

VACCINATION COSTS

25% to 50%

ing the Job Yourself

Safety's Sake

ANCHOR

ms and Vaccines

erica's Leading

Brand

Anti-Hog Cholera	.....	\$0.75	per 100 cc
Antis Virus	.....	1.65	per 100 cc
Bacterin	.....	.07	per dose
Septicemia	.....	.07	per dose
Septicemia	.....	.07	per dose
Bacterin	.....	.06	per dose
Swine Bacterin	.....	.06	per dose
Bacterin (Swine)	.....	.06	per dose
Bacterin (Cattle)	.....	.06	per dose
Bacterin (Poultry)	.....	.01½	per dose
Vaccine (Cattle)	.....	.50	per dose

Products Made and Tested Under U. S. Government Supervision.

Low Price on Syringes

Free Book: Send for free copy of our new book, "Vaccination Simplified," also latest price list on all products.

Order from nearest ANCHOR dealer. If your local store does not handle ANCHOR serums and vaccines, write us.

Anchor Serum Co.

W. J. KENNEDY,
Vice-Pres. & Sales Mgr.

St. Joseph, Mo.

World's Largest, Newest and Best Equipped Animal Serum and Vaccine Plant. Where Quality Is Always Higher Than Price.

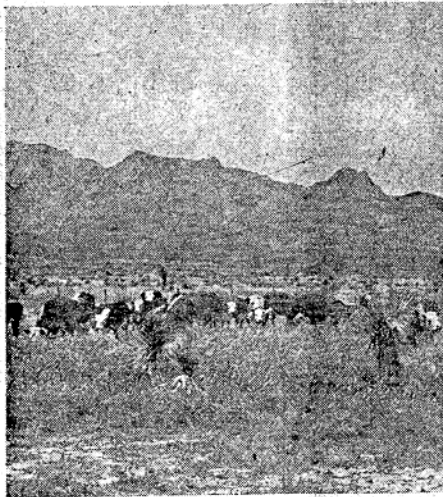
Range Forage Utilization

Adherence to Proper Use Preserves Good Ranges and Restores Depleted Ones

By Fred N. Ares, Range Superintendent, Jornada Experimental Range, Las Cruces, N. M.

The degree of utilization of forage on southwestern ranges is one of the most important factors in range management and livestock production and as such warrants considerable study and experimentation. In fact, the importance of utilization studies can hardly be over-emphasized since not only the restoration of our depleted ranges but also the maintenance of all our valuable grazing lands depends directly upon the fixing of certain standards of utilization which if adhered to will insure against that close, destructive grazing of perennial forage plants which so impairs and

Serves Its Purpose Well—



View of cattle grazing on summer range on the Jornada Experimental Range. An abundance of this type of forage makes possible the deferred use of the valuable black grama grass ranges which are reserved for winter-spring use.

weakens their vitality that a high mortality is usually sustained during the frequent drouth years.

Many forage plants are found on the Jornada Experimental Range, a branch of the Southwestern Forest and Range Experiment Station,* located about 23 miles north of Las Cruces, N. M., but black grama grass is considered the most valuable because it cures well on the stalk and furnishes a supply of palatable feed for grazing animals during all seasons of the year. Therefore, it was selected as the utilization indicator plant and the determination of all range use is based upon the degree of grazing found on this important species. In other words, when black grama is found to be properly used, the range is considered fully utilized regardless of the degree of use found on other less palatable plants.

The following terms are used to describe the various degrees of utilization

*Maintained at Tucson, Ariz., by the Forest Service, U. S. Department of Agriculture, in co-operation with the University of Arizona, and covering Arizona, New Mexico and the western third of Texas.

(Continued on Page 46)

TATTOO EAR MARKER



Approved by Ass'n; Plier type; sturdy; permanent indelible identification; Write for FREE Catalog.

Complete, with 0 to 9 digits; & ink (2 oz.) \$4.

1602 Genesee, Kansas City, Mo.
NAYLOR SERUM CO.

KENTUCKY HEREFORDS

Bulls and Heifers. Either Polled or Horned. State your preference.

Kentucky Polled & Horned Hereford Ass'n. Clifton Rodes, Sec'y. Louisville, Ky.

STANCHARD DOMINO

Heads our herd of Stanway-Blanchard-Dominos Yearling bulls and yearling and two-year-old heifers for sale.

THE RIGGS CO., OAH, Hughes Co., S. D.

RUSCONI

Horned and Polled Herefords

Bred and raised by L. & E. RUSCONI SANGER, CALIF.

HARRAH HEREFORDS

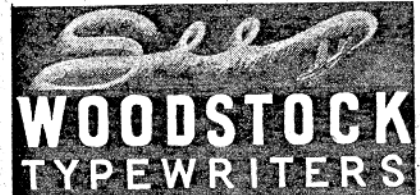
Breeding Herefords for more than 30 years, with customers through all the range country. Bulls and females for sale in carlots—special prices now for immediate delivery.

