

TRACTOR VS HORSE, TOPIC

Grande Ronde valley is not only the home of prize-winning horses, but is rapidly becoming a center of tractor farming, paradoxical as the statement may seem. Trade papers are giving a whole lot of attention to tractor farming these days, and "Tractor Farming" a journal of this sort, contains pertinent argument in this respect in its current issue claiming too the horse will remain always. It says:

The great economic law, which makes a man's farm profitable, is not the amount he produces per acre, but the price he sells it for, rather than the difference between the amount it costs him to raise his crops and the selling price. This difference is what we call "net" profit.

This little word "net" is really the most important word in any business man's vocabulary. "Net" means how much you have left after paying to raise crops. If you take in three thousand dollars and pay out the same amount, you have no "net". It is better to take in one dollar and have ten cents left than it is to take in a hundred dollars and have only five cents left.

According to Extension Bulletin No. 15, issued by the Minnesota Farmers' Library, almost half of the gross cost of operating an ordinary diversified farm must be laid to horse labor. As long as this is true, just so long will it be difficult to lower producing costs; just so long, whether the farmer owns a hundred or ten thousand acres, will he find himself face to face with this power problem at sunrise every day.

This problem is chronic, we might say. It exists on every farm where horses are relied upon to furnish the power for field work. The number of horses in nowise affects it. The man who keeps a large number of horses to have plenty of power available at all times is increasing the cost per hour by decreasing the number of hours each horse works. The man who keeps a minimum number of horses finds himself handicapped in the amount of work he can do.

Conditions are Changing
The desire to apply factory principles of efficiency to farm methods in order to increase profits has brought farmers to the point where they are analyzing their producing costs in an attempt to find the leaks. When the government experts told us that half the gross operating expense of an ordinary farm was horse power, they forced us to make a cold-blooded analysis of this form of power, because here of all places is where a saving might be effected.

This analysis has not been an altogether pleasant task. We have become so used to seeing horses, reading of them, and thinking of them as a motive power for farm work, that we immediately question and perhaps even resent the statement that they can be dispensed with to great advantage. Sentiment is responsible. The horse is an intelligent animal. We have been in constant contact with him for years, and we have learned to love him.

What's the Matter With Horse Power
Fortunately, we can answer this

question, not from personal observations, which are open to question, but from tests which expert investigators of the Department of Agriculture conducted for a number of years. These investigators discovered one very important truth, i. e., that the farm horse works on an average only three hours per day, or less than one thousand hours per year. That sums up the whole trouble with horse power.

Being an animal, the horse must eat regularly in order to sustain life. There really isn't very much difference in the amount he eats whether he works or not. He also requires a certain amount of personal attention in the way of feeding and care. Whether he works or not he must have shelter, and as he gets older he depreciates in value. Whether he works or not there are certain definite charges by way of interest against the amount invested for him. The total amount of all these charges for the year is about \$125.

The cost of horse labor per hour is determined by dividing the cost of maintenance for a year by the number of hours the horse works. If he works 1,000 hours a year at a cost of \$125, it costs 12 1/2 cents for every hour that he works.

There are two seasons on every farm—the active and the inactive seasons. During the inactive season the horse seldom averages more than one hour of work a day. During the active season, the crop-growing period, the work averages from three hours a day on some farms to as high as eight or ten on others. Horses suitable for farm work cannot be picked up at a moment's notice. Knowing this, the forehanded farmer always has a barn full of horses for emergency work. Government experts say there are from one to three of these costly extras on every farm.

Five Acres to Feed a Horse
Have you ever stopped to realize how many acres in a farm are given up to growing horse feed? It's strange how many times this is overlooked. We had one farmer down in Kentucky tell us that it didn't cost him anything to feed his horse, because he had the feed anyway. This man overlooked the fact that for every horse or mule he had on his farm, he was growing five acres of feed. Government experts tell us that the horse eats, annually, three tons of hay and about 5,000 pounds of grain. It would take just about five average acres to grow this amount of hay and grain.

On this basis the 160-acre farmer who has eight horses in his barn, is cultivating forty acres for horse feed, or one-fourth of his total farm. Think of it! One acre out of every four under cultivation being farmed for the benefit of horses that give only three hours work a day!

Horse is a Low-Efficiency Tractor
We might forgive the horse for requiring so much of our perfectly good farm land for feed if he did more for us. But he can't.

