

# Impacts of Off-Road Recreation On Public Lands Habitat

Due to the breadth and depth of our state's vast public lands estate, Colorado boasts more [elk](#) than any other state. At the same time, our human population is booming and expanding its impact on wild habitat. The Colorado [chapter](#) of Backcountry Hunters & Anglers (BHA) has been hearing from an increasing number of hunters, anglers, public land managers and others about the detrimental impacts of increasing off-road recreation on public lands habitat.

Wildlife habitat in Colorado is being significantly impacted by the proliferation of mechanized (i.e., mountain bike) and motorized (ATV/OHV) trails on public lands. Sportsmen and wildlife managers are finding that elk hunting opportunities, in particular, are being compromised by trail development in many parts of the state.

In the Roaring Fork Valley (which stretches from Glenwood Springs to Aspen), for example, user-created trails have displaced elk to a point where a Colorado BHA member, Bob Shettel, no longer finds elk in traditional hunting areas north of Basalt.<sup>1</sup> Colorado Parks and Wildlife (CPW) is also growing increasingly concerned about decreasing elk numbers in the vicinity of areas with expanding off-road recreation trail systems.

Former CPW District Wildlife Manager, Jim Haskins, wrote: "New mountain bike [trail] construction will likely result in permanent habitat fragmentation. Habitat fragmentation impedes the movement of wildlife across landscapes. Looped trails may create islands of habitat that may be avoided entirely by wildlife."<sup>2</sup> During the 2017 Colorado BHA Rendezvous at Sylvan Lake State Park (June 2-4), CPW District Wildlife Manager, Craig Wescoatt, stopped by. He's concerned that elk are being displaced by mountain bike trails in the Eagle area.<sup>3</sup>

At a February 27, 2018, Vail Planning and Environmental Commission meeting, CPW officer Bill Andree told board members about the decline in area wildlife populations, including a roughly two-thirds decrease in the elk herd between Vail Pass and Wolcott south of Interstate 70 in the past 15 years. The *Vail Daily* Editorial Board added these insights:<sup>4</sup>

"Ultimately, preserving and rebuilding wildlife herds is up to us. 'We all feel we don't have an impact, that it's the other guy,' [CPW officer Bill] Andree told commission members. He's right, you know. We're all the problem. From people who ... [walk dogs] on trails ... to people who violate trail closures—'oh, the elk will never notice me'—individuals can and do impact

---

<sup>1</sup> Bob Shettel. "Wildlife and the Crystal Trail." Glenwood Springs (Colo.) *Post-Independent*: 11/8/17. <https://www.postindependent.com/opinion/letter-wildlife-and-the-crystal-trail/>

<sup>2</sup> Jim Haskins (CPW District Wildlife Manager), in a 2015 letter addressing a mountain bike trail proposal for Buffalo Pass (northeast of Steamboat Springs): <http://www.steamboattoday.com/news/jim-haskins-bids-farewell-after-rewarding-career/>

<sup>3</sup> Craig Wescoatt, CPW District Wildlife Manager (Glenwood Springs), attended Colorado BHA's general membership meeting during our 9<sup>th</sup> Annual Rendezvous at Sylvan Lake State Park south of Eagle (on 6/4/17).

<sup>4</sup> Editorial Board (Publisher Mark Wurzer, Editor Krista Driscoll and Business Editor Scott Miller). "Do we truly value wildlife? Then it's time to acknowledge that it's up to everyone to help." *Vail Daily*: 2/27/18. <https://www.vaildaily.com/opinion/do-we-truly-value-wildlife-then-its-time-to-acknowledge-that-its-up-to-everyone-to-help-editorial/#.Wpbk8e914sg.facebook>

wildlife. When a few hundred—or even several dozen—individuals take the same attitude, the results can be devastating to local wildlife.<sup>5</sup>

“Whether or not you see an elk or deer, that animal has probably seen you, and at a fairly great distance. An elk can spot a hiker as far away as 550 yards. An animal can spot a person on an all-terrain vehicle nearly a mile away. An animal easing away from a human isn’t doing the work needed to stay alive or raise a viable calf.<sup>6</sup>

“That contributes to the decline of our herds. Better education—from locking gates to crystal-clear closure signs to, perhaps, having volunteers at trailheads explaining closures—can all help. Ultimately, though, responsibility falls on us.”<sup>7</sup>

In southwest Colorado, around Durango, illegal trails are vexing land managers and wildlife officials, who have struggled with reining in the longstanding, escalating problem. “We’re not talking small connector trails,” said Shannon Borders, spokeswoman for the Bureau of Land Management. “We’re talking miles of illegally built trails.”<sup>8</sup>

