

Dairymen Use Cull Fruit and Vegetables to Help Cut Cost of Milk

BY-PRODUCTS OF FARM FED COWS CUTS MILK COST

Dairymen Find Cull Fruit and Vegetables Great Nutrients When Mixed With Other Feed.

COSTS 3.67 CENTS POUND

Turnips, Carrots, Parsnips and Beets Are Suited to Maintain High Production of Milk.

Oregon Agricultural College, Corvallis, Nov. 1.—In the task of holding down the cost of milk production dairymen may find that the use of cull fruit and vegetables and other by-products of the farm is profitable now, when it might not have been at former low prices of concentrates. At present prices the average cost of one pound of nutrients in oil meal, corn, barley, oats, mill run, alfalfa and clover is 3.87 cents, calculated by S. Fine of the Oregon Agricultural college dairy department.

Feeding these by-products is profitable only if they are worth more as feed than it costs to collect and prepare them for feeding. Mr. Fine points out. It costs a certain amount to get these feeds before the cattle, and they have a definite food value. If that value is greater than the cost, it is advisable to feed them. Otherwise, not.

VALUE DEPENDS ON COST

The value depends directly on the cost of the nutrients they would displace in staple feeds such as hay, silage, and concentrates. To enable dairymen to make a ready comparison Mr. Fine prepared the following table showing the nutrients in 100 pounds of each item, and the feeding value per ton, based on present nutrient prices in standard feeds:

Feed	Total nutrients in 100 lbs.	Value per ton
Potato	17.1	\$12.55
Carrot	9.9	7.27
Turnip	9.4	6.90
Parsnip	14.7	10.78
Beet	9.4	6.90
Turnip	7.4	5.43
Apple	18.4	12.64
Apple Pomace	18.8	13.85
Pumpkin	6.7	4.92
Cabbage	7.8	5.80
Kale	7.3	5.36

CARROTS GOOD FEED

The actual feeding value may vary slightly from these figures but the comparative prices are fair and applicable. Margels and carrots are worth rather more because of their palatability and regulatory action, while potatoes may not be quite equal to the calculated value.

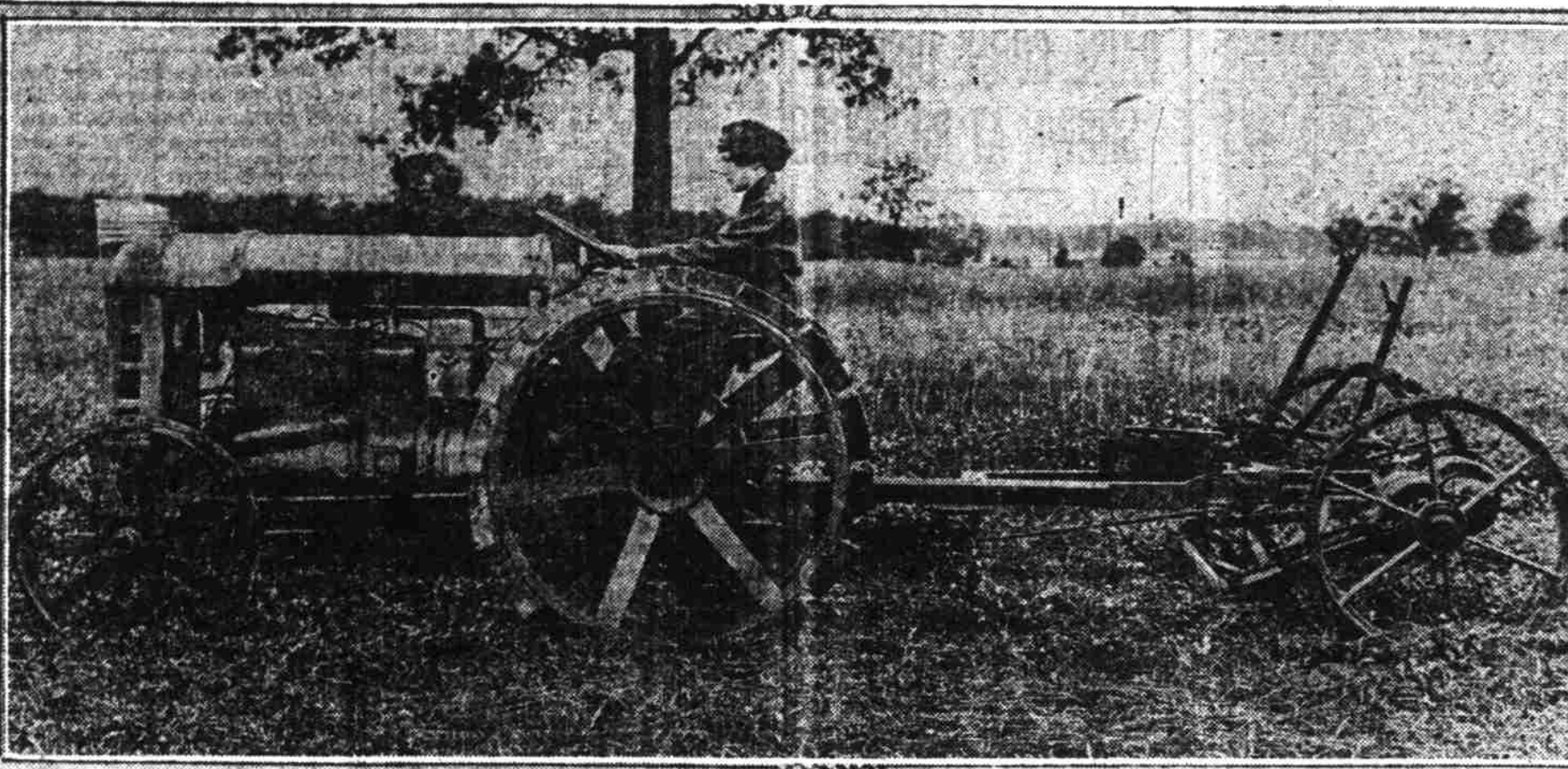
Cull fruit such as apples and pears comes close to corn silage in feeding value. Danger of choking should be guarded against by cutting or mashing the apples before feeding.