In the first place, he is a very low-efficiency motor. Seventy per cent of what he eats is lost somewhere in his mouth, stomach and intestines. This delivers 30 per cent to his muscles, which sounds promising until we learn that the greater part of his must be reserved for his own use—body maintenance, carrying his weight, and propelling himself about the field. He has left after he has taken care of himself, not over 7 per cent efficiency for drawbar work. Edison says his efficiency is only 2 per cent.

The Power of a Horse
Measured in actual pounds of work,

the horse delivers about one-tenth of his weight at the drawbar. A 1,500 pound horse would have a pull, at 2 miles an hour, about 150 pounds. If this horse were traveling at two and a half miles per hour, pulling 150 pounds, he would be developing an actual horse power, which is the power necessary to raise 33,000 pounds one foot in one minute. This is the standard horse power measure. It is apparent, then that the efficiency of a great many horses is considerably less than an actual horse power in continuous work, especially when the horse weighs less than 1,500 pounds or travels at a speed of less than two and a half miles per hour.

Horse is a Small-Power Unit
The second handicap of the horse is the fact that he is comparatively a small-power unit. The horse at best cannot work with more than two or three other horses, so that really a farmer never has more than three or four horse power of energy to put on any job. If the field to be plowed is large enough, there is no reason why a farmer should not put twenty horse power at work at one time and plow the ground more quickly. With horses, however, to apply twenty horse power to the job would mean five or six teams, a man with each team. Many farmers could not possibly afford to keep this number of horses, nor could they find the necessary hired help simply to do a plowing job.

Horse Will Always Be Used
However far horse power seems to fall short of being the ideal farm power, we do not say that he is going. Horses will always have to be kept,

Coffee

We pack in a way to respect the coffee and keep it fresh for you; it is the way to keep coffee.

We grind it evenly so that you will have more cups of fine clear coffee.

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especially on corn belt farms. There will always be room for more good horses. When steam power replaced the horses used to drive the old-time threshers, many felt that the horse industry was going to be hurt badly. It was not. When the automobile came along many of us saw visions of the horse in museums of antiquity. He is still with us, and strange to say, he has increased in value more than 185 per cent in the last twenty years.

The trouble with many of the horses on the farm is that they fill no market demand. They are the result of indiscriminate crossing, a type that nobody really wants. Farmers realize this. Reports show that hundreds of farmers who have been supplanting expensive horse power by oil power for heavy field work have sold enough of the poorer horses to pay the original cost of the tractor. The average price they received for even these poor horses was \$150 a head.

The safe rule for the farmer, who wishes to cut his producing cost, is this—substitute oil power for animal power where the time saved and the increased amount of work done will result in a profit. Sell all but enough horses to do the light work. Keep preferably brood mares that will help pay for their keep by the colts they produce.

War Spy Activities in Northwest.

Tacoma, Wash., Dec. 9.—(Special)—More amazing details of the activities of war spies in Tacoma came to light today when M. J. Malloy, a resident of Puyallup, Wash., told British consular officials in Tacoma that he had been in direct communication with Count von Bernstorff, Captain Boy-ed, military attache, Von Papen, Lieutenant Robert Fay, also known as Scholtz, and "Captain" Charles C. Crowley.

Conferences between Mr. Malloy and "Lieutenant" Smith, "Captain Crowley and Lieutenant Fay were held in Puyallup early in May, Mr. Malloy told the British officers. At that time, Mr. Malloy declares, Smith, Fay and Crowley represented themselves as British army officers, seeking to purchase from him a self-propelled missile that he had invented to be used expressly to destroy commerce.

As a result of the conferences and written communications with German military attaches, Mr. Malloy declares he has received anonymous letters instructing him to "leave the country immediately."

Mr. Malloy declares if called upon by United States officials, he will dis-

close the correspondence that passed between him and the German military attaches.

Once Banker, Is Now a Day Laborer.

Winslow, Ill., Dec. 6.—From a well-dressed banker to a day laborer in overalls is the transition of J. Bradley Fuller, who, with his sisters owned and operated the private bank of Fuller & Son at Winslow. Necessity forced the former banker to obtain means of support.

The only occupation available was that of helping manufacture concrete blocks. He is paid \$2 a day for ten hours, and is docked for every hour in which he is not occupied.

