

Cows on the National Forest?

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If you've spent any time on the National Forest just outside of the Silverheels subdivision, you've no doubt seen cattle or evidence of their presence. What are domestic livestock doing on National Forest System lands? Why are they there? And why, pray tell, are they there in the winter time? Does the Forest Service know they are there? If the FS knows about it, why haven't they made them move? Who is crazy enough to put cows there anyway? If you're curious about the answers to any of those questions, keep reading.

History and Background of Cattle Grazing on the Pike National Forest

National Forest System lands are comprised of two general vegetation types: forestlands and rangelands. Forested lands grow trees, while rangelands are basically everything else, including grasslands, shrublands, forblands, and riparian/wetlands. Rangelands provide values such as habitat for wildlife, biodiversity, livestock forage, recreation, scenic beauty and clean water, to name a few. People often associate rangelands with livestock grazing – and this is an important use of many of these lands.

The Pike National Forest is 38% rangeland and 62% forestland. That means over half a million acres of Forest Service land made up of grass, flowers (forbs), shrubs, and wetlands. These rich resources did not go unnoticed by early livestock producers raising both cattle and sheep. To settle massive grazing disputes and protect depleted resources from additional overuse, the Forest Service began managing livestock grazing based on permits and allotments. The Pike National Forest was divided into 47 different grazing allotments, all of which still exist today. The FS in Fairplay manages 41 of these as active allotments with permittees who meet a series of qualifications and follow the terms, conditions and special instructions of their grazing permits. The grazing allotment that wraps around Mount Silverheels is aptly named the Silverheels allotment. The livestock operator that holds this permit is J.T. Benes of the Silverheels Ranch.

Silverheels Allotment

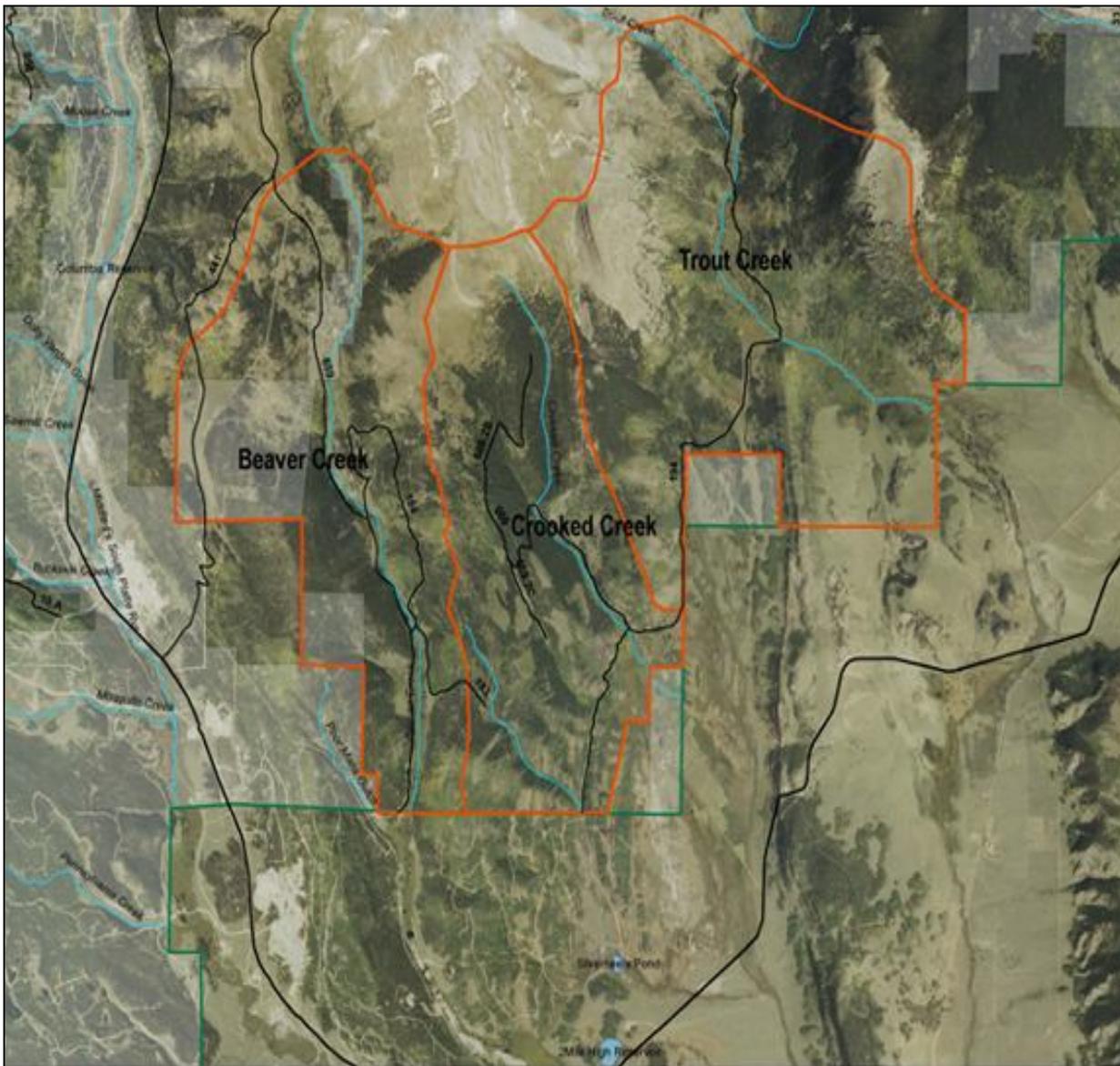
The Silverheels allotment has been managed in a variety of ways over time. At one point, it was grazed exclusively by domestic sheep. Later, it was grazed by sheep in the spring and fall and by cattle in the summer. That was followed by only cattle grazing in the summer. Range conditions declined with hard summer use and it was clear that grazing management needed to change. After many years of full rest (no domestic livestock grazing), the FS began to permit cattle grazing in the winter.



