

mer's Dessert, and Patten's Greening. These are named in the order of their established reputation for hardiness, and the Alberta experiments carry out the earlier reputation for hardiness or the absence of it. The first two varieties are doing well, while of the last variety very few trees are living. The crab apple trees are nearly all living, and are doing well. The plums do not appear to be a success thus far. It would, however, be premature to conclude that they cannot meet the climatic conditions, as one year's test cannot mean much in the naturalization or acclimatization of a new variety of tree in any country.

The department has arrived at the conclusion that trees should not be above two years old for planting. The younger trees can be trained to lower habit than the larger ones, and can withstand wind better on this account. The lower spreading top is some protection to the trunk against sun scald. It is caused by the alternate freezing and thawing of the bark on the south side of the tree.

The department favors fall shipping rather than spring shipping of trees, but the difference is chiefly an accidental one. Spring shipments are apt to be hurriedly packed, and owing to irregularities in season, their arrival cannot be properly timed. If they are properly buried or kept moist they can be set out under the most favorable conditions.

Trees secured from Manitoba nurseries are more vigorous than those obtained from Ontario or Minnesota. The shipping distance is, of course, less, but the advantage is thought to be chiefly in the approximate acclimatization of the Manitoba stock.

Some fungus diseases have occurred in the stock planted, but not of a serious sort.

The general success of the growing of fruit trees seems to indicate the possibility of general fruit growing in the province. The same general biological problems occur as in the case of the introduction of any other plant or animal varieties viz., the problems of selection and care. On the side of varieties, hardy stock is desired. It is probable, however, that with progress in care and treatment, that the number of varieties will increase to those doing well in other parts of the Dominion. On the side of care, there seems to be two or three matters requiring consideration. One is the development of relatively low habits of growth suited to the prairie, the second is providing against sun scald by growing well-spread tops, sloping the trees towards the south-west, and the third care is to have sufficient moisture about the tree to hold the tree dormant during the winter period. It is the case that the lateness of summer rains protracts summer growth of wood, and trees frequently have too much soft top of wood, which suffers with the advent of winter frosts. If crops can be grown about the trees to use up the moisture of the soil at this time, the wood will mature earlier. On the other hand, with the advent of winter, the moisture in the soil is insufficient for the safety of the tree through the winter.

Individual experimenters in fruit growing are of the opinion that the wealth of humus of the virgin soil tends to rank growth as against ripening, and in soils sufficiently thin some have followed the practice of planting down into the sub-soil. As this appears as a real difficulty, there should be care taken in the selection of orchard areas in the way of securing thin or sharp soil.

With regard to late growth in trees, it should be borne in mind that selection has as much to do as special treatment. The problem is identical with that of the grain grower who has to complain of injury to late oats. A ninety day oat is obviously better than a hundred day oat, and an extreme of the early maturing habit in trees would obviously be the best way to counteract late maturing, due to special climatic conditions.

Fruit Acreage in United Kingdom

Writing to *Weekly Trade & Commerce Report*, from London, England, Harrison Watson says:

In recent years there has been no more striking feature in the home life of the inhabitants of Great Britain than the remarkable increase in the consumption of fruit of various kinds. Owing to the varying climatic conditions of the many countries from which consignments are shipped to the United Kingdom, such favorite fruits as apples, oranges and bananas can be purchased almost without a break throughout the whole year at low prices, and practically every kind of fruit grown now reaches this market at different seasons in such quantities as to be available as cheap articles of diet.

Although the importation of fruit has developed so largely, it is interesting to note that there has been a striking increase in the home cultivation of such fruits as are capable of production in the United Kingdom, and according to figures which have recently been published, the acreage of orchards has increased from 148,221 in 1873, to 250,176 in 1907. Of these latter, no less than 244,118 are located in England, and over 172,000 are devoted to the cultivation of apples.

