

Farmer & Stockman

50TH YEAR OF PUBLICATION

MOST SECTIONS of Montana have enjoyed an abundance of rainfall this year, marking the end of a prolonged drought. And along with that moisture has come an abundance of cheatgrass and some real gully washers that carried millions of tons of top soil down to the rivers.

Cheatgrass may indicate over-grazing. However, where drought has been particularly severe, the desirable perennial grasses may have become so weakened that they couldn't get ahead of the cheat regardless of how carefully the range was managed.

Bruce Orcutt, Custer County rancher isn't concerned in the least with cheatgrass or erosion. Sure, he's got them both on his place, but they don't bother him.

Nature's Plan

Cheatgrass, he says, fits into nature's plan to protect the soil. During periods of drought the native grasses lose vigor. Weaker plants die off. The plant population declines to a point where the cover is in balance with the limited moisture, he explains.

From 1933 to 1937 perennial grasses and sedges at the U.S. Range Experiment Station at Miles dropped from 28 per cent to 2 per cent because of drought and insect damage, a loss of 92.8 per cent in a 5-year period.

This means there is a lot of bare ground. True, there is an increase of cactus, snake weed and other less palatable plants, but the ground is essentially unprotected.

Then the rains came. The powder-dry soil washed down from the hillsides and into the creeks.

After the sun has been out for a few days the range is covered with a beautiful, green carpet. It looks real pretty, but its feed value is rather limited. Stock may nibble on it a little in the spring or in the winter when it is "conditioned" by moisture and freezing and thawing, but any cattleman knows the stuff is considered worthless for cow feed.

Quick Cover

Orcutt says this shallow-rooted cheatgrass is nature's special way of providing a quick cover to protect the land. It shades the ground and reduces evaporation. Its short roots skim off only the surface moisture and help hold the soil.

As the deep-rooted perennial grasses regain their vigor and get reestablished the cheat won't be able to compete. And because cheatgrass is relatively unpalatable, cattle stay off of it and don't disturb the forage grass seedlings.

Even cactus has a place in nature's plan. It's probably the most drought resistant of all plants. It can easily endure prolonged periods of extreme drought. Because of its sharp spikes, cattle can't get close to it. It protects the spears of grass that grow among its prickly leaves and assures a source of seed for the desirable perennial grasses.

The range's amazing ability to respond to moisture and recover from nearly total destruction is illustrated by the situation at Miles City. By 1944 the cover of perennial grasses and sedges was back up to the pre-drought level.

Silt-Filled Streams

Now, regarding that top soil that goes cascading down the gullies after a heavy rain: On most ranches these "capillary" streams carry soil into the larger creeks (Continued on page 4)



Bruce Orcutt looks out across one of the meadows created by layers of sediment that settled out of runoff waters. He's harvesting four tons of hay on land that years ago was eroded sagebrush range.

CHEATGRASS, EROSION...**NATURE'S BLESSINGS?**

By RAY OZMON, Field Editor



In the foreground is one of the dams that slows down and spreads the water, allowing the soil to settle. The resulting hay meadow is seen in the background.