

UNITED STATES GOVERNMENT

*ALH*  
**Memorandum**Forest Service San Francisco 11, California  
2210TO : Pacific Southwest Forest & Range  
Experiment Sta. Joe Woolfolk

DATE: November 1, 1960

FROM : Range &amp; Wildlife Management

SUBJECT: Analysis and Plans

Attached is a request from the Sequoia N. F. for assistance from Gus Hormay in developing a system of range management for the Sprague Operating area and the Fish Creek Allotment.

Although this request was received after the due date we hope Gus can work it into his schedule.

cc - Sequoia N. F.

*Lloyd L. Bernhard*

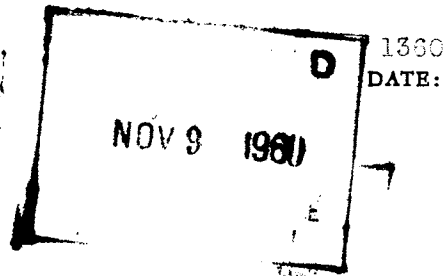
*Phoned & left memo with  
Mr. Raach, Adm. Off. that  
ALH will be at Sequoia  
8am 11/14*

## Office Memorandum • UNITED STATES GOVERNMENT

TO : E. J. Woolfolk, Chief  
Division of Range Research

FROM : Lynn Kader  
Center Leader

SUBJECT: Meetings



With regard to the Harvey Valley Winter Meeting December 8, I would like to catch a ride down to Santa Barbara with you. Had thought I might come down with some of the fellows from the Lassen, but Pearl would like to do some shopping in the Bay Area so I'll probably drive my personal car to Berkeley.

A few pertinent questions: When do you plan to leave for Santa Barbara? Return to Berkeley? Do you have reservations in Santa Barbara? If so, where? If not, would Miss Matson include me when she makes reservations?

Incidentally, I was talking with Bosworth this morning and he has heard rumors of a meeting, but has received no formal notice from Loman. Told him I had gotten the date from you and assumed this would be the only notification I would get.

On another matter, the attached copy of a memo from Connaughton seems to give an official statement of Gus' present position. So far as I know there has been nothing in the local paper concerning his move or present work. Possibly a Press Release from Berkeley along the line of this memo might be worthwhile to let people here know of Gus' new position.

*Handwritten notes:*  
 1360  
 11/7  
 in R.C.  
 Motel-Res.  
 Lynn Kader

Forest Service San Francisco 11, California

2210

To : Forest Supervisors

Date: September 21, 1960

From : C. A. Connaughton, Regional Forester, By

Subject: Analysis and Plans

Recently we received a memorandum from the Washington Office as follows:

"In order to further the application throughout the West of results from range research, Mr. A. L. Hormay of the Pacific Southwest Station has been reassigned to a position which allows him to spend approximately half of his time in range extension work. The other half of his time will be devoted to research, primarily in the refinement of the rest-rotation system of grazing management and its adaptation to different range types and conditions.

Mr. Hormay, then, is available to the western regions for consultation on national forest range problems and their solutions, including recommendation of practices for range improvement, assistance in establishing the rest-rotation or other grazing systems on allotments, and evaluating results of specific grazing systems. We believe this is a particularly good opportunity for you to obtain some help in the establishment and management of demonstration allotments.

In order to facilitate scheduling of Hormay's visits during the balance of C. Y. 1960, requests for his assistance should be made directly to the Pacific Southwest Station as soon as possible. Beginning in C. Y. 1961, requests for his assistance should be made through the Washington office to allow full consideration of western-wide needs and equitable distribution of Hormay's time. Considerable latitude will be allowed so that the demands and desires of the regions can be met in furthering the range management effort."

We feel forests should take advantage of this situation and secure Gus Hormay's help when needed. Items we feel that Gus would be of assistance on are:

1. Investigating the possibility and cost of setting up rest rotation management on particularly difficult problem allotments.
2. Recommendations for the kind of systems and design of equipment needed to check utilization of ranges under present management.
3. Recommendations as to the system of range management practical for allotments not suitable for the rest-rotation system of range management.
4. Recommendations as to the possibility of given areas for spraying, seeding and other cultural improvement treatments.

