April 3, 1967

Mr. A. L. Hormay  
Bureau of Land Management  
P. O. Box 245  
Berkeley, California 94701

Dear Mr. Hormay:

Enclosed is information as requested in Instruction Memorandum 67-119, March 21, 1967.

Sincerely yours,

[Signature]

Thomas J. O'Kelly  
Acting District Manager

Enclosures: As stated
TO : Range Conservationist Hormay

FROM : District Manager, Pinedale

SUBJECT: Rest-rotation Grazing Test Program FD 4/3/67

As requested in Instruction Memorandum No. 67-119, enclosed is the report on the status of the Bousman Rest-Rotation Management Plan.

Enclosure

cc: State Director, Wyoming
TO : Mr. A. L. Hormay

FROM : District Manager, Burley District Office

SUBJECT: Rest-Rotation Grazing Test Program - 67-119

Attached hereto are the forms required by subject memo. We are most interested to see that you are working on a procedure for appraising the results, and hope that an evaluation and study system can evolve that will be helpful.

Attachments
TO: A. L. Hormay  
Range Conservationist

FROM: District Manager, Carson City District Office

DATE: April 3, 1967

SUBJECT: Rest-rotation Grazing Test Program.

Enclosed is our report on the "Status of Rest-Rotation Grazing Allotments".

We have anticipated that we would request a full review of the grazing plan on the Rafter Seven Ranch during the first part of FY1968. However, it may be worth considering this review so as to coincide with the Nevada Section, ASFM, summer tour which will be June 29 and 30. This tour will include the East Walker River area where this ranch is located. The tour also includes the Flying M Ranch allotments for which we are working on an allotment plan. Also included is the Mt. Grant natural area that has not been grazed for 30 - 40 years. The tour has the promise of being an outstanding field trip.

CC: NSO

By telephone arranged dates for trip to Carson District 12:00 noon June 26 - 5:00 June 30, 1967.
NEVADA SECTION

AMERICAN SOCIETY OF RANGE MANAGEMENT

Spring Range Tour
June 28-30, 1967

WALKER LAKE AND EAST WALKER RIVER AREAS
AGENDA

Your Tour Committee

Grant Seaman - Section President
J. Boyd Price - President Elect
Charles N. Saulisberry - Tour Committee
Buhel R. Heckathorn - Tour Committee
Thane Johnson - Tour Committee
Harold W. Baker, Jr. - Registration Committee
Dick Holland - Registration Committee

Tour Conductors

Charles N. Saulisberry - June 29
Thane Johnson - June 30
June 28, 1967

<table>
<thead>
<tr>
<th>Time</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 PM</td>
<td>Registration, hosted cocktail party courtesy of Pecoles Packing Company and Mason Valley SCD.</td>
</tr>
<tr>
<td>8:00 PM</td>
<td>Section Council Meeting - Price.</td>
</tr>
</tbody>
</table>

June 29, 1967

<table>
<thead>
<tr>
<th>No.</th>
<th>Time</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7:00-8:00 AM</td>
<td>Registration and loading in cars and/or busses, SCS office, Yerington, Nevada.</td>
</tr>
<tr>
<td>1</td>
<td>8:30 AM</td>
<td>Schurz flat, Walker River Indian Reservation for a look at Indian rice grass and whitesage desert range, good condition - Charlie Fisher.</td>
</tr>
<tr>
<td></td>
<td>8:45 AM</td>
<td>Depart Schurz flat - travel thru Walker River Indian Reservation. Narrators Fisher and Everett Randell</td>
</tr>
<tr>
<td>2</td>
<td>9:15 AM</td>
<td>Arrive at Sportsman Beach Campground, recreation development. Discussion of Walker Lake recreation. Last rest room stop before going on Mt. Grant and returning to Hawthorne - Thane Johnson.</td>
</tr>
<tr>
<td></td>
<td>9:30 AM</td>
<td>Depart Sportsman Beach.</td>
</tr>
<tr>
<td></td>
<td>9:45 AM</td>
<td>Arrive at Cottonwood turnoff; discussion of Naval Ammunition Depot facilities - Captain Schweer. Change to 1154 transport vehicles.</td>
</tr>
<tr>
<td></td>
<td>10:00 AM</td>
<td>Nevada State Fish &amp; Game proposed Big horn sheep plant and enclosure - Marshall Humphreys.</td>
</tr>
<tr>
<td></td>
<td>10:15 AM</td>
<td>Depart up Cottonwood Canyon.</td>
</tr>
<tr>
<td>3</td>
<td>10:30 AM</td>
<td>NAD water facilities and diversion - Cottonwood Creek, - Lloyd Boone.</td>
</tr>
<tr>
<td>4</td>
<td>10:45 AM</td>
<td>Continue on up canyon and stop near Goat Ranch to see desert Needle-grass range - Buhe R. Heckathorn.</td>
</tr>
</tbody>
</table>
11:00 AM  Depart Goat Ranch.
5 11:30 AM  Arrive at Cabin and aspen on Cottonwood Creek. Lunch. At lunch stop - notice reproduction of aspen, meadow grasses, structures in channel to halt erosion - Chuck Saulisberry, Lloyd Boone.
12:45 PM  Depart Cabin
6 1:00 PM  Stop at meadows above aspen groves. Discussion of forage and production on mountain meadows - Harry Summerfield, Lloyd Roeke.
1:15 PM  Depart meadows, pass over Cat Creek Summit in route to top of Mt. Grant. Elevation of Mt. Grant 11,239.
7 2:15 PM  Arrive top Mt. Grant. Discussion of the Snow Partridge - Iant - Glen Christiansen
2:45 PM  Depart Mt. Grant
9 3:15 PM  Erosion structure at the head of Cat Creek - Lloyd Boone, et. al.
3:30 PM  Depart Cat Creek, travel along Wassuk Summit and descend Corey Canyon Grade. Hold on to your hats!!!
10 4:15 PM  Arrive Coreyville, history of development, etc. - Victor Goodwin
4:45 PM  Depart Coreyville.
11 5:15 PM  Arrive Hawthorne city water supply (reservoir). Discussion of the grazing and the problems in Corey Canyon - Dick Kuntze and Thane Johnson.
6:00 PM  Arrive back at Hawthorne.
7:30 PM  Banquet - to be arranged.
8:30 PM  Program of the NAD by Captain Schweer at Elks Hall. Summer Range Camp slides presentation of award to outstanding boy - Jack Artz and Boyd Price presiding.
9:00 PM-Till  On you own, Be Careful.
June 30, 1967

