ORCHARD EXPERIMENTS

Cultivation and Pruning Tests by Government Agents.

It Pays to Enrich the Soil — Late Cultivation Not Advisable—Pruning and Spraying Advocated—Thrifty Ewes Mean a Big Lamb Crop.

(Contributed by Ontario Department of Agriculture, Toronto.)

FIVE leased orchards in the Counties of Simcoe, Norfolk, Prince Edward, Lambton and Ontario, all being in apple growing sections, were looked after by the Ontario Department of Agriculture during the war. Four of these have been very profitable. In the Prince Edward county orchard it was successfully demonstrated that new heads could be put on old trees.

The Department found that leasing apple orchards is a profitable business, but several things must be done to make it so. On the lighter soils many of the trees are positively starving while on heavier lands this may not be so apparent. In the experiments very little commercial fertilizer was used, but the Department depended on the use of barnyard manure, mostly secured from Toronto. About seven tons per acre are sufficient for one application, which gives about 400 pounds per tree and the total cost is about $21 per acre. The amount looks big but there is no doubt that it will pay well to spread that much on light land nearly every year.

About six or seven years ago we began ploughing, in the fall, several rows of trees in all the leased orchards (a portion being left in sod to test the sod mulch). This was done in order that we could answer from experience the frequent question —What about fall ploughing? When the land is fall ploughed cultivation can be begun much earlier in the spring. It costs much less to get land in good condition when it has been ploughed before winter, but we can see no advantage in ploughing closer than five feet from the tree. The troublesome part in orchard cultivation is close to the trunk and it is frequently difficult to work near the tree without injuring the bark.

We have tested cultivation against sod mulch, and have concluded that nearly all the orchards will be more profitable when cultivation is carried on, unless the land is first-class and there is plenty of barnyard manure for mulching. When to stop cultivation is rather hard to answer. It depends on the season. The drier the weather the later the cultivation should be carried on. On rich land apples will grow long after cultivation has ceased. We are stopping our cultivation earlier and earlier every year because our Ontario apples lack color; less cultivation means more color, more color higher priced fruit. Medium apples slightly colored seem preferable to larger ones lacking color. When cultivation is stopped a cover crop is frequently sown. The principal object is to rob the trees of nourishment in order that the fruit will color and the wood will ripen before winter. Some low growing crop from cheap seed gives most satisfaction.

Trees must be pruned to get high class apples. The best time to prune is early spring but we prune any month when the weather is not too cold for our men. If there are large cuts to make we leave a stub about one foot long and cut it off in the spring, as cuts of two inches or more do not heal well when made in the very cold weather; large cuts should be kept painted to keep the wood from decaying. Pruning is a slow business and it costs a lot to get a big orchard done, but it is absolutely necessary if good apples are expected. High trees are difficult to spray thoroughly. Twenty feet is high enough for any tree and several feet of top may be removed in a season with no bad effects. The tree with a low head is easier pruned, easier sprayed, can be picked for half the cost, and the wind will not blow down so many apples.—W. F. Kydd, Fruit Branch, Toronto.

Thrifty Ewes Mean Bigger Lamb Crop.

The best results from breeding are obtained from ewes that are in a gaining condition. If they are thin from having been kept on short fall pastures, they should have a little grain—from one-quarter to one-half a pound a day. This will put them in good condition and they will breed earlier and increase the lamb crop.

Some fairly accurate record should be kept when the ewes are bred in order that when lambing time approaches the ewes may be separated from the main flock and given extra feed and care. If ticks, lice or scab appear in the flock, the sheep should be dipped even though the weather is a little severe. This is extra work, but the flock will be more healthy and thrifty. A warm place should be provided the sheep until they dry off.

The ram should also receive extra care at this time. In order to keep him active, vigorous and in fair flesh during the breeding season he should be fed a pound or two of grain every day. "Extra care of ewes and breeding ram at this time," says Mr. Anderson, "will insure a larger and stronger lamb crop and well repay the flockmaster for his extra labor."

Farm Notes.

