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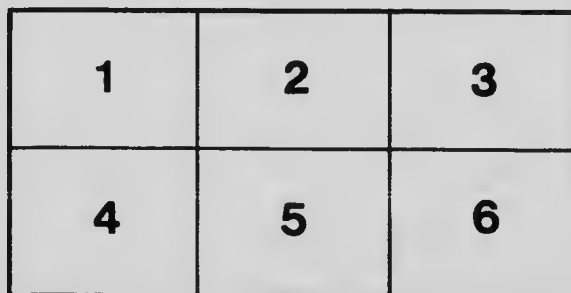
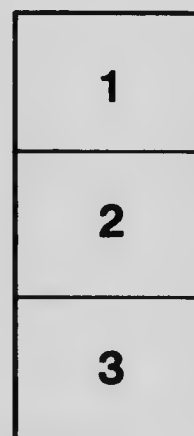
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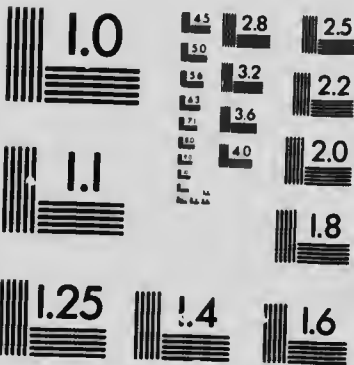
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FROM THE TRANSACTIONS OF THE ROYAL SOCIETY OF CANADA
SECOND SERIES—1905-1906
VOLUME XI



**Report of the Botanical Club of Canada
for 1904-1905**

**By A. H. MacKAY, LL.D.,
General Secretary**

(ISSUED JULY, 1905)

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BERNARD QUARITCH, LONDON, ENGLAND

1905



Report of the Botanical Club of Canada
for 1904-1905

By A. H. MacKAY, LL.D.
General Secretary

ISSUED JULY, 1905

XVI.—*Report of the Botanical Club of Canada for 1904-5.*

By the General Secretary, A. H. MacKAY, LL.L.

There was nothing striking in the history of the Club during the year. Prince Edward Island appears to have done more work than usual; British Columbia has not reported as much as usual. In Nova Scotia the public schools have been doing good work in phenology. Over three hundred accurate and full schedules of observations were sent in from as many school sections representing every county in the Province. These were referred in groups to the following phenological staff for examination, selection, and compilation; and the criticisms on faulty observations were published in the *Journal of Education* for the benefit of observers in future years—from page 72 to 85 of the April issue, 1905.

- | | |
|--------|---|
| Region | I. (Yarmouth & Digby), A. W. Horner, Principal, Salem School, Yarmouth. |
| " | II. (Shelburne Co.), C. Stanley Bruce, Principal, Academy, Shelburne. |
| " | II. (Queens Co.), Miss M. C. Hewitt, Science Teacher, Academy, Lunenburg. |
| " | II. (Lunenburg Co.), B. McKittrick, B.A., Principal, Academy, Lunenburg. |
| " | III. (Ann. & Kings), E. Robinson, Principal, Academy, Kentville. |
| " | IV. (Hants Co.), Miss A. Forbes, B.A., Academy, Windsor. |
| " | V. (Halifax Co.), G. R. Marshall, B.A., Principal, C.A. School, Halifax. |
| " | V. (Guysboro Co.), J. B. McCarthy, B.Sc., Science Master, Academy, Halifax. |
| " | VI. (Col. & Cum.), J. E. Barteaux, Science Master, Academy, Truro. |
| " | VII. (N. Cum. Co.), E. J. Lay, Principal, Academy, Amherst. |
| " | VII. (Pictou Co.), W. P. Fraser, Science Master, Academy, Pictou. |
| " | VII. (Antigonish Co.), F. G. Morehouse, Principal, Schools, Antigonish. |
| " | VIII. (Richmond Co.), G. W. MacKenzie, B.A., Principal, Public Schools, Sydney Mines. |
| " | VIII., IX., X. (C.B. Vic., & Inv. Co.), L. A. DeWolf, M.Sc., High School, North Sydney. |

The phenochrons of each of these compilers were again averaged into the ten columns of phenochrons for each region of the Province by Miss Jean Lindsay, B.A., of the Education Department, as they are given in the first table following.

The annual phenochrons for Nova Scotia, and the observations reported by the following observers from stations within the other Provinces of the Dominion are given in the last table:

- New Brunswick: Geo. U. Hay, D.Sc., Saint John.
Prince Edward Island: John MacSwain, Charlottetown.
Prince Edward Island: J. M. Duncan, Kensington.
Ontario: Cephas Guillet, Ph.D., Ottawa.
Ontario: Mrs. F. E. Webster, Creemore.
Ontario: A. B. Klugh, Guelph.
Saskatchewan: Rev. Charles W. Bryden, B.A., Shellbrook.
British Columbia: J. K. Henry, P.A., Vancouver.

It was found to be impossible hitherto to obtain reports from Yukon and Newfoundland. Several parties at the beginning of the year hoped to be able to record observations, but before the close of the season pressure of other affairs had prevented them from making a series of observations which they cared to report. But were only a half a dozen observations made, they would be of very great interest, for they would form a basis of comparison with as many objects observed in the other provinces. It is hoped we may be more successful in the future in obtaining observations representing portions of the continent from the Atlantic to the Pacific and north to the Arctic. Even should the observations be very few, they would be of very great value.

Circular and special letters were sent out to hundreds of addresses during the year, asking for co-operation in the various kinds of botanical work which may be found convenient in each locality. The exploration of the local floras is going steadily on. It is suggested, that those sending in to the General Secretary list of plants new to any locality, should have each species with the notes on it so separated on the manuscript, that each can be easily cut off to be collated by the central compiler with similar notes on the same species from other localities.

The annual meeting of the Club was held during the meeting of the Royal Society at Ottawa; the first meeting at noon on the 24th of May, 1905, and the second on the 25th May, at 4 p.m., in the Section IV. meeting room in the Normal School Building. There were present: John Macoun, G. U. Hay, James Fletcher, Professor Fowler, Dr. Burgess, Mr. Evans, and A. H. MacKay. John Macoun gave an idea of the amount of new work done since the first volume of the Catalogue

of Canadian Plants was issued, and expressed the view that the revision should not be printed until the report of the Vienna Congress on Non-enclosure should be published. The work outlined at the previous annual meeting—at Saint John, New Brunswick—was further considered, and each member present constituted a committee to stimulate the movement within his own Province and where ever an opportunity should offer. The officers of the previous year were re-elected as follows:

- Honorary President: John Macoun, M.A., F.L.S., Ottawa.
- President: Geo. E. Hay, D.Sc., Saint John, New Brunswick.
- General Secretary-Treasurer: A. H. MacKay, LL.D., Halifax, Nova Scotia.

