to limited, sex-specific licenses is a major change for archers. They would likely have to apply for a license, be restricted to hunting in a limited geographic area, and only be able to hunt a bull or cow.
- Depending on the quota set for each hunt code(s), there could be a potential loss of revenue due to reduced license sales.

- Without statewide archery limitation, limitation in certain units could push crowding into other units of the state.

Alternative 2- Limited either-sex (E/S) archery licenses. Key points for consideration include:

- Total limitation gives control of cow harvest, but is not as predictable as sex-specific since hunters could take either sex.
- Based on the variability of cow harvest on the either-sex tag, the amount of license reduction needed to reduce cow harvest will likely be higher than with the sex-specific system.
- Total limitation gives managers the best ability to control archery hunter numbers.
- Devoted cow hunters will be competing against bull hunters for E/S licenses.
- Could require preference points to draw.
- For archery hunters, going to a limited, E/S license would be less of a change than limited, sex-specific licenses. Archers would be restricted geographically, but would still maintain the opportunity to harvest bulls or cows.
- Depending on the quota set for each hunt code(s), there could be a potential loss of revenue due to reduced license sales.
- Without statewide archery limitation, limitation in certain units could push crowding into other units of the state.

Alternative 3- Limited cow/OTC bull- This assumes that an OTC bull license would be administered with a unique hunt code by DAU (ex: EM-070-U1-A, EM-074-U1-A, and EM-075-U1-A). This alternative seems to have increased confusion based on the implementation in GMU's 44, 45, 47, and 441 in the 2019 season. Key points for consideration include:

- Limited antlerless licenses give managers the ability to control cow harvest.
- Specified antlerless licenses give devoted archery cow hunters that opportunity without competing against bull hunters for tags.
- Archery hunters in these units would be restricted to a specific DAU. This is similar to the limited elk license alternatives.
- Archery hunters would be restricted to a specific sex.
- Because OTC bull licenses are unlimited in number, they are not likely to address public perceptions about hunter crowding.
- OTC bull licenses maintain the ability for archery bull hunters to purchase a license at the last minute rather than applying for a draw license.

As staff has discussed the alternatives, they would further recommend that licenses in E-24 be split between GMU 70 only and another hunt code for GMUs 71, 711, 72, and 73. This would allow a greater ability to distribute hunters throughout the landscape and address the different elk issues that are occurring.

It is also recommended that E-31 be divided into two hunt codes: GMU 75, 751 and GMUs 77, 78, 771 to help distribute hunting pressure across this large area from Durango to Wolf Creek Pass. Both of these recommendations would be consistent with how antlerless licenses are distributed for rifle and muzzleloader seasons in these two herds.

**STATE LAW REQUIRES CPW TO SOLICIT INPUT FROM STAKEHOLDERS THAT MAY BE AFFECTED POSITIVELY OR NEGATIVELY BY THE PROPOSED RULES. THE FOLLOWING STAKEHOLDERS HAVE BEEN ADVISED OF AND INVITED TO PROVIDE INPUT ON THE REGULATORY CHANGES PROPOSED IN THIS ISSUE PAPER:**

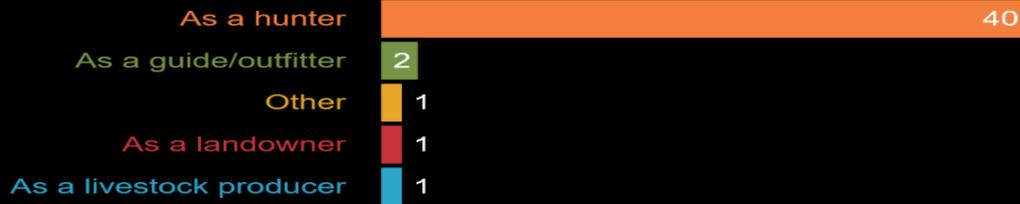
**\*IT IS ASSUMED THAT ALL NECESSARY INTERNAL PARTIES HAVE BEEN NOTIFIED\*.**

Internal: DWMs, AWMs, Area Biologists, CSRs, licensing unit

External: Archery elk hunters, rifle elk hunters, muzzleloader elk hunters, non-consumptive wildlife users, bowhunters, BGSS public meetings on February 6, 2019. Those comments are summarized below.

Individual bowhunters in the field have been asked about the issue. The overwhelming majority have been in favor of some type of limitation.

