

and vegetables. High prices are and high prices those who will t of the war. their times are ly be heard in ty of work to on large farms, r the war. and good beef e. Pork is one f York County, ss firm. Sheep a large decrease hen the prices at better busi- an be pastured etter weed de- market is dull, er prices after E. RATCLIFF.

ved varieties. e towards the ich, of course, f seasons are ough attention for this crop period which During this a good yield. The critical precipitation out ten days ites that the enon is easy, period when ative organs. organs which the phase of en too much not proceeded ns in respect applied the rthern Italy. writes, the o rain, falls heading. If ng the phase an 30 mm; he preceding ility of good hould fall taly relates ause lodging. er elasticity of resistance it is recom- es that the time that is

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as having been obtained by mathematical and statistical processes, farmers have themselves arrived at similar conclusions from their practical experience. None the less the demonstrations of scientific observers have always an interest and a value as corroborating and explaining rationally—correcting if need be—processes that have been adopted empirically. Valuable as may be the recent Russian developments in the field of agricultural meteorology, it will be apparent from the references already made to the English statistical studies of the weather and crop yields that the existence even of "critical periods" in plant growth, as determined by meteorological conditions, has not been altogether ignored. It would hardly be safe to assume that the results of meteorological observations in Russia and Italy could be applied without local confirmation in Canada where conditions are, in many respects, wholly different. It does not follow that the so-called "critical periods" are the same in Canada as in Russia or Italy. In certain seasons and localities Canadian crops are, to a considerable extent, independent of rainfall, the melting snows leaving large supplies of moisture in the ground. Untimely frosts are, too, a meteorological factor to be reckoned with in grain-growing on the Western prairies, a disadvantage which farmers have already learned largely to overcome by early sowing and the adoption of early-ripening varieties, such as the Marquis and other wheats.

Doubtless, however, the Russian investigations, as has been officially recognized, have an important bearing upon conditions in Canada, the United States, Argentina and other countries upon which, as in Russia, increasing dependence is likely to be placed for the world's wheat supplies. There can, therefore, be no doubt as to the desirableness of more extended local meteorological observations in Canada for scientific ascertainment of the influence of the weather upon agricultural crops; and it is satisfactory to note that a good start in this direction has been made.

The Tree Toad Knew.

BY PETER MCARTHUR.

When we were going to bed in the tent there was some argument as to the chances of rain. It was so stifling hot, and had been all day, that everyone hoped for rain and was ready to stretch the point a little about the signs. No dew is looked upon by many as one of the sure signs of rain, but everything was damp and there was no comfort for us in that sign. Then someone remembered that on the previous night the dew had been very heavy—almost like a shower and there are many who think that the surest sign of all. But there was not a cloud in the sky and not a flicker of lightning, so we turned in without any real hope of the comfort of a shower. Just as I was dropping off to sleep a boy asked in tones of some alarm?

"What noise is that?" Rousing up to listen I heard a grating sound, repeated at short intervals, that reminded me of some one starting to wind an old fashioned Waterbury watch, of the kind that a man had to start winding right after supper if he expected to get through by bedtime. The strange sound would start for a few seconds and then stop for a few seconds. Of course it was a tree toad, and when I heard it I wakened up enough to assure my questioners that at last we had a sure sign of rain. When a tree toad made a noise like that rain was not many hours away so we could be fairly sure of rain before morning. In my heart I know that sign is probably no better than any other, but when I was a

boy it was infallible and the beliefs of boyhood are hard to shake. Having issued this ultimatum on the weather I rolled over to see if the other side was cooler to lie on—and went to sleep.

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The next thing I remember was a wild dream in which I thought an automobile about the size of a city block was tearing across the farm without paying attention to trees, buildings, fences or anything else. I was going to make a few remarks to the reckless chauffeur when I wakened up, and realized that a glorious thunderstorm was spanning the sky from the southwest to the north-west. The lightning was almost continuous, but was still too far away for the thunder to be especially terrifying. While making up my mind what to do I had a chance to enjoy the cool breeze that was flowing towards the storm. As it was after four o'clock in the morning all nature seemed to be watching the storm also. The roosters were crowing, and although it is too late in the year for the bird concert that usually happens at dawn I could hear many bird cries, though most of them were unfamiliar. Cows were bawling expectantly and sheep could be heard bleating in the distance. Perhaps it was because I was all alone in my human wakefulness that these things were all so noticeable. And here I am just on the point of missing the most noticeable of all. Down in the Government drain which had been dry for weeks a bull frog seemed in danger of tearing his lungs loose in an attempt to welcome the storm. Presently the indications were clear that the storm was coming straight over us, and was going to be a big spill. I had heard that the tent was showing signs of leaking so I decided that the best place for everyone was under the roof. There was much grumbling and protesting while the change was being made, but by the time we had reached surer shelter the storm came with a rush and a spill and a roar, and I guess we were as glad to be out of it as everything in nature was to be in it. The only objection to it was that it didn't last long enough. It will take many rains like this to satisfy the long-thirsty earth. And all of this recalls something written many years ago after a similar spell of dry weather, which I shall venture to quote:

"Last night we marked the twinkling stars,
This morn no dew revived the grass,
And oft across the parching fields
We see the dusty eddies pass;
The eager hawk forgets to swing
And scream across the burning sky,
And from the oak's slow dying crest
Sends forth a strange and plaintive cry.

