

THE PHENOLOGY OF NOVA SCOTIA, 1916—By A. H.
MACKAY, LL.D.

(Read by title 14 May 1917)

These observations were made by the school children of the Province of Nova Scotia as a part of the Nature Study work prescribed. The pupils report by bringing into the school-room the flowering or other specimens when first observed, for authoritative determination by the teacher who generally credits the first finder by placing the name and the observation on the honor roll section of the blackboard for the day. The teacher after testing the correctness of the observation, marks it on the schedule with which every teacher is provided—a copy of which is sent in to the Inspector with the school returns at the end of June and January.

The following tables are compiled from 180 of the best schedules out of the 435 sent in. The selections were made and compiled under the direction of Mr. H. R. Shinner, B. A., and Miss M. G. McLeod, of the Education Department.

The schedules for each year are carefully bound up in a large annual volume which is placed in the Provincial Museum and Science Library where they can be used by students of climate, etc. The compilers of the phenochrons of the different belts, slopes or regions, have been rural science teachers who have most distinguished themselves as instructors. They were selected for the purpose on the recommendation of the Director of rural science education. The sheets from which the provincial phenochrons are calculated, are also bound in annual folio volumes for ease of consultation and preservation.

The Province is divided into its main climate slopes or regions not always coterminous with the boundaries of counties. Slopes, especially those to the coast, are subdivided into belts, such as (a) the coast belt, (b) the low inland belt, and (c) the high inland belt, as below:—

No.	Regions or Slopes.	Belts.
I.	Yarmouth and Digby Counties,	(a) Coast, (b) Low Inlands, (c) High Inlands.
II.	Shelburne, Queens & Lunenburg Co's.	" " "
III.	Annapolis and Kings Counties,	(a) Coast, (b) North Mt., (c) Annapolis Valley, (d) Corn- wallis Valley, (e) South Mt.
IV.	Hants and Colchester Counties,	(a) Coast, (b) Low Inlands, (c) High Inlands.
V.	Halifax and Guysboro Counties,	" " "
VI.A.	Cobequid Slope (to the south),	" " "
VI.B.	Chignecto Slope (to the northwest),	" " "
VII.	Northumberland Straits Slope (to the n'h)	" " "
VIII.	Richmond & Cape Breton Co's.,	" " "
IX.	Bras d'Or Slope (to the southeast),	" " "
X.	Inverness Slope (to Gulf, N. W.),	" " "

The ten regions are indicated on the outline map on the next page.

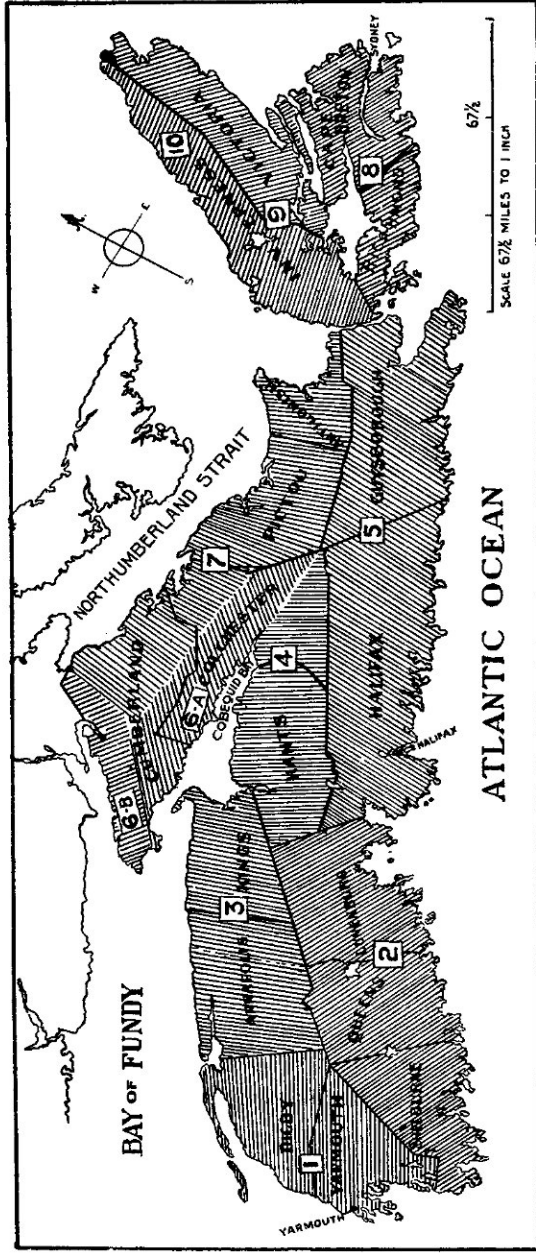
THE LOCAL COMPILERS FOR EACH REGION, 1916.

