TO: Director, Pacific Southwest Forest and Range Experiment Station
Attention: Gus Hormay
FROM: E. R. De Silvia, Acting Regional Forester, By

SUBJECT: Administration

We received your outline for the training session scheduled March 30 through April 3, 1964. We invited the SCS, BLM, Montana State University, and Montana State College to each send one trainee, and Joe Basile of the Range Experiment Station at Bozeman will attend. In addition, there will be 14 Forest Service people.

The management data for several allotments is assembled and will be held for the meeting. Let us know if there is any other data, special equipment, or material that should be available.

If any time remains after your presentation, we have some administrative matters we would like to discuss with the Forest staff officers. We would like a couple of hours but not at the expense of your presentation.

We are looking forward to meeting with you.
Regional Foresters, Regions 2, 3 and 4

February 6, 1964

John H. McGuire, Director, By

Management (Training Program in Range Management)

The enclosed outline will give you an idea of the subjects to be covered in the range management training course. No doubt questions raised by the trainees will bring other subjects up for consideration as well.

The outline is quite general, prepared primarily to indicate coverage of major items. The headings do not necessarily indicate the importance of subjects nor the amount of time that may be spent on them. This will be determined mainly by developments in the classroom. However a rough time schedule is shown.

Enclosure

cc: De Nio, W. O.

ALHORMAY: gws

H. W. Camp

EXR
General Topical Outline

Forest Service Range Management Training Course

(Scheduled for Western Regions February-April 1964)

I Introduction
A. Purpose of course (Washington Office)
B. Type of course - seminar, trainee participation
C. Emphasis - livestock grazing management
D. Scope of course - coverage
E. Forest Service goals and responsibilities in range management on National Forests

II Importance of vegetation in relation to wildland values and influence of livestock grazing on vegetation

III Range problems - What are they?
A. Condition and productivity of the range
B. Management of grazing

IV Review of biological facts bearing on forage production and resource maintenance
A. Vegetation
   1. Character
   2. Photosynthesis
   3. Synthesis and composition of plant materials
      a. Carbohydrates
      b. Proteins
      c. Fats, oils, etc.
4. Role of elements in plant nutrition
5. Movement and storage of nutrients

B. Soil

1. Character
2. Formation
3. Fertility (activation and maintenance)

V Plant ecology

Plant succession and climax vegetation
Nature of plant competition

VI Plant growth and development (normal)
Seasonal trends - shoot, root, etc.
Use and replenishment of food reserves

VII Effect of defoliation on
Growth, yield, reproduction
Plant nutrition food reserves

VIII Characteristics of vegetation use by livestock
Plant species, range areas
Patterns and intensities
Discuss information assembled by Regions on specific allotments

IX Management of grazing

A. Specific objectives of management

Vegetation
Soil
B. Kinds of management

1. Continuous moderate grazing - principal kind used to date

   Basis
   Effectiveness

2. Non-continuous (deferred, rotation, etc.)

   Basis
   Effectiveness

C. Method of appraising -

1. Grazing capacity

2. Vegetation-soil reactions to grazing (trend)

D. Cultural practices

1. Spraying, artificial reseeding, fertilization

2. Place in range improvement

XI Preparation of grazing management plans for selected Region allotments

Trainee practice

XI Review of biological facts bearing on livestock production

A. Nutritional requirements of livestock

B. Seasonal trend in nutritional value of range forage

   Chemical analyses
   Livestock weight responses

C. Utilization of forage for desired level of livestock production

   1. Season of use
   2. Stocking rate
   3. Livestock handling

D. Significance of livestock facts in management of grazing
XII Trainees revise grazing plans prepared in XI on basis of livestock information

XIII Considerations in planning management

  Resource inventory
  Multiple use
    Delimitation range area
  Potential production capacity of range area
  Goals of managements
    Livestock
    Wildlife
    Vegetation
      Species
      Cultural practices
  Management design

