Grand Trunk Railway TIME-TABLE

Trains leave Ducham at 7.15 a.m., and 3.45 p.m.

Trains arrive at Durham at 11.55a.m. 2.00 p.m., and 8.55 p.m. EVERY DAY EXCEPT SUNDAY C. E. Horning, G. T. Bell, D.P. Agent, G.P. Agent,

Toronto. Montreal. J. TOWNER, Depot Agent W. CALDER, Town Agent

Canadian Pacific Railway Time Table

Trains will arrive and depart as fol ows, until further notice:--

P.M	A.M.	P.M. P.M
3.10	8 20 T.V	. Walkerton Ar.12.55 10.35
3.24	634 "	Maple Hill " 12.38 10.22
3.34	6.43 "	Hanover 12,30 10.14
3.43	6.52 "	Allan Park 12.20 10.04
3.58	7.07 **	Durham " 12.06 9.50
		A.M.
4.00	7.18 "	McWilliams" 11.54 9.34
4.19	7.21 "	Glen " 11.51 9.34
4.22	7.31 **	Priceville " 11.41 9.23
4.35	7.45	Saugeen J. " 11.30 5.18
8.10	11.20 Ar.	Toronto Lv. 7.45 5.25
		RLANE, - Town Agent

New Train Service TORONTO-MONTREAL **OTTAWA**

Via 'Lake Ontario Shore Line" Fast time to Oshawa, Port Hope. Cobourg, Believille. Trenton, etc.

Particulars from C.P.R. Ticket Agents, or write M. G. Murphy, District Passenger Agent corner King and Yonge Streets, Toronto.

> R. Macfarlane, Town Agent E. A. Hay, Station Agent

BUSINESS SHORTHAND, CIVIL SERVICE COURSES

MOUNT FOREST Business College

Competent instructors. Special training for teachers. Special Farmer's Course, and NEW YEAR TERM FROM JAN. 4.

Affiliated with the Stratford Business College and Elliot Business College, Toronto. Write for free cat..logue.

D. A. McLachtan, President. G. M. Henry, Prinicipal.

DOUBLE TRACK ALL THE WAY

TORONTO-CHICAGO TORONTO-MONTREAL

Unexcelled Train Service Highest Class of Equipment

WINTER TOURS

CALIFORNIA, FLORIDA and SUNNY SOUTH

FAST TRAINS CHOICE OF ROUTES LOW FARES NOW IN EFFECT

For full particulars consult G.T R. ticket Agents or write

C. E. HORNING. Dist. Pass. Agent, Toronto

W. Calder. Town Agent, Phone 3a J. Towner, Station Agent Phone 18

H A M PLANING MILLS

The undersigned begs to announce to residents of Durham and surrounding country, that he has his Planning Mill and Factory completed and is prepared to take orders for

> SASH, DOORS - and all kinds of -House Fittings

Shingles and Lath Always on Hand At Right Prices.

Custom Sawing Promptly Attended To

ZENUS CLARK DURHAM ONTARIO

Mustard plasters come under the head of drawing instruments.

In after years love's young dream occasionally develops nightmares.

Scientific Farming

THE APPLE ROOT BORER.

How This Enemy of Apple Orchards May Be Controlled. [Prepared by United States department of

agriculture.] An enemy of apple orchards which than by killing the insect is the "apple root borer." The adult borer is a tiny slender beetle which has a metallic purplish or coppery luster. This beetle lays its eggs in the late spring and trunk a few inches above the ground. The eggs are usually deposited one by for comparison Both parts are one, though occasionally in pairs. They are usually attached to a smooth surface, but are sometimes inserted in a crack or beneath a scale of bark.

When the larva hatches it leaves the egg from the underside and enters directly into the bark, thrusting its castings backward into the discarded shell and so filling it that it retains its normal size and shape. The abandoned shell often adheres to the bark for a year or longer.

The work of the insect is obscure, there being no chips or castings thrown to the surface, as is the case with the common round headed apple tree borer. which the adult escapes from the wood are the only external marks made by the insect on the tree. In addition to the injury resulting from the damaged



DAMAGE CAUSED SY BORER IN THE APPLE 3001 BY SURROWING

roots, the exit holes in the bark admit more or less water, which frequently induces decay of the heart wood.

as far west as Michigan. In portions of the Appalachian region it does considerable damage to young fruit trees.

