

THE PHENOLOGY OF NOVA SCOTIA, 1914—BY A. H.
MACKAY, LL.D.

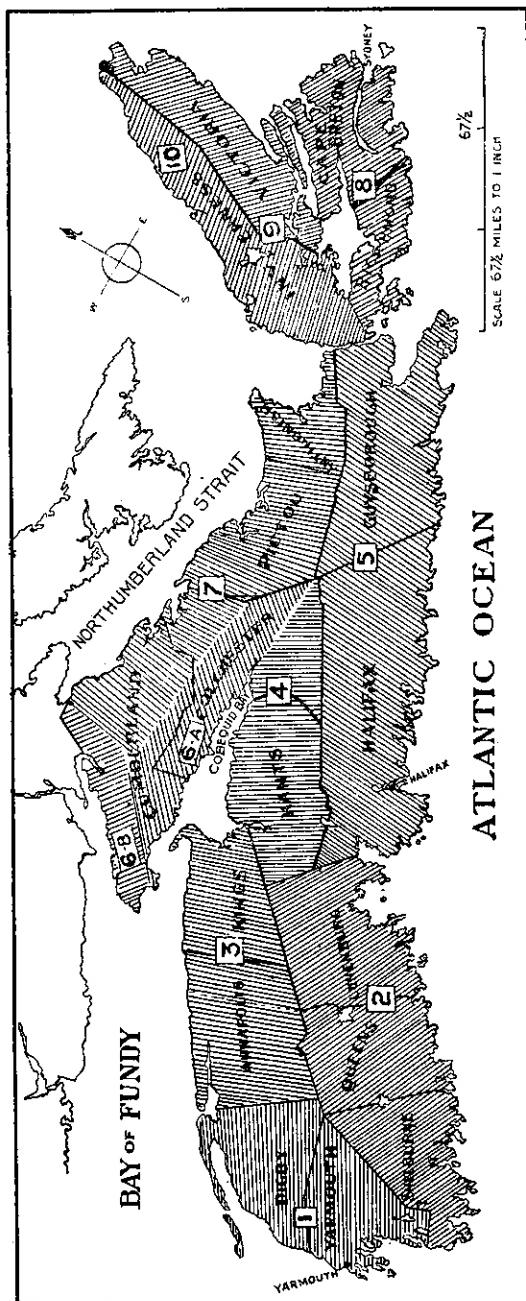
(Read by title 12 May 1915)

These phenological observations were made in the schools of the province of Nova Scotia as a part of the Nature Study work prescribed. The pupils report or bring in the flowering or other specimens to the teachers when they are first observed. The teachers record the first observation and observer, and vouch for the accurate naming of the species. The schedules from 350 of the best schools form the material of the following system of average dates (phenochrons) for the ten biological regions of the Province, and the phenochrons of the Province as a whole. The averaging of these schedules was done by H. R. Shinner, B. A. The * marks dates not averaged.

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) Cornwallis 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 Sts 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 TEN PHENOLOGICAL REGIONS OF NOVA SCOTIA.

THE PHENOLOGY OF NOVA SCOTIA, 1914.

[Compiled from over 350 local observation schedules.]

