RANGE STOCK GAIN BY FEED PROCESS

Alfalfa Feeding Alone Proven Fallacious.

SILAGE PRODUCTS ASSIST

Weight Gains Twice as Rapid and Cost Greatly Cut, According to Experiment Tests.

Feeding practices that produce gains on young steers twice as rapid-ly as feeding alfalfa hay alone, and at about one half the cost, have been etermined by the eastern Oregon ranch experiment station at Union. branch experiment station at Union. The method, how it is applied, exact results and a store of related information that will enable stockmen to know more nearly under what conditions of feed and feeder costs, and market price of finished stuff, they can buy range stock to fatten for market at a profit, are explained in a new station bulletin, "Fattening Steers," just off the state agricultural college press.

Steers." just off the state agricul-tural college press.

The feeding tests on which the re-ports are founded were conducted at the Union branch by Robert Withy-combe, superintendent, in co-opera-tion with E. L. Potier, head of animal husbandry at the college. Professor Potter outlines the experimental data

Tests Cover Six Years,

Tests Cover Six Years.

'The eastern Oregon experiment station at Union has just closed a six-year series of tests in fattening steers which throw a lot of new light on this industry as it is conducted in the alfalfa districts of the west. In the first piace it was found that since but few of the cattle being fed in the northwest were weighed in and out, and since the few itst were weighed. and since the few that were weighed were often weighed in shrunk and out full, the stockmen had rather ex-aggerated ideas of the gains which could be expected on alfalfa hay

"The Union station found that through a long series of tests two-year-old steers on alfalfa alone were fed 37.7 pounds of alfalfa a day and of this they refused 4.9 pounds. On of this they refused 4.9 pounds on this ration the average daily gain was .38 pound. In determining this gain the steers were weighed in as nearly as possible the same condition as regards fill at the beginning and at the end of the tests. The steed for while being as desired and as a rule were not in nearly as pood condition at the end of the feeding. The only chance of a profit was in a rise in the end of the feeding. The only chance of a profit was in a rise in the market. The improved condition of the feed consumed.

This situation led to trying out other methods of feeding which might posses they should have been considering the market. The improved condition of the reactive would not normally pay for the feed consumed.

This situation led to trying out other methods of feeding which might posses for the safer handling of the repeated which might posses for the safer handling of the growth of the consumed.

This situation led to trying out other methods of feeding which might posses for the safer handling of the repeated which might posses for the safer handling of the repeated which might posses for the safer handling of the products. The non-partisan league is in much distance the gains without being as expensive as full grain feeding.

One idea was to supplement the One ide

these it was found that the improvement in the value of hay resulting from the chopping was 28 per cent when the alfalfa was fed alone, 14 per cent when fed with grain and 7 per cent when fed with slage. The cost of chopping was about \$3 a ton.

"As compared with feeding long hay alone the chopping was some advantage, but when fed with grain or silage the improvement in feeding value did not pay the cost.

Varied Combinations Exed.

Varied Combinations Used.

Then sliage and hay was tried. The results in this case were remains states. All the visiting judges have been asked to attend the session. Maris has sent the following have been asked to attend the session. Maris has sent the following save been asked to attend the session. Maris has sent the following following of sliage and gained. It is not that had been accounted the session of sliage as easy to the following the pounds of sliage as the steers at 23.5 pounds daily.

The sliage used was of fair quality of the steers following the steers at 23.5 pounds daily.

The sliage used was of fair quality of the steers at 23.5 pounds dealing the steers at 23.5 pounds daily.

The sliage used was of fair quality of the steers show a lig gah our sanctiation that they created and some was peas and baid barriey. A little was alfalfa sliage in the previous feeding.

The cost of producing one for of sliage they aline, for every pound of slage in different tests varied from 15 to 39 pounds and that of any other method tried.

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The cost of producing one for every pound of slage they aline, for every pound of slage in different tests varied from 15 to 39 pounds and the same and the good aliality of the pound less happened to the following the pound of slage they a rse on poor hay he will eat more

"On the whole the results on the sliage were so good that we feel safe in saying that in a very few years feeding on alfalfa alone will be a thing of the past."

STATE ECONOMIC SURVEY IS PROOF OF PROSPERITY.

Labor Cost Increases, While Manufacturers Also Show Gain in Their Output.

An economic survey of the state of Oregon has just been completed by Charence D. Porter, in connection with a national survey being carried with a national survey being carried out throughout the country by the Fidelity & Deposit company of Maryland, under the supervision of Franklin K. Lane, former secretary of the interior. Mr. Porter, who is associate manager of the company for Oregon, has submitted his report for Oregon, and it is as follows:

Building—A careful investigation shows building operations slightly decreasing at

this time. However, up until summer this year they had increased aimost double over leave they had increased activity has leave they had increased activity has leave they had increased over leave they had increased leave they had increased activity has been and grapes.

Labor-Cost of labor has increased 10 to 13 per cent over 1919. Productivity has facturing establishment it has slightly increased, owing to better selection of akilled workmen and restoration of plaints to personal pionems of the state of the same in skilled building trades, but common libor is plentiful. No evidence of uncomployment exists at this time.