**Which of the following best describes how you interact with elk or deer in Colorado (Please select one.)**

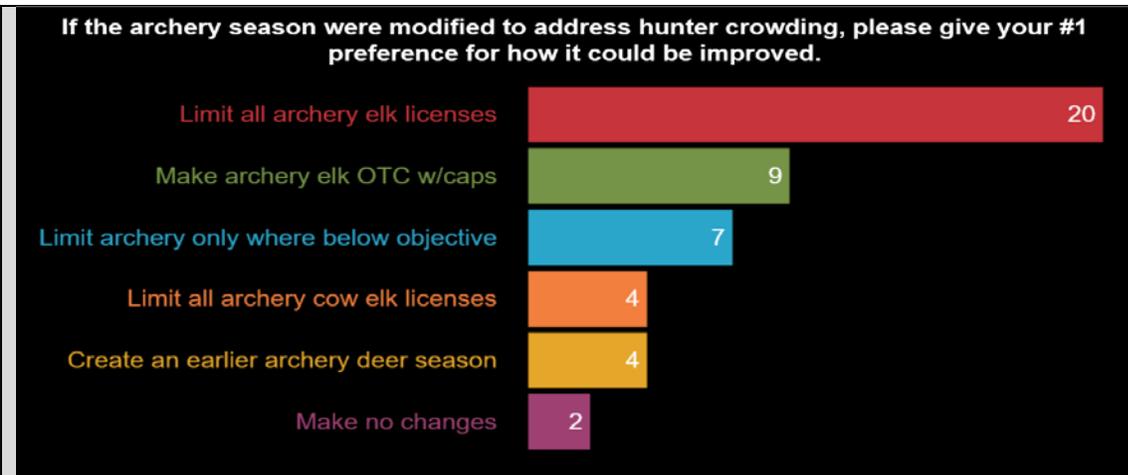


**Which method of take is your preference to hunt big game in Colorado?**



**How concerned are you with hunter crowding during the deer and elk archery season?**





Of the 46 participants to the survey:

- 71% identified archery as their preferred method of take
- 66% were Very Concerned or Moderately concerned with crowding during archery season
- Only 9% were not at all concerned with archery season crowding
- 43% favored limiting all archery licenses to address hunter crowding

**ALTERNATIVES: (POSSIBLE OUTCOMES or POSSIBLE REGULATIONS):**

- Limited, sex-specific licenses issued for:
  - E-24- Disappointment
    - EM-070-O1A, EF-070-O1A (Unit 70 only)
    - EM-071-O1-A, EF-071-O1A (Unit 71, 711, 72, 73)
  - E-30- Hermosa
    - EM-074-O1A, EF-074-O1A (Unit 74, 741)
  - E-31- San Juan
    - EM-075-O1A, EF-075-O1A (Unit 75, 751)
    - EM-077-O1A, EF-077-O1A (Unit 77, 78, 771)
  - E-16- Frying Pan River
    - EM-044-O1A (Unit 44, 45, 47, 471)

(For consistency of application, archery licenses in DAU E-16- Frying Pan River would be changed from DAU-specific, sex-specific Over the Counter licenses to limited licenses to mirror the proposed approach in DAUs E-24, E-30, and E-31. An EF-044-O1A limited, antlerless-only hunt would be established in the future when elk numbers in E-16 recover to a point permitting increased antlerless harvest.)
- Limited, either-sex archery licenses issued for:
  - E-24- Disappointment
    - EE-070-O1A (Unit 70 only)
    - EE-071-O1A (Unit 71, 711, 72, 73)
  - E-30- Hermosa
    - EE-074-O1A (Unit 74, 741)
  - E-31- San Juan
    - EE-075-O1A (Unit 75, 751)
    - EE-077-O1A (Unit 77, 78, 771)
- Limited cow/OTC bull:
  - E-24- Disappointment
    - EM-070-U1A, EF-070-O1A (Unit 70 only)
    - EM-071-U1A, EF-071-O1A (Units 71, 711, 72, 73)
  - E-30- Hermosa
    - EM-074-U1A, EF-074-O1A (Units 74, 741)

|  |   |
|--|---|
| E-31- San Juan<br>EM-075-U1A, EF-075-O1A (Units 75, 751)<br>EM-077-U1A, EF-077-O1A (Units 77, 78, 771)<br>4-Status Quo |   |
| <b>Issue Raised by:</b>  | <b>Area 15 and Area Biologist</b>   |
| <b>Author of the issue paper<br/>(if different than person raising the issue):</b>                                     | <b>Matt Thorpe and Brad Weinmeister</b>   |
| <b>CC:</b>   | Scott Wait, Matt Thorpe, Renzo Del Piccolo, Area 15 DWMs, Area 18 West End DWMs, Brad Banulis |
| <b>APPROVED FOR FURTHER CONSIDERATION BY:</b>  | <b>Cory Chick</b>   |
| <b>REQUIRES NEW SPACE IN THE BROCHURE?</b>   | <input checked="" type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>             |
| <b>ARE ADEQUATE STAFF AND FUNDING RESOURCES AVAILABLE TO IMPLEMENT?</b>  | <input checked="" type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>             |
| <b>REGION, BRANCH, OR SECTION LEADING IMPLEMENTATION</b>   | <b>Field Ops/Terrestrial</b>  |
| <b>RECOMMENDED FOR CONSENT AGENDA?</b>   | <input type="checkbox"/> <b>YES</b> <input checked="" type="checkbox"/> <b>NO</b>             |