Secretaries for the Provinces:

- Nova Scotia: Principal E. J. Lay, Academy, Amherst.
- New Brunswick: James Vroom, Esq., St. Stephen.
- Prince Edward Island: John MacSwain, Esq., Charlottetown.
- Quebec: Rev. Robert Campbell, M.A., D.D., Montreal.
- Ontario: James Fletcher, LL.D., F.L.S., Ottawa.
- Manitoba: Rev. W. A. Burman, B.D., Winnipeg.
- Assiniboia: Mr. Thos. R. Donnelly, Pheasant Forks.
- Northwest Prov. and Territories: T. N. Willing, Esq., Regina.
- Alberta: Percy B. Gregson, Esq., Blackfalds.
- Saskatchewan: Rev. C. W. Bryden, B.A., Shellbrook.
- British Columbia: J. K. Henry, B.A., High School, Vancouver.
- Vancouver Island, B.C.: A. J. Pinco, B.A. High School, Victoria.

The determination of species can be most effectively made by

JAMES M. MACOUN,

Curator of the Herbarium, Geological Survey.

OTTAWA, ONT.

The Botanical Club of Canada was organized by a committee of section four of the Royal Society of Canada, at its meeting in Montreal, May 29th, 1891.

The object is to promote by concerted local efforts and otherwise, the exploration of the flora of every portion of British America, to publish complete lists of the same in local papers as the work goes on, to have these lists collected and carefully examined in order to arrive at a correct knowledge of the precise character of our flora and its

geographical distribution, and to carry on systematically seasonal observations on botanical phenomena.

The attention is to stimulate, with the least possible paraphernalia of constitution or rules, increased activity among botanists in each locality, to create a corps of collecting botanists wherever there may be few or none at present, to encourage the formation of field clubs, to publish lists of local floras in the local press, to conduct from year to year exact phenological observations, etc.; for which purposes the secretaries for the provinces may appoint secretaries for counties or districts, who will be expected, in like manner, to transmit the same information to as many as possible in their more local spheres of action.

Members and secretaries, while carrying out plans of operation which they may find to be promising of success in their particular districts, will report as frequently as convenient to the officer under whom they may be immediately acting.

Before the end of January, at the latest, reports of the work done within the various provinces during the year ended December the 31st previous, should be made by the secretaries for the provinces to the general secretary, from which the annual report to the Royal Society shall be principally compiled. By the first of January, therefore, the annual reports of county secretaries and members should be sent in to the secretaries of the provinces.

To cover the expenses of official printing and postage, a nominal fee of twenty-five cents per annum is expected for membership (or one dollar for five years in advance, or five dollars for life membership). Secretaries for the provinces, when remitting the amount of fees from members to the general treasurer, are authorized to deduct the necessary expenses for provincial office work, transmitting vouchers for the same with the balance.

The names of those reporting any kind of valuable botanical work during the year will be published in the list of active members, even should the payment of fees be forgotten. All payments are credited to the current year and the future. Lapsed active membership can, therefore, be restored at any time without the payment of arrears.

FLOWERING AND OTHER PHENOCHRONS FOR EACH REGION OF THE PROVINCE OF NOVA SCOTIA, COMPILED FROM 300 PUBLIC SCHOOL OBSERVATION SCHEDULES

WHEN FIRST SEEN.		NOVA SCOTIA.		WHEN BECOMING COMMON.	
Regions.		Regions.		Regions.	
YEAR ENDED JULY, 1904.		NOVA SCOTIA.		WHEN BECOMING COMMON.	
Day of the year corresponding to the last day of each month.		Average for Province.		Average for Province.	
1. Yarmouth and Digby.	102.3	101.	102.3	1. Yarmouth and Digby.	113.2
2. Shelburne, Queens and Lunenburg.	115.5	112.5	115.5	2. Shelburne, Queens and Lunenburg.	118.9
3. Annapolis and Kings.	92.9	98.6	92.9	3. Annapolis and Kings.	118.9
4. Hants and South Colchester.	125.9	127.4	125.9	4. Hants and South Colchester.	128.2
5. Halifax and Guysboro.	125.9	127.4	125.9	5. Halifax and Guysboro.	128.2
6. South Cobequid Slope (S. Cumb. and Col.)	125.9	127.4	125.9	6. South Cobequid Slope (S. Cumb. and Col.)	128.2
7. North Cumb. Col. Pictou and Antic. Breton.	125.9	127.4	125.9	7. North Cumb. Col. Pictou and Antic. Breton.	128.2
8. Richmond and Cape Breton.	125.9	127.4	125.9	8. Richmond and Cape Breton.	128.2
9. Bras d'Or Slope (Inv. and Victoria).	125.9	127.4	125.9	9. Bras d'Or Slope (Inv. and Victoria).	128.2
10. Inverness Slope to Gulf.	125.9	127.4	125.9	10. Inverness Slope to Gulf.	128.2
Average for Province.		106.9	106.9	Average for Province.	130.8
Day of the year corresponding to the last day of each month.		Average for Province.		Average for Province.	
Jan. 31	212	1 Alnus incana, Wildl.		113.2	
Feb. 59	243	2 Populus tremuloides		124.3	
March 89	273	3 Epigaea repens, L.		118.4	
April 120	304	4 Equisetum arvense		135.2	
May 151	334	5 Sanguinaria Canadensis		130.8	
June 181	365	6 Viola blanda		132.6	
For Leap year add one to each except January.		7 Viola palmata, cucullata		135.3	
		8 Hepatica triloba, etc.		127.5	
		9 Acer rubrum		133.1	
		10 Fragaria Virginiana		136.6	
		11 " " fruit ripe ..		173.8	
		12 Taraxacum officinale		138.1	

FLOWERING AND OTHER PHENOCHRONS FOR THE PROVINCE OF NOVA SCOTIA.—(Continued).

