

THE ONTARIO NATURAL - SCIENCE BULLETIN.

The fourth annual issue of the Ontario Natural Science Bulletin, the journal of the Wellington Field Naturalists' Club, comes to us brimful of interest for the student of biology, containing between its bright red covers 132 pages of matter by eminent authorities. A special feature this year is a full and systematic article by Dr. C. S. Sargent on the *Crataegus* (a genus of plants comprising the thorns and haws) in Ontario. It is interesting to note that, according to Dr. Sargent, Southern Ontario is one of the richest *Crataegus* regions in the world. Mr. John Dearness, Vice-Principal of the Normal School, London, contributes an article on Fungi as Food—Some Ontario Species. This embraces the class of plants commonly designated mushrooms, or what is equally correct, basidiomycetes, the popular differentiation between these being inaccurate, unscientific and erroneous. The index also includes the following names: W. E. Saunders, J. H. Fauli, A. B. Klugh, Theo. Holm, and W. Herriqt. The letterpress reflects credit upon the printers, The London Printing and Lithographing Company, of London, Ont., who are especially well equipped for executing technical work of this nature with accuracy and dispatch.

The Wellington Field Naturalists' Club is a most praiseworthy organization, founded in Guelph, Ont., in March, 1900, its object being to further biological research in the Province. During these eight years much valuable work has been accomplished by the members, both as individuals in the field and as a society in the fortnightly meetings held throughout the winter months, while the publication of the scientific data obtained, as well as many articles from recognized authorities in natural history outside the bounds of the club, constitute no small part of the good done. One line of work which has always been given due prominence is that of collecting in the less-known orders of plants and compiling complete and annotated lists of the species known to occur in any locality, thereby securing information as to their occurrence and geographical range. The same has been done with birds, mammals and other animals.

The editor of the bulletin, in his foreword, refers with pleasure to such kindred organizations as the Ottawa Naturalists' Club, the Queen's University Naturalists' Club, the Canadian Institute, the Dufferin County Natural History Association, and others, and would like to see such clubs organized in every town in Ontario, especially the High School towns. The editor's address is T. D. Jarvis, B.S.A., O. A. C., Guelph, and communications or inquiries looking to the organization of such clubs would undoubtedly receive prompt and courteous attention.

CHANGE IN MANAGEMENT OF MARITIME WINTER FAIR.

At an important meeting of the Maritime Stock-breeders' Association, held in Amherst, N. S., early last month, radical action was taken, involving a complete change in the status and management of the Maritime Winter Fair. This fair was originally organized and virtually managed by the Live-stock Branch of the Dominion Department of Agriculture, acting through its Maritime representative, Mr. E. B. Elderkin, who was also President of the Maritime Stock-breeders' Association, and until this year manager of the Maritime Winter Fair, receiving salary and expenses for this work from the Live-stock Branch at Ottawa. In addition a grant of \$1,000 was paid from Ottawa towards the Winter Fair, as well as \$200 per year toward the holding of an annual auction sale of pure-bred stock, conducted by the above association. Incidentally, it may be noted that owing to a lack of interest in this sale it was considered advisable by the Executive Committee of the Association to discontinue it, though this has nothing directly to do with the Winter Fair itself, except that Mr. Elderkin had charge of both. In addition to the grants from the Dominion Department, the Provincial Governments subscribed to the Maritime Fair annually as follows: Nova Scotia, \$1,000; New Brunswick, \$800; Prince Edward Island, \$350.

It has for some time been considered advisable, from the standpoint of the Federal Department and also of the Maritime Stock-breeders' Association, that the fair should be managed by the association itself. To this end a committee of the association had met for the Hon. Mr. Fisher some time ago, and arranged for the change of policy that was resorted to on June 9th. At this latter meeting Mr. J. B. Spencer, Acting Live-stock Commissioner, was present, and took an active part in the meeting. He suggested that the Maritime Stock-breeders' Association should carry on work in the interests of live stock apart from the Maritime Winter Fair, in accordance with the plan of similar organizations in other Provinces, where their fairs are simply incidents in their work. The association decided to do so, and intends holding educational meetings in each of the Provinces from time to time, with a view to creating interest in its work and increasing its membership. A number of amendments to the constitution were proposed, including one providing for the affiliation of Nova Scotia, New Brunswick and P. E. Island Agricultural Societies with the Stock-breeders' Association. These amendments will be passed upon at the next annual meeting. The business of the organization was thoroughly straightened out, and the statement of finances showed a deficit of about \$1,500 to date. This deficit is met by a special grant of \$200 from the Nova Scotia Department of Agriculture, and \$1,300 from the Department of Agriculture, and \$1,300 from the Maritime Stock-breeders' Association is to be entirely responsible for the fair. They will pay their own manager and direct

