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UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
REGION SIX
ALBUQUERQUE, NEW MEXICO

GUIDE

TO RANGE FORAGE APPRAISAL

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J. L. LANTON

PREVENTING MISUSE OF THE RANGE
IS THE ESSENCE OF GOOD RANGE MANAGEMENT

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GUIDE TO RANGE FORAGE APPRAISAL

BY

J. L. LANTOW

FORAGE PLANTS STUBBLE HEIGHTS PROVIDE A SIMPLE, BROAD, GUIDE TO RANGE OPERATORS FOR LIMITING FORAGE USE SO PLANT VIGOR AND OPTIMUM PRODUCTION CAN BE MAINTAINED OR INCREASED. FROM A RANGE CONDITION AND FORAGE APPRAISAL, HE CAN WORK OUT A SATISFACTORY FLEXIBLE RANGE USE PROGRAM.

THE SUGGESTED FOLLOWING STEPS AND INFORMATION ARE HELPFUL WHEN ASCERTAINING CONDITIONS AND MAKING ADJUSTMENTS ON THE RANCH. ADDITIONAL HELP CAN BE SECURED FROM THE SOIL CONSERVATION SERVICE OFFICE.

1. EXAMINE REPRESENTATIVE PARTS OF EACH PASTURE.

2. NOTE KINDS OF FORAGE, THEIR DEGREE OF USE, AND THE CONDITION OF VEGETATION AND SOIL. COMPARE THIS YEAR'S FORAGE PRODUCTION WITH LAST YEAR'S AND WITH THAT WHICH IS CONSIDERED NORMAL FOR THE AREA.

3. MAKE AN ESTIMATE OF THE PERCENTAGE OF PROPER USE IN THE FALL OR SPRING (ACCORDING TO AREA) BASED ON THE ABOVE CONSIDERATIONS AND THE FOLLOWING TABLE:

RECOMMENDED AVERAGE MINIMUM STUBBLE HEIGHT

<u>USE HEIGHT IN INCHES</u>	<u>COMMON NAME OF GRASS</u>	<u>USE HEIGHT IN INCHES</u>	<u>COMMON NAME OF GRASS</u>
2 TO 3	HAIKY GRAMA ROTHROCK GRAMA TEXAS TIMOTHY BLUE GRASS BLUE GRAMA -- WHEN 2 IN. OR LESS, 50% CAN BE USED CURLY MESQUITE	4 TO 5	MOUNTAIN MUHLY SAND DROPSEED MESA DROPSEED SIDE-OATS GRAMA TOBOSA GRASS INDIAN RICEGRASS
3 TO 4	GALLETA GRASS BLACK GRAMA CRESTED WHEAT SEDGES WESTERN WHEAT VINE MESQUITE	6 TO 7	ARIZONA FESCUE SLENDER WHEATGRASS DEER GRASS

(SAMPLE SHEET REFERRED TO ON PAGE 7)
FORAGE PRODUCTION, UTILIZATION AND RANGE MANAGEMENT CHECK SHEET

NAME _____ ADDRESS _____ AREA _____

ITEM _____ PASTURE NUMBER _____

ACRES _____

1. AV. CARRYING CAPACITY AN. MOS. _____

2. PCT. OF RANCH CARRYING CAPACITY _____

3. PCT. NORMAL FORAGE PRODUCTION _____

4. WEIGHTED PCT. NORMAL RANCH C.C. _____

FIRST CHECK _____

DATE _____ EXAMINER _____

5. DATES OF USE _____

6. MONTHS USED TO DATE _____

7. NUMBER OF STOCK, COW UNITS _____

8. USE TO DATE, COW MONTHS _____

(SAMPLE SHEET REFERRED TO ON PAGE 7)

FORAGE PRODUCTION, UTILIZATION AND RANGE MANAGEMENT CHECK SHEET

NAME _____ ADDRESS _____ AREA _____

ITEM	PASTURE NUMBER		
ACRES			
1. AV. CARRYING CAPACITY AN. MOS.			
2. PCT. OF RANCH CARRYING CAPACITY			
3. PCT. NORMAL FORAGE PRODUCTION			
4. WEIGHTED PCT. NORMAL RANCH C.C.			
<u>FIRST CHECK</u> DATE _____ EXAMINER _____			
5. DATES OF USE			
6. MONTHS USED TO DATE			
7. NUMBER OF STOCK, COW UNITS			
8. USE TO DATE, COW MONTHS			
9. PERCENT OF PROPER UTILIZATION			
10. RECOMMENDED USE, AN. MOS.			
11. REMAINING USE, AN. MOS.			
12. MONTHS REMAINING			
13. AN. U. FOR PROPER REMAINING USE			
<u>SECOND CHECK</u> DATE _____ EXAMINER _____			
14. TOTAL USE, AN. MOS.			
15. PERCENT OF PROPER UTILIZATION			
16. WEIGHTED PCT. UTIL. OF RANCH			