Typical winter grazing area of the Silverheels allotment.

Pasture Rotation

The Silverheels allotment contains approximately 12,500 acres. In order to better control livestock and manage their location and grazing, the allotment has been divided into 3 "pastures." Each pasture is approximately 4 thousand acres and is named for the main creek running through each valley area. Therefore, the pastures are (from west to east), Beaver Creek, Crooked Creek and Trout Creek. The grazing for each year is planned in advance and a schedule is made to account for elk and moose activity, past grazing time and duration, predicted weather forecast and livestock body condition. The schedule changes each year according to the many variables that have an effect on vegetation and animals.



SILVERHEELS ALLOTMENT MAP KEY:

Orange – pasture/allotment boundaries

Blue – major waterways/waterbodies

Black – roads (please note – any other roads on FS land are NOT legal routes for driving)

Grey – private property inholdings within Forest Boundary

Green – Forest Boundary

Why Management? And Why Grazing?

There is a pervasive public attitude that wildlands are best left alone and that natural resources do just fine without "management." While that may be true in a world without human influence, the fact of the matter is that people are here and we have altered our environment tremendously. We've put houses and roads where they once were not. We've developed and moved water far from its point of origin. We've installed infrastructure for communications, electricity, gas and sewer. We've built fences and developed multiple forms of recreation that didn't exist in the past. Because of human values, we don't allow wildfires to burn at will. As a result of our cumulative effects on the environment, we've affected the species of wildlife that live here, wildlife migration patterns, water movement, tree distribution and density, soil richness and forage communities. Management of natural resources is now necessary to reestablish some of the desirable conditions that once existed. One of the most powerful tools in restoring ecosystem function is grazing.



The Science of Grazing

Like most things, if livestock grazing is managed poorly, the results can be detrimental. However, when done well, grazing has a variety of ecosystem benefits. Grasses evolved with grazers. Grass is healthiest when it is being used. Take a lawn for example; if the lawn is allowed to grow without mowing, the grass gets tall and thin and spindly. If the lawn is mowed and fertilized on a regular basis, it stays lush and thick and green. The same process is at work in nature. When an individual grass plant is left alone, it grows up, not out. Over time, dead leaves accumulate and block the sun from reaching the active crown of the plant. This makes the plant thin and weak because it is not replenishing its root reserves. On the other hand, when an individual grass plant is grazed and the top is removed, the crown is exposed to sunlight and the plant responds by storing energy and growing outward. The regrowth on the plant is healthier than the blades that were removed. The new vegetation that is produced is higher in calories and nutrients than the plant matter that was there before. This invites further grazing.

Seasonal Grazing Matters

When grazing takes place in the summer, it must be managed intensively to avoid overuse of certain areas or certain types of plants. When grazing is done in the winter, grass plants are dormant and are not producing any new leaf material. Dead leaves left over from summer growth are just sitting on the plant. Removing that dead material is highly beneficial for the plant. There are also benefits for the livestock owner/rancher. If cattle are grazing, then the rancher is not having to feed hay which is a huge savings in cost and time. The other thing that happens with winter grazing is that you are limiting the choices that cattle have when it comes to selecting what they'd like to eat. If dead grass is all that is available, that's all that gets consumed. In the spring and early summer, when plants are turning green and starting to grow, cattle have many more choices. In that scenario, cattle will choose new plants that have very little dead material and avoid anything that is old and "wooly." So, older grass plants that are in poor condition continue to decline and newer, tender grasses get overused. Winter grazing changes that. The huge benefit that comes from the grazing and fertilizing that happens during the dormant months is that grass plants emerge and grow in the spring and summer under optimum conditions. Grass in excellent condition is then available for wildlife forage, soil health and water capture.



Ungrazed grass on the Silverheels allotment in early spring. Not much happening. "Wolfy," ungrazed fescue plants have accumulations of old, dead leaves preventing sunlight from penetrating plant crowns. The longer that these plants go ungrazed, the more undesirable (as food) and unhealthy they become.

Why Winter Graze?

