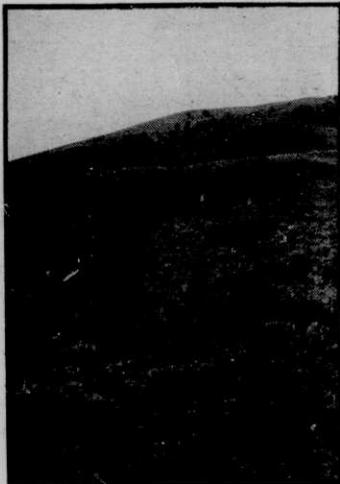


Sagebrush Lands Burned For Increased Grass Production

SAGE brush was the problem on 1,000 acres of range land at the S. E. Whitworth ranch, Beaverhead county—brush so thick a band of sheep with lambs couldn't get through it—brush sapping soil nutrients and moisture that could otherwise have gone into producing



Natural range land on the S. E. Whitworth ranch, Beaverhead county. Sagebrush was so thick on 1,000 acres of this land that sheep couldn't be pushed through it.

more and better range grass. The story of how this brush was burned off the range is one that could profitably be repeated in many other parts of the state.

Forest Service Assists

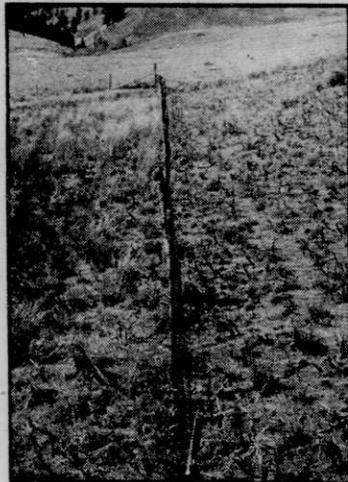
Because the burning was done near national forest lands, the U. S. forest service was interested and W. W. Wetzell at Dillon helped set up a fire control program with fire guards. It is necessary in any such program to have grass enough to keep the fire going so the brush will burn. This increases the danger of the fire getting out of control and makes definite precautions necessary. Also special consideration should be given to possible water or wind erosion on such denuded lands.

The 1,000-acre section of land was fortunately split into four units by a road and two streams. This made it possible to start the fire at one edge

of a plot and let it burn to the road or streams. Where necessary, back fires were burned in strips at night to control burning the next day. Fire guard strips, 10 feet wide, were pushed out around the entire area with a bulldozer. Assistance and advice on the burning was also obtained from Herb Wheat of the Beaverhead county ACA. The job was done as an ACA project, with a possible re-payment of near 50 percent.

Expect Greater Grass Yield

The burning was done about the middle of September. A jeep be-



Here is brush land after a controlled burning program showing just the blackened stubs of the sagebrush above the bare ground.

longing to Pete Sweeney a nearby rancher was equipped as a fire patrol wagon with a small pump and chemical extinguishers. Barrels of water were placed along the fire line for an emergency break out. Edwin, Bernard and Louis Whitworth also helped with the project to improve the range capacity of the Sheep Creek basin.

All interested parties are watching for the natural grass regrowth that should come on this burned area within the next few years. Extension service estimates are that from two to four times the amount of grass will grow on the land after burning the brush.

Field Pitting Machine Made From Old Disc

By EDGAR I. SYVERUD, Sheridan County

HERE is a field pitting machine which I "invented" this fall. I will not take complete credit for this invention, for the idea has been written about by several others in the last few years. However, I had been planning on it for some time, so I finally got my neighbor, Everett Melby, to burn off-set holes in some worn out disc blades, and I assembled the outfit.

The frame is an old single disc, 10-foot, and the off-set discs were spaced double the usual distance. There are 10 of these off-set discs, each mounted half way around the square shaft. I used two regular discs next to the bumpers to prevent any tangling or "riding" of the shafts.

Set straight across, these discs gouge pits about 4 inches wide and 2 feet long and down to 6 inches deep depending on the looseness of the field. This spacing and shaping of the pits I believe will overcome

the general objection to pit cultivation so often heard about other machines, that is, rough riding for wheel tractors. I found this method smoother on the average than duck-footing.

I also aimed to disturb the clean summerfallow as little as possible in order not to dry it out any more than necessary, yet leave the field plenty rough to prevent soil drifting, catch winter snow, check water erosion and provide catch basins for water.