Tyler Fouss, a BLM law enforcement ranger, said the trails appear to be mostly constructed and used by mountain bikers. The BLM and other agencies treat the illegally built trails as a criminal case of trespass, but it’s tough to find perpetrators. Since 2015, no one has been caught in connection with building illegal routes.<sup>9</sup>

Trails are also being built and used in closed areas. Every year, the BLM cordons off areas that are critical winter habitat for wildlife (from Dec. 1 to April 15), and every year, people disregard the closures. “It’s a shame people can’t share the landscape with wildlife,” said Colorado Parks and Wildlife (CPW) spokesman Joe Lewandowski.<sup>10</sup>

“The purpose of this seasonal closure is to reduce the recreational impacts ... on wintering big game animals during the time of year when deer, elk, pronghorn and moose are most vulnerable to stress,” a CPW official explained. “The result of this stress can be decreased body condition, increased mortality, and decreased fawn/calf survival. Winter can be extremely difficult in wildlife as body weight is down and access to food is very limited. The survival of wildlife relies heavily on keeping as many calories as possible until the green shoots pop up, heralding spring’s return.”<sup>11</sup>

---

<sup>5</sup> Editorial Board (Publisher Mark Wurzer, Editor Krista Driscoll and Business Editor Scott Miller). “Do we truly value wildlife? Then it’s time to acknowledge that it’s up to everyone to help.” *Vail Daily*: 2/27/18. <https://www.vaildaily.com/opinion/do-we-truly-value-wildlife-then-its-time-to-acknowledge-that-its-up-to-everyone-to-help-editorial/#.Wpbk8e914sg.facebook>

<sup>6</sup> Editorial Board (Publisher Mark Wurzer, Editor Krista Driscoll and Business Editor Scott Miller). “Do we truly value wildlife? Then it’s time to acknowledge that it’s up to everyone to help.” *Vail Daily*: 2/27/18. <https://www.vaildaily.com/opinion/do-we-truly-value-wildlife-then-its-time-to-acknowledge-that-its-up-to-everyone-to-help-editorial/#.Wpbk8e914sg.facebook>

<sup>7</sup> Editorial Board (Publisher Mark Wurzer, Editor Krista Driscoll and Business Editor Scott Miller). “Do we truly value wildlife? Then it’s time to acknowledge that it’s up to everyone to help.” *Vail Daily*: 2/27/18. <https://www.vaildaily.com/opinion/do-we-truly-value-wildlife-then-its-time-to-acknowledge-that-its-up-to-everyone-to-help-editorial/#.Wpbk8e914sg.facebook>

<sup>8</sup> Jonathan Romeo. “Illegal trail building a vexing problem for public land managers: Mountain bike paths build in recent years.” *The Durango Herald*: 3/20/18. <https://durangoherald.com/articles/214352-illegal-trail-building-a-vexing-problem-for-public-land-managers>

<sup>9</sup> Jonathan Romeo. “Illegal trail building a vexing problem for public land managers: Mountain bike paths build in recent years.” *The Durango Herald*: 3/20/18. <https://durangoherald.com/articles/214352-illegal-trail-building-a-vexing-problem-for-public-land-managers>

<sup>10</sup> Jonathan Romeo. “Illegal trail building a vexing problem for public land managers: Mountain bike paths build in recent years.” *The Durango Herald*: 3/20/18. <https://durangoherald.com/articles/214352-illegal-trail-building-a-vexing-problem-for-public-land-managers>

<sup>11</sup> <http://cpw.state.co.us/antlershed>

The problem extends beyond BLM- and CPW-managed lands. The U.S. Forest Service discovered an illegal mountain bike trail near Hermosa Creek Campground, in a special management area protected by law. Forest Service staff and volunteers went out to eliminate the route by spreading shrubs, rocks and trees along the path. Cam Hooley, spokeswoman for the Forest Service, said illegal trails have become more of an issue in the last five to 10 years.<sup>12</sup>

Partly as a result, we are losing critical wildlife habitat in Colorado at an alarming rate. A [study](#) conducted by Conservation Science Partners found that from 2001 to 2011 the West lost a football field worth of natural areas to human development every 2½ minutes.<sup>13</sup> Colorado alone lost 525 square miles of natural areas (or 254,259 football fields) during that time, and threats to our public lands continue to proliferate.<sup>14</sup>

As a result, sportsmen and women are increasingly concerned that off-road trail systems on public lands—especially in places that provide critical wintering habitat for elk and mule deer—are negatively impacting wildlife populations. The scientific studies and related information below provide additional detail supporting and confirming our concerns.