WHEN First Seen.	YEAR 1914.	WHEN BECOMING COMMON.											
		OBSERVATION REGIONS.						OBSERVATION REGIONS.					
1. Yarmouth and Digby	Average Dates	Day of the year corresponding to the last day of each month.	Jan.....	31	July.....	212	1. Annis incana, Wild.....	126	120	124	130	133	133
2. Sheldburne, Queens-	Average Dates		Feb.....	69	Aug.....	243	2. Populus tremuloides.....	126	125	131	128	134	140
3. Amnapolis and Kildres-	Average Dates		March.....	90	Sep.....	273	3. Epigaea repens, L.....	126	126	123	124	131	133
4. Halifax and South Colchester	Average Dates		April.....	120	Oct.....	304	4. Euonymus atropurpureus.....	124	116	126	126	134	133
5. Hants and South Colchester	Average Dates		May.....	151	Nov.....	334	5. Sanguinaria Canadensis.....	127	138	139	148	144	146
6. S. Cobiquid Slope,	Average Dates		June.....	181	Dec.....	365	6. Viola Blanda.....	130	136	141	143	144	144
7. N. Cumb., Col., Pictou and Antigonish	Average Dates	For leap year add one to each except January.					7. Viola pumila, gracilis.....	127	136	142	139	146	150
8. Baddeck and Cape Breton	Average Dates						8. Hepatica trilobata, etc.....	133	135	138	144	149	151
9. Bras d'Or Slope, and Victoria	Average Dates						9. Acer rubrum.....	129	136	139	144	147	147
10. Glace Bay and Victoria	Average Dates						10. Fragaria Virginiana.....	131	136	139	143	145	146
11. Yarmouth and Digby	Average Dates						11. Taraxacum officinale.....	126	132	136	143	145	148
12. Sheldburne, Queens-	Average Dates						12. Taraxacum officinale.....	127	139	142	143	145	148
13. Amnapolis and Kildres-	Average Dates						13. Erythronium Americanum.....	128	130	132	144	152	150
14. Halifax and South Colchester	Average Dates						14. Coptis trifolia.....	129	130	132	140	146	148
15. Hants and South Colchester	Average Dates						15. Claytonia Carolina.....	131	130	131	141	145	145
16. S. Cobiquid Slope,	Average Dates						16. Nepeta Glechoma.....	132	131	131	146	147	151
17. N. Cumb., Col., Pictou and Antigonish	Average Dates							17. 146	147	147	153	151	151
18. Bras d'Or Slope, and Victoria	Average Dates							18. 144	145	145	146	147	153
19. Glace Bay and Victoria	Average Dates							19. 144	145	145	146	147	153
20. Yarmouth and Digby	Average Dates							20. 144	145	145	146	147	153
21. Sheldburne, Queens-	Average Dates							21. 144	145	145	146	147	153
22. Amnapolis and Kildres-	Average Dates							22. 144	145	145	146	147	153
23. Halifax and South Colchester	Average Dates							23. 144	145	145	146	147	153
24. Hants and South Colchester	Average Dates							24. 144	145	145	146	147	153
25. S. Cobiquid Slope,	Average Dates							25. 144	145	145	146	147	153
26. N. Cumb., Col., Pictou and Antigonish	Average Dates							26. 144	145	145	146	147	153
27. Bras d'Or Slope, and Victoria	Average Dates							27. 144	145	145	146	147	153
28. Glace Bay and Victoria	Average Dates							28. 144	145	145	146	147	153
29. Yarmouth and Digby	Average Dates							29. 144	145	145	146	147	153
30. Sheldburne, Queens-	Average Dates							30. 144	145	145	146	147	153
31. Amnapolis and Kildres-	Average Dates							31. 144	145	145	146	147	153