Upon the recent return of Fuller from the East, his departure taking place just one week prior to the failure of the bank, he was on the verge of nervous prostration. The sympathy of his friends assisted in restoring him he announced his willingness to take nerves to their normal condition and any kind of work which afforded himself and his family a living.

After seeking in vain for some occupation more remunerative and with less physical labor involved, he went to work with the concrete firm and expects to remain there until something more inviting develops. His family take their reduced circumstances philosophically, all seeking employment in order to contribute to the common fund.

The report of the Auditing Board, of which D. F. Graham, President of the First National Bank of Freeport is Chairman, shows that the liabilities of the Winslow bank are \$168,647, while the assets are \$120,935. On this basis depositors will receive about 70 cents on the dollar. The auditor assumed that the assets credited to the Invariable Furniture Company of Manitowoc, Wis., amounting to \$20,000, would not depreciate.

TWENTY NEW MEMBERS.

Interesting Service in Connection With Baptismal Rites.

Baker, Dec. 10.—Twenty new members joined the Haines Baptist church in this city last evening at special services at Calvary Baptist church, which were attended by a large congregation of Baker people and 50 from Haines. The 20 who were baptised and made members of the Haines church were among the converts made at the recent revival services by Rev. A. M. Williams, who performed the baptismal rites. The trip to Baker was made for the reason that as yet there is no baptistry in the Haines church, although one is to be installed in the near future.

The service in which 20 new members were added to the Haines church was very interesting. Short sermons by Rev. Williams and Rev. A. R. Willet, pastor of Calvary Baptist church, were followed by special music by the choir and a solo by Mrs. Cecil Stuller.

Logger Falls 35 Feet.

Cottage Grove, Or., Dec. 9.—Oscar McCallister while employed at U. S. Logging company's camp near here a few days ago had a narrow escape from death, when his foothold gave way while he was fixing a block in a tree about 35 feet above the ground and he fell. There were no bones broken and he is improving rapidly.

Notice

I will not be responsible for any debts incurred by Mrs. A. J. Fiek after December 9, 1915—Adv 12-9-51. A. J. FIEK.

Notice to Stock Holders.

The annual meeting of the stockholders of the United States National Bank of La Grande will be held at their banking rooms on Tuesday January 11th, at the hour of 2 o'clock p. m. for the purpose of electing a board of directors for the ensuing year. T. J. SCROGGIN, Cashier. Adv-Dec. 8, Jan. 10.

Tuesday Special

Sweaters at One-Half Price

Our entire line of sweaters—white, red, navy, and brown, all sizes values to \$7.00—at half-price.

125 Wool tams Tuesday special 69c.

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CHINESE ROOT AND HERB REMEDIES

Cures Bodily Diseases With Root and Herb Treatment. Free Consultation

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La Grande Ore.

Announcement

Fairbanks, Morse & Co. standard line of gasoline and oil engines pumps, windmills and electric motors.

2 horse power gasoline engine	\$50.00
4 horse power gasoline engine	\$99.00
6 horse power gasoline engine	\$149.00

Other sizes in proportion f. o. b. Beloit, Wis. Ask our nearest agent about it.

J. J. QUINLAND CO. Inc.
Salesroom & Shops
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Ajax tires, Oakland automobiles, garage in connection.

Annual Meeting of Stockholders

Notice is hereby given that the annual meeting of the stockholders of La Grande National Bank will be held at their Banking House in La Grande, Oregon, on Tuesday, January 11th, 1916, at the hour of two o'clock P. M. At this meeting a Board of Directors will be elected to serve for the year 1916 and until their successors are elected and qualify, and such other business will be transacted as may properly offer.

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The people I represent are never out of funds, and the rates of interest are fair. If you have the security, I will get you the money.

WRITE OR CALL

If you want a loan on your farm, call and see me or write, and you will receive prompt attention. Come in and let me explain the merits of the farm loan I have to offer you.

Let Us Insure Your Buildings, Furniture, Stock, Implements, Etc.

La Grande, Ore.,
108 Elm Street
Phone Black 2001

Geo. H. Currey

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Flowers For Christmas

Blooming Plants

These always make acceptable gifts. We will begin showing in our windows about the 15th a beautiful assortment. Be sure and see them. Make your selection and we will deliver anytime.

Cut Flowers

Orders are now coming in. Let us have your order early. Remember as usual, orders are filled in the order received—first come—first served.

Holly Wreaths

Green and Berried Holly.

Red Ruscus

La Grande Seed & Floral Co.