From now on empty the hopper of the gasoline engine after using, and protect batteries from frost.

Do not forget that salt and water are as necessary for the cow as is feed. A tablespoonful of charcoal mixed with the feed aids digestion.

The dairy farmer not only studies how to feed his cow, but how to feed his land. He is not a soil robber, as he realizes that the farmer who reduces the fertility of his land robs without reason, since he steals from himself.

Light in Poultry House

(Experimental Farms Note)

After repeated experiments by the Experimental Stations and others, one can say that artificial light in the poultry house is an advantage, in that it transfers the period of high production from the spring months to the winter months. Tho' light may not be the means of increasing the yearly egg yields, it produces eggs when eggs are high in price.

Light gives the birds the amount of daylight they are used to having during the time of high production, or in the spring months. In Canada, especially, the winter days are extremely short, and the hen's day even more so, for she goes to roost as soon as it begins to grow dusk, and the trouble is that the night is so long that she is not able to take enough feed to do her until morning. The value of the light is simply to increase her daylight so that she can have more time to eat and less time necessary for sleep. It lengthens the hen's day and makes it more in keeping with summer conditions.

There is really no best time when the light should be turned on. It is all a matter of convenience Some people prefer to turn on the light from four to six in the morning and let the birds go to roost when they see fit in the evening. They claim that this is more natural, in that the birds get up as soon as the light comes and start scratching. They go to roost at the usual time at night and are sure to be on the roosts. Others will turn the light on for an hour or two in the morning and an hour or two in the evening, while some find it more convenient to turn the light on in the afternoon before dark comes, and then turn it off about nine or ten o'clock at night.

As long as the day is lengthened from twelve to fourteen hours it is immaterial just what method is adopted, so long as the same method is followed throughout the whole season. Care, however, must be taken so that after the lights are turned on in the evenings the birds will get to roost before the lights are turned out. To insure this some use dimmers. Others flash the lights, while some claim it is not necessary; that the birds will soon get into the habit of knowing just when to take to roost.

On the electric light being turned on at night, there is the difficulty that the birds sometimes go to roost early, even though the light is on. If this is found to be the case it will be well to give them some special feed in the evening and keep them scratching, or allow the birds to go to roost at the natural time in the afternoon and then after supper turn on the light and give them their evening feed. At that time they are hungry, they get off their roost and spend an hour or two scratching to get their evening feed. The exact time is not so important, so long as judgement and good management are used.

Since the use of electric light is valuable only in hurrying up egg production, it is not recommended as highly for well-matured early pullets that have started to lay, say in October and November. Under natural conditions these will give a good egg yield, and it is a question as to whether light in their case is an advantage, but for late and immature pullets and older hens, light is an advantage. It will hasten development of the later pullets, bring them into egg productien much earlier, and will sometimes be the means of making late birds give a profit when otherwise there would be none. The same is true of hens that have been laying fairly well during the summer and under natural conditions will rest for most of the early winter months. Our experience has also been that for the late hatched chicks electric light has assisted in the development. In a bunch of White Leghorns hatched on the 15th of September, electric lighted brooders were used which gave light all night long and these pullets were laying by January 15th.

As a rule a 60-watt. Tungsten will give sufficient light for an ordinary pen of twenty-five birds. Shades to the light should be placed where the most illumination will spread over the floor. Where electric lights are not available, a number of barn lanterns with reflectors have been hung on the wall with fair success. Other systems of illumination may be used, but danger of fire must be taken into consideration. Automatic clocks for turning on and off the lights are an advantage, in that it is then done without any extra attention. Dimmers are an advantage if the light is used in the evening, but if the manager will watch carefully he can by flashing his light soon train the birds to take to the roost.

At the Experimental Farm electric lights have been tested for several years, and the general results are as indicated above. During the six winter months, November to April, lights were the means of reducing the cost of feed for each dozen of eggs from 32.1 to 28.5 cents, but the main difference was shown in the profit because of the extra price received for the eggs during the early winter or with the light, for in four pens, two with light and two without light, a balance over cost of feed and cost of light in the illuminated pens was $76.64 against a balance over cost of feed in the dark pens of $58.95.