When fruit is setting in the spring such paints, washes, sticky substances or mechanical devices as are used to prevent the round headed apple tree borer furnish equal protection against other insects. The eggs may also be prevented from being placed on the bark by temporary wrappers of paper or burlap or any other material that iron sulphate. will entirely cover the lower two feet of the trunk for a period of four or five

weeks following the blooming season. Treatment with sticky adhesives or heavy paints that are not injurious to trees will answer the same purpose. The insects' concealed method of feeding does not permit the use of the "digging out" process," which is effectively used by truit growers against

a number of fruit tree borers. The borer also is to be feared because it develops freely in the common service tree. It has also been found on wild thorn and chokeberry. The nearness of woods where these trees flourish may be regarded as a possible source of danger to an apple orchard.

Much Grass Needed Yet.

A careful examination of the dry farming regions will show that the percentage of smooth, hard lands wnich should be retained in grass is much larger than would at first be supposed. It may be said that these lands nave become too high priced to use for pasture, but unless the land can show a net profit on the crop in an average year which will pay the fixed charges on the land, then the excess value placed on the land over its earning power is purely speculative and not to Le used as a basis upon which to establish land values or determine systems of land management. The net profit per acre in good years is less under pasture than under grain cropping but in bad years the revenue is greater under pasture, and the risk is always less, as you reduce the labor cost per acre and increase the size of the farm unit up to the limit which can be handled by a single family.-Dean E. A. Burnett, Nebraska College of Agrica.

1914 DRIEST YEAR ON RECORD, 11

But Drainage Gives Big Results

The Ontario Agricultural College reports that the crop year of 1911 14 Testing 2 varieties Carrots was the driest on record in On- 15 tario. The precipitation from harvest 1913 to harvest 1914 lacked 17 Testing 2 varieties Sorghum 5% inches of being up to the average. This is a shortage of almost 20 per cent. The College has often 19 stated that tile drainage was effective in a dry season as well as 20 must be controlled by protecting the was able to prove this in a prac- 22 trunk of the tree from the egg rather tical way Since 1912 the College 23

in a wet one, and last year has been installing Practical Drainage Demonstration Flots in 24 parts of the province where little or no drainage has been done The glues them tightly to the bark of the plan is to drain half of a field 30 leaving the other half undrained sowed to the same kind of grain and the crop from each part for 1915 and apply for the same. threshed separately. Nine plots were drained prior to 1914. The average of the nine fields showed that at market prices at threshing make a second choice as the matime the drained half produced terial for the experiment selected \$14.12 more per acre than the undrained half, and that in the driest vear on record. In an average nished free of charge to each apseason the average increase due to plicant and the produce will, of drainage is over \$20 per acre, and course, become the property of

in a wet season even more. The egg, which is placed rather con- ricultural College has been mak- his name and address very carespicuously on the bark of the trunk, ing drainage surveys for farmers and the exit hole in the bark through free of charge, except for travelling expenses. This offer is again ed to the Agricultural College at renewed. Farmers having drainage Guelph. difficulties may secure assistance by writing the Department of The Need of Greater Production Physics, O. A. C., Guelph. for information and regular application

- perative Experiments

1912-1. 14, the Department of ties for carrying on our business. Botany of the Ontario Agricultur- It is loamed money, and bears one al College, in connection with the hundred and twenty millions of work of the Ontario Agricultural dollars interest annually. That inand Experimental Union, carried terest must be met. It can be met on co-operative experiments in only by exporting surplus prothe eradication of weeds. Some 45 ducts. There is a ready market farmers co-operated in this work. for all the farm products we can the weeds experimented with produce over and above our own were Perennial Sow Thistle, Twitch requirements. A twenty per cent. Grass, Bladder Campion, Wild increase in farm production will Mustard and Ox-eye Daisy. Some cover our interest payments and very interesting and valuable re- maintain the country's credit. sults were obtained. Those who took part in these . experiments profited by the experience. nearly every instance they cleaned the field experimented with, and demonstrated to their own satisfaction the effectiveness of the methods tried, and at the same time the results furnish rractical information to others.