WHEN FIRST SEEN.		WHEN BECOMING COMMON.	
REGIONS.		REGIONS.	
NOVA SCOTIA.		NOVA SCOTIA.	
YEAR ENDED JULY, 1904.		YEAR ENDED JULY, 1904.	
Day of the year corresponding to the last day of each month.		Day of the year corresponding to the last day of each month.	
Average for Province.		Average for Province.	
1. Yarmouth and Digby.	139.	1. Yarmouth and Digby.	141.8
2. Shelburne, Queens and Lunenburg.	140.9	2. Shelburne, Queens and Lunenburg.	146.4
3. Annapolis and Kings.	138.5	3. Annapolis and Kings.	148.1
4. Hants and South Colchester.	131.2	4. Hants and South Colchester.	137.7
5. Halifax and Guysboro.	138.5	5. Halifax and Guysboro.	147.5
6. South Cobequid Slope (S. Cumb. and Col.)	132.1	6. South Cobequid Slope (S. Cumb. and Col.)	133.4
7. North Cumb. Col., Pictou and Antig. Breton.	137.6	7. North Cumb. Col., Pictou and Antig. Breton.	137.1
8. Richmond and Cape Breton.	137.1	8. Richmond and Cape Breton.	137.1
9. Bras d'Or Slope (Inv. and Victoria).	137.6	9. Bras d'Or Slope (Inv. and Victoria).	137.9
10. Inverness Slope to Gulf.	137.9	10. Inverness Slope to Gulf.	137.9
		Average for Province.	137.7
13 Erythronium Americanum.....	212	13 Erythronium Americanum.....	212
14 Coptis trifolia.....	243	14 Coptis trifolia.....	243
15 Claytonia Caroliniana.....	273	15 Claytonia Caroliniana.....	273
16 Nepeta Glechouma.....	304	16 Nepeta Glechouma.....	304
17 Amelanchier Canadensis.....	331	17 Amelanchier Canadensis.....	331
18 " " fruit ripe.....	365	18 " " fruit ripe.....	365
19 Prunus Pennsylvanica.....	223	19 Prunus Pennsylvanica.....	223
20 " " fruit ripe.....	225	20 " " fruit ripe.....	225
21 Vaccinium Can. and Penn.....	148.7	21 Vaccinium Can. and Penn.....	148.7
22 " " fruit ripe.....	222.7	22 " " fruit ripe.....	222.7
23 Ranunculus acris.....	155.5	23 Ranunculus acris.....	155.5
24 R. repens.....	162.3	24 R. repens.....	162.3
25 Trill erythrocarpum.....	151.1	25 Trill erythrocarpum.....	151.1
26 Rhododendron Rhodora.....	153.6	26 Rhododendron Rhodora.....	153.6
		For Leap year add one to each except January.	

FLOWERING AND OTHER PHENOCHEONS FOR THE PROVINCE OF NOVA SCOTIA.—(Continued).

WHEN FIRST SEEN.		YEAR ENDED JULY, 1904.		WHEAT BECOMING COMMON.	
Regions.		Nova Scotia.		Regions.	
1. Yarmouth and Digby.	133.8	145.5	145.1	150.5	150.4
2. Shelburne, Queens and Lunenburg.	182.5	201.	205.	220.	204.
3. Annapolis and Kings.	146.5	144.3	144.3	151.2	150.8
4. Hants and South Colchester.	147.6	150.2	148.8	153.3	153.3
5. Halifax and Guysboro.	159.7	150.4	148.8	157.5	153.3
6. South Cobequid Slope (S. Cumb. and Col.).	150.5	151.3	149.4	165.4	155.2
7. North Cumb. Col., Pictou and Antik. Brceton.	151.6	147.2	149.4	165.4	155.2
8. Richmond and Cape Breton.	151.6	147.2	149.4	165.4	155.2
9. Bras d'Or Slope (Inv. and Victoria).	151.6	147.2	149.4	165.4	155.2
10. Inverness Slope to Gulf.	151.6	147.2	149.4	165.4	155.2
Average for Province.	150.5	150.4	151.2	153.4	153.4
Day of the year corresponding to the last day of each month.	Jan.	31	July 212	27	Cornus Canadensis
	Feb.	59	Aug. 243	28	" " fruit ripe.....
	March	90	Sept. 273	29	Trientalis Americana
	April	120	Oct. 304	30	Clintonia borealis
	May	151	Nov. 334	31	Galla palustris.....
	June	181	Dec. 365	32	Cyripedium acule.....
				33	Sisyrinchium angustifolium.....
				34	Linnea borealis
				35	Kalmia glauca
				36	Kalmia angustifolia
				37	Crataegus oxyacantha
				38	Crataegus coccinea, etc
				39	Iris versicolor.....
				40	Chrysanthemum Leucanth
					For Leap year add one to each except January.

FLOWERING AND OTHER PHENOCHRONS FOR THE PROVINCE OF NOVA SCOTIA—(Continued).

WHEN FIRST SEEN.		YEAR ENDED JULY, 1904.		WHEN BECOMING COMMON.																										
		NOVA SCOTIA.		REGIONS.																										
		Day of the year corresponding to the last day of each month.		Average for Province.		1. Yarmouth and Digby.		2. Shelburne, Queens and Lunenburg.		3. Annapolis and Kings.		4. Hants and South Colchester.		5. Halifax and Guysboro.		6. (S. Cumb. and Col.) North Cumb. Col., Pictou and Antig. Breton.		7. North Cumb. Col., Pictou and Antig. Breton.		8. Richmond and Cape Breton.		9. Bras d'Or Slope (Inv. and Victoria).		10. Inverness Slope to Gulf.						
Jan.	31	July	212	170.5	170.3	170.3	170.3	165.3	170.3	170.3	165.2	170.3	172.5	170.3	174.2	173.5	173.6	170.3	172.5	170.3	174.2	173.5	173.6	170.3	172.5	170.3	174.2	173.5		
Feb.	29	Aug.	243	166.9	162.8	162.5	166.6	161.4	167.8	160.9	168.4	171.2	173.7	173.5	173.6	170.3	172.5	170.3	174.2	173.5	170.3	174.2	173.5	173.6	170.3	172.5	170.3	174.2	173.5	
March.	31	Sept.	273	227.1	220.5	219.	216.	225.5	236	227.	238.7	.....	227.	234.	.....	227.	234.	.....	227.	234.	.....	227.	234.	.....	227.	234.	.....	227.	234.	
April.	30	Oct.	304	175.9	172.5	176.6	180.	177.1	180.8	153.	181.9	176.2	180.	181.	.....	176.2	180.	.....	176.2	180.	.....	176.2	180.	.....	176.2	180.	.....	176.2	180.	
May.	31	Nov.	334	171.6	167.5	171.3	169.3	164.5	170.4	165.7	174.7	176.8	178.	177.5	.....	176.8	178.	.....	176.8	178.	.....	176.8	178.	.....	176.8	178.	.....	176.8	178.	
June.	18	Dec.	365	249.2	236.3	253.	239.	252.5	247.5	252.5	249.7	.....	244.	268.	.....	244.	268.	.....	244.	268.	.....	244.	268.	.....	244.	268.	.....	244.	268.	
		For Leap year add one to each except January.		172.1	171.7	167.3	167.	.....	153.6	175.7	175.5	180.	187.	.....	187.	.....	187.	.....	187.	.....	187.	.....	187.	.....	187.	.....	187.	.....	187.	.....
41 Nuphar advena				181.6	180.	178.3	182.	180.6	184.6	179.	181.9	176.	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....
42 Rubus strigosus.		fruit ripe		173.7	170.7	168.3	175.7	170.7	175.7	172.9	177.6	177.7	174.5	.....	174.5	.....	174.5	.....	174.5	.....	174.5	.....	174.5	.....	174.5	.....	174.5	.....	174.5	.....
43 " "		fruit ripe		178.3	174.6	178.3	182.	180.6	184.6	179.	181.9	176.	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....
44 Rhinanthus Crista-galli				178.3	174.6	178.3	182.	180.6	184.6	179.	181.9	176.	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....
45 Rubus villosus				173.3	174.6	178.3	182.	180.6	184.6	179.	181.9	176.	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....
46 " "		fruit ripe		173.3	174.6	178.3	182.	180.6	184.6	179.	181.9	176.	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....
47 Sarracenia purpurea				173.3	174.6	178.3	182.	180.6	184.6	179.	181.9	176.	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....
48 Brunella vulgaris				173.3	174.6	178.3	182.	180.6	184.6	179.	181.9	176.	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....
49 Rosa lucida				173.3	174.6	178.3	182.	180.6	184.6	179.	181.9	176.	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....
50 Leontodon autumnale				173.3	174.6	178.3	182.	180.6	184.6	179.	181.9	176.	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....
51 Linaria vulgaris				173.3	174.6	178.3	182.	180.6	184.6	179.	181.9	176.	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....
52 Trees appear green				173.3	174.6	178.3	182.	180.6	184.6	179.	181.9	176.	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....
53 Ribes rubrum (cultivated)				173.3	174.6	178.3	182.	180.6	184.6	179.	181.9	176.	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....
54 " "		(fruit ripe)		173.3	174.6	178.3	182.	180.6	184.6	179.	181.9	176.	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....
Average for Province.				173.3	174.6	178.3	182.	180.6	184.6	179.	181.9	176.	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....	192.	.....

