

The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

Published weekly by
THE WILLIAM WELD COMPANY (Limited).

JOHN WELD, Manager.
Agents for "The Farmer's Advocate and Home Journal,"
Winnipeg, Man.

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London, Canada.

In the Mountains.

By SANDY FRASER.

For a man that takes an interest in what Nature can do in the way o' tearin' things up an' creatin' what we call "scenery", British Columbia is the place to go. For, whether I travelled by train or by steamer, I saw naething but a succession o' mountains an' valleys an' lakes, till my head got dizzy an' my eyes grew dim wi' lookin'.

But wherever ye go ye find men there ahead o' ye, at work o' some kind, tryin' to mak' a livin' or a fortune, accordin' to their ambition or necessity. It's a God-forsaken place that some man won't settle doon in and call it home. How the owners o' a guid mony o' the wee farms, that I saw here an' there, made oot to find three meals a day beats me. They must have had some ither occupation to depend on and be rinnin' the farm for pleasure. There's that kind o' people that can tak' amusement oot o' anything, ye ken.

The morning I took the train for the Okanagan country I had an illustration o' the labor-saving tendency o' the men o' the West. A habit they're acquiring from their neighbors doon south, I suppose. We were passin' a small lake and there, near the shore, was a raft built and on it a wee gasoline engine that was running a circular saw. The saw was on the edge o' the raft, wi' the blade half-way doon in the water. And there they were, cutting ties from lang timbers that were floating in the lake all about them. Not a man on the job was lifting onything heavier than his pike-pole. They just floated the timbers up against the saw and the wee engine did the rest. It was a different proposition to the circular-saw outfits that I had been acquainted wi' back hame.

About noon we left the train and got on board the steam-boat that makes the round o' Okanagan Lake every day in the week that the weather's fine, and it isn't Sunday.

It wasn't long till we got oor first glimpse o' the fruit-farmers that we have heard so much about the last number o' years. There's Kelowna and Peachland and Summerland and ither places along there, wi' mair pleasant-sounding names, till ye think ye must be on the boarders o' the Promised Land, and no mistak'.

It's all vera fine sure enough. I spent ten days, or mair, in those parts and I'm feelin' free to admit that I've seen worse country. In fact, gin it were a case o' being exiled from Glengarry for some crime I had committed, and I had my choice, I think I'd choose a wee fruit-farm in the "Okanagan", about a couple or three miles oot frae the toon o' Kelowna.

The fruit business has its ups and doons, of course, like raisin' hogs and growin' wheat an' onything else, but the outlook for the fruitgrower in British Columbia, just at present, seems to be pretty good. He has a market for all he can grow, he has a climate that he's all the time braggin' about, and he can raise a "bumper crop", although he doesn't get a drop o' rain from May till November.

It's this last fact that gives him the start o' a guid mony o' us. He gets his rain "made to order", as ye might say. It's the irrigation system that makes the Okanagan Valley an improvement on the Sahara Desert as a place o' residence.

The water is brought doon from some lake awa' back in the mountains by means o' a big wooden trough, or "flume," as they call it in that country. Then it is carried around to the different farms by smaller flumes an' ditches, till every one gets their share. There's a system o' regulation and a man appointed to look after the water an' see that nobody is gettin' a bigger supply than they are payin' for. That's the sore spot in the scheme. Ye're taxed for the water and if ye don't pay up ye soon begin to feel the effects o' the dry weather.

It is the habit o' the fruit-growers there to keep the ground between the trees cultivated, although some o' them sow alfalfa or red clover, noo an again, and plow it doon. The way they get the water to the trees is by plowing four furrows between each two rows o' trees and letting the water from the small flumes run into them. It's a big job to get the water tae all the trees, but some way they seem to manage it. After the water has been running in these furrows for two three days, maybe, they shut it off and as soon as the ground has dried a wee bit they go over it wi' the harrows to loosen up the top soil and keep the moisture from gaein' awa' into the air. It's a case o' "what we have we hold" wi' them. Water is good money oot there and worth savin'.

They tell some pretty interesting stories o' the money that has been made by certain parties that have gone into fruit growing on a big scale. They're real optimists all right. There's never a word about the failures. I heard o' one chap at Kelowna that got \$26,000 for his apple crop last year, on forty acres. The general idea o' the value o' improved land oot there seems to be in the neighborhood o' about one thousand dollars an acre. No just the place for a poor man to get his start, you'll be sayin'. All the same some o' the best off farmers there



Summerland, B. C.

were workin' for a day's wage six or seven years ago. The chance is there for the right kind o' a man. Like most parts o' this country.

And there is mair ways o' makin' a living than by selling a crop o' apples right on the start. Talk about mixed farming. Ye get it there, gin there's ony such thing. They go in for tomatoes wholesale, and cabbage and tobacco and several ither things on the same scale. They sell cherries by the car-load and onything ye want in the line o' plums, peaches, pears, apricots and such like, juist place yer order early enough and they will supply ye. The man wi' a thin purse can get in in one way, if not another. It will be a wee bit slow at first, that's all. For a chap who likes the hills and the lakes an' that sort o' thing, the Okanagan Valley might not be the worst place in the world to settle doon in, maybe.