tion gained from these weed ex- in the transportation of products periments were:

ed by rape sown in drills, provides ing the farmers' business as well a means of eradicating both per- as the manufacturers'. The farmennial sow thistle and twitch ers of almost every country in

2. That rape is a more satis- urgently needed here. factory crop to use in the destruction of twitch grass than buck- The need of supplying the farm-

The apple root borer probably occurs

3. That rape gives much better his products to the best advantage throughout the greater part of the east results in the eradication of twitch ern United States and has been found grass and perennial sow thistle when sown in drills and cultivated than it does when sown broadcast.

> 4. That thorough, deep cultivation in fall and spring, followed by a well cared for hoed crop, will destroy bladder campion.

> 5. That mustard may be prevented from seeding in oats, wheat and barley by spraying with a 20 per cent. solution of

These co-operative weed experiments will be continued this year. The weeds to be experimented with are Perennial Sow Thistle, Twitch Grass, Bladder Campion or of the handicaps retarding proeye Daisy. All who have any of results that must grow out of the these weeds on their farms are in- present campaign. vited to write to the Director of Co-operative Experiments Weed Eradication, O.A.C., Guelph. who will gladly furnish informat tion concerning this experimental

Experiments With Farm Crops

The members of the Ontario Ag- into question. He has the opporricultural and Experimental Union are pleased to state that for 1915 they are prepared to distribute into every township of Ontario material of high quality for experiments with grain, fodder crops, roots, grasses, clovers. and alfaifas, as follows:

Experiments

1 Testing two varieties Oats 2 2a Testing O.A.C. No. 21 Barley and Emmer 2b Testing two varieties two-

rowed Barley 3 Testing two varieties Hullless Barley.....

Testing two varieties Spring 5 Testing two varieties Buck-

6 Testing two varieties Field

Testing two varieties Spring Куе..... 8 Testing two varieties Soy, Soja, or Japanese Beans Testing 3 varieties Husking

10 Testing 3 varieties Mangels

Testing 2 varieties Sugar Beets for feeding purposes Testing 3 varieties Swe ich

> Turnips... 3 Testing 2 varieties Fall Turnips.....

Testing 3 varieties Fodder and Silage Corn 16 Testing 3 varieties Millet

18 Testing Grass, Peas and two varieties Vetches Testing Rape, Kale and Field Cabbage

Testing 3 varieties Clover Testing 2 varieties Alfalfa ... Testing 4 varieties grasses Testing 3 varieties Field Beans.....

Testing 2 varieties Sweet Testing 3 grain mixtures for

grain production Testing 3 grain mixtures for fodder production

Any person in Ontario may choose any one of the experiments The material will be furnished in the order in which the applications are received while the supply lasts. Each applicant should as first choice might be exhausted before his application is ceived. All material will be furthe person who conducts the experiment. Each person applying For a number of years the Ag- for an experiment should write fully, and should give the name of the county in which he lives. Applications should be address-

Great Britain has invested more money in this country than in any other country in the world, outside of the United States. The sum total is no less than \$2.800,-000,000, being equal to \$400 for in Weed Eradication every man, woman and child.

This money has gone largely to During the past three years of provide railway and other facili-

> This is one answer to the question- Why is it necessary that Canada at this particular time should increase the output of the

It is neither asked nor expected that the farmer should bear the whole burden. The railways Some of the practical informa- and other organizations engag d must bear their share. The financial institutions of the country 1. That good cultivation, follow- must be asked to assist in financ-Europe enjoy the advantages of . rural credits. Simi'ar facilities are

> is becoming more and more urgent. The Canadian Minister of Agrisulture recently put the matter in this form:

"It is not, therefore, only "greater production, but bet-"ter production and cheapened "production, more accurate "knowledge of markets and "better facilities for "eaching "them. All these things are "tied up together, and it is to "these things that not only "farmers, but Governments "bankers and transportation "men have to address them-"seives."

A clearer understanding of some Cow Bell, Wild Mustard and Ox- duction will be one of the good

> But let not the farmer stay his hand because these and other defects in the economic system have not yet been remedied. Your country needs you, and needs you now.