7:30 AM   Load into transportation vehicles and depart Hawthorne going over Lucky Boy Pass

8:30 AM   Stop on BLM Summit Station enclosure, top of Lucky Boy Pass. Discussion of species present - Dick Holland.

9:45 AM   On Road to Aurora. Discussion of Forest Service Recreational plans for the Powell Mtn. area while vehicles are moving by Victor Goodwin and Lynn Mitchell. Discussion of the frog farm - Thane Johnson.

10:45 AM  Arrive Aurora, history of Aurora - Victor Goodwin.

11:15 AM  Depart Aurora.

11:30 AM  Arrive at planting trial, near Fletcher, with results of this trial - Victor Goodwin. Also history of Fletcher - Victor Goodwin.

10:45 AM  Depart Fletcher; enroute to Flying M Ranch. BLM and Nevada Fish & Game will discuss recreational developments on East Walker River while vehicles are moving - Thane Johnson, et. al.

12:00 Noon Arrive at Flying M Ranch. Lunch courtesy of Flying "M" Ranch with discussion of Santa Gettrudis cattle operations - Bill Shay, Don Douglas, Jr., and Henry Tyree.

1:30 PM   Depart ranch.

2:45 PM   Arrive at Galleta Grass Plots, discussion of the plots by University of Nevada - Dr. Richard Holbo.

2:00 PM   Raftner Seven Coordinated Ranch Plan. Francis Goetsch, Thane Johnson.

2:10-3:10 PM Enroute to Yerington, Notice excellent stand of Indian ricegrass, mixed with Spiney hop sage, and upland greasewood along the way.

3:30 PM   Peoples Packing Company feedlot, and operations - Feedlot Manager.

4:00 PM   End of Tour.
SOME INTERESTING INFORMATION IN THE WASSUK RANGE, WEST OF WALKER LAKE

Elevation change from Walker Lake to top of Mt. Grant is 3,900 to 11,230 feet. Average Precipitation at Walker Lake is 4.5 inches and on Mt. Grant approximately 11.5 inches.

Vegetative zones from Walker Lake to top of Mt. Grant can be classified into the following zones. They are:

1. **Mixed Desert Shrub** - Shadscale, upland greasewood, desert peach, Indian ricegrass, fourwinged saltbrush, bud sage, spiny hopsage, desert needlegrass, sand dropseed, red brome, Nevada ephedra, and snakeweed. Elevation 4,000-4,500 feet.

2. **Desert Shrub** - Species present are Indian ricegrass, squirreltail, Mormon teas, shadscale, upland greasewood, littleleaf horsebrush, granite gilia, cactus, perennial Lepidium, bud sage, desert needlegrass, and buckwheat. Elevation 4,200-5,000.

3. **Desert Needlegrass - Indian Ricegrass** - Species present are desert needlegrass, galleta grass, Sandberg bluegrass, needleandthread grass, squirreltail, big sagebrush, Mormon tea, Douglas rabbitbrush, spiny hopsage, horsebrush, and buckwheat. Elevation 5,000-7,500 feet.

4. **Pinyon Juniper - Aspen - Big Sage - Mixed grasses.** - Species present are Pinyon pine, Utah Juniper, spikes fescue, June grass, Great Basin wildrye, onion grass, Sandberg bluegrass, Thurber needlegrass, needleandthread grass, Mormon tea, bitterbrush, squirreltail, Great Basin wildrye, Canby bluegrass, Sego lily, spiny hopsage and big sage. Elevation 6,200-8,500 feet.
5. **Big Sage - Grass** - Chief species present are Nevada bluegrass, Canby bluegrass, June grass, Sandberg bluegrass, Thurber needlegrass, Great Basin wildrye, squirreltail, big sagebrush, snowberry, Senecio, lupine, false dandelion, bitterbrush, and buckwheat. Elevation 7,200-8,500 feet.

6. **Low Sage - Needlegrass** - Chief species present are low sagebrush, Thurber needlegrass, June grass, Sandberg bluegrass, squirreltail, spike fescue, sheep fescue, Indian paintbrush, lupine, Douglas rabbitbrush, and buckwheat. Elevation 7,500-9,500 feet.

7. **Sub-Alpine Shrub** - Species present are granite gilea, rabbitbrush, low sage, spike fescue, Poa spp., Stipa spp., Sandberg bluegrass, lupine, buckwheat, phlox, Indian paintbrush. Elevation 9,500-11,200 feet.
Mr. A. L. Hormay  
Range Conservationist  
Bureau of Land Management  
P. O. Box 245  
Berkeley, California 94701

Dear Mr. Hormay:

The enclosed information on the rest-rotation management plan for Gold Basin RCA is basically the same as that previously submitted. The major differences are the use of the two crested wheat pastures, and the use of the three Forest Service pastures in the plan.