For mysel', I find the mountains unco' attractive. I suppose it's some sort o' an instinct that comes tae me from my auld ancestors that used to roam the Highlands o' Scotland, a couple o' hundred year back. The while I was in Summerland I used to be off climbin' the rocks an' tryin' to get high enough up tae get a look at the Pacific Ocean. But I never made it oot. Nae matter what mountain I would get to the top of there would be anither still higher that I couldna see over, do my best.

It struck me that the auld preacher, back hame, would get a text for a sermon oot o' a situation like that. He'd be applyin' it tae life in general and saying that when we surmounted one difficulty we were preparing ourselves for the fight wi' another and greater difficulty that was coming tae meet us juist around the corner. That's the thing that mak's life interesting, he says. Climbing over yer troubles an' leavin' them in the road behind ye. "When climbing's done I'm done," says he.

But I'm gettin' awa' from my subject, which is a sign that I hae said all that is necessary for the present.

City folk, as well as farmers, are apparently rejoicing that crop prospects are good this year. However, the world's granaries need replenishing before prices of foodstuffs can drop very much. Greater and still greater production in all lines is needed. If the laboring class, mechanics and tradesmen were working as assiduously to increase production as are the farmers it would not be long before the supply would catch up with the demand which would result in lowering of prices on the necessities of life.

Nature's Diary.

By A. BROOKER KLUGH, M. A.

BLUEBERRIES AND HUCKLEBERRIES.

We have in Canada many species of Blueberries and two species of Huckleberries. These two names are quite generally regarded as synonymous, and the same species is indiscriminately called either a Blueberry or a Huckleberry, but they really belong to quite distinct plants. The fruit of a Blueberry has either five or ten cells containing many small seeds and may be bluish, black or red according to the species, while the fruit of a Huckleberry is ten celled, each cell containing a single large nutlet, and is black and more or less shiny. Owing to the small size of the seeds in the Blueberry they are not noticed in eating the fruit, but because of their large size in the Huckleberry the fruit is decidedly "seedy."

The Dwarf Huckleberry is a low shrub of sandy swamps along the Atlantic coast, while the Black Huckleberry grows to a height of three feet, the young leaves and flowers are sticky with resinous droplets, and it is found from Newfoundland to Manitoba.

One of the commonest Blueberries in Canada is the Early Sweet Blueberry, (*Vaccinium pennsylvanicum*) which occurs from Newfoundland to Saskatchewan. This shrub, which is from one to two feet in height, grows in sandy soil, and is particularly abundant in regions where there is much rugged country with exposures of granite rocks. This is the earliest of all the Blueberries to ripen, and is the species which furnishes the main supply for the market. In some localities the fruits of this species attain a large size, particularly in season of sufficient rain-fall, and I have found some fruits which measured just over half an inch in diameter. There is a form of this species, known as the variety *nigrum*, which instead of having blue fruit covered with a whitish bloom as is usual with this species, has a black fruit without any bloom.

Another species which is very common from Labrador to Manitoba is the Velvet-leaf Blueberry, (*V. canadense*), a species which is much like the preceding species but has the leaves downy on both sides, and also has downy branchlets. The fruit is similar to that of the preceding species, but usually has a denser bloom. It often grows with the Early Sweet Blueberry, but is also found in bogs. The fruit ripens later than that of the last species.

The High Blueberry, (*V. corymbosum*), is fairly common in bogs in some parts of the country from the Atlantic coast to Manitoba. It attains a

height of from six to twelve feet. There are several species of Blueberries in British Columbia, but the one which is likely to attract the most attention is that remarkable contradiction the Red Blueberry, (*V. parvifolium*), with its bright red fruit. The fruit of this species is decidedly acid, but I noticed that at high altitudes it was much sweeter than at sea-level.

There are several ways in which Blueberry shrubs differ from our other wild fruits. One of these is the fact of their having small fungi intimately associated with their roots, fungi which perform the work of securing nitrogen. These fungi known as mycorrhizae will grow only in an acid soil, and hence restrict the range of the Blueberry to barrens and bogs.

Another peculiarity is that the cold of winter is necessary as a stimulus for growth during the coming spring and summer. It has been found that when a Blueberry plant has finished its active growth and gorged its twigs, stems and roots with starch and other stored food for early spring use, it becomes dormant and refuses to grow again at the temperatures which are under normal circumstances most suitable for growth, unless it is first exposed to the effects of cold. Dr. Coville of the United States Department of Agriculture has found that one effect of the chilling is to turn the stored starch into sugar, which is then available for growth. Along with the development of sugar, and caused in part by its accumulation, there develop within the minute cells of the plant enormous internal pressures, which enable the plant to push its buds open. These pressures are frequently as high as seven atmospheres, or more than a hundred pounds to the square inch—a stress that would start a leak in a low-pressure steam-engine, and they may become as high as four hundred and fifty pounds to the square inch—a force sufficient to blow the cylinder head off a high-pressure engine. The reason that the plant does not explode is because it is broken up into many extremely small and strongly-built cells instead of having one big interior cavity. These minute chambers are often as thickly walled proportionately as an artillery shell and are of such construction as to be able to withstand enormous pressures.

Another fact brought to light by Dr. Coville is that cross-pollination is absolutely essential for the successful fruiting of the Blueberry. In a long series of experiments it was found that self-pollinated flowers never matured fruit, while cross-pollinated flowers grown under exactly the same conditions fruited abundantly.