UNITED STATES GOVERNMENT

*Memorandum*PACIFIC SOUTHWEST  
FOREST AND RANGE EXPERIMENT STATION  
P.O. Box 245, BERKELEY 1, CALIFORNIA

4200

DATE: November 10, 1960

TO : E. J. Woolfolk

FROM : A. L. Hormay

SUBJECT: Cooperation - BLM

Reference is made to the March 29, 1960 request by the Bureau of Land Management, Portland for assistance in selecting demonstration ranges in Oregon and prescribing suitable management systems for them. Following is a report of the trip I made in response to this request.

I met George Lea, BLM, Portland in Lakeview, Oregon the morning of July 18. With George and other BLM personnel I visited 4 cattle allotments through Thursday. On Friday we returned to Lakeview and enroute took a general look at the character and condition of ranges in the Fort Rock and Silver Lake areas. The route travelled, approximate location of the four allotments, and the people present in the party while we were on the allotments are indicated in the table on the next page.

We spent 3 to 5 hours on each allotment. In this short time it was not possible to get enough information for specific management recommendations for each allotment. However, rest-rotation grazing is well suited to the type of vegetation found on these allotments and to many other ranges in southeastern Oregon. In the main this is sagebrush, bunchgrass country. Precipitation ranges from 8 to 15 inches annually.

Attached is a description of a general 5 unit rest-rotation grazing plan that should produce good results on these allotments. There appears to be enough grazing capacity on each of the allotments to initiate this plan of management with the number of cattle presently grazed on the range. I recommend application of a specific form of this plan to the allotments finally selected for demonstration. I will be glad to help work up the specific plans.

There are good artificial reseeding and sagebrush control chances on each allotment. These, of course, can be worked on within the framework of the grazing system without disruption of planned management of grazing.

Some of the allotments would make better demonstration projects than others by virtue of location, potential for improvement, and existence of usable management facilities on the ground at the present time. I would rate them in order of suitability as follows:

ITINERARY - SOUTHEASTERN OREGON

<u>Date</u>	<u>Travel Points</u>	<u>Allotment Name</u>	<u>Personnel in party</u> <u>1/</u>
July 18	Lakeview AM Adel (near) Burns PM	O'Keeffe	Henry O'Keeffe, permittee Edward Burgess, Mgr. Lakeview District
July 19	Burns AM Diamond (near) Jordan Valley P M	Ruby Springs- Moon Hill	Leon Thompson and son, Nevin, permittees Howard Delano, BLM, Portland Warren Sandau, Range Technician, BLM, Burns Dist.
July 20	Jordan Valley AM Jordan Valley (near) Burns PM	Lodge (on Con Creek Unit)	Edward Holbrook, Range Technician, BLM, Vale District
July 21	Burns AM Hampton (near) Bend PM	Jackson	Mr. Jackson and son, permittees District Manager, Prineville District
July 22	Bend AM Fort Rock Silverlake Lakeview PM	- -	Rube Long, a permittee

1/ George Lea was present throughout the trip.

1. Jackson
2. Ruby Spring-Moon Hill
3. Lodge
4. O'Keefe

Some reasons for this rating are indicated in the following tabulation.

	<u>Jackson</u>	<u>Ruby Spring</u>	<u>Lodge</u>	<u>O'Keefe</u>
Potential for improvement	High	High	Med	Fair
Accessibility	Ex	Good	Fair	Fair
Amount of existing management facilities	Mod	High	Low	Low
Ease of management	High	Mod	High	Low
Range of problems and applicability of results	Broad	Broad	Broad	Limited

These initial demonstration allotments should be located on sites that hold promise of yielding favorable results quickly and can be easily reached by interested people. I suggest the O'Keefe allotment be dropped from consideration as a demonstration area at the present time because of the many problems it presents, cost of setting it up, and the likelihood that favorable responses will be obtained slowly.

I hope this brief report is helpful in early establishment of some of these projects.

I was impressed by George Lea's and Howard DeLano's strong desire to promote more intensive management of BLM rangelands. Their knowledge of ranges, appreciation of the more important problems, and their drive and enthusiasm are bound to produce good results.



Attachment

Lynn Rader, SRC

1360 (4200)  
November 16, 1960

E. J. Woolfolk

Meetings, Harvey Valley

Everett Doman's plans to hold the Harvey Valley meeting in Santa Barbara on December 8th have been vetoed by the Regional Forester. Yesterday I discussed the matter with Lloyd Bernhard and agreed that the meeting should be held in the Bay Area and on an earlier date. Accordingly, we set the place as the Regional Office and the date December 7th. Bernhard will write a memo on the subject with copies to all interested.