him in his work. To enable them to do this, the Federal Department has increased its annual grant to \$2,400, the Nova Scotia Department raises its annual allowance to \$1,200, Prince Edward Island hers to \$400, while the New Brunswick grant remains at \$800. Mr. F. L. Fuller, Superintendent of Agricultural Societies for Nova Scotia, was made Secretary-Treasurer of the Association and Manager of the Maritime Winter Fair, and will conduct the business of the association, except in fair time, from Truro, N. S. The appointing of an auditor was left with the Board of Directors. The new Board of Directors elected is as follows: For New Brunswick—Col. H. Montgomery Campbell, Apohaqui; Bliss M. Fawcett, Sackville; M. H. Parlee, Apohaqui, and Geo. E. Fisher, Charlottetown. For Prince Edward Island—Rev. A. E. Burke, Alberton; Hon. F. L. Hazard, Charlottetown; Jas. Roper, Charlottetown, and John Annear, Lower Montague. For Nova Scotia—W. W. Black, Amherst; C. A. Archibald, Truro; R. S. Starr, Port Williams, and S. A. Logan, Truro. The representatives to the fair boards were elected as follows: For New Brunswick—Col. H. Montgomery Campbell and Walter McMonagle, Sussex. For Prince Edward Island—Thos. P. Cass, Cornwall, and John Roper, Charlottetown.

At a subsequent meeting of the Board the President and Provincial Vice-Presidents were re-elected:—President, E. B. Elderkin, Amherst, N.S.; Vice-Pres. for New Brunswick, Col. H. Montgomery Campbell, Apohaqui; Vice-Pres. for Prince Edward Island, Hon. F. L. Hazard, Charlottetown; Vice-Pres. for Nova Scotia, C. A. Archibald, Truro. The date of the Maritime Winter Fair for 1908 was fixed at Nov. 30th, being advanced somewhat from previous years, to make it convenient for P. E. Islanders to attend.

FRUIT-CROP PROSPECTS.

Weather Conditions.—The weather conditions throughout the Dominion for the past month have been generally favorable for fruit. The first three weeks were exceptionally dry in the fruit districts of Ontario, but occasional showers after the 20th have prevented serious injury, except that the samples of strawberries in some cases are not so large as usual. Light frosts on the 15th did only a very slight damage. Nova Scotia and Prince Edward Island have had exceptionally favorable weather. In British Columbia, though the weather was cool and wet till the early part of June, conditions were not seriously affected. During the latter part of the month the temperature has been higher, with occasional showers.

Apples.—Prospects are not so good this month as last. The "set" of fruit was not as good as was expected, and the dry weather has probably increased the June "drop." A fair estimate of the present conditions would be an average or slightly above the average crop of early and fall apples, with winter apples somewhat below a medium crop. The districts producing the larger quantity of fruit in Ontario, such as the counties of Hastings, Durham and Northumberland, have rather a light crop of winter apples.

Speaking generally for the whole apple belt, Spies, Baldwins and Kings will be light or very light; Russets a medium crop; Ben Davis nearly a full crop; Greenings a medium crop; the Fameuse above the average almost everywhere, and at least an average crop of fairly clean, good-sized fruit in the Ottawa and St. Lawrence Valleys.

In Nova Scotia the prospects for the apple crop as a whole are particularly good, this being a bearing year for the Gravenstein. There are no unfavorable conditions in British Columbia, the prospects showing a medium crop.

Pears and Plums.—The prospects for pears and plums are only medium. Bartletts and Kieffers have the best showing.

Peaches.—Early varieties will be fairly abundant, somewhat above the average; late varieties a medium crop. In the early varieties, Alexander, Early Rivers and Triumph are reported bearing full crops. Of the latter varieties, St. John will be only a medium crop, the Early Crawford light, Smocks and Elbertas show for something over a medium crop. The Elbertas are bearing heavily where they were sprayed for curl leaf; those not sprayed have in many cases a very light crop.

Tomatoes.—The prospects for tomatoes are excellent. Should there be plenty of moisture during July, there seems nothing in the way of a full crop this year.

Cherries.—Sweet cherries somewhat scarce; sour cherries more plentiful.

Grapes.—Grapes look well and promise a full crop. Small Fruits.—With a moderate amount of rain small fruits will likely give a large crop. The conditions are so favorable over all the fruit-producing sections that the aggregate of the crop will likely be very large.

Insects.—Insects are not more prevalent than at this time last year, and fungous diseases are not specially in evidence. Up to the present time most injury has been done by the cigar-case borer, the bud moth, canker worm, green-fruit worm and oyster-shell bark-lice.