Woodhouse Election

REEVE

	1	2	3	4	Total
R. W. Caswell	28	138	52	43	261
C. D. Woolley	98	37	35	65	235

COUNCILLORS

R. B. Kent	62	149	39	14	264
Roy Misner	52	54	43	103	252
A. C. Kitchen	55	48	47	94	244
S. R. Hancock	102	86	16	10	214
B. Steinhoff	37	64	71	19	191
D. Secord	22	48	19	9	98

The first four are elected as councillors.

Nanticoke

A very successful Christmas tree programme given by the Sunday School of School 16, led to all the participants enjoying last Thursday evening an oyster supper, held at the home of Mr. and Mrs. Cox. A pleasant evening was enjoyed with games and music. Old school pals and friends fall in line with the "Community Spirit," and unite in the continuation of these social evenings.

There's a dear spot, its our old schoolhouse, and it's still sweet sixteen,
Bring memories of all the good times
We had there long ago.
After years we gather round the dear old school room again
And give three cheers for our school Sixteen.

Ross Macdonald, Brantford barrister, has been appointed prosecutor in O.T.A. cases in Dunnville, and will also prosecute in such cases in adjoining counties.

Hat-Draw to Choose Delhi's Councillors

Method Adopted to Obviate the Necessity of Holding an Election.

DELHI, Jan. 7—All nominees for the Council having withdrawn on December 28, new nominations were held in Morgan's hall this evening when A. Aldrich was declared by Clerk James A. Lawson to be elected Reeve. For the four Council seats seven were proposed: J. Hiller, A. Wilbur, J. W. Bannister, E. D. Heath, E. Bertling, R. Quance and W. R. Kent.

In order to avoid the necessity of an election these nominees decided the matter by drawing slips from a hat.

The new Councillors are the four first named.

Read the advertisoments in the Record and spend you money at home.

Seed

Highest Cash Prices Paid for all kinds of Grass Seeds

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F. W. Reichheld

WM. HOSKIN
JARVIS, ONT.

—has been appointed the exclusive Sharples dealer for this territory. Because—we want you to get Sharples Service with Sharples machines. You can get repairs or supplies the *same day*. Furthermore, our local agent will demonstrate to you the superiority of any Sharples machine. The Sharples Separator saves cream thrown out by all other separators because it *skims clean at all speeds*, due to the wonderful Suction-feed.

SHARPLES
famous Suction-Feed
"Skims clean at any Speed"
SEPARATOR

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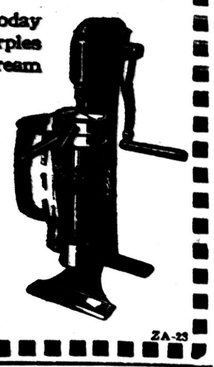
—the *only* separator that gives cream of unchanging thickness—all speeds
—the *only* separator that will skim your milk quicker when you turn faster
—the *only* separator with just one piece in the bowl—no discs, easiest to clean
—the *only* separator with knee-low supply tank and once-a-month oiling

Take a trip into our local agent's store today and see for yourself the above *exclusive* Sharples advantages and what they mean to you in cream saved and in convenience.



SHARPLES MILKER The world's fastest milker—and *fast milking* increases the milk yield. Produces 1.25 lbs. of milk per unit per minute—one man can easily operate four units. Used on over 300,000 cows daily.

The Sharples Separator Co., [illegible] Toronto

ZA-23

If you buy out of town and I buy out of town what is going to become of our town? The dollar you spend in Jarvis will eventually "Come home to Boost."

JARVIS' BUY-AT-HOME CAMPAIGN

Read these articles with care, they may present something you have not thought of before. Patronize the home merchants, whose ads. appear here. They are your neighbors and will treat you right. The money you spend with them stays in circulation in Jarvis and neighborhood and benefits the town.

Service is The Measure of a Bank's Usefulness

We think we give the best. Our facilities are at the disposal of all who appreciate courteous consideration and the best terms consistent with sound banking. We are always glad to be consulted.