GEO. D. HARRAH, So. Omaha, Neb.

Alliance Hotel

"headquarters for stockmen"

Alliance, Nebraska



H. C. Taylor, Roanoke, Mo.



Offering Anxiety 4th-bred Herefords in lots to suit: All kinds of bred cows and heifers and 2 cars of good bulls. Also bull and heifer calves. Come see them.

Always glad to entertain visitors wanting good cattle.

Try Taylor's Herefords



The Famous WESTON Horn Weights

Original Weights Perfected & sold by Weston for use by Leading Breeders.

STOCK SIZES	
½-lb. Weights, per pair	50c
1-lb. Weights, per pair	75c
1½-lb. Weights, (Larger Hole), per pair	80c
2-lb. Weights, per pair	80c
2½-lb. Weights, (Larger Hole), per pair	85c
3-lb. Weights, per pair	90c
4-lb. Weights, per pair	\$1.10

POSTAGE PREPAID

THE WESTON MFG. & SUP. CO.

1957 Speer Blvd., Denver, Colo.

Inter-State National Bank

Continues to solicit deposits
and Loans from cattlemen
and bankers.

Live Stock Ex. Bldg., Kansas City, Mo.

Range Forage Utilization Important Management Factor

(Continued from Page 39)

found by range examination: light use, proper use and over use.

On deferred black grama ranges light use should be found on the range at about the half way point of the season of use. The Jornada black grama ranges are used during the winter-spring season, approximately from November until June, so this degree of use will be found in February and March. Light use consists of about half of proper use or about 25 to 27 percent of the total volume by weight of the feed produced by the plant.

Proper use is of course the degree of utilization which will be found on well managed black grama ranges at the end of the grazing season. This, on the Jornada, corresponds to the early summer season just preceding the summer rains.

If the proper methods of stock control have been used, this degree of use should be fairly uniform over most of the range with possibly some unavoidable heavy use near watering places where cattle gather. The most effective means in use on the Jornada to minimize this uneven range utilization is the practice of salting the range to secure proper distribution of the stock.

Proper use of the range is said to be obtained when the examiner judges that roughly about four-fifths of the flower stalks have been cropped down to a height of from two to three inches from the ground. This constitutes only about half of the total volume by weight of the herbage produced by the plant. The portion of the plant remaining should never be considered as waste feed but as a reserve highly necessary for the welfare of the plant and for drouth contingencies.

It has been shown by a recently completed clipping experiment conducted over a 10-year period on the Jornada that black grama cannot withstand the repeated total harvesting of its foliage. Plots which were clipped frequently during the growing season lost heavily be-

fore the fifth year of the experiment while even those clipped only once each year, and that after the growing season lost practically all plant cover before the end of the tenth year.

By way of contrast, black grama pastures 9 and 10 of the Jornada, which have been conservatively used over long periods, have maintained themselves in excellent condition year after year and were able to carry a herd of cattle through the 1934 drouth without supplemental feeding. Use of these pasture has always been so regulated that a reserve supply of feed is left ungrazed at the end of the growing season.

The term over-use describes the state of the range when through overstocking all the herbage has been grazed down to a height of two inches or less from the ground. This degree of use cannot be otherwise than harmful as the continued close cropping gives the plant no opportunity whatever to manufacture and store up the food so necessary to maintain plant vigor. Black grama depends very little upon seed for reproduction but spreads from stolons or prostrate flower stalks which take root at the joints and form new sets or tufts. Therefore, removal of all the foliage leaves the plant practically without means to reproduce itself.

Boren Buys Crosby Show Prospects

Two promising show and herd bull prospects were recently sold by Peirce Crosby, Jr., wellknown Polled Hereford breeder, Clarksville, Mo., to Boren Farms, Linton, Ind. These included a summer yearling bull calf and a senior bull calf, both sons of the Crosby sire, The Ridley Type. Boren Farms, owned by W. O. Boren, are establishing a Polled Hereford herd and plan to have a few select show animals at some of the leading polled shows this fall. These two will go into that string. The herd is to be fitted by Boren Farms herdsman, Bernard Hart.

A poor herd sire may father as many cattle as a good one, but what will they amount to?

New Round Tooth Comb

Doesn't cut the hair because the teeth are smoothly round. By far the best Scotch comb made. Also best Rice Root Brushes.

Complete catalog of Stockmen's Supplies Free.

FRANKLIN SERUM CO.
Livestock Exchange, DENVER

Straight-Bred Bulls

Your herd bull may be here—5 extra good ones—we never offered better individuals. One coming 2, others early calves—and all herd bull quality. Sired by Beau Blanchard 39th 20-48794.

M. W. & P. M. STEPHENS, STEPHENS, MO.

COWDEN FARMS

The Home of
ROIL PRINCE DOMINO 11th
American Royal Blue Ribbon Winner
Both open and bred females
and young herd bulls for sale.