Pumpkins and squash chopped into pieces and fed seeds and all are very satisfactory. No danger of seeds making the cows "dry up."

Potatoes are valuable if fed not more than 30 pounds a day per animal. Green or sprouted potatoes contain a poison and are dangerous.

Turnips, carrots, parsnips and beets are suited to maintain high production, but must be used to substitute for roughage and not concentrates.

THE HORSE IS DISAPPEARING; TRACTORS TAKING THEIR PLACE



It is authoritatively stated that there are now over 1500 tractors in use in the Willamette, Umpqua and Rogue River valleys of Western Oregon. The average light tractor will do the work of several horses; some of the heavy tractors have displaced as many as 20 horses on a single farm.

7,000,000 ACRES OF OREGON LAND UNDER CROP CULTIVATION

Tax Commissioner's Figures Show There Are 30,000 Farms in State at Present.

Salem, Nov. 1.—There are more than 30,000 farms in Oregon, embracing an area of more than 7,000,000 acres, according to a statement just compiled by State Tax Commissioner Frank Lovell. With reports from several counties yet incomplete, the summary shows a total of 29,313 farms, aggregating 6,773,977.45 acres. Of this area, 2,151,355.39 acres are devoted to agricultural and horticultural products, according to the report. Of a total of 637,955.49 acres sown to winter wheat, more than one-fifth, or 136,645.75 acres, are in Umatilla county, which easily leads the state in wheat acreage.

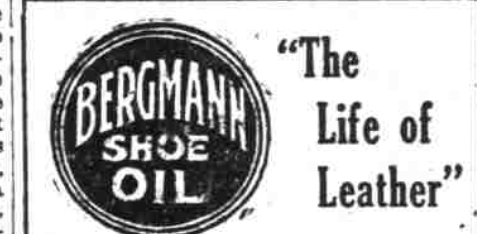
This is the first year of operation under the law requiring county assessors to include a census of agricultural and horticultural activities in their reports, and in several counties the work of assessment had been started before the necessary blanks for this work were received, occasioning a very incomplete summary at this time. The summary shows acreage devoted to the various crops as follows: Winter wheat 637,955.49, spring wheat 276,654.59, oats 229,801.87, barley 65,153.75, rye 78,241.25, corn 49,421.14, clover 50,801.63, alfalfa 112,921.50, wild or marsh hay 324,327.27, other hay crops 191,992.32, potatoes 29,381.81, other root crops 39,555.85, field peas 508.75, field beans 4108.61, other crops 11,516.66.

The pages of "Oregon Country Life" contain many advertisements of interest to farmers. When answering these advertisements mention The Journal.

GRIMM ALFALFA IS TERMED BEST FOR OREGON'S CLIMATE

Claim Made Following Experiments by Oregon Agricultural College Station.

A. W. McComb, O. A. C. Farm Crops Writer. The superiority of Grimm alfalfa over other varieties for the cool, dry sections of Oregon has been proved by the Oregon Agricultural college at the Eastern Oregon experiment station. Trials in several areas have shown that Grimm is the variety for those parts of the state where the altitude is high and severe winters with occasional late spring frosts prevail. Klamath, Lake, Harney, and Malheur counties as well as other parts of Central Oregon need this hardy variety, according to the college crops specialists. The Blue mountain section is also in need of Grimm alfalfa. In these sections Grimm can and should entirely replace other



A perfect non-mineral, non-injurious oil for any and all kinds of shoes. Shoes treated with Bergmann Shoe Oil are made waterproof, soft and pliable and their life greatly increased. For sale at shoe, hardware and sporting goods stores.