BANK OF HAMILTON, Jarvis-Nanticoke
J. H. BROWN, Manager.

Bring Your Old Shoes to Me for Repairs

I will make them look like new. These are the days when it is necessary to cut down your expenses. I also have a fine line of men's and ladies' shoes to select from.

J. W. NORMAN,
The Old Veteran Shop.

Seldom Will You Find a Combination

of grocery and bakery giving the service and quality of goods I do. I do not fear competition of any nature because the groceries and baked goods I sell cannot be duplicated anywhere.

D. C. ALLEN, Grocer and Baker

A Drive to and From My Garage is an economy drive. If you spend some money with me you will save money. If I attend to your car it will render a faithful accounting. Oils, Greases and Accessories.

E. W. ANDERSON, Garage

Pocket Billiards is a Recreation

It aids digestion. — Come in and try it. My shop is clean and and sanitary. If you need a shave, haircut, shampoo or massage you will get the right kind of service here. A full line of smokers' supplies and tobaccos always kept in stock.

WM. HODGES,
Barber and Tobacconist.

GERARD HEINTZMAN

The piano whose present popularity with music lovers has been won by merit, and by merit alone. If interested first consult any Gerhard owner, then for a quality deal of 100 cents on the dollar consult the district representative,

C. S. McCARTER.

Get your next job of paperhanging, painting or decorating be done by me. My long and wide experience in Jarvis is your guarantee of a service well rendered. I also sell wall papers of every description. Look over my samples before buying elsewhere.

WM. MACHELL, Paperhanger.

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You will find my prices right, and I stand back of every piece of furniture I sell. My Undertaking Parlors are well equipped for service—night or day. Call me up or come in and see mee.

IVAN W. HOLMES,
Furniture and Undertaker

I Am Always Prepared

To do all kinds of Sheet Metal Work, Trimming and Spouting. If I do your work you will be sure it is done right. No job too big or too small. I am always prompt and my prices as well as service is right.

W. R. OWEN,
Plumbers and Tinsmiths

TAXES RAISED BY HARD TIMES

Burden Is Lightest in Communities Boasting Live and Thriving Towns.

FARMER FEELS THE EFFECT

Is Inclined to Forget, at Times, That He Is Most Vitally Interested In Prosperity of Nearby Cities.

(Copyright.)

Taxes are always heavy — to the man who has to pay them—but taxes in some communities are much higher than in others. If you have ever stopped to investigate the matter you have discovered that the lowest taxes are found in the most prosperous communities. And there's a reason.

The prosperous community has the lowest taxes because there is a large amount of wealth in the community against which the taxes may be assessed. There are prosperous merchants with large stocks of goods upon which taxes are levied. Property values are high and there are thriving industries which pay a large proportion of the taxes.

The higher the property values and the greater the wealth of the community the lower are the tax levies, for a lower tax on each hundred dollars of valuation is required to produce the necessary revenue for the administration of the city and county governments.

Other Taxes Are Raised.

On the other hand, take a dead town. Property values are low. Merchants' stocks are small and they have little money in the bank. Industries which ordinarily pay a large part of the taxes of a community have closed down. There are vacant store buildings which were formerly filled with stocks of merchandise upon which the owners paid heavy taxes. Who pays the taxes that were once paid by the mechants, the manufacturers, the bankers and the men who had large holdings of high-priced property! The taxes to conduct the city and county governments, to maintain the schools, to build and repair the roads must be collected from someone. Who pays them? The man who owns his little home or [illegible] upon which he has been planning to build his home must pay double or triple the amount which he paid in the times when the town was prosperous, to make up for the taxes which are not paid now by the merchants, the bankers, the manufacturers and the big property owners who bore the heaviest burdens of taxation when times were good.