No reliable statistics of small fruits were compiled before 1897, but the 64,792 acres which were being cultivated in that year had increased to 82,175 in 1907.

Canada's Timber Land Decreasing

One hundred million acres would be an adequate estimate of Canada's timber land, in the opinion of Dr. Judson F. Clark, of Vancouver, B. C., formerly superintendent of forests for Ontario. This estimate, it must be explained, includes only lands on which are found "forests of commercial value, as measured by present day logging standards" (to quote Dr. Clark's own words), and including those areas bearing pulpwood or saw timber.

The above statement is considerably lower than that of two hundred million acres given by Dr. B. E. Fernow, of the University of Toronto faculty of forestry, when speaking of the same class of land. Be the difference what it may, both estimates go to show the shrinkage of the estimated timbered area of Canada, which has followed on close examination, from the eight hundred million acres (or even twice that area) formerly put forth, and until lately accepted without question.

Both the estimates first given are the statements of men who are acknowledged authorities in this line. Dr. Fernow's work in forestry is familiar all over this continent; while Dr. Clark, in addition to his work with the U. S. Forest Service and a number of years as forester to the province of Ontario, has of late had extended experience of British Columbia forests and timber, in connection with the commercial firm he now represents.

The Canadian people may well draw from these estimates the warning that their timber wealth is far from being the "inexhaustible" supply that it was once supposed to be, and that what they have requires careful husbanding, both in the way of adequate protection of the forests that now exist from fire and other enemies and the introduction of timber forestry measures with a view of getting increased supplies from areas already forested or to be forested in future.

What Ten Dollars Would Do

The average farmer would doubtless be willing to plant ten dollars' worth of nursery stock about his place if he knew the exact investment he could make in that line which would yield him the largest returns. It is possible to spend ten dollars with a fruit tree agent and get very little for your money. It is also possible by careful buying, to obtain sufficient material to make a very good showing. Young forest trees like the ash and elm can be obtained in quantity for about one-half cent apiece. One dollar's worth of these placed in groups or masses, at the sides and rear of the buildings will add very materially to the comfort and appearance of the place in a very short time. Young ornamental shrubs like the lilac, snowball, and spirea, are easily grown and can be obtained from the nurseries at a low cost. Where one buys a large plant, of course he must expect to pay more; but this is not necessary. Small plants, well taken care of, are usually more satisfactory than the large ones for general planting. Most nurseries have a quantity of small stock which they are glad to dispose of at prices not exceeding ten cents per plant. It will thus be seen that with an outlay of ten dollars one can supply himself with about all of the ornamental material that he will need for the average place. The secret lies in purchasing at the right price only such things as are known to be hardy and valuable, and then in planting them in groups and masses where they will grow best, and produce the best effects.

FIELD NOTES

Events of the Week

CANADIAN

The Hamilton "Tigers" won the Rugby championship of Canada at Toronto on the 28th.

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Hon. Clifford Sifton's election in Brandon has been protested.

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Up to the end of November Port Arthur elevators handled some 15,000,000 bushels of grain.

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Sir Wilfrid Laurier has returned to Ottawa after enjoying a holiday of ten days in New York.

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The investigation into the department of marine and fisheries continues to reveal numerous instances of petty graft.

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H. C. Simpson, of Virden, has been selected by the Conservative party to contest the constituency made necessary by the death of the late Mr. Agnew. Robert Forke, of Pipestone, is the choice of the Liberals.

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Wholesale personation was proved to have been practised near Port Arthur in the recent Dominion election.

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The heavy blizzard and snow-storm of last week swept Lake Superior and tied up navigation for a time. As yet there are few reports of loss.

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The bear at "Deer Lodge" Winnipeg, went into his den on December 1st. Last year he "went below" on November 26th.

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The steel plant at the Canadian Soo is about to close. Lack of orders for rails is said to be the reason. The works employ about 1500 men.



A NORTHERN MANITOBA RIVER WITH TIMBERED BANK