SPRINGFIELD - MISSOURI

I NEED A NEW SADDLE
BOY! GET A FRED MUELLER LIKE MINE—EASY ON YOUR HORSE YOUR POCKETBOOK

Save \$10 to \$20 on Mueller lifetime saddles. Quality harness, hats, chaps, boots, belts, bridles, etc.

Send today for FREE CATALOG

FRED MUELLER
SADDLE & HARNESS FACTORY
442 MUELLER BLDG., DENVER, COLO.

W. L. WILLIAMS & SON

Linebred Anxiety 4th Herefords
of Straight Gudgeil & Simpson Breeding.

Featuring a few choice bull calves and two real heifer calves, all about 10 months old.

WHEELER TEXAS

Pioneer Dominos

AT

C. M. HANNA RANCH

Every day in every way are
getting better and better.

Carl Smith, Mgr. Jetmore, Kansas

The "MOFFIT" QUALITY

In Herefords has been attained by consistent use of the strongest Anxiety 4th blood.

25 Bulls coming two-year-old and 25 Two-Old Heifers bred to calve next summer—selling NOW!

A. MOFFIT & SONS, Mechanicsville, Iowa

HORN WEIGHTS

70c Per Pair
POSTPAID

in 1/2, 1, 1 1/2, 2 and 3 pound sizes
Cattle with shapely horns bring better prices... start using York weights NOW. Leading cattlemen over the entire nation say—"Your weights most satisfactory ever used."
Order Today—Prompt Shipment—Postpaid in U. S. & A.

YORK FOUNDRY & ENGINE WORKS
YORK. - BOX AHJ - NEBR.

INDEX TO ADVERTISEMENTS

Aermotor Co.	26	Globe Laboratories	14	Ohio Hereford Assn.	78
Albers Bros.	40	Goernandt Bros.	44	Orleton Farms	29
Alexander, R. T.	35	Guthery, G. M.	27	Painter, Ralph & Sons	42
Alliance Hotel	39	Haley-Smith Co.	31	President Hotel	40
Anchor Serum Co.	39	Hanna, G. M.	46	Radford & Sons	40
Arrington, E.	43	Hartman, George	39	Radotinsky, Joe	40
Atkinson Sale	23	Harvey, R. O.	45	Ravenstein, John	47
Bea-Mar Farms	11	Hengst, Fred D.	82	Reppert, Fred	47
Blanchard, Earl G.	29	Hilandale Farm	31	Riggs, The Co.	39
Boren, W. O.	40	Hodgson Bros.	45	Roberts, L. & C. Co.	46
Bowling, W. C.	35	Hoskins, P. M. & Son.	47	Rusconi, L. & E.	39
Bowman, George	44	Inter-State National Bank.	46	Schultz Hereford Ranch	33
Brannan Bros.	45	Jenny Wren Farms.	17	Shawhan, D. Lee & Son.	47
Breeders Supply Co.	35	Johnson Bros.	44	Stephens, H. W. & P. M.	46
Buck & Doe Run Valley Farms	23	Johnston, George A.	19	Stribling-Jinkins	15
Burch, George	35	Jumping Horse Stock Ranch.	32	Taylor, H. O.	39
Burleson & Johns.	45	Kentucky Polled & Horned Assn.	39	Thompson, A. W.	47
Campbell, W. H. & Son.	44	Letts & Turkington	26	Tomelme Co.	31
Carnation Co.	19	Lewis, John M. & Sons.	45	Trenfield, George	45
Cable, I. B.	18	Lynch, Hugh M.	30	Turner Ranch	48
Corley, W. D.	24-25	McKelvie, Sam R.	18	Vernon, J. F. & Eva A.	6, 18, 32, 38
Cowden Farms	46	McKinney, James O.	31	Westense Co.	43
Cowden Livestock Co.	23	McVay, O. W.	35	White Hereford Farms.	42
Crocker-Huffman Land & Water Co.	19	Mitchell, Dittmann.	36-37, 47	Wilkins, H. F. & Son.	2
Cutter Laboratories	7, 9	Moffit, A. & Sons.	46	Williams, W. L. & Son.	46
DaCamara, J. B.	44	Mueller, Fred	46	Winter, A. H. & Son.	30
Dana, C. H. Co.	44	Murry, M. B.	35	Woodstock Typewriter Co.	39
Early, J. J.	35	Naylor Serum Co.	39	Woody, Warren V.	2
Edmundson, Nora D.	26	Nelson, Oscar	12-13	Wyoming Hereford Ranch	2
Foster Farms	21	Northeastern Colo. Assn.	22	Yankee, Z. W. & Son.	35
Franklin Serum Co.	30, 46	Northwestern Iowa Polled Assn.	41	York Foundry & Engine Works	6
Gartin, Earl	47	Northwest Kansas Here- ford Breeders	20		
Giltner Bros.	44				