INSTRUCTIONS

ITEM 2 = ITEM 1 FOR EACH PASTURE ÷ THE SUM
OF ITEM 1 FOR ALL PASTURES

ITEM 4 = ITEM 3 X ITEM 2

ITEM 5 = DATES OF USE AFTER THE BEGINNING
OF PERIOD OF GROWTH

ITEM 8 = ITEM 6 X ITEM 7

ITEM 10 = ITEM 8 ÷ ITEM 9

ITEM 11 = ITEM 10 - ITEM 7

ITEM 13 = ITEM 11 ÷ ITEM 12

ITEM 16 = ITEM 15 X ITEM 2

(NOTE: THE REVERSE SIDE OF THIS SHEET CONTAINS SPACE FOR COMMENTS ON MANAGEMENT, REVEGETATION, EROSION, NEEDED STRUCTURES, ETC., ON FIRST AND SECOND CHECKS.)

4. DESIRABLE FORAGE SPECIES SHOULD BE THE MAIN BASIS FOR APPRAISAL. THE TIME AND DEGREE OF USE OF THE PASTURE SHOULD BE DETERMINED BY SUCH FORAGE PLANTS.

5. THE PROPORTION OR PERCENT OF GRASS SPECIES EATEN IN A MIXED GRASS STAND WILL DEPEND UPON THEIR RELATIVE PALATABILITIES. THE MOST DESIRABLE SPECIES SHOULD BE THE KEY OR GUIDE POST FOR PROTECTION.

6. CHECK THE TABLE ON PAGE 6 FOR CONVENIENCE IN ARRIVING AT THE NUMBER OF ANIMAL UNITS REPRESENTED BY THE VARIOUS KINDS AND CLASSES OF LIVESTOCK ON THE RANGE.

7. ON YEARLONG RANGES, THE FOLLOWING ITEMS ARE IMPORTANT:

A. IN THE FALL, AFTER COMPLETION OF GROWTH, A 25% TO 30% OF PROPER USE INDICATES NO CHANGE IN LIVESTOCK NEEDS TO BE MADE. SOME PASTURES WILL BE USED HEAVIER; IF SO, OTHER PASTURES SHOULD BE USED LIGHTER.

B. A SPRING CHECK, BEFORE GROWTH, SHOULD SHOW NO OVERGRAZING.

C. MID-SEASON OBSERVATIONS ARE DESIRABLE TO NOTE THE PRODUCTION AND USE OF FORAGE WHICH MAY DETERMINE CHANGES IN PASTURES OR TIME OF MARKETING.

D. NO PASTURE, AT ANY TIME, SHOULD SHOW MORE THAN 100% OF PROPER USE, BASED ON THE STUBBLE HEIGHT TABLE.

ANIMAL UNIT CONVERSION TABLE

CATTLE	HORSES	SHEEP *	GOATS *
1.3	1.25	1.3	1.3
BULLS	ABOVE 3 YRS.	RAMS	BUCKS
COWS, WITH OR WITHOUT CALF	2 YR. OLDS	EVES	DOES
1.0	1.0	1.0	1.0
YEARLINGS	YEARLINGS	YRLGS.	YRLGS.
.6	.75	.6	.6

* DIVIDE BY FIVE TO CONVERT TO ANIMAL UNITS

#3003

8. ON SEASONALLY USED RANGES, THE FOLLOWING CHECKS NEED TO BE MADE.

A. AN INSPECTION IN THE SPRING TO DETERMINE WHEN THE SOIL WILL BE IN CONDITION AND THE VEGETATION SUFFICIENTLY ADVANCED TO ALLOW GRAZING.

B. MID-SEASON OBSERVATIONS ARE DESIRABLE TO NOTE THE PRODUCTION AND USE OF FORAGE WHICH MAY DETERMINE CHANGES IN PASTURES OR TIME OF MARKETING.

C. AT END OF SEASON, NO PASTURE SHOULD SHOW MORE THAN 100% OF PROPER USE, BASED ON STUBBLE HEIGHTS.

9. FINALLY, ON EITHER YEARLONG OR SEASONAL RANGES, NOTE AREAS WHERE LIVESTOCK HAVE CONCENTRATED OR WHERE EROSION SEEMS TO BE INCREASING SO THAT MORE UNIFORM DISTRIBUTION OR SPECIFIC RANGE IMPROVEMENTS CAN BE MADE TO REMEDY CURRENT DIFFICULTIES.

ALL TABLES AND SUGGESTIONS MUST BE CONSIDERED AS GUIDES ONLY.

A SAMPLE COPY OF A SHEET WHICH WILL BE USEFUL IN RECORDING AND ESTIMATING FORAGE PRODUCTION AND UTILIZATION AS A GUIDE TO RANGE MANAGEMENT IS REPRODUCED ON PP. 3 AND 4. ASK FOR ADDITIONAL CHECK SHEETS OF THE SOIL CONSERVATION SERVICE.