The geese on unaccustomed wings
Flap wildly in ungainly flight,
The peacock's fierce, defiant scream
Scatters the fowls in wild affright.
The crows are barking in the woods,
The maple leaves their silver show,
The cattle sniff the coming storm,
Then toss their heads and softly low.

And now along the hazy west
The swiftly building clouds uprear;
High overhead the winds are loud,
The thunder rolls and grumbles near;
The housewife trims the leaky eaves,
The farmer frets of lodging grain,
Till all the world rejoicing drinks
The long-denied, long-prayed-for rain.

East Middlesex Notes.

EDITOR "THE FARMER'S ADVOCATE":

The deluge has turned to drouth, and almost all the crops are suffering as a consequence. Mangels and corn are about the only crops that appear to be holding their own, the former are doing well, but some fields of the latter are rather thin. There probably never was a better crop of hay saved in as good condition as this year's crop, but the spring grain crop will be below the average, especially for straw. Cutting has now (Aug. 12) commenced, but shaving would be a better term for all that was late sown on wet land, and wet land was generally the cause for late sowing. This emphasizes the value of drainage if grain is to be grown, but it is a question whether it pays to grow so much grain in this part of Ontario. Some are already dispensing with the threshing machine and claim better results, but so far as we know this system is only practiced by those who graze cattle mostly in summer and "run them over" winter. The dairymen and winter feeders who require large quantities of grain always attempt to grow what they need, and buy when they run short. Yet it is a still more common practice when the feed runs short to sell the animals rather than buy the feed. Consequently a year like the present one usually results in comparatively low prices for feeders. We hear of some already anxious to sell because they are short of feed. Fall wheat did well where it had a fair chance, and it was harvested in good condition. The dry weather did not come in time to shrink the kernels unduly, and the straw was straight, clean and long. The drouth cut short the yield of small fruits and cherries, and the prospects for fall fruits are none too good. Consequently the demand for honey is keen, and the yield good and of excellent quality. We think the yield is not quite equal to the record of three years ago, but the flavor is milder. It is selling at ten to fourteen cents per pound (extracted honey) net in ten-pound lots at the apiary, and many families are laying in a stock for winter, some take as high as one hundred pounds, but the average is about forty. But about half either do not buy any or else depend on getting it as needed from time to time.

Middlesex Co., Ont. J. H. BURNS.

Dr. Jas. W. Robertson on Duty.

Dr. Jas. W. Robertson of Ottawa, in immediate response to a cabled invitation has gone to England to give his services on behalf of Canada in co-operation with Great Britain, Australia and New Zealand in the agricultural restoration and relief campaign for the war-devastated portions of Belgium and France out of which the invading enemy is being steadily driven. Ravaged and robbed by a brutal foe the farming industries in these areas have suffered terribly, but, as related in "The Farmer's Advocate" of August 10th, relief work was courageously undertaken last year under the lead of the Royal Agricultural Society—in addition to all the other war burdens manfully shouldered by the United Kingdom. The extended organizing experience of Dr. Robertson and his inspiration and sympathy will find ample scope in coping with the situation and in some measure overcoming the havoc wrought. Germany has imposed on the world terrible burdens which a common humanity is now sharing.

One of the speakers at a country life conference down in Missouri was right when he said that the country should have three things—the best homes, the best schools and the best churches.

Toronto, Montreal, Buffalo, and Other Leading Markets.

Toronto.

Receipts of live stock at the Union Stock Yards, West Toronto, on Monday, August 21, numbered 164 cars, comprising 3,210 cattle, 284 calves, 790 hogs, and 1,465 sheep. Market slow. Good heavy cattle were 10 cents higher; good butchers' were steady; cows were 15 cents lower; bulls steady. Lambs were 50 cents lower than Friday; sheep steady. Hogs, slow, at prices quoted by packers. Calves were steady.

