East-West French Allotment
Heaven NF Montana
Heaven Ranger District
Location T14N R1E
Sections 16 5 14
21 22 23 24
Names on allotment
Elk Ridge Spring
Meadow Spring
Pasture BC Spring
Montana

E.W. French (Sieben Livestock Co.

Chase Hibbard

3-Pasture System

Photographs

1981 First
1982
1984
1988

Short grazing in East Pasture,
Pasture No. 3, in 1984
E W French
First photos in 1981?
Fence lines slugged Fall of 1982 before New 16
Start Grazing in East Pasture III 3/3 1984
East-West French C&H
Allotment Management Plan

Prepared By: ________________________________  __________________
Lois Olsen, Range Conservationist

Reviewed With: ________________________________  __________________
Sieben Livestock Company Permittee

Reviewed By: ________________________________  __________________
Maurice W. Anding, District Ranger

Approved By: ________________________________  __________________
Robert S. Gibson, Forest Supervisor
I. Identification

The East-West French Cattle and Horse Allotment is located in T13N, R1E, northeast of Helena, Montana. The allotment covers approximately 4340 acres, 3060 acres of which are National Forest land and 1280 acres which are owned by Sieben Livestock Company, the permittee. For precise boundary locations, see Appendix A.

II. Objectives of grazing plan

The objectives of this management plan are to:

1) Manage the allotment under a three pasture rest rotation system.

2) Maintain good vegetative and soil conditions and increase fair conditions to good.

3) Fully utilize the available forage for livestock by increasing animal unit months.

4) Balance distribution throughout the allotment through fencing and water developments.

III. Action

A.M. (Animal Month) = 1.00 AU
AUM (Animal Unit Month) = 1.32 AU

A. Present Obligation

Sieben Livestock Company is presently permitted 265 cow/calf pair for a 65 day season between 7/1 and 9/30. This consists of a private land permit for 115 pair, or 249 A.M.'s -- 329 AUM's and a term permit for 150 pair, or 325 A.M.'s -- 429 AUM's. The allotment is grazed under a season long system, alternating turnout dates between 7/1 and 7/21 every other year.
B. Proposed Grazing System and Permitted Grazing Use

The estimated capacity of this allotment, utilizing 70% of the available livestock forage, is 1049 AUM's. The estimated capacity of the National Forest is 594 AUM's, the private is 455 AUM's.

A three pasture rest rotation system will be implemented. Livestock numbers will remain the same while the grazing season will be extended to 6/21 through 9/10. Under the rest rotation system, two pastures will be used each year while one is rested. The gate between the two use pastures will remain open after seed ripe time, allowing the cattle to move between the two pastures.

The grazing sequence is as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>(West) Pasture A</th>
<th>(Middle) Pasture B</th>
<th>(East) Pasture C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>C Rest</td>
<td>B Seed Ripe</td>
<td>A Early</td>
</tr>
<tr>
<td>Year 2</td>
<td>B Seed Ripe</td>
<td>A Early</td>
<td>C Rest</td>
</tr>
<tr>
<td>Year 3</td>
<td>A Early</td>
<td>C Rest</td>
<td>B Seed Ripe</td>
</tr>
</tbody>
</table>

Repeat Sequence

Seed ripe should occur by early to mid-August in an "average" year.

C. Range Improvements

The existing improvements consist of one jackleg drift fence located in the NW¼ Sec. 24, T13N, R1E. It is approximately ½ mile long and the improvement number is 00085.

The following improvements are necessary to implement the system:

<table>
<thead>
<tr>
<th>Imp. Name</th>
<th>Location</th>
<th>Year to be Constructed</th>
<th>Length or Description</th>
<th>Maintenance Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pasture AB fence</td>
<td>W½ Sec. 22, W½ Sec. 16, T13N, R1E</td>
<td>1983</td>
<td>2½ miles barbed wire, steel post</td>
<td>Sieben Livestock</td>
</tr>
<tr>
<td>Pasture BC fence</td>
<td>W½ Sec. 14, E½ Sec. 22, T13N, R1E</td>
<td>1983</td>
<td>2½ miles barbed wire, steel post</td>
<td>Sieben Livestock</td>
</tr>
<tr>
<td>Section 16 Spring</td>
<td>SE½ Sec. 16, T13N, R1E</td>
<td>As Needed</td>
<td>redwood tank</td>
<td>Sieben Livestock</td>
</tr>
<tr>
<td>Meadow Spring</td>
<td>SE½ Sec. 22, T13N, R1E</td>
<td>As Needed</td>
<td>redwood tank</td>
<td>Sieben Livestock</td>
</tr>
<tr>
<td>Elk Ridge Spring</td>
<td>NE¼ Sec. 23, T13N, R1E</td>
<td>As Needed</td>
<td>redwood tank</td>
<td>Sieben Livestock</td>
</tr>
</tbody>
</table>
Other improvements may be necessary in the future.