THEO. BERGMANN SHOE MFG. CO. Portland, Oregon.

Slump Is Reported In Yearly Output of Nitrate by Chileans

The production of Chilean nitrate, from July 1, 1918, to May 31, 1919, totaled only 2,200,417 tons of 2,204.6 pounds, whereas for the same period in 1917 and 1918 it rose to 2,738,285 tons, a gain of 537,868 tons in the latter named period, according to a report from the American consul at Antofagasta, Chile, June 7, 1919.

Normally, however, production and demand center around 1,840,515 tons yearly. At present the amount exported is negligible, and it is estimated that if the present rate of production is maintained and there is not a corresponding demand established before the end of the year, there will be a sufficient quantity of nitrate on hand to take care of all normal demands for one year from January 1, 1920.

Canning Company Capital Increased. Lebanon, Nov. 1.—At a recent meeting of the stockholders of the Lebanon Canning company it was voted to increase the capital stock from \$50,000 to \$75,000, and the number of shares from 1000 to 1500.

Orchards Gone Cause for Regret. Dec. Nov. 1.—The only people here who are not smiling are those who dug up their orchards. One man who dug

up seven acres of orchard was out hunting someone to kick him, when he thought about the Oregon hop men, who dug up their yards. Then he started for Marion county to find some man with whom he could exchange kicks.

First Annual GUERNSEY SALE

PACIFIC INTERNATIONAL LIVE STOCK EXPOSITION
November, 1919

The first Consignment Sale of Selected Guernseys ever held in the Northwest, in which every Consignor guarantees his offerings.

We have no Guernseys which we wish to sell, but for the sake of the advancement of the breed we are consigning some of the Best Animals from our herds for this sale.

For Catalogue write
Western Breeders Sales and Pedigree Co.
Sales Managers
202 Wilcox Building, Portland, Oregon
Auctioneer: J. W. Hughes, Forest Grove, Oregon
Assistants: Roy C. Jones, Tillamook, Oregon
C. D. Minton, Portland, Oregon

SALESMAN WANTED

We want an active intelligent man with car, who can give references as to his reliability, to handle farm lighting and power plants in his home district. Experience not necessary.

Exclusive territory and big pay to the right man. Write or wire if you can qualify. Stark-Davis Co., 215 Third St., Portland, Ore.



The Biggest and Most Interesting Livestock Show Ever Held in the West

Staged in the New \$300,000 Pavilion at North Portland, Oregon

Week of November 17 to 22

Open All Day and Evenings

Pure Bred Stock
Dairy Products
Horse Show

Cups, Trophies
and \$75,000
in Premiums to
Be Awarded

THE Pacific International Livestock Exposition was inaugurated and is supported by leading bankers, business men and breeders of the Pacific Coast—men of vision who see in the Pacific Coast the livestock center of the world.

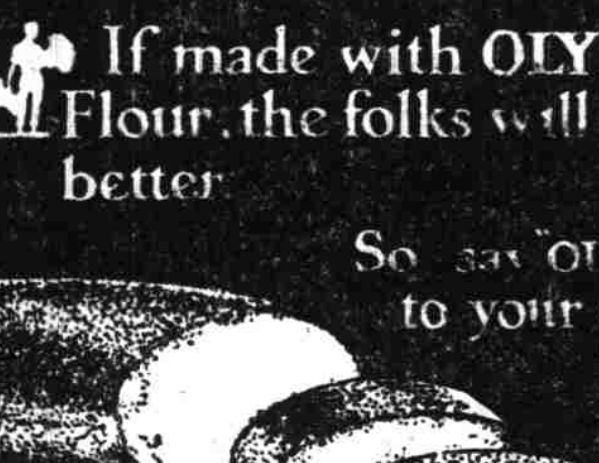
The staging of this exposition on so huge a scale is a long step toward the accomplishment of this aim and the benefits of its success will be widespread.

Thousands of entries of pure bred stock, many coming from the Middle Western States, necessitated additions to the immense \$300,000 Pavilion.

Hundreds of educational exhibits claim your attention, including the large Western Dairy Products Show with 250 entries and daily lectures by Mr. O. E. Reed of Purdue University and Mr. M. Mortenson of the Iowa State College.

Plan to Attend the Entire Week

Pacific International Livestock Exposition
North Portland, Oregon



EAT MORE BREAD

If made with OLYMPIC Flour, the folks will like it better

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