FLOWERING AND OTHER PHENOCHRONS FOR THE PROVINCE OF NOVA SCOTIA.—(Continued).

WHEN FIRST SEEN.										WHEN BECOMING COMMON.																													
Regions.					Nova Scotia.					Regions.					Nova Scotia.																								
					Year ended July, 1904.										Year ended July, 1904.																								
					Average for Province.										Average for Province.																								
					Day of the year corresponding to the last day of each month.										Day of the year corresponding to the last day of each month.																								
1.	Yarmouth and Digby.	2.	Shelburne, Queens and Lunenburg.	3.	Annapolis and Kings.	4.	Hants and South Colchester.	5.	Halifax and Guysboro.	6.	South Cumb. and Col.	7.	North Cumb. Col. Pictou and Antic. Breton.	8.	Richmond and Cape Breton.	9.	Bras d'Or Slope (Inv. and Victoria).	10.	Inverness Slope to Gulf.	1.	Yarmouth and Digby.	2.	Shelburne, Queens and Lunenburg.	3.	Annapolis and Kings.	4.	Hants and South Colchester.	5.	Halifax and Guysboro.	6.	South Cumb. and Col.	7.	North Cumb. Col. Pictou and Antic. Breton.	8.	Richmond and Cape Breton.	9.	Bras d'Or Slope (Inv. and Victoria).	10.	Inverness Slope to Gulf.
139.	142.2	139.7	140.1	145.6	142.2	140.5	148.3	149.2	141.9	142.9	55	R. nigrum (cultivated)	148.1	143.3	147.7	145.1	136.1	151.6	146.6	147.8	154.1	151.7	147.3	148.1	143.3	147.7	145.1	136.1	151.6	146.6	147.8	154.1	151.7	147.3					
190.	199.5	.....	210.5	214.5	201.1	.....	213.2	228.2	209.4	209.4	56	" (fruit ripe)	214.9	195.2	205.1	.....	210.2	223.5	214.2	.....	218.2	239.1	.....	214.9	195.2	205.1	.....	210.2	223.5	214.2	.....	218.2	239.1	.....				
138.	4	141.5	138.9	142.9	160.9	146.1	146.1	152.8	155.5	148.5	147.4	57	Prunus Cerasus	156.9	145.1	151.8	145.3	149.1	163.5	150.7	151.1	157.3	160.2	155.7	156.9	145.1	151.8	145.3	149.1	163.5	150.7	151.1	157.3	160.2	155.7				
221.	199.2	.....	200.2	.....	212.2	205.3	218.2	214.6	.....	210.2	58	" fruit ripe	210.3	228.2	206.1	150.3	220.2	.....	210.2	214.1	225.2	.....	.....	210.3	228.2	206.1	150.3	220.2	.....	210.2	214.1	225.2	.....	.....			
141.	7	147.1	142.1	144.7	157.6	147.4	147.1	156.7	160.2	156.5	151.1	59	Prunus domestica	155.5	145.1	152.5	147.3	150.9	169.4	150.7	152.1	163.8	164.4	162.2	155.5	145.1	152.5	147.3	150.9	169.4	150.7	152.1	163.8	164.4	162.2				
143.	5	140.3	143.6	144.3	155.4	147.2	147.4	161.7	159.6	155.7	150.5	60	Pyrus Malus	155.7	151.5	152.9	150.5	151.5	161.2	152.6	148.4	165.2	163.8	159.6	155.7	151.5	152.9	150.5	151.5	161.2	152.6	148.4	165.2	163.8	159.6				
151.	1	153.6	152.3	151.1	160.8	153.7	153.5	167.3	162.2	170.6	157.6	61	Syringa vulgaris	163.6	158.2	159.9	158.7	157.4	168.5	160.1	160.1	171.7	167.2	174.5	163.6	158.2	159.9	158.7	157.4	168.5	160.1	160.1	171.7	167.2	174.5				
150.	4	156.6	156.5	152.4	157.9	151.3	156.2	162.9	161.5	167.3	157.3	62	Trifolium repens	165.3	159.7	163.9	167.9	159.7	166.5	160.2	155.9	168.3	168.2	173.2	165.3	159.7	163.9	167.9	159.7	166.5	160.2	155.9	168.3	168.2	173.2				
144.	3	151.6	154.6	150.2	157.6	153.2	156.9	161.2	162.6	164.4	155.7	63	Trifolium pratense	164.6	154.1	159.8	163.6	160.3	166.5	162.9	166.5	168.5	171.6	172.5	164.6	154.1	159.8	163.6	160.3	166.5	162.9	166.5	168.5	171.6	172.5				
173.	8	169.9	171.4	173.1	171.5	164.4	167.8	184.1	196.1	.....	157.2	64	Phleum pratense	180.6	180.1	173.7	178.5	180.3	180.1	175.9	177.6	180.1	199.5	.....	180.6	180.1	173.7	178.5	180.3	180.1	175.9	177.6	180.1	199.5	.....			
175.	5	181.8	184.2	.....	197.7	190.6	.....	199.1	181.2	.....	176.8	65	Solanum tuberosum	198.7	189.2	189.7	196.2	222.2	.....	208.5	201.6	184.2	204.5	193.1	198.7	189.2	189.7	196.2	222.2	.....	208.5	201.6	184.2	204.5	193.1
101.	2	114.2	115.2	124.5	118.7	124.1	126.9	120.4	125.3	119.5	119.3	66	Ploughing (first of season)	126.8	116.9	123.4	125.7	132.5	121.2	.....	132.5	129.1	131.3	126.1	126.8	116.9	123.4	125.7	132.5	121.2	.....	132.5	129.1	131.3	126.1		
122.	3	121.4	124.5	129.8	126.1	130.1	131.2	131.3	136.3	130.6	128.4	67	Sowing	135.9	130.1	129.3	135.9	138.9	132.6	.....	138.3	137.7	143.1	137.7	135.9	130.1	129.3	135.9	138.9	132.6	.....	138.3	137.7	143.1	137.7		
119.	2	118.2	123.7	129.1	125.3	131.8	132.8	125.3	129.1	131.7	126.6	68	Potato-planting (first of season)	134.4	125.3	129.1	144.6	141.2	123.4	.....	138.3	132.1	134.5	136.3	134.4	125.3	129.1	144.6	141.2	123.4	.....	138.3	132.1	134.5	136.3		

FLOWERING AND OTHER PHENOCHRONS FOR THE PROVINCE OF NOVA SCOTIA.—(Continued).