Trainees review allotment management plans in view of above

XIV Other subjects for possible discussion

1. Big game management
2. Other wildlife management
3. Water yield
4. Erosion
5. Timber-grazing conflicts
6. Recreation-grazing conflicts
7. Financing range management
8. The training course
Approximate Time Schedule for Range Management Training Course

<table>
<thead>
<tr>
<th>Day</th>
<th>Time of day</th>
<th>Subjects</th>
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<tbody>
<tr>
<td>First</td>
<td>8 - 10</td>
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<td>10 - 5</td>
<td>IV</td>
</tr>
<tr>
<td>Second</td>
<td>8 - 5</td>
<td>V - VIII</td>
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<td>Third</td>
<td>8 - 5</td>
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<td>X - XI</td>
</tr>
<tr>
<td>Fifth</td>
<td>8 - 5</td>
<td>XII - XIV</td>
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Office Memorandum - UNITED STATES GOVERNMENT

R. E. Ratliff, Susanville

SUBJECT: Harvey Valley Cattle Records

Thank you for sending copies of the 1954-59 cattle weight records to us. Jack asked that I answer some questions you have regarding the cattle weight data I sent down.

1. Did we use the same animal unit rating in table 1 as you used in computing actual use?

A. I think not. We have used the following ratings since 1960.

- Cows .......... 1.0 AU (Both wet and dry)
- Calves .......... 0.3 AU
- Bulls .......... 1.25 AU
- Yearlings ....... 0.7 AU (all yearlings)

Mr. Lee used these values in 1960, and I continued to do so not knowing about your ratings. However, a search of the files turned up your ratings which I enclose with this.

2. Are 1961 through 1963 weights on a shrunk weight basis?

A. All weigh animals were shrunk overnight before weighing except for the heifers at mid-season 1963. The sell of steers at this time prevented our getting shrunk weights. As indicated on the record forms we use a 4% pencil shrink on the weights in our computations.

3. Are the 1961 "cows" really replacement heifers, and what is the breed?

A. They were yearling Hereford replacement heifers.

We have searched high and low for your report on the disposition of cattle at Harvey Valley. We can't find it. In the search I did find the enclosed memo by you to Joe. Is the table of actual stocking referred to the thing wanted? If so it may be in the files in Berkeley. Fred Alterino remembered Joe putting stocking figures on the board at the 1960 meeting on Harvey Valley, but neither he nor Phil Lord remember the report on cattle disposition.

Since we have apparently used different criteria in computing actual grazing use it would be advisable to recompute the use figures and get them on the same basis. In order to get this done, I will take on the job if you wish. To do
Thus, however, I would need to have records of the disposition of the various classes of cattle and their dates in and out for the various range units for each year. Such records previous to 1960 are not available at Susanville. Also, I would require your decision as to animal unit ratings to be used. Note that on the enclosed rating bulls are not listed.

Let me know if you want me to do this job. If so please outline how you would like the data presented. Needless to say, we also have a large interest in getting the stocking statistics in order.

Enclosures
<table>
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<tr>
<th>Class, Age or Weight</th>
<th>Animal Unit Rating</th>
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<tbody>
<tr>
<td>Cow (wet - calf at side; 4 yrs. plus)</td>
<td>1.00</td>
</tr>
<tr>
<td>Cow (wet - calf at side; 2 - 3 yrs.)</td>
<td>.95</td>
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<tr>
<td>Cow (dry)</td>
<td>.90</td>
</tr>
<tr>
<td>Heifer (bred)</td>
<td>.80</td>
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<tr>
<td>Heifer - weaning to breeding</td>
<td>.50</td>
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<tr>
<td>Heifer calf - 4 mos. to weaning</td>
<td>.35</td>
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<tr>
<td>Heifer calf - birth to 4 mos.</td>
<td>.15</td>
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<tr>
<td>Steer</td>
<td>Protection</td>
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<tr>
<td>14 mos. and older</td>
<td>.75</td>
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<tr>
<td>Steer</td>
<td>Weaning to 14 mos.</td>
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<tr>
<td>.60</td>
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<tr>
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<td>4 mos. to weaning</td>
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<tr>
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<td>2/17-2/21</td>
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<td>2/24-2/28</td>
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<td>4/6-4/10</td>
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Region 4

