

SUNFLOWER'S FUTURE FOR SILAGE BIG

WALLOWA COUNTY
SUCCESS GREAT

FEEDING VALUE HIGH

Mac Hoke, County Agent Wallowa
County, Gives Suggestion on Sun-
flower Silage—Big Feed Value
Seen in Cultivation.

By Mac Hoke, County Agent
Wallowa County.

The sunflower has consistently demonstrated during the past five or six years, that it can be grown successfully under conditions of severe climate that would not permit the growing of corn. With the possible exception of field peas no other field crop will withstand early and late frosts with the success of the sunflower. It is for this reason and for the additional reason that it produces heavier yield in tonnage than other crops that so many farmers are becoming interested in growing sunflowers for silage purposes.

In our experience in Wallowa county, we have found no crop for the dry farm land that would stand the dry weather as well as the sunflower. It can be depended upon when planted in season and properly cared for to yield from eight to twelve tons of silage per acre. On land that is irrigated the yield will average better than fifteen tons, and on soil that has been heavily manured, either by growing legumes or by applying farmyard manure, the yield will average around twenty-five to thirty tons per acre. J. P. Gillespie, of Lostine, had an average yield last season of twenty-seven tons on land that was fairly well fertilized.

For growing sunflowers on dry land, fall plowing is to be preferred, if possible. The best soil is to be found on the north or east slopes, and by fall plowing it will be possible to get the seed in the ground in early May. This will give four months for the growing of the crop, which we have found necessary. Sunflowers have not proved difficult to grow with us, in fact, the crop is one that will do better with neglect than any other crop that we have ever tried. They will respond also to good care as much as any other crops.

For seeding dry land the amount of seed per acre required, is from eight to twelve pounds. This depends on the method used in seeding time. Most farmers in Wallowa county have found that the grain drill can be used most successfully in seeding time. Openings are stopped up so as to leave the rows about thirty inches apart, and the drill is opened up to allow about ten pounds of seed to be planted to each acre.

On irrigated land the seeding will be as much as twelve to fifteen pounds. Some farmers have used a hand corn planter and have found that the seed required for an acre was only five or six pounds. Others have double rowed them with a garden drill and found that the amount of seed required was more than fifteen pounds per acre. Others have used a hoe and rake in planting the seed. The amount of seed depends therefore on the manner of seeding and the thickness with which it is desired for stocks to grow.

Best results have been obtained by drilling the seed and pacing the rows wide enough that the crop can be cultivated with a corn cultivator. After the plants have reached a height of twelve inches they are thinned to twelve inches apart in the row. This will give plenty of room for the development of each plant and will permit it to mature in the season. If the plants are not thinned it will be found that many of the plants will not head out and none of them will develop in size as they should for the best silage.

The first cultivation should be given just as soon as the plants are high enough that they will not be covered up. The dirt should be thrown to the plants, and if there is danger of covering them up the fenders should be put on the cultivator. The first cultivation may be deep but subsequent cultivations should be shallow and should conserve moisture and make available additional plant food. Frequent cultivation on dry land is ad-

visable but it will be found usually that not more than three cultivations can be given before they are too large. On irrigated land two cultivations—one before thinning and first irrigation and one after thinning and before the second irrigation—will be sufficient. Early irrigation is advisable because of the danger of late irrigation causing the plants to be too late in maturing. It does not seem advisable to irrigate them here later than the middle of July when they are planted the first of May. The crop is cut for the silo when about twenty-five per cent of the heads have reached the dough stage and about fifty per cent are in full bloom. It is better that they should be pretty well matured than not matured.

Lack of maturity gives a silage that develops much acid and which is likely to upset the digestion of sheep in particular. Stock will seldom eat such silage with the same eagerness that is shown for that made of more mature sunflowers. To avoid this danger it is essential that the flowers be thinned in the rows and that they be allowed to mature to the proper point before cutting them.