IV. Monitoring

A. Allotment Examination

Plots (establish first year of RR)

The allotment should be analyzed five years after the system is implemented to determine the effect of the system. The carrying capacity will be reassessed at that time.

B. Utilization - Production

The carrying capacity has been calculated on 70% weight use of the available livestock forage. Rest rotation grazing concentrates grazing use on two units each year, allowing one-third of the area complete rest one year out of three. Traditional utilization standards do not apply to this allotment.

C. Trend - Benchmarks

There are no permanent benchmarks on the allotment. Five years after implementation of the system, paced transects and photo points should be established at key areas in each pasture to measure long term condition and trend. See range analysis evaluation for suggested key area locations.

D. General Administration

Permittee judgement will be relied on to determine when gates between pastures should be opened. In the early years of implementation gates may have to be opened earlier than desirable due to on-the-ground conditions. The system will be flexible to allow for those occurrences. As stated earlier, the gate between the use pastures will be left open to allow unrestricted cattle movement. Cattle may or may not have to be physically moved between pastures.

E. Appendix

A. Vegetative Type Map
B. Condition and Trend Map
C. Improvements and Key Area Map
Plant requirements can be met adequately only when the plant is rested from use. Rest-rotation grazing systems are formulated objectively to provide the amount of rest needed. The amounts for various requirements have been worked out over a long period of time by researchers and practitioners.

The minimum amount of rest recommended for restoring plant vigor in plants on dry (upland) sites, is two growing seasons through completion of food storage, and for seedling establishment one full year. Near complete defoliation must be assumed in determining the amount of rest for vigor because some plants, on heavy concentration areas, are invariably grazed this way.

Resting should be started immediately after, but one year of grazing during the critical green period so as not to compound the harmful effects of grazing. The rest needed for vigor, seed production and seedling establishment can be obtained in two years. This is shown in the following diagram of grazing and resting that would be applied on an area over time.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>GRAZING TREATMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>A</td>
</tr>
<tr>
<td>2nd</td>
<td>B (1) (2)</td>
</tr>
<tr>
<td>3rd</td>
<td>C</td>
</tr>
</tbody>
</table>

1 cycle of treatments

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**LEGEND**

- ■ graze
- □ rest
- :: seed-ripe time

23
<table>
<thead>
<tr>
<th>Year of grazing</th>
<th>Pasture 1</th>
<th>Pasture 2</th>
<th>Pasture 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>Second</td>
<td>B</td>
<td>C</td>
<td>A</td>
</tr>
<tr>
<td>Third</td>
<td>C</td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>Fourth</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
</tbody>
</table>
other resource values and at the same time improve and maintain the vegetation and soil fertility. Maintenance and improvement of the resource is accomplished almost entirely by timely resting of the range from use. By dividing the range into pastures it is possible to graze a given number of livestock on the range each year.

Purpose of Resting

A pasture or unit of range is rested from use after a season of grazing to:

1. Allow plants opportunity to make and store food -- to recover vigor.
2. Allow seed to ripen.
3. Allow seedlings to become established.
4. Allow litter to accumulate between plants.

The amount of rest needed for these purposes depends on the plants involved, the character of the range, and the objectives of management, so is determined for each range individually.

Usually 1 or 2 years of rest is adequate to restore plant vigor. The key plant in deciding the amount of rest needed is the species that needs the most rest to regain vigor after it has been completely defoliated during the critical green period. Complete defoliation must be assumed because some plants are always grazed to this degree.

Seed-ripen date is determined by the species of plant that ripens seed latest in the season.

More than one year's rest is usually needed for establishment of seedlings. The key condition is that seedling are large enough to