RANGE MANAGEMENT TRAINING MEETING
February 10 to 14, 1964
Assembly Room

Frank C. Curtiss, Assistant Regional Forester

James L. Jacobs, Range Conservationist

Merlin I. Bishop, Forester

Mont E. Lewis, Range Conservationist

James J. Butler, Range Conservationist

Hallie L. Cox, Forester, Cache National Forest

Lester Fluckiger, Forester, Bridger National Forest

R. Grant Seaman, Forester, Humboldt National Forest

Lewis E. Hawes, Forester, Manti-LaSal National Forest

Norman H. Beck, Forester, Challis National Forest

Thomas A. Phillips, Range Conservationist, Sawtooth National Forest

Walter H. Randell, Forester, Uinta National Forest

Martin Buesa - Bureau of Land Management, Nevada

Maurice M. Marsh - Bureau of Land Management, Idaho

Horace (Milt) Jones - Bureau of Land Management, Salt Lake City, Utah

Jesse Judson - Bureau of Land Management, Monticello

August L. Morrey, PSW (instructor)
Region 3
1964

Jack Bohning - Santa Fe
Bill Fleishman - Tonto
John Haferson - Apache
Gil Duran - Carson
Wally Gallagher - Cibola
Bob Gashwiler - Coconino
Ray Swigart - Gila
Roy Gandy - Kaibab

Hugh Wall - BLM Las Cruces
Francis Riordan - BLM Phoenix
Dr Floyd Kinsinger - BLM Washington

Frank Smith
John Hall
Stan Wallace
Roy Stratton
Bill Currier
Ray Housley

Art - Wildlife
Anal & Plans
Reveg Ass't
Reveg
Admin & Tr.
MEMORANDUM

TO: Forest Supervisors, Chippewa, Clark, and Mark Twain N. F.

DATE: February 24, 1964

Your Reference: 8/2/63

FROM: H. A. SVENSEN, Assistant Regional Forester

SUBJECT: Training (Range Management 3/16-20/64)

This will confirm arrangements for the Range Management Training Course scheduled for March 16-20, 1964, by "Ous" Hormay.

Meeting Place:

The meeting will be held in the Forest Service Conference Room at 710 North 6th Street, Milwaukee, Wisconsin.

Program:

We understand the training will cover basic knowledge on range management to be followed by exercises in the preparation of management plans. On August 2, each Forest was assigned two allotments on which data was to be collected and brought to the training meeting for use in allotment plan preparation.

We believe it will be possible to complete the training sessions by Friday noon, or at least arrangements can be made for the Chippewa members to leave in time to assure attendance at the annual meeting of the Sheyenne Association on Saturday, March 21.

Attendance:

Chippewa: Von Bargen, Roberts, Simpson
Clark: Horne, Hornkohl, Campbell
Mark Twain: De Bruin, Kirkman, Nelson
Regional Office: Swensen, Olson, Radtke

Hornky

If the Clark or Mark Twain feel, after our discussion of last week, that changes in attendance are in order, please advise. We could accommodate one or two more people, if it appears desirable to make this training available to others than those named above.

We assume attendees will make their own arrangements for hotel reservations.

2xc: Each Forest

cc: August L. Hormay

H. S. Svensen
Region 2

F. S. Region 2 Feb. 29 1964

1  Bill Bradshaw
2  Don Euler
3  Milt Wright
4  Ralph Marshall
5  Ron Schultz
6  Art Cook
7  Tom Lewis
8  Dale Jones

9  John Minaw
   Black Hills H.F.
10  George Burnett

BLI7

10  Bob Krumm
11  Jim Andrews
12