In harvesting sunflowers we have used numerous methods, but have found cutting by corn binder and by hand to be the best and most efficient ones. Where the silo is near the sunflower field, so that the haul is short there is no better method than to cut them with corn knives and to lay them on sleds. They are hauled to the cutter and there is no loss of labor. Two men cutting can keep a two-ton cutter working at capacity. One man will be needed to do the

hauling and one at the cutter to do the feeding. Two sleds will be all that is required. This arrangement assumes that the yield will be better than twenty tons per acre and that the sunflower field is very near the silo. If the haul is a quarter of a mile or more a corn binder can be used conveniently but is not essential. The binder will cut and bind the flowers into bundles that can be thrown on to a low wagon and hauled to the cutter. More teams and men will be required by this method and the cost of putting them in the silo in Wallowa County has averaged about \$1.50 per ton but in one case was only \$1.00 per ton for 160 tons. The sunflower should be finely cut, and to do this it is necessary to have ample power—all knives that can be put on the cutter should be on before starting. If the sunflowers seem dry after cutting and do not pack well a hose should be run in with a half inch stream of water. The judgement of the operator will have to be depended upon to decide whether the silage needs more water. As a general rule sunflowers will not require additional water.

Too strong emphasis cannot be placed upon the importance of packing the silage in the silo. Loosely packed silage permits the retention of air which causes spoilage and poor silage results. Men that can be depended upon should be put in the silo to do the packing. A heavy tamp will be found useful in packing the silage around the edges.

Wallowa county has fourteen silos filled entirely and in part with sunflower silage. Practically all of these are filled entirely with sunflowers. The results that have been

obtained by those who have opened their silos at this time have been very satisfactory and have led to much enthusiasm among the farmers in the county. Mention of two experiences will be sufficient to indicate results obtained.

Albert Wilson, of Paradise, grew sunflowers on summerfallow, cut them with a corn binder and filled his silo. On the first of November he opened the silo and began feeding silage to beef steers. They ate the silage from the start, did well on it, and were consuming at the end of the season of feeding 40 pounds of sunflower silage and from twelve to fifteen lbs. of grain hay. The result could not be determined in pounds gained, due to the lack of farm scales, but Mr. Wilson is satisfied that his sunflower silage saved him a lb of hay for each two lbs of silage consumed. He reported that the condition of the steers was first class and that no ill results followed heavy feeding of it. Mr. Wilson will put an increased acreage of sunflowers the coming year.

J. P. Gillespie, of Lostine, started the feeding season with forty lbs. of alfalfa hay and seven of mill feed for each of his twelve dairy cows. About November 15th, he opened his silo and stopped feeding grain. They ate only twenty lbs. of alfalfa in addition and increased one quart per day in milk flow. The first ration cost Mr. Gillespie 75 cents per day, but the sunflower hay ration cost him only about 40 cents per day, even if we figure two tons of silage the same price as one ton of hay. Mr. Gillespie is feeding forty lbs. per day per cow at this time and his cream check was never so good as now. He is also feeding his ewes on 2 1/2 lbs. per day and says he is saving much hay with them. No ill results have been obtained by Mr. Gillespie, and he reports his stock in better condition than usual at this season. Mr. Gillespie will also grow sunflowers for silage another year. He says, "I would like to see a silo on every farm in Wallowa county. I have kept my cost of production down with silage, and my cream check for November, December, and January from twelve head amounted to \$712.00.

Others who have had just as good success might be named, but it is unnecessary. Our results have been such that we are making arrangements to supply seed to growers for more than 400 acres of sunflowers this coming season. We have had

"I'll Tell the World" says the Good Judge

The man who doesn't
chew this class of to-
bacco is not getting
real satisfaction out of
his chewing.

A small chew. It holds
its rich taste. You don't
have to take so many
fresh chews. Any man
who uses the Real To-
bacco Chew will tell
you that.



Put Up In Two Styles

RIGHT CUT is a short-cut tobacco

W-B CUT is a long fine-cut tobacco

Weyman-Bronson Company, 1107 Broadway, New York City

calls already for enough seed to plant
150 acres and I am writing this on
the first of February. The number
of silos will be trebled in 1920 and
a very large per cent of them will
be filled with sunflower silage.

it costs you no more than the cheap
mixtures. Contains no opiates. Chil-
dren like it. For coughs, colds, croup.
—Adv.