There is no doubt that winter is a tough time of year for animals, both domestic and wild. Intentionally putting cattle out in the Forest during the worst months doesn't seem like a kind thing to do. However, if you know something about cattle behavior and how a cow's digestive system operates, you start to understand that the Silverheels allotment is a good place to winter. First of all, cattle can stand extreme cold as long as their belly is full. Unlike humans, cattle are able to process cellulose as an energy source. They take in large amounts of dry grass to meet their caloric needs. They are occasionally supplemented by the permittee with protein to maintain the microflora in the rumen. As compared to animals in the open flatlands, Silverheels cattle find all sorts of microclimates that provide protection from bad weather. Open meadows and south-facing slopes often blow clear of snow and provide excellent grazing. And, if things get too nasty, J.T. can bring his cattle home to the Silverheels Ranch. But the cattle generally stay in groups, create snow trails and grazing areas, find running water and enjoy the quiet of the Forest in winter with few visitors and no motorized use from January to June. Resident elk, deer and moose take full advantage of improved spring and summer forage brought on by winter cattle grazing. The improved vegetation conditions across this massive acreage encourage wildlife to spend most of their time on public lands where there are less human/wildlife conflicts.



Compare grazed grasses to those that were ungrazed. The photos were taken on the same day in the same area. Ungrazed grasses suffer from over-rest. Sunlight is able to penetrate the crown and begin the process of photosynthesis.



The plant expands out rather than just up. Over time, the interspace of soil between plants fills as grass extends across the landscape. This makes the environment richer and more resilient, while holding water, preventing erosion and cycling nutrients.



Many grazed plants.

The same area three months later...



It's hard, if not impossible to believe that this is the same area (and unfortunate that the photo wasn't take from exactly the same angle.) The darkest green plants that look full and healthy are those that got grazed and fertilized the most. Spindly plants in the center foreground were likely not grazed.

The "Down-side" of Grazing on National Forest

So hopefully, some of your questions about why grazing is allowed have been answered. The benefits to the ecosystem and the ability to support local agriculture are positive tradeoffs to the two inconveniences often cited by forest visitors. The first complaint the FS usually hears about cattle is the amount of manure left behind. The second is usually about gates or cattleguards. Controlling cattle placement requires fence. Wherever there's a fence, specific access points are needed. These are controlled by gates and/or cattleguards. These features are very necessary in keeping livestock where they belong. Some people place their personal convenience over the needs of others and choose not to close gates. Others intentionally cut wire fence. Both of these actions create additional work for the livestock permittee (J.T. Benes.)

Colorado Fence Law and Federal Lands

The Forest Service gets a lot of questions about fencing and shared boundaries between public and private land. Fence that lies on the boundary between the National Forest and private property owners belongs to the private property owner, even if the fence was originally constructed by the federal government. So, if you own a lot that backs up against the Forest, any boundary fence that is on that line belongs to you. That ownership comes with some responsibility, choices and decisions. The first responsibility is to make sure that no motorized access crosses your boundary line. If you have a fence, you can have a gate to access the forest by foot or horseback, but not by vehicle. Colorado is a fence out state (if you don't want livestock animals on your property, you must fence them out.) That is true to a point. State law is superseded by federal regulations. Not only must a private property owner fence livestock out if they don't want cattle on their property, they must also prevent entrance of any privately owned livestock (horses, cattle, goats, sheep, llamas, etc.) from entering federal (public) land. The federal grazing permittee is not required to maintain boundary fence. So, if you have a boundary fence between your property and the National Forest, you must maintain it if you have any of your own livestock. If you don't have any livestock, maintaining your fence keeps J.T. Benes' cattle off your property. He doesn't want his cows on your property any more than you want his cows on your property. Keeping the fence in good shape prevents this. There is no law that says you must maintain the fence (especially if you don't have livestock), but there is also no law that says the permittee must maintain the fence. With over 14 miles of boundary fence between private property and the National Forest of the Silverheels allotment, your help in keeping up the fence is certainly appreciated.

Before and After Photos:



This area was one of the places that got grazed fairly heavy during the winter of 2014-15. It is at the entrance to the Forest at Crooked Creek. Conditions here look pretty bleak, but are necessary to create the regrowth and vitality shown in the grasses by July (see below.)



Notice how dense and vigorous the grasses are in this photo. It was interesting to compare seed production on the grazed side of the fence vs. the ungrazed side. Seed production was at least twice that of the ungrazed side of the fence – owing to the renewing effects of grazing.

Summary

Livestock grazing on the Silverheels allotment is no accident. It takes lots of planning and work on the part of local ranchers and managers (J.T. Benes and the good folks at Silverheels Ranch) to make it happen, especially during the winter months. The good that is done in terms of cattle production, supporting local agriculture, benefitting vegetation, improving spring and summer forage quality for wildlife and making our rangeland ecosystems more resilient far outweighs any downside associated with this use. For more information on grazing, grasses, or the livestock permit system, please contact: Sheila Lamb, Natural Resources Manager, South Park Ranger District, Pike National Forest at 719-836-2031 or at slamb@fs.fed.us. For more information about Silverheels cattle, Silverheels Ranch or beef, please contact: J.T. Benes at 303-918-6610 or at <http://www.silverheelsranchbeef.com/>.