

Too many elk spoiling Rabbit Mountain



A herd of local elk has increased in numbers to the point where drastic action will have to be taken to ensure the ecological health of one of Boulder County's most popular open spaces. A management plan presented to the public April 6 proposes opening up the Rabbit Mountain Open Space to limited hunting in an effort to force the herd off the property and back into a seasonal migration pattern.

According to the plan, the purpose of the hunting "is to make Rabbit Mountain no longer a safe haven for elk." The actual number of elk harvested may be relatively low, but the hunting pressure will cause them to disperse.

The plan has yet to be approved by Boulder County Commissioners and is now going through a public input process. More than 100 members of the public attended the April 6 meeting, and residents have until April 26 to submit comments online at:

www.bouldercounty.org/dept/openspace/ , "Rabbit Mountain Elk Management Plan."

No Boulder County open space currently allows public hunting.

The Rabbit Mountain elk herd has exploded from around 30 animals in the mid-2000's to more than 350 elk in 2016, and without intervention could expand to 600+ in a few short years, according to the plan authored by Boulder County Parks & Open Space.

The exponential growth of the herd is due to a few factors.

“With the mild climate and the abundant food and resources, there’s a high survivorship of cows and calves,” said Dave Hoerath, certified wildlife biologist for BCPOS. Hoerath said the herd added 100 calves last spring and expects another 125 or so calves this spring.

Janet George, senior wildlife biologist for Colorado Parks & Wildlife, said that the usual number of elk calves per 100 cows is around 30-40. The Rabbit Mountain calves-to-cow ratio is 50-60 per 100 cows.

A key to the high survival rate is that Rabbit Mountain Open Space is surrounded by rich croplands of grass, alfalfa, corn and hay stacks that the elk feed on and irrigation ditches that provide water.

In the past, hunting on surrounding private land helped control the smaller elk population but, according to the management plan, “the elk have learned to avoid hunters by using areas where hunting is not allowed.” Currently, hunters on private land around the open space take about 25 animals per year, but it’s not enough to keep the herd numbers in check.

Stay-at-home elk

The Rabbit Mountain elk are a subherd of the larger St. Vrain herd, which numbers some 2500 animals ranging from roughly Lyons to Estes Park. Unlike the rest of the herd, the Rabbit Mountain animals are non-migratory. Normally, elk have winter grounds at lower elevations and return to higher elevation during the summer.

A telemetry study of four Rabbit Mountain elk cows in 2015-2016 showed that the animals confined their year-round activity to a 6-mile range running east to west with Rabbit Mountain in the middle. The elk never crossed Rte. 66 (Ute Highway).

In contrast, the elk herd typically seen on Rte. 36 between Lyons and Boulder spends their winters along that stretch of highway then summer in the Indian Peaks Wilderness.

The hope is that hunting pressure will force the animals back into a normal migratory behavior. The expectation is not that the herd will move en masse but rather they will disperse with some elk linking up to other migratory herds in the area (like the Rte. 36 group), said George.

The ultimate objective is to have 30-70 elk in the Rabbit Mountain area.

Elk affecting habitat quality

Native plants on Rabbit Mountain are being extensively damaged by the herd. Approximately 500 acres in the southern part of the open space are heavily used by the elk, and while they are not necessarily foraging extensively in that area, it is their refuge after their nightly feedings in the neighboring crop fields.

The presence of such a large number of big animals browsing, bedding and traveling has in some cases taken the cover down to bare soil, which then becomes ripe for introduction of noxious weeds like cheatgrass.

Vegetation studies in the core area frequented by the elk show that the most obvious species impacted by the elk are mountain mahogany and Ponderosa pines, said Hoerath.

“Clearly, the vegetation is changing,” he said.

The projected growth of the herd will only increase habitat damage that will take years to recover.

A 2008 survey by the Colorado Natural Heritage Program said Rabbit Mountain has “outstanding biodiversity significance” including “excellent to good” foothills natural communities, mountain mahogany shrublands and grassland communities.” The area is also designated as a critical wildlife habitat.