We should be prepared to present all possible data from our efforts of last summer which will support the proposed agreement or any changes in procedure which we might suggest. Also, we will have to look to additional seasonal work in the future if we expect to influence the ranger's decisions.

To allow some time for checking signals perhaps you should travel to Berkeley on December 5th. It will be necessary for me to travel to Santa Barbara on the 8th, therefore, we should plan to clear everything in the previous 2-day period.

EJWoolfolk:mm

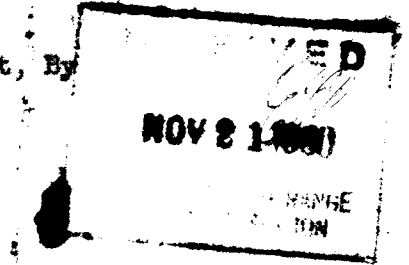
## Office Memorandum • UNITED STATES GOVERNMENT

TO : Forest Supervisor, Lassen N.F.

DATE: 1360 (2200)  
November 18, 1960

FROM : E. R. Duman, Chief, Range &amp; Wildlife Management, By

SUBJECT: Meetings



The annual conference held to review plans and work progress on the Harvey Valley Demonstrational Allotment will be held in the San Francisco Regional Office conference room (room 539) starting at 9:00 a.m. on Wednesday, December 7, 1960.

This meeting is particularly important in that we would like to thoroughly review our plan for the next 5-year period. Therefore, we feel it important that the Forest be well represented and, if possible, would like to have Supervisor Irvin Bosworth, Staffman Phil Lord, and Ranger Fred Alberice attend. Please have Lord and Bosworth bring the Forest's records on this allotment.

The Experimental Station people plan to be here and we hope to work out a revised operational plan for this allotment that will be satisfactory to all concerned.

cc: PSWF&amp;RES

*L. Radu - 11/21**Head S. Radu*



NOV 22 1960

Forest Supervisor, Lassen N.F.

1360 (2200)  
November 21, 1960

E. R. Doman, Chief, Range & Wildlife Management, By

Meetings

In our memorandum of November 18, 1960 we forgot to ask you to invite the permittees (Roney Brothers) to our meeting regarding the operational plan for the Harvey Valley demonstrational allotment. We feel it proper that you invite the Roney Brothers to this meeting.

cc: PSWF&RES

Lisa L. Burnham

Supervisor, Sequoia National Forest

4200

November 22, 1960

A. L. Hormay, Range Consv.

Extension, Grazing Management

*Sequoia*

Dear Eldon:

After returning to Berkeley yesterday, I found many things preventing my looking at the Fish Creek and other range allotments this fall as planned with Cooper Smith and you last week. Perhaps it would be better anyhow to see the Fish Creek unit, particularly, when the vegetation is growing and cattle are on the range--say next summer in July or August. Cooper outlined some interesting range management problems to me when I was in Parterville, but of course, until we look at the ground I don't know how much help I can be to you on these. I am reasonably sure some positive steps can be taken, however. Let me hear from you as summer approaches and get lots of precipitation in the meantime, but gently.

ALHormay:mm

Chief, Forest Service  
Attn: K. W. Parker, RMLWHR  
Reg. M. DeNio, RM

4200  
November 23, 1960

Keith Arnold, Director

RES

Extension, Grazing Management

The first request for Gus Hornay's services in getting rest-rotation grazing extended on western ranges since his reassignment came from the Bureau of Land Management, Portland. They asked for assistance in setting up some demonstration ranges in southeastern Oregon. Hornay made a trip to Oregon in July for this purpose. His report is attached. It is being sent you to keep you apprised of developments in the extension program.

Hornay made a similar trip to national forest ranges in eastern Oregon and another to the Modoc forest in California during the summer. Reports on these trips will be forwarded when ready.

**KEITH ARNOLD**

Attachment

ALH:ls

*AKH*

*EJW*

4200  
November 23, 1960

Everett R. Doman, ARF  
Range and Wildlife Management, RO

E. J. Woolfolk, Chief, Div. of  
Range Management and Wildlife Habitat Research

Extension, Grazing Management

The attached report is to keep you advised of some of  
the services rendered by Gus Hornway to another agency  
in his new assignment.

Attachment  
ALH:ls

4200  
November 23, 1960

Mr. Tom D. Conklin,  
State Supervisor,  
Bureau of Land Management,  
809 N. E. Sixth Avenue,  
Portland 12, Oregon.