32. Halifax and South Colchester	Average Dates							32. 144	145	145	146	147	153
33. Hants and South Colchester	Average Dates							33. 144	145	145	146	147	153
34. S. Cobiquid Slope,	Average Dates							34. 144	145	145	146	147	153
35. N. Cumb., Col., Pictou and Antigonish	Average Dates							35. 144	145	145	146	147	153
36. Bras d'Or Slope, and Victoria	Average Dates							36. 144	145	145	146	147	153
37. Glace Bay and Victoria	Average Dates							37. 144	145	145	146	147	153
38. Yarmouth and Digby	Average Dates							38. 144	145	145	146	147	153
39. Sheldburne, Queens-	Average Dates							39. 144	145	145	146	147	153
40. Amnapolis and Kildres-	Average Dates							40. 144	145	145	146	147	153
41. Halifax and South Colchester	Average Dates							41. 144	145	145	146	147	153
42. Hants and South Colchester	Average Dates							42. 144	145	145	146	147	153
43. S. Cobiquid Slope,	Average Dates							43. 144	145	145	146	147	153
44. N. Cumb., Col., Pictou and Antigonish	Average Dates							44. 144	145	145	146	147	153
45. Bras d'Or Slope, and Victoria	Average Dates							45. 144	145	145	146	147	153
46. Glace Bay and Victoria	Average Dates							46. 144	145	145	146	147	153
47. Yarmouth and Digby	Average Dates							47. 144	145	145	146	147	153
48. Sheldburne, Queens-	Average Dates							48. 144	145	145	146	147	153
49. Amnapolis and Kildres-	Average Dates							49. 144	145	145	146	147	153
50. Halifax and South Colchester	Average Dates							50. 144	145	145	146	147	153
51. Hants and South Colchester	Average Dates							51. 144	145	145	146	147	153
52. S. Cobiquid Slope,	Average Dates							52. 144	145	145	146	147	153
53. N. Cumb., Col., Pictou and Antigonish	Average Dates							53. 144	145	145	146	147	153
54. Bras d'Or Slope, and Victoria	Average Dates							54. 144	145	145	146	147	153
55. Glace Bay and Victoria	Average Dates							55. 144	145	145	146	147	153
56. Yarmouth and Digby	Average Dates							56. 144	145	145	146	147	153
57. Sheldburne, Queens-	Average Dates							57. 144	145	145	146	147	153
58. Amnapolis and Kildres-	Average Dates							58. 144	145	145	146	147	153
59. Halifax and South Colchester	Average Dates							59. 144	145	145	146	147	153
60. Hants and South Colchester	Average Dates							60. 144	145	145	146	147	153
61. S. Cobiquid Slope,	Average Dates							61. 144	145	145	146	147	153
62. N. Cumb., Col., Pictou and Antigonish	Average Dates							62. 144	145	145	146	147	153
63. Bras d'Or Slope, and Victoria	Average Dates							63. 144	145	145	146	147	153
64. Glace Bay and Victoria	Average Dates							64. 144	145	145	146	147	153
65. Yarmouth and Digby	Average Dates							65. 144	145	145	146	147	153
66. Sheldburne, Queens-	Average Dates							66. 144	145	145	146	147	153
67. Amnapolis and Kildres-	Average Dates							67. 144	145	145	146	147	153
68. Halifax and South Colchester	Average Dates							68. 144	145	145	146	147	153
69. Hants and South Colchester	Average Dates							69. 144	145	145	146	147	153
70. S. Cobiquid Slope,	Average Dates							70. 144	145	145	146	147	153
71. N. Cumb., Col., Pictou and Antigonish	Average Dates							71. 144	145	145	146	147	153
72. Bras d'Or Slope, and Victoria	Average Dates							72. 144	145	145	146	147	153
73. Glace Bay and Victoria	Average Dates							73. 144	145	145	146	147	153
74. Yarmouth and Digby	Average Dates							74. 144	145	145	146	147	153
75. Sheldburne, Queens-	Average Dates							75. 144	145	145	146	147	153
76. Amnapolis and Kildres-	Average Dates							76. 144	145	145	146	147	153
77. Halifax and South Colchester	Average Dates							77. 144	145	145	146	147	153
78. Hants and South Colchester	Average Dates							78. 144	145	145	146	147	153
79. S. Cobiquid Slope,	Average Dates							79. 144	145	145	146	147	153
80. N. Cumb., Col., Pictou and Antigonish	Average Dates							80. 144	145	145	146	147	153
81. Bras d'Or Slope, and Victoria	Average Dates							81. 144	145	145	146	147	153
82. Glace Bay and Victoria	Average Dates							82. 144	145	145	146	147	153
83. Yarmouth and Digby	Average Dates							83. 144	145	145	146	147	153
84. Sheldburne, Queens-	Average Dates							84. 144	145	145	146	147	153
85. Amnapolis and Kildres-	Average Dates							85. 144	145	145	146	147	153
86. Halifax and South Colchester	Average Dates							86. 144	145	145	146	147	153
87. Hants and South Colchester	Average Dates							87. 144	145	145	146	147	153
88. S. Cobiquid Slope,	Average Dates							88. 144	145	145	146	147	153
89. N. Cumb., Col., Pictou and Antigonish	Average Dates							89. 144	145	145	146	147	153
90. Bras d'Or Slope, and Victoria	Average Dates							90. 144	145	145	146	147	153
91. Glace Bay and Victoria	Average Dates							91. 144	145	145	146	147	153
92. Yarmouth and Digby	Average Dates							92. 144	145	145	146	147	153
93. Sheldburne, Queens-	Average Dates							93. 144	145	145	146	147	153
94. Amnapolis and Kildres-	Average Dates							94. 144	145	145	146	147	153
95. Halifax and South Colchester	Average Dates							95. 144	145	145	146	147	153
96. Hants and South Colchester	Average Dates							96. 144	145	145	146	147	153
97. S. Cobiquid Slope,	Average Dates							97. 144	145	145	146	147	153
98. N. Cumb., Col., Pictou and Antigonish	Average Dates							98. 144	145	145	146	147	153
99. Bras d'Or Slope, and Victoria	Average Dates							99. 144	145	145	146	147	153
100. Glace Bay and Victoria	Average Dates							100. 144	145	145	146	147	153
101. Yarmouth and Digby	Average Dates							101. 144	145	145	146	147	153
102. Sheldburne, Queens-	Average Dates							102. 144	145	145	146	147	153
103. Amnapolis and Kildres-	Average Dates							103. 144	145	145	146	147	153
104. Halifax and South Colchester	Average Dates							104. 144	145	145	146	147	153
105. Hants and South Colchester	Average Dates							105. 144	145	145	146	147	153
106. S. Cobiquid Slope,	Average Dates							106. 144	145	145	146	147	153
107. N. Cumb., Col., Pictou and Antigonish	Average Dates							107. 144	145	145	146	147	153
108. Bras d'Or Slope, and Victoria	Average Dates							108. 144	145	145	146	147	153
109. Glace Bay and Victoria	Average Dates							109. 144	145	145	146	147	153
110. Yarmouth and Digby	Average Dates							110. 144	145	145	146	147	153
111. Sheldburne, Queens-	Average Dates							111. 144	145	145	146	147	153
112. Amnapolis and Kildres-	Average Dates							112. 144</td					

THE PHENOLOGY OF NOVA SCOTIA, 1914.—Continued.

WHEN FIRST SEEN.	YEAR 1914.	WHEN BECOMING COMMON									
		OBSERVATION REGIONS.									
		Day of the year corresponding to the last day of each month.									
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.									
		Average Dates									
		1. Yarmouth and Digby									
		2. Sheldburne, Queens and Lundernburg									
		3. Amnapolis, Kings and Coburg									
		4. Hants and South Colchester and Kincardine									
		5. Halifax and Goffsboro									
		6. S. Cobiquid Slope, (S. C. and E. Col.)									
		7. N. Cumb., Col. Pictou and Antigonish									
		8. Richmond and Cape Breton (S. C. and E. Col.)									
		9. Bras d'Or Slope, Victoria and Grand Victoria									
		10. Inverness Slope to Gulf of St. Lawrence									
		Average Dates									
		146	139	141	143	149	142	143	154	148	148
		147	145	144	145	153	145	154	157	150	150
		148	145	144	145	153	145	154	157	152	152
		149	146	146	146	144	142	147	159	156	156
		150	150	150	151	151	152	149	159	156	156
		151	150	150	151	151	152	150	159	157	157
		152	150	150	151	151	152	150	159	158	158
		153	150	150	151	151	152	150	160	156	156
		154	152	152	152	152	152	150	160	157	157
		155	153	153	153	153	152	150	161	158	158
		156	154	154	154	154	154	152	162	162	162
		157	152	152	152	152	152	150	163	163	163
		158	151	151	151	151	151	150	164	164	164
		159	150	150	150	150	150	150	165	165	165
		160	149	149	149	149	149	148	166	166	166
		161	148	148	148	148	148	147	167	167	167
		162	147	147	147	147	147	147	168	168	168
		163	146	146	146	146	146	146	169	169	169
		164	145	145	145	145	145	145	170	170	170
		165	144	144	144	144	144	144	171	171	171
		166	143	143	143	143	143	143	172	172	172
		167	142	142	142	142	142	142	173	173	173
		168	141	141	141	141	141	141	174	174	174
		169	140	140	140	140	140	140	175	175	175
		170	139	139	139	139	139	139	176	176	176
		171	138	138	138	138	138	138	177	177	177
		172	137	137	137	137	137	137	178	178	178
		173	136	136	136	136	136	136	179	179	179
		174	135	135	135	135	135	135	180	180	180
		175	134	134	134	134	134	134	181	181	181
		176	133	133	133	133	133	133	182	182	182
		177	132	132	132	132	132	132	183	183	183
		178	131	131	131	131	131	131	184	184	184
		179	130	130	130	130	130	130	185	185	185
		180	129	129	129	129	129	129	186	186	186
		181	128	128	128	128	128	128	187	187	187
		182	127	127	127	127	127	127	188	188	188
		183	126	126	126	126	126	126	189	189	189
		184	125	125	125	125	125	125	190	190	190
		185	124	124	124	124	124	124	191	191	191
		186	123	123	123	123	123	123	192	192	192
		187	122	122	122	122	122	122	193	193	193
		188	121	121	121	121	121	121	194	194	194
		189	120	120	120	120	120	120	195	195	195
		190	119	119	119	119	119	119	196	196	196
		191	118	118	118	118	118	118	197	197	197
		192	117	117	117	117	117	117	198	198	198
		193	116	116	116	116	116	116	199	199	199
		194	115	115	115	115	115	115	200	200	200
		195	114	114	114	114	114	114	201	201	201
		196	113	113	113	113	113	113	202	202	202
		197	112	112	112	112	112	112	203	203	203
		198	111	111	111	111	111	111	204	204	204
		199	110	110	110	110	110	110	205	205	205
		200	109	109	109	109	109	109	206	206	206
		201	108	108	108	108	108	108	207	207	207
		202	107	107	107	107	107	107	208	208	208
		203	106	106	106	106	106	106	209	209	209
		204	105	105	105	105	105	105	210	210	210
		205	104	104	104	104	104	104	211	211	211
		206	103	103	103	103	103	103	212	212	212
		207	102	102	102	102	102	102	213	213	213
		208	101	101	101	101	101	101	214	214	214
		209	100	100	100	100	100	100	215	215	215
		210	99	99	99	99	99	99	216	216	216
		211	98	98	98	98	98	98	217	217	217
		212	97	97	97	97	97	97	218	218	218
		213	96	96	96	96	96	96	219	219	219
		214	95	95	95	95	95	95	220	220	220
		215	94	94	94	94	94	94	221	221	221
		216	93	93	93	93	93	93	222	222	222
		217	92	92	92	92	92	92	223	223	223
		218	91	91	91	91	91	91	224	224	224
		219	90	90	90	90	90	90	225	225	225
		220	89	89	89	89	89	89	226	226	226
		221	88	88	88	88	88	88	227	227	227
		222	87	87	87	87	87	87	228	228	228
		223	86	86	86	86	86	86	229	229	229
		224	85	85	85	85	85	85	230	230	230
		225	84	84	84	84	84	84	231	231	231
		226	83	83	83	83	83	83	232	232	232
		227	82	82	82	82	82	82	233	233	233
		228	81	81	81	81	81	81	234	234	234
		229	80	80	80	80	80	80	235	235	235
		230	79	79	79	79	79	79	236	236	236
		231	78	78	78	78	78	78	237	237	237
		232	77	77	77	77	77	77	238	238	238
		233	76	76	76	76	76	76	239	239	239
		234	75	75	75	75	75	75	240	240	240
		235	74	74	74	74	74	74	241	241	241
		236	73	73	73	73	73	73	242	242	242
		237	72	72	72	72	72	72	243	243	243
		238	71	71	71	71	71	71	244	244	244
		239	70	70	70	70	70	70	245	245	245
		240	69	69	69	69	69	69	246	246	246
		241	68	68	68	68	68	68	247	247	247
		242	67	67	67	67	67	67	248	248	248
		243	66	66	66	66	66	66	249	249	249
		244	65	65	65	65	65	65	250	250	250
		245	64	64	64	64	64	64	251	251	251
		246	63	63	63	63	63	63	252	252	252
		247	62	62	62	62	62	62	253	253	253
		248	61	61	61	61	61	61	254	254	254
		249	60	60	60	60	60	60	255	255	255
		250	59	59	59	59	59	59	256	256	256
		251	58	58	58	58	58	58	257	257	257
		252	57	57	57	57	57	57	258	258	258
		253	56	56	56	56	56	56	259	259	259
		254	55	55	55	55	55	55	260	260	260
		255	54	54	54	54	54	54	261	261	261
		256	53	53	53	53	53	53	262	262	262
		257	52	52	52	52	52	52	263	263	263
		258	51	51	51	51	51	51	264	264	264
		259	50	50	50	50	50	50	265	265	265
		260	49	49	49	49	49	49	266	266	266
		261	48	48	48	48	48	48	267	267	267
		262	47	47	47	47	4				

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164	164	164	156	156	158	42	<i>Rubus strigosus</i> ...	
165	165	165	164	164	164	43	<i>Rubus</i> fruit ripe...	
166	166	166	164	164	164	44	<i>Rhinanthus Criste-galli</i> ...	
167	167	167	164	164	164	45	<i>Rubus villosus</i> ...	
168	168	168	165	165	165	46	<i>Sarracenia purpurea</i> ...	
169	169	169	171	172	172	47	<i>Sarracenia purpurea</i> ...	
170	170	170	170	170	170	48	<i>Brassolis vulgaris</i> ...	
171	171	171	170	170	170	49	<i>Flos lucidae</i> ...	
172	172	172	172	172	172	50	<i>Leontodon autumnale</i> ...	
173	173	173	173	173	172	51	<i>Ligustrum vulgare</i> ...	
174	174	174	170	170	170	52	<i>Trees appear green</i> ...	
175	175	175	170	170	170	53	<i>Ribes rubrum</i> cultivated...	
176	176	176	173	173	173	54	<i>Ribes rubrum</i> fruit ripe...	
177	177	177	174	176	173	55	<i>R. nigrum</i> cultivated...	
178	178	178	171	171	170	56	<i>Prunus Cerasus</i> fruit ripe...	
179	179	179	170	170	170	57	<i>Prunus Domestica</i> ...	
180	180	180	173	173	173	58	<i>Prunus Malus</i> ...	
181	181	181	170	170	170	59	<i>Fruit Malus</i> ...	
182	182	182	165	165	165	60	<i>Fruit Malus</i> ...	
183	183	183	160	160	160	61	<i>Sorbus vulgaris</i> ...	
184	184	184	155	155	155	62	<i>Tritium repens</i> ...	
185	185	185	150	150	152	63	<i>Tritium pratense</i> ...	
186	186	186	145	145	152	64	<i>Tritium pratense</i> ...	
187	187	187	140	140	155	65	<i>Solanum tuberosum</i> ...	
188	188	188	135	135	155	66	<i>Ploughing (first of season)</i> ...	
189	189	189	130	130	155	67	<i>Sowing</i> ...	
190	190	190	125	125	155	68	<i>Potato-planting</i> ...	
191	191	191	120	120	155	69	<i>Sheep-shearing</i> ...	
192	192	192	115	115	155	70	<i>Hay-cutting</i> ...	
193	193	193	110	110	155	71	<i>Grain-cutting</i> ...	
194	194	194	105	105	155	72	<i>Potato-digging</i> ...	
195	195	195	100	100	155	73	<i>Opening of lakes</i> ...	
196	196	196	95	95	155	74	<i>Last snow to whitening ground</i> ...	
197	197	197	90	90	155	75	<i>Last snow to fly in air</i> ...	
198	198	198	85	85	155	76	<i>Last spring frost—hard</i> ...	
199	199	199	80	80	155	77	<i>Last spring frost—hard</i> ...	
200	200	200	75	75	155	78	<i>Water in streams—hard</i> ...	
201	201	201	70	70	155	79	<i>Water in streams—hard</i> ...	
202	202	202	65	65	155	80	<i>Water in streams—low</i> ...	
203	203	203	60	60	155	81	<i>First autumn frost—hard</i> ...	
204	204	204	55	55	155	82	<i>First snow to fly in air</i> ...	
205	205	205	50	50	155	83	<i>Closing of lakes</i> ...	
206	206	206	45	45	155	84	<i>Rivers</i> ...	
207	207	207	40	40	155	85	<i>Wild ducks migrating, N.</i> ...	
208	208	208	35	35	155	86	<i>Wild geese migrating, N.</i> ...	
209	209	209	30	30	155	87	<i>Wild geese migrating, S.</i> ...	
210	210	210	25	25	155	88	<i>Wild geese migrating, S.</i> ...	
211	211	211	20	20	155	89	<i>Wild geese migrating, S.</i> ...	
212	212	212	15	15	155	90	<i>Wild geese migrating, S.</i> ...	
213	213	213	10	10	155	91	<i>Wild geese migrating, S.</i> ...	
214	214	214	5	5	155	92	<i>Wild geese migrating, S.</i> ...	
215	215	215	0	0	155	93	<i>Wild geese migrating, S.</i> ...	

PHENOLOGICAL OBSERVATIONS IN

THE PHENOLOGY OF NOVA SCOTIA, 1914—Continued.

OBSERVATION REGIONS.	WHEN FIRST SEEN.	YEAR 1914.	WHEN BECOMING COMMON.	
			Observation Regions.	
1. Yarmouth and Digby		Average Dates	Day of the year corresponding to the last day of each month.	
			Jun. 31	July 212
			Sept. 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.	
2. Sheldburne, Queens and Lunenburg		Average Dates	S.	
			Gulf	
			North.	
3. Amherst and Kincardine		10. Inverness Slope to Gulf and Victoria		
4. Halifax and South Colchester		9. Bras d'Or Slope, Yarmouth and Digby		
5. Halifax Sand Gubysboro		8. Richmond and Cape Breton		
6. S. Coqueduid Slope, Yarmouth and Digby		7. N. Cumberland & Col.		
7. N. Cumberland & Col., Pictou and Antigonish		6. S. Cumberland & Col.		
8. Richmond and Cape Breton		5. Halifax and Gubysboro		
9. Bras d'Or Slope, Yarmouth and Digby		4. Halifax and South Colchester		
10. Inverness Slope to Gulf and Victoria		3. Sheldburne, Queens and Lunenburg		
		2. Sheldburne, Queens and Lunenburg		
		1. Yarmouth and Digby		

*354	*253	304	304	82b Wild geese migrating
85	90	100	103	83 <i>Malospiza fasciata</i>
88	81	86	90	84 <i>Turdus migratorius</i>
94	97	95	92	85 <i>Zonotrichia albula</i>
118	115	134	133	86 <i>Actitis macularia</i>
120	110	110	116	87 <i>Sturnella magna</i>
124	118	131	124	88 <i>Ceryle Alcyon</i>
125	130	147	122	89 <i>Dendreca coronata</i>
134	129	142	131	90 <i>D. asturina</i>
129	118	128	94	91 <i>Zonotrichia querula</i>
143	143	142	144	92 <i>Trochilus columbris</i>
121	123	142	139	93 <i>Tyrannus Carolinensis</i>
133	115	137	142	94 <i>Dolichonyx oryzivorus</i>
145	138	145	133	95 <i>Spinus tristis</i>
145	130	146	151	96 <i>Scotiaptica ruficilla</i>
145	164	150	145	97 <i>Ampelis cedrorum</i>
133	130	136	126	98 <i>Chordeiles Virginianus</i>
107	105	110	115	99 First piping of frogs.
116	108	122	121	100 First appearance, snakes.

THUNDERSTORMS—PHENOLOGICAL OBSERVATIONS, Nova Scotia, 1914.

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

OBSERVATION REGIONS.

PHENOLOGICAL OBSERVATIONS IN

THUNDERSTORMS—PHENOLOGICAL OBSERVATIONS, NOVA SCOTIA, 1914.

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 Guysborough.	6. S. Cobiquid 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 1913.
148 ³	148 ¹⁴	148 ³	148 ¹⁰	148 ⁸	148 ²	148 ¹⁶	148 ¹³	148 ³	.....	148 ⁷²
150	.....	150 ²	.....	.....	.....	150	150	.....	.....	150 ⁵
151 ²	151 ²	151 ⁵	151 ⁴	151 ⁴	151	151 ¹²	151	.....	.....	151 ³⁰
152 ³	152 ³	152	152 ⁴	152 ³	152	152 ⁴	152 ⁶	152	.....	152 ³⁰
153	153	153	153	153	.....	153	153	153	.....	153 ⁷
154 ²	.....	.....	.....	.....	.....	.....	.....	.....	.....	154 ²
.....	155	.....	.....	.....	.....	.....	155	.....	.....	155 ²
.....	.....	156	.....	.....	.....	.....	.....	.....	.....	156
157	.....	157	.....	.....	.....	.....	.....	.....	.....	157 ²
.....	158	.....	.....	.....	.....	.....	159	.....	.....	158
.....	.....	.....	.....	.....	.....	160	160	.....	.....	159
.....	.....	161	161 ²	161 ²	161 ²	.....	161 ⁴	161	.....	160 ³
163 ⁶	163 ⁴	163 ⁴	163 ²	163 ²	163	163	163 ⁴	163	.....	161 ¹⁰
164	164	164	.....	.....	.....	.....	164 ⁶	.....	.....	163 ²²
.....	.....	.....	.....	165	.....	.....	.....	.....	.....	164 ⁸
.....	.....	.....	.....	166	.....	.....	166	.....	.....	165
.....	167 ²	167	167	167	167	.....	167	.....	.....	166 ²
.....	168	.....	.....	168	.....	.....	168	168	.....	167 ⁶
.....	.....	.....	171	.....	173 ²	173	.....	173	.....	168 ⁴
.....	.....	.....	.....	.....	175 ²	175 ³	.....	175 ²	.....	173 ⁴
176 ⁴	176 ⁹	176 ⁷	176 ⁸	176 ³	176 ³	176 ⁶	.....	176	.....	175 ⁷
.....	177	.....	.....	180	.....	.....	.....	.....	.....	176 ³⁷
.....	.....	.....	179	.....	.....	.....	.....	.....	.....	177
181	199	.....	.....	201	.....	.....	.....	.....	.....	179
.....	.....	.....	.....	207	.....	.....	.....	.....	.....	180
.....	.....	.....	.....	208	.....	.....	.....	.....	.....	181
215	.....	.....	.....	227 ²	.....	.....	.....	.....	.....	199
227	.....	.....	.....	233	.....	.....	.....	.....	.....	201
233	.....	35	.....	240	242 ²	.....	244	.....	.....	207
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	208
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	215
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	227 ³
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	233 ²
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	235
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	240
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	242 ²
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	244
.....	.....	.....	.....	245	.....	.....	.....	.....	.....	254

THUNDERSTORMS—PHENOLOGICAL OBSERVATIONS, NOVA SCOTIA, 1914.

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

OBSERVATION REGIONS.