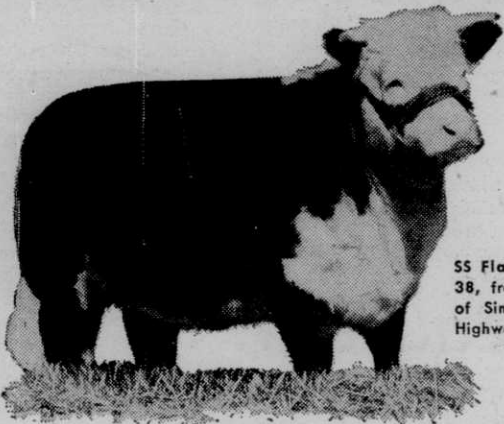


## Your Neighbor Feeds MISCO



SS Flashy Duchess 38, from the herd of Sim & Schock, Highwood, Mont.

## BUILD CHAMPION LIVESTOCK WITH MISCO PELLET 20's

A great lady from a great herd . . . SS Flashy Duchess 38 from the Sim & Schock herd of Highwood, Montana. For bone, for scale, for beef, the SS Herefords are among the finest in the state. Misco Pellet Twenties, and other quality Misco Feeds, play a big part in the breeding program at this well-known ranch. Misco Pellet Twenties can help your feeding program . . . and help you earn more profits, too. Get a supply today from your Misco dealer.

**Stabilized Vitamin A:** All Misco Cattle Feeds contain important Vitamin A in a stabilized form. Be sure your cattle get full strength Vitamin A with Misco.

# MISCO

## PELLET TWENTIES

A MONTANA PRODUCT



### Veterinary Department

## Mineral Mixtures for Montana

By DR. HOWARD WELCH

WE ALL RECOGNIZE the fact that the animal body requires a lot of various substances to keep it functioning. It needs plenty of feed—proteins, carbohydrates, fats, etc., and it needs minerals, phosphorus, lime, sulphur, iron, etc., for proper nutrition. And with few exceptions, every item on this long list, is found in abundance in the grasses and forage plants in our pastures and ranges.

Some of these minerals are used and needed in such small amounts that they are called "trace" minerals, that is, in chemical analysis of feeds they are found in amounts too small to measure, and the chemist reports a "trace" of iron, or iodine, of manganese, of cobalt, etc.

The other minerals, phosphorus, sodium, calcium, sulphur, etc., are found in relatively large amounts. All these minerals are important, some more so than others. When they are lacking in the diet, there may be serious consequences.

### What Minerals Are Lacking?

But what are these minerals that are deficient, and where do these shortages occur? Everybody supplies salt (sodium chloride) to stock. They like it, they are used to it, and probably they need it, though both sheep and cattle have been run for some time without it, without measurably bad results.

Phosphorus we must have, and this mineral is decidedly short in many large areas, and the shortage is more marked in very dry years. The lack of phosphorus is followed by general unthriftiness, by depraved appetite, the cattle licking dirt and rocks, chewing bones and corral poles. There are some areas of extreme phosphorus deficiency, many areas on the border line of deficiency.

Iodine, one of the trace minerals, is deficient mainly east of the divide, in large areas. The lack of iodine does not affect the health of mature animals, but results in goiter in the very young calves, lambs and pigs.

But here we run out of definite information or proof of any other deficiencies.

It is true that it costs very little to add a combination of these trace minerals to the salt in the salt box, and it may be regarded as a sort of general insurance against some unknown disaster.

So we have an iodine deficiency, remedied easily by the use of iodized salt. We have a phosphorous deficiency, remedied by bone-meal. In 9 cases out of 10, a sack of iodized salt and a sack of bone-meal, thoroughly mixed, will make a complete mineral supplement for Montana.

Stockmen should remember that the principal item of value in these mixtures is phosphorus, and that no mixture containing less than 10 percent phosphorus is worth the money. Statements frequently made by salesmen that their product will prevent bloat in cattle, are pure nonsense.

New cattle brought on the farm should have individual inspection every day for two or three weeks. Keep them separate from your other cattle for that period if you can.