The fences circled in red will be moved to simplify the movement of cattle. The pastures will have a common corner when the fences are moved.

Mr. McCabe is very enthusiastic about the plan. He feels that the change in pastures and rotation will be very helpful.

We found we had to leave the cattle in a pasture longer than anticipated to obtain the desired utilization.

Sincerely yours,

Arthur W. Zimmerman
District Manager

Enclosures
April 3, 1967

TO: A. L. Horney - Range Conservationist

FROM: District Manager, Craig, Colorado

SUBJECT: Status of Fair-Station Grazing Allotments.

Enclosed is our status report on the Fair-Station Allotment. I regret the report was not timely. We received the Instruction memo the day you were to receive the report.

Neil B. McClary
acting

Note: Return this form when action is completed or attach it to data requested.
Memorandum

TO: Gus Hormay, Range Conservationist

FROM: DM, Las Cruces

SUBJECT: Status of rest-rotation grazing allotments

Submitted herewith in accordance with Instruction Memo No 67-119 dated March 21, 1967, supplemental information on allotments of Cothern and Templeton.

Enclosures - 4

Encl. 1 - Status of Rest-Rotation Grazing Allotments
Encl. 2 - Status of Deferred-Rotation Grazing Allotments
Encl. 3 - Templeton - Deferred Rotation Grazing System
Encl. 4 - Map Templeton Allotment

Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan
Mr. A. L. Hormay
Range Conservationist
Bureau of Land Management
P. O. Box 245
Berkeley, California  94701

Dear Mr. Hormay:

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The fences circled in red will be moved to simplify the movement of cattle. The pastures will have a common corner when the fences are moved.

Mr. McCabe is very enthusiastic about the plan. He feels that the change in pastures and rotation will be very helpful.

We found we had to leave the cattle in a pasture longer than anticipated to obtain the desired utilization.

Sincerely yours,

[Signature]
Arthur W. Zimmerman
District Manager

Enclosures
Memorandum

To: A. L. Hormay, Range Conservationist

From: Allan W. Strobel, Area Manager, Idaho Falls District

Subject: Status of Rest Rotation Grazing Allotments

April 4, 1967

A grazing system has been reviewed by you and adopted for the Smith Allotment in the Idaho Falls District. Approximately 2/3 of this allotment burned during the summer of 1966. In order to minimize the hardship on the operator, grazing will be allowed on the unburned portion of the allotment for the 1967 and 1968 seasons without regard to the planned grazing system. Some temporary electric fences will be constructed to control the livestock. The burned area will be protected from grazing for 2 seasons. During this period the grazing system plan will be reviewed with the operator and beginning in 1969 grazing will be in accordance with a grazing system.

Several more Rest Rotation Grazing Allotments are being planned. We will send you all information as soon as we can get it out.

[Signature]

cc:
State Director, Idaho
April 4, 1967

Mr. Gus Hormay
Range Conservationist
Bureau of Land Management
P. O. Box 245
Berkeley Calif., 94701

Dear Mr. Hormay

Enclosed is a copy of the informational form for this District's single rest rotation plan called for in instruction memo 67-119.

As the system has not been in operation, we are unable to provide you with further information at this time.

Sincerely,

[Signature]

Marry R. Finlayson
District Manager

Enclosure
April 4, 1967

Mr. G. L. Hormay  
P. O. Box 245  
Berkeley, California 94701  

Dear Mr. Hormay:

Enclosed are the forms and information on the rest rotation pastures as requested. These are the pastures you have reviewed.

We plan to initiate several rest rotation systems in the Worland District in the near future. If you would like the information on these as on the previous pastures, please let us know.

Sincerely yours,

[Signature]

Rex D. Colton  
District Manager

Enclosure
April 4, 1967

Mr. Gus Hormay
Range Conservationist
U.S. Bureau of Land Management
P.O. Box 245
Berkeley, California 94701

Dear Mr. Hormay:

Attached is the questionnaire which was requested in Instruction Memo No. 67-119.

I am sorry this is somewhat late but we only received this memo on April 3, 1967.

The Sand Spring grazing system is progressing very satisfactorily and should show considerable improvement in the vegetation by the end of the first series.

We have another plan "Haworth Allotment" that is now fenced, water will be developed by May 1, 1967, so this system will go into effect by this date.

Sincerely yours,

Gene Nodine
Range Manager

Encl.
TO : Mr. Hormay, Range Conservationist  
    Berkeley, California  

FROM : District Manager, Price, Utah  

DATE: April 4, 1967  

SUBJECT: Rest-rotation Grazing Test Program

In response to Instruction Memo 67-119, we are enclosing the information requested. None of these plans can be put into effect until the fences required are installed. They will be scheduled in FY's 1968 and 1969.

Enclosure
Memorandum

TO: Mr. A. L. Horman, Range Conservationist

FROM: District Manager, Bakersfield

SUBJECT: Rest-Rotation Grazing - Instruction Memorandum No. 67-119, dated March 21, 1967

Enclosed are reports on our two Rest-rotation grazing allotments as requested.

2 Enclosures - Status of Rest-Rotation Grazing Allotments
   Encl. 1 - Wells Meadow
   Encl. 2 - Adobe Valley
Lassen National Forest
Susan River Ranger District
Susanville, California 96130
April 5, 1967

James W. Mapes Estate
c/o Julian Mapes
Litchfield, Calif. 96117

Dear Mr. Mapes:

Enclosed is the "Annual Permittee Plan" for the Lower Pine Creek Allotment. If it meets with your approval, please sign all copies, retain the original for your use and return the other copies to this office.