Dear Mr. Conklin:

Reference is made to your request of March 29, 1960 for assistance by A. L. Hormay in selecting and setting up some range management demonstration areas on Bureau of Land Management lands in Oregon. As you know, in the company of Mr. George Lea of your office, Mr. Hormay completed a trip in Oregon as planned. His suggestions are included in the attached report.

We were glad to be able to help you on this matter and please let us know if we can be of any further assistance.

Very truly yours,

E. J. WOOLFOLK, Chief  
Division of Range Management  
and Wildlife Habitat Research

Attachment  
ALH:ls

EJM 11/28/60

PSW 9756

RANGE CONSERVATIONIST (RESEARCH) GS-454-12

<u>TASKS</u>	<u>STANDARDS OF SATISFACTORY PERFORMANCE</u>
1. Evaluates and interprets research.	(a) Becomes thoroughly familiar with range problems within the sphere of operation of the station. (b) Becomes full informed on the range research program of the station and the results obtained. (c) Evaluates results and draws sound conclusions for application in management of public and private rangelands. (d) Defines range problems needing research.
2. Develops and executes procedures and methods of applying research findings to use and management of wildlands.	(a) Prepares specific guides for planning and carrying out promising range management practices particularly grazing management systems. (b) Through advice helps set up demonstrations of sound range management practices. (c) Participates in development of detailed range management plans for particular ranges. (d) Through publications, lectures, and field meetings informs concerned and interested people on the application of research findings in range management. (e) Plans and carries out research on grazing management and methods of planning and appraising the results of grazing management.
3. Develops and maintains cooperative and collaborative relations with agencies, groups, and individuals.	(a) Contacts groups and individuals in land managing agencies and in range livestock circles at suitable times and informs them of research in range management in the station and the results obtained.

TASKS

STANDARDS OF SATISFACTORY PERFORMANCE

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4. Develops training programs and conducts meetings for extension of developed material.
- (b) Participates in university class lectures and other programs directed at students of range management.
  - (c) Participates with cooperators and collaborators in promoting and practicing improved range management.
  - (d) Effectively presents and supports the policies of the station and Service before all groups and individuals.
  - (e) Maintains a neat appearance and affable relations with others at all times.
- (a) Prepares a classroom and field in-Service course in range to provide background for understanding and applying grazing management systems developed by the station.
- (b) Becomes acquainted with ranges and range problems in various parts of the west to provide a basis for judging the extent of applicability of grazing systems and other range practices.

UNITED STATES GOVERNMENT

*Memorandum*PACIFIC SOUTHWEST  
FOREST AND RANGE EXPERIMENT STATION  
P.O. Box 245, BERKELEY 1, CALIFORNIA

4210

DATE: November 30, 1960

TO : E. J. Woolfolk

FROM : A. L. Hormay

SUBJECT: Extension, Grazing Management, Sequoia

Reference is made to the Sequoia Forest's memo of October 19 to the Regional Office.

I stopped at the Supervisor's office in Porterville on November 14, enroute to a meeting with the Bureau of Land Management personnel at Bishop, to find out the nature of the forest's request. They are exploring possibilities of getting more intensive management on their range allotments. They are particularly interested in two areas at the present time--the Fish Creek Allotment on the eastside which consists largely of mountain meadows at higher elevations and sagebrush at lower elevations and a combination of 3 or 4 ranges along the Kern River on the southern end of the forest in the annual-semi-desert type. We tentatively agreed to look at these ranges yet this fall. However, I have since suggested that the trip be postponed until next July or August when the range and problems could be seen better. Next developments, therefore, will probably come sometime next summer.



Attachments



UNITED STATES GOVERNMENT

*Memorandum*PACIFIC SOUTHWEST  
FOREST AND RANGE EXPERIMENT STATION  
P.O. Box 245, BERKELEY 1, CALIFORNIA

4200

DATE: November 30, 1960

TO : E. J. Woolfolk

FROM : A. L. Hormay

SUBJECT: Extension, Grazing Management

Reference is made to the memorandum of October 13, 1960, from the Regional Office by Mr. Bernhard in which he calls attention to a request for help on developing a grazing system for the Tucker cattle allotment, on the Modoc Forest.

On November 17 and 18 I met Elmo Brough, ranger Doublehead district, and Don Euler, R&WL staff, at the Dry Lake Guard Station to discuss management plans for the Tucker cattle allotment and other matters.