WHEN FIRST SEEN.		YEAR ENDED JULY, 1904.		WHEN BECOMING COMMON.									
REGIONS.		NOVA SCOTIA.		REGIONS.									
		Day of the year corresponding to the last day of each month.		Average for Province.									
1. Yarmouth and Digby.	143.8	129.2	117.8	138.7	150.7	138.1	148.1	140.	145.2	136.5	131.6	127.5	10. Inverness Slope to Gulf.
2. Shelburne, Queens and Lunenburg.	186.1	180.2	191.5	215.8	214.	223.6	203.7	215.3	213.5	213.5	213.5	220.	9. Bras d'Or Slope (Inv. and Victoria).
3. Annapolis and Kings.	239.	239.	239.8	250.1	253.5	250.3	245.6	262.8	255.5	247.2	248.3	254.5	8. Richmond and Cape Breton.
4. Hants and South Colchester.	248.1	263.4	254.9	270.1	273.2	264.6	272.3	269.8	276.	269.9	266.2	278.3	7. North Cumb. Col. (S. Cumb. and Col.)
5. Halifax and Guysboro.	81.4	81.2	80.9	80.3	92.8	94.7	91.3	91.5	91.	100.2	88.5	274.2	6. South Cobequid Slope
6. Hants and South Colchester.	93.3	96.9	97.1	102.	112.2	112.	105.6	119.9	119.	113.3	107.1	274.2	5. Halifax and Guysboro.
7. North Cumb. Col. (S. Cumb. and Col.)	111.2	111.1	111.4	115.2	111.	114.1	110.9	109.7	112.	114.9	112.2	274.2	4. Hants and South Colchester.
8. Richmond and Cape Breton.	111.2	111.1	112.	118.3	118.8	119.9	117.7	123.9	122.	129.6	118.4	274.2	3. Annapolis and Kings.
9. Bras d'Or Slope (Inv. and Victoria).	134.1	135.9	141.	133.8	132.4	155.4	139.8	145.4	134.	137.3	138.9	274.2	2. Shelburne, Queens and Lunenburg.
10. Inverness Slope to Gulf.	158.3	163.9	166.	150.5	160.5	131.7	157.8	159.5	163.	157.	159.8	274.2	1. Yarmouth and Digby.
	104.9	90.	127.9	167.	86.5	97.3	103.1	100.	110.6	102.5	186.8	274.2	
	183.5	187.9	181.	181.	200.	180.	243.	225.	275.8	271.9	296.3	274.2	
	272.3	257.4	240.6	257.1	276.6	258.7	271.2	285	304.	296.3	274.2	274.2	
	297.3	292.5	277.2	294.6	297.7	289.7	295.8	307					

FLOWERING AND OTHER PHENOCYCLONS FOR THE PROVINCE OF NOVA SCOTIA—(Continued).

WHEN FIRST SEEN.		YEAR ENDED JULY, 1904.		WHEN BECOMING COMMON.	
Regions.		NOVA SCOTIA.		Regions.	
1. Vermouth and Digby.	295.9	298.2	298.5	1. Vermouth and Digby.	Average for Province.
2. Shelburne, Queens and Lunenburg.	305.7	311.3	304.6	2. Shelburne, Queens and Lunenburg.	
3. Annapolis and Kings.	332.	338.3	342.	3. Annapolis and Kings.	
4. Hants and South Colchester.	334.8	341.5	347.	4. Hants and South Colchester.	
5. Halifax and Guysboro.	80.	86.4	80.2	5. Halifax and Guysboro.	
6. South Cobequid Slope (S. Cumb. and Col.)	298.7	298.7	243.	6. South Cobequid Slope (S. Cumb. and Col.)	
7. North Cumb. Col., Pictou and Antig. Breton.	317.	283.5	336.324.	7. North Cumb. Col., Pictou and Antig. Breton.	
8. Richmond and Cape Breton.	85.	83.8	87.5	8. Richmond and Cape Breton.	
9. Bras d'Or Slope (Inv. and Victoria).	82.4	84.7	83.8	9. Bras d'Or Slope (Inv. and Victoria).	
10. Inverness Slope to Gulf.	70.	88.1	81.0	10. Inverness Slope to Gulf.	
	108.5	132.	124.4		
	114.5	122.3	116.		
	129.5	122.6	126.7		
		125.7	117.6		
		127.5	123.2		
		125.5	126.5		
		121.7	121.5		
		124.9	125.		
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FLOWERING AND OTHER PHENOCHRONS FOR THE PROVINCE OF NOVA SCOTIA — (Continued).