### Scientific Studies

Although there are some groups who claim that their off-road recreation activities on public lands don't impact elk and other wildlife species, scientific (peer-reviewed) studies prove otherwise.<sup>15</sup> The Starkey Project measured the population response of deer and elk to managed forests and rangelands. The project is a synthesis of long-term studies on the impact of off-road recreation on elk and mule deer.<sup>16</sup> A summary of the data is included here: "[Effects of Off-Road Recreation on Elk and Mule Deer](#)."

Elk calving grounds are carefully selected by cows and are generally in locations where cover forage and water are in close proximity. Sites must provide security from harassment and be within or adjacent to high quality summer range. Hiking and other recreational activities in or near elk calving areas can have a significant impact on reproductive success. Gregory Phillips and William Alldredge (2000) studied reproductive success of elk following disturbance by humans during calving seasons in central Colorado.<sup>17</sup> A summary of the data is included here: "[Reproductive Success of Elk Following Disturbance by Humans During Calving Season](#)."

### Mitigation Issues

A USDA-Forest Service Final Environmental Impact Statement (EIS), for the Gunnison Basin Federal Lands Travel Management plan, stated: "Basically all activities related to roads and trails

---

<sup>12</sup> Jonathan Romeo. "Illegal trail building a vexing problem for public land managers: Mountain bike paths build in recent years." *The Durango Herald*: 3/20/18. <https://durangoherald.com/articles/214352-illegal-trail-building-a-vexing-problem-for-public-land-managers>

<sup>13</sup> <https://disappearingwest.org/>

<sup>14</sup> John Gilroy. "Bill Would Protect Colorado Wilderness, WW II History, and Recreation Economy." *Pew Charitable Trusts*: 1/26/18. <http://www.pewtrusts.org/en/research-and-analysis/blogs/compass-points/2018/01/26/bill-would-protect-colorado-wilderness-wwii-history-and-recreation-economy>

<sup>15</sup> Michael J. Wisdom, et al. "[Elk responses to trail-based recreation](#) on public forests." *Forest Ecology and Management*: March 2018, p. 223-233.

<sup>16</sup> Wisdom, M. J., A. A. Ager, H. K. Preisler, N. J. Cimon, and B. K. Johnson. 2005. Effects of Off-Road Recreation on Mule Deer and Elk. Pages 67-80 in Wisdom, M. J., technical editor, *The Starkey Project: a synthesis of long-term studies of elk and mule deer*. Reprinted from the 2004 Transactions of the North American Wildlife and Natural Resources Conference, Alliance Communications Group, Lawrence, Kansas, USA.

<sup>17</sup> U.S. Dept. of Agriculture-U.S. Forest Service. "Application for Transportation and Utility Systems and Facilities for the Village at Wolf Creek Final [Environmental Impact Statement](#) (EIS)." *Rio Grande National Forest-Divide District*: 3/27/16.

will have an effect on wildlife species. The widespread, detrimental impacts of human disturbance on wildlife are well documented in the literature. No positive benefits to wildlife have been identified from increases in travel management access.”<sup>18</sup> A discussion of issues related to off-road recreation mitigation measures/effectiveness (or lack thereof) is included here: [“Off-Road Recreation Trail Development Observations/Mitigation Issues.”](#)

Mountain biking is an increasingly popular form of quiet and healthy recreation that has a place on public lands. Many sportsmen and women use mountain bikes for exercise, enjoyment and hunting. When well-planned and managed, mountain bike use can occur in a way that minimizes conflicts with other public lands users and maintains high-quality fish and wildlife habitat.

Healthy public lands help sustain healthy fish and wildlife populations, and Colorado BHA is dedicated to working collaboratively with other public lands user groups to provide avenues for sustainable outdoor recreation, while also conserving the large tracts of intact habitat that make Colorado’s public lands a national hunting and fishing destination.

## **Resources**

[“Impacts of Off-Road Recreation on Public Lands Habitat: Resources.”](#)

---

<sup>18</sup> USDA Forest Service, Grand Mesa, Uncompahgre and Gunnison National Forest (GMUG). “Final Environmental Impact Statement: Gunnison Basin Federal Lands Travel Management.” *USDA FS-GMUG*: April 2010, p. 3-112.  
[http://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb5182985.pdf](http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5182985.pdf)