

yield of 180 bushels, and expenses \$28, the cost per bushel would be little over 15c. Rent or interest on purchase would add from 3c. to 5c. per bushel. The expenses charged might be reduced in some of the items, and it is to be observed that the potato grower, for his own labor and horses', is credited with these estimates.

As the expenses of growing a light crop are as great as of a heavier one, it is evident that as much as below a good yield, the expense per bushel increases in proportion. This is a profit from heavy crops. Of 150 bushels per acre, the expense would be over 18c. per bushel; of 100 bushels it would be 27c.

Bad farming, and consequent light crops, cannot leave profit.

Light Crops and High Prices.

Are high prices with light crops really beneficial to the farmer, or the reverse? Even were it a doubtful question, we hope there are few who would prefer the high prices with such an accompaniment. But there can be no doubt on the subject. Were the produce per acre 25 bushels, and the prices low, or were it 15 bushels, with the price so high that the amount would be the same as that of 25 bushels, the amount received by the producer in both instances would be the same, and so far both would be equal. But the enquiry must not end here.

With abundant produce there is plenty throughout the land. Food is abundant for the labourer, and the live stock on the farm fares better. It is the interest of the farmer in such seasons to bring to market none of his inferior produce, the light grains from his fanning-mill, or the straw that should be used in the farm yard. The *tailings* from the mill are for the stock; the large produce from the fields of heavy grain is all that is required for the merchant and miller, and the farmer, as he sees his granaries filled with the riches of his fields, is convinced that, even if accompanied by low prices, a luxuriant growth, with a good harvest, is a blessing for all.

Correspondence.

SIR,—It is perhaps fortunate that the bag of oats you sent me was so long on the road. They were not far advanced when the long wished for rain came on the 4th June, and consequently was in a state to be more benefited than those which were sown earlier. It tillered well, and has fine heads with drooping panicles. Please let me know the name of these oats, as I should like, when offering them for sale as seed oats, to have a name for them. The fall before last I procured some Scott wheat from a farmer in the township of Derby, and sowed that and some Treadwell wheat in adjacent fields. Both were partially winter killed, but the Scott wheat the least, and it ripened some days earlier. Last fall I sowed the Scott wheat only; it was again partially winter killed, and will be only half a crop, but it is of excellent quality, and was cut last week. The spring crops are looking well; even potatoes, wherever they are taken proper care of. But the Colorado potato beetles are more numerous than ever; however, the parasites which prey on them seem to be increasing, and in a few years more I trust these unwelcome visitors will have passed away. Hay is a very short crop, except in a few places where the land is low and moist. The sharp June frost was scarcely felt on my farm, or on those on either side which front on the Bay, although one of my neighbors told me he noticed its effects on some nettles near his house, but that was in a low sheltered situation. In the rear concessions much damage was done to the young timothy and early potatoes. Our immunity was probably owing to the latent heat from the Georgian Bay. To the same cause it is probably owing that our potatoes are generally untouched by the fall frost for a fortnight later than in the rear concessions, or in the townships to the south of Owen Sound. Too much protection is not always good. We had a sharp frost on the 1st June, 1864; the roof of my barn was white with the frost about 5 a.m., but a row of dwarf beans, a few inches high,

in my garden, were untouched, but some I had planted on a piece of high ground, but sheltered on two sides by trees, and on the other by fences, were killed. The cause I suppose to be that when anything is exposed to the wind the hoar frost does not form on it. A case in point occurred some years ago when I was residing in the township of Quebec: A patch of potatoes in a piece of low ground, sheltered by the bush and open only to the east, was cut down by the frost on the 27th July, whilst a field of potatoes on the opposite side of the concession road on high ground, sheltered from the east and south, but open to the west and north, was untouched by the frost until the month of October following. I have noticed potatoes growing on the high lands at Point Levi, on the south bank of the St. Lawrence, still green a fortnight after all the potatoes in the townships thirty miles further back were cut down by the frost, which I attribute to a full exposure to every breath of wind, and still more to the water. When the degree of cold is sufficient to form ice in any locality, the effect is felt by everything; but hoar frost does not appear to form on places exposed to the wind; it is generally on calm, clear nights that its effects are most severely felt. The soil also has something to do with it, as a black vegetable soil radiates the heat faster than soil of a lighter color, and if the frost goes off any vegetable before sunrise they escape injury.

CHARLES JULYAN.

I observe Mr. Bruce, of the Forest City Grange, justly complains of the destruction of insectivorous birds by persons holding licenses from the Government, to shoot birds for scientific purposes. Such licenses can give the parties holding them no right to trespass on a farmer's land without his leave, and consequently, so far as these parties are concerned, farmers have the remedy in their own hands, by warning them off their farms, and should they refuse to quit, apply to the nearest magistrate for a summons against them. But I fear too many of the farmers are indifferent to these matters, to their own loss.

C. J.

Blight on Apple Trees.