Region No.

- I. Irma Campbell, Bay View, Dig. Co.
- II. Seldon Bryson, Chester, Lun. Co.
- III. Merna Franke, Kentville, Kings Co.
- IV. Katherine Dawson, Maitland, Hants Co.
- V. G. Lawrence Leslie, Woodside, Hfx. Co.

Region No.

- VIa. Robt. Bagnell, Great Village, Col. Co.
- VIb. R. H. Wetmore, Parrsboro, Curn. Co.
- VII. Flora Zwicker, Tatamagouche, Col. Co.
- VIII. Mary B. MacDonald, L. Bras d'Or W., C. B.
- IX. & X. R. Stanley MacLeod, Wh. Pier, Sydney.



THE TEN PHENOLOGICAL REGIONS OF NOVA SCOTIA.

THE PHENOLOGY OF NOVA SCOTIA, 1916

[Compiled from the best 180 out of 435 local observation schedules.]

WHEN FIRST SEEN.		WHEN BECOMING COMMON.	
OBSERVATION REGIONS.		OBSERVATION REGIONS.	
YEAR 1916		Average Dates	
Day of the year corresponding to the last day of each month.		Average Dates	
Jan. 31	July 212	1. Yarmouth and Digby	140
Feb. 59	Aug. 243	2. Shelburne, Queens and Lunenburg	127
March 90	Sept. 273	3. Annapolis and Kings	108
April 120	Oct. 304	4. Hants and South	119
May 151	Nov. 334	5. Halifax and Guysboro	119
June 181	Dec. 365	6. S. Cobequid Slope, (S. Cum. & Col.)	124
For leap year add one to each except January.		7. N. Cumb. Col., Pictou and Antigonish	124
		8. Richmond and Cape Breton	134
		9. Bras d'Or Slope, Inverness Slope to Gull	115
		10. Inverness Slope to Gull	116
1. Yarmouth and Digby	132	1. Alnus incana, Wild.	123
2. Shelburne, Queens and Lunenburg	127	2. Populus tremuloides.	128
3. Annapolis and Kings	113	3. Equiseta repens, L.	121
4. Hants and South	117	4. Equisetum arvense.	132
5. Halifax and Guysboro	108	5. Sarracenia Canadensis.	137
6. S. Cobequid Slope, (S. Cum. & Col.)	121	6. Viola blanda.	134
7. N. Cumb. Col., Pictou and Antigonish	118	7. Viola palustris, cucullata.	137
8. Richmond and Cape Breton	126	8. Hepatica trilobata, etc.	134
9. Bras d'Or Slope, Inverness Slope to Gull	119	9. Acer rubrum.	136
10. Inverness Slope to Gull	112	10. Fragaria Virginiana.	139
	127	11. Fragaria officinale.	174
	129	12. Taraxacum officinale.	140
	132	13. Erythronium Americanum	149
	133	14. Copis triflora.	142
	135	15. Claytonia Caroliniana.	143
	137	16. Nepeta Glechoma.	146
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THE PHENOLOGY OF NOVA SCOTIA, 1916.—Continued.