Foreign Crop Conditions.—The United States will have only an average crop, but very generally distributed over the apple-growing districts. The prospects for stock suitable for marketing during the winter months would indicate about an average crop or somewhat less.

The prospects for apples in Great Britain, and for

the fruit crop generally, are particularly good, and there are no serious adverse conditions reported from the Continent.

A. McNEILL,
Chief, Fruit Division, Ottawa.

NOVA SCOTIA'S TIMBER RESOURCES.

At a recent meeting of the Lumbermen's Association of Nova Scotia, at Liverpool, N.S., President F. C. Whitman estimated the forest lands of the Province at 5,808,350 acres, of which 1,469,750 acres are Crown lands. Nova Scotia is most fortunately situated as regards forest wealth, not only in respect to trans-oceanic shipping facilities, but in the humidity of her climate, which enables the lumberman to take a crop in a generation and find another one growing. With the alleged probability of a continental timber famine in twenty years, the Peninsular Province should consider herself blessed indeed. Mr. Whitman highly commended the forest-ranger system in force, which has been effective in preventing forest fires, the total yearly cost being only about \$6,000, or 90 cents per square mile. He recommended a Provincial forest survey, or stock-taking of timber resources, with a view to the adoption of a wise policy for the future.

Lieut.-Governor Fraser said that of all things grown on earth, the most important are food, animals, and then lumber. The latter is more necessary than minerals. We should have stability of title and should preserve and conserve the forests. The man who will carelessly or negligently set a fire is practically a criminal, adding: "If we preserve our forests we have in Nova Scotia sources of continuous wealth for many generations. Continuity of operations in anything is the better way. It tends to the building of character as well as business."

DEATH OF F. C. PETTIT.

In the death of Mr. F. C. Pettit, of Burgessville, Ontario, which took place on June 4th, Oxford County has lost one of its most prominent stock-breeders. First in partnership with his father, the late J. G. Pettit, in breeding Shorthorn cattle for about twenty years, they were very successful as exhibitors at local fairs, and were always noted for their honest and upright dealing, as well as advanced methods of farming. A few years ago, when the sale of Shorthorn cattle was at a low ebb, they decided to change breeds, substituting Holstein-Friesian cattle as their choice, as they were in a dairy county. About this time the father died. Subsequently the partnership was known as F. C. Pettit & Son, which continued for the last five years. In this breed they have been very successful, and prominently known to readers of "The Farmer's Advocate," shipping cattle from one end of the Province to the other. Mr. Pettit was born and died on the same farm, having spent sixty years out of sixty-five on the farm. The farm has been continually in the Pettit family since 1839, and has now passed to the third generation, the only son of the late F. C. Pettit, F. E. Pettit, who intends to continue farming and stock-raising the same as before.

TORONTO'S HORSE PARADE.

The annual Dominion Day open air horse parade and show was held in Queen's Park, Toronto, on July 1st, and was the most successful event of the kind in the Queen City since the inception of these shows, over 800 horses being paraded and judged for prizes. The entries were 24 ahead of any previous year, and the horses an improvement over the display of former years, which has always been of a high order of merit. A moderate estimate of the value of the horses on exhibition was put by the judges at an average of \$300 each, or a total of a quarter of a million dollars.

Of the 800 horses in the procession there was not an inferior one. From the heavy teams attached to ponderous drays, down to the sleek ponies ridden by young and ambitious equestrians, there was not a faulty animal in the whole lot. Each driver, as usual, received a dollar, whilst the medals distributed to the prizewinners cost over \$1,000, to say nothing of the \$400 distributed in other prizes. The total cost of the show was \$2,500.

IRRIGATION EXPERIENCE REQUESTED.

Editor "The Farmer's Advocate":

Could you give me the address of some farmer, or farmers, who have irrigation working satisfactorily on their farm or farms? I am thinking of putting in a plant, and before doing so would like to see how it works for the "other fellow," and how much profit there is in it. Would water from a deep well be just as good as water taken from a river or lake?

Kent Co., Ont.

DOUGLAS MAYNARD.

[Note.—"The Farmer's Advocate" will be pleased to publish any reliable experience with irrigation under Canadian or foreign farm conditions. Full details of installation and operation, together with impartial estimate of capital cost and operating expenses, advantages and profit, are invited.—Editor.]

A Nova Scotia correspondent reports that many orchardists in the Annapolis Valley region have been having a terrible fight with the canker worm, adding, however, that in their own thirty-acre orchard they have no caterpillars at all, having sprayed it faithfully with Paris green.