WHEN FIRST SEEN.		YEAR ENDED JUL. 1904.		WHEN BECOMING COMMON.					
REGIONS.		NOVA SCOTIA.		REGIONS.					
1. Yarmouth and Digby.	2. Shelburne, Queens and Lunenburg.	3. Annapolis and Kings.	4. Hants and South Colchester.	5. Halifax and Guysboro.	6. South Cobequid Slope (S. Cumb. and Col.)	7. North Cumb. Col., Pictou and Antigonish.	8. Richmond and Cape Breton.	9. Bras d'Or Slope (Inverness and Victoria).	10. Inverness Slope to Gulf.
Average for Province.		Average for Province.		Average for Province.		Average for Province.		Average for Province.	
29.5	141.1	128.7	135.5	140.5	136.7	130.5	134.5	134.5	134.5
137.2	136.6	139.4	140.	115.2	142.7	135.2	136.	126.	137.5
124.5	120.5	110.8	130.	133.6	120.7	110.9	119.5	116.6	107.
151.	147.1	143.4	141.7	150.7	143.8	143.6	149.	142.	143.
138.	138.2	136.5	136.8	139.5	136.6	138.3	151.5	141.5	144.
138.	143.	137.7	133.2	115.	121.7	138.1	141.2	131.	139.
148.	144.8	143.8	139.9	142.	150.4	146.8	146.	132.	132.
.....	141.7	134.7	142.3	100.	153.3	139.7	140.	134.	150.
147.	133.7	.....	148.2	.....	138.5	153.5	.....	131.	.....
102.	132.1	128.9	125.3	124.2	139.1	129.	117.0	.....	105.5
95.7	97.7	99.4	107.	115.5	110.9	108.7	115.4	118.6	111.
104.4	107.9	108.6	116.9	120.5	122.	119.4	120.6	120.7	120.7
Day of the year corresponding to the last day of each month.		Day of the year corresponding to the last day of each month.		Day of the year corresponding to the last day of each month.		Day of the year corresponding to the last day of each month.		Day of the year corresponding to the last day of each month.	
Jan.	31	July	212	For Leap year add one to each except January.	89	<i>Dendroica coronata</i> "	.....	.....	.....
Feb.	59	Aug.	243		90	<i>D. aestiva</i> "	.....	.....	.....
March.	60	Sept.	273		91	<i>Zonotrichia alba</i> "	.....	.....	.....
April.	120	Oct.	304		92	<i>Trochilus colubris</i> "	.....	.....	.....
May.	151	Nov.	334		93	<i>Tyrannus Carolinensis</i> "	.....	.....	.....
June.	181	Dec.	365		94	<i>Dolichonyx oryzivorus</i> "	.....	.....	.....
					95	<i>Spinis tristis</i> "	.....	.....	.....
					96	<i>Setophaga ruticilla</i> "	.....	.....	.....
					97	<i>Ampelis cedrorum</i> "	.....	.....	.....
					98	<i>Chordeiles Virginianus</i> "	.....	.....	.....
					99	First piping of frogs	7	.....	.....
					100	First appearance, snakes	116.2	100	116.2

THUNDERSTORMS-PHENOLOGICAL OBSERVATIONS, NOVA SCOTIA, 1903.

The indices indicate the number of stations from which the Thunderstorms were reported on the day of the year specified.

OBSERVATION STATIONS.

1. Yarmouth and Digby.	2. Shelburne, Queens and Lunenburg.	3. Annapolis and Kings.	4. Hants and Colchester.	5. Halifax and Guysboro.	6. S. Cobequid Slope (S. Cum. & Col.)	7. North Cum., Col., Pictou & Antic.	8. Richmond and Cape Breton.	9. Bras. Or Slope (Inv. & Victoria).	10. Inverness Slope to Gulf.	Province of Nova Scotia.	YEAR 1903.
184	183 ¹		184	183 184 ²	183	183 ¹³ 184 ¹⁰			184	183 ¹⁵ 184 ¹⁵	
	188					189 ² 190	188			188 ² 189 ³	
	191					192 ²		189		190 191 ²	
						194		193		192 ² 193	
				197 199		197 199 ² 200				194 197 ²	
203				201		204 208 215		200		199 ³ 202 ²	
	223									203 204 ²	
	227 ¹			227		227 ²				208 215	
	228 ³			228		228 ¹⁵		228		215 223	
	229 ¹⁰			229 ²	229	229 ²⁷		229	229	228 ²⁰ 229 ⁴²	
	230	230 ⁴	230 ⁴	231	230 ⁶	230 ¹¹			230	230 ²⁷	
	232 ³		231			231 ³				231 ⁴ 232	
	233				233 ¹²	233 ²				232 233 ¹⁵	
		234 ⁴	234 ⁴	234	234 ²	234 ¹⁰	234 ²			234 ²¹	
		235 ³	235 ³		235 ³	235 ⁷				235 ¹⁶	
					236 ³					236 ³	
			238			238	237			237	
				239 ²		239 ¹⁰				238 ² 239 ¹²	
242 ²	240		240 ²		240	240 ⁴	240			240 ⁹ 242 ³	
	242									242 ³	
	243 ²		243 ⁴	243 ¹⁰		243 ³	243	243		243 ²¹	
	244			244		244 ³	244			244 ⁶	
						245				245	
						246				246 ⁴	
248 ²	248 ¹²	248 ⁷	248 ⁷	248 ¹⁵		248 ²³	248	248	248	247 248 ⁶⁹	
249	249 ¹²	249 ⁷	249 ⁶		249 ³	249 ²¹	249			247 248 ⁶¹	
	250 ²		250 ⁴			250 ¹⁴		250		250 ²	
251	251 ²		251 ⁴	251 ²	251 ²	251 ¹⁶	251			251 ¹⁷	
			252			252 ³				252 ⁴	
						254				254	
259							256			256	
						259			259	259 ³	
						260				260	
						261			263	261	
266										263	
267			267						263	266	
										267 ²	

THUNDERSTORMS—PHENOLOGICAL OBSERVATIONS, NOVA SCOTIA, 1903

The indices indicate the number of stations from which the Thunderstorms were reported on the day of the year specified.

OBSERVATION STATIONS.

1. Yarmouth and Digby.	2. Shelburne, Queens and Lunenburg.	3. Annapolis and Kings.	4. Hants and South Colchester.	5. Halifax and Guysborough.	6. S. Colebrook Slope (S. Cunn. & Col.)	7. North Cunn., Col., Pictou & Antigonish.	8. Richmond and Cape Breton.	9. Bras d'Or Slope (Inv. & Victoria).	10. Inverness Slope to Gulf.	Province of Nova Scotia.	YEAR 1903.
270						271 ⁵			271		270
						272			272		271 ⁷
						273					272 ²
				278							273
				279							278
				280							279
						281					280
											281
											282
	282										285 ⁹
285 ³	288 ⁴			285 ³							289 ²
289	289										290 ²³
290 ⁷	290 ⁹	290 ⁹	290			290 ⁴					291 ¹⁴
291 ⁵	291 ²				291 ²	291 ⁵					299 ⁷
	299		299 ²	300 ⁴							304
				300		304					304
											306
310	310 ²			311 ⁹		311 ⁹	311	311	311		310 ⁹
			311 ²	312		312 ⁴	312 ²	312	312		311 ²²
						318					312 ⁹
						321	321 ⁷				318
				322 ⁴		322 ⁹	322	322	322		321 ³
						323					322 ¹⁶
						324					323
						324					324
						328					328
						341 ⁷					341 ⁷
									360		360

YEAR 1904.

				32		32			4	4
										32 ³
38										38
						54				54
						56				56
				60		60				60 ²
										61 ⁷
	61 ²		62 ³	62 ¹⁸		62 ⁴				62 ⁷³
63 ¹⁶	63 ¹⁰	63 ¹⁰	63 ⁹	63 ⁶	63 ¹⁹	63 ²⁶	63 ²		63	63 ¹⁴¹
64			64	64		64 ⁶	64	64		64 ¹¹
						66				66
			67							67
			68 ³							68 ³
	70									70
71				71		71				71 ⁵
				72						72
73										73
				74						74
77						77				77 ²

THUNDERSTORMS- PHENOLOGICAL OBSERVATIONS, NOVA SCOTIA, 1904.