Sincerely yours,

[Signature]

Jonathan F. Hoefer
District Ranger

Enclosure
TO : A. L. Hormay

FROM : District Manager
       Canon City District #5

SUBJECT: Status of Pilot Rest Rotation Grazing Allotment

DATE: April 5, 1967

In reply refer to:
4412.2

In response to Instruction Memo 67-119, we herewith submit the following data:

1. Status questionnaire,
2. Map of allotment,
3. Pasture treatment formula,
4. Resumes of treatment cycle.

We decided to include the yearly schedule of pasture use rather than try to make a diagram showing movement of livestock, as the map or diagram would have been extremely cluttered.

If you desire further information, please advise.

[Signature]

Acting
TO: A. L. Horman, Range Conservationist

FROM: District Manager, Salt Lake District

DATE: April 5, 1967

SUBJECT: Status of Rest Rotation Grazing Allotments

In accordance with instructions contained in Instruction Memo 67-119, we are submitting the information as per the two attachments.

Attachments

[Signature]

Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan
Memorandum

TO: Range Conservationist, Hormay

FROM: DM, Richfield, Utah

DATE: April 5, 1967

SUBJECT: Hartnet Rest - Rotation Allotment

Enclosed is the completed information form regarding the current status of the above mentioned allotment.

The rest-rotation system has now been in use for about five months without any changes in its original design. Results to date look encouraging. Utilization on the fall pasture averaged 53% and was fairly uniform over the entire pasture, on areas seldom before used by cattle. The only problem encountered has been the lack of water over a large area in one of the pastures. This grazing season, we have rested the pasture with insufficient water with hopes that next year the newly constructed reservoirs will have collected sufficient water. Our current evaluation is that the system will work on this desert range if we can provide adequate stock water.

Warren J. Miller
Acting

Enclosure: (1)
Memorandum

To: A. L. Hormay, Range Conservationist

From: District Manager, Miles City

Subject: Pierce Rest-Rotation Grazing System

Thanks for your comments on the proposed Pierce rest-rotation grazing system. We are writing to you again in fear that our initial submission may have been incomplete or misleading. We would appreciate further discussion to clarify some points.

We wonder if Little Bluestem (Andropogon scoparius) should be given consideration as a possible key forage species on the Pierce allotment for the following reasons:

1. Dispersed throughout the allotment.
2. Bunchgrass - High forage producer.
3. Adaptable to majority of soils on allotment.
4. Has low tolerance to heavy grazing.
5. We feel that there is potential for increasing this species in 75% of the allotment.

Little Bluestem seed ripe date is approximately September 1 to September 15 which is 30 to 45 days later than the turn in date, which you suggested for Treatment C.

Additionally we wonder if three browse species (Atriplex nuttallii, Chrysothamnus nauseosus, and Symphoricarpos occidentalis) should be given consideration as key species in the system.

Since the report was submitted for your review, we have obtained information that Atriplex nuttallii (Nuttalls Saltbush) may ripen seed in
September or later. This species is valuable as a big game and livestock forage producer.

We noted an error on the seed ripe date for Symphoricarpos occidentalis (Snowberry) sent you on Enclosure 3. Seed ripe date should be late August instead of early July. This browse is a valuable watershed stabilizer, an important big game forage producer, and is valuable for upland bird habitat.

Another browse, Chrysothamnus nauseosus (Rubber Rabbitbrush), to the best of our knowledge, ripens seed from late August on. Our phenological data is quite limited on this specie, but it is critical antelope forage.

In view of these observations, we wonder if consideration should be given to a later seed ripe date than the August 1 suggestion which you sent to us. It would probably be necessary to sacrifice some of the rest for vigor and seed production in your proposed Treatment B to accomplish this.

Could you also send us your computations in arriving at 640 AUMs/pasture. We were unable to determine how you obtained this figure.

Thank you for your time and guidance with these systems.

cc: State Director, Montana Denver Service Center, Attention 712a
DATE: April 6, 1967

TO: Range Conservationist, Mr. Hormay

FROM: District Manager, Susanville

SUBJECT: Rest-rotation Grazing Test Program

In accordance with Instruction Memorandum No. 67-119 from the Washington Office enclosed herewith is the information requested.

Rex J. Morgan

Enc. 1
Memorandum

TO : Mr. Gus Hormay, Berkeley

FROM : District Manager, Monticello

DATE: April 6, 1967

SUBJECT: Rest-Rotation Grazing Test Program

Attached is a copy of the report that the Washington office requested we send you. The system has not been in operation a full year yet on the East League Allotment. The only problem encountered so far is insufficient water in some pastures. We are planning water developments for next fiscal year which should eliminate this problem.

Robert E. Anders

1 Enclosure
Encl. 1 - Status Report
Mr. Gus Hormay  
Bureau of Land Management  
P. O. Box 245  
Berkley, California 94701

Dear Mr. Hormay:

Subject: Status of Rest Rotation Grazing Allotments

Attached is our report as requested by Instruction Memo 67-119.

The area involved does not include all of the lands included in our original submission. This plan was, however, reviewed by you during your trip to the district last October. A copy of the allotment map and grazing system is attached.

Sincerely yours,

Donald G. Gipe  
District Manager

Attachments

cc: State Director with attachments
April 7, 1967

Mr. A. L. Hormay
P. O. Box 245
Berkley, California 94701

Dear Mr. Hormay:

Enclosed is copy of Status of Rest-Rotation Grazing Allotments (Tenney Allotment), for the Kingman Resource Area.

Sincerely,

[Signature]

Acting Area Manager

Enclosure
TO : A. L. Hormay, Range conservationist

FROM : District Manager, Winnemucca

SUBJECT: Rest Rotation Grazing Test Program

Enclosed are the informational forms requested by Instruction Memo 67-119. We have included not only Flat Creek and Willow Creek Allotments that are shown on the test allotment tabulations but, have included for your information the Gondra Allotment and the Little Owyhee Allotment.