Market and sale time to some people may mean quick harvest money in the sock and fiesta for a week, but for you ranchers the problem of getting cattle to market is full of headaches.

Shipping fever is one of the biggest pains in the neck to most cattlemen. Although it's easily prevented, just too many animals die from it each year.

Here's the story in a durham sack: Shipping fever is an acute disease and a rapid killer. It gets its name because it usually strikes when the animals are low in vitality from overcrowding, irregular feeding and watering, hard driving, and the general excitement and hassel of getting to the sale yard. Most common form of the disease resembles pneumonia, and animals stand with forelegs wide apart to breathe easier. They lose flesh rapidly, abdomens become tucked up, and eyes become sunken. There's no set time schedule for mortality in shipping fever — it might take days or weeks. Penicillin and serum have been used with some success, but the cost and nurse-aiding involved will sure stick out like a sore thumb when you compare them with the modest price of preventive vaccination.\* Prevention is the smartest move you can make. It will save you money.

Field reports on Blacklegol "S,"\*\* Cutter's combined vaccine against both blackleg and malignant edema, continue to make Cutter glow with pride. In addition to potent, proven vaccine strains, Blacklegol "S" has aluminum hydroxide\*\*\* to bind the vaccine and hold in tissues longer for higher, enduring immunity. It's an exclusive plus value, found only in Cutter vaccines, one as worth having as the insurance on your pick-up truck.

See you next month.

# C.L.

\*Pelmenal-Cutter  
\*\*Cutter Trade Name  
\*\*\*Alhydrox is Cutter's Trade Name

CUTTER LABORATORIES  
Berkeley 10, California

**TO SUPPLY PHOSPHORUS**  
There is NO Substitute for  
**DIGESTA-BONE**

14% phosphorus - 30% calcium - 5% protein

Costs less than 1/2 cent  
per steer per day

**HELPS PROMOTE**  
feed utilization  
greater gains  
speedier gains  
health - growth  
lower feeding costs

Order from your dealer  
or write for folder

**CONSOLIDATED**  
Chemical Industries, Inc.  
SAN FRANCISCO 4

Write MONTANA FARMER-STOCKMAN for information about LOW-COST ACCIDENT INSURANCE POLICY.

TWA TWA TWA TWA TWA TWA



now is your time to  
**TOUR EUROPE**

fly via dependable TWA . . .  
fares, costs lowest ever

Plan to go this winter while TWA fares are low and you get more for your money overseas. See European farms, meet the farmers, enjoy historical sights, and see battlefield landmarks. Fly in comfort aboard a fast 4-engine TWA Skyliner. Clip and send coupon to TWA today for details, or see your local travel agent.

Across the U.S. and overseas . . .  
you can depend on

**TWA**  
TRANS WORLD AIRLINE

U.S.A. • EUROPE • AFRICA • ASIA

TRANS WORLD AIRLINE

Dept. PS, 60 E. 42nd St., New York 17, N. Y.

Dear Sirs: I'm interested in learning all the facts about a trip to Europe. Please send me free literature.

Name \_\_\_\_\_

Address \_\_\_\_\_

State \_\_\_\_\_

TWA TWA TWA TWA TWA TWA

## The BEAR CAT

COMBINATION  
Grain and Roughage Mill  
also Ensilage Cutter



Grinds any feed—green, wet or dry. Snapped or ear corn, roughage bundles or bale flakes and no monkey business. It really grinds, and with ordinary farm tractor. Has both cutter head and heavy swing hammers. Adjustable Drop-Apron Feeder works in any position from ground to truck bed height. Get full information on this real honest-to-goodness Bear-Cat Grinder. Four sizes. Write—

Western Land Moller Co., Box 275, Hastings, Neb

## IN SIOUX CITY

It's The

**FARMERS UNION  
LIVESTOCK COMMISSION**

Working For You and With You

Lloyd Sebby, Cattle Salesman  
Clair Pendergast, Hog Salesman

Art Coe, Sheep Salesman

**P. J. DALY, Manager**