The indices indicate the number of stations from which the Thunderstorms were reported on the day of the year specified.

OBSERVATION STATIONS.

1. Yarmouth and Digby.	2. Shelburne, Queens and Lunenburg.	3. Annapolis and Kings.	4. Hants and South Colchester.	5. Halifax and Guysboro.	6. S. Cobequid Slope (S. Cum. & Col.)	7. North Cum., Col., Victou & Antig.	8. Richmond and Cape Breton.	9. Bras d'Or Slope (Inv. & Victoria)	10. Inverness Slope to Gulf.	Province of Nova Scotia. YEAR, 1904.
					81		81			81 ²
										82 ²⁶
										83 ¹³
					92					88 ²
						91				91
										92
		93 ⁹								93 ⁹
						94				94
								95		95
97 ²								101	101	97 ²
	101 ¹⁷	101 ⁴	101		101 ²					101 ²⁶
102 ²	102 ⁵	102 ¹⁵	102		102 ¹³	102 ²⁷				102 ²⁴
103 ¹⁴	103			103		103 ²		103	103	103 ²⁰
104										104
					110 ²	109	100 ⁸	109		109 ²
	111									110 ²
						112				111
			114							112
										114
									117	117
						119				119
			120	120	120 ⁹	120	120 ⁵	120 ³		120 ¹⁵
		121 ⁷	121 ¹²		121 ¹²	121 ³³				121 ⁷⁹
				122		122 ²³				122 ⁴
						123				123
					124	124 ¹²				124 ¹³
			126			125				125
						126				126 ²
						128 ²		128		128 ³
									129	129
						130				130 ²
			137	138		137 ²	137			137 ⁴
			138	138						138 ²
						140				140
			141			141 ¹⁵				141 ¹⁶
								144 ³	144 ⁴	144 ⁷
145 ⁴	145 ³		145 ⁴	145		145			145	145 ¹⁶
146	146			146 ⁷		146	146			146 ¹¹
	147 ²	147 ²		147 ⁷		147 ⁴	147 ³	147 ³		147 ²⁸
	148 ⁵				148 ²	148 ⁵	148 ¹²		148 ⁵	148 ²⁹
							149 ³	149		149 ⁴
	150							151	151	150
						151 ²				151 ⁴
				154	154					154 ²
			155			155	155 ²			155 ⁴
156	156		156							156 ³
157	157 ⁴						157			157 ⁶
158						158				158 ²
161										161
						162				162

PHENOLOGICAL OBSERVATIONS, CANADA, 1904

"WHEN FIRST SEEN."

OBSERVATION STATIONS.

Number	Day of the year 1903 corresponding to the last day of each month.		Average dates for Nova Scotia	St. John, N.B.	Charlottetown, P.E.I.	Kenton, P.E.I.	Ottawa, Ont.	Greenboro, Ont.	Guelph, Ont.	Shellbrook, Sask.	Vancouver, B.C.
	Jan..... 31	July..... 218									
	Feb..... 59	Aug..... 243									
	March..... 89	Sept..... 273									
	April..... 120	Oct..... 304									
	May..... 151	Nov..... 334									
	June..... 181	Dec..... 365									
	For Leap Year add one to each except January.										
*1	<i>Alnus incana</i> , Wildt	106.9	118	120			114		117		75a
2	<i>Populus tremuloides</i>	118	125	132			118	126	123		
3	<i>Epigaea repens</i> , L.	108.1	1.5	120	1.6		118				
4	<i>Equisetum arvense</i>	128.8				131	†124		127		102
5	<i>Sanguinaria Canadensis</i>	127					124		117		
6	<i>Viola blanda</i>	126.3	131		127	†127	142	130			
7	<i>Viola palmata</i> , <i>encullata</i>	150	133		134	131	174	131			
8	<i>Hepatica triloba</i> , etc.	121.3	123				167	126	123		
9	<i>Acer rubrum</i>	128.1	125	132	130				123		100b
10	<i>Fragaria Virginiana</i>	127.7	131	110	136	127			132		
*11	" " (fruit ripe)	161.9	162								
12	<i>Traxacum officinale</i>	131.1	130	135	130	127	130	113			
13	<i>Erythronium Americanum</i>	137.2	125				122	126	117		
14	<i>Cuscuta trifolia</i>	133.2			137	†133			144		
15	<i>Claytonia Caroliniana</i>	128.1				111		117			
16	<i>Nepeta Glechoma</i>	138.4				†133					108
17	<i>Amelanchier Canadensis</i>	137.1	159		139	133		132			
18	" " (fruit ripe)	200.1									
19	<i>Prunus Pennsylvanica</i>	141.5	149		1	12	142				114c
20	" " (fruit ripe)	215.9									
21	<i>Vaccinium Can. and Penn.</i>	141.2	146		118	135		135			80
22	" " (fruit ripe)	207.6									
23	<i>Ranunculus acris</i>	147.5			156			131			124
24	<i>R. repens</i>	156.8			170						128
25	<i>Trillium erythrocarpum</i>	145.9	139		141	127					
26	<i>Rhododendron Rhodora</i>	145.1	139		151						
27	<i>Cornus Canadensis</i>	147.2			147	152		163			133
28	" " (fruit ripe)	212.6									
29	<i>Trientalis Americana</i>	148.5	146		159	138			148		
30	<i>Clintonia borealis</i>	151.5	149		160	138		148			
31	<i>Calla palustris</i>	158.5			131			165			

a. *Alnus inbrum*; b. *Acer macrophyllum*; c. *Prunus emarginata*.
 * When becoming common, except 1 and 11.
 † When becoming common.

PHENOLOGICAL OBSERVATIONS, CANADA, 1904.

"WHEN FIRST SEEN."

OBSERVATION STATIONS.