And it’s not just native plant damage that is a concern. CPW has paid crop damages of \$56,000 over the last four years to farmers and ranchers on whose land the elk feed. The management plan states that this dollar figure will only rise as more landowners’ fields suffer crop damage from the increasing herd.

Move ‘em out ...

So what to do about these problem elk?

The management plan study concluded that a public harvest program would be the most effective means of managing the Rabbit Mountain herd. The program, which the plan says “prioritizes public safety,” will use “trained, skilled and licensed volunteers to harvest female elk.”

The hunting is primarily intended to force the elk off the open space. There’s no expectation that hunting alone will reduce the herd significantly.

Lest any hunter think that being chosen for the hunt guarantees success, CPW biologist George reminded that these elk are still a wild herd and will require skill to harvest.

“These are not Estes Park elk,” said George, referring to the elk often seen in downtown Estes Park.

The volunteer-hunters will be chosen via a lottery system administered by BCPOS or CPW from among CPW-licensed hunters who will have to attend an orientation session.

The season is expected to run from August 15 to January 31 and only two hunters per one-week slot will be allowed. The exact scheduling and logistics have not been finalized, and will depend on feedback received through the public input process, said Vivienne Jannatpour, Communications Specialist, BCPOS.

“Rabbit Mountain Open Space will be closed completely during active hunting,” said Jannatpour.

Larry Rogstad, CPW biologist, said an adaptive management approach will be used for the harvest.

“It’ll be a fluid situation where the impact of hunting will be measured during the harvest and changes will be made if necessary as the public harvest moves forward,” he said.

A Proven Plan

The proposed public harvest plan has successful precedents. Two other Colorado public areas allow limited hunting to both prevent overgrazing and maintain the health of the elk herds.

At Jefferson County’s Centennial Cone open space, a regulated hunt from December to January allows up to 55 elk to be taken to ensure the health of the herd. Last year, hunters took only six animals but the effort dispersed the concentrated herd.

The Green Ranch portion of Golden Gate Canyon State Park also allows limited elk hunting with a September to November season.

Other Options Considered, Rejected

The authors of the Rabbit Mountain plan considered other ways to control the herd – all of which have limiting factors that caused their rejection.

There’s currently no **fertility control** drug for use in elk. The most promising fertility drug for free-ranging ungulates is effective for only one year, the cost of capturing a single elk averages \$600 to \$1,000 and the logistics of safely capturing a free-ranging elk are difficult.

Trapping and transplanting was rejected due to the evidence of Chronic Wasting Disease within the Rabbit Mountain subherd. The spread of CWD to other areas was reason enough to reject this concept, but it would also be difficult to find a suitable location for transplanted elk, accustomed to feeding on agricultural crops.

Culling by professional hunters is a rarely used last option. State statute 33-1-101(4) C.R.S. states that hunting will be the primary method of effecting necessary wildlife harvests.

While **fencing** can be an effective tool in the recovery of over-grazed areas, the high cost of fencing to prevent grazing is prohibitive, and fencing would only cause the elk to move and continue overgrazing on other properties.

Hazing – disrupting the elk through periodic harassment – was rejected as studies show it only causes the elk to move temporarily. Experimental hazing by Open Space personnel in the winter of 2015-2016 showed that the animals could be moved but they returned to Rabbit Mountain in one to three days.

Public harvest is best solution

Other techniques will be used at Rabbit Mountain to complement the public harvest. Some fencing may be used to help vegetation recover, ten elk will be radio-collared to measure the plan’s success, efforts will be made to increase private land hunting and crop alternatives will be discussed with local farmers.

Officials at BCPOS and CPW believe that these actions in combination with the proposed public harvest will preserve and restore Rabbit Mountain's ecological health and cut down on damage to local crops done by a herd of elk that has diverged from their natural migratory pattern and overwhelmed their habitat.

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