I should like to ask, through your columns, for information relative to the new blight which has attacked the apple trees within the last two years, both in this, and, I believe, other localities; as you are probably aware, the young shoots of the present year's growth are the only parts of the tree affected so far. In my orchard of some three hundred trees, the only ones blighted are the American Golden Russet and Transcendent Crab, and the only trees of these varieties touched are 5 or 6 standing at the north-west corner of the orchard. The rows of trees run east and west, probably twenty rods in length; five or six trees of each of the two named varieties at the west end are badly injured, while the remaining portion of the row containing the same kinds is not touched in one single shoot.

Unlike the pear blight which kills wood of one, two, three and four year's growth, this disease, so far as my observation goes, affects only the present season's wood. If it is the work of an insect, the said insect must be of such minute construction as to baffle detection by the eye alone. Probably the use of a microscope in the hands of an expert in these matters, has already solved the mystery. If so, and he will kindly give the results of his examination through the medium of your paper, with any suggestions as to its destruction or prevention, he would confer a favor on

ENQUIRER.

Westminster, Aug., 1875.

[We have seen many trees affected as above described; some consider it proceeds from injury done by insects at the roots, others that it is a blight, others that it is from the sting of an insect. We are unable to decide. We hope the question will be answered by some one of our readers.—Ed.]

Utilizing Soakage of Barn-Yard and Privies.

SIR,—I have just put in a tank, 8 x 8, for the reception of the soakage from the barn-yard, stables, &c. I have moved the privies, putting them on the top of the tank. I have also put a chain pump in alongside. I do not intend to let any of the two manures go to waste any more. How does the arrangement suit you, Mr. Editor?

G. VAIR.

The Gardens, Chestnut Park, Toronto.

[Your arrangement for the soakage of barn-yard suits our ideas very well; not so that of the privies. We prefer a dry earth closet. You can keep it well deodorized by putting a little dry earth into it as often as necessary, and then re-

moving the product weekly or after ten days to the place prepared for it. By using it dry, as it will be from the dry earth, there will be less of the odors that are not only offensive, but also dangerous to health.—Ed.]

Wild Oats.

SIR,—I have been pulling wild oats now for about seven years, more or less every year, and this year I have to give up a field. Would you, or some of your subscribers, through your paper, tell me if they will grow in the fall when plowed light. I see almost in every paper how to kill almost every weed but wild oats, which is the hardest weed to contend with in this part of the country.

THOS. HAMILTON.

East Garafraxa, Aug. 5, 1875.

[In the FARMER'S ADVOCATE, Feb'y, 1874, are two prize essays, written for the ADVOCATE, on the subject of your inquiry. It is very desirable for subscribers to preserve the columns of their numbers unbroken; they will be of service for reference if occasion arises. In that number there is also a review of the other essays received on the subject, with a brief compendium of the whole matter. It is treated of under the following heads: Longevity of the Seed; Destroying of Wild Oats; Description of the Wild Oats; Soil most Suitable to its growth; Means to Exterminate; The Summing up of the Testimony. Besides the two prize essays published in full, the methods pursued and the recommendations given by ten other practical farmers, are referred to and examined in the brief review. The summing up is as follows: Four of the essayists recommend a thorough summer fallow. Two recommend a root crop after several plowings in fall and spring. Two recommend buckwheat to be sown and plowed under. Four recommend certain rotations of crops. In the words of the review we say: Of all the methods recommended, we believe the summer fallowing to be the most effectual remedy. The root crop after partial fallowing, it is true, has in its favour the advantage that no year's crop is lost, and if the summer cultivation of the root crop be thoroughly performed, we have no doubt the ground will be pretty free from wild oats and all other annual weeds.—Ed.]

Wheat.

SIR,—The Scott wheat I got from you last fall was the worst killed of any kind I had; I do not think much of it. The Seneca came out well, though it was not so much exposed as the Scott, and is a superior wheat. The Arnold wheat came out fair, and is a splendid sample. The Treadwell and Scott, grown alongside, were killed almost totally, both on summer fallow. Soules has done fair.

When should Sanfoin be sown, and should it be sown with or without other crops?

JAMES FORD, JR.

Bewdley, Aug. 7th, 1875.

[We paid a visit to Paris to find out the real state of the Arnold wheat. We do not consider it near as valuable as the varieties we speak of.—Ed.]

Westminster, July 19, 1875.

SIR,—Please let me know the best grass to sow for pasture, as I have two fields to sow. Timothy is the only kind sown here, and the best clover. I intend to mow them the first year. Weather and crops are just as you describe them yourself. Hay very light, but grain crops are growing well now.

Yours truly,

JOHN ROSS.

Before you determine what grasses to sow, the first consideration must be what will best endure the climate. Timothy grass and clover are the staple grasses of this country. No doubt in this selection farmers have been guided in a great measure by their observations of the climate, and part by the state of cultivation of their farms. It is time to make the enquiry, Can we not have a selection of grasses better for pasture, soiling and hay? To do this it will be necessary to make experiments, cautiously and on a small scale, at first. Were you to sow a small portion of orchard grass (cocksfoot) and red top (blue grass) mixed with the other grass, we believe it would improve the quality of your pasture. If orchard grass answers our expectations, it will be of great benefit to the country. It has done so in the States, and we know it is highly prized in the old country.