As this outfit pulls easily, it can be hooked on behind the one-way, disc or even the duckfoot. I believe a spring tooth harrow will be sufficient to level it off for spring seeding.

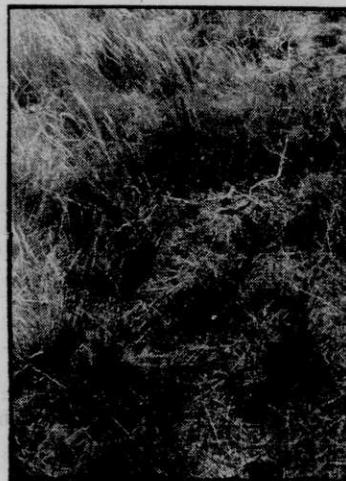
The best working speed of the outfit is 2 or 3 miles an hour. Faster speeds cause the dirt to be thrown too widely. The equipment is easily made and very effective.

Farm Project Becomes Recreation Area

THANKS to a flood irrigation project developed on the H. C. Christopherson farm, the town of Froid has a lake for summer recreation.

The dam for the 7-acre reservoir was built by the soil conservation district across a small creek and has a 400-foot sod spillway to divert water for flood irrigation. The lake provides boating, swimming, fishing and hunting for the community. Bullheads and other warm water fish have been planted in the waters and an estimated 500 ducks are hatched and reared on the shores.

The reservoir means recreation to many people in the community, but to Christopherson it is just one of the many conservation practices used on the farm. There are two stockwater dugouts and four diversion dams on the place. Contour stripping is practiced and some 200 acres of alfalfa are diked and terraced for flood irrigation. Cropped land includes 600 acres of wheat,



And here is the result of controlled brush burning showing the excellent stand of grass from natural re-seeding. The extension service estimates that from two to four times the amount of grass will grow on such land after the brush is burned off.

240 acres of corn and 100 acres of oats. Corn and wheat are alternated on some of the contour strips with a noticeable increase in wheat yields on land previously in corn.

Eighty to 100 head of cattle are kept on the place including 30 registered shorthorns. The cattle are allowed to "hog-off" the corn in the field and Christopherson has definite ideas on the value of such a method. He says the cattle stand the winter better in the corn field and they pack down the land while they are grazing.

Christopherson has much praise

for the work of the soil conservation district in Roosevelt county. He explains the operation of the district as being a farmers' co-operative heavy machinery organization. The co-operative can own expensive dirt moving machinery, leveling equipment and other items that could never be purchased by an average farmer.

Then too, the district has the organization and engineering help of the national soil conservation service to keep it functioning efficiently. As he puts it, being without the services of the soil conservation district now would be like giving up electric lights after getting accustomed to them.

He feels that many of the districts could also use a ditcher for farm sewer systems. The dirt moving equipment is very useful for digging basements, root cellars or trench silos.

Paradise Valley Builds Community Dip Vat

By FRANK NESSLAR, Secretary, Paradise Soil Conservation District

THROUGH co-operation of the operators in the area and the soil conservation district the Paradise valley now has a community dipping vat that can handle up to 1,000 head of cattle a day.

The need for such a vat had long been felt and the project took shape soon after the organization of the soil conservation district. The operators learned through talks and meetings with the soil conservation leaders that they could, by co-operating with the district, get aid in planning conservation programs for their farms. The logical proposition then seemed to be, Why not construct a dipping vat to conserve livestock?

A site was selected, and a fund for beginning construction was soon raised among the co-operators. The soil conservation district made the survey and assisted with the plans. A carpenter was employed to build the vat, while operators in the district donated their labor to haul rock, gravel, cement and build corals.

In the spring of 1946 the dipping vat was ready and had a capacity of 2,800 gallons. The dip solution was mixed at the rate of 1 gallon of dip to 70 gallons of water.

Approximately 1,100 head of cattle were dipped that spring and many more in the summer and that fall. About 1,000 head a day can be dipped with sufficient help.

A charge of 25 cents per head has been made to date to pay for dip, poles repairs, etc. In this manner the vat is paying for itself.



Pictured here is the waffle iron effect Edgar Syverud, Sheridan county, achieves when he works a clean summerfallowed field with his homemade disc field pitter.