WHEN FIRST SEEN.		YEAR 1916.		WHEN BECOMING COMMON.					
OBSERVATION REGIONS.		OBSERVATION REGIONS.		OBSERVATION REGIONS.					
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 (S. Cumb. & Col.) Slope, Guysboro	7 N. Cumb. Col. Pictou and Antigonish	8 Richmond and Cape Breton	9 Bras d'Or Slope, Inv. and Victoria	10 Inverness Slope to Gulf
Average Dates	Average Dates	Average Dates	Average Dates	Average Dates	Average Dates	Average Dates	Average Dates	Average Dates	Average Dates
114	961	341	261	319	317	294	294	306	288
91	92	91	91	99	98	96	103	95	95
90	91	92	91	90	90	93	94	93	91
87	95	95	91	96	112	98	74	121	96
100	92	127	118	133	130	127	151	118	121
129	142	130	128	122	133	154	126	152	137
128	130	124	128	125	128	125	128	128	127
139	125	136	125	92	118	139	132	126	126
138	128	141	131	133	117	139	134	145	134
141	111	121	128	128	90	115	125	126	121
149	148	148	148	153	148	151	160	156	121
150	...	135	138	123	139	149	139	139	135
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152	150	138	142	149	110	140	150	141	141
140	146	...	97	129	128	145	142	120	141
...	159	...	98	161	143	175	145	135	145
123	134	142	136	129	127	143	128	141	134
104	107	108	110	115	112	113	118	112	111
114	107	116	118	117	130	125	127	114	116

Day of the year corresponding to the last day of each month.	For leap year add one to each except January.	North.	S.
Jan. 31	July 212	82b Wild geese migrating	
Feb. 59	Aug. 243	83 <i>Melospiza fasciata</i>	
March 90	Sept. 273	84 <i>Turdus migratorius</i>	
April 120	Oct. 304	85 <i>Junco hiemalis</i>	
May 151	Nov. 334	86 <i>Actitis macularia</i>	
June 181	Dec. 365	87 <i>Sturnella magna</i>	
		88 <i>Ceryle alcyon</i>	
		89 <i>Dendrea coronata</i>	
		90 <i>D. aestiva</i>	
		91 <i>Zonotrichia alba</i>	
		92 <i>Trochilus colubris</i>	
		93 <i>Tyrannus Carolinensis</i>	
		94 <i>Dolichonyx oryzivorus</i>	
		95 <i>Spiza tristis</i>	
		96 <i>Setophaga ruticilla</i>	
		97 <i>Ampelis cedrorum</i>	
		98 <i>Chordeiles Virginianus</i>	
		99 First piping of frogs	
		100 First appearance, snakes	

154 PHENOLOGICAL OBSERVATIONS IN N. S., 1916.—MACKAY.

THUNDERSTORMS—PHENOLOGICAL OBSERVATIONS, NOVA SCOTIA, 1916.

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

OBSERVATION REGIONS.

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. and Col.)	7. North Cum., Col., Pictou and Antig.	8. Richmond and Cape Breton	9. Bras d'Or Slope (Inv. & Victoria).	10. Inverness Slope to Gulf.	Total Year 1916.
				160						160
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	163 ³			163						163 ³
			164 ³	164 ⁷	164	164 ³⁰	164 ³		164	164 ⁴⁵
				165 ³						165 ³
171 ³	171 ²	171	171	171 ²	171		171			171 ¹¹
172 ⁸	172 ¹¹	172 ⁴	172 ³	172 ⁴	172 ³	172 ⁸	172 ⁶		172 ²	172 ⁴⁸
						173	173			173 ²
	174			174						174 ²
				175						175
									179	179
180 ³	180 ²	180 ²	180 ³		180	180 ⁸			180 ²	180 ²¹
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