Number	Day of the year 1905 corresponding to the last day of each month.		Average dates for Nova Scotia.	St. John, N.B.	Charlottetown, P.E.I.	Kingston, P.E.I.	Ottawa, Ont.	†Greer, Ont.	Geolph, Ont.	Shallbrooke, Sask.	Vancouver, B.C.
	Jan. 31	July.....212									
	Feb..... 59	Aug..... 243									
	March..... 90	Sept..... 272									
	April.....120	Oct..... 304									
	May..... 151	Nov..... 334									
	June..... 181	Dec..... 365									
	For Leap Year add one to each except January.										
32	Cypripedium acutum.....	157 1	162	.....	153	.....	.....	.....	156	.....	.....
33	Sisyrinchium angustifolium.....	158	.....	.....	172	145	.....	.....	.....	.....	.....
34	Linnaea borealis.....	162 9	.....	.....	166	.....	.....	.....	163	.....	.....
35	Kalmia glauca.....	151 1	.....	.....	.....	.....	.....	.....	143	.....	.....
36	Kalmia angustifolia.....	170.1	.....	.....	173	.....	.....	.....	.....	.....	.....
37	Crataegus Oxycantha.....	162.	146	.....	.....	142	.....	.....	.....	.....	.....
38	Crataegus coccinea, etc.....	157 7	.....	161	.....	.....	.....	.....	148	.....	.....
39	Iris versicolor.....	164.6	103	.....	175	.....	.....	.....	166	.....	.....
40	Chrysanthemum Leucanthemum.....	144.6	.....	.....	157	.....	.....	.....	169	.....	.....
41	Nuphar advena.....	164.9	.....	.....	.....	151	.....	.....	162	.....	.....
42	Rubus strigosus.....	160.6	.....	.....	170	151	.....	.....	155	.....	74d
43	" " (fruit ripe).....	217.5	.....	.....	.....	.....	.....	.....	.....	.....	162
44	Rhinanthus Crista-galli.....	172 7	.....	.....	.....	.....	.....	.....	.....	.....	.....
45	Rubus villosus.....	166	.....	.....	.....	.....	.....	.....	150	.....	.....
46	" " (fruit ripe).....	230 7	.....	.....	.....	.....	.....	.....	.....	.....	.....
47	Sarracenia purpurea.....	168 1	.....	.....	.....	.....	.....	.....	158	.....	.....
48	Brunella vulgaris.....	173.3	.....	.....	179	.....	.....	.....	178	.....	.....
49	Rosa lucida.....	179.9	.....	.....	.....	.....	.....	.....	197	.....	.....
50	Leontodon autumnale.....	167.6	.....	.....	151	.....	.....	.....	.....	.....	.....
51	Linaria vulgaris.....	176	.....	.....	.....	.....	.....	.....	.....	.....	.....
52	Trees appear green.....	135.8	.....	.....	.....	127b	146	.....	.....	.....	100
53	Ribes rubrum (cultivated).....	141 8	.....	.....	.....	.....	.....	.....	.....	.....	.....
54	" " (fruit ripe).....	203 4	.....	.....	.....	.....	.....	.....	.....	.....	.....
55	R. nigrum (cultivated).....	142 9	.....	.....	148	.....	.....	.....	.....	.....	.....
56	" " (fruit ripe).....	209 4	.....	.....	.....	.....	.....	.....	.....	.....	.....
57	Prunus Cerasus.....	147 4	.....	149	150	.....	.....	.....	.....	.....	.....
58	" " (fruit ripe).....	216	.....	.....	.....	.....	.....	.....	.....	.....	104
59	Prunus domestica.....	151.1	.....	.....	146	129	.....	.....	.....	.....	.....
60	Pyrus malus.....	170 5	.....	149	148	.....	.....	.....	.....	.....	103
61	Syringa vulgaris.....	157.6	.....	161	158	.....	.....	.....	.....	.....	112
62	Trifolium repens.....	157 3	.....	.....	158	.....	.....	.....	.....	.....	125

d. Rubus spectabilis.
 * When becoming common.
 † When becoming common.

PHENOLOGICAL OBSERVATIONS, CANADA, 1914.

'WHEN FIRST SEEN.'

OBSERVATION STATIONS.

Number	Day of the year 1903 corresponding to the last day of each month. Jan 31 July.....212 Feb..... 59 Aug..... 242 March..... 90 Sept..... 273 April..... 120 Oct.....304 May.....151 Nov.....334 June.....181 Dec..... 365	Average dates for Nova Scotia.	St. John, N.B.	Charlottetown, P.E.I.	Kensington, P.E.I.	Ottawa, Ont.	Creemore, Ont.	Guelph, Ont.	Shellbrooke, Sask.	Vancouver, B.C.
63	Trifolium pratense.....	155.7			159	†128				140
64	Phleum pratense	157.2								
65	Solanum tuberosum.....	170.8					188			
66	Ploughing (first of season).....	119.3			124					
67	Sowing " "	128.4			127					
68	Potato-planting "	126.0					145		131	
69	Sheep-shearing "	129.6					144			
70	Hay-cutting "	205.7					194		196	
71	Grain-cutting "	248.3					202			
72	Potato-digging "	266.2			276					
73a	Opening of rivers "	88.5		103						
7	Opening of lakes "	107.1								
74a	Last snow to whiten ground.....	112.2								82
74b	" to fly in air.....	118.4			117					82
75a	Last spring frost—hard.....	138.9			97					
75b	" " hoar.....	159.8	163	126	124					
76a	Water in streams—high.....	102.5					107			
76b	" " low.....	186.8								
77a	First autumn frost—hoar.....	271.9		252	252		257			
77b	" " hard.....	296.3	281		280					
78a	First snow to fly in air.....	299.6		262	301					
78b	" whiten ground.....	308.3			306					
79a	Closing of Lakes	342.5								
79b	" Rivers.....	340.9		344						
81a	Wild ducks migrating, N.....	88.3					124	123		
81b	" " S.....	295.7								
82a	" geese " N.....	83.9		69					94	
82b	" " S.....	312.5		260						
83	Melospiza fasciata, North.....	91.2		88	92	85	86	83		
84	Turdus migratorius "	88.1		90	92	84	85	83	111	
85	Junco hiemalis "	87.3		90	92	93		Res.		

80 Thunderstorms:
 Charlottetown, P.E.I.:—63, 121, 141, 148, 204, 210, 231, 202.
 Kensington, P.E.I.:—63, 121, 148, 170, 181, 202, 230, 242, 262.
 Creemore, Ontario:—129, 194, 202, 246, 255, 273.

PHENOLOGICAL OBSERVATIONS, CANADA, 1904.

"WHEN FIRST SEEN."

OBSERVATION STATIONS.

Number	Day of the year 1903 corresponding to the last day of each month.		Average dates for Nova Scotia.	St. John, N.B.	Charlottetown, P.E.I.	Kensington, P.E.I.	Ottawa, Ont.	Creemore, Ont.	Guelph, Ont.	Shellbrooke, Sask.	Vancouver, B.C.
	Jan. 31	July. 212									
	Feb. 59	Aug. 243									
	March 90	Sept. 273									
	April 120	Oct. 304									
	May 151	Nov. 334									
	June 181	Dec. 365									
	For Leap Year add one to each except January.										
86	Actitis macularia, North	127.4									
87	Sturnella magna "	121.7							120		
88	Ceryle Alcyon "	124.9					93		83	112	
89	Dendroca coronata "	134.5					114		97		
90	D. aestiva "	134.6							120		
91	Zonotrichia alba "	119.4					128		126		
92	Trochilus colubris "	145.6							146		
93	Tyrannus Carolinensis "	140.1							141		
94	Dolichonyx oryzivorus "	133.8							126		
95	Spinis tristis "	143.7							124		
96	Setophaga ruticilla "	137.3						151	Res.		
97	Ampelis cedrorum "	142.					128		140		
98	Chordeiles Virginiaus "	122.5							147		
99	First piping of frogs	108.7		149					155		
100	First appearance of snakes	116.2		114	123	108	112			113	
					168		93			111	