Dollars in Products.

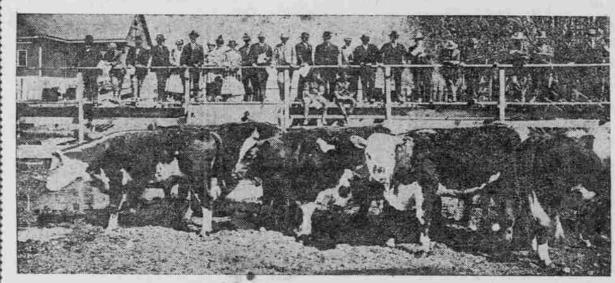
Small Tract Produces Million Dollars was more than 1,200,-000. Kinamath Fails was in a peculiar situation because in skilled building trades, but common libor is plentiful. On evidence of uncomployment exists at this time.

Dollars in Products.

Small Tract Produces Million Dollars in Products.

But when the manager for the local plant of the Standard Oil company made up his totals he found that we had used 65 per cent more oil than the previous year, but had received the previous year, but had received the previous year, but had received the structure of the standard oil company made up his totals he found that we had used 65 per cent more oil than the previous year, but had received the structure of the standard oil company made up his totals he found that we had used 65 per cent more oil than the previous year, but had received the structure of the structur

SILAGE-FED STEERS IN EASTERN OREGON PROVE MONEY-MAKERS.



VISITORS INSPECTING STEERS AT EASTERN OREGON EXPERIMENT STATION AT UNION.

"Then silage and hay was tried ers, will be on the programme, Mr. Maris states. All the visiting judges have been asked to attend the session.



EFFICIENT AND SIMPLE PUT UP IN NEEDED SIZES. Quart, 50c; Haif Gallon, \$1; Gallon, \$1.75. Order from your dealer. If he hasn't it we will send you one gallon, all charges paid, for \$1.75. Postage Stamps Accepted. Pre-pared by

Clarke-Woodward Drug Co Portland, Oregon.

"On the Caledonia marsh, bordering upper Klamath lake, rye is being harvested that is yielding 65 bushels an

dations Fugnished Those Who Work in Fields.

vested that is yielding 65 bushels an acre. Here also was grown the experimental crop of mint, to which 30 acres was sown. It is producing 40 pounds of oil an acre. and the present that it is a profitable crop and it is the intention to set 1900 acres to the intention to set spring.

AT SALEM SEPTEMBER 29.

The potato crop is good and the growers are now considering the advisability of building a potato warehouse for storing their product. All as Expert Judges.

Eight Judges Engaged. Who Are Said to Be Orators as Well as Expert Judges.

Notice of the annual meeting of the Corgon Plains are better pickers of the companies operating marshes are long camberries in Oregon is fast becoming an art. Since the baby industry of Oregon has come into bearing the cranberry fields are in the intention to set 1900 acres to the roots next spring.

The potato crop is good and the growers are now considering the advisability of building a potato warehouse for storing their product. All the bounties a wise providence has bestowed.

Said to Be Orators as Well as Expert Judges.

Notice of the annual meeting of the Corgon Plains are better equipped to take care of their pickers of fast becoming an art. Since the baby industry of Oregon has come into bearing the cranberry fields are in the competition with the hop yards and appie orchards.

Cranberries are closely allied with America's great national holiday, when the entire country bows its reverence to a period of thanks and there is an abundance of hay in the valley for sale. The Fort Klamath there is an abundance of hay in the valley for sale. The Fort Klamath which was sold at picture prices.

Wool Clip Exceptional.

Notice of the annual meeting of the Oregon Purebred Livestock association, to be held at the state fair grounds September 29 at 8 P. M.

The annual wool clip was of experiment of the hards of the growers and these men as well as expert judges, and these men, as well as local speak, ers, will be on the programme, Mr. Maris states. All the visiting judges have loss their reputations and standings in livestock society of execution. The amount product is the markets of the Pacific coast now, will be on the programme, Mr. Maris states. All the visiting judges have loss their reputations and standings in livestock society circles—year at the local market of the home-grown fruit, and the residue of the home-grown fruit, and the res

Account

Oregon State Fair

TRAINS LEAVE NORTH BANK STATION 6:30, 8:30, 10:45 A. M.; 2:05, 4:45, 6:05, 9:20 P. M. Leave Jefferson-street Station 15 minutes later. Train leaving at 8:30 A. M. will be run in sections Wednesday to Saturday, inclusive.

RETURNING, TRAINS LEAVE SALEM 7:15, 9:45, 11:30 A. M.; 1:40, 4:00, 5:30 and 7:55 P. M. Thursday only special train leaves Salem 10 P. M., arrives Portland 11:45.

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among growers to insure a staple product for the consumer.

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a fluffy chick.

call to the metropolis for aid. Head-quarters of the cranberry growers has been placed with Mrs. L. Vivianne Scott, Henry building, Portland, who

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keting principle has been adopted a delightful vacation than a laborious shipped to the Merrow county booth treasurer; Ralph McDaniels, boys' yell one, and at the same time profitable, at the state fair at Salem.

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the most successful remedy for female ills in this country.

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