Tucker Cattle Allotment

The forest tentatively planned to set up the Tucker allotment under a 4-unit rotation grazing plan and has fenced some of the range accordingly. Considerable artificial reseeding and sagebrush spraying is also planned for the area. The estimated increase in grazing capacity expected from this cultural program is on the order of 60 to 70 percent. This increase is expected to be realized in the reasonably near future. A quick analysis of the situation showed that the allotment is better suited to a 5-unit grazing plan than a 4-unit one.

The original plan called for cutting the allotment roughly into quarters with two fences, one running north and south and the other east and west. The north and south fence and the east-west division fence on the west half of the allotment are nearly completed. The east half of the allotment has not yet been divided. Based on the anticipated increases in grazing capacity from cultural work, the allotment is best divided into 5 units, 2 on the west half as now fenced, and 3 on the east half. These units will have approximately equal grazing capacities when the cultural program is completed. There will be no difficulty managing the allotment under a 5-unit rest-rotation plan as additional grazing capacity is developed. The allotment appears to have adequate capacity at the present time for the numbers of cattle now permitted. I recommend using the plan described in the attached write-up.

The forest is still faced with the problem of developing adequate water on the allotment and finding the best way to split the east half into three units. The best grazing season can be determined after a season or two of observations on the growth and development of the principal plants on the range. In the meantime and until one or more units is placed under the management planned, the present season can be continued.

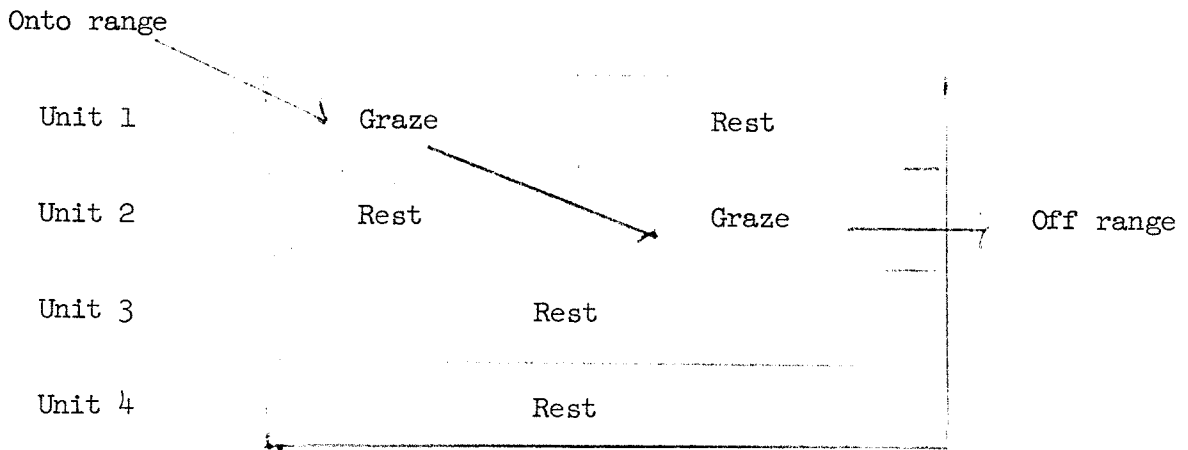
Potter Pasture Cattle Allotment

This allotment is already fenced and being managed under a 4-unit rotating grazing plan in which 3 units are grazed and one rested each year. With some changes in the use of the 4 units and adjustment of the grazing season, I believe improvement of the range could be speeded up and the available forage more efficiently used resulting in greater livestock production.

I suggest using a grazing plan in which two units are grazed and two rested each year to facilitate improvement of the range at the maximum rate. Four treatments would be applied to each unit over a 4-year cycle as follows:

- 1st year    Graze 65 percent up till seed ripening time (1st half season)
- 2nd year    Graze 65 percent after seed ripening (2nd half season)
- 3rd year    Rest seasonlong
- 4th year    Rest seasonlong

Movement of cattle during any given season would be as follows:



During a 4-year cycle the four units would be grazed as shown below:

	Unit 1	Unit 2	Unit 3	Unit 4
1st year	Graze 1st half	Graze 2nd half	Rest	Rest
2nd year	Graze 2nd half	Rest	Rest	Graze 1st half
3rd year	Rest	Rest	Graze 1st half	Graze 2nd half
4th year	Rest	Graze 1st half	Graze 2nd half	Rest

There is adequate grazing capacity in Potter Pasture to operate this plan.