Sell your poultry through Bulletin
classified ads.

Costs More But Price is Same.

Foley's Honey and Tar is the origi-
nal and genuine honey and tar cough
medicine. It costs Foley & Co. more
to make than it costs others to make
mixtures of cheaper ingredients, but

You Know What He Wanted.

When his father asked Charles what
he wanted for his third birthday, he
said: "Oh, one of those horsies, you
know, that keeps on a-go! but never
gets anywhere."



The Casino

Gordon

Looking for the hat that
will express your idea of what
a hat should be? Tell your
troubles to your dealer—he'll
say, "Here's your Gordon."

THE

GORDON HAT

CASHMAN, BEND'S
CLOTHIER

REPORT OF THE CONDITION OF

Lapine State Bank

AT LA PINE, IN THE STATE OF OREGON

AT THE CLOSE OF BUSINESS FEBRUARY 28, 1920

RESOURCES

Loans and discounts	\$66,152.13
Overdrafts, secured and unsecured	223.94
Bonds and warrants	1,700.00
Banking house	1,900.00
Furniture and fixtures	1,200.00
Due from banks (not reserve banks)	4,032.47
Due from approved reserve banks	7,849.72
Checks and other cash items	40.00
Cash on hand	3,162.03
Other resources	3.88
Total	\$86,264.17

LIABILITIES

Capital stock paid in	\$15,000.00
Surplus fund	2,500.00
Undivided profits, less expenses and taxes paid	297.93
Dividends unpaid	50.00
Individual deposits subject to check	39,599.07
Cashier checks outstanding	5,307.92
Time and savings deposits	13,509.25
Bills payable for money borrowed	10,000.00
Total	\$86,264.17

State of Oregon, County of Deschutes—ss.
I, E. B. Tomes, Cashier of the above-named bank, do solemnly swear
that the above statement is true to the best of my knowledge and belief.
E. B. TOMES, Cashier.

CORRECT—Attest:
WILLIAM WILLIAMS,
GEO. M. MAYFIELD,
E. B. TOMES,
Directors.

Subscribed and sworn to before me this 8th day of March, 1920.
AMY E. CAVANAUGH, Notary Public.
My commission expires June 20, 1923.

It took
50 years
to make this SHOE

For fifty years this firm has been aiming to
make the best shoes for men that could be
bought. For a good many years BUCKHECHT
Shoes have been fulfilling this ambition of
their makers. "Extra service every step—
comfort every minute"—always in BUCK-
HECHT Shoes.

BUCKHECHT SHOES

BUCKHECHT Shoes for
you—for active men
in all walks of life—are
sold in a variety of styles
and leathers from \$8 to
\$12 by principal shoe
dealers in the West.



If not sold by your dealer, send his name and your order to

BUCKINGHAM & HECHT, MANUFACTURERS, SAN FRANCISCO

ORGANIZATION CO-OPERATION



Two factors most vitally bound up in the building up of great
organizations. Without them the structure falls. Great con-
cerns have seen the great importance to them of organizing
and in their organization perfecting a cooperative spirit.

WHY DO FARMERS REFRAIN FROM ORGANIZATION AND COOPERATION?

The greatest of all farmers' agencies in the United States to-
day is the Farm Bureau. Its policies are constructive—its
aims are for better livestock, better cultivated farms, more sys-
tematic marketing and shipping—suited to the crops to the
country and developing the highest quality products from the
land.

You, as a farmer, owe it to yourself to league with more
than 500 farmers of Deschutes county in putting Deschutes
county further ahead in agriculture. That is the mission of
the Deschutes County Farm Bureau. You need the Farm
Bureau and the Farm Bureau needs you.

To help make 1920 the banner year in agriculture, associate
yourself with the great nation-wide movement for better farm-
ers and better agriculture.

JOIN THE DESCHUTES COUNTY FARM BUREAU

Send your dollar to D. L. Jamison, County Agent, at Redmond

This space donated by The Bend Bulletin in the interests of
Better Farming in Deschutes County.