Dave Little Roach

1. Travel Nov 10 1986
   AM Brad

Start field headquarters

<table>
<thead>
<tr>
<th>System</th>
<th>Field</th>
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<tbody>
<tr>
<td>outside</td>
<td>11</td>
</tr>
<tr>
<td>D</td>
<td>15, 12, 11</td>
</tr>
<tr>
<td>C</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>6</td>
</tr>
<tr>
<td>A</td>
<td>3</td>
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To Infact for lunch, Chuck Cafe
PM Brad continued

Travel east and north to Red Basin
South of Little Bute System ⑥
South of Grande Bute System ⑦

Short side trip into pasture 16 in ⑦
On to Red Basin. Familiar 5th responses
in debuttars and restless band. Condition
of hittabush.

Returned south on highway then turned
west through Field 15. Basin South

⑦
Continued south westward and then along the south boundary of field 25
(7) Square Butte, Broken pipe line on route, to main road.
Travelled south between systems
(5) Long Hollow and (6) Little Butte
Judy, husband and crew preoccupied fishing
cattle eroute
Then to Emmett, Jim Little drove me to Boise.

Travel Nov 11 Jim Little

Am
North from Ranch right on road
to turn off southeast into
System 4, 5, 11, 2, 11, 10, 4, 3, 28, 26A, and back to Ranch
Jim Little drove me to the airport (7:00pm)
David Little
Post Office Box 68
Emmett, Idaho 83617

Dear Dave,

I appreciated the opportunity to see the Cascade Burn and some of your grazing systems. I have suggestions in both areas. I hope you find them useful.

Rehabilitation - Cascade Burn

The fire was much larger than I expected and at first glance appeared to have set the stage for wide-spread accelerated soil erosion. But a closer look showed that the herbaceous cover, which largely controls erosion on the area was damaged little, if at all, by the fast moving fire.

Annuals dominate this cover. A heavy stand had already germinated and was growing on all areas we observed, even at higher elevations where there was snow.

Herbaceous perennials, also, did not appear to be damaged. Little bluegrass (Poa sandbergii) and squirreltail (Sitanion hystrix), two important grasses were sprouting vigorously.

A tight green carpet of herbaceous plants has already developed on the area. I anticipate the stand will be as thick as ever, probably thicker because of fertilization by ash.

The soil was bared of vegetation or the vegetation was thinned,posing a threat of soil erosion on a limited acreage, mainly on sites supporting shrubs. Here, areas under shrub crowns burned hot, because of accumulated litter from crowns and understory vegetation exposing bare mineral soil. The need for emergency rehabilitation treatments is mainly on these hot spots.

The cost of cultural treatments is high and results uncertain. I believe the area needing emergency treatment is considerably less than presently estimated. So, I recommend first, that another assessment be made of the effect of the fire, focusing on determining more closely the acreage needing immediate attention. This is best done after the vegetation grows out this coming season. Observations on damage in the riparian type is already planned for this time.
"Approximately 157 miles of riparian zones were within the fire boundary. Some zones were severely damaged and most were damaged to some degree. Riparian zones will be surveyed in the spring of 1987 to monitor regeneration of vegetation."

The objective of increasing perennials and decreasing annuals in the plant cover to site capability, can be realized only through proper management of grazing—rest-rotation grazing—and will take a long time. Cultural measures may be used to speed the process on a limited acreage, mainly, where there has been little soil loss and soil fertility is still high. To increase the chances of success with cultural treatments on such sites, I suggest that plant species and rehabilitation methods be tested on small plots on the various sites and conditions on the area. Plots 5 to 10 acres in size should be large enough in most cases.

Fence a portion of each plot against livestock grazing and leave a portion open. Management of grazing on the range will not be affected by these small plots.

With rest-rotation grazing artificial seeding, and other vegetation treatments can be carried out in pastures without additional grazing controls or change in grazing plans. Treated areas can remain unfenced and can be any size and in any location in pastures.

On summer ranges, fall seeding is done in the pasture grazed after seed-ripe time, and spring seeding in the pasture rested season long. On spring-fall ranges fall seeding is done in the pasture that is grazed during the growing season and is followed by a season of rest. Spring seeding is done in the pasture(s) rested through out the growing season.

Monitor results on the plots closely to provide guides for future large scale treatments.
Grazing Systems

Brad

The 3-pasture system you designed for Tunnel, Black Canyon and Station Gulch is good. The vegetation will improve with it. The grazing formula you wrote is the following:

A

C

REST

B

REST

Nov 15±  Mar 15±  July 10±

Flower stalks, squirreletal
in low boot

I assume you are applying the grazing treatments in ACB order in pastures from one year to the next as shown in the formula and that grazing under treatment B is ended when flower stalks of squirreletal are low in boot.

Summer Range

You asked about the proper time to begin the grazing season on summer ranges.

From the standpoint of maintaining vegetation, the season may be started anytime from the beginning of growth on. For maximum livestock production, however, the season should be started when flower stalks of the principal bunchgrass on the range, in your case, squirreletal or bluebunch wheatgrass is low in boot. This is the same stage you leave the winter range under treatment B. It is reached several days (weeks) later on the summer range than on the winter range.
Grazing Systems con't

Jim

Long Hollow Grazing System

It appears that perennials are not being maintained in full vigor under the system with grazing to April 15± in the pasture getting treatment C.

The Grazing Formula

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td></td>
<td>REST</td>
<td>REST</td>
<td>REST</td>
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Nov 15±       Mar 15± Apr 15±    July 10±

In 1982 I commented as follows, on your question of whether grazing could be extended from March 15 to April 15±.

"Whether grazing into April under treatment C is harmful or not can be determined only by actual trial. If seedheads form in squirreltail after grazing is terminated in April, the grazing is not harmful.

I suggest grazing as desired under treatment C and observing results. No irreparable damage to the range will result from several years of such use even if the use is somewhat harmful. The experience will provide guides to getting with better management."

With your need for grazing past March 15 under both treatments A and C, I suggest switching to, two 3-pasture grazing systems with the same grazing formula. The best formula can be worked out following a closer study of your operation and needs.
A formula that could be used is the following:

<table>
<thead>
<tr>
<th>A</th>
<th>REST</th>
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<tbody>
<tr>
<td>B</td>
<td>REST</td>
</tr>
<tr>
<td>C</td>
<td>REST</td>
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Nov 15t  Start of growth  July 1t

Here grazing can be started anytime in the fall and ended anytime in spring. The cattle would be grazed in the pasture getting treatment A until squirreltail leafs out prominently, then they would be moved into the pasture getting treatment B. They should be moved before flower stalks of squirreltail show in boot. They could be grazed in this pasture as long into the growing season as desired.

With this system grazing capacity is increased. Sixty-Six percent of the forage is used instead of 50 percent under the 4 pasture system. Heavy use is desirable especially under treatment B to control annuals and to reduce competition to perennial grass seedlings. Perennials will be maintained in full vigor.

I will be in Boise, December 4 and 5, meeting with BLM. I will arrive late afternoon December 3, and will be staying at the Holiday Inn near the airport.

I will be glad to discuss this letter and other matters with you sometime during or after my meeting with BLM.

Enclosed is an invoice for services.

Sincerely,

A. L. Hormay

ALH: be encl.