The loyalty and patriotism of the farmer has never been called tunity before him to give expression to his patriotism by helping to keep up the food supply of Britain and her Allies. There is higher motive than that of the pocket merely, and it should be a stronger one.

At the same time the business aspect must be recognized. With a food shortage staring it in the face, the world is ready to absorb at good prices all we can produce. The main object of the campaign is to make clear the situation. There is no more reasonable body to deal with than the farmers. Lay the facts before them clearly and fully and they may be relied on to reach a correct de-

There is no necessity for calling upon the farmer to work harder or for longer hours. Neither is it advisable to dictate to him as to what he should produce nor how. he should produce it. The individual farmer must decide for himself; how best to meet the demand.

asked, too, by agricultural journals- How can the farmer increase the output without putting more acres under cultivation and employing more labor?

2 That production may to some extent be increased without a corresponding increase in labor is than inferior kinds. A strain suited to the soil and climate sown at the right time will give better returns than seed that is not. Pure seed, plump seed, seed the yield. These and other important principles are not as widely applied as they might be.

production may be ir creased with- stone as a preventive out any appreciable increase in labor.

If the facts of the case indicate Word has been received in Sarnor can be secured; he is warranted have been destroyed by fire. in preparing his land better, sowing his seed better, and in this A Government notice ias been manner doing what he an to issued prohibiting the export of meet the Empire's needs. The man prussiate of soda to all foreign who fails in his duty in the coun- destinations, except under special

Treatment of Smut

Commissioner Clark writing in the Agricultural War Book on the "Treatment for Smut Prevention" says that in Eastern Canada there is considerable smut in the grain clearly indicated. The best strains crops each year, but that it has of seed will give larger yields not been sufficiently prevalent to make treatment for its prevention general. The losses, however. are much greater than is commonly realized, and the value of the of strong vitality, will increase crop could be considerably increased if treatment for smut prevention were more generally practiced. Over half the samples of fall wheat collected in Ontario There is an appalling and almost contain smut, and it is also very universal waste in the handling of common in the spring crops, esliquid and solid manure in this pecially oats. Reports on the samcountry. Rectify this and restore ples treated indicate that formalin. to the soil the elements of fertility one pound in 40 gallons of water. now lost through lack of care, and is much more popular than blue-

it, as we believe they do, then the ia that the mills of the Spanish farmer is warranted in employing River Lumber Company at Cutler. more labor, provided suitable lab- on the north shore of Lake Huron.

try's crisis will regret it all his license from the Department of

Spring Goods Have Arrived

Come in and have a look at our new lines of Classic Shoes and Pomps for Ladies, Weston's and Eclipse for Misses and Children, Astoria and Brandon for Men, before selecting your next pair of footwear.

Many other lines in stock for less money. Our prices on Spring goods are the same on most lines as they were last season.

Hosiery for all classes, in many kinds. at close prices. Trunks, Suitcases, etc. in stock.

Broken lines of boots that we are not stocking again are offered at cut prices.

Custom Work and Repairing Promptly Attended To The Down Town Shoe Store: J. S. McIlraith

Special Reduction Sale

In order to reduce our general stock of Dry Goods, Groceries, Ready Mades, Blankets, Sheeting etc., we have decided to make a Special Reduction on Everything in stock, starting on

SATURDAY, JANUARY 16. 1915

Intending purchases may rest assured of getting even better bargains than we offered last spring. A trial order will convince you. Come in and ask for prices.

S. SCOTT

Opposite the Old Stand

Durham, Ontario

Central Drug Store

Prepare Your Stock for Spring

By Using the Celebrated Chesney Veterinary Remedies for all kinds of Stock

rantee

Chesney's Horse and Cattle Spice an All Round Tonic and Digestive

Chesney's Alterative Powder The best Blood Purifier for stockey legs, grease, scratches, etc., etc.

Chesney's Dry Murrain Powders for Acute Indigestion. A Guranteed Remedy.

> Chesney's Heave Powder Chesney's Cough Powder Chesney's Cleansing Powder

These Remedies have been before the public for a quarter of a centuary.

Manufactured and for Sale only at

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