| E24- Disappointment Elk Herd- GMU's 70,71,711,72,73 |                               |                |   |                                |                          |                         |
|---|-------------------------------|----------------|---|--------------------------------|--------------------------|-------------------------|
| Population Objective:                               |                               | 17,000-19,000  |   | DAU Plan Approved:             |                          | 2007                    |
| Year  | Post-Hunt Population Estimate | Calf:Cow Ratio | # of Muzzleloader/Rifle Antlerless Licenses | Muzzleloader/Rifle Cow Harvest | # of E/S Archery Hunters | E/S Archery Cow Harvest |
| 2008  | 20117                         | 31.2           | 2790  | 1057                           | 2076                     | 94                      |
| 2009  | 21093                         | 41.8           | 2965  | 1296                           | 1853                     | 101                     |
| 2010  | 19519                         | 30.3           | 3315  | 1199                           | 2267                     | 133                     |
| 2011  | 19635                         | 38.2           | 3155  | 1437                           | 2215                     | 122                     |
| 2012  | 18709                         | 32.9           | 3105  | 1191                           | 2002                     | 98                      |
| 2013  | 19001                         | 33.3           | 2695  | 1122                           | 2107                     | 126                     |
| 2014  | 19133                         | 29.5           | 2670  | 894                            | 2292                     | 97                      |
| 2015  | 18640                         | 28.2           | 2630  | 1359                           | 2491                     | 109                     |
| 2016  | 18532                         | 27.7           | 2585  | 854                            | 2607                     | 88                      |
| 2017  | 17953                         | 24.7           | 2250  | 732                            | 2609                     | 118                     |
| 2018  | 16889                         | 26.5           | 1885  | 622                            | 2562                     | 161                     |

| E30- Hermosa Elk Herd- GMU's 74, 741 |                               |                |   |                                |                          |                         |
|--------------------------------------|-------------------------------|----------------|---|--------------------------------|--------------------------|-------------------------|
| Population Objective:                |                               | 5000-6000      |   | DAU Plan Approved:             |                          | 2010                    |
| Year                                 | Post-Hunt Population Estimate | Calf:Cow Ratio | # of Muzzleloader/Rifle Antlerless Licenses | Muzzleloader/Rifle Cow Harvest | # of E/S Archery Hunters | E/S Archery Cow Harvest |
| 2008                                 | 4933                          | 30.9           | 1375  | 331                            | 699                      | 7                       |
| 2009                                 | 4858                          | 38.2           | 1500  | 349                            | 518                      | 34                      |
| 2010                                 | 4397                          | 27.8           | 1560  | 310                            | 677                      | 16                      |
| 2011                                 | 4287                          | 25.7           | 1235  | 184                            | 730                      | 16                      |
| 2012                                 | 4266                          | 36.9           | 960   | 240                            | 650                      | 12                      |
| 2013                                 | 4193                          | 25             | 960   | 196                            | 726                      | 28                      |
| 2014                                 | 4474                          | 38.2           | 875   | 173                            | 830                      | 12                      |
| 2015                                 | 4645                          | 34.6           | 850   | 148                            | 888                      | 27                      |
| 2016                                 | 4589                          | 28.2           | 650   | 191                            | 928                      | 47                      |
| 2017                                 | 4812                          | 30             | 340   | 61                             | 953                      | 28                      |
| 2018                                 | 4809                          | 30             | 355   | 97                             | 966                      | 39                      |

| E31- San Juan Elk Herd- GMU's 75, 751, 77, 78, 771 |                               |                |   |                                |                          |                         |
|--|-------------------------------|----------------|---|--------------------------------|--------------------------|-------------------------|
| Population Objective:                              |                               | 17,000-21,000  |   | DAU Plan Approved:             |                          | 2007                    |
| Year   | Post-Hunt Population Estimate | Calf:Cow Ratio | # of Muzzleloader/Rifle Antlerless Licenses | Muzzleloader/Rifle Cow Harvest | # of E/S Archery Hunters | E/S Archery Cow Harvest |
| 2008   | 17428                         | 30.9           | 2594  | 746                            | 1858                     | 47                      |
| 2009   | 17550                         | 41.6           | 2202  | 923                            | 1590                     | 40                      |
| 2010   | 17223                         | 33             | 2425  | 754                            | 2191                     | 67                      |
| 2011   | 17724                         | 37.2           | 1060  | 487                            | 1762                     | 48                      |
| 2012   | 18203                         | 35.9           | 1160  | 412                            | 2119                     | 40                      |
| 2013   | 18089                         | 32.1           | 1155  | 446                            | 1895                     | 50                      |
| 2014   | 18138                         | 29.2           | 1105  | 406                            | 2048                     | 68                      |
| 2015   | 18595                         | 33.6           | 1105  | 459                            | 2600                     | 72                      |
| 2016   | 18980                         | 31             | 945   | 428                            | 2529                     | 70                      |
| 2017   | 19261                         | 27.9           | 670   | 239                            | 2754                     | 67                      |
| 2018   | 18687                         | 30.6           | 825   | 288                            | 2896                     | 102                     |