The total receipts of live stock at the City and Union Stock Yards for the past week were:

	City	Union	Total
Cars.....	100	594	694
Cattle.....	699	5,742	6,441
Hogs.....	2,100	8,503	10,603
Sheep.....	1,145	3,278	4,423
Calves.....	79	824	903
Horses.....	68	3,564	3,632

The total receipts of live stock at the two markets for the corresponding week 1915 were:

	City	Union	Total
Cars.....	17	478	495
Cattle.....	150	6,262	6,412
Hogs.....	334	5,784	6,118
Sheep.....	1,083	4,784	5,867
Calves.....	43	573	616
Horses.....	20	1,442	1,462

The combined receipts of live stock at the two markets for the past week show

an increase of 199 cars, 29 cattle, 4,485 hogs, 287 calves, 2,170 horses, but a decrease of 1,444 sheep and lambs, compared with the corresponding week 1915.

Packers quote hogs for the week commencing Monday August 21st as follows: F. O. B. \$11.75, fed and watered \$12.50, weighed off cars \$12.75.

There was a very steady trade in all grades of cattle all last week. Choice heavy steers advanced slightly and are in demand. There was a steady demand for choice light butcher steers and heifers, but very few of this class were offered. In fact the great majority of cattle were of inferior quality and should have been kept on the farm until they were in better condition.

Cows were somewhat easier than the previous week. Chiefly on account of the quality offered. Bulls—Stockers and feeders and milkers and springers were steady to firm. Lambs—Choice spring lambs were active at 11c. to 13c. lb. Sheep—The sheep market was steady to strong. The demand for choice, light butcher sheep being greater than the supply. Veal calves were steady and active. Hogs were the feature of the week, weighed off cars reaching the record price of \$13.25. A few extra choice loads selling at \$13.35. At the close of Thursdays market, however, they declined about 25c. Packers say they will be still lower this coming week.

Butcher Cattle.—Choice heavy steers, \$8.60 to \$8.75; good, \$8.10 to \$8.50; butcher steers and heifers, choice, \$7.80 to \$8.00; good, \$7.70 to \$7.80; medium, \$7.25 to \$7.50; common, \$6.50 to \$6.75. Cows, choice, \$6.75 to \$7.00; good, \$6.40 to \$6.60; medium, \$5.75 to \$6.00; common, \$5.00 to \$6.50. Canners and cutters, \$3.50 to \$4.75. Bulls, best heavy, \$7.00 to \$7.75; good, \$6.00 to \$6.75; stockers and feeders, \$5.00 to \$6.50; milkers and springers, \$5.50 to \$10.00; spring lambs, choice, 11c. to 13c. lb., common, 8c. to 10½c. lb.; light handy sheep, 7½c. to 9c. lb.; Heavy fat sheep, 4c. to 5½c. lb.; veal calves, best, 11½c. to 12½c. lb.; medium to good, 9c. to 11c. lb.; common, 6c. to 8c. Hogs, fed and watered, \$12.75 to \$13.00; weighed off cars, \$13.00 to \$13.25.

Breadstuffs.

Wheat—Ontario, (according to freights outside) New crop, No. 2, \$1.22 to \$1.25; No. 1 commercial, \$1.18 to \$1.20; No. 2 commercial, \$1.14 to \$1.16; No. 3 commercial, \$1.10 to \$1.12, according to freights outside; feed wheat, 98c. to \$1, according to sample. Manitoba wheat (track, bay ports)—No. 1 northern, \$1.54½; No. 2 northern, \$1.52¼; No. 3 northern, \$1.47½.

Oats.—Ontario, No. 3 white, 51c. to 52c., according to freights outside. Manitoba oats (track, bay ports)—No. 2 C. W., 55c.; No. 3 C. W., 54c.; extra No. 1 feed, 54c.; No. 1 feed 53c.

Rye.—According to freights outside, No. 2, new 98c. to \$1.

Buckwheat—Nominal.

Barley.—Ontario, malting, nominal; feed barley, nominal.

American Corn.—No. 3 yellow, 95½c., track, Toronto.

Peas—No. 2, \$1.85 to \$1.95.

Flour.—Ontario, winter, new, \$5.50 to \$5.60, nominal, in bags, track, Toronto; new, \$5.40 to \$5.50, nominal bulk sea-board. Manitoba flour—Prices at Toronto were: First patents, \$8.10; second patents, \$7.60 in jute; strong bakers', \$7.40, in jute; in cotton, 10c. more.

Hay and Millfeed.

Hay.—New, car lots, track, Toronto, No. 1 per ton, \$10 to \$12; No. 2 per ton, \$9 to \$9.50.

Straw.—Baled, car lots, \$6 to \$7, track, Toronto.

Bran.—\$24 per ton, Montreal freights; shorts, \$26 to \$27, Montreal freights; middlings, \$27 to \$28, Montreal freights; good feed flour, per bag, \$1.80 to \$1.85, Montreal freights.

Country Produce.

Butter.—Again advanced one cent per pound on the wholesales during the past week. Creamery, fresh-made pound squares, 33c. to 34c.; creamery solids, 33c.; dairy, 25c. to 27c.; separator dairy, 29c.

Eggs.—New-laid eggs kept firm, case