The farmers in the country surrounding the town are also among the heaviest sufferers from the ebbing of the town's prosperity. A certain amount of money must be raised by taxation to provide for the expenses of the county. Roads must be built and kept in repair. Bridges must be built and maintained. Salaries of county officers must be paid. County institutions for the care of the sick and the poor must be maintained. In counties which contain one or more thriving towns, a large proportion of the taxes for the county are paid by the towns. The greater the wealth of the towns and the higher the property valuations, the lower the tax levy for the entire county. When the tax levy is low the burden placed upon the farmer is light.

Burden Falls on Farmer.

When the county contains no prosperous and wealthy towns, the greater part of the burden of taxation for the county falls upon the farmer. The value of the property in the town and the higher tax levy that results from the lower property values in the towns makes his taxes higher.

The farmer forgets at times that he is vitally interested in the prosperity of "his town." He thinks that it is up to the town to take care of itself and that it is up to him to take care of himself, and he overlooks the fact that the prosperity of the town means as much to him as it does to those who live in it. The farmer who is inclined to overlook this fact has only to think of the matter of taxes and he is likely to change his point of view, for taxes are one thing that neither he nor anyone else can escape, and they are one thing in which the farmer ordinarily takes a very lively interest.

How Farmer Can Help.

There is just one way in which the farmer can best promote prosperity in the town near which he lives and that is by spending his money in that town instead of sending it away to the far-distant city. Every time the farmer sends an order to a mail order house he helps to destroy the prosperity of his own community and to boost his own taxes. When he sends a dollar away from home he gets none of it back. When he spends a dollar at home, a part of that dollar comes back to him in some way. It helps the town where it is spent to provide a profitable market for his products and it helps the town pay a large part of his taxes.

The farmer is the one man in the community, above all others, who should have no love for the mail order houses for they are doing more to add to his troubles than any other one agency.

In the Line of Meats

You cannot beat the OLD VETERAN SHOP. Everything I have in stock is "proven best by every test." I invite your patronage with the assurance that you will be satisfied. Carry a good line of all vegetables in season.

E. MACHELL, Meat Market.

Pure Drugs Are Essential to health. We carry a full line of 100 per cent. pure drugs — and medicines. Big line of toilet articles and sick room supplies and everything usually carried in a first-class drug store. Buy in Jarvis.

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When It Comes to Supplying the needs of this community in the line of Groceries and Dry Goods. We feel proud to state that our lines cannot be surpassed. A complete line of everything kept in stock, and the service we at all times extend to our patrons is deserving of your patronage.

MILLER BROS.,
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Always at Your Service

Anything in the line of Real Estate, Fire Insurance, Loans & Conveyancing will be given the strictest attention by me. If you re considering the sale of your home or farm see me.

GEO. L. MILLER,
Real Estate and Insurance.

GOODS OF QUALITY!

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J. A. BURWASH,
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I have just opened up and have taken the agency for the Farmers Cockshutt line of farm implements, also the Adams' make of wagons. Come in and get my prices on anything you may need, and I will assure you in advance of every courtesy possible in my line.

HERBERT PEACOCK, Implements

I Have Said It Before and Say It Again.

You can get better prices as well as quality in footwear at my store than in the city. My stock is of the best quality. Also carry a good line of harness, whips, etc. Bring in your harness now for repairs.

A. H. LANGRAF,
Saddler and Shoes

If You Have a Blowout, Stone Bruise, Puncture

or if your tires need re-treading bring it to me and I will show you how to save money on your tire bills. I have a complete vulcanizing and tire repair plant, and the service rendered is your guarantee of good work.

J. W. MORRISON,
Tire Repairman

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I always aim to keep my stock fresh and clean. You can always return anything you buy from me that is not satisfactory. I carry at all times the choicest cuts of beef, pork, lamb, in fact, everything in the meat line. I solicit your patronage, guaranteeing to service in advance.

THOS. HARRIS,
Groceries and Meats

General Hardware Needs

At C. T. Carter's. Everything in Hardware, Builders and Contractors Supplies, Farm Needs, etc. You can depend on any line of Hardware you purchase from me. Coal Ranges, Coal Oil Stoves and Heaters always kept in stock. Full line of Paints.

E. T. CARTER, Hardware