The grazing season on the allotment can be 4 to 4.5 months long and should start about the time the flower stalks of Festuca idahoensis or Sitanion hystrix are in mid-boot. A suitable season can be determined next year after observations are made on the growth and development of the vegetation. There is considerable leeway in selecting a season that will best fit the range and desires of the permittee.

#### Sheep Range Problem

Some basically perennial bunchgrass ranges now supporting a high proportion of annuals and presently grazed by sheep (and cattle?) on the Doublehead district are becoming less weedy and progressively poorer for sheep grazing under present management. The question has arisen whether this kind of range could be managed so as to improve and maintain it for sheep grazing. Based on the principles of rest-rotation the answer is yes. Lacking actual experience with a grazing plan I can only suggest one on theoretical grounds.

Basically the problem is to encourage the growth of annuals and discourage the growth of perennials (grasses in particular) up to a point and at the same time maintain an adequate vegetation cover on the soil. This can be done under dual use of the range where sheep grazing is manipulated to encourage annuals and cattle grazing to discourage perennials. It is assumed that on the whole the annuals develop and seed earlier than the perennials. Therefore, in any given year, the range could be grazed in the forepart of the vegetation growing season by sheep and latter part by cattle. These two grazing seasons may overlap.

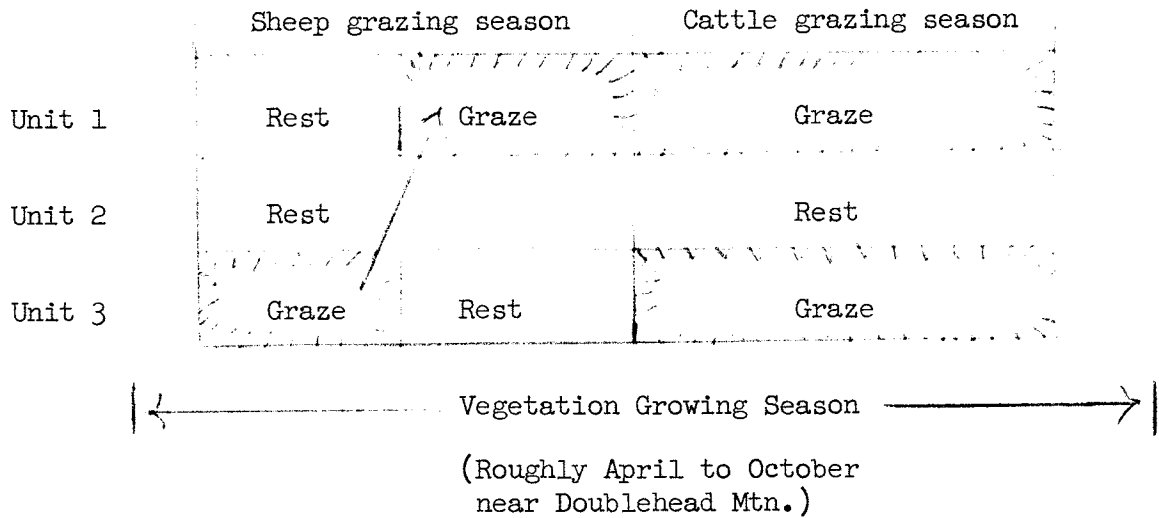
To get desired results the range would have to be divided into 3 units. The grazing treatments applied to each unit during a three-year period during the sheep grazing season would be as follows:

- 1st year. Rest until seed of principal annual plants ripen. Then graze remainder of season.
- 2nd year. Rest season long.
- 3rd year. Graze from beginning of season until seed of principal annual plants ripen.

During the cattle grazing season each unit would be used as follows:

- 1st year. Graze seasonlong
- 2nd year. Rest seasonlong
- 3rd year. Graze seasonlong

Use of all three units in a given year would pattern out as shown below:



In this example sheep are grazed in Unit 3 the first half of the season and in Unit 1 the second half. Cattle are grazed in Units 1 and 3 throughout the cattle grazing season. Half the permitted numbers are grazed in each. In this plan two of three units are grazed and one rested each year. From 40 to 50 percent of the total available forage on the range is utilized.

If it is found desirable or necessary to overlap the sheep and cattle grazing seasons but objectionable to have both classes of livestock on the range at the same time, then the cattle grazing plan can have the same form as the sheep grazing plan.

Vegetation use during grazing periods by both sheep and cattle should be on the order of 60 to 80 percent.

This suggestion is outlined here in theoretical form and may be adjusted or compromised in one way or another in specific applications. The Modoc Forest may wish to try this plan.

Attachment

*P. L. Hervey*