We are looking forward to your visit this spring. In our discussion with Ross Ferris of Nevada State Office, it was decided that he would contact you in the near future to finalize the arrangements for your Nevada trips.

cc: State Director, Nevada
April 7, 1967

Mr. A. L. Hormay
Bureau of Land Management
P. O. Box 245
Berkley, California 94701

Dear Mr. Hormay:

Enclosed is the status of the rest-rotation system now in effect on the Powder Rim Allotment.

Sincerely yours,

[Signature]

Claudell Martin
District Manager

Enclosure 1
TO : A. L. Hormay, Range Conservationist  
BLM, P. O. Box 245, Berkeley, California 94701

FROM : District Manager, Albuquerque

DATE: April 7, 1967

SUBJECT: Rest-rotation Grazing Test Program

Enclosed are copies of the forms for the two Rest-rotation Allotments 
in the Albuquerque District requested by Instruction Memorandum No. 67-119.

James C. Harris

Attachments

Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
DISTRICT OFFICE
P. O. Box 1456
SOCORRO, NEW MEXICO 87801

APRIL 7, 1967

Memorandum

To: Mr. Hormay, Range Conservationist

From: District Manager, Socorro

Subject: Rest-rotation Grazing Test Program

With reference to Instruction Memorandum No. 67-119, submitted herewith is the information requested.

[Signature]

Enclosure

cc: State Director, New Mex. w/copy of enclosure
Dear Rex:

The browse problem on the Gage Brothers allotment was considered during development of the grazing season. And it seemed that adequate rest was being provided for plant vigor, seed production and seedling establishment, but there was some question of maintaining plant size. Only plant responses will answer this question. The plants are being provided rest, at least from livestock grazing, that they never had before and it is difficult to predict just how they will respond. The amount of rest provided may prove to be entirely adequate.

The thing to do now however is to observe and the plants for vigor, size, seed production and whether reproduction is occurring so you can pinpoint the problem if there is one. If the problem is related to livestock grazing then obviously some management can be adjusted to take care of it. If it is related to wildlife use that is another problem.

With this problem in the picture decisions about increasing stocking so you will have a better chance to adjust management if needed.
On the Neal allotment, I suggested moving the beginning of treatment C (suggested plan) up to August 1, so flooding would quickly follow seedfall of the early maturing species. This would minimize predation of seeds by rodents, insects, and birds. The date of September 1 in the distinct plan would allow these factors to operate for about a month before flooding occurs. Also, September 1 does not appear to be late enough for such late-developing species as Calamovilfa longifolia and Andropogon scoparius. I suggested holding off on treatment B long enough for seeds of these species to ripen.
Memorandum

To: State Director, Utah

From: Assistant Director, Resource Management

Subject: Rest-Rotation Planning - 50-Mile Mountain

We appreciate notification in your memo of March 31 of the field trip about June 1 to 50-Mile Mountain. Gus Hormay is available to assist the District personnel. He will contact your office to make firm arrangements.

Thank you for the opportunity to participate.

[Signature]

Acting

cc: A. L. Hormay
Chief, RS&T - DSC
DDRF 1 & 2

712a:FEKinsinger:djt 4-5-67
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
District & Land Office
1414 University Ave., Box 723
Riverside, California 92502

DATE: APR 10 1967

IN REPLY REFER TO:
4412.2 (RM)

TO: Director (712a)

FROM: Manager, Riverside District and Land Office

SUBJECT: Rest-Rotation Grazing Test Program, Information on Southcott Lease

Mr. Benshoof, operator of the Southcott ranch, is proceeding with the rest-rotation plan as of March 1, 1967.

No changes have been in the plan that you reviewed with Don Dimock earlier this year. The requested form is enclosed. Please call if you want further details.

Hall H. McLean

Enclosure

RECEIVED
BUREAU OF LAND MANAGEMENT
COMMUNICATIONS UNIT

APR 13 1967
AM 7:18:9
PM 12:12.3:4:5:6
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<tr>
<th>Code</th>
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Indicate Action by Number:

1. Necessary action  
2. Approval  
3. Signature  
4. Prepare reply  
5. Your comment and return  
6. Note and surname  
7. Note and return  
8. Your information  
9. See me  
10.  

**Office:** Bureau of Land Management  
**Address:** P. O. Box 592  
**Elko, Nevada 89801**

Enclosed are the requested copies of the status of the rest-rotation grazing allotments in Elko District.
Memorandum

TO: Mr. Gus Horman, Range Conservationist
    BLM, Berkeley, California  94701

FROM: State Director, Alaska

DATE: April 12, 1967

SUBJECT: Status of Rest-Rotation Grazing Allotments

Alaska has not established any rest-rotation grazing systems on any grazing lease or permit area. We do not expect to establish any in near future.

[Signature]
Acting

Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan
TO: Gus Hormay, Berkeley, California

FROM: Marvin Hammersmark, Natural Resource Manager, Ely, Nevada

DATE: April 12, 1967

SUBJECT: Allotment Management Plans

We have been advised by Ross Ferris that you will be in Ely on or about June 5, 1967 to assist us in developing allotment management plans for the Geyser Ranch in Lake Valley.

We will furnish you with the necessary information for Lake Valley prior to this date.

Marvin H. Hammersmark
To: A. L. Hormay, Range Conservationist
From: State Director, Oregon
Subject: Status Rest-Rotation Grazing Allotments

Enclosed status reports for the Ruby Springs and the Krumbo Allotments of the Burns District. Status reports for other Oregon district rotation plans were sent direct from the Prineville, Lakeview and Baker District offices.

A recent canvas of Oregon districts reveals that approximately 20 individuals would benefit from the week long training session such as you conducted at Boise, Idaho in 1964.

In order to fill the 50 to 75 group size, we feel a joint session with district personnel from adjoining states would be most appropriate.

We would like to hear from you regarding the possibility of such a joint session and your recommendations on time and location.

James [Signature]

2 Enclosures:
Status Reports for Ruby Springs & Krumbo Allotments dated 4/7/67

cc:
DM, Burns
Director, PSC
Enclosed are three copies of the revised manuscript of the range training guide by August L. Norway and two sets of 49 Kodachrome slides, and accompanying descriptions.

Gus has shortened and simplified the manuscript and to some extent changed the style of presentation along the lines you suggested. But the writeup is still basically a guide and reference for instructors and range managers as originally planned, rather than a colorful flowing account of grazing management. Gus feels satisfied it will well serve the purpose for which it was intended.

The comments on your other suggestions as follows (page numbers below refer to the earlier draft):

Page 75: Stocking rate and grazing capacity

We know of no actual or other similar data on this subject.

Page 79: Speculation on livestock handling.

The principal points in this section are supported by studies by Smolik (1960) and other workers. Several articles on rotation grazing in the January 1951 issue of the Journal of Range Management, for example, have a bearing on this point. No attempt was made to document all pertinent points developed in the guide.

Page 81: Forced rotation of animals among pastures during the green season is undesirable under rest-rotation grazing and should be avoided if possible.

Page 81: The wording on salting has been softened. Under rest-rotation grazing there is no need to try to distribute animals on the range so as to lighten grazing on certain areas. Salting is not used as a livestock distribution measure under this grazing system, but as an animal husbandry practice that bears on the well-being of the animals. Whether salting is considered a livestock distribution factor or an animal husbandry measure has--as you know--important practical management implications.
Pages 46, 71, and 72: Suggested changes were made.

Several people, including some from universities have inquired about the availability of a set of color slides illustrating some of the more significant points of rest-rotation grazing. Gus believes the enclosed basic set of 49 slides will serve this purpose. Please let us know if you favor distribution of this material outside the Forest Service and the Bureau of Land Management. If so, to whom and how should the material be made available? Cost of reproduction of a slide is 20 cents or $9.80 a set.

Enclosures
Memorandum

To: Lee Laitala, District Manager, Miles City

From: A. L. Hormay, Range Conservationist

Subject: Pierce Rest-Rotation Grazing System

April 13, 1967

This is in reply to your April 6, 1967 memorandum on the Pierce grazing allotment.

I know you appreciate that it is difficult, if not impossible, for me to make specific and meaningful suggestions on a grazing formula because of my lack of knowledge of the local situation, both from the standpoint of the range and the needs of the stockman. The best I can do in most cases is to point to principles of management. Moulding the specific grazing formula for a range is the hardest job and requires considerable study and analysis, both of the requirements of the range and the needs of the permittee. Only the range manager is in a position to do this. So if some of my suggestions appear out of line you can understand why.

From your descriptions there is little doubt that Andropogon scoparius and the various browse species you mention are important on the Pierce allotment and should be considered as key species. The species that depend on seed for reproduction pose the most difficult management problems.

The spread of one or two months between seed-ripe time of early maturing and late maturing species introduces a complication. It is not possible to get seed of all these species trampled into the soil reasonably soon after seed-ripe fall with only one treatment designed for the purpose as under your plan.

My suggestion is to set up two treatments to accomplish seed trampling; one for early maturing species—treatment C in my proposal, and one for late maturing species—treatment B. The date grazing is started in treatment C is determined by the date seeds ripen on the latest
maturing "early" species and in treatment B by the date seeds ripen on the latest maturing "late" species.

Treatments B and C may be interchanged in which case you have essentially your original formula except that grazing in treatment B would start nearer August 1, and in treatment C sometime after September 1, depending on seed-ripe date of the latest maturing "late" species.

Grazing in treatment E, as you know, will reduce available old growth the following spring in treatment A. Many stockmen prize this old growth highly in springtime. From your figures it seems that you may have enough capacity to carry present numbers in three pastures in which case you could do without grazing in treatment E. Other alternatives are: 1) Graze in the pasture receiving treatment E last and for as short a time as possible. 2) Move treatment E in between treatments A and B. This leaves only one year of rest for seedling establishment, however.

Be sure to settle on a grazing formula that minimizes livestock handling and is practical from the stockman's point of view as well as one that meets range requirements. This formula will not be ideal in all respects but will be a compromise.

I slipped up on the AUMs/pasture calculation. The 640 AUMs/pasture represents 66.6 percent capacity rather than 100 percent as I indicated. I picked up the wrong figure from my scratch sheet. The calculation for AUMs/pasture is:

\[
\frac{38.4\%}{100.0\%} : \frac{1845}{x} = \text{AUMs (allotment)}
\]

\[
x = \frac{184500}{38.4} = 4805 \text{ AUMs (allotment)}
\]

Pasture capacity (100%) = \[\frac{4805}{5} = 961 \text{ AUMs}\]

Pasture capacity (66.6%) = 961 x 66.6 = 640 AUMs

A. L. Hormay

c: State Director, Montana
Denver Service Center, Attn: 712a
AIRMAL

Memorandum

To: 

R. D. Nielson, State Director, Utah

From: 

A. L. Hormay, Range Conservationist, Berkeley

Subject: Rest-Rotation Planning - 50-Mile Mountain

April 18, 1967

I should be glad to visit the 50-Mile Mountain allotment on the Kanab District and help develop grazing plans for the area. You indicate a week long trip about June 1 is being planned. I am traveling in Nevada the week of June 5, but am not committed the week before or the two weeks following, from June 12-23.

Kindly let me know whether the trip to 50-Mile Mountain can be worked into these free time periods, and where you would like me to report.

A. L. Hormay
April 19, 1967

Memorandum

To: Rex D. Colton, District Manager,
   Worland
From: A. L. Hormay, Range Conservationist,
      Berkeley
Subject: Rest-rotation Grazing Plans

I'd appreciate reviewing all new rest-rotation grazing plans as they are developed. Please let me see them just as soon as you come up with the grazing formula and before you begin to talk about the plan in detail with the permittee. A field trip to some of these allotments on my part even, before you get deeply into planning, would probably save considerable time and I hope prove productive.

cc: State Director, Wyoming
    Denver Service Center

ALHormay.1kn
Memorandum

To: Raymond T. Peterson, Area Manager, Elko District
From: A. L. Hormey, Range Conservationist, Berkeley

Subject: Rest-rotation Grazing - Zaga Allotment

This is in reply to your comments of April 11, 1967 on the Zaga allotment. I am not sure how the Zaga pastures were grazed last year; whether as I suggested, in one set of two pastures and another set of four, or in some other way. Your comments on the use of crested wheatgrass no doubt refer to a 4 or more pasture setup.

The solution to the wolf plant problem is heavier stocking. This automatically shortens the season in any pasture. However, wolf plants can be controlled effectively only under treatment A—early grazing. So stocking should be governed by the reactions obtained in the field getting treatment A. At a given stocking level, the fields getting treatments D and E will be less heavily used—more plants will be left ungrazed—than under treatment A.

I should operate a few years under the present plan and see how crested-wheatgrass and the native vegetation react to the rest periods now provided. Then you will be in a better position to judge whether you can do with less rest or not.

It is difficult for me to advise on matters of this kind without seeing the range and being filled in on the whole situation. Perhaps I can visit the area with you this summer sometime.

cc: State Director, Nevada
    Portland Service Center
Airmail

Memorandum

To: Nyles L. Humphrey, District Manager, Malta

From: A. L. Hormay, Range Conservationist, Berkeley

Subject: Rest-rotation grazing - Nichols Coulee cattle allotment

April 19, 1967

I was sorry to read about your difficulties on the Nichols Coulee allotment in Harry Cosgriffe's studies file report of March 28, 1967. I am writing you to reassure you that your proposed change in the grazing formula is in the right direction. The stockmen's points appear to be valid from a stock production standpoint, and I don't see any reason why the grazing formula should not be adjusted as you have done to minimize adverse effects on livestock as much as possible.

Your proposed grazing formula, as I understand it, is shown on the attached sheet (Formula 1). This setup provides for old growth in the pasture grazed in springtime, but still requires rounding-up and moving livestock across a pasture two years out of four. Also, I rather doubt you will have enough capacity in one field to carry the livestock from April 1 until July 25 (seed-ripe time), almost four months. I suggest you modify the formula to read as shown in Formula 2.

Under Formula 2, livestock in all instances would move to an adjoining pasture eliminating the cross-pasture move and unnecessary livestock handling. Also the pasture receiving treatment B would be opened to grazing as soon as it appeared the livestock needed the feed. This probably would be by June 20, about one-third the way through the season.

Under this formula, all the stock would be put into the pasture receiving treatment A at the beginning of the season, April 1. On June 20, or thereabouts, the pasture receiving treatment B would be opened to use. The livestock would then graze in both "A" and "B" with gates open until seed-ripe time. Then the pasture...
receiving treatment C would be opened. From this time on until the end of the season, the livestock could be allowed to graze freely among the three pastures open to use or in any of these pastures the stockman wishes.

This formula and the one you propose adequately safeguard the resource yet provides the flexibility needed for practical livestock production.

Do not strive for any particular degree of forage use in any of the pastures. The use will be what it will be when pastures are simply opened to use as I described. According to your use data, the average use in the three grazed pastures should average 53 percent in the average year under present stocking.

I hope I have a fairly realistic view of your situation. This is difficult to obtain without observing the range and talking to you and the stockman directly. I'm sure you will get more favorable livestock responses in 1967.

Attachment

cc: State Director, Montana
Denver Service Center
Grading Formula 1

A M J J A S O N

Sand ripe

Formula 2

A M J J A S O N

Nichols Cooke, Malta, Montana

Berkeley, California
April 17, 1967
Hornsey
Memorandum

To:       James F. Doyle, State Director
From:    A. L. Hormay, Range Conservationist

Subject: Training - Rest-rotation Grazing Management

I have contacted Nevada and Idaho about joining you in a range training session this summer. Both states are interested. They will contact you shortly to work out the time and place of the meeting.

The meeting will last 5 days. One day will be spent in the field on a suitable allotment appraising range responses. The allotment should be under rest-rotation grazing management, if possible, and should have meadow, bunchgrass and browse types. I will look at any candidate allotments the group selects for suitability and make the necessary on-the-ground preparations for the class. I should like the help of one man for a week on this preparation.

I am particularly interested in having men directly responsible for planning range management, such as area and district managers, well represented at the meeting. In most cases it will take at least two training sessions for a trainee to get the full significance of rest-rotation management and to acquire sufficient know-how to apply this type of management with facility in practice. So there is room for trainees that have taken the course before to attend again if they desire.

I will not be available to conduct the school before mid-August. Anytime thereafter will be satisfactory. I hope you can settle on a date and place for the meeting in the coming month so I may plan definitely. I will outline the instruction and materials needed for the meeting after I hear from you.

cc:      Director, Nevada State Office, NM
         Director, Idaho State Office, NM
         C. D. Fulcher, WA, (712a)
         Portland Service Center

ALHormay:Lkn                         A. L. Hormay
Mr. A. L. Hormay  
California Forest Range and Exp. Station  
Berkeley, California

Dear Mr. Hormay:

You probably do not remember meeting me, however, met you at the BLM office in Worland. You gave a nice presentation on the "Rest Rotation Grazing Management System".

I have done considerable work on curl leaf mahogany communities located on the west side of the Bighorn Mountain range. This has consisted of annual growth measurements, condition evaluations, mapping of distribution and density measurements.

At the present, I am attempting to correlate Peet's group studies, browse density measurements per acre and pounds of browse removed per acre with wildlife potential of the region.

I would appreciate a copy of method for estimating grazing use on Bitterbrush and would also appreciate any suggestions or comments that you might want to offer concerning this determination of pounds of browse removed per acre.

Please examine the enclosed table. Thanking you, I am

Yours truly,

Calvin L. King  
Box 952  
Thermopolis, Wyoming 82443
**Table**

**SUMMARY OF PELLET GROUP COUNTS TAKEN ON KEY RANGE SITES IN SPRING OF**

Management Area: 

Key Range Area: 

Game Species: 

<table>
<thead>
<tr>
<th>Transact No.</th>
<th>By Herd on Winter Range (13 x Number of Days) *</th>
<th>Average PG/A * By After Winter Use = Acres Per Animal Use Per/Acre</th>
<th>Area In Acres x</th>
<th>Total No. Animal/Days</th>
</tr>
</thead>
</table>

Total

Average

**Vegetative Type**

<table>
<thead>
<tr>
<th>Transact No.</th>
<th>Open</th>
<th>Brush-Grass</th>
<th>Pine</th>
<th>Density Per/Acre %</th>
<th>Pounds Browne Removed P/Acre</th>
<th>Trend Upward Downward</th>
<th>Current Condition Rating</th>
</tr>
</thead>
</table>

Total

Average
Airmail

Memorandum

To: G. D. Pulehar, Chief, Range Management Staff, Wash., D. C.

From: A. L. Hornery, Range Conservationist, Berkeley

Subject: Read this report.


2. Summarized replies from BLM Districts on the status of pilot rest-rotation grazing allotments. See attached report.

3. Answered management questions on the following allotments:
   a) Pierce, Miles City District, Montana
   b) Nichols Coulee, Malhe District, Montana
   c) Zaga, Elko District, Nevada

4. Started programming a range training school for Oregon, Idaho and Nevada later this year.

5. Wrote State Director Neilson, Utah about a trip to the 50-Mile allotment, Kanab District. Awaiting reply on suitable time for the trip.

6. Spent about a week on the following research projects:
   a) A method of appraising range trend under rest-rotation grazing.
   b) Effect of logging and forest regeneration on range grazing capacity.

The trip to the Wells Meadow bitterbrush allotment near Bishop, California is now definitely scheduled for May 1 to 3.

Attachment

A. L. Hornery
Status of Rest-Rotation Grazing Program
April 27, 1967

In reply to Instruction Memorandum No. 67-119 (March 21, 1967), the Districts furnished information on 71 test rest-rotation grazing allotments. Forty-six of these are now under management. The Districts plan to place the remaining 25 under management in the next 4 years—14 in 1967, 8 in 1968, 2 in 1969 and 1 in 1970. Plans are being prepared for still other allotments. Some of these will probably be put in effect as early as 1967 or 1968.

A total of 38 allotments have now been under management a year or longer—26 for one year, 9 for two years and 1 for four years. The Districts commented on reactions obtained to date on 19 of these 38 allotments. In 17 cases, range and livestock responses have been favorable and permittees were pleased with initial results.

The Flat Creek allotment, Winnemucca District, Nevada, was the first to be put under management in the test program and has been operating 2 years. Comments by the District on this allotment follow.

"The system has provided increased forage each year. The livestock operator in this allotment is very pleased with the results. He has feed from the previous year he can use early in the spring. His calf crop has increased from 8.4% to 87% and weaning weights from an average 409 lbs. to 467 lbs. He claims he handles his livestock less, has better control for inspection and reduced costs of operation. He has flexibility in turnout dates and claims his cattle come off the range in better condition. The system has provided very good soil stabilizing conditions. In fact, two reservoirs used for stock water which filled from run off have failed to collect any water for the last two years due to the increased plant cover on the area. This, then, presents a problem in that particular area."

In one case unsatisfactory responses with livestock were reported and in another case there was question of whether anticipated improvement in the range could be realized. These negative reactions are the result mainly of inadequate understanding of rest-rotation management. Properly designed rest-rotation management cannot fail to yield good results. Management on practically all of the allotments now in operation could be improved to some extent.

Good results depend above all on a clear understanding of rest-rotation management principles, and on planning of management by personnel who have had training in this subject.
Some ways in which difficulties in the test program, to date, could have been minimized are:

1. Avoidance of conventional grazing practices and methods that are contrary to rest-rotation management principles.

2. Greater consideration of multiple uses in planning management.

3. More adequate discussions with State Game and Fish Departments on objectives of management prior to planning.

4. More adequate discussions with permittees on their mode of operation and their needs and desires on the range before finalizing management plans.

5. Greater help of range operators in locating new fences, water developments and other range management facilities.

Neighboring stockmen and others interested in wildland resources are watching the test allotments closely. The educational and demonstration value of these allotments will rise sharply with each passing year, and it is important that the best practical forms of rest-rotation grazing management be used.

Further training of Bureau personnel in rest-rotation management is urgently needed. For most rapid progress, men directly concerned with planning management and making policy should attend training classes first. Oregon